ASHEN STARS
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CONTENTS

WHERE THE STARS TURN GREY 1

ALL THE JUSTICE CREDITS CAN BUY 3
- What You Did In the War 4
- Creating Your Crew 4
  - One: Choose Species 4
  - Two: Assign Crew Packages 5
  - Three: Choose the Rest Of Your Investigative Abilities 6
  - Academic 7
  - Interpersonal 7
  - Technical 7
  - Special (Vas Mal) 7
  - General 7
  - Four: Choose the Rest Of Your General Abilities 8
  - Five: Choose Your Drive 8
  - Six: Choose Your Ship 9
  - Seven: Choose Tech and Enhancements 9
  - Eight: Add Personal Details 10
  - Nine: Note Reputation 10
- Personal Arcs 10
  - Your Arc Meets the Big Theme 11
  - Submitting Your Arc 12

THE SEVEN PEOPLES 15
- Species Format 15
- The Balla 16
- Cybes 18
- The Durugh 19
- Humans 20
- The Kch-Thk 21
- The Tavak 24
- The Vas Mal 25

WHAT YOU CAN DO 27
- Crew Packages 27
- Packages and 28
- Character Creation 28
- Warpside Assignments 28
  - Communications Officer (Hailer) 28
  - Pilot 29
  - Strategic Coordinator (Stratco) 29
  - Systems Officer (Wrench) 30
  - Weapons Officer (Gunner) 30
- Groundside Assignments 30
  - Cultural Officer (Face) 30
  - Operations Officer (Bagger) 30
  - Survey Officer (Mapper) 30
  - Security Officer (Chopper) 30
  - Technical Officer (Techo) 30
- Mixed Assignments 31
  - Medical Officer (Doc) 31
- Abilities 31
  - Investigative 31
- General Abilities 44

DRIVES 53
- Altruism 53
- Atonement 54
- Avenger 54
- Bleedism 54
- Civilizer 54
- Chronicler 55
- Combinism 55
- Comradeship 55
- Derring-Do 55
- Entrepreneurial 56
- Exploration 56
- Faith 56
- Family Tradition 56
- Footloose 57
- Hotshot 57
- Hunger Tourism (Kch-Thk) 57
- Integrationist (Cybe) 58
- Justice-Seeker 58
- Meditative Reconciliation (Tavak) 58
- Nowhere Else To Go 58
- Phase Rider (Durugh) 58
- Professionalism 59
- Pursued 59
- Programming 59
- Re-evolution (Vas Mal) 60
- Role Model 60
- Scientific Inquiry 60
- Self-Exclusion (Balla) 60
- Sexual Adventure 60
- Social Engineer (Cybe) 61
- Something To Prove 61
- Tech Hound 61

GUMSHOE RULES 62
- What GUMSHOE Does 62
- From Structure To Story 63
  - Gathering Clues 64
- Tests 67
  - Simple Tests 67
  - Making Tests Without an Ability 68
  - Ratings as Difficulty 70
  - Benchmarks 70
  - Contests 71
  - Fighting 72
  - Exhaustion, Injury and Death 73
  - Showdowns 78
- Regaining Pool Points 78
- Time Increments 79
  - Intervals 79
  - Episodes 79
  - Downtime 79
  - Sessions 79
- Improving Your Character 79
- Boosts 79
- Hazards 80
  - Electricity and Other Shocks 80
  - Fire 81
  - Suffocation 81
  - Toxins 81
  - Vacuum 81

STARSHIPS 84
- Space Combat 84
  - One: Determine Goals 84
  - Two: Determine Initiative 86
  - Three: The Ship With Initiative Launches an Attack 87
  - Four: Has the Loser Been Rocked? 91
  - Five: Mop-Up Operations 91
  - Six: Check For Victory 92
  - Results 92
  - Destroying a Disabled or Crippled Ship 95
  - Towing 95
  - Boarding 96
  - Ship Destruction 96
  - Describing the Action 97
  - Aftermath: Lingering Ship Damage 98
  - Ship Combat Example 98
  - Uneven Fights 98
  - Space Battles 100

Ships 101
Specs 101
Ship Classes 104
Runner 104
Hammer 105
Rampart 105
Speeder 106
Hauler 106
Porcupine 107
Mandible 108
Sherlock 108
Alexandria 109
Voodoo 109
Junker 110
Miser 111
Custom Ships 111
Combat Specs 111
Output 113
Cargo 113
Condition 113
Upkeep 113
Shipbuilding Example 113
Repairs and Upgrades 113
Repairs 113
Upgrades 115
Cannibalizing Is Such an Ugly Word 118
Upkeep Failure 119
Downgrades 119
Navigational Hazards 119
Orbit 120
Shuttling Down 120
Leaving Your Ship: Safer Than You Think 120
Out Of Your League 121
Freighter 122
Passenger Liner 122
Naval Cruiser 122
Naval Dreadnought 122
Big Scary Alien Vessel 122
Shuttles 123
Configuration 123
Pursuit and Combat 123

TECH 124
Communications 124
Disguiser 124
Headsets 125
Translators 126
Cybernetic Enhancements 126
Medical and 133
Forensic Gear 133
Protective Gear 133
Investigative Tech 135
Surveillance Equipment 135
Viroware 137
Weaponry 142
Unclassifiable Items 145

THE FEED AND THE BLEED 147
The Combine In 147
Retreat 147
Org Chart 147
The Combine In the Bleed 150
Ossa One 150
Synthcultures 152
SynthCode and Combine Law 152
Ideologies 153
Atomism 154
Bleedism 154
Combinism 154
Empiricism 154
Mercantilism 155
Racial Separatism 155
Nufaiths 155
Blood Redeemers 155
The Fibrous Sacrament 155
Kherenism 156
The Mondat 156
Interstellar History 157
The Four Expansions 157
The Collision 158
The Founding 159
The Flowering 159
The Annexation 160
The Utopian Era 160
The Mohilar War 161
The Aftermath 161
The Bogey Conundrum 161
Slang and Jargon 162
Derogatory Terms 164

ON THE CONTRACT 165
The Business Of Justice 165
Reputation 165
Building Your Reputation 165
Smirching Your Reputation 167
Ambiguous Events 168
Egregious Events 168
Cementing Your Reputation 169
Securing Contracts 169
Contract Types 169
Pickup Contracts 170
Time Between Contracts 170
Paying Upkeep 171
Contract Fees 172
Side Deals 173
Dividend Deals 173
Fee Cap 174
Loans 174
Judicial Procedures 175
Whose Law? 175
Jurisdiction 176
Trial Procedure 176
Sentencing 177
Supervised Rehabilitation 177
Imprisonment 177

WORLDS ARE STORIES 178
Build the Details From the Premise 178
I've Been Everywhere, Man 178
From Problem to World 178
Worlds As Problems 181
Stories Without Worlds 181
Tangential Worlds 184
Naming Worlds 187
Stellar Navigation 188
Approximate Travel Times 190
Ashen Stars 191
The Spaceway 193
Clusters, Wars and Money 193

THE BAD, THE WORSE, AND THE ALIEN 194
Entity Classes 194
Sentients 194
Quasi-Sentients 194
Lifeforms 194
Aliens as Opponents and Rivals 195
Health Pools 195
Pool Refreshments 196
Opponent Statistics 196
Entity Database 197
Dermoids 197
Jaggar 198
Klorn 200
Lipovore 201
Mynatid 202
Nanogons 203
Phyllax 205
Sh'ard 207
Generic Xenozoological Threats 208
Non-Alien Opponents 209
Balla Avenger 209
Bodyguard 210
Cybe Militant 210
Durugh Spy 210
Gangster 211
Groundside Bandit 211
Hired Killer 211
Kch-Thk Warrior 211
Mercenary 212
Militant 212
Miner 212
Pirate 212
Rival Laser 213
Security Guard 213
Spaceport Lowlife 214
Tavak Warrior 214
Thug 214
Vas Mal Deranger 214
Vigilante 214

RUNNING THE BLEED 216
Building Cases 216
Choosing a Premise 216
Scenes 220
Episode Premises 221
Building Cases On the Fly 225
Don't Panic! 225
Activating Players 225
Avoid Negation 226
Preparing a Fallback 226
Leading and Following 226
Chaos and Order 227
Building Series 227
Series Arcs 227
Personal Arcs 228
Recurring Characters 230
GUMSHOE Tips 231
Perception Is (Nearly) All 231
Any Track Is the Right Track 232
Calling On Abilities 233
Compensating For Spotty 233
Attendance 233
Ending Scenes 233
There Will Be References 234
Example Of Play 234

THE WITNESS OF MY WORTH 238
The Contract 238
The Twist 238
Backstory 238
The Investigation 238
Complications 239
The Choice 239
Scenes 239
Contract Briefing 239
Remote Hijack 240
Shattered Planet 242
Bloodstained Outpost 243
Tracking The Transmission 246
Unsanctioned Settlers 247
Arms Merchants 249
Scrap With the Locals 251
Second Outbreak 251
Mutant Animals 253
The Hudd Museum 254
The Combatorium 255
Return of the Arms 258
Merchants? 258
Wrapping Up 258

APPENDIX I: SAMPLE NAMES 261
Balla 261
Cybe 262
Durugh 263
Human 264
Kch-Thk 266
Tavak 267
Vas Mal 268

APPENDIX II: SPACE COMBAT EXAMPLE 269
The Morricone vs. The Harvester 269
Goals 270
Initiative 270

CHARACTER SHEET 280

APPENDIX III: TABLES & CHARTS 282
Ship Tracker 282
Ship Combat Tracker 283
NPC Ship Combat Crew Tracker 284
Crew Tracker 284
Total Ship/Crew Upkeep: 284
Episode Worksheet 285
Ship Bolt-on Reference Sheet 286
Tech Reference Sheet 287

INDEX 292

WHERE THE STARS TURN GREY

Ashen Stars is a game of mystery and adventure set in a gritty space opera universe. You play freelance law enforcers solving problems for pay in the Bleed, a war-ravaged frontier of colonized space.

Ashen Stars is a roleplaying game, in which a Game Moderator (GM) and a group of players get together to spontaneously weave an ongoing storyline. Each player portrays and makes decisions for a single fictional character, called a player character (PC.) In this game, PCs are also called lasers — the term inhabitants use in the setting to describe freelance law enforcement officers.

This game book assumes that you are already familiar with the roleplaying form, including its basic concepts and techniques. If you aren't sure what a roleplaying game is, exactly, find a friend to explain it to you. Or seek out the thriving roleplaying game community on the Internet. Find us at www.pelgranepress.com, and we'll steer you right. We envy the moments of discovery you'll experience as you begin to explore this fun, creative and affirming hobby!

Ashen Stars is one of many games from Pelgrane Press to use the GUMSHOE rules system. GUMSHOE concentrates on mystery and investigation. It streamlines the process of information-gathering so that the players always have the clues they need to advance the story. The question is not whether they'll find them, but whether they successfully interpret them and solve the mystery. While PCs never fail to get information if they use an appropriate ability and look in the right place for it, they do face suspenseful situations carrying the potential of disaster or death when performing other dangerous tasks. These scenes are resolved using a very simple rules set.

Other GUMSHOE games published so far include:

The Esoterrorists, where you play modern day agents fighting an international conspiracy intent on thinning the boundaries between this world and the Outer Dark, a realm of madness ruled by perverse supernatural creatures.

Fear Itself, where you play ordinary people struggling to survive against the same awful supernatural threats.

Trail of Cthulhu, an authorized adaptation of the classic Chaosium game Call Of Cthulhu, where you play intrepid investigators protecting the darkening world of the 1930s from the madness-inducing gods, cultists and monsters of H. P. Lovecraft's Cthulhu mythos.

Mutant City Blues, where you play super-powered police detectives clearing cases in a near-future world where one per cent of the population mysteriously acquired mutant abilities.

Razed, in which the survivors of a strange apocalypse acquire the information they need to survive amid civilization's ruins.

This book breaks down as follows:

All the Justice Credits Can Buy kicks it off with a brief introduction to the premise and setting. It gives the players the basic information about the universe they'll need when creating their characters.

The Seven Peoples provides simple descriptions of the sentient species (including humans) players can choose from when creating their characters.

What You Can Do gets players started in the character creation process. It allows them to choose their positions in the laser crew and then the additional abilities that make them unique.

Drives lists the motivations that propel characters into the storylines and keep them acting like heroic, if slightly scuffed-up, space opera protagonists. Each player chooses one.

GUMSHOE Rules, unsurprisingly, lays out the resolution systems for mystery-solving and for other exciting actions.

Starships covers interstellar vehicles, including combat rules for clashes between ships.

Tech describes the items of advanced technologies the characters rely on during their adventures, from disruptor pistols to gene-shifting viroware.

The Feed and the Bleed goes into greater depth on the setting, including prevailing political circumstances, the structure and history of the interstellar empire, burgeoning belief systems, and the mysteries of the menacing and apparently departed alien enemy, the Mohilar.

On the Contract details the business of being a laser, from contract terms to rates of compensation.

Worlds Are Stories shows GMs how to detail and populate the worlds of the Bleed. Ashen Stars provides you with as much setting detail as you're likely to find a comparably-sized core rules book. That said, it does so as a departure point only. It gives you the tools to develop and enrich your version of its science fiction setting as you go, on the same episode-by-episode basis the writers of a space opera TV series would use. You and your players organically create the Bleed to arise to the story needs of your central characters. You do this without locking yourself into a predigested setting bible that minutely details, worlds, economies, stellar distances, planetary ecologies, lists of space stations, and in-depth profiles of NPCs who are more important than your crew.

Running the Bleed supplies tips and techniques for GMs.

The book concludes with a sample episode, **The Witness Of My Worth,** in which the lasers respond to a distress call from a survey team on a war-ravaged planet.

Data Readouts

When you play Ashen Stars, it becomes your game, not ours. **Data Readouts** may suggest ways to modulate the frequency of your game to suit the tastes of a particular group.

Throughout the text you'll find two sets of sidebars, separated from one another by distinctive graphic treatments.

Standard sidebars contain asides and rules bits that are best understood when pulled from the main text. To see what a standard sidebar looks like, see p. 6.

Data Readout sidebars, styled like this one here, provide you an inside look at the game's intentions. They directly explain its creative choices so you can see what we're setting out to accomplish.

ALL THE JUSTICE CREDITS CAN BUY

They call you **Lasers.** Or scrubbers, regulators, or, out in the Scylla Outzone, shinestars. To the lawless denizens of the Bleed, whether they be pirates, gangsters or tyrants, you're known in less flattering terms. According to official Combine terminology, the members of your hard-bitten starship crew are known as Licensed Autonomous Zone Effectuators. You're the seasoned freelancers local leaders call when a situation proves too tough, too baffling, or simply too weird to handle on their own. In the abandoned fringe of inhabited planets known as the Bleed, you're as close to a federal authority as they come.

Sometimes that's not saying much. Nearly any planetsider can tell you a horror story of effectuators gone wrong. Motivated by profit and operating on razor-thin margins, laser crews are all too tempted to cross the line, to become the kind of scum they're paid to hunt. You may despise the crooked contractors who give your profession a bad name and make it harder to win the trust of honest citizens. Or you might be hanging on the edge of corruption yourselves. However deep your ethical commitments, you struggle to maintain at least the appearance of a sparkling reputation. The value of your next contract depends on it.

The Bleed wasn't always the untamed fringe it is today. Less than a generation ago, it was the glamorous frontier of an interstellar, culture-spanning government dedicated to peace, understanding, and self-determination. The Combine, an amalgamation of interstellar empires founded two centuries ago, had achieved its apex. With humanity at the forefront, its united peoples expanded throughout the dense belt of solar systems then known as the Wave. Sleek, generously manned star vessels patrolled its FTL corridors, keeping the peace, confronting anomalies, and solving problems. Shielded by their universal ideology of cooperation, the peoples of the Wave slumbered safe in their beds.

Then came the Mohilar War. For the first time in a century, the Combine faced an enemy strong enough to threaten its very existence. The Mohilar arose suddenly, on planets throughout Combine space, which were thought to be uninhabitable. Due to a bizarre psychic effect dubbed the Bogey Conundrum, memories of the Mohilar race have grown indistinct and contradictory, even though the last of them vanished less than a decade ago. What they did is remembered all too well. Mastering a strange and incompatible material technology, they roused vast war fleets, attacking without warning or mercy. They rampaged through Combine space. The atmospheres of its core planets, including Earth, were irreparably poisoned. Billions of civilians died, on both sides. Industrial production flatlined, provoking economic collapse in a society that had transcended the need for currency. The Combine's glittering fleets of patrol vessels, pressed into unfamiliar service as military ships, were largely destroyed.

Seven years ago, the war ended. After suffering a surprise defeat in a decisive last-ditch engagement at Myndaro Station, the Mohilar abruptly vanished. Fears of their return remain high. In the meantime, a reconstituted, decentralized Combine has begun the tortuous process of rebuilding its economy, government, and war fleet.

Barely able to administer its surviving core worlds, the Combine has abandoned central control over its far-flung frontiers. More than any other sector, the once-proud Bleed has been left largely on its own. Combine vessels venture here only in direst emergency—usually to investigate signs of a possible Mohilar resurgence. The Bleed's various planets are now essentially autonomous, though united by a common currency and various economic and cultural ties.

The old duties of Combine patrols are now outsourced to private contractors like you.

You may cruise around the spacelanes waiting to respond to emergency distress calls. This activity, known as "swooping", is looked down on by higher-end lasers, who pick

and choose their missions. Through this procedure, a distress call is routed through a Combine outpost. The outpost then sends a proffer to all registered laser ships within hailing range. Each ship bids on the contract. The Combine authorizes the winner to proceed to the site of the call and solve whatever problem the locals report. The bid system takes into account the reputations of the bidding vessels, giving the scrubbers incentive to keep it honest. Or what passes for honest in the Bleed.

What You Did in the War

Sooner or later, players will want to establish what their PCs did during the war. You might choose to start with this decision and envision your character around it, or find a likely answer after establishing other facts about your laser, for example crew position, species, and or drive. Your wartime activities might explain how you gained the training that made you the ultra-competent problem-solver you are today. The list is not exclusive; players are free to find answers that don't appear on it.

- Fought the Mohilar as a member of the Combine fleet
- Fought planetside as an infantry soldier or officer in Combine forces
- Fought in local militia
- Fought Mohilar invaders as irregular or partisan
- Saw action while serving in non-combat or support role, for example as medical officer or military policeman
- Served as civilian in Combine administration; positions might range from high (Assembly Command) to low (local government in a Bleed backwater)
- Bribed or finagled your way out of military service
- Called up for duty but granted conscientious objector status
- Deemed medically unfit for military service
- Imprisoned as a criminal or deserter
- Served war effort as scientific researcher, developing anything from weapons to new battlefield cures
- Spent the war hospitalized for a debilitating but now-cured condition, physical or mental, possibly caused by Mohilar bioweapons
- Too young to fight (and are therefore a young adult today)
- Trained to fight, but stationed planetside in obscure location and saw no action
- Worked as civilian in a crucial industry
- Was a swirling energy being untethered from limited notions of space, time and causation (standard answer for all Vas Mal.)

Pocket Timeline

It is the year 2468.

7 years ago, in 2461, the Mohilar War ended.

17 years ago, in 2451, the Mohilar War began.

206 years ago, the Combine formed, in the halcyon year 2262.

276 years ago, in the wondrous and awful year of 2192, humanity encountered its first sentient alien species, the tavak, and promptly went to war with them.

330 years ago, in 2138, humankind discovered the secrets of faster-than-light travel and began to colonize other planets.

A detailed history starts on p. 157.

Creating Your Crew

As the group invents the player characters who star in its Ashen Stars series, you'll be referencing various chapters of this book. GUMSHOE character creation is a collaborative effort of the entire group. The process breaks down into eight steps.

One: Choose Species

Refer to "The Seven Peoples", starting on p. 15, to decide which of the major spacefaring races your character hails from:

- The eerily beautiful, nature-loving, emotion-fearing balla.
- The cybes, former humans radically altered by cybernetic and genetic science.

ACCESSIBLE FRESHNESS

The Ashen Stars setting pursues a balance between the new and the recognizable that is essential to successful space opera roleplaying.

Nods to beloved genre themes and imagery provide players with the baseline of familiarity they need to orient themselves. Keying from these elements, they can make reasonable guesses about the sorts of actions their characters ought to be taking when faced with the game's mysteries and challenges. On top of this necessary accessibility we layer offbeat elements to keep the experience fresh and a little bit strange. For example, wetware and cyberware technology are not commonly thought of as space opera elements, because they entered the SF lexicon generations relatively recently. Their pervasive use in this setting adds an outward dash of alien-ness to even its human characters.

In dusting the enjoyably familiar with a thin coat of strangeness, we're helping you follow today's most common and effective pop culture strategy. The most successful properties dare to be simple. They drink deep from the well of classic storytelling. They put just enough of a spin on their time-honored devices to let us see past their debt to what has gone before. Call it the willing suspension of originality.

We might smirk when we spot a borrowed or repurposed element summoned from the space opera collective consciousness. It is a weird duality of the geek tribe that we relentlessly condescend to the entertainment we nonetheless love.

Deprive us of our genre touchstones, however, and we feel confused or cheated. In roleplaying we especially need these shared assumptions; they're the building blocks, the shorthand, from which collaborative narrative springs.

The setting earns its homages by commenting on the themes of the genre. Most notably, its core theme is the conflict between utopianism and bitter reality, and who we become when we have to choose between the two.

Within any given group you'll find different levels of attraction to core genre elements. GMs can adjust their portrayal of the Ashen Stars setting to match their responses. This is a tricky and ongoing process. Some players think in genre tropes. A few really want a wholly unfamiliar world. Most think they want more originality than they really do. For a group with avowedly classical tastes, you can throw in constant, thinly disguised hat tips to classic TV shows and movies. In other groups you might need to scrub out anything that seems like a reference or recapitulation of something they already know.

- The durugh, hunched, furtive ex-enemies of the Combine who can momentarily phase through solid matter.
- The humans, adaptable, resourceful, and numerous. They comprise the majority of a typical laser crew.
- The kch-thk, warrior locust people who migrate to new bodies when their old ones are destroyed.
- The armadillo-like tavak, followers of a serene warrior ethic.
- The vas mal, former near-omniscient energy beings devolved by disaster into misshapen humanoid form.

Two: Assign Crew Packages

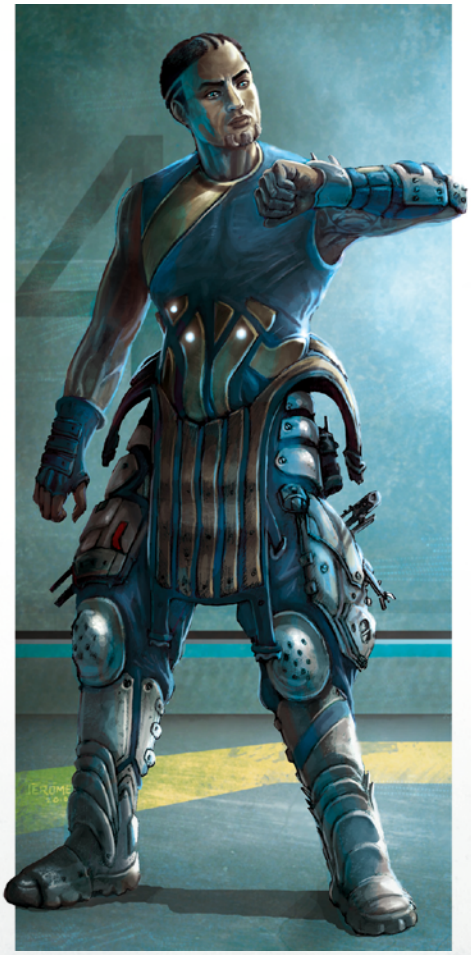
As seen on p. 28 most lasers fulfill at least one role warpside (on the ship), plus at least one role while breaking cases groundside (on the various planets you visit.) During this step the players parcel out these responsibilities between them. Crew packages give you the basic abilities you need to perform these tasks:

- Warpside: Communications, Pilot, Strategic Coordinator, Systems, Weapons
- Groundside: Cultural, Operations, Survey, Security, Technical
- Mixed: Medical

Three: Choose the Rest Of Your Investigative Abilities

Investigative abilities are central to any GUMSHOE character; they enable you to gather information and drive the plot forward. You get a number of build points to spend on them, as determined by the size of the player group:

# Of Players	Investigative Build Points
2	36
3	28
4	24
5+	21



As the name suggests, investigative build points can only be spent on investigative abilities. One rating point in an ability costs one build point. There is no extra cost to buy the first rating point in any ability. Each crew package costs a certain number of build points; start by deducting these from your total.

The GM then leads the group through the list of investigative build points, ensuring that each one of them is covered by at least one member of the crew *.

Once all of the abilities are covered, you are permitted, if you desire, to reserve any remaining build points to spend as situations arise during play. You may assign yourself additional abilities, or increase your ratings in the ones you've chosen, as seems appropriate to your character and the situations she finds herself in. When you choose to do this, you are not suddenly acquiring abilities on the spot, but simply revealing for the first time what the character has been able to do all along.

Your choice of race gives you advantages, called boosts, on certain abilities, so you'll probably want to pick these up if they weren't in your crew packages.

The abilities are as follows. Special abilities are available only to vas mal characters. Unlike the other investigative abilities, your group can function perfectly well without them.

RATINGS AND POOLS

The number you assign to each ability is called a rating. Although you may improve it gradually over time, ratings remain static over the course of the typical game session.

For each ability your character has a pool of points, which fluctuates over the course of each session. You begin each case, or scenario, with pool points equal to your rating. You might then immediately spend some of them during a prelude phase to the investigation itself. You will definitely spend points as you conduct the investigation. At times your pool may increase, sometimes refreshing to equal its rating again.

The distinction between ratings and pools is a crucial one; keep it in mind as you read and interpret the GUMSHOE rules.

* Provided that someone takes History (Combine), it's okay, if not optimal, to skip the species-oriented history abilities. At any rate, you'll probably want to take the history of your species, especially if you're playing a non-human.

INVESTIGATIVE ABILITIES

Academic

Anthropology
Archaeology
Botany
Cybe Culture
Forensic Accounting
Forensic Psychology
Geology
History, Balla
History, Combine
History, Durugh
History, Human
History, Kch-Thk
History, Tavak
Law
Linguistics
Vas Mal Culture
Xenoculture
Zoology

Interpersonal

Bullshit Detector
Bureaucracy
Cop Talk
Downside
Flattery
Flirting
Impersonate
Inspiration
Interrogation
Intimidation
Negotiation
Reassurance
Respect

Technical

Astronomy
Bio Signatures
Chemistry
Data Retrieval
Decryption
Energy Signatures
Evidence Collection
Explosive Devices
Forensic Anthropology
Forensic Engineering
Holo Surveillance
Imaging
Industrial Design
Kinetics
Virology

Special (Vas Mal)

Consciousness Simulation
Dreamsight
Neurosight
Timesight

General

Athletics
Business Affairs
Communications Intercept
Emotion Suppression (Balla)
Enhancement Integration (Cybe)
Farsight (Vas Mal)
Filch
Ground Craft
Health
Helm Control
Infiltration
Medic
Migrate Consciousness (Kch-Thk)
Naval Tactics
Neural Rewiring (Cybe)
Pathway Amplification (Vas Mal)
Phase (Durugh)
Preparedness
Probability Override (Vas Mal)
Psychic Vitality (Vas Mal)
Public Relations
Scuffling
Sense Trouble
Shooting
Battle Console
Shuttle Craft
Surveillance
Systems Design
Systems Repair
Viro Manipulation

INTERPERSONAL ABILITIES AFFECT YOUR PERSONALITY

The interpersonal abilities you choose—and perhaps more to the point, the ones you skip—say something about your character's demeanor and behavior. When your rating in an ability is 0, you can never get information or other benefits by using that persuasive tactic. So if you, as the player, are convincingly buttering up a contact but then have no Flattery to back that up, you can't succeed. This reveals something about his ability to impress his personality on others.

How this expresses itself is up to you. Having no Flattery, for example, might suggest that:

- you're a lousy liar
- you're too tongue-tied to let loose a flow of soothing compliments
- you can't stand to cater to others' transparent emotional needs
- egotism forbids you from shining the spotlight on anyone but yourself
- you're not empathetic enough to tell what those needs might be

Likewise, a Bullshit Detector of 0 might imply that you're gullible, bad at reading subtle emotional cues or prefer to take people at face value.

Intimidation 0 could suggest that you're not particularly scary, that you dislike leaning on people, or that you're so frightening that witnesses freeze up in your presence.

You can work out the implications of your interpersonal ability choices in advance. Or you can wait until your use of, or lack of, an ability comes up in play, and then explore how that manifests itself in your actual behavior.

GENERAL ABILITY BENCHMARKS

Where any points at all in any investigative ability implies a high degree of competence, spreads in general abilities cover a wider range of capability levels. A rating of 1-3 indicates that the ability is a sideline. 4-7 is solid but not off the charts. 8 or more suggests a dedicated bad-assery that will be immediately apparent to observers when they see you in action.

When you choose to have ratings of 0 in certain basic abilities, you're defining your character. An Athletics of 0 implies a surprising feebleness and lack of coordination for a laser. A Health of 1 puts you on the constant verge of hospitalization. A Health rating between 6 and 12 should stand you in good stead.

Four: Choose the Rest Of Your General Abilities

General abilities help you survive while you're gathering information and solving problems. You get 75 general build points to spend on them, from which you deduct the cost of the general abilities from your crew package(s.) Every character starts with a Health rating of 1. Like investigative abilities, 1 build point buys you 1 rating point. Unlike investigative abilities, it isn't a game-breaker if certain abilities are left off the crew's collective ability list. The list of general abilities appears below. Some abilities are only available to members of a given species: if so, the species name appears in brackets after the ability name. General points can only be spent on General abilities.

Although there is no set cap on abilities, your second highest general ability rating must be at least half that of your highest rating.

As with investigative abilities (above), you're free to set some build points aside to add to your character during play as the need arises.

Five: Choose Your Drive

Each crew member follows a drive, a personal motivation giving him, her or it good reason to act heroically and curiously. By following your drive, you keep the story moving and ensure that your behavior is in keeping with the space opera genre. The

drives, explained in greater detail starting on p. 53, are as follows. When a species name appears in brackets after the drive name, the drive applies only to that species.

Altruism	Atonement
Avenger	Bleedism
Civilizer	Chronicler
Combinism	Comradeship
Derring-Do	Entrepreneurial
Exploration	Faith
Family Tradition	Footloose
Hotshot	Hunger Tourism (Kch-Thk)
Integrationist (Cybe)	Justice-Seeker
Meditative Reconciliation (Tavak)	Nowhere Else To Go
Phase Rider (Durugh)	Professionalism
Pursued	Programming
Reevolution (Vas Mal)	Role Model
Scientific Inquiry	Self-Exclusion
Sexual Adventure	Social Engineer
Something To Prove	Tech Hound

Six: Choose Your Ship

Together, the players decides on the type of ship their characters fly. When you pick your ship, you'll be choosing the balance of offensive and defensive qualities that best match your group's self-image. Do you want to blaze with firepower or deflect incoming attacks? What weight do you place on speed, against jamming and hacking capacity, against tactical flexibility? You'll also weigh such options as state of repair, cargo space and ongoing upkeep cost. A list of ship types appears here, for more, start on p. 104.

To cut this step short, pick a runner, the default choice of lasers everywhere. It's an all-around performer that neither excels or disappoints in any particular area.

While choosing your ship, you'll collectively decide how your crew came to possess it.

Seven: Choose Tech and Enhancements

The following chart gives you the total budget for all crew members combined, from which they can purchase gear, including cybernetic and viroware enhancements. If you want to buy bolt-ons (p. 115) for later installation on your ship, those fees are also paid for from this budget. You do not pay for the ship itself.

# of Players	Budget
2	72
3	84
4	96
5	108
6	120

Although most groups will divide the bigcreds equally, yours is free to agree to any other arrangement. Players may also collectively decide whether unspent bigcreds remain the personal property of each crew member, or return to the ship's overall budget.

Non-cybe characters may start play with a total of 2 cyber and/or viro enhancements. Cybe characters may start play with up to 7 such enhancements.

To speed up character generation, players may announce how many enhancements they're starting with but leave the specific selections open. To do this, set aside money for future use. You may then decide at any time during play that you've had a particular enhancement all along. When you do so, you spend the money from your reserve. After you run out of reserved money and/or pre-announced enhancement slots, any additional enhancements must be acquired and installed as if new to you, using the improvement rules on p. 126 and 137.

Overenthusiastic purchasing now may require belt-tightening later. Enhancements, like your ship, impose an upkeep cost you must continue to pay over time. Otherwise you lose the use of the enhancements, and may suffer a nasty array of symptoms besides. Basic tech comes at no cost as part of your assumed equipment. For more, start on p. 124.

Eight: Add Personal Details

If you haven't done so already, choose a name for your character. Springboarding from the suggestions on p. 4, figure out what your laser did during the recent war. You can share these facts with other players now, or wait to reveal them during play.

Either before play begins, or after the first session, create a personal arc for your character, as seen at the end of this section. This is a series of brief suggestions your GM will use to weave an ongoing subplot around your character.

Review all of the steps before you get started. You might find a starting hook for your character in a later choice in the list. For example, you might start with a drive and choose your species and crew package to best suit it. Or you might want to play a particular crew position and center all of your other choices around that core concept.

ADDING ADDITIONAL PLAYERS IN MID-SERIES

To add an additional PC to a GUMSHOE game already in progress, assign the same number of investigative build points to the new player as the other players received during character generation. Do not readjust the numbers to reflect the new number of players.

When adding a replacement character, whether played by a replacement player or by the same player in the wake of a previous PC's death or retirement, check the Investigative Ability Worksheet. Highlight the investigative abilities possessed only by the now-absent character. The player of the new character starts by assigning at least 1 build point to each of these abilities. The remaining investigative build points may be spent to increase the ratings of those abilities, or on any other investigative abilities, as the player wishes.

Nine: Note Reputation

As your first episode begins, the crew has already assembled and is assumed to have a modest number of cases to its credit. These past contracts may come into play later, as new episodes refer on the crew's early days as a laser crew.

The general opinion of your crew's honesty and efficiency, as held by those in the business of awarding contracts or purchasing services, is expressed as a Reputation score, which can be either 0, or a negative or positive number. If your Reputation is positive, you'll quickly get new contracts after closing out old ones. Shorter periods between contracts save on upkeep costs, making your operation more profitable. Negative reputations lengthen the periods between contracts, costing you additional upkeep.

Your crew begins play with a Reputation of 0, unless you've chosen to freestripe it (p. 27) in which case it starts at -1.

PERSONAL ARCS

Your personal arc is a narrative hook around which your GM will weave occasional subplots. Over the course of a series, these stories will connect up to deepen, develop, and possibly change your character. Alternately, they might challenge PCs in ways that threaten to change them for the worse. When they overcome these challenges, they prove their heroism by remaining true to their essential selves.

Most contemporary procedural* shows use personal arcs to fill out their characters over time. You know the formula even if you haven't thought about it as such. While the full ensemble of characters tackles the problem of the week, the issues raised by that problem take on a particular relevance for one or two of the cast members. The personal story adds emotional impact to the problem of the week. Over time, as new personal stories build on past ones, the viewer sees a broader narrative linking the episodes.

In scriptwriting jargon, the various plotlines interweaving through the course of a given episode are called A-stories and B-stories. Sometimes the character subplot links loosely, if at all, to the problem of the week, in which case it is the B-story to the central mystery's A-story.

> *In an episode of an imaginary TV series, the crew of the spaceship Brasilia intercede in a civil war between two*

* In this context, "procedural" refers not to the narrow genre of the police investigative genre, but any show in which a set cast of characters solves a problem of the week. Star Trek in its various iterations, Firefly, and Stargate SG-1 are all examples of space opera procedurals.

seemingly indistinguishable factions of an alien species. Meanwhile, Commander B.O.R.N., in his ongoing attempt to learn what it is to be human, tries to master the subtleties of the trombone.

Another structure keeps the two elements tightly woven; the character's personal goals become a complication making it harder to solve the problem.

Sent to put down an android rebellion on the Planet Xaora, the crew of the Brasilia finds itself at a loss when a strangely reprogrammed Commander B.O.R.N. sides with the revolutionaries.

Generally your GM will look for ways to make your personal arc an additional complication to the central mission driving the episode. When this proves difficult she'll make it a largely separate B-story occurring between problem-solving scenes.

Your Arc Meets the Big Theme

Your task when devising a personal arc is to create an ongoing story idea that allows you to explore your character while easily dovetailing with your laser assignments. The easiest way to do this is to create an arc that fits the overall theme of the game.

Ashen Stars places its central characters in a conflict between altruism and selfishness. This is reflected in its setting, pitting the idealism of a fallen utopian order against the harsh realities of a post-war environment.

As lasers, you are constantly navigating this contradiction, trying to bring justice while also turning a profit. The game reflects this with its all-important Reputation score (p. 165.) When you tilt toward altruism, your Reputation grows. When you give into the many temptations lasers face, your Reputation gets muddied.

Each of the races likewise reflects a conflict between their impulses and their aspirations:

- The balla pit their ideal of emotional containment against the reality of their turbulent impulses.
- Cybes seek to transcend the limitations of flesh and blood by remaking their bodies. Ironically, the process makes them all the more aware of those limitations.
- Some durugh seek acceptance among peoples who recently regarded them as enemies, while others yearn for a return to the power and certainty they felt when they were the Combine's sworn foes.
- Humanity's contradictory history has shown its capacity both for enlightened advancement and rapacious exploitation. Will new conditions tip them toward the former, or the latter?

- The kch-thk are capable of great self-sacrifice, but also limitless hunger.
- The tavak struggle to ground their warrior instincts in a meditative philosophy.
- The vas mal used to be near-gods, but are now trapped in vulnerable mortal bodies. Can they re-evolve, or are they doomed to devolution?

You aren't obliged to explicitly link your personal arc to the overall theme.

Submitting Your Arc

Format your arc as follows:

1. A brief sentence or phrase expressing your character's most important goal.
2. (Optional) A second sentence showing how this goal relates to the character's internal conflict between altruism and selfishness.
3. A brief sentence or phrase suggesting an introductory subplot featuring your character.
4. Another subplot that builds on the idea introduced in the previous one.
5. A third subplot concept, again building on the others.

As GM brings your ideas into play, you'll periodically update your arc list to replace them.

Creating Strong Goals

A strong goal is active—it suggests something you'll go out and do. If your goal seems inactive, or about what the character won't do, turn it around. Your character wants something and will, given the opportunity, take action to get it.

The goal can be concrete, or thematic. A concrete goal is specific and material in nature. A thematic goal suggests an inner change or challenge.

Sample concrete goals include:

- find my missing sister
- learn my true parentage
- solve the Bogey Conundrum
- cure the rare disease that's killing my wife
- return to my home dimension
- earn my way back into the Combine navy

Concrete goals imply a conclusive end to your character's arc, often one that will end her participation in the series. Your GM might withhold the goal from you whenever it draws near, to keep the character in the series. She might pace her series so that you have a chance to achieve your goal when it concludes. Or you might, on achieving your goal, find a new one that keeps you aboard the ship.

Thematic goals include:

- overcome the odds with maverick confidence
- make the Bleed a more rational place
- relax my rigid sense of discipline
- prove my worth
- find new friends, to replace the ones I betrayed
- remember you're alive by cheating death

Thematic goals are open-ended. You can achieve them over and over, without changing who you are or why you're serving as a laser.

Whether concrete or thematic, your goal should be charged with meaning and emotion. If you're looking for your missing sister, you have to truly care about her. If your goal is to prove your worth, that has to matter more to you than anything else in this life.

Your goal should match or strongly relate to your drive. Simply restating your drive is perfectly cool; that's what they're there for. If it fits perfectly, just quote the text of your drive description. Otherwise, tweak it until it exactly reflects the laser you want to play. By quoting your drive, you're choosing a thematic goal.

You don't have to tie every sub-plot into your goal. You might design an arc that shifts you from one goal to another, or develops your character in relation to another PCs' goal. However, if you find yourself not wanting to incorporate your goal into sub-plots, it probably isn't as compelling as you thought it was. Take a step back and find a goal that easily suggests a number of stories you really do want to engage with.

Like other creative choices, you can come at this from various angles. You might find it easier to:

- come up with sub-plots first and then find the common goal that ties them together.
- invent a supporting character to whom your PC has an ongoing and turbulent relationship: friend, family member, past or present romantic partner. Then backwards engineer your goal from the contrast between the two characters.
- pick a TV character that resembles yours, rip off a bunch of B-stories relating to that character, then change the details to match this setting instead of the show you're borrowing from.

If your unfamiliarity with the setting of feels like a stumbling block, forget the world stuff for the moment. Focus on an emotionally significant story you'd like to tell through your character. Once you've arrived at this universal human theme or conflict, you can collaborate with the GM to fit it into the basic tropes of space opera, and the specific details of the Bleed. When stumped, describe the arc as it might unfold in our real world, and let the GM translate it into Ashen Stars terms.

Creating Open Subplots

For each of your three subplots, introduce an idea that is specific enough for the GM to latch onto, yet vague and open enough that you'll still be surprised by the way it unfolds. If you're having trouble writing them, find a set of TV listings. Check out the one or two sentence episode summaries for a show you follow. See how they lay out the premise of the episode without revealing its conclusion. That's what you're shooting for here: the basic situation that brings your goal into play and gets your personal story rolling. How it ends up is up to you, the other players and the GM, as you make the story in the course of play.

As examples, here are a few sets of subplot premises arising from some of the goals given above.

Find my sister:

- Someone poses as my sister.
- I run into someone who has one of her possessions.
- I find a survivor who claims to have been aboard her ship when it disappeared.

Return to my home dimension:

- An energy reading seems to emanate from my dimension.
- I glimpse someone who seems to belong to an enemy species from my dimension.
- The case brings us into contact with a psychiatrist who claims my belief in a home dimension is delusional.

Make the Bleed more rational:

- We encounter a race or subculture who take rationality to irrational lengths.
- I am given a chance to save many lives by harsh and cold-blooded means. Can I go through with it?
- We deal with a pathogen that strips away all but the most primal of emotions

Prove my worth:

- the victim of the week is the hard-assed instructor who flunked me from helm school
- to solve the case we need the help of my disapproving uncle, who wants me back on the ion farm
- a scandalcast journalist writes a profile that's supposed to boost the crew's image, but I keep making us look bad.

Write your suggestions so that they draw out your story over time. This is especially important when your goal is a concrete one. If your goal is to find your sister, your first subplot idea can't be "I find my sister", because that burns through your goal immediately. If you can't see a way to slowly develop your goal, go back and pick one that can be teased out in increments.

Your GM may collaborate with you to clarify or modify your ideas, so that she can understand them, and fit them in with the other arcs.

How Sub-Plots Get Implemented

After an introductory episode or two, in which the crew as a whole is established, the GM starts bringing in personal subplots. Typically, each player will get a subplot until everyone has had one. Then the GM will start over. To preserve surprise, she may vary the order from each round of subplots. Often the order will vary itself naturally as the GM adjusts for player absences.

GM guidance for personal arcs appears on p. 217.

Hosers Get Hosed

Personal arcs are a vehicle for you to transmit story requests to your GM. They don't allow you to circumvent the rules to get more stuff for your character or ship or to secure other unearned benefits. If you try, you may discover that you have a sympathetic GM. This GM will work with you to remove your attempt to hose the rules, and find an equivalent idea that does fit the spirit of the concept.

On the other hand, you might find that you have a cunning GM, who gives you what you want, and then uses it as a way of getting you into trouble. In the end, you'll face this interesting trouble, only to have the advantage you were looking for yanked away from you.

Think of how often TV episodes flirt with plot developments which, if followed to their logical conclusion, would end the premise of the show. By the end of the episode, unless it's the finale, the status quo returns. This is what might happen when your GM runs with what seems like a hose attempt on your part.

So if your subplot idea is: *"We get a bigger, better-armed and defended ship,"* you'll get it perhaps for the length of the episode, only to see it blown up, confiscated, or donated to needy orphans.

If your idea is, *"I achieve godhood,"* it happens only briefly, and you then discover that the hangover from apotheosis is a bitch.

Freedom, Skeeviness & Sympathy

The Ashen Stars setting is designed to address the recurring problems of space opera roleplaying.

Classic space opera settings are hard to translate to roleplaying because they usually organize their ensemble casts along military or quasi-military lines. Chains of command make for clear fictional storytelling, but disrupt the joint decision-making that is the hallmark of an RPG session. Ashen Stars removes this issue by making its protagonists freelance law enforcers who organize themselves cooperatively.

The same people who enjoy the ultra-optimistic worldview of shows like Star Trek tend to chafe at the high virtue expected of their heroes when they sit down at the gaming table.

Ashen Stars posits a utopian future, and then scuffs it up and places it in the immediate past. Its fraying post-utopia licenses players to explore the shady, self-interested or irresponsible characters they so often gravitate towards.

At the same time, it introduces a mechanism to keep this tendency from going so far that it stops being fun. Players often want their fictional surrogates to behave skeevily—until they inevitably step over the line into outright nastiness, and become too unsympathetic to play. Our innate sense of story rebels when our central characters consistently engage in unredeemed selfishness and face no comeuppance. By quantifying, and giving the players reason to worry about, their crew's Reputation, the game maintains the balance between enjoyable roguishness and revolting transgression.

We'll revisit this issue when we get to the Reputation rules.

THE SEVEN PEOPLES

Each PC belongs to one of the Seven Peoples, the major sentient species dominant in the Combine. This section describes them in enough detail to decide which you want to play. The descriptions here are written in the second person and provide all you need to know to start playing. Each provides additional abilities or benefits which you gain without spending build points during character creation.

All of the seven peoples are humanoid in body shape. Sentient races with non-humanoid body morphologies are known but rare. They are now subject to prejudice, because the Mohilar, who recently brought about the near-destruction of the Combine, are now fuzzily imagined as having had far from humanoid bodily structures.

Future sourcebooks will include game details for less common species, if demand warrants. Players and GMs wishing to collaborate to create new races of their own should take care to keep the mechanical benefits within the range of those given below.

Humans are by far the most common of the seven peoples. When Bleed denizens imagine a Laser crew, they tend to picture a group of humans, with one or two of the other races sprinkled in. Defying this expectation presents no great obstacle, except when dealing with unusually xenophobic human sub-cultures. If your crew consists mostly of non-humans* , the people you encounter will find it interesting enough to remark on, the way they might if everyone had red hair or blue eyes.

SPECIES FORMAT

Each species is presented in the following format:

A text block, written in the second person, describes the species from the point of view of a Laser who belongs to it. It covers the species' physicality and defining social or psychological traits, concluding with brief mentions of its standout cultural qualities. Rules notes appear after the text block:

Boosts: A PC Laser of this species gains boosts (p. 79) in three of the abilities listed here. Where more than three abilities are listed, the player chooses the ones the character is boosted in. Although supporting characters don't necessarily use these abilities†, the list does, for story purposes, suggest the fields the species is particularly associated with.

Other Modifiers: If the PC gets modifiers to its Hit Threshold or Unarmed Damage, these are noted here. They apply to all adult members of the species, not just PCs.

Suitable Drives: This entry lists the drives (see p. 53) that most closely fit the species' culture and background. To make your character atypical of the species, pick a drive not listed here or in the next entry.

Unique Drives: This entry lists drives specific to the species, with page references. Each non-human species has at least one of these.

Species-Specific Abilities: If applicable, this names the abilities available only to the species. You do not automatically get a boost in the ability but might acquire one by other means. Supporting characters may have them in the setting, but, due to GUMSHOE's player-facing nature, might not use the game mechanics.

Cybernetic Compatibilities: The anatomy of your species particularly suits the installation of particular cybernetic enhancements. If a cybernetic device is listed here, its install cost is reduced by 1.

Cybernetic Clashes: The anatomical configuration of your species may make it difficult to install certain cybernetic enhancements. If a cybernetic device is listed here, its install cost doubles.

Viroware Affinities: Certain types of viroware work best on particular species. If a viroware type is listed here, its monthly upkeep cost is reduced by 1.

Viroware Susceptibilities: Certain types of viroware mesh poorly with particular species' cellular structures. If a type is listed here, its upkeep cost is doubled.

* Most game groups will include more aliens in their crew than humans. This does not mean that they are representative of the average Laser crew in the fictional setting.

† See p. 196, "Player-Facing Rules."

Player-Built Cultures

Ashen Stars provides players of alien species a strong archetype to build from without loading them down with masses of cultural detail they have to absorb before being able to properly play their characters. Instead it encourages the group to gradually build a portrait of the alien culture, the way the writers of a TV show would do.

Think of your favorite space opera show in which some of the regular characters are aliens. They create their alien cultures incrementally, over the course of many episodes. More importantly, the details arise from particular storylines. They are key either to the resolution of the central problem, or of a character-centric sub-plot.

Players can suggest details by:

Building them into their personal arcs (p. 10.)

Spontaneously describing them in response to in-story situations

Citing them in dialogue, as banter or offhand references

Keep track of details over time, either by remembering them or jotting them down. Make it the alien player's duty to recall the player-built details introduced to date.

The GM can enhance introduced details by building on them further. An offhand reference might become the springboard for an episode's central mystery. Either GM or player might weave in an elaboration on the detail the next time the PC features in a personal arc.

GMs should be careful not to stomp on player-driven cultural details just because they happen to contradict material given in this book. Rather than shutting down the suggestion entirely, either modify the suggestion to better fit the established material, or depart from the depiction given in this book (or later supplements.) It's easy to lock into a certain take on a culture after reading a section of game text. However, it's almost always more satisfying to adjust preconceptions to encourage spur-of-the-moment creativity. Turn storytelling into storymaking by encouraging your players to contribute to your unique version of the Bleed.

The Balla

You are of the Balla, a lithe, light-boned species known for becoming ever more eerily beautiful with age. Balla children appear unformed and somewhat grotesque, even to their parents. Despite your clumsiness and unbecoming appearance, you were trained by your elders for an adulthood of grace and beauty. By the time you reached sexual maturity, around the age of eighteen, you had gradually transformed into a silky-haired, bright-eyed being with perfectly symmetrical facial features and ideally proportioned musculature. After this time, your interactions with other species changed. You were treated as an object of awe, and granted unconscious deference. Sometimes these attentions were uncomfortable, taking on an overtone of intense sexual desire. Your elders warned you not to wield this unwanted power as a weapon, to treat other species as your equals, despite their instinctive urge to worship and obey you. As you get older, your physical loveliness will only increase. Many decades from now, you will have to enter a cloistered life, so that your extreme beauty will not drive others—even other, younger Balla—insane.

As a point of honor, balla are trained not to use their appearance to achieve dominance over others. Although this principle is not universally followed, the average balla is a surprisingly awkward seducer.

Like all Balla, you are rocked by powerful emotions which you continually work to contain and conceal. Without constant mental discipline, you might faint, weep uncontrollably, or surrender to violent rage. By far the most common symptom of emotional surrender is derangement of the senses. A device known as the mor sohn (p. 145) allows you to literally bottle up your excess emotions. If you fail to use it or lose access to it, you risk slipping forever into a hallucinatory fog.

Normally, your species' psychic discipline comes as second nature to you. However, if other balla start to display feelings in your presence, a psychic chain reaction can occur, causing all of you to break down. Your society holds no greater taboo than the failure to suppress outward signs of emotion. The object is not to become unemotional, which would be impossible, but to avoid

showing or acknowledging your feelings. It is best not to mention them at all—including your need to suppress them. Outside of the process in which children are trained to exercise mental discipline, no balla in good standing would ever discuss any of the facts given in this or the preceding paragraph. Where discussion of emotions is unavoidable, you have learned to speak obliquely, in the hypothetical third person. Instead of saying, "This angers me," you say, "In a similar situation, one might experience the state known as anger."

Balla emotionalism extends to your investigative work as a Laser. Each a piece of evidence carries an empathic wallop. While recounting the historical events of the Great Founding, you might feel a swelling optimism. When you spot a bloodstain left behind from a violent fight, you might register the fear of the victim or the rage of the attacker. This response does not grant you more information than an investigator of another race would get. You simply react more viscerally to the clues you gather.

Other hallmarks of balla culture include an affinity for the natural world, a devotion to your peoples' ancient calligraphic scripts, a tradition of achingly beautiful music, and a love of rhetoric. Translation devices (p. 126) render your speech as formal and portentous.

Balla given names are two syllables long and begin and end with vowel sounds. Some include no consonants at all. Choose an example from p. 261 or invent a name that follows these rules.

Boosts: Botany, Geology, History (Balla), Zoology

Suitable Drives: Altruism, Atonement, Avenger, Bleedism, Chronicler, Combinism, Entrepreneurial, Exploration, Family Tradition, Justice-Seeker, Nowhere Else To Go, Professionalism, Pursued, Scientific Inquiry, Tech Hound

Unique Drives: Self-Exclusion

Species-Specific Abilities: Emotion Suppression

Cybernetic Compatibilities: Dataloader, Headdisk, Internal Headset

Cybernetic Clashes: Motobooster, Phosphoryltic Battery, Popclaws

Viroware Affinities: Brainwave Recycler, Heighten Pre-Frontal Cortex

Viroware Susceptibilities: Keratinized Epidermis, Refractive Skin, Slickskin,

Special: **Inspiring Presence:** Once per episode, you may spend 1 Inspiration point to refresh one of another PC's general ability pools (Health excepted).This must occur in a moment of relative calm and reflection—that is, not in the middle of a fight, ship combat, or other crisis or contest.

cybes

You are a genetically and cybernetically altered being, originally from human stock. You are the results of super-soldier experimentation undertaken during the Mohilar War. In all likelihood, you served in the war. If not, you'll need to explain why you didn't, which you can do either immediately or at an appropriate moment in the course of the series.

If you're like most of your kind, you consider yourself a new species, *homo amplius*. About 70% of cybes fall into this category. Cybes of this persuasion seek to build their own settlements and cultures. If you count yourself among them, you envision a utopian cybe society based on the principles of self-determination, mutability of body and soul, and personal freedom. Attempts to found such societies have proven rocky so far. When outsiders point this out to you, you might reply that you're doing much better than homo sapiens a single generation after it first appeared. Among fellow cybes you might be willing to admit that the tenuous interpersonal connections fostered by cybe ideology make for volatile communities—especially when the innate aggression installed in your genes by Combine geneticists kicks in. You are nonetheless determined to lay the foundations for a perfect society. Since the cybes intend to render themselves effectively immortal through additional modification, they'll be living with the results of today's political developments for centuries to come. If you're a member of this dominant faction, you call yourself an amp or evolver.

About one in ten cybes consider themselves to still be human. They resent the notion that they might be anything else, reject political separatism, and seek full integration with human societies. Other cybes contemptuously refer to them as vestigials; they call themselves integrationists and label the so-called amps as transers.

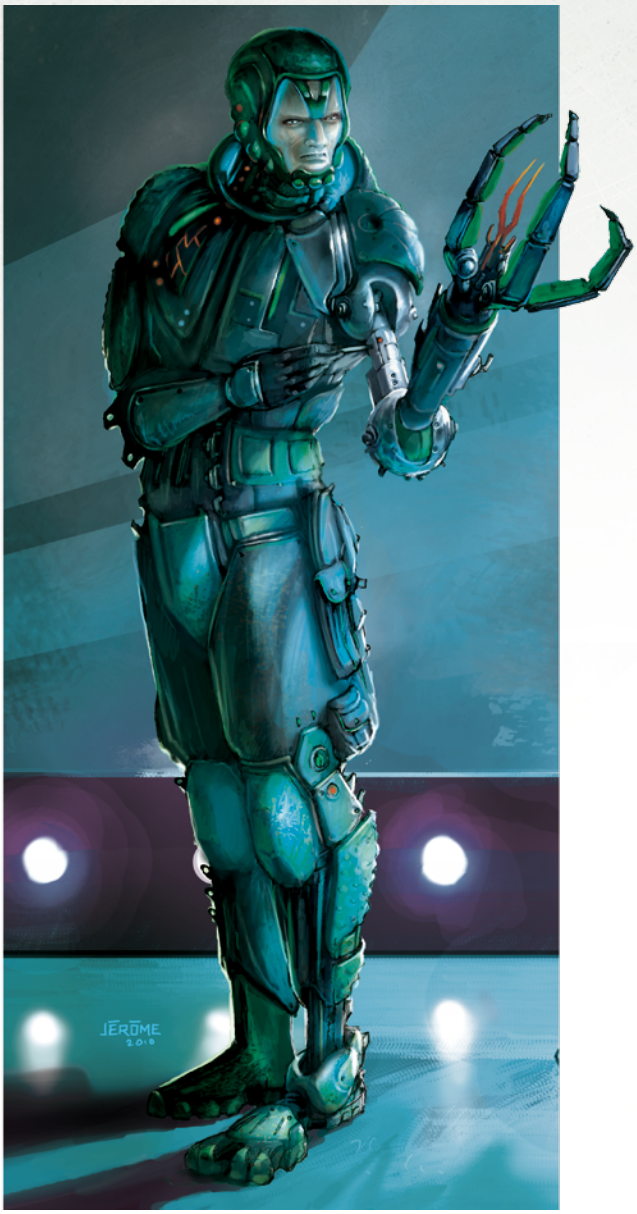
Cybes can reprogram their abilities at will, at the cost of personality drift; see the Neural Rewiring ability, p. 49.

Translation devices render your speech patterns as slightly stilted and robotic. You may speak in a staccato rhythm or a monotone, or avoid the use of contractions.

Cybes abandon their human names to affirm their identity as a separate species. Their names are metonyms: English words that reveal their (self-perceived) best qualities or capabilities. They may seem blunt or boastful to others. Older cybes append the vowel u to the English word, which stands for Unit. Younger cybes drop this convention. Pick a name from the sample list of on p. 262, or use it as inspiration for a similar name of your own invention.

Boosts: Culture (Cybe), Bullshit Detector, Virology

Suitable Drives: Altruism, Atonement, Avenger, Bleedism, Chronicler, Combinism, Comradeship, Derring-Do,



Entrepreneurial, Exploration, Faith, Hotshot, Justice-Seeker, Nowhere Else To Go, Professionalism, Pursued, Programming, Role Model, Scientific Inquiry, Tech Hound

Unique Drives: Integrationist, Social Engineer

Species-Specific Abilities: Enhancement Integration, Neural Rewiring

Cybernetic Compatibilities: All

Cybernetic Clashes: None

Viroware Affinities: All

Viroware Susceptibilities: None

Inter-Species Romance

The seven peoples are not, as a rule, interfertile. (Otherwise they wouldn't be separate species, would they?) Cybes, though descended from humans, are infertile by design, though some of their scientists are working to reverse this condition. Others pursue effective immortality through ongoing genetic and robotic enhancement, which will render them immortal and in no need of reproduction.

The insectoid Kch-Thk are physically incapable of sexual congress outside their own species, as are the Tavak. Even so, they sometimes develop romantic attachments to aliens, which are consummated by unconventional means. Such liaisons are taboo in both cultures.

The remaining species are sufficiently physically compatible to enjoy relations with the others.

The Vas Mal are interfertile with humans and balla, but try to avoid reproduction in general, as it retards their efforts to regain their lost energy forms. In such pairings the non-Vas Mal parent is entirely dominant; the child lacks all Vas Mal traits.

Balla are also interfertile with humans. Fifty percent of all hybrid births are stillborn. The survivors grow up into oddly homely balla.

Before the war, romantic or sexual pairings across species were more common than today. Many nufaiths discourage them. Even among the secular, a superstitious belief has arisen that the extreme tolerance of the Combine's golden age led to its vulnerability to Mohilar attack. People may give unconscious credence to this belief, even as they espouse the old tolerances.

Still, the universe is a lubricious place, and desire has a funny way of prevailing, even in the face of social prohibitions. Seasoned investigators must always be open to the possibility that figures in their current case are crossing the species barrier behind closed doors.

The Durugh

Other species may instinctively recoil at your twisted features and hunched physiques, but you durugh certainly came in handy during the Mohilar War. Your ability to briefly phase between dimensional layers made your people ideal spies and infiltrators. A once-despised enemy of The Combine, your people initially threw in your lot with the Mohilar when war broke out. Your much-derided penchant for double-dealing proved indispensable when your martyred former king, Ukshqa, used his access to the Mohilar mothership to discover their genocidal plans for your race after the Combine was defeated. Thanks to the Bogey Condundrum, due credit for the defeat of the Mohilar has been taken away from you. Still, you are sure that the durugh were somehow instrumental to victory. Although a small faction of durugh want to go back to the old ways and fight the Combine, a new majority seeks peaceful union with it. Since then you have learned that the universal tolerance espoused by the Combine is more ideal than reality. The durugh were the primary foes of the Combine peoples for generations, and old perceptions die hard.

The war, and Ukshqa's great sacrifice, worked great internal changes on durugh society. Its old hierarchical structure, based on a rigid class system and enforced by brutal punishment, has fallen by the wayside. Now all the classes can perform the dimension phase, making a police state impossible to maintain. Each durugh world has fallen into its own unique anarchy, some more benign than others. The future is wide open, assuming you don't all backstab each other to death first.

Translation devices often render durugh speech as sibilant, high-pitched or whiny. They undermine even your most lofty expressions. Despite years of effort the technical breakthroughs needed to remedy this flaw remain elusive.

You range between 127 and 168 cm in height. Dense musculature and bone structure makes you heavier than a human counterpart. Your fingers are disproportionately long and thin, your thumbs thick and partially bifurcated. Durugh tend toward pale complexions and dark hair.

Durugh names sound, at least as rendered in English by translation devices, like a cross between Latin and Assyrian. Pick a name from the list in Appendix 1 (p. 263), or invent one that sounds similar to those.

Boosts: Decryption, Explosive Devices, History (Durugh), Downside, Negotiation, Filch, Preparedness, Surveillance, Infiltration

Suitable Drives: Altruism, Avenger, Chronicler, Comradeship,

Entrepreneurial, Exploration, Faith, Footloose, Justice-Seeker, Nowhere Else To Go, Professionalism, Pursued, Programming, Role Model, Scientific Inquiry, Sexual Adventure, Something To Prove, Tech Hound

Unique Drives: Phase Rider

Species-Specific Abilities: Phase

Cybernetic Compatibilities: Breadbox, Handgun, Interface Transducer

Cybernetic Clashes: Aidkitter, Berserker, Episealant

Viroware Affinities: Aggravator, Chameleon, Dominator, Mr. Grey, Peacepipe, Scrambleface, Scrambleface Ultra, Snakehisser, Stumulust

Viroware Susceptibilities: Proprioception Booster, Tiresias

humans

As a human, you belong to the Combine's most numerous and politically dominant species. You probably look just like a particularly fit and attractive human being of the early 21st century. About one in twenty humans now boast genetically inherited body modifications. These originated in a vogue for cosmetic form alteration that flourished during the historical period known as the Flowering (p. 159). Today it is not uncommon to encounter people with brightly hued skin, pronounced facial ridges, luminous hair, or cat-like eyes. Some conformist cultures require all citizens to display a distinctive set of cosmetic alterations; others insist on original human form, or OHF as it is called. As with any species, use of viroware may also alter your appearance.

If you have a high opinion of your species and its history, you believe yourself inspiring, innovative, and resourceful. If you take a more jaundiced view, you see a history of chauvinism, unchecked expansion, and heedless resource consumption.

Humans are the most pleasure-seeking and libidinous of the major species. Depending on your personal attitudes, you may celebrate its devotion to fleshly rewards or view it as a tragic flaw to be stoutly resisted.

Although all species tend to divide people into "us" and "them", this tendency is hardwired particularly deeply into the human psyche. Humans are known for treating positive traits universal to all species as somehow unique to their own. You may catch yourself doing this too, perhaps while using phrases like "indomitable human spirit." You may also tend to refer to negative traits as inhuman or supernatural, even though there is no form of cruelty so repellent that it does not feature extensively in the chronicles of your people.

Yours is the most culturally mutable of the seven peoples. Wherever humans go, they quickly divide and subdivide themselves into new cultures. They devote themselves easily to abstract ideologies. This behavior also roots itself in neurochemistry. The human brain supplies a dopamine reward whenever its owner rejects new facts in order to preserve its existing belief system. The greater the factual challenge, the stronger the reward. Humans get more dopamine by being extremists than by espousing reasonable beliefs or modifying their views to fit new evidence. For this reason they are innately prone to schism and internecine conflict.

Still, without your boundless sense of the possible, the Combine would not have come into being. Without your ruthless streak, it would not have prevailed against the Mohilar. As the age of rebuilding begins, it's up to people like you to ensure that humanity's best qualities take precedence over its worst.

Human names have evolved a little over the last four centuries. Long surnames have been shortened. People also prefer short, punchy given names. Characters whose first names are longer than two syllables go by a diminutive or a descriptive nickname. See p. 264 for inspiration.

Boosts: pick any four: History (Human), Inspiration, Flattery, Flirting, Negotiation, Reassurance, Business Affairs, Ground Craft, Helm Control, Medic, Naval Tactics, Public Relations, Battle Console, Shuttle Craft, Systems Design, Systems Repair, Viro Manipulation

Suitable Drives: any non-unique drives

Unique Drives: none

Species-Specific Abilities: none

Cybernetic Compatibilities: none

Cybernetic Clashes: none

Viroware Affinities: none

Viroware Susceptibilities: none

Special: Dauntless: During any fight, ship combat or contest you may, when a general pool other than Health drops to 0, roll a die. On a result of 1, that pool instantly refreshes. You may refresh one pool per episode in this way.

The Kch-thk

You belong to the only non-mammalian race among the Seven Peoples. You look like a six-foot-tall humanoid locust. You walk on two legs and use your other four to wield weapons. The egg you were originally hatched from was chosen after an exhaustive process of inspection by your clan, a colony of several thousand individuals. After a long nutrient soak, you emerged from it in larval form. Hundreds of other slightly less perfect larva were imprinted with your DNA during this nutrifying process. Upon hatching, you were invested with a name and trained in the six warrior arts. You proved your competence as a fighter—if you hadn't, you would have been slain and reduced to nutrient mush for someone else's larva. After this time you may have specialized in some other task, or continued to devote yourself to warlike pursuits.

Your people crack-cricked with joy at the arrival of the Mohilar war. The sentimental live-birthing species treat the war as if it were a wrenching disaster. Yours regards it as a crowning opportunity, in which you fulfilled your collective destiny as killers and devourers. Kch-thk populations exploded during the war. When soldiers were mowed down, other larva rose to take their place.

Non-Standard Character Types

Some players may want to set aside the seven races given here to portray non-standard character types. These may be inspired by other science fiction settings or spring entirely from their own imaginations. Examples might include:

- An "uplifted" animal given sentience via genetic modification
- A fully robotic being possessing artificial intelligence
- A strange hybrid mixing human traits with those of an unidentified other race, with some evidence pointing to Mohilar heritage
- An alien from a parallel dimension, whose traits might lead to an intellectual property lawsuit, were we to describe them here. But what you do with popular settings in the privacy of your own home is none of our business.

In each case, the character represents the only one of his, her or its kind in Combine space. This uniqueness comes into play in the character's personal arc. Unscrupulous scientists may attempt to kidnap the character for study. Xenophobes find her a convenient scapegoat for crimes and disasters. The character may discover others of her type, only to lose them at the end of the episode, or discover that they're frauds.

The player proposing a nonstandard character must sell the concept to you, writing up a paragraph describing the type, with notes on characterization and history, where appropriate. The concept must somehow address the game's theme: the collision between high ideals and difficult realities. Species descriptions handle this by contrasting the people's position in the golden age before the war to their changed circumstances now. For example:

- the uplifted animal struggles between its civilized aspirations and its predatory instincts
- the robot's desire for acceptance clashes with its rational belief in organic inferiority

The player may leave points of the character's origin mysterious, with the understanding that they'll be slowly revealed over time through his personal arcs. The player may propose a unique drive, or use any of the standard ones. He specifies three boosts. Abilities given as boosts to any of the standard peoples (other than humans) in this chapter are off-limits. The player may propose a unique ability; collaborate with him to ensure that it neither duplicates nor eclipses in awesomeness the species-specific abilities that already exist in the game. The unique character may have up to three Viroware Affinities, provided none of them duplicate affinities already taken by a standard people. The GM then assigns three Viroware Susceptibilities, based on the logic of the submitted description. Unlike Affinities, they may overlap. Alternately, the player sidestep the issue entirely by deciding that the character is unable to use Viroware of any kind. This would make sense, for example, in the case of a robotic character.

Dying is a way of life for you. Your chitinous body is all but disposable. When it is destroyed or damaged beyond repair, you can migrate your consciousness into a new larva kept in a temperature-controlled grk-k'ka chamber. It is then doused in a hyper-nutrient bath and, in a matter of days if not hours, regrown to full size. The new body is in every respect a copy of the original, without any lasting damage it may have suffered during its undoubtedly short existence. (Sadly, you also lose any implants or viroware you had installed, which is why your people don't much bother with these technologies.) You can migrate your consciousness over great distances. Assuming no anomalous local conditions apply, if your chamber is anywhere on the same planet as you, or is on your ship in orbit around the planet, you're golden. You can't, however, migrate over interplanetary distances.

Before your home planet's industrial revolution, consciousness migrations were rare events. Only the wealthy could attempt it, and even then there were a dozen failures for every success. Technological improvements to the grk-k'ka chamber turned it into a mass phenomenon only centuries before your people reached the stars.

Kch-thk are long-lived but scarcely immortal. Eventually every kch-thk soul fails to take root in a new larva. Consciousness degrades over the decades, finally concluding in senility, after which migration becomes impossible. A few unusual individuals have been migrating between bodies for centuries. The oldest of these was supposedly born in 1954, although debunkers dispute his claims. You are probably in your late twenties or early thirties. With the dangerous life you lead as a Laser, senility is the least of your concerns.

The drawback of kch-thk existence is your constant need to consume. Traditionally, the great pressure a kch-thk presence places on the environment constrained its population growth. When the Combine sanctioned unchecked hatching to reinforce its armies, it lit the fuse on a demographic time bomb. There are more kch-thk than the Bleed can support, most of them decorated veterans of the great conflict. Some people predict war between the kch-thk and the other peoples when your species goes on a devouring jag. In your own small way you hope to forestall that, by serving as a Laser and reminding the other peoples of your value.

Culturally, kch-thk are materialistic, unsentimental, and warlike. If you're the typical kch-thk, you speak with sometimes off-putting frankness. Niceties designed to prevent hurt feelings are lost on you. You may not have lost the habit of describing people or their treasured animal companions by their likely flavors. As in, "The man I surveilled near the shipyard was fatty and grain-infused."

Even after they reached the stars, kch-thk were enthusiastic devourers of other species, making no exceptions for tasty-looking sentients. As their contribution to the founding of the Combine, your ancestors agreed to a species-wide genetic alteration, administered through grk-k'ka fluid. An ineradicable behavioral compulsion now prevents you from eating humanoids.

Kch-thk perpetually seek chances to prove themselves, and are always on the lookout for new food sources. When vat-bred larva aren't available, you'll chow down on almost anything organic.

The popping and clicking noises made by kch-thk mandibles when they talk bleed through into audio translations of your speech.

Kch-thk names are two syllables, separated by a hyphen, consisting entirely of consonants. Humans and others add random vowels to them in an attempt to render them pronounceable. Take a name from the sample list on p. 266, or invent one of your own following the same formula.

Boosts: History (Kch-Thk), Intimidation, Scuffling, Shooting

Suitable Drives: Altruism, Avenger, Bleedism, Chronicler, Combinism, Comradeship, Derring-Do, Entrepreneurial, Exploration, Footloose, Hotshot, Justice-Seeker, Nowhere Else To Go, Professionalism, Pursued, Programming, Role Model, Scientific Inquiry, Something To Prove, Tech Hound

Unique Drives: Hunger Tourism

Species-Specific Abilities: Migrate Consciousness

Cybernetic Compatibilities: Aidkitter, Amper, Biofueler

Cybernetic Clashes: Breadbox, Headdisk, Ocular Input Analyzer

Viroware Affinities: Morphological Mimicry, Refractive Skin, Slickskin

Viroware Susceptibilities: Brainwave Recycler, Latency Suppression, Mr. Grey

The Tavak

At an average seven feet in height and topping the scales at close to half a ton, you are a tavak, the most physically robust of the seven peoples. Descended from the armadillo-like creatures of your homeworld, Tav, you are covered with hairy plates of natural armor. Piercing retractable claws wait within your long, wrinkled fingers. Your culture transformed when your ancestors discovered the warp corridors and reached the stars. Before that, your people were peaceful, placid insectivores, surviving through an instinct for social harmony. When they reached space, they found it a cold and forbidding environment, wracked by warfare. They also discovered that their naturally armed and armored body morphologies gave them a physical edge over their rival peoples. Over the course of a generation, they transformed themselves into formidable warriors. Yet even as they embraced the art of combat, they held fiercely onto their traditions of spiritual serenity and political coexistence.

Humans take credit for brokering the formation of the Combine, but it is the Tavak philosophy that provides it with its guiding principles.

By default, you are calm, centered and even somewhat sleepy. Only when danger threatens do you rouse yourself with the warrior's mantra and transform into a furious fighting machine. You end the fight with decisive, but not excessive force, then return to your state of lowered excitation. Or that is what happens under ideal circumstances. In fact, the quick transition from peace to war has left you susceptible to battle frenzy. When in this state, your fury is a terrible thing to witness, a danger to foe and friend alike.

Translators render your speech as lilting and sometimes painfully slow. Fortunately, if you are a typical Tavak, you are a being of few words. When you have something important to say, you say it. Most of the time you lapse into a meditative state of alert tranquility. You have had to alter your conversational style to be understood by outsiders. Discussions among Tavak consist mostly of grunts and nearly

imperceptible gestures, which are somehow able to resolve complex issues into a happy consensus in a few quicksilver instants.

Tavak names are always two syllables long, following a consonant-vowel-consonant-vowel-consonant pattern. The Tavak language uses only a limited number of consonants, mostly hard. Pick a name from the list given on p. 267.

Boosts: History (Tavak), Interrogation, Reassurance, Athletics, Scuffling, Shooting

Suitable Drives: Altruism, Atonement, Bleedism, Chronicler, Combinism, Comradeship, Entrepreneurial, Exploration, Footloose, Justice-Seeker, Nowhere Else To Go, Professionalism, Pursued, Programming, Role Model, Scientific Inquiry, Sexual Adventure, Something To Prove, Tech Hound

Other Modifiers: Hit Threshold +1, hand to hand Claw attack +1damage

Unique Drives: Meditative Reconciliation

Species-Specific Abilities: Resist Battle Frenzy

Cybernetic Compatibilities: Berserker, Mesodermal Jumper, Motobooster

Cybernetic Clashes: Bad Liver, Neurojolter, Nightvision,

Viroware Affinities: Latency Suppression, Regenerate

Viroware Susceptibilities: Skeletal Fluidity, Keratized Epidermis, Tiresias

Special: Your marksmanship is so well-honed that you can, at will, do lethal damage while firing a weapon tuned to a non-lethal setting. You never have to pay Shooting points to switch a weapon from a non-lethal to lethal setting.

The Vas Mal

Once—less than a blink of an eye in cosmic reckoning—you were infinite. You were the Vas Kra, beings of pure energy and universal consciousness. Though you were not gods, and sought not the worship of biological beings, you sometimes received it all the same. Your thoughts reverberated through the universe. You became one with the great cycles of being and unbeing. All was revealed to you. There was neither happiness nor unhappiness. Neither desire nor contentment. There simply was the Vas Kra, and that was balanced and infinite.

From time to time your sense of pervading essence led you to intervene in mortal affairs. First, you exiled to the final corridors of the Dimension U, the renegade Vas Kra whose name can now not be remembered. He had gone mad, and acted like a devil in mortal mythology, tormenting hapless sentients. So naturally he had to be removed to a place beyond the veil. Through this act you forged a bond with the beings called humans. You saw their potential and their tragedy, and were moved.

Their plight was within them, a propensity for self-defeating aggression. You acted at the margins, working small changes of perception. You fostered coincidences, caused unseen connections. And through this action the warring species achieved unity, and formed the mortal polity called the Combine.

Thus were sown the seeds of your doom. For universal awareness must not become specific, lest it devolve. And by attaching yourselves to the practical fortunes of the flesh-bound, you opened a conduit between destinies.

The Mohilar, whoever they were, found the sub-atomic anomaly you had thus generated and used it to end your eternal primacy. Their doomsday weapon followed it, homing in on your energy signatures. You were devolved. You returned to mortal form, as you had not been for untold eons. Yet your new bodies were not the perfect specimens of distant memory. They were weak, malformed, hideous.

This happened five or so years ago, as mortals reckon time. To be bounded not only by physicality but chronology is a loathsome burden indeed!

You appear as a 92-122 cm humanoid, your head oversized, your eyes black and enlarged, your body spindly and twisted. Your skin is gray or green and semi-translucent. When you use your psychic powers—mere mocking echoes of what you once possessed—your luminous brain can be seen pulsing within your skull. Although you still retain vestigial remnants of your universe-spanning mental abilities, they overtax your puny new bodies. (This effect can be resisted to some extent with the Psychic Vitality ability, p. 51.)

There are only a few thousand of you now. Despite your small numbers, your influence on post-war history has led the mortals to regard you as the seventh of the great peoples of the sector. You seek to reverse the devolution process and return to your immortal oneness. Somewhere in the Bleed lies the cure to this appalling condition of weakness and mortality. Now equal members of the Combine, you join with your erstwhile mortal protégés to conduct this search.

The Vas Kra had no names, identifying one another by psychic resonance. The vas mal have taken on slightly odd human names, in which an archaic first name is followed by the second name of an important figure from ancient Earth history. Pick a name from the appendix entry on p. 268 or invent one along similar lines. Although your character might have started with a second name accidentally taken from a figure of ill repute, he has since been informed of the embarrassing error and chosen a replacement name evoking more positive connotations.

Boosts: Linguistics, Vas Mal Culture, Xenoculture, Bio Signatures, Energy Signatures, Communications Intercept, Sense Trouble

Suitable Drives: Altruism, Atonement, Comradeship, Exploration, Nowhere Else To Go, Pursued, Scientific Inquiry

Unique Drives: Reevolution

Species-Specific Abilities: Consciousness Simulation, Dreamsight, Farsight, Neurosight, Timesight, Pathway Amplification, Probability Override, Psychic Vitality.

You start play with Psychic Vitality and up to two of the other species-specific abilities. You may gain other abilities from this list when improving your character during play. The first rating point in any newly acquired species-specific ability costs 5 build points.

Psychic Vitality is an essential counter to the condition of psychic depletion (sidebar; p. 42), which exacts a toll on you whenever you use one of your other species-specific abilities.

Cybernetic Compatibilities: none

Cybernetic Clashes: all

Viroware Affinities: none

Viroware Susceptibilities: all

WHAT YOU CAN DO

This chapter details the abilities you bring to bear on the cases you contract to solve. It discusses crew packages, bundles of abilities tied to particular duties you undertake on or off the ship. It then continues by defining the various abilities, both the investigative ones essential to the solution of mysteries, and the general ones that keep you alive, and perhaps even prosperous, while you solve them.

CREW PACKAGES

A crew package gathers together the basic abilities you need to fulfill a common assigned role aboard a Laser vessel. Lasers typically adopt at least one set of duties aboard the ship and another when on a planet's surface tackling the problem they've been hired to solve. These are called, respectively, a Laser's warpside and groundside assignments.

The role of medical officer is considered mixed; its duties are as crucial aboard the ship as on shore.

As Laser crews are small, personnel may be called on to double up, taking on more than one warpside or groundside assignment. Doubling is easier on the ground. Certain warpside assignments must be performed by different people. These incompatibilities are noted in the descriptions, below.

Nicknames for each position appear in brackets after the formal assignment title. Lasers tend to use the official job titles when talking to outsiders, and nicknames in conversation among themselves, and with other professionals. When meeting a witness or local official, you might say, *"I'm the security officer of the Eastwood."* If you bump into old colleagues in a spaceport tavern, you'd probably say, *"I'm working the Eastwood, chopper on the groundside, wheel on the warp."*

FREESTRIPING IT

Some Laser crews ignore crew positions entirely. Each brings an arbitrary set of skills to the table. When crisis strikes, these crews muddle their way through, chaotically jumping into whatever roles seem to best suit the moment. These crews refer to themselves as Freestripers. The term plays on the striped shirt-cuffs of Combine uniforms, which denote the rank and role of each member of a ship's complement. All Lasers exhibit an allergy for command authority, but Freestripers take this to an extreme. They may be motivated by collectivist or anarchist ideologies. Many learned to hate naval traditions while serving with the Combine fleet.

A group may collectively decide to Freestripe it. They skip the crew package step of character creation, going right to the selection of investigative abilities. The GM still guides the group through the list to make sure that someone has each one of the investigative abilities. Although this is not necessarily recommended, groups may omit the species-oriented History abilities so long as someone has History (Combine.)

Incidents of corruption and incompetence have tarnished the Freestripers' collective reputation. Clients contracting for Laser services want their freelance problem solvers to remind them of Combine patrols. For this reason, they may discriminate against Freestripers. To reflect this prejudice, Freestriper crews start play with a Reputation of -1.

Packages and Character Creation

During character creation, the group first distributes the warpside assignments, plus the mixed assignment of medical officer, between them. The role of communications officer can be doubled up with any other. The remaining warpside assignments should be spread among separate individuals. If you don't have enough PCs to go around, resort to background PCs; see sidebar below.

Next, distribute the groundside assignments, doubling up as needed.

Background PCs

If your player group is small, the GM may allow the use of background PCs, who take on the needed roles to fill out the warpside roster. Assign players to control the actions of each supporting crewman during space combats and other dangerous shipboard activities. They take center stage only when needed. They have only the few general abilities listed in their crew packages. Their ratings in each equals the rating given in the crew package, plus 4. They do not make use of investigative abilities. Even if described as non-human, they never use species-specific abilities.

Background PCs might be directed by different players over time. Each should have a simple personality that's easy to play. GMs might collaborate with the group to create backgrounders who act as comedy relief, or as foils to the attitudes of the primary PCs. If there's a funny accent everyone in the group can do, that's how a background PC talks. For groups who already have trouble keeping a straight face, the GM might prefer relatively colorless background PCs.

Situations might arise where some players are directing the actions of backgrounders and others are not. Controlling a backgrounder does not give you an extra vote when making collective decisions.

Distribution might occur by discussion and consensus. Alternately, the GM can hand out the two sets of assignments on randomly-drawn index cards. The players can then trade among one another or keep the tasks they've been arbitrarily given. Players often form an immediate attachment to a randomly drawn character type, quickly envisioning a PC they wouldn't have chosen on their own.

In a small group, be careful to balance out the doubling. Avoid, where possible, situations where one player has four crew assignments and another has only two.

Each crew package sets out minimum requirements in both Investigative and General abilities. Before spending any points elsewhere, make sure you have those covered. If the same ability appears in more than one of your packages, make sure you at least hit the highest minimum. To be particularly bad-ass, exceed the high minimum, perhaps even adding the minimums together.

Warpside Assignments

Although the bulk of a Laser's time is spent putting down cases groundside, the lingering glamor of naval tradition accords prestige according to one's warpside duties. In situations where they could easily go either way, Lasers tend to introduce and define themselves by their warpside jobs.

Communications Officer (Hailer)

You establish, receive and route communications with other ships, planetary installations, and space stations. More than a glorified space receptionist, you serve as a combination of public relations frontperson and psychological warrior. You facilitate the decision-making process of the crew and convey its intentions to the outside world. In crisis situations, you keep vital information flowing to the stratco, so that the right decisions get made at lightning speed. During space combat, you launch hack attacks on the enemy's computer system, while defending your own from penetration.

Investigative: Linguistics 1, Flattery 1, Reassurance 1, Decryption 1, Data Retrieval 1

General: Communications Intercept 6, Sense Trouble 4

Pilot

You plot courses through the spacelanes, navigating the ship through warp corridors. In orbit or near orbital conditions, you engage with the stellar traffic control system to avoid collisions with other vessels. Where the automated system has ceased to function, you keep a steady hand on the helm, ready for unpleasant surprises. In combat, you maneuver the vessel according to the instructions of your stratco. In space, as anywhere else, the best way to win a fight is to not get hit.

Investigative:Geology 1, Astronomy 1

General: Ground Craft 2, Helm Control 6, Shuttle Craft 4

Strategic Coordinator (Stratco)

During space combats, you take center chair on the bridge, where you lead the fight. You take in information from the hailer, pilot, wrench and gunner. Then you process it through your mastery of three-dimensional tactical positioning and spit out the orders that send your ship screaming into battle.

On a Combine vessel, this role would be taken by the captain, who holds ultimate authority over the crew in all matters. Crews of Laser ships, leery of anything smacking of a command structure, take pains to keep a stratco's pretensions in check. It's telling, though, that the ego tweaking always happens after combat, not when the crew's collective fat is in the fire. And if there's a touch of a strut in your gait, or the occasional tone of flinty authority in your voice, you can hardly be blamed for that. Any stratco worth his salt recognizes that as integral to the job description.

General: Athletics 4, Naval Tactics 6, Scuffling 4, Sense Trouble 4, Shooting 4

Systems Officer (Wrench)

While the others preen on the bridge, you're down in the bowels of the ship, keeping it running. Whether she's coming apart during a warp corridor breach or withering under a neutronic fusillade, you're the one holding the ship together. You manage the competing resource requests of the bridge crew, take damaged systems offline before they blow, and throw everything you've got into the emergency whatevers. When the chips are down, you're the one with your head stuck under an access vent, manually repairing the transducer conduits, while sparks shower all around you.

General: Systems Design 4, Systems Repair 6

Weapons Officer (Gunner)

During a naval battle, you operate the ship's weapons console, adjusting the targeting algorithms in response to enemy movements and your own ship's maneuvering. You may select weapon types yourself, when granted leeway by your stratco, or execute assault patterns according to his instructions.

General: Battle Console 6, Scuffling 4, Sense Trouble 2,Shooting 4

Groundside Assignments

The bulk of your time as a Laser will be spent where the people are—on the planets, asteroids, and space stations of the Bleed.

Cultural Officer (Face)

Although all groundside roles assume an ability to deal fruitfully with the witnesses, victims, and potential adversaries you meet, your role places that duty above all others. You know people—their histories, their social organizations, and their behavior. You're the go-to officer in first contact situations, and when communicating with extreme or unfamiliar subcultures.

Investigative: Anthropology 2, Archaeology 1, History (Combine) 1, Xenoculture 1, Downside 1, Impersonate 1, Respect 2

Operations Officer (Bagger)

For Lasers, law enforcement is a business as well as a vocation. The operations officer handles logistics, legalities and practicalities. You keep the mission supported with necessary clearances and equipment. Your contribution goes far beyond mere support, however. In the poverty-stricken post-war environment of the Bleed, an ancient motivation for trouble has suddenly risen from the depths of history: material greed. Your mastery of financial matters allows you to track the flow of credits and other negotiables. To put down cases, you follow the money.

Investigative: Forensic Accounting 1, Law 1, Bureaucracy 1, Negotiation 1

General: Business Affairs 4, Preparedness 4, Public Relations 4

Survey Officer (Mapper)

The exploration mission of the Combine has gone by the wayside with its retreat from the Bleed. That leaves a multitude of questions unanswered among its countless lightly surveyed worlds. You find answers out in the wilderness, in the biologies of undocumented organisms, the properties of unknown minerals, and the side effects of spatial anomalies.

Investigative: Botany 1, Geology 1, Zoology 1, Astronomy 1, Bio Signatures 1, Chemistry 1, Energy Signatures 1

General: Sense Trouble 4

Security Officer (Chopper)

You draw on the hoariest methods of police work to move cases into the win column. When a suspect needs sweating, you're there to lean in and put the fear in him. When he refuses to surrender for questioning, you've got a disruption pistol in your belt and, if all else fails, a hard pair of fists to batter his jaw. Sure, it's the 25th century and all, but sometimes the old ways are the best ways.

Investigative: Cop Talk 1, Interrogation 1, Evidence Collection 1, Kinetics 1

General: Athletics 4, Scuffling 4, Sense Trouble 4, Shooting 4, Surveillance 4

Technical Officer (Techo)

When the answer to a mystery revolves around a piece of tech—or can be scanned, enhanced, or analyzed with a piece of tech—you're there to bring your toolkit, your gear bag, and your ingenuity to bear. Whether you need to ID a bomber from his exploded handiwork, slip a holosnail into a target's hidey-hole,

or sift the crucial snowflake from an avalanche of data, you're the tech for the job.

Investigative: Explosive Devices 1, Forensic Engineering 1, Holo Surveillance 1, Imaging 1, Industrial Design 1

General: Infiltration 4, Systems Design 2, Systems Repair 6

MIXED ASSIGNMENTS

Medical Officer (Doc)

Lasering is rough work. There's no greater testament to that fact than the countless wounds you've sealed, the poisonings you've reversed, and exotic cures you've engineered moments before your patient's breath ebbed away. And that's just what you've done for the other members of your crew. On a good day, you get to save a few victims and innocent bystanders in the course of a mission, too. Unluckier subjects wind up as corpses on your operating table, subject to your keen talents as a medical examiner. But above all, your greatest contribution to the team may be that essential element of the doctor's bag, a hardbitten awareness of personal frailty.

Medical Officers tend not to double up on warpside duties, so they can be ready to deal with any casualties during space combat. They may or may not double up groundside.

Investigative: Forensic Psychology 1, Bullshit Detector 1, Virology 1

General: Medic 6, Viro Manipulation 2

SPECIAL INVESTIGATIVE ABILITIES

Some of the abilities listed here are marked as special. This means that they are available only to certain character types. They can be used as alternate means to gain core clues, but should never be the only way to gain a core clue.

Special abilities listed here are available only to members of the Vas Mal people. You could invent other special abilities for nonstandard character types. Additional special abilities could appear in future supplements.

ABILITIES

Abilities in GUMSHOE break down into two main categories: the investigative abilities you use to gather the information you need to solve the episode's central mystery, and the general abilities that allow you to survive and maybe even prosper while you're doing it.

Investigative

Investigative abilities make you the seasoned effectuator you are. Many of the hardbitten denizens of the Bleed can repair damaged equipment, hack a virus, or shoot a disruption pistol. Few can match your crew's collective array of mystery-busting abilities—that's why they pay you the bigcreds*.

Choose investigative abilities from the list below.

Anthropology (Academic)

Having studied the social structures of sentient peoples, you know how they tend to organize themselves. When encountering a new society or subculture for the first time, you can make educated guesses about its customs, traditions and taboos. You can rattle off the distinctive traits of any well-documented societies or sub-culture. Your familiarity with the techniques of predictive anthropology allow you to extrapolate the changes a society will undergo over time. Computer simulations allow you to predict the consequences of outside stimuli on social development. You can use these to engineer your relations with a nascent or developing culture to maximize positive social development. For example, you might predict that the introduction of disruptor pistols to a stone age society might lead to its rapid destruction, unless accompanied by changes to its clan structure.

Archaeology (Academic)

You know how to unearth, preserve, document and explain relics of the past, whether of known or undocumented sentient races. You can:

- tell how long something has been buried
- identify artifacts by culture and usage
- distinguish real artifacts from fakes
- navigate inside ruins and catacombs
- describe the customs of ancient or historical cultures
- spot well-disguised graves and underground hiding places

* **Cred**: basic unit of currency; Bigcred: a million creds

WHAT SCANS REVEAL

Details of exactly how scanning technology works are left vague, just as the scriptwriters of your favorite space opera shows handle it. Exactly what sensors or tethers reveal from one situation to the next varies depending on how fast you need the information to flow to keep the story moving at a satisfying pace. Typically sensors provide just enough information to keep the investigation moving forward, but not so much that the heroes can solve the problem without confronting its dangers face-to-face. In any given scene, scans may also rule out any number of possibilities that don't pertain to the situation at hand. When you need to explain why a scan attempt that provided a lot of information last episode now yields only a single useful data point, attribute the discrepancy to outside factors, not to the skill of the character conducting the scan.

These factors include anti-scanning technology, hull shielding, ionic interference, and that old stand-by, meson shrapnel (p. 191).

ANTI-SCANNING TECHNOLOGIES

Signature sweeps can be reliably thwarted with sophisticated anti-surveillance technologies. These are expensive and rare; not even Combine ships are equipped with them. The Mohilar were thought to scramble scanning devices, but whether they were detectable by bio or energy scanners has been lost to the memory-draining effect of the Bogey Conundrum and is now a matter of debate.

Ship communication systems can be used to temporarily jam incoming scans, but doing so for more than a few minutes taxes engine resources.

Before the war, paper documents were encountered only as relics, of interest only to archaeologists like yourself. They'd been long since superceded by electronic files and reading devices. Where technology has collapsed, pen and paper have returned to fill the gap. Your ability to analyze these as physical objects can now be applied not only to historical artifacts but to present-day documents. To this end, you can:

- determine a document's approximate age
- tell forged documents from the real thing
- identify distinctive handwriting
- match typed documents to the typewriters that produced them
- find fingerprints on paper
- tell whether paper is handmade or manufactured, possibly tracing it to its source

Astronomy (Technical)

You can read and interpret a star map. The three-dimensional spatial relationships between stars, planets, and other major heavenly bodies in Combine space are thoroughly imprinted in your memory. You can:

- plot the fastest and/or safest course between two destinations
- extrapolate the intended destination of another ship observed in an FTL corridor
- recall the properties and hazards of documented stellar and sub-space anomalies
- extrapolate the behavior of unknown astronomical anomalies from the contents of an infoscan
- find inconsistencies in accounts of interstellar travel

Bio Signatures (Technical)

Aided by your tether (p. 136) and/or shipboard scanning devices, you home in on the trace energies emitted by biological lifeforms, gaining information about them. You can scan buildings, outdoor areas, starships, or even entire planets. The larger the area the scan, the less specific your conclusions can be. You can determine:

- the number of complex lifeforms in an area (numbers are precise for small areas, approximate for planets)
- what species each lifeform belongs to
- the general state of their health

Bio signatures are insufficiently precise to home in on particular individuals. You can discover that there are four humans, a cybe and a vas mal in that warehouse, but not that one of them is Stephen Graak, the fugitive you're pursuing.

Starship scans can be performed only within combat range of the target vessel.

Non-corporeal entities, including energy beings, defy biological measurement but can be detected by a sister ability, Energy Signatures (p. 36).

Botany (Academic)

You study the plants and fungi of Earth and their counterpart equivalents of other planetary environments.

You can:

- identify the likely environment in which a plant sample grew
- name the home planet of a plant species from a sample
- determine whether a plant grew on its planet of origin or elsewhere
- tell whether a plant has been genetically modified, and at what point in its history
- forage for food plants, or plants with needed medicinal qualities, even on an unfamiliar or undocumented planetary environment
- identify plants which might be toxic, carnivorous, or otherwise dangerous
- spot the symptoms of plant-derived poisonings

You need this ability to use Viro Manipulation to genetically alter plants, fungi, and their equivalents.

Bullshit Detector (Interpersonal)

Either through instinct or a detailed study of pan-species micro-behavior, you can tell when sentient beings are deliberately trying to deceive. This sense doesn't tell you what they're lying about, specifically, or see through their lies to the truth. Occasionally you might get a sense of their reasons for lying. The ability works best on nervous, guilty, or inexperienced liars. Expect it to work poorly or not at all against:

- psychopaths or sociopaths
- trained or practised liars
- people from cultures that exert no pressure on their members to be truthful
- noncorporeal entities
- psionic projections
- nonhumanoid alien species, or those whose facial morphologies strongly diverge from well-documented species
- robots, androids, constructs and other artificial beings

Bureaucracy (Interpersonal)

No matter what their species or planetary origins, government officials share certain common traits. You use a deep familiarity with their psychology, and the systems they erect around themselves, to extract the information you need to advance your case and fulfill your contract. Your mastery of regulations, paperwork and double-talk allows you to:

- access official records
- guess what the local government is covering up, and why
- secure permission to enter government installations and use their resources
- find whistleblowers inside the system who will tell you the truth
- where lip service to Combine authority is still paid, overcome resistance with your knowledge of its rules and regs
- power-search through masses of reports and useless data to find the secret nugget of useful info concealed within
- get information an organization finds embarrassing, by convincing them that you'll respect their secrets

Whether they inhabit the seats of power of heavily populated core planets or supervise sleepy backwater outposts, bureaucrats hate to do more work than is necessary, or to use up their precious favors. They won't do your legwork for you.

Often your contract will be with a local government body. They'll volunteer the information they think you need. The whole story may come to light only after the additional pressure represented by this ability.

Chemistry (Technical)

You study chemical substances and the molecular science that lends them their properties. With handheld scanners or, in complicated cases, the equipment in your shipboard lab, you can:

- identify non-organic compounds
- specify the properties of toxins, hallucinogens and other non-organic compounds that interact with living beings' body chemistries
- match samples to sources, for example correlating a soil sample from one location to the dirt on a suspect's boots
- identify sources of contamination and alteration in a mineral sample
- identify the planetary or extra-planetary origin of a mineral or compound
- synthesize small quantities of specific compounds
- determine whether a compound is naturally occurring or was synthesized

Why no Lying Ability?

Unlike many other RPG rules sets, GUMSHOE does not treat lying as an ability unto itself. Instead characters employ it as a tactic while using any of the various interpersonal abilities. With Bureaucracy, you tell functionaries what they want to hear. Using Interrogation, you convince suspects that you're the only Laser on their side, and so on. There's a little bit of deception in nearly every successful interpersonal interaction—at least when you're a licensed effectuator.

Consciousness Simulation (Special — Vas Mal)

The brainwaves of sentient beings emit an extremely faint trace signature which you can briefly recreate after their deaths. These signatures tend to cluster around the corpse of the deceased, but may in some instances imprint themselves on objects important to the individual at its moment of demise. These might include heirlooms, personal computing devices, and weapons. The latter might include weapons used by the dead entity, or the one used to bring about its death.

When you use this ability, you go into a trance, hearing and seeing a recreation of the subject according to its own self-perceptions. You hear the subject's voice as it sounded from inside his, her or its head. Depending on the subject's self-esteem and visual acuity, the image you see may be essentially accurate, idealized, or unflattering. Others do not perceive this vision; it remains entirely within your mind's eye.

You may ask any number of questions of the subject, as limited by the number of points you choose to spend from your Consciousness Simulation pool. Using Consciousness Simulation costs 3 points, plus 1 point for each question. (For this reason, you should always take at least 4 points in Consciousness Simulation when building your character.) The subject answers as it would in life, and may prove evasive, deceptive or deluded. It can't supply information it lacked while alive. Your simulation of its consciousness interacts with you and may change its responses according to its personality type and motivations while alive. You may use other Interpersonal abilities to gain its cooperation or, with Bullshit Detector, evaluate its honesty.

Cop Talk (Interpersonal)

Regardless of species, culture or planetary origin, law enforcement officers across the galaxy tend to exhibit similar attitudes. They see themselves as beleaguered defenders of an underappreciative citizenry, foolishly constrained from doing what really needs to be done to keep the perps in line. At the same time, they're working stiffs of varying degrees of dedication, from the hard-nosed obsessive to the guy just putting in his time. They resent intrusion from constables of other jurisdictions, and most of all from highly paid freelance Lasers beholden to no authority higher than their need to project a positive image. Even when their superiors are your clients you might, without this ability, get only the runaround from them.

Your ability to alternately assume and defuse the police allows you to extract information and cooperation from local cops. In the unlikely event that a Combine patrol makes its way into the Bleed, you can use Cop Talk to pry the data from them, too.

You might also:

- access police resources and equipment, with the assurance that it will come back as you got it
- delegate local cops to perform unchallenging legwork for you
- convince them to keep their mouths shut about reputation-damaging offenses committed by your crew in the course of an investigation
- get yourself, your colleague, or needed witnesses excused for minor infractions

Cybe Culture (Academic)

You're familiar with the people, players, and ideologies of the cybes and their various competing movements. Their history spans only a generation, but thanks to their artificially altered psychologies can be inaccessible to the outsider. You can:

- translate cybe slang and jargon
- reel off personality profiles on all major cybe figures, alive or dead
- identify a cybe's ideological affiliations from details of dress, speech, and enhancement configuration
- make accurate guesses as to a cybe's occupation and past history from the array of visible enhancements installed in him
- guess which non-visible enhancements a cybe might possess, based on a brief observation
- use Cybe Culture as an Interpersonal ability, to establish rapport with a cybe, by assuming the terminology and attitudes of his culture, subculture, or ideology

If you are a Cybe but haven't taken this ability, prepare an explanation to account for your unfamiliarity with your own culture.

Data Retrieval (Technical)

You sift through masses of electronically stored data to quickly find the salient fact you're looking for. You can penetrate data security to get at the information you need. Unfamiliar systems yield to your touch, whether they be ancient or alien. You can bridge technological gaps between incompatible systems. Damaged or corrupted storage devices return to life under the twin ministrations of your toolkit and meticulously hand-crafted algorithms. With your own system, you can enhance recorded media to tease out its secrets:

- isolating and identifying sounds on an audio recording, or smells in an olfactory emitter
- enhancing and extrapolating visual data
- zeroing in on telltale glitches in a holo display

Decryption (Technical)

You break encrypted messages, from the simple letter-substitution codes of ancient history to content subjected to subspace fractal scramblers. Any code that time and computer power can make, you, given more time and greater computer power, can break. Needless to say, you can also create codes as needed. When gathering clues, this includes the ability to use communications consoles to locate and intercept transmissions, including hidden ones.

More prosaically, Decryption also provides a thorough grounding in communications technology, allowing you to perform such tasks as:

- pinpointing a transmission's origin point
- determining when a damaged communications device went off-line
- spotting and identifying wavelength anomalies in an intercepted transmission
- uncovering fakery in a transmission

Consider pairing this with its general counterpart, the Communications Intercept ability, p 53.

Dreamsight (Special — Vas Mal)

When within direct visual perception range of a sleeping individual undergoing REM sleep, you are able to enter a trance state, close your eyes, and see the subject's dreams. You see what the subject is dreaming from his point of view. You are unable to control the circumstances of the dream, or influence the dreamer's actions within it.

The dreamer remains unaware of your intrusion, unless he becomes lucid during the dream. PCs may become lucid on a Difficulty 6 Sense Trouble test (Difficulty 3 for tavak.) Supporting characters may become lucid if the GM deems it in keeping with their established role in the story.

Kch-thk do not dream or undergo REM sleep, and cannot be subjected to dreamsight.

Upon awakening, subjects may, on a Difficulty 4 Sense Trouble test, retroactively sense that their dreams were observed. On a result of 8 or more, they know who was in their dreams and can recognize you later.

FINGERPRINTING THE FUTURE

In the 25th century, fingerprints are easily faked and are not considered probative evidence by Combine courts. A small, commonly available device called a dermal regenerator, developed as a wrinkle-fighting cosmetic aid, can be used to temporarily erase human fingerprints. When modified with a computer hookup, it can be used to copy a specific individual's fingerprint. Finding a modified dermal regenerator tells you something about its owner.

DNA can also be faked through replication devices, but the fakery can in turn be detected with the use of Evidence Collection and/or Forensic Anthropology. However, DNA evidence alone is no longer considered proof positive of anything, as it was for a few convenient decades in the late 20th and early 21st centuries.

Downside (Interpersonal)

The utopian vistas of the Combine left infertile ground for a criminal underground to flourish. Outlaws, fraudsters, and gangsters existed only in a lawless fringe of outposts and hidden bases. The shock of the war, and its ensuing financial and technological collapse, bred a growing underground economy. This scene, and the black marketeers, extortionists, smugglers, exploiters and addicts who inhabit it, are collectively known as the Downside. Whether by fair means or foul, you immersed yourself in this threon-lit world and can now pass yourself off as a member of it. Crooks and degenerates trust you—to the extent that they trust anyone, which is not very much. Still, it's enough to coax information from them, as well as to avoid or find lowlife hangouts, defuse dangerous situations, and to seem like anything other than a lawman for hire.

Energy Signatures (Technical)

With handheld or shipboard scanners, you analyze the various energy waves present at a scene, often from a great distance. By interpreting the waveforms and their interactions, you can:

- spot the presence of noncorporeal beings
- pinpoint bent lightwaves, indicating the presence of invisible persons or objects
- identify technologies used by other star vessels, including weapon types
- tell whether a vessel or groundbound military emplacement is charging its weapons
- assess present condition of another vessel
- reconstruct the past operation of energy-emitting technological devices
- scan distant buildings or vessels to find the number and approximate locations of robotic or mechanical beings, including individuals equipped with invasive implants

Starship scans can be performed only within combat range of the target vessel.

This staple ability of Laser casework is one you might want your crew members to double or triple up on.

Evidence Collection (Technical)

You can collect pieces of evidence without contaminating them. While anyone can spot a bloodstain, broken lock or vloton pulse in plain view, you can:

- scour a scene to find its carefully hidden samples of trace evidence
- mentally recreate a sequence of events by eyeballing the spatial relationships between objects found at a scene

- tell when evidence at the scene has been faked, moved, contaminated or otherwise interfered with
- spot inconsistencies and frauds in the work of other forensic scientists
- lift fingerprints from a scene and match them to a database; see sidebar

When your case requires you to identify the perpetrator of a crime, the proper handling of evidence will be contractually required. Without samples that will withstand the technical scrutiny of expert defense witnesses, you don't get paid.

Evidence Collection is limited to the finding and handling of forensic samples. Although some players infer otherwise from its name, it does not serve as a catch-all replacement for other investigative abilities.

Explosive Devices (Technical)

You're an expert in bombs and booby-traps. You can:

- defuse bombs and traps
- reconstruct exploded bombs, determining their materials, manufacture, and the sophistication of the bomb-maker
- safely construct and detonate explosive devices of your own

Flattery (Interpersonal)

Within seconds of meeting a new person, you can accurately guess the compliments he most wants to hear about himself. By smoothly lacing these into your conversation, you put the subject at ease, making him receptive to your requests for information or other assistance. You adjust the effusiveness of your praise to the customs of known species and subcultures, so that it never seems embarrassing or self-serving. Even when dealing with a previously undocumented entity, you can instinctively attune your sweet talk to its sensibilities.

Flirting (Interpersonal)

Your raw sexual charisma wins the cooperation of others, who fall in love—or at least lust—with you after a brief interaction. How thoroughly you choose to romance them after getting the information or aid you seek is up to you. Many of the subjects you successfully use this ability on are interested in nothing more physical than winks and banter. You never blunder into making a pass at an unreceptive subject—your finely tuned sense for

the hot-to-trotness of others reliably tells you how far you can go with any subject. Generally you can set aflutter only the hearts of beings theoretically capable of sex acts with your species—see sidebar, p. 19. You might occasionally take advantage of the amorous feelings of entities incapable of physical follow-through.

Forensic Accounting (Academic)

You find irregularities in financial records and can correctly infer the sorts of activities that brought them about, from mismanagement to embezzlement to victimization by outside fraudsters or hackers. You can adjust for the different economic models of businesses, installations, and government agencies. Even without access to relevant databases, you can make inferences about the fiscal health of a business or organization merely by observing it in action. You can differentiate legitimate businesses from criminal enterprises, and track a trail of payments as it bounces the commlinks from one banking database to another.

This ability can be reverse-engineered to conceal or perpetrate misleading bookkeeping. On occasion, for example when targeted for investigation by another duly contracted Laser crew, you may find it expedient to obscure the spreadsheets of your own ship. This is not an information-gathering action, so it always requires a spend.

Forensic Accounting may sometimes be used as an interpersonal ability. Gain information from accountants and financial wizards by presenting yourself as a sympathetic colleague.

Forensic Anthropology (Technical)

You perform autopsies on deceased subjects to determine how they met their various demises. In the case of death by foul play, your examination can identify:

- the nature of the weapon or weapons used
- the presence of intoxicants or other foreign substances in the bloodstream
- the contents of the victim's last meal

In many cases, you can reconstruct the sequence of events leading to the victim's death from the arrangement of wounds on the body.

You also perform DNA analysis on samples found at crime scenes, matching them to samples provided by suspects. Note that DNA is highly falsifiable with 25th century technology: see p. 36.

Forensic Engineering (Technical)

Your grounding in mechanics, materials science, architecture and technology allows you to gain information by studying the state of machines, devices, buildings, starships, and installations. You can:

- spot damaged, stressed or sabotaged components
- identify the means, technological or otherwise, used to damage or sabotage components
- specify the relative expertise of an unknown saboteur simply by examining his handiwork, perhaps identifying how he was trained
- correlate quirks of methodology in acts of repair or sabotage to the identities of techos you've dealt with in the past, or whose work you know second-hand

To actually fix buildings, machines or devices, use Systems Repair, a general ability (p. 52).

Forensic Psychology (Academic)

A combined knowledge of sentient psychology, brain structure, neurochemistry and social development provides insight into the behaviors and attitudes of individuals driven by violent or anti-social impulses. You can:

- based solely on their known modus operandi, make accurate guesses as to the upbringing and pathology of unidentified criminals, renegades and operatives
- predict their upcoming actions based on their past behavior
- distinguish an individual whose violence is deemed acceptable by his home culture from one who defies local norms
- distinguish subjects who can be successfully rehabilitated from the incorrigibly violent or deviant
- tell whether a known individual's criminal behavior is in response to deep psychological impulses, or is motivated primarily by economic factors
- after brief observation of an individual, select the most fruitful Interpersonal ability to use when attempting to get information out of him, her or it
- after briefly interacting with a member of an unknown species, extrapolate details of its social structure, environment, and degree of evolutionary development

Geology (Academic)

You are an expert on rocks, soils, minerals, plate tectonics, and planetary formation. You can:

- analyze soil samples, crystals and minerals
- determine the age of a rock stratum
- date and identify fossils of known lifeforms
- evaluate soil for agriculture or industry
- identify promising sites for resource extraction
- anticipate volcanism, seismic events, avalanches, and other planetary phenomena
- determine the properties and origins of unknown mineral compounds
- find sources of fresh water

History, Balla (Academic)

You're an expert in the recorded history of the balla people, with an emphasis on their political, military, economic and technological developments, and their migration to the stars. You can:

- recognize obscure historical allusions
- recall capsule biographies of famous historical figures
- tell where and when an object made during historical times was fashioned
- identify the period of an article of dress or costume
- translate into common parlance the high rhetorical style of balla documentation

History, Combine (Academic)

You've steeped yourself in the politics, organization, and naval lore of the Combine, along with its social and cultural developments. You can:

- recall capsule biographies of its great figures and direst foes
- rattle off the names of Combine ships, extant and defunct, along with other vital stats including their capacities and armaments
- identify destroyed Combine ships from fragmentary chunks of salvage, supplying any known details of their demise
- sketch out a Combine org chart from any era of its existence
- provide a context for any piece of Combine tech, memorabilia, or ephemera
- remember when the Combine first discovered a given planet or celestial body, describe the nature of its presence there. If it has withdrawn its presence, you can say when and why it did so.

With the history of the Combine comes a basic grounding in the histories of its founding peoples. When a scenario grants information based on another history ability, and no PC is present to use that ability, you know the basic facts provided. You can only make spends or gain non-informational benefits arising from these other history abilities if you have the ability itself, and are not substituting History (Combine) for it.

History, Durugh (Academic)

You're an expert in the recorded history of the durugh people, with an emphasis on their political, military, economic and technological developments, and their migration to the stars. You can:

- recognize obscure historical allusions
- recall capsule biographies of famous historical figures
- tell where and when an object made during historical times was fashioned
- identify the period of an article of dress or costume
- reference the contents of military and intelligence dossiers looted from the once-secret datafiles of the old regime

History, Human (Academic)

You're an expert in the recorded history of the human race, with an emphasis on their political, military, economic and technological developments, and their migration to the stars. You can:

- recognize obscure historical allusions
- recall capsule biographies of famous historical figures
- tell where and when an object made during historical times was fashioned
- identify the period of an article of dress or costume

describe the tenets and practices of the old-fashioned world religions, finding parallels between them and the burgeoning nufaiths of the post-war era

History, Kch-Thk (Academic)

You're an expert in the recorded history of the kch-thk people, with an emphasis on their political, military, economic and technological developments, and their migration to the stars. You can:

- recognize obscure historical allusions
- recall capsule biographies of famous historical figures
- tell where and when an object made during historical times was fashioned
- identify the period of an article of dress or costume
- can recite the chittering proverbs of the great texts of rational materialist poetry, such as Krktl's The Errors Of Sentimentality and Trk-chk's Sublime Hierarchy of Foodstuffs

History, Tavak (Academic)

You're an expert in the recorded history of the tavak people, with an emphasis on their political, military, economic and technological developments, and their migration to the stars. You can:

- recognize obscure historical allusions
- recall capsule biographies of famous historical figures
- tell where and when an object made during historical times was fashioned
- identify the period of an article of dress or costume
- explicate the intricacies of Tavak philosophy

Holo Surveillance (Technical)

You gain information by planting hidden recording devices and then reviewing the results. 25th century bugs are known as snails, due to the spiral designs of these microscopic devices. They typically record visual and auditory data then reconstruct them in a three-dimensional holo layout that viewers can walk through as if present in the scene. Holo layouts can extrapolate the feel of displayed objects, though not always accurately. With a little additional risk and/or lead time, bugs can be deployed that record olfactory input, temperature, and even pheromone emissions.

In some oddball situations you may wish to use obsolete electronic surveillance techniques, which record flat video or, more primitive still, audio only. These ancient technologies also fall within your wheelhouse.

Information hidden in the recordings may need to be analyzed using Data Retrieval, an ability that pairs well with this one. As you'll also want to be able to sneak in to plant your snails, Infiltration is a recommended general ability for any surveillance expert.

Imaging (Technical)

You use non-surreptitious recording devices to capture data for later examination. These devices capture visual information for flat or holographic display, along with sounds, smells, energy signatures, temperatures, tactile information, and hormonal emissions. While any civilian can make casual use of an image recorder, your expertise encompasses the minute calibrations needed to capture information for high-grade analysis. Readings you generate during the imaging process prove their authenticity beyond a shadow of a doubt. They count as admissible evidence, which your contracts often require you to turn over to clients and/or Combine representatives.

Impersonate (Interpersonal)

You gain information by passing yourself off as someone other than an investigating member of a Laser crew. A battery of false credentials assist in your inquiries. As a skilled deceiver, you know to project confidence, provide few details, and minimize contact with the witnesses you're bamboozling.

Long-term impostures are tougher to pull off, and require ongoing spends. These are difficult even when augmented by holographic or viral disguises—eventually a verbal slip rolls off the tongue, or glitching disguise technologies snaff you up.

Industrial Design (Technical)

You know how structures, devices, machines and vehicles are put together, from the fabrication of parts to final assembly. You can:

- identify the designer, or design tradition, of a device, structure, or machine
- date an obsolete piece of equipment from a known culture
- relying on your knowledge of design practices, guess the interior layout of a building or starship
- extrapolate from one or two technological devices the overall technical development level of a previously unknown people

Inspiration (Interpersonal)

You convince reluctant witnesses to supply information by appealing to their better selves. After a few moments of interaction you intuitively sense the positive values they hold dearest, then invoke them in a brief but stirring speech. Depending on the person you're dealing with, you might call to mind her:

- devotion to the utopian principles of the Combine
- nufaith beliefs
- ideological predilections
- cultural traditions of their species, planet, nation, or tribe
- love of friends, family, or community
- positive personal drives, such as altruism, atonement, derring-do, or justice-seeker. (GMs don't typically assign drives to supporting characters, but may refer to them as a form of shorthand in the case of certain witnesses who are susceptible to Inspiration. This might happen either on the fly or in their scenario notes.)

This new Interpersonal ability can be adapted to any GUMSHOE game by changing the setting-specific examples above. When adding a new ability to an existing game, make sure you adjust the number of investigative build points awarded during character generation, so that every ability appears on at least one PC's character sheet.

Interrogation (Interpersonal)

You extract information from witnesses fearful of your authority as a law enforcer. To use this ability, you must place the subject in custody, or in a situation evocative of constraint and punishment, like an interrogation chamber on your ship. Often you'll borrow an interrogation

room from local cops or construct a makeshift one in the groundside installation you've chosen as your temporary HQ. Through threats, persistence, and the occasional deception, you gradually establish a bond with your subjects, convincing them that you're on their side, and that giving up the information you seek—even if it's a confession—is their only remaining option.

Intimidation (Interpersonal)

You elicit cooperation from suspects by seeming physically imposing, invading their personal space, and adopting a psychologically commanding manner. Intimidation may involve implied or direct threats of physical violence but is just as often an act of mental dominance.

Kinetics (Technical)

Applying your knowledge of the physics of moving objects, you examine locations where violent events took place. You find points of impact, examine damaged objects, and map out spatial relationships. In your head, you recreate the sequence of events that led to the particular scattering of scorch marks, impact holes, shrapnel and other physical clues. You correlate damaged objects to the weapons and other technological devices that made them. Coordinating with a Forensic Anthropologist, or relying on your own parallel expertise in that field, you extend your examination to the study of wound damage on the dead and wounded. You can match a disruption pistol wound to the make and model of the weapon that produced it. If the weapon has been modified or degraded over time, you may even be able to match a wound to a particular pistol, assuming you have it in evidence to perform comparative tests.

To put it in shorthand terms, this is the futuristic version of Ballistics.

Law (Academic)

You are thoroughly conversant with the laws and judicial precedents of the Combine. These apply to varying degrees on the various worlds of the Bleed. Planets whose governments still consider themselves signatories to the Combine obey them in their totality—or try to, given the deprivations of the post-war collapse. Others pay homage to Combine law but provide no means to enforce it—other than the occasional visit by Laser crews like yours. Even worlds denying Combine authority use legal systems that derive from it.

A study of historical law codes allows you to quickly figure out unfamiliar legal systems of freshly encountered peoples or subcultures.

This ability gives you information about the law. To participate in court proceedings or hammer out legal agreements, you must make spends.

A rating of 2 or more indicates that you are accredited to practice law in Combine territory. It entitles you to take part in Combine legal proceedings. This distinction comes in handy when members of your crew are brought up on charges. If you prefer, you can replace Combine accreditation with that of another jurisdiction.

For more on law and justice in the Bleed, see p. 175.

Linguistics (Academic)

You are an expert in the principles and structures underlying languages. You can:

- given a large enough sample of text, decipher the basic meaning of an unknown language
- identify the languages most similar to an unknown language
- program a translation device with the basic parameters needed to begin decoding the spoken and written versions of a previously undocumented language. (Once programmed, the device analyzes its failures, quickly improving its success rate.)

Thanks to ubiquitous translation devices, there's no need to take individual languages as abilities. If you're human, balla, cybe, tavak or vas mal, you probably speak Comblish, the lingua franca of the Bleed and beyond. Durugh and kch-thk speak their own tongues, but no one notices, aside from a few quirks of translation software that give them slight accents. For more on translation devices and Comblish, see p. 126.

Negotiation (Interpersonal)

You are an expert in making deals with others, convincing them that the best arrangement for you is also the best for them. You can:

- haggle for goods and services
- mediate hostage situations
- swap favors or information with others

Neurosight (Special — Vas Mal)

You can sense the energy expended by biological entities as a faint nimbus beyond the visual spectrum. From these resonances, you can draw conclusions about the living thing you're looking at. Each use of this ability costs you points from your neurosight pool. When viewing a living being you can, for example:

- examine the subject's general emotional state, determining which of the following adjectives best fits his current condition: joyful, depressed, angry, amused, confused, frightened, or relaxed (costs 2 points per attempt.)
- tell whether the subject is healthy or unhealthy (costs 1 point per attempt.)

PSYCHIC DEPLETION

Immediately after using any Vas Mal species-specific ability, you suffer Psychic Depletion. You:

- lose 3 Health
- pay an extra point for each investigative spend
- can't make investigative spends when you have only 1 point in the relevant pool
- suffer a 1-point drop in your Hit Threshold
- increase the difficulties of all general ability attempts by 1

You can avoid Psychic Depletion by making a successful Psychic Vitality test — see p. 51.

Psychic Depletion lasts until the end of the episode, or two intervals , whichever happens sooner.

Multiple instances of Psychic Depletion exert combined effects. Hit Thresholds never decrease below 0.

- determine if the subject's brainwave patterns are natural to it, or have been overridden by outside attack or influence, for example by psionic-capable entities (costs 1 per attempt)
- determine if that the subject was in the past subjected to psionic domination or other outside influence (costs 1 per attempt)

At the GM's discretion, you may be able to suggest creative uses of neurosight allowing you to gain other information. This should always cost points. GMs should disallow suggestions that trump the information-gathering specialties of other PCs, unless the other characters are somehow unavailable to perform their duties.

Reassurance (Interpersonal)

You get people to do what you want by putting them at ease. You can:

- elicit information and minor favors
- allay fear or panic in others
- instill a sense of calm during a crisis

Respect (Interpersonal)

Your knowledge of social rituals allows you to gain information and favors with a culturally appropriate show of respect for a subject. This ability applies to subjects who consider themselves figures of authority, or who hold real or imagined power over you. By showing respect, you preserve your status as well as the subject's. It is the fallback tactic of choice when dealing with previously unknown sentients, especially if you're talking to their leaders.

This new Interpersonal ability can be adapted to any GUMSHOE game by changing the setting-specific examples above. When adding a new ability to an existing game, make sure you adjust the number of investigative build points awarded during character generation, so that every ability appears on at least one PC's character sheet.

Timesight (Special – Vas Mal)

Though stripped of the near-omniscient perceptions you once accessed as an immortal energy being, you still retain a weak flicker of the Vas Kra ability to see non-linear time. Every so often, you may briefly glimpse your immediate future. Or rather, one of your likely immediate futures. (It's complicated. You understood the complications of temporal mechanics much better before you were imprisoned in a limited mammalian form.)

You experience a fleeting image of a person, place, object or situation relevant to the mystery you're currently investigating. The image is most often visual, but might also register as a smell, sound, taste, tactile sensation, or emotional reaction. For each point of timesight you spend—and you might as well spend them all, because you can only use this ability once per episode—the GM describes one detail related to a core clue in a scene you haven't entered yet. When you finally do reach this scene and perceive the subject of the vision with your ordinary senses, you always recognize it as such. Timesight works in both directions, so details can also reconstruct past events that shed light on the core clue.

The sooner you use timesight in a given investigation, the more leeway the GM has in choosing which core clue to reveal. Often the GM will choose an early scene you were about to get to anyway. The longer you wait to use it, the more likely it will be to relate to the one of the scenario's pivotal sequences.

You're hunting for the kingpins of a water-theft ring on the desert planet Xomon. You spend 3 points of Timesight, emptying your pool.

Ashley, the GM, must now describe a vision with at least three distinct components, relating to one of the scenario's remaining core clues. There are three left to uncover so far. Ashley would be within her rights to pick the earliest one, but would rather make her selection based on dramatic interest. The core clues are:

- the corpse of a desert-dwelling lizard, killed by a distinctive gene-ripping pistol
- a doorway to an underground bunker
- a photon burn on a witness' forehead, identifying him as a fugitive wanted by the Combine for cowardice and desertion

Doorways have been a recurring image for your character. Two episodes ago, you found a hidden doorway, behind which you discovered the murdered body of a vas mal ally. Last episode, a supposed prophet told you you'd find the secret of reevolution behind a door of perception. So Ashley decides to reinforce the pattern by choosing the second of the above core clues. She chooses the following images associated with it:

- a steel door rising from a vast plain
- being buffeted by sand, whipped up by a hot wind
- the rhythmic sound of a metal banging on metal

When you get to that scene, the third detail will turn out to be a chain on the other side of the door. It still swings against it because a member of the water theft gang recently stepped through the doorway. He now waits behind a sand dune, ready to ambush you.

Vas Mal Culture (Academic)

Perhaps through direct experience, you are well versed in the nascent culture of the vas mal, who devolved into their current physical state only years ago. As needed, you recall to mind salient facts concerning:

prominent vas mal individuals, including their personalities, abilities, and agendas

- internal conflicts and controversies
- nascent arts and cultural expressions
- social organization and customs
- the progress of various competing schemes to achieve reevolution

Virology (Technical)

You are trained in the science and technology of virology. This process achieves mental and bodily transformations via genetic modification. These changes are instilled through engineered viruses, which invade the subject's body to rewrite its DNA structure. You can:

- name a subject's genetic alterations on a cursory visual examination, assuming that they are documented in the virological literature
- determine from a DNA sample whether the donor is genetically modified, and what modifications the subject carries
- spot symptoms of unwanted genetic changes or other virology-related disorders
- determine the alterations a viral sample will induce when injected into a host
- trace the designer of a virus from a sample

- reverse-engineer the schematic of a virus from a tissue sample of a modified host
- determine whether a viral sample has been weaponized, by making it contagious

This ability provides information. Its general equivalent, Viro Manipulation (p. 52), allows you to engineer, administer and reverse the effects of gavs (genetic alteration viruses).

Xenoculture (Academic)

You've extensively studied the Combine's records of its interactions with sentient species other than the Seven Peoples. You can provide brief profiles of any documented sentient species encountered by the Combine. Details at your fingertips include:

- the extent and nature of the interaction
- a potted history of the species, as known to Combine scholars
- notes on its behavior, attitude, and culture
- a rundown of its technological capabilities, including ships and weaponry
- suggestions for appropriate approaches to use while dealing with members of the species. (Although you don't express this information in rules terms, it allows you to name the most likely Interpersonal abilities to use in the course of an interaction.)

Zoology (Academic)

Use your knowledge of animal lifeforms to:

- find times of death for corpses from the insect larva found in tissues
- distinguish deaths from animal predation from those caused by sentient violence
- match the species of an animal lifeform to its tracks, spoor, hairs, blood or tissue
- extrapolate the mass, body morphology, behavior and/or ecological niche of an undocumented, unseen animal species from any of the sample types in above example
- predict the behavior of an animal, given its species or ecology
- tell whether apparently normal animals have been genetically altered, either from tissue or hair samples, or from observing their behavior
- make inferences about unknown animals by studying their fossilized remains

GENERAL ABILITIES

This section describes what you can do with the various general abilities.

Athletics

Athletics allows you to perform general acts of physical derring-do, from running to jumping to dodging falling or oncoming objects. Any physical action not covered by another ability, probably falls under the rubric of Athletics.

If your Athletics rating is 8 or more, your Hit Threshold, the Target Number your opponents use when attempting to hit you in combat, is 4. Otherwise, your Hit Threshold is 3.

Battle Console

During a naval battle, you operate your ship's complex automated firing systems, adding the crucial touch of unpredictability that makes the difference between a miss and a hit. See p. 84 for more on ship combat.

Business Affairs

You know how to run a profitable business. You use your financial acumen to:

- manage the ship's budget
- seek new contracts (see p. 169)
- negotiate and execute trade deals and other lucrative side arrangements

Communications Intercept

While at a comm station aboard a starship, space station or planetary installation, you can zero in on, intercept and decode secret or encrypted transmissions. 25th century technology inextricably intertwines communications and computing systems. Communications Intercept is the ability you need to access, scan and tamper with computer systems.

This part of the job becomes crucial during ship combat. Your role in disabling the enemy vessel's computer systems, while at the same time protecting your own from incursion, is as central to victory as the actions of the gunner, pilot or stratco.

When gathering needed clues, the investigative counterpart of this ability is Decryption.

Emotion Suppression (Balla)

You use this ability to keep your roiling emotions contained. When you are stressed or strongly confronted with stimuli that might provoke a display of passion, anger or fear, the GM may require an Emotion Suppression test. She assigns difficulties using the entries on the following list as a benchmark:

Stimulus	Difficulty
Another PC is seriously wounded	2
You are the subject of unwanted sexual advances	2
You suffer an insult or humiliation	2
Your Health pool drops to 3 or lower	2
A romantic partner spurns your advances	3
External forces prevent you from acting in accordance with your drive	3
You are falsely accused of a social gaffe	3
You hear a deliberate insult to balla calligraphy, poetry, or decorative arts	3
You witness a blatant act of environmental sabotage	3
An ally appears to betray you	4
You are subjected to unwanted sexual contact	4
Another PC is dying or dead (Kch-thk excluded, except when a consciousness migration fails).	5
You are falsely accused of a crime	5

Difficulties increase by 1 during any episode furthering your personal arc.

If successful, you remain impassive, and may decline to act on the impulses surging within you.

If you fail, you have two choices: you can either take self-destructive action to slake your freshly stirred instincts, or you can resist the impulse, at the cost of concentration and mental energy.

In the first case, the GM suggests what self-destructive action the character takes. As player, you can negotiate to adjust the nature of the action to fit your character, but always end up doing something humiliating and/or counterproductive. Some players who prefer flawed characters like to use them to screw over the rest of the party. The GM should carefully guide your suggestions to make sure you're not pulling this old trick. It's you, not your fellow crewmen, who suffers the blowback from your rash actions.

If you choose to resist, your body flushes with adrenaline and cortisol. You are distracted: you can't make investigative spends, your Hit Threshold drops by 1, and the difficulties of all general tests increases by 1. You remain distracted for two intervals.

Enhancement Integration (Cybe)

Normal use of cybernetic enhancements requires that you pay an ongoing cost in bigcreds for stimmers, viral treatments that maintain the links between the meat part of your nervous system and the wiring of your technological components. This cost is your total enhancements Upkeep. See p. 171.

As long as your Enhancement Integration pool exceeds 0, you are shielded from the Health point loss and additional damage you would otherwise suffer when you fail to pay upkeep and an enhancement goes offline.

Also, you may attempt to use cybernetic enhancements that have gone offline. Make an Enhancement Integration test with a Difficulty equal to 3 + your number of offline cybernetic components. For each successful test, you continue to gain the benefits from 1 enhancement of your choice. You can continue to use the enhancement for two intervals.

If you exceed the difficulty of this test by less than 3, you lose a number of points from your Health pool equal to the difference between the difficulty and the result.

Farsight (Vas Mal)

You can separate your awareness from the limitations of linear space to witness events occurring elsewhere. Establishing perception of this location requires a Farsight

test. Its base Difficulty is 3 if you've been there before, and 4 if you haven't. It is modified depending on your distance from the location:

Distance	Modifier
500 m or less	-2
501 m – 1 km	-1
1 – 5 km	0
5 – 10 km	+1
10 – 50 km	+2
50 – 100 km	+3
100 to 1000 km	+4
Anywhere on current planet	+6
Anywhere in the Bleed	+8
Anywhere in Known Space	+12

Once you've established your connection, you may be able to gather useful clues by perceiving events through the spatio-psychic anomaly you've created. At the GM's discretion this may require the expenditure of Farsight points as if it were an investigative ability.

Other entities capable of psychic awareness may be aware that you're viewing them with Farsight. This includes other Vas Mal. They may be able to determine who and where you are, or simply know that they're being observed.

When you're observed with Farsight or an equivalent psionic ability, and you have a point or more in your Farsight pool, you lose 1 point and automatically realize that you're being watched. To identify the viewer, you may make a Farsight test. The base Difficulty is 4. Extremely powerful entities, as you used to be before you devolved, may impose higher Difficulties. On a success, you can identify any individual or entity you're already aware of. This includes entities you were aware of during your eons as a near-omniscient energy being, which is to say nearly everyone or everything. In the unusual event of an unfamiliar entity, you are unable to name it but recognize it immediately should you directly encounter it later.

Filch

Your nimble fingers allow you to unobtrusively manipulate small objects. You can:

- pick pockets
- plant objects on unsuspecting subjects
- remove small items from desks, consoles or storage units, even while others are present and supposedly watchful
- if imprisoned, slip cell keys or IR-beam unlockers from the belts of guards
- hide small objects on your person
- surreptitiously relieve suspects and witnesses of their weaponry

Ground Craft

You're a whiz behind the steering wheel of a ground vehicle, whether that be a car, a truck, or jetbike.

This ability includes vehicles that hover a few feet off the ground, whether cushioned by air, magnetism, or polyionic energy. You can:

- pursue fleeing vehicles
- evade pursuing vehicles
- avoid hazards and collisions
- maintain high speed under unfavorable weather conditions
- perform jumps, spins, rolls and other driving stunts

Health

Health measures your ability to sustain injuries, resist infection, and survive the effects of toxins. When you get hit in the course of a fight, your Health pool is diminished. A higher Health pool therefore allows you to stay in a fight longer before succumbing to your injuries.

When your Health pool is depleted, you may be dazed, wounded, or pushing up the daisies. For more on this, see Exhaustion, Injury and Death, p. 73.

Helm Control

This ability reflects your certification as a starship pilot, whether trained or self-taught. At the helm of an interstellar vehicle, you can:

- pursue fleeing vehicles
- evade pursuing vehicles
- maneuver during combat

- avoid collisions with other ships and their debris, in either lowshift or translight space
- skirt or escape from dangerous astronomical anomalies, including black holes, spatial rifts, and translight ripples

Infiltration

You're good at placing yourself inside places you have no right to be. You can:

- deactivate or evade security systems
- sneak up on suspects and their hideouts, to take them by surprise
- find suitable places for forced entry, and use them
- defeat locks, from primitive metallic devices to quantum hatchguards

Despite its name, Infiltration is as useful for getting out of places undetected as it is for getting into them.

Medic

You can perform first aid on sick or injured individuals. For more on the use of this ability, see p. 73.

You're well versed in the anatomical structures of the seven peoples. When dealing with a known but uncommon humanoid species, you use a standard protocol to quickly determine its basic biology, which you can then effectively treat. Very strange or unfamiliar beings, especially of non-humanoid body morphology or non-mammalian ancestry, may impose increased challenges.

Migrate Consciousness (Kch-Thk)

This ability allows you to place your mind in a new larval body after death.

When you are dead or dying, make a Migrate Consciousness test to determine your success in separating your mind from your physical brain and converting it to energy. This energy pattern moves into translight space, where it homes in on your dedicated larval vat. This incubation device houses multiple larvae, all genetically identical to you. Assuming that the energy pattern remains intact en route, it identifies and settles into the healthiest of the larvae found within. Technicians—presumably your shipmates— then submerge the chosen larva in a growth-accelerating hormone bath. A

fresh new body emerges from the bath within 6-8 hours. If all has gone smoothly, it is physically and mentally identical to your previous, slain self.

Make the Migrate Consciousness test against a Difficulty of 4, plus 2 for each migration you've undergone during the series so far. If you fail, your consciousness loses integrity while in translight space and never re-emerges to fuse with a larval host.

If the margin is more than 2, the new you is exactly identical to the old you. All of your pools are refreshed.

If the margin is 2, your pools remain as they were at the time of your death, except for your Health, which is either 4 or your Health rating, whichever is lower. You exhibit a behavioral tic (below) for the remainder of the episode.

If the margin is 1, your Health pool equals 2 or your rating, whichever is lower. All other pools are 1 less than they were at the time of your death. You exhibit a behavioral tic that lasts for three episodes (including the current one).

If your result equals the difficulty, your pools are as immediately above. You gain a permanent behavioral tic.

Behavioral Tics

Tics occur when your migrated consciousness fuses imperfectly with your new larval host. Though they usually vanish of their own accord, they sometimes become a permanent new part of your personality.

Work with the GM to choose a suitable tic. Shoot for a choice that is either amusing or poignant. The GM keeps an eye out for ideas that allow the player to annoy the other players or set back the progress of the crew. Negative repercussions of the tic should fall on the kch-thk character and not the other PCs. They should add flavor to play without hamstringing the group's forward progress through the episode. The best tics contrast strongly with the character's previously demonstrated behavior. You might, for example:

- act in accordance with a new Drive that sharply differs from your usual motivations
- assign an odd nickname to everyone you meet
- become obsessed with a new weapon type
- become wildly pessimistic or crazily optimistic
- decide that you can't use contractions, speak in incomplete sentences, or use words containing the letter "e"
- develop a new physical mannerism, like a nodding head, slumped posture, or twitching mandible*
- develop weird food cravings
- easily take offense
- exhibit one or more obsessive compulsive behaviors. For example, you might have to hit the airlock button three times before entering it, clean your bunk area for an hour before going to bed
- fall prey to one or more delusions, deciding for example that a crewman is a ghost, that a dead relative is present and speaking to you, that you are an exiled prince, or that your touch is poisonous
- follow superstitions
- latch onto a nufaith or ideology
- overuse a catch phrase
- speak very slowly or quickly, or in an exaggerated. Staccato. Cadence. Where your voice rises . And falls. Without regard to the meaning of your. Words.
- start hoarding goods
- temporarily forget details of your past (though you remember the details of the current case, so that you don't trigger a lot of redundant explanation or fail in your duties as an effectuator)
- weep, laugh, sigh and/or groan at inappropriate moments

Regardless of the Migration test's result, the player is always free to decide that the character's death and rebirth triggers additional personality changes more profound than a mere behavioral tic.

Naval Tactics

By commanding and coordinating the actions of your fellow crew members during space combat, you provide the edge that leads to victory. While others focus on their stations, you take in the entire battle, planning three or four moves ahead of your enemy. As the ship shudders and shakes under the drumbeat of incoming fire, your mind spools through the great battles of the past.

In addition to making Trickbag attacks during ship combat (p. 87), you may, at any time during a dogfight:

- spend 4 points from your pool to allow any other PC to reroll the die from any Battle Console, Communications Intercept, Helm Control, or Systems Repair test
- transfer at no extra cost any number of pool points to any other PC's Battle Console, Communications Intercept, Helm Control, or Systems Repair pool

* Players without mandibles will have to settle for an ordinary facial tic, explaining to the other players what their characters are seeing.

Abilities	Emotional State	Scanned Subject
Anthropology, Archaeology, Forensic Psychology, History (Human), Linguistics, Vas Mal Culture, Xenoculture	Flirtatious	Professor Ivan Greenwater (human)
Botany, Geology, History (Balla), Zoology, Bio Signatures, Forensic Anthropology, Virology	Condescending	Calang Caloth (balla)
Forensic Accounting, History (Kch-Thk), Law, Data Retrieval, Evidence Collection, Imaging	Acquisitive	Krk-Krt (kch-thk)
History (Durugh), Chemistry, Explosive Devices, Forensic Engineering, Industrial Design, Kinetics	Suspicious	Nabros the Trembler (durugh)
History (Combine), History (Tavak), Astronomy, Decryption, Energy Signatures, Imaging	Melancholy	Tatat Twelvehouse (tavak)

Neural Rewiring (Cybe)

You can alter your brain structure to temporarily mimic that of certain scholars and technical experts. Your cerebellum literally reshapes itself, recreating procedural memory patterns that originally belonged to someone else. You may spend Neural Rewiring points in order to make spends in academic or technical investigative abilities you do not possess. The number of Neural Rewiring points spent equals the spend + 1.

While stranded in the metal rainforest of Vaab, the cybe crewman Dialectic (played by Mike) encounters a tribe of hyena-like hunter-gathers. He wants to make an Anthropology spend to avoid any gaffes as he attempts to win their assistance. Dialectic doesn't have Anthropology, and so may use Neural Rewiring to simulate it. The GM decides that a 2-point spend will allow Dialectic to present himself as a friend, despite an appearance the locals find disturbingly strange. It costs Mike 3 Neural Rewiring points: the 2 for the spend, plus one extra. His Neural Rewiring pool drops from 5 to 2.

Neural Rewiring grants no access to species-specific abilities.

Along with mimicked knowledge and experience you gain, dim echoes of the experts' personalities seep into your own. These do not override your motivations or free will, but slip out as momentary lapses or outbursts when you concentration strongly on these imported memories. They may impel you to act, but you are always able to resist through a minimal exercise of willpower.

Each personality trait instilled by Neural Rewiring corresponds to a set of abilities, copied from the brainwave patterns of a particular still-living expert. This table shows the ability sets, the emotional state they instill, and the name of the expert whose brain patterns you're copying.

You remain subject to the emotional state triggered by the use of Neural Rewiring for two intervals, or your next use of Neural Rewiring, whichever comes soonest. In the latter case, the duration in intervals resets.

Look for opportunities to bring out your emotional state—either as something you're feeling, or trying not to. If you forget to bring it into play, your GM will steer your character in relevant situations.

Not all cybes choose to resist the emotional overlay provoked by Neural Wiring. Some come to prefer these borrowed personalities to their own. They contrive opportunities to rewire to the ability sets that provide them constant access to these particular outside memories and feelings.

The personalities of the memory donors are so well-known that they've entered slang terminology as synonyms for their associated mental states. To flirt aggressively is to greenwater; to become depressed is to have a case of the tatats.

Pathway Amplification (Vas Mal)

You can heighten another mind's ability to recall, process and interpret information. Once per episode, you may designate a PC recipient and an investigative ability that character possesses. The PC adds your Pathway Amplification rating to his pool in that ability. The pool refreshes to normal at the case's conclusion.

Phase (Durugh)

By harmonizing the quantum vibrations of your body's sub-atomic particles with those of a wall or other solid object, you can walk through it. You can walk through any wall or barrier with a thickness of 10 cm or less simply by spending a phase point. Any thicker barrier requires a test; the difficulty equals 2 + 1 for each 10 cm increment of thickness. Partial increments round up.

A wall is 22 cm thick. Rounding up, that counts as 3 increments. Adding 3 to the base Difficulty of 2 gives you a final difficulty of 5.

The typical interior wall is 10 cm thick; exterior walls are usually about double that.

Highly sensitive areas may be guarded against phasing. A lattice of circuitry embedded in walls, ceilings and flooring interferes with your sub-atomic harmonization. Anti-phase circuitry adds anywhere from 1 to 10 points to the difficulty of your phase attempt. You must make a test to phase through any barrier equipped with anti-phase technology, regardless of its thickness. Anti-phase tech adds considerable expense to any construction. You expect to find it in places like banks, vital government installations, or Combine ships. Its presence elsewhere tells you that something unusual or suspicious is afoot.

If you also took the drive Phase Rider (p. 58), an indulgent GM may occasionally allow you to use the visions you experience after using the phase ability under pressure as an information-gathering device. This requires an expenditure of 2-3 Phase points. The content of the vision obliquely and surreally points you in a plot-forwarding direction. GMs may use it to nudge the group toward an important clue the group has discovered but forgotten or disregarded. This informational use of the Phase Rider/Phase combination might yield the occasional Core Clue in an episode built around your personal arc.

While phasing you can carry with you a quantity of gear, including your clothing, with a maximum weight in kg equal to your Phase rating. You can't take other people or creatures with you. If you try, you move through the solid object, and they remain where they are. Certain unusual objects and unfamiliar technological items may prove phase-resistant.

To make an item phase-resistant, coat it in phlogium. This substance, available in convenient lacquer form, can be had for the cost of a can of high-quality paint from any durugh housewares emporium. This treatment prevents items from being carried by a phasing character through solid objects. It does not prevent a durugh from phasing through that object. You can't, for example, paint it on a vault wall as a measure against incursion.

Preparedness

Preparedness allows you to have minor bits of gear on your person to suit the needs of a situation. Rather than preparing an exhaustive list of everything you're carrying in your pack, wait until you need something and then check Preparedness to see if you have it. The ability does not cover items that appear in the Tech chapter: they're either standard equipment, or you have to make a point beforehand of paying for them.

Other abilities imply the possession of basic gear suitable to their core tasks. Characters with Medic have their own first aid kits; Imaging implies a suite of holo capture devices. If you have Shooting, you own and carry a disruption pistol, and so on.

The sorts of items you can produce at a moment's notice depend not on your rating or pool, but on narrative credibility. If the GM determines that your possession of an item would seem ludicrous or and/or out of genre, you don't get to roll for it. You simply don't have it. Any item which elicits a laugh from the group when suggested is probably out of bounds.

Inappropriate use of the Preparedness ability is like pornography. Your GM will know it when she sees it.

Probability Override (Vas Mal)

Your connection to the eternal constancy of non-time, though largely severed, is still strong enough to allow to you massage the destinies of others. Alas, your own latent eternality at the same time prevents you from placing micro-alterations in your own personal timeline.

When another character fails a general ability test, you may spend 4 probability override points to allow the player (or GM, in the case of a supporting character), to reroll the die.

If the reroll results in a failure, observers detect nothing out of the ordinary.

If the reroll results in a success, the use of this reality-bending power becomes visible to any witnesses. The character is seen to fail. For an instant, space and time visibly warp. The character is then seen to succeed. The outward manifestation of this power resembles a visual recording rewound and reedited in lightning-fast real time.

You may use probability override multiple times on the same failed action, until it succeeds or you run out of points.

In order to use this power from the start of play, you'll want to buy at least 4 points in it. The only reason to have a rating that is not a multiple of 4 is if you're spending build points on it over time and haven't yet reached the next threshold point.

Psychic Vitality (Vas Mal)

The use of any other Vas Mal ability weakens you through an effect called Psychic Depletion (see sidebar, p. 42) unless you make a successful Psychic Vitality test. The Difficulty of the test is either 4, or the number of points you spent from the pool of the Vas Mal ability you just used, whichever is higher.

Psychic Depletion doesn't kick in until you either make a Psychic Vitality test or decline to do so. Accordingly, the difficulty increase it levies against general abilities does not apply to your Psychic Vitality test. However, if you're already suffering Depletion from a previous ability use, that penalty does apply to subsequent Psychic Vitality tests.

Public Relations

In the hardscrabble world of Lasers, getting the job done isn't enough. You must not only put down your current contract, but be seen to do so by others. That's how you make sure that the next contract comes in fast and lucrative. You unruffle feathers, burnish reputations, downplay failures, and trumpet successes.

When keeping the locals onside during a case, the GM may allow you to spend Reassurance or Respect points on Public Relations tests.

In game terms, Public Relations helps you to preserve your crew's collective Reputation, which in turn keeps your budget in the black. (Translation: without it, you're screwed.)

Resist Battle Frenzy (Tavak)

Whenever you see a person you identify as a comrade (including any member of your Laser crew) seriously harmed in a scuffle or firefight, your limbic system goes into overdrive. You lash out furiously at your enemies, trying to kill them.

Each time combat damage causes a comrade to drop to -6 or fewer Health, you must make a Resist Battle Frenzy test against a base Difficulty of 4 + the number of previous times a comrade has been seriously wounded during the current episode.

If you fail the test:

- you gain 3 Health after each instance of damage that does not drop you below 0 Health
- your Hit Threshold drops by 1, or to 3, whichever is lower
- any attacks you make become lethal attacks, even when you're using non-lethal weaponry
- any attack that fails to overcome the target's Hit Threshold by a margin of 1 instead hits the combatant nearest to the target, even if that combatant is an ally of yours

Although all tavak risk battle frenzy when they see their comrades harmed, some are also triggered by other emotionally stressful combat circumstances. When it fits your character concept, you may suggest to the GM that a particular situation might also call for a Resist Battle Frenzy test. You must be able to justify the reaction on character grounds. The GM may demur if you seem interested only in the mechanical effect, or in jamming up the other players by wreaking gratuitous havoc.

Although it originates in a genetic alteration your ancestors engineered into the species in the late 22nd century, honorable Tavak are obligated to describe this impulse as ancient and atavistic.

Scuffling

You can hold your own in a hand-to-hand fight, whether you wish to kill, knock out, restrain, or evade your opponent.

Sense Trouble

Keen perceptions allow you to spot signs of potential danger to yourself and others. Information gained from this ability might save your skins but doesn't directly advance the central mystery. You might use it to:

- hear the faint hissing of a murderbot's hydraulic system as it sneaks up on your position
- see a lipovore lurking in the tall fronds of a pterophyte forest
- notice the rubbery stink of fused wiring just before a command console shorts out
- subliminally note a troubling disruption in the area's background field of brainwave energy (if you are a vas mal or otherwise psionically aware)
- have a bad feeling about the formation of that seemingly innocent fleet of tramp ships

Players never know the Difficulty Numbers for Sense Trouble before deciding how many points to spend, even in games where GMs generously inform the players of other Difficulty Numbers. Players must blindly choose how much to spend.

When more than one player is able to make a Sense Trouble test, the group decides which of them makes the attempt. Only one attempt per source of trouble occurs, conducted by the chosen PC.

Shooting

You can fire ranged weapons, from primitive archery and crossbows to antique firearms to the disruptor pistols and other energy weapons used today.

Shuttle Craft

You pilot sub-orbital vessels, small ships that transit between starships in orbit and planetary surfaces. You can evade and conduct pursuit against ships of like size, avoid accidents, and safely crash-land when necessary.

Surveillance

You can watch others without being watched in turn. You can do this from a stationary hidden position or while on the move, following people, creatures and entities without being seen.

Systems Design

You create and supervise the construction of engineered systems, from buildings to computer server installations to starships. When something new needs to be made in a hurry, or something sturdy must be created to withstand the pressures of the ages, you start the process with your 3D modeling software and end it with a careful inspection of every joist, join, and quantum fill.

Systems Repair

You fix machines, ships, computers—anything big and technical. When the ship takes damage in a naval skirmish, you're the one in the engine room, frantically patching holes and wondering if she can take much more of this.

Viro Manipulation

You administer and maintain viroware installations. You can:

- reverse the effects of mutant viroware
- alter a viral load to a patient's unique biochemistry
- ameliorate the ill effects of stimmer withdrawal

For more on viroware, see p. 137.

DRIVES

Players sometimes forget that actions that would be foolhardy based on their real-world experience are merely calculated risks in the context of a space opera setting and the action-adventure genre conceits that go with it. Reminding them of this essential context are Drives, motivating factors that propel each Laser into the storyline, hazards be damned. Drives prevent players from making boring, cowardly choices for their characters. They don't require foolish or suicidal recklessness, just the same degree of courage and initiative you'd expect from a heroic protagonist.

Choose your character's drive at the beginning of play, from the following list. Think of it as a key to his personality. The selection you make will also inform the plot lines featured in your personal arc (p. 10). A species name appearing in the name of a drive indicates that it is specific to characters of that background, and not available to others.

When playing roleplaying games, we sometimes tend to overprotect our characters, who we identify with more directly than we do the lead characters of books or TV shows. This habit can bring the story to a halt as the PCs hunker down and avoid trouble when they ought to be leaping into it with gritted teeth or confident swagger. Even when the GM is able to work around this tendency, it feels discordantly out of step with the sorts of stories that inspire the game. Drives remind us to break this habit. Most of the time, a GM who realizes you've slipped into over-cautious mode and are holding up the progress of the story can spur you to action simply by reminding you of the drive. She might explain to you why your drive would spur you to action. Better yet, she could prompt you to explain it.

When invoking drives, GMs should take care not to guide the player's specific response to the situation. The goal is to lead the player to move forward, not to force a particular choice. Avoid this by listing several viable choices, remaining open to the possibility that the player will set them aside to seize upon yet another choice that didn't occur to you.

If the player digs in and refuses to have his character act, the GM may assess a stress penalty. This reflects the character's loss of concentration as he acts against his fundamental nature. The cost of all investigative spends increases by 1, as does the difficulty of all general tests. The stress penalty is a backup measure; chances are you'll never have to assess one. It's almost always sufficient simply to remind players of their Drives.

Likewise, if players are getting into interesting trouble without prompting, the Drives are already doing their job. GMs needn't tax themselves finding ways to bring them to the fore. Instead, they let them fade into the background until needed.

Feel free to propose to your GM a custom drive that fills the same function as the ones given here. Write up an explanatory paragraph in the same vein as the supplied drives. If not immediately apparent, your GM may ask you to supply hypothetical examples of situations in which the drive will keep the character making active, interesting choices in solving the mystery at hand. Be sure to pick an emotional motivation that impels you to action in a wide variety of space opera situations. Overly specific drives, like a grudge against a single group or type of person, leave you without a strong entry point into cases that don't involve them.

Altruism

You instinctively act for the benefit of others, especially when they're unable to help themselves. As far as you're concerned, the fees the crew earns for its cases are just a means to an end. They keep the ship operational and the group sufficiently equipped to go out and do good in the world. If the Combine were still active, you might well have signed on with them as a patrol officer. Without them, the need for strong men and women to act selflessly is greater than ever. This sector of space has taken some hard knocks, and people are scared and discouraged. But if enough folks put the common good over their own petty interests, someday—maybe someday soon—the Bleed will go back to what it was before the war.

Atonement

You did something shameful, which you might specify at the outset of play, or leave open for later revelation at an appropriate moment. Whatever it is, it led you to an epiphany—you can only erase its emotional burden by acting to make the world a better place. Destroying yourself won't help anyone, though if the stakes were high enough, you'd willingly sacrifice your misbegotten life in order to make things right. This need to atone might literally be religious in nature. Just as likely, you want to clear your name, so that posterity will remember a hero instead of a creep. Or perhaps this is simply a matter between you and your tortured conscience.

If you choose to set up your past misdeed for later revelation, be sure to drop hints along the way, to increase the impact on the other players when the secret finally comes out. Alternatively, you could wait for an interesting possibility to arise during play, and then tie your past history into the current action. Clear it with the GM first, to make sure that the facts you're adding to the narrative don't conflict with the mystery you're investigating.

Avenger

Lawless men hurt or killed someone you cared about deeply. Although you weren't able to stop that tragedy, you resolved to hunt them down and punish them.

Decide whether you have already succeeded in taking vengeance on them, or (perhaps more interestingly) have so far been unable to find them.

In the first instance, you were left with your rage unslaked when you finally did catch up with the wrongdoers. The Bleed crawls with rats just like them, you realized. Still feeling empty inside, you resolved to take similar vengeance on behalf of the myriad other victims who can't do it for themselves. Thus you became a Laser—the closest thing to judge, jury and executioner the terms of the standard Combine effectuator will allow.

In the second case, the GM will look for opportunities to weave your hunt for the bad guys into her cases. She may dole them out in stages, so that successful revenge against one of them puts you onto the trail of another perpetrator, and so on. The GM will never present your personal grudge and the resolution of your current case as mutually exclusive. The clash between the two might put you in a tough spot emotionally or ethically, but you'll never have to completely abandon the investigation of the week to get your revenge.

Should you finally achieve it you then, as above, choose to continue bringing terrible justice to those who remind you of your hated quarry.

Bleedism

The days of the Combine are over for good, you believe. The empire has fallen irreparably into decadence and can no longer sustain itself. It will inevitably break up into smaller, more manageable sectors. You are a Bleedist—a political activist who supports the creation of a federation between the planets of the local sector. This new political entity will need law enforcement. When it comes into being, you'll be positioned to become one of the government's founding peace officers. In the meantime, every problem you help solve proves that the Bleed needs local solutions, not rule from afar. Of course, it's just as important that you solve practical problems for your people now, when they need it. If you were cynically using your Laser status to advance personal ambitions, you'd be just as bad as those effete, worn-out Combine hacks. You and your disruption pistol are here to make sure that the new boss is not remotely the same as the old boss.

You are hostile to the goals of Combinists, who seek to return the region to full centralized control, but may or may not feel personally aggrieved by those who advocate them.

Civilizer

Civilization took a series of devastating blows during the Mohilar War. With deprivation endemic and the bonds of social cooperation fraying, someone has to step in to make the Bleed livable again. Only when people feel safe, and able to trust others, can businesses flourish and the economy rise again. When employment and security return, the fruits of civilization—arts, culture, scholarship—can resurge, too. Until then, the treasures of the past will remain in peril, and the future will be barren of accomplishment. You don't care whether the Bleed rises again under the Combine, or as an autonomous Zone. What matters is that it rises. And until the rule of law is restored, that won't happen. One day Lasers will be unnecessary, as functional governments establish accountable police forces. Before this can happen, the Bleed needs people like you, to take the first essential steps on the road back.

Chronicler

Ever since you were a little kid, you knew you were destined for greatness as a writer. As the days of the Mohilar War grew darker, you consoled yourself by recalling that writers should write what they know—and that they should know something interesting. Since then, you've gone out into the world in search of new experiences you could incorporate into your work. When the war ended, you sought the toughest, most exciting and romantic job in the furthest corner of the universe, all in search of material for your magnum opus. You may write non-fiction or cast your experiences in novel form. Your chosen form might be the song, the holonovel—or for that matter, photography, painting or some other medium with a documentary element. Whatever the method, you're determined that the history of this great, sad era will be remembered—with your name stamped indelibly on it.

Combinism

As a fervent believer in the Combine and its ideals, you took a post as a Laser in order to bring order back to the Bleed. By reducing its chaos, you will pave the way for the inevitable day when the Combine recovers and reasserts its authority in deed as well as in name. When that time comes, you'll probably sign up for duty in the Combine fleet. If so, you'll probably be resuming a commission you resigned or were discharged from at war's end. It may be that you're a young idealist who was just a kid when the war ended, and sees Laser duty as a stepping stone to an eventual commission. By serving in a Laser crew, you can keep them from slipping into corruption, so that they don't taint the Combine by association. Although you see successful mission completion as goal number one, you don't hesitate to lay the groundwork for a Combine resurgence as opportunity arises. You don't want the Bleedist movement, which espouses local independence, to succeed. Whether you regard them as misguided rivals or venal traitors is up to you.

CONFLICTING DRIVES

Some of the drives presented here might set you up as a rival to another player with a contrasting motivation. For example, Bleedists and Combinists seek mutually exclusive political change. GMs and players should take care to ensure that conflicting character drives add spice to stories without sidetracking them entirely. The mutual loyalty of crew members who must protect each others' backs trumps all other differences. When drives conflict, use them as a stepping stone for ongoing banter and debate rather than an excuse to draw down on other PCs.

Comradeship

You might have been motivated by abstract or material concerns when you first signed on as a Laser, but over the months or years, that all fell by the wayside. The real reason to be part of a crew, you came to realize, is for the intense bond between men and women who depend completely on each other for their lives and livelihoods. The crew might have started out as a motley band of outcasts, and in some ways they still are. But deep down, they're like a family to you. The ties you've forged under fire are in many ways stronger than blood. (You might, in fact, be estranged from your kin. Or perhaps you lost them all in the war.) No value is more important than personal loyalty. No people matter more than the crew of your ship. And for them to survive and prosper, the job has to get done. It may be dangerous, but you know you can do it, if you all just pull together.

Derring-Do

Why are you a Laser? Because that's where the action is! Only when your back is up against the wall do you feel truly alive. People say "adrenaline junkie" like it's a bad thing. But time and again you've proven the usefulness of a person who embraces danger like a long-lost love. That doesn't mean you drift off when the others are sifting facts and kicking around theories. Anyone can go and get into a fight or stick his neck where it doesn't belong. The true thrill comes when the stakes are high, and people are depending on you. That means knowing your facts, cutting through the fog, and homing in on the crux of the situation. Once you know the score, that's when you shine: when you strap on your d-pistol and dive right in, photons popping all around you.

Entrepreneurial

You intend to be rich. You probably grew up desperately poor during the bad old days of the war. Or maybe your family once had it all, before everything went up in disruptor smoke, and now you want it back. Maybe there are easier, safer ways to fatten your bankroll, but none of them panned out for you. After a succession of failed schemes that supposedly couldn't miss, you've settled on the Laser business as the best match-up between your ambitions and your skill set. Granted, the line of work is a hard-scrabble one—for the moment. But you can see how a single crew on a single ship might parlay itself into a franchise and then an empire. When people hear of your financial ambitions, they automatically assume that you're bent. And sure, maybe you are occasionally tempted to cut a corner or two to fatten the margins. But in the long run you see that a reputation for honesty will serve as the cornerstone of the vast law enforcement consortium you hope to establish. And you'd better do it fast—because you're darn sure you're not the only gun-wielding entrepreneur who hopes to corner this market.

Exploration

You're never happier than when you've got a meglight in your hand and a dark hallway ahead of you. Before the War, a primary mission of the combine was the exploration of the unknown. It plunged ever-further into the dark of space, mapping new worlds and encountering unimagined life forms. Those ideals fell by the wayside during the long years of the war, but they never lost their place in your imagination. There's no money for exploration any more. Nor with population sizes devastated by conflict is there a hunger for additional worlds to colonize. That heyday might be gone forever, but you can still relive the moments of discovery logged by the great fleet captains of the glory days. The Bleed was settled but still young as a Combine sector when the Mohilar War struck. Many of its dark corners remain undocumented. You might easily find new worlds, creatures—perhaps even unknown sentient species—as you bounce around the space lanes with your Laser crew. Even on well-trodden planets, there's usually a strange ruin to plumb or weird anomaly to chase.

Faith

You subscribe to one of the many metaphysical doctrines that have sprung up in the wake of the Mohilar War. It is either one of the nufaiths described starting on p. 155, or one of your (the player's) own creation. At any rate, you see your Laser service as the means to bring something valued by your creed to the people of the Bleed. To list a few examples:

As a Kheren, you see the bringing of protection and order to the helpless as an extension of the godhead's healing blessing.

As a Mondat, you solve mysteries and explain anomalies as a way of repairing the world's corrupted computer code.

As a Blood Redeemer, you seek opportunities to slay the unjust and perhaps to fulfill the purpose of your existence through holy self-sacrifice.

This is not to say that you let missionary speechifying get in the way of the mission. If your sect proselytizes (not all of them do), you see successful action as a Laser as the best advertisement for your beliefs. However, given the chance to quietly share your nufaith with a sympathetic listener, you'll of course do your best to spread the word.

Family Tradition

Your parents, and their parent's parents before them, served in the Combine fleet. Generations of your family have served the public as warriors, cops, and protectors. Trace your lineage back to your species' home world, and you'll find a long line of officers and generals, stretching back as far as history allows. For a reason you must detail, you and the Combine fleet have parted ways. You may, for example, have:

- turned your back on it, heartsick at its pathetically dwindling state
- lost a field commission as demand for officers plummets in the face of a shrinking fleet
- been sidelined or cashiered after losing a political infight

Although the slovenly conditions and communal decision-making of an effectuator vessel may be a far cry from the spit-and-polish world you were raised in, it beats civilian life. Maybe you'll slowly whip your uncon-

ventional crewmates into regulation shape. Or wait out your exile until the Combine comes crawling back to you, begging for you to set things shipshape. Until then, if there are missions to be accomplished, you're there. Your family tree is failure-free, and you aim to keep it that way.

Footloose

You don't like to stay too long in one place. Maybe you were born in a stultifying environment, and swore you'd never be tied down again. On the other hand, you might never have known a home, and get the sweats at the thought of a permanent planetside roof over your head. This is a particular malady of people raised in a military environment, as you might have been during the war.

For someone struck by wanderlust, there's no sweeter gig than being a Laser. You're always moving around. You meet new people, go to fresh places, do a few exciting things, and then disappear from their lives forever. Though you're not planning to quit anytime soon—you're hard-pressed to think of a sweeter gig—it soothes you to know that you could, at any minute. In the meantime, you work and think hard to solve the case at hand. Because when you do, you can get the heck out of there and move on yet again.

Hotshot

Nobody does it better than you. Ever since you were young, you showed a natural flair for every activity you deigned to dabble in. Naturally you chose a glamorously hazardous line of work, one that allows you to show off your dazzling array of talents. You'd sooner act by the seat of your pants than plan laboriously ahead—there's always some surprise that changes your plans anyway. Every problem that confronts your Laser crew is a chance to once again confirm to the world how great you are. You tackle obstacles with aplomb, confident in your brilliant intellect and inborn athleticism. If these qualities weren't counterbalanced by a disarming grin and a cargo bay full of charisma, people might think you a conceited blowhard. Well, maybe a few folks do anyway. But they're jealous rivals and disgruntled ex-lovers, mostly. Not that you worry your handsome head about that. You're too busy making the Bleed a better place.

Hunger Tourism (Kch-Thk)

As is fitting for a Kch-thk, your life is driven by the need to feed. Unlike many of your people, you are a discriminating feeder, forever seeking new vistas of flavor. Accordingly, it was logical to seek out a means of employment which would take you to strange corners of the galaxy. You earn your keep by doing as much as any other crew member to put down cases and solve problems. But in moments of leisure, you help yourself to whatever unusual forms of organic matter you can conveniently and legally ingest. Hunger tourists are an elite but admired lot. You probably keep a journal of your gustatory adventures, which you periodically beam to kch-thk communications network. These are enthusiastically devoured by envious readers, who yearn for news of unfamiliar ingredients. On occasion you might help to arrange for the collection and transplantation of your food discoveries, for the excitement of palates throughout the Bleed. Who knows? You might even find something that mammals like to eat, too.

Integrationist (Cybe)

You belong to the small faction of cybes who identify with the human race and still seek acceptance within it. Signing on with a Laser crew not only provided you a suitable outlet for skills picked up as a supersoldier against the Mohilar, but law enforcement duties allow you to demonstrate to a sometimes skeptical interstellar public that cybes can be positive contributors to the rebuilding of the entire sector. You also seek to show your fellow cybes that they can work with humankind, eventually recognizing that their connections to it are stronger than their differences.

Justice-Seeker

Combine space used to be a place where the virtuous were rewarded and the unjust punished. Now no such certainties apply. The powerful act with impunity. The weak cower in fear. As a Laser, you do your small part to rebalance the scales. Decent, hardworking people who harm no one must be shielded from harm. Predators and exploiters must once more dread the consequences of their misdeeds. You are no vigilante; as a Laser, you are a legally appointed deputy of a legitimate authority. As such, you must bring true justice, not revenge dressed up in pretty platitudes. Mercy and good judgment must temper your wrath. You are not the law, but are only its humble instrument.

Meditative Reconciliation (Tavak)

While all Tavak instinctively pursue a state of inner peace, a relative few devote themselves as thoroughly to it as you do. You practice a heavily philosophical branch of meditation called gahud, which literally means the three-step staircase. By devoting yourself to gahud, you divide your life into three stages. During the first, youthful stage, you explore the self, engaging in extended sessions of intense visualization.

During the second stage, which you are in now, you explore the world, experiencing the extremes of physical reality. You put your body to the test by placing it in danger. You test your understanding of others by traveling to meet others whose concerns and perceptions are as unlike yours as possible. Instead of reshaping your inner world, you help to work positive changes in the external world. You chose the problem-solving life of a Laser as the ideal way to combine all three of these goals, while supporting yourself besides.

When you are old, you will descend into the third stage, when you fuse your inner and outer perceptions. At the end of the process, you drop into what appears to be a coma, surviving without the need for sustenance. The earliest practitioners of gahud still live, a thousand years later, immobile but apparently conscious, in the mountaintop shrine of Vastra-Kav. They are the only beings who can now live in the poisoned atmosphere of your shattered homeworld.

Nowhere Else To Go

Until you signed on with your Laser crew, you were a directionless vagabond. Despite the list of useful talents you picked up during the war, you were unable to make a go of it in civilian life. Without family, friends or opportunity, you bounced from one low-end, no-future job to the next. This dispiriting period may have been marked by addiction, depression, or some other self-destructive behavior. Your path crossed with your fellow crew members by random accident. (You can decide how this happened now, or wait to improvise the details of this backstory incident so that it supports an unfolding storyline.) Finally your real life seemed to begin, with all of those wasted years seeming merely a prelude to it. The ship, the crew and the job is your life. You attack each problem ferociously, as if afraid that a single failure will send you spinning back into those days of soul-crushing despair.

Phase Rider (Durugh)

With the heroic death of the old king and the ensuing collapse of totalitarian durugh society, the ability to Phase between dimensions is now open to all Durugh. You've taken to it more than most. Like 3. 2% of the durugh population, you are a munakti, the bearer of a rare genetic variance that confers ecstatic psychedelic visions whenever you use your Phase power. The glorious visions only come after you've used the ability under stress. By signing on with a Laser crew, you guarantee a steady succession of dangerous situations in which you can use it. Like the durugh in general, you seek to prove your worth to the crew by putting down cases as devo-

tedly as any other effectuator. Fortunately, you've learned the mental technique of tuqha, which allows you to postpone the onset of your visions for up to seventy-two hours after you phase. Thus you can concentrate on the case at hand without suddenly being whisked to your psychotropic inner world.

Your visions might be part of a nufaith religious practice: if so, you might see them as metaphorical roadmaps of your spiritual journey, or true prophecies of events to come. Just as likely, you see them through a prism of rationalism, as mesmerizing neural fireworks with no higher meaning.

If you take this drive, don't forget to invest points in the Phase ability (p. 50).

Professionalism

You do a job and do it well, and that's all the philosophy you need in your life. You take Lasering seriously and expect others to act accordingly. Nothing burns you more than other crews who do sloppy work, fail to execute according to contract parameters, or—worst of all—engage in corrupt activity. The best compliment you can give to another Laser is to say that he or she is "good." That means that he gets the job done with a maximum of efficiency and a minimum of whining, hesitation or drama. You respect others who perform their jobs, whatever they may be, in the same manner. Those who fail to live up to the expectations of their duty, whether through selfishness, inexperience, or laziness, get nothing from you but your curt disapproval.

Pursued

Somebody's looking for you, and you don't want them to find you. If they do, you want the solid backup that only a crew of heavily armed freelance law enforcers can bring. Although you've always got one eye out for signs that your pursuers have finally caught up with you, you don't let that interfere with the performance of your duties. You need the rest of the crew on your side should that terrible day of reckoning ever arrive. So you do your best to make yourself indispensable to them. When the crew's successes attract reputation-building attention, you fade modestly into the background, to keep your image from being broadcast. When internal tensions tear at the group from within, you act as mediator. They're your bubble of safety, and you mean to protect that at all costs.

Consult with your GM to choose a backstory and pursuer that will fit the rest of the series. Here's a quick list of ideas:

You're a cybe, genetically engineered by a team of sinister scientists who want to put you back in a cage for a long-term study of their handiwork

You've been framed for a crime you didn't commit, and have changed your identity while you try to clear your name

You broke a law on a planet outside Combine jurisdiction and are pursued by its vigilantes. It was either an unjust law, or your crime was justifiable under the circumstances

Members of a cultish nufaith pursue you for apostasy

Your family, according to the tenets of a forbidding local culture, must kill you to restore its tarnished honor.

Programming

Your brain has been altered or designed to make you the ideal law enforcement agent. Depending on the details you choose for your backstory, you may or may not be conscious of this. You might be a cybe, or a member of any other race subjected to genetic or behavioral modification. You tackle mysteries, entering hazardous situations when necessary, because this is what your deepest instincts tell you to do. That you would do otherwise is no more thinkable than a vacuum cleaner refusing to pick up dirt or a FTL engine refusing to interlocus a warp corridor.

If you know that you're programmed, you react with surprise when others are appalled by the notion. They say you lack freedom of choice, but you see that others are programmed, too—but often with contradictory impulses that bring only unhappiness. You are glad to have a clear consistent purpose—and in such an interesting field! The fact that your programmers engineered this contentment into you does not make it unreal.

If you decide to start play unaware of your programming, consult with the GM to weave the personal arc

that will result in its eventual revelation. In this case, you will probably undergo a wrenching identity crisis when the truth emerges. It will not, however, alter your compulsion to act as an exemplary effectuator.

Re-evolution (Vas Mal)

You seek the means to reverse the effects of the Mohilar doomsday weapon, which resulted in your people's deevolution from near-omniscient beings of universal consciousness to malformed creatures of flesh and blood. Though your ability to see through time has been terribly reduced, the Vas Mal can still perceive the future, as through a persistent fog. You know that the answer to the enigma will be found somewhere in the Bleed, by members of a Laser crew. They will stumble onto it while probing into some seemingly unrelated case. Now that you have been expelled from eternity's bosom, the future is but dimly written. You must make it come true, by being in the right place at the right time. You are not the only Vas Mal hoping to fulfill the so-called prophecy (an ignorant, superstitious term), but you hope to be the one who does so. Until then, you work with fervor for your crew, as every clue you uncover might just be the one to liberate your people, casting them back into their due state of beyondness.

Role Model

You are a member of a minority whose youth are, at least in your opinion, unused to seeing themselves in positions of competence and authority. You went into law enforcement to show the next generation that they are just as worthy and capable of leadership as the majority. Every case you put down, every problem you solve, creates a path for others like you to follow. You might belong to a small, derided or dispirited species group: the cybe, durugh, or kch-thk. Or you could belong to an oppressed cultural minority within the other races.

This drive differs from Something To Prove, below, in that your motivation is more social than personal. You're acting to better the lot of a coming generation.

Scientific Inquiry

The beautiful thing about science, the pursuit that defines your life, is that every answer leads to a new question, and new vistas of knowledge. In an earlier generation, you might have been content to while away your years in a quietly humming, antiseptic laboratory, painstakingly furthering one avenue of research. Among the tragedies of the Mohilar War was its devastating effect on pure research. If a project wasn't directly applicable to the war effort, it found itself without funding or resources. A generation of students found itself redirected to the development of weapons technologies. Universities became military targets; many were destroyed and have yet to rebuild. With the galactic economy still in tatters, the true scientists must find unconventional venues for research.

You joined a Laser crew knowing that the problems they're contracted to solve often revolve around weird anomalies and strange technologies. Laser work forces you to act as a generalist. Its dangers make you less a lab-coated scholar than a two-fisted modern Darwin. Along the way you've made the oddest discovery of all—that's the way you like it.

Self-Exclusion (Balla)

Balla who cannot suppress the outward display of their feelings are dangerous to themselves and to others of their race. Overt emotionalism can provoke a chain reaction of mental breakdown. Yet, despite all of your training and mental discipline, that is what you did—or nearly did—back among your people. As you attempt to tame your rampant extroversion, you have found a place for yourself among aliens, who are at no risk from it. The isolation and continual relocation of a Laser crew suits you just fine. The cases you take on occasionally put you in contact with others of your people, but for short enough periods that you can minimize contact and hope for the best. Perhaps in the mysteries you confront you will find a solution to the ultimate enigma—your failings as a balla.

Choose this drive only if you are the only player taking a balla character. By taking it you preclude other players from making new balla PCs, so long as your character remains active.

Sexual Adventure

You signed up as a Laser after cluing in to one essential observation: lots of gals and/or guys get turned on by the sight of a uniform. As far as you're concerned, the entire purpose of a starship is that you can use it to cruise around the Bleed, meeting and bedding the sexiest creatures in the galaxy. Service as a Laser lets you love and leave 'em

guiltlessly—your conquests know it's part of the deal from the jump. Although you can hardly blame them if they get attached...

Somehow, your cases always seem to bring you into contact with the foxiest exponents of your desired sex. By pursuing the clues and taking on the bad guys, you are routinely presented with situations highly conducive to temporary romance: rescuing, interrogating, handcuffing, getting trapped together in escape pods. . . Nobody can tell you there's a career with a better benefits package!

Social Engineer (Cybe)

You are a cybe, of the dominant evolver faction that sees itself as a new species and seeks to create a utopia for its genetically engineered, potentially immortal people. Unfortunately, early attempts to create a perfect society along grounds of extreme personal autonomy have hit a few predictable bumps. As a social engineer, you seek the mathematically ideal social and constitutional structure for your people. In pursuit of this goal, you signed on with a Laser crew. As a traveling troubleshooter, you get the chance to see first hand the fault lines in the rebuilding polities of the Bleed. Social crises to one degree or another underlie almost all of the cases you encounter. Every mystery you solve teaches you a valuable lesson, which one day you will use to the benefit of cybes everywhere.

Something To Prove

All your life you've been written off, disregarded, and underestimated. You may have been:

a late bloomer in a family of overachievers
a slave
a member of a despised caste
the inheritor of a family disgrace
deemed unattractive or monstrous
physically handicapped in a culture intolerant of outward defect

(These are examples; by all means, supply your own answer to the question, in consultation with the GM.)

Some people would have resigned themselves to this treatment, would have believed what others said of them. Not you. You worked harder than anyone to prove your worth. In response to this, you were mocked, cheated, and punished. Finally breaking free of your humble circumstances, you made your way—struggling for each inch of advantage—to apply for duty aboard a Laser vessel. Even though you've won the trust of your comrades, you can't help but throw yourself headlong into any task. Those jeering voices still ring in your head, telling you you're inferior. You cannot and will not let them win.

Tech Hound

Let others have their Shakespeare, their Keats, their Rovalion-8. To you, true poetry lies in the engineering of devices. You had a wrench in your hand before you knew how to talk. You were disassembling vehicles before you were legally old enough to drive them. If you served during the war, you quickly earned a reputation as a miracle worker in the engineering room. Afterward you may have taken a lucrative job in some rebuilding industry, but found the work boring by comparison to the seat-of-the-pants, emergency-driven work on a spaceship under fire. With a new generation of sticklers and specifications-loving bureaucrats squeezing out all the combat-hardened techsters of the war years, you drifted to the Bleed in search of rougher challenges. You found it in a Laser crew. More than that, you discovered that your understanding of technologies could not only get the ship out of tough scrapes, but could be used to solve the mysteries that put them in trouble in the first place. To get you out of the Laser racket, they'll have to pry you out with a crowbar.

GUMSHOE RULES

This chapter describes the basic GUMSHOE rules system and is addressed to players and GM alike. But first bear with us for a little explanatory theory.

WHAT GUMSHOE DOES

GUMSHOE speeds and streamlines the time-honored form of the investigative roleplaying game. The central question a traditional RPG asks is:

Will the heroes get the information they need?

Assuming that they look in the right place and apply appropriate abilities to the task, GUMSHOE ensures that the heroes get the basic clues they need to move through the story. The question it asks is:

What will the heroes do with the information once they've got it?

If you think about it, this is how the source materials we base our mystery scenarios on handle clues. You don't see the forensic techies on CSI failing to successfully use their lab equipment, or Sherlock Holmes stymied and unable to move forward because he blew his Zoology roll.

You don't see this because, in a story, failure to gain information is rarely more interesting than getting it. New information opens up new narrative possibilities, new choices and actions for the characters. Failure to get information is a null result that takes you nowhere.

In a fictional procedural, whether it's a mystery novel or an episode of a cop show, the emphasis isn't on finding the clues in the first place. When it really matters, you may get a paragraph telling you how difficult the search was, or a montage of a CSI team tossing an apartment. But the action really starts after the clues are gathered.

Investigative scenarios are not about finding clues, they're about interpreting the clues you do find.

GUMSHOE, therefore, makes the finding of clues all but automatic, as long as you get to the right place in the story and have the right ability. That's when the fun part begins, when the players try to put the components of the puzzle together.

That's hard enough for a group of armchair detectives, without withholding half the pieces from them. Every investigative scenario begins with a crime or conspiracy committed by a group of antagonists. The bad guys do something bad. The player characters must figure out who did it and put a stop to their activities.

When you do see information withheld from characters, it's seldom portrayed as a failure on the part of the competent, fact-gathering heroes. Instead the writers show an external force preventing them from applying their abilities. In a space opera show, you might get the proverbial ion storm that prevents the crew from scanning the planet before they go down. Information is only withheld when it makes the story more interesting—usually by placing the heroes at a handicap while they move forward in the storyline. In GUMSHOE terms, they're not trying to get an available clue and failing; they're using an ability for which no clue is available.

Historically, story-based roleplaying, of which investigative games were an early if not the earliest example, evolved from dungeon-bashing campaigns. They treat clues the same way that dungeon games treat treasure. You have to search for the clue that takes you on to the next scene. If you roll well, you get the clue. If not, you don't—and the story grinds to a halt.

However, treasure gathering isn't the main event in a dungeon game. There, the central activity is killing the monsters and enemies who live in the dungeon. The trea-

sure-finding phase comes afterwards, as a mere reward. If you don't get all the treasure in a room, you lose out a bit, but the story keeps going, as you tromp down the hallway to the next monster-filled chamber.

Imagine a dungeon game where you always had to roll well to find another room to plunder, or sit around feeling frustrated and bored.

Many of our favorite roleplaying games use the traditional roll-to-get-a-clue model. You may have been lucky enough to play in them without ever seeing your game ground to a halt after a failed information roll. Perhaps your GM, or the scenario designer, has carefully crafted the adventure so that you never have to get any specific clue to advance the story.

More likely, your GM adjusts on the fly to your failed rolls, creating elaborate workarounds that get you the same information by different means. When you think about it, these runarounds moments are essentially time killers. They bring about a predetermined, necessary result while giving you the illusion of randomness and chance. GUMSHOE cuts out these filler moments in favor of scenes that actually advance the story. With the time saved, you can construct more detailed, compelling mysteries for the players to sort out. That's where the streamlining comes in.

If you've never had a game stop dead on a missed clue, you may naturally figure that it never happens to anyone. Having run GMing seminars at conventions for years, I can assure you that this is not the case. People come up to me all the time to share their horror stories of games that literally go nowhere on a blown spot test. This should not be surprising. GMs are doing what the rules tell them to do, and failing to see the unwritten rule that they should then spend five to twenty minutes of game time introducing a workaround.

GUMSHOE gives you the rules you should actually use as written, and skips the workaround.

But even if you've never noticed this problem, it will still give you a faster, more concentrated take on the investigative formula.

FROM STRUCTURE TO STORY

The GM's structure notes are not a story. The story occurs as you, the team of players, bring the structure to life through the actions of your characters. The story proceeds from scene to scene, where you determine the pace, discovering clues and putting them together. Your characters interact with locations, gathering physical evidence, and supporting characters run by the GM, gathering expert and eyewitness testimony.

The first scene presents the mystery you have to solve. You then perform legwork, collecting information that tells you more about the case. Each scene contains information pointing to a new scene. Certain scenes may put a new twist on the investigation, as the initial mystery turns out to be just one aspect of a much bigger story. As clues accumulate, a picture of the case emerges, until your characters arrive at a climactic scene, where all is revealed and the bad guys confronted. A wrap-up scene accounts for loose ends and shows the consequences of your success—or, in rare instances, failure. (Why is failure possible at all? Its possibility creates urgency and suspense.)

To move from scene to scene, and to solve the overall mystery, you must gather clues. They fuel your forward momentum.

TIP FOR PLAYERS: CONTAINING SPECULATION

Investigative scenarios often bog down into speculative debate between players about what could be happening. Many things can be happening, but only one thing is. If more than one possible explanation ties together the clues you have so far, you need more clues.

Whenever you get stuck, get out and gather more information.

Gathering Clues

Gathering clues is simple. All you have to do is: 1) get yourself into a scene where relevant information can be gathered and 2) have the right ability to discover the clue and 3) tell the GM that you're using it. As long as you do these three things, you will never fail to gain a piece of necessary information. It is never dependent on a die roll. If you ask for it, you will get it.

You can specify exactly what you intend to achieve: *"I use Imaging to determine if the figure in the holorecording has really been infected by a Denovian moldspawn."*

Or you can engage in a more general informational fishing expedition: *"I use Energy Signatures to scan for anomalous readings."*

If your suggested action corresponds to a clue in the scenario notes, the GM provides you the information arising from the clue.

You're investigating the strange viroware malfunction that has turned your ship's stratco, Matt Bruco (normally played by Brandon, but absent for the current session) into a maniacal parody of his true self. Searching the area where he was last seen in his right mind, you tramp across the crunchy silicate surface of the planet Chronos.

> *GM: "You spot a peculiar shack hidden amid the transparent rocks."*
>
> *You: "A peculiar, huh? I draw on my knowledge of Industrial Design to see if I can tell anything about it from its style of construction."*
>
> *GM: "From its biomorphic forms and distinctive support struts, you recognize it as the work of a little-known alien species called the Uthon."*

Some clues would be obvious to a trained investigator immediately upon entering a scene. These passive clues are provided by the GM without prompting.

> *GM: "As you draw closer to the shack, you spot droplets of what looks like blood on a jagged silica rock."*

Scenarios suggest which clues are passive and which are active, but your GM will adjust these in play depending on how much guidance you seem to need. On a night when you're cooking with gas, the GM will sit back and let you prompt her for passive clues. When you're bogging down, she may volunteer what would normally be active clues.

> *Early in the series, or on a night when everyone's experiencing a collective caffeine crash, the GM might instead run the shack clue, above, like this:*
>
> *GM: "You spot a peculiar shack hidden amid the transparent rocks. Who has Industrial Design?"*
>
> *You: "I do."*
>
> *GM: "From its biomorphic forms and distinctive support struts, you recognize it as the work of a little-known alien species called the Uthon."*

For groups preferring to hide the game terms, the GM can rely on an Investigative Ability Worksheet, (see Appendix). Knowing from the sheet which characters have which abilities, the GM supplies passive clues without stopping to ask. Given a choice between multiple PCs who have the same ability, the GM picks either a character who hasn't had a chance to shine lately, or the one with the highest pool in the relevant ability. The GM might stick with one approach, or switch between them as the moment seems to demand. However, characters who are directly present should always take precedence over those observing the action via headset (p. 125).

> *GM: "You spot a peculiar shack hidden amid the transparent rocks. " [Checks the worksheet, seeing that, of the various characters present, you have the highest Industrial Design rating. Addressing you, she says:] "From its biomorphic forms and distinctive support struts, you recognize it as the work of a little-known alien species called the Uthon."*

The exact give-and-take surrounding the provision of clues will vary seamlessly based on the situation. Typically your GM will sit back and invite you to take the lead, subtly taking up the slack as needed.

For each scene, the GM designates a core clue. This is the clue you absolutely need to move to the next scene, and thus to complete the entire investigation.

Certain clues allow you to gain special benefits by spending points from the relevant investigative ability pool. During your first few scenarios, your GM will offer you the opportunity to spend additional points as you uncover these clues. After that it's up to you to ask if it there's anything to be gained by spending extra time or effort on a given clue. You can even propose specific ways to improve your already good result; if your suggestion

EXAMPLE BENEFITS

Here some special benefits you might get from investigative point spends.

The benefit gives you an advantage in a future contest of General abilities.

- you see that your shuttle craft has been sabotaged before you fire up its engines
- you notice that there is a gap in the force shielding around the back of the suspicious installation
- the plans reveal that, to avoid triggering the ion bomb, you must keep it horizontal

The benefit gives a supporting characters a favorable impression of you.

- you recognize and recover stolen artwork for the original owner, who will then be more inclined to help you
- you spend points to discover a hidden room where there is a hostage who can either give clues or even help with General abilities.
- once you find the hostage, you spend Reassurance to calm his nerves

The benefit can lead to a flashback scene.

- you find the body of an old colleague, and remember that he was a good Laser who hit the skids after his crew wrecked its reputation in a ship confiscation scandal
- a Virology spend allows you to specify that you helped design a cybe witness' favorite viral enhancement

Point spends can help you resolve moral dilemmas or avoid reputation-smirching incidents.

- Intimidating a local might net a core clue for free, but a two point Reassurance spend on the same witness could get you the same information without blackening your name
- a little Flirting with the witness to one of your recent infractions encourages her to keep the incident to herself

Extra point spends might speed up an investigation:

- a Forensic Anthropology spend lets you run all of the DNA samples you gathered on the asteroid in half an hour, instead of half a day
- a spend on a History ability means that you can rattle off an obscure piece of trivia off the top of your head, rather than visibly consulting the ship's database via your headset

A spend might allow you to stretch the definition of the ability you're using, granting you a core clue that would ordinarily be gained with a different ability than the one you have. See the spend example in the main text.

is persuasive or entertaining, the GM may award you a special benefit not mentioned in her scenario notes.

Each benefit costs either 1 or 2 points from the relevant pool, depending on the difficulty of the additional action and the scope of the reward. When asking you if you want to purchase the benefit, the GM always tells you how much it will cost. Additional information gained provides flavor, but is never required to solve the case or move on to a new scene. Often it makes the character seem clever, powerful, or heroic. It may grant you benefits useful later in the scenario, frequently by making a favorable impression on supporting characters. If you think of your GUMSHOE game as a TV series, an extra benefit gives the actor playing your character a juicy spotlight scene.

> *"What do I know about the Uthon?" you ask. "I have 3 points in Xenoculture."*

The GM answers: "There are only a few recorded encounters with them. Mysteries concerning the Uthon start with the location of their homeworld. Each time they appear in Combine incident reports, they've been discovered conducting ruthless scientific experiments on unwilling and unaware subjects."

"Hmm, I'd like to know more about them than that. Can I pay points to specify that I've studied these incident reports in detail, and can easily recall them?"

"Uh, sure," the GM says. "How about two points?"

"It's a deal," you reply.

She then gives you a core clue that the scenario lists as falling under Combine History. "After the last incident, on the planet Borov-n'ar-3, the Combine captain who dealt with them seemingly went insane. He plunged his ship into a black hole and was assumed dead. Later, he was found buried in a cell on Borov'n'ar, claiming he'd never returned to his ship."

The spend allows you to make an intuitive leap: "Sounds like cloning to me!"

The crew still would have gathered the clue eventually, but now you have it before you explore the Uthon hut, and can take precautions. "I don't want to risk being cloned. Can I use Systems Design to jury-rig my insureshield so that it obliterates any stray hairs or exfoliated bits of skin I might leave behind when I go in there?"

"You can certainly try," the GM says, as she realizes that you're cleverly foiling one of the hazards you'll encounter inside the structure.

Spending points on benefits gives often you an advantage, perhaps in a later General conflict. Thus it is to your advantage to propose cool benefits to the GM, even when they aren't specified in the scenario.

The act of spending points for benefits is called a spend. The GM's scenario notes may specify that you get Benefit X for a 1-point spend, or Benefit Y for a 2-point spend.

GMs of great mental agility who feel comfortable granting their players influence over the details of the narrative may allow them to specify the details of a special benefit.

The mere act of proposing a spend in a situation for which the GM has no special benefit to offer never costs you points.

Inconspicuous Clues

Sometimes the characters instinctively notice something without actively looking for it. Often this situation occurs in places they're moving through casually and don't regard as scenes in need of intensive searching. The team might pass by a holo-concealed door, spot a droplet of blood on the marble of an immaculate ship's bridge, or spot an out-of-place fungal organism growing on the underside of a fuel tank. Interpersonal abilities can also be used to find inconspicuous clues. The classic example is of a character whose demeanor or behavioral tics establish him as suspicious.

It's unreasonable to expect players to ask to use their various abilities in what appears to be an innocuous transitional scene. Otherwise they'd have to tediously plumb every scene change, running down their abilities in obsessive checklist fashion. That way madness lies.

Instead the GM asks which character has the highest current pool in the ability in question. (When in doubt for what ability to use for a basic search, the GM defaults to Evidence Collection.)

If two or more pools are equal, it goes to the PC with the highest rating. If ratings are also equal, their characters find the clue at the same time.

To your surprise, you find a human dwelling in the shack, clad in stinking rags. He says that he was captured by aliens and subjected to a terrifying battery of intrusive medical experiments. In fact, he's a clone, brainwashed into a fanatical loyalty for his Uthon creators. According to the GM's notes, his story is both vague and a bit too enthusiastically told—in other words, it should ping any Laser's Bullshit Detector. Both your character and Dialectic (played by Mike) have this popular and widely useful ability, but you have 1 more point in your pool than Mike does.

The GM addresses you: *"You get a strong sense that the guy is afraid of you, and making up the story he thinks you want to hear."*

General Spends

Occasionally you'll want to create a task at which there is no reasonable chance of failure, but which should cost the characters a degree of effort. To do this, simply charge the character(s) a number of points from relevant general ability pools. Where tasks can be performed by cooperative effort, multiple characters may contribute points to them. 1 or 2 points per character is a reasonable general spend .

DIE ROLLS

All die rolls in GUMSHOE use a single, ordinary (six-sided) die.

Leveraged Clues

A staple element of mystery writing is the crucial fact which, when presented to a previously resistant witness or suspect, causes him to break down and suddenly supply the information or confession the detectives seek. This is represented in GUMSHOE by the leveraged clue. This is a piece of information which is only available from the combined use of an interpersonal ability, and the mention of another, previously gathered clue. The cited clue is called a prerequisite clue, and is by definition a sub-category of core clue.

Pipe Clues

A clue which is important to the solution of the mystery, but which becomes significant much later in the scenario, is called a pipe clue. The name is a reference to screenwriting jargon, where the insertion of exposition that becomes relevant later in the narrative is referred to as "laying pipe." The term likens the careful arrangement of narrative information to the work performed by a plumber in building a house.

Pipe clues create a sense of structural variety in a scenario, lessening the sense that the PCs are being led in a strictly linear manner from Scene A to Scene B to Scene C. When they work well, they give players a "eureka" moment, as they suddenly piece together disparate pieces of the puzzle. A possible risk with pipe clues lies in the possible weakness of player memories, especially over the course of a scenario broken into several sessions. The GM may occasionally have to prompt players to remember the first piece of a pipe clue when they encounter a later component.

TESTS

A test occurs when the outcome of an ability use is in doubt. Tests apply to general skills only. Unlike information gathering attempts, tests carry a fairly high chance of failure. They may portend dire consequences if you lose, provide advantages if you win, or both.

Even in the case of general skills, the GM should call for tests only at dramatically important points in the story, and for tasks of exceptional difficulty. Most general ability uses should allow automatic successes, with possible bonuses on point spends, just like investigative abilities.

There are two types of test: **simple tests** and **contests.**

Simple Tests

A simple test occurs when the character attempts an action without active resistance from another person or entity. Examples include driving a treacherous road, jumping a gorge, sneaking into an unguarded building, binding a wound, shooting a target, disconnecting a security system, or resisting mutant mental powers.

The GM determines how hard any given action is by assigning it a Difficulty Number ranging from 2 to 8 (occasionally even higher), where 2 offers only a slim chance of failure, 4 is the norm and 8 verges on the impossible. The player rolls a single die; if the result is equal to or higher than the Difficulty Number, the character succeeds. Before rolling the die, the player may choose to spend any number of points from the relevant ability pool, adding these to the final die result. Players who forget to specify the number of points they want to spend before rolling are stuck with the unmodified results.

> *You want to roll under a rapidly closing blast wall before an amnesia bomb goes off and robs you of your knowledge of the Uthon plot. You have 8 points in your Athletics pool. With the facts on the Uthon crucial to your contract payout, you decide to go all out. You spend half of your pool, 4 points, on the attempt. You roll a 5, to which you add the 4 spent Athletics points, for a final result of 9. With mere micro-instants to spare, you slip under the wall before it seals shut. The brainwave-frying explosion rattles harmlessly against the polymer-reinforced protective door.*

The GM never directly reveals Difficulty Numbers. She may, in response to player questions, give rough verbal indications of how hard a task seems to the naked eye:

"You've got plenty of time—unless you slip."

"The last time you slid for a blast door that far away, you made it. The time before that was a different story."

"If you make it through, it'll be a miracle."

(Some GUMSHOE groups feel that GMs should announce Difficulty numbers, so players never feel that they've unnecessarily overspent. The designer regards this as, frankly, a wuss-out. General ability spends force players to ask themselves, "how much do I really want this?" It's the need to balance two competing possible negative outcomes—spending more than you need versus failing—that lends an essential emotional frisson to the decision-making process and subsequent die roll. If you decide to reveal numbers, and the designer finds out that you're doing it, he might well tease you about it.)

Making Tests Without an Ability

You can always make a test of any general ability, even when you have no points in its pool, or even if you have a rating of 0. Exception: you must have a rating of at least 1 in a species-specific ability to make a test against it.

On select occasions you might qualify to spend points on an ability rated at 0; see Lucky Shots, p. 69.

Note: This rule departs from other GUMSHOE games such as Trail of Cthulhu in which, with limited exceptions, characters without a General ability cannot make a test of that ability.

The test represents the character's best chance to succeed. Once you fail, you've shot your wad and cannot retry unless you take some other supporting action that would credibly increase your odds of success. If allowed to do this, you must spend more pool points than you did on the previous attempt. If you can't afford it, you can't retry.

> *The cloned Matt Bruco has broken loose from his bonds to grab the helm of the shuttle craft you're piloting. While Dialectic subdues him, you must use your Shuttle Craft ability to right its course before it crashes into a communications relay station. You've just failed your first test, spending 2 points from your Shuttle Craft pool on the attempt. Thanks to an imaging spend, the GM allows you one more shot before you smash into the station. To qualify for this attempt, you must spend at least 3 Shuttle Craft points. Fortunately you have 4 points left, so you're good to go. You hate to spend all of your shuttle piloting this early in the episode, but smacking into that station might give the counterfeit Bruco a chance to escape. The Difficulty Number of the piloting attempt is 5. You roll a 5; adding the 3 points expenditure, you get a final result of 8. Executing a hair-raising barrel roll, you reassert gravitic inertia, and right your course. The shuttle blazes past the station, merely knocking off a redundant antenna array.*

Piggybacking

When a group of characters act in concert to perform a task together, they designate one to take the lead. That character makes a simple test, spending any number of his own pool points toward the task, as usual. All other characters pay 1 point from their relevant pools in order to gain the benefits of the leader's action. These points are not added to the lea-

der's die result. For every character who is unable to pay this piggybacking cost, either because he lacks pool points or does not have the ability at all, the Difficulty Number of the attempt increases by 2.

After interrogating the re-subdued clone aboard the Eastwood, you determine that the Uthon have set up their main research facility inside what an apparently derelict Mohilar vessel drifting in space. They have captive experimental subjects on board, and you don't want to risk their lives by starting a ship-to-ship skirmish. Instead you settle on a covert boarding mission.

Your hailer has jammed their scanner arrays with Communications Intercept, allowing a team to drive a shuttlecraft to its cargo bay undetected. Now you have to open and move through the hatch without triggering any sensors they might have installed in the ruined ship. The task requires a Systems Repair test. Your wrench, Kai Reffen (Sarah), will take the lead, with you, Dialectic (Mike) and the real Matt Bruco (Brandon, now back at the gaming table) piggybacking.

Kai has 8 points in her Systems Repair pool. You, Dialectic and Matt have 2, 0, and 4, respectively. You and Matt pay 1 point apiece, dropping your pool to 1 and Matt's to 3. Because Dialectic has nothing to spend, the Difficulty of the Systems Repair increases from 5 to 7. You might have left him behind, but he's the ship's medic, and will be needed to safely revive the comatose captives. Sarah spends 4 points and rolls a 3—exactly what you needed.

With such a close result, the GM narrates a razor's-edge victory, singling out the empty-pooled character as the one who nearly brings it all crashing down: "As you slide through the hatch, Dialectic momentarily loses his scanlock on the dampening frequency. Kai jumps in to override the signal, squelching the alarm."

You're now safely aboard the floating lab.

In many instances a group cannot logically act in concert. Only one character can steer a ground vehicle at one time. Two characters with Preparedness check their individual kits in sequence, rather than checking a single kit at the same time.

Piggybacking applies only to simple tests, not to contests, lucky shots, showdowns, or other ability rolls.

Lucky Shots

In a desperate situation, you may be called on to use an general ability you don't have. Once per episode, a character with a rating of 0 in a given ability may attempt a lucky shot. The other players must grant unanimous permission for the character to try a lucky shot. They have a vested interest because the once-per-episode rule applies to the entire crew. If they let you use the lucky shot, none of them will be able to try it later on.

If allowed to go forward, you spend up to 4 points from your highest current general ability pool, and add it to your roll.

Should you succeed, you get the result you wanted, but are required to describe the outcome as somehow fluky or embarrassing. Thus you preserve the sense that the players who invested real points in the ability are the real masters, and you succeeded through sheer happenstance. Alternately, you can succeed with a straight face, but then explain how the victory really belongs to the PC with the highest rating in the ability. Maybe she taught you a few tricks between episodes. Or perhaps you remember something bad-ass she did earlier, and are simply aping it now.

You're playing the ship's bagger and wrench, well known for standing well away from any fight. You are the only crew member available to guard a prisoner when the crew's security officer is called away to deal with a new threat. As soon as she goes, the captured alien disarms the force-shield securing its jail cell and makes a break

Difficulty Numbers and Story Pacing

Just as the GUMSHOE system keeps the story moving by making all crucial clues accessible to the characters, GMs must ensure that tests and contests essential to forward narrative momentum can be overcome. Assign relatively low Difficulty Numbers of 4 or less to these crucial plot points. Reserve especially hard Difficulty Numbers for obstacles which provide interesting but nonessential benefits. Alternatively, ensure that failing such tests causes negative consequences other that stalling the adventure, for example, causing damage to the PCs.

For example, if the characters have to sneak into the McMillenist compound in order to stage the final confrontation, assign the relatively low Difficulty Number of 4 to the task. If it seems to the characters that they ought to have a tougher time of it, insert a detail justifying their ease of success. The soldier assigned to patrol duty might be found passed out at his post, say. If they fail, perhaps a PC has accidentally touched an electric fence and takes damage.

for the doorway. You have a gun in your hand and no rating in Shooting.

"Can I make this our lucky shot for the episode?" you ask the other players. "We worked hard to capture this guy and don't want him getting away."

The other players agree. Your highest current rating is a 12, in Business Affairs. You spend 4 points, dropping your pool to 8. You roll a 4, enough to overcome its impressive Hit Threshold of 6.

Your GM has already quietly decided that a single successful shot will convince the alien to surrender. "Okay, you've stopped him, but in a fluky way," she says. "What happened?"

"I aimed right at him, but flinched at the last minute. The shot went wild, hitting a beam overhead and sending that ornamental light fixture crashing down on its head."

The GM nods, accepting your description; you accomplished the goal without eclipsing your security officer.

GMs aiming for a gritty tone may discourage funny or slapstick-style action descriptions.

Lucky shots apply to species-specific abilities only if you're a member of the species associated with the ability.

Cooperation

When multiple characters cooperate toward a single goal, they agree which of them is undertaking the task directly, and which is assisting. The leader may spend any number of points from her pool, adding them to the die roll. The assistant may pay any number of points from his pool. All but one of these is applied to the die roll.

Taken by surprise, the Uthon vanish, using an unknown technology. To prevent the crew from reading its energy signatures, they set off a final trap, sending lethal jolts through the life-support system housing the captive experimental subjects. Stopping the effect before it kills the prisoners will require another test of the group's already depleted Systems Repair pools. Kai (Sarah) with 4 points left, takes the lead, with Matt (Brandon) assisting. With only 1 left in your pool, there's no point in your trying to assist, because you need to have at least 1 extra point left to pay the cooperation cost. Both Sarah and Brandon spend all of their remaining points. Her 4 points add to the die roll as usual; Brandon spends 2, but adds only 1 to the result. Sarah rolls a 3, to which 4 and 1 are added for a result of 8. This beats the unrevealed Difficulty Number of 6, saving the patients. The crew has now fulfilled the terms of its contract, and can arrange for a payout after transporting the freed captives to the nearest Combine outpost.

Toll Tests

In a toll test, your success is assured, if you want it enough, but the cost of your effort is not. The GM informs you of the Difficulty; you roll the die without announcing an expenditure. Once you see the die result, you then decide whether to spend the points needed to bridge the gap between die roll and Difficulty, or to allow yourself to fail. The base Difficulty of a toll test is 6, which may be modified upwards as circumstances warrant.

Chiara, playing wrench Titus Mbae, installs a tractor beam on her ship, the Morricone. This calls for a toll test of her Systems Design ability. Titus has 8 points in his pool. The Difficulty of the test is 6. Chiara rolls a 5. She spends 1 point to get her result up to the needed Difficulty, leaving her Systems Design pool at 7. Titus has successfully installed the tractor beam.

Toll tests are used for bolt-on installation (p. 115) They may be of use in this or any other GUMSHOE game for situations to which you want to attach a modicum of suspense, while at the same time making failure extremely unlikely.

Ratings as Difficulty Benchmarks

You may want to use a supporting character's rating in a general ability as a benchmark for the Difficulty of a PC's test. Supporting character ratings translate into difficulties as follows:

Rating	Difficulty
1–7	4
8–12	5
13–16	6
17+	7

You are in the room when Docetist, a cybe supporting character, tries to surreptitiously activate a mysterious piece of alien technology. Rather than having the supporting character make a Filch test to succeed, the GM requires a Surveillance test from you, to see if your character spots his attempt. Docetist's Filch rating is 12, making this a Difficulty 5 Surveillance test.

Margins

In some special tests or contests, the difference between difficulty and result is used to determine the degree of failure or success. This number is called the margin.

Examples of Ashen Stars rules where the margin matters include the determination of downtime between contracts, and escape from navigational hazards.

Contests

Contests occur when two characters, often a player character and a supporting character controlled by the GM, actively attempt to thwart one another.

In a contest, each character acts in turn. The first to fail a roll of the contested ability loses. The GM decides who acts first. In a chase, the character who bolts from the scene acts first. Where the characters seem to be acting at the same time, the one with the lowest rating in the relevant ability acts first. In the event of a tie, supporting characters act before player characters. In the event of a tie between player characters, the player who arrived last for the current session goes first in the contest.

The first character to act makes a test of the ability in question. If he fails, he loses the contest. If he succeeds, the second character then makes a test. This continues until one character loses, at which point the other one wins.

Typically each character attempts to beat a Difficulty Number of 4.

> *Pursued by a mysteriously reactivated gladiatorial robot, you flee through the dusty canyons of Bronson-4. Your Athletics pool is 6; the robot's is 10. As the fleeing character initiating the chase sequence, yours is the first character to act. You spend 1 point, dropping your pool to 5. Your ensuing roll is a 4, for a result of 5. This beats the standard Difficulty of 4.*
>
> *You describe your success: "Kicking up oxide dust, I boot it down the sloping hills!"*
>
> *On behalf of the robot, the GM spends 2 and rolls a 4, for a result of 6. It's still in the chase. The GM narrates accordingly: "It shudders across the uneven surface, ancient servos screeching!"*
>
> *You spend another point, taking your Athletics to 4. You roll a 6, for a final result of 7. The GM invites his player to explain what you've done to widen the gap. "I duck into a cavern, hoping the darkness will throw off its visual sensors."*
>
> *The GM rolls for the robot, spending 1 point and rolling a 2. That's a failure. "It stops short at the cavern mouth, smoke rising from its processors," the GM narrates. "Clearly its subroutines have corrupted during its long sleep on this barren planet.»*
>
> *You've escaped the immediate pursuit, but are now in the canyon and can't go back out again without recommencing hostilities with the battlebot. Your choice of narration has hemmed you in; now you'll have to explore the cavern system in search of another exit, or information that will help you defeat the bot.*

Where the odds of success are skewed in favor of one contestant, the GM may assign different Difficulties to each. A character with a significant advantage gets a lower Difficulty Number. A character facing a major handicap faces a higher Difficulty Number. When in doubt, the GM assigns the lower number to the advantaged participant.

> *A Laser scrabbling without gear up a rock face finds it harder to move quickly than the well-equipped climber he's pursuing. In this case he might face a Difficulty Number of 4, while the mountaineer gets the lower Difficulty of 3.*

Throughout the contest, GM and players should collaborate to add flavor to each result, explaining what the characters did to remain in the contest. That way, instead of dropping out of the narration to engage in an arithmetical recitation, you keep the fictional world verbally alive.

Zero Sum Contests

A zero sum contest occurs when something bad or good is definitely going to happen to one of the PCs, and you need to find out which one takes the hit or earns the goodie. Each player makes a test of a general ability. A zero sum contest can be positive or negative. In a posi-

tive contest, the character with the highest result gets a benefit. In a negative contest, the one with the lowest result suffers an ill consequence. Tell the players you're using a zero sum contest, and whether it's toward a positive or negative result. Players decide in advance how many points to spend to modify their rolls, keeping this number secret from other players by writing it down on a piece of paper. They then roll the dice, reveal their expenditures, and announce their final results.

> *Graz Prister (played by Lynne), Clementine Heidegger (Rich) and Armo Black (Steve) flee from a velocisphere on the planet Numitor. The GM, Rachel, has determined that, for story reasons, one of them will be definitely be caught by the creature-slash-device, making this a zero sum contest. (If she wanted all of them to have a chance of getting away, it would be a contest of its Athletics versus their Athletics/Fleeing, but here the creature doesn't enter into the process at all.) Lynne decides to spend 8 Fleeing points, and rolls a 1, for a result of 9. Rich spends 4 Athletics, and rolls a 1, for a result of 5. Steve spends 4 Athletics and 4 Fleeing, and rolls a 5, for a result of 13.*
>
> *Rich's 5 is the lowest result. The unfortunate vas mal, Clementine Heidegger, is absorbed into the translucent sphere.*

Be cautious when treating events with negative outcomes as zero sum contests. Because they guarantee that something bad will definitely happen to one of the PCs, make sure that the negative consequence is distressing but does no permanent harm to the character.

Worse results of zero sum contests are acceptable if the characters have had some other fair chance to avoid exposure to the bad situation.

If players are tied for best result (in the case of a positive test) or worst (in a negative test), the tied players may subsequently spend any number of additional points from the pool in question, in hopes of breaking the tie in their favor. Should results remain tied after additional expenditures, the Keeper chooses the winner based on story considerations.

Fighting

Fights are slightly more complicated contests involving any of the following abilities:

Scuffling vs. Scuffling: the characters are fighting in close quarters.

Shooting vs. Shooting: the characters are apart from one another and trying to hit each other with guns or other missile weapons

The aggressor is the first character to move against the other. When the status of aggressor and defender are unclear, the combatants compare their current pool numbers in the abilities they're using in the fight. The character with the highest number chooses whether to act as aggressor or defender. (Unlike an ordinary contest, in a fight it is often advantageous to strike first.)

A contest proceeds between the two abilities. When combatants using the Scuffling or Shooting abilities roll well, they get the opportunity to deal damage to their opponents.

Hit Thresholds: Each character has a Hit Threshold of either 3 (the standard value) or 4 (if the character's Athletics rating is 8 or more.) The Hit Threshold is the Difficulty Number the character's opponent must match or beat in order to harm him. Less competent supporting characters may have lower Hit Thresholds. Creatures may have Hit Thresholds of 4 or higher, regardless of their Athletics ratings.

Dealing Damage: When you roll on or over your opponent's Hit Threshold, you may deal damage to him. To do so, you make a damage roll, rolling a die which is then modified according to the relative lethality of your weapon, as per the following table:

Weapon Type	Damage Modifier
Fist, kick	–1
Small improvised weapon, baton, knife	0
disruption weapon, ancient firearm, sword	1

For firearms, add an additional +2 damage when fired at point blank range.

Characters may never spend points from their combat pools to increase their damage rolls.

The final damage result is then subtracted from your opponent's Health pool. When a combatant's Health pool drops to 0 or less, that combatant begins to suffer ill effects, ranging from slight impairment to helplessness to death; see sidebar. Any combatants currently engaged with him in a close quarters fight can then deal another instance of damage to him.

Unlike other contests, participants do not lose when they fail their test rolls. Instead, they're forced out of the fight when they lose consciousness or become seriously wounded—see sidebar.

Exhaustion, Injury and Death

Unlike most abilities, your Health pool can drop below 0.

When it does this, you must make a Consciousness Roll. Roll a die with the absolute value* of your current Health pool as your Difficulty. You may deliberately strain yourself to remain conscious, voluntarily reducing your Health pool by an amount of your choice. For each point you reduce it, add 1 to your die result. The Difficulty of the Consciousness roll is based on your Health pool before you make this reduction.

> *You are backhanded by an inorganic oil entity. Your Health pool drops to -2. As the oil creature withdraws to pool hungrily in a nearby rock basin, you struggle to remain conscious. Zoology tells you that this creature will wait until you're out, and then osmotically break you down into your component nutrients. You must make a Consciousness roll. The absolute value of –2 is 2, so this is the Difficulty of your Consciousness roll. Not wanting to become oil food, you expend another 2 Health points, even though you don't really have any. That allows you to add 2 to your ensuing roll. Your die comes up a 6, for a final result of 8. You remain blearily awake as you call for help on your headset, but your Health pool is down to –4.*

If your pool is anywhere from 0 to –5, you are **hurt**, but have suffered no permanent injury, beyond a few superficial cuts and bruises. However the pain of your injuries makes it impossible to spend points on Investigative abilities, and increases the Difficulty Numbers of all tests and contests, including opponents' Hit Thresholds, by 1.

* In other words, treat the negative number as a positive. For example, if your Health pool is at –3, the Difficulty of the roll is 3, and so on.

A character with the Medic ability can improve your condition by spending Medic points. For every Medic point spent, you regain 2 Health points—unless you are the Medic, in which case you gain only 1 Health point for every Medic point spent. The Medic can only refill your pool to where you were before the incident in which you received this latest injury. He must be in a position to devote all of his attention to directly tending to your wounds.

If your pool is between –6 and –11, you have been **seriously wounded**. You must make another Consciousness roll. (If you dropped from a positive Health pool into this range, you make only the one Consciousness roll.)

Whether or not you maintain consciousness, you are no longer able to fight. Until you receive first aid, you will lose an additional Health point every half hour. A character with the Medic ability can stabilize your condition by spending 2 Medic points. However, he can't restore your Health points.

Even after you receive first aid, you must convalesce. Convalescence takes four hours in a 25th century medical facility, including the sick bay of your ship.

When your pool dips to –12 or below, you are **dead**. Time to create a replacement character.

Example Fight

Plunging deeper into the cavern, you are jumped from behind by a knife-wielding humanoid, whose body morphology suggests a human being after millions of years of adaptation to a desert environment. He's hairless, wrinkly, nearly blind, and clawing at you with monstrous nails. There's no room to step back and fire a disruption beam at him. You have to fight up close, with Scuffling. The GM declares that the moleman is the aggressor. It has a Scuffle rating of 12 and a full pool. His unusually dense hide acts as natural armor, giving him a Hit Threshold of 4, and his claws give him a Damage Modifier of 2. Your Scuffle rating is 6; your pool is full. You grab your Meglight Whacker, which carries a Damage Modifier of 0. You're carrying a deflector, giving you a Hit Threshold of 4.

The moleman goes first. Ashley, the GM, spends 2 points from its pool, dropping it from 12 to 10. She rolls a 2 and adds the 2 points, for a total of 4, which equals your Hit Threshold. Having hit, Ashley rolls a die for the moleman's damage, getting a 4. Added to the Damage Modifier of 2, that's 6 points of damage. Your Health pool drops from 8 to 2.

You swing your baton at the moleman, spending 3 Scuffling points. You roll a 3, for a result of 6—more than you need to overcome his Hit Threshold. Because your Damage Modifier is 0, you roll a damage die and neither add or subtract from it. Your roll is a 5. The moleman's Health pool drops from 7 to 2. "I smack him on the side of the head," you narrate, "my blows landing with a resounding crunch."

The GM continues the narration: "The moleman withdraws slightly, clutching its purpled flesh, then launches itself at you, furious and hissing." It's now the moleman's turn to strike back. Ashley spends 2 more Scuffling points from the moleman's pool, dropping it from 10 to 8. She rolls a 5, for a result of 7—also well above your Hit Threshold. Ashley makes a damage roll, a 2, which the moleman's Damage Modifier turns into a 4. You lose 4 points of Health, dropping your pool to -2. You are now hurt, and suffer an increase of 1 to all Difficulty Numbers, including your opponent's Hit Threshold—it is now effectively 5.

Because you've been hit and are below 0 Health, you now have to make a Consciousness roll. The Difficulty of this roll is 2, the absolute value of your current negative Health pool total. (Unlike all other Difficulties, this does not increase because you are hurt.) You could spend more Health on the roll, but, given that you can only fail if you roll a 1, you decide to chance it. You need every Health point you can get! Your trust in statistical odds turns out to be well-placed: you roll a 3, and remain upright.

"I fall back against the canyon wall, clutching at my torn flesh," you narrate. "With sweaty hands I grip my Meglight Whacker and reel at him, swinging wildly." You spend 2 points, taking your Scuffling pool from 3 to 1. You roll a 2, for a total of 4. That would have been enough to hit him before you got hurt, but now you'd need a 5. "Your swinging Meglight catches nothing but air," Ashley narrates.

Now the moleman gets another swipe at you. Ashley spends 2 points, taking its pool from 8 to 6. That beats your Hit Threshold, and occasions another damage roll—a 3, to which Ashley adds the moleman's Damage Bonus of 2. You lose another 5 Health. Your Health pool falls from -2 to -7. You are seriously wounded. Normally you'd be unable to continue fighting, but you have a cybernetic trick up your sleeve.

First, you make your Consciousness roll, which faces a Difficulty of 7 (the absolute value of your negative Health number). You could go further into the red in an attempt to beat that number, but decide not to. Knowing you'll fail the roll, you don't bother to make it.

Now your cybernetic enhancement, Autonomic Avenger (p. 127) kicks in, as it always does when you lose consciousness during a Scuffling contest. It allows you to attack your opponent even while unconscious. Following its rules text, you roll a die to see how many attack attempts you get. You roll a 6, allowing you two attempts. Your Scuffling increases by 6 points, which you must spend on these attacks. You have another 1 point left in your pool. You decide to spend 4 on the first attack, which will guarantee you a hit, and 3 on the second, which will give you an 83% chance of success.

Although success on the first hit is a foregone conclusion, you roll the die anyway, just to see what you really needed to spend. You get a 2, for a final result of 6. Then it's time for damage. The Autonomic Avenger has increased your Damage Modifier from 0 to 2. You roll a 6. The moleman takes 8 points of damage, dropping its Health from 2 to -6. It is now seriously wounded. It can no longer fight, and must make a

PRIMITIVE CONVALESCENCE

Recovery from serious wounds takes a prolonged period when you are deprived of 25th century medical facilities. In a low-tech hospital, your period of forced inactivity is a number of days equal to the positive value of your lowest Health pool score. (So if you were reduced to –8 Health, you are hospitalized for 8 days.) On the day of your discharge, your Health pool increases to half its maximum value. On the next day, it refreshes fully.

Recovery rates double when your medical care is nonexistent. This includes hospitalization in a facility provided by a pre-industrial society.

Alternate healing technologies might allow you to recover as if in a 25th century, low-tech, or pre-industrial facility, depending on the world and culture, as established by the GM.

Consciousness roll against a Difficulty of 6. Ashley spends 2 of its Health, dropping its pool further, to -8. She rolls a 3, for a result of 5—not enough to beat the Difficulty. The moleman drops to the cavern floor.

With no other combatant to strike, the Autonomic Avenger's targeting algorithms withhold your second blow. You spend only the Scuffling points from the enhancement. As you sink to the ground alongside the moleman, your Scuffling pool remains at 1.

After a time of swimming darkness, you wake up in a sparklingly white medical laboratory, strapped to a gurney. The moleman lies, restrained and drooling, on another gurney beside you. The gladiatorial robot buzzes around the facility, expertly tending to your wounds, and the moleman's besides.

The mystery deepens. . .

Disruption Fire

A variety of weapons, including the ubiquitous firearm of Combine space, the disruption pistol, are capable of dealing an energy burst that incapacitates organic creatures. This is known as non-lethal disruption fire, or NLD for short. In naval jargon, the acronym is pronounced "nulled." It is also used as a verb, meaning, "to hit someone with non-lethal disruption fire." To be nulled is to be hit by an NLD blast.

For targets with Health ratings of 4 or more:

The first time a target is nulled in the course of a fight, its Hit Threshold drops by 1.

On its second NLD hit, the target falls unconscious, regardless of its current Health pool.

For targets with Health ratings of 3 or less:

On a single successful NLD hit, the target falls unconscious.

(In other words, GMs who want minor adversary characters to go down in one shot should give them 3 or fewer Health.)

The character remains unconscious until awakened with a widely available device called an espresser (p. 133) or, failing that, for a period of time derived from its Health rating:

NLD Recovery Rate

Rating	Duration of Unconsciousness
4 or less	6 hours
5-8	3 hours
9-12	2 hours
13-16	1 hour
17 or more	30 minutes

When struck by one NLD hit, a target remains vulnerable to the incapacitating effect of a second hit for the rest of the current interval, or until the end of the episode, whichever comes first.

Free-For-All Combat

Combat becomes more chaotic when two groups of combatants fight, or a group gangs up against a single opponent. The GM abandons the aggressor/defender model. Instead, the GM determines an order of action, ranking all participants in the combat according to their present pool values in the fighting skills they'll be starting the fight with—Scuffling or Shooting. Ties are broken in favor of characters with higher ratings in those skills. If characters are still tied, player characters win out over creatures and enemies, and early-arriving players win over late-arriving players.

The time it takes to go through the ranking order once, with each character taking an action, is called a round. When one round ends, another begins. When called upon to act, each character may strike at any opponent within range of his weapons. Some supernatural creatures may strike more than once per round. They make each attack in succession, and may divide them up between opponents within range, or concentrate all of them on a single enemy.

Creatures may choose to use their actions to deal additional damage to downed or helpless opponents rather than engage active opponents. They automatically deal once instance of damage per action. Only the most crazed and bestial human enemies engage in this behavior.

Characters who join a combat in progress come last in order of precedence. If more than two characters join during the same round, the GM determines their relative precedence using the rules above.

The fight continues until one side capitulates or flees, or all of its members are unconscious or otherwise unable to continue.

A STUNNING PRONOUNCEMENT

The rules for non-lethal fire represent a compromise between genre fidelity and playability.

In genre, stun rays typically take out a target in one shot. However the writers always contrive to keep this satisfying.

In a game, limiting firefight shots so that they either result in a miss or in instant victory is generally unsatisfying. It's fun to mow down insignificant opponents in one shot, but not to be taken out with one hit or to do the same to a central opponent.

Accordingly, the rules are configured to allow you to still instantly zap minor opponents, but to require two shots to down a PC or major antagonist. This still feels faster and more decisive than the standard RPG combat, and thus retains a touch of SF flavor, while still respecting our emotional expectations for tabletop play.

Cover

In a typical gunfight, combatants seek cover, hiding behind walls, furniture or other barriers, exposing themselves only for the few seconds it takes them to pop up and fire a round at their targets. The GUMSHOE rules recognize three cover conditions:

Exposed: No barrier stands between you and the combatant firing at you. Your Hit Threshold decreases by 1.

Partial Cover: About half of your body is exposed to fire. Your Hit Threshold remains unchanged.

Full Cover: Except when you pop up to fire a round, the barrier completely protects you from incoming fire. Your Hit Threshold increases by 1.

Range

Disruption pistols can strike targets up to 25m away. Rifles are effective against targets up to 150m from the shooter.

ONE GUN, TWO COMBATANTS

If your opponent has a gun well in hand and ready to fire, and you charge him from more than five feet away, he can empty his entire clip or chamber at you before you get to him, badly injuring you. You are automatically hit. He rolls one instance of damage, which is then tripled. Yes, we said tripled. And, yes, the tripling occurs after weapon modifiers are taken into account. This is why few people charge when their opponents have the drop on them.

If your opponent has a pistol but it is not well in hand and ready to fire, you may attempt to jump him and wrestle it from his grip. If he has a pistol well in hand but is unaware of your presence, you may also be able to jump him, at the GM's discretion. The characters engage in a Scuffling contest to see which of them gets control of the gun and fires it. The winner makes a damage roll against the loser, using the pistol's Damage Modifier, including the +2 for point blank range.

If you jump an opponent with an unready rifle, a Scuffling combat breaks out, with the opponent using the rifle as a heavy club.

Surprise

Characters are surprised when they find themselves suddenly in a dangerous situation.

Surprise supporting characters by sneaking up on them with a successful Stealth test. The basic Difficulty is 4, which may increase for especially vigilant characters.

Avoid being surprised with a successful Sense Trouble test, handled by the hailer. The basic Difficulty is 4, but may be higher in the case of notably sneaky opponents.

Surprised characters suffer a +2 increase to all general ability Difficulties for any immediately subsequent action. In a fight, the penalty pertains to the first round of combat.

Showdowns

A showdown is a shortened contest that resolves in a single step, by comparing the test results of two opposing characters. Each character makes a test. The character with the highest result is the winner and gains whatever advantage the two were struggling over.

Two player characters, Ann Keefer (played by Jae) and Solace (played by Declan) get into an arm-wrestling contest. As GM you don't want to stretch this out into an entire Athletics contest, and so resort to a showdown. Jae spends 3 Athletics points and rolls a 3, for a result of 6. Declan spends 2 Athletics and rolls a 5, for a winning result of 7. Solace easily overcomes Ann, winning bragging rights, and a chance to impress a tight-lipped bartender who knows something about the smuggler they're hunting.

Ties are resolved in favor of the character who spent the most points on the showdown.

If Jae had rolled a 4, she and Declan would have both scored results of 7. She however would have spent more points on the result. The tie would be awarded to her.

Where both point expenditures are equal, the participants reroll until one of them wins. They do not spend additional points from their pools on these additional die rolls. Instead, the existing point expenditure is applied to the new roll. This sometimes matters, as it does during ship combat, where the degree of difference between showdown results factors into the skirmish's ultimate outcome.

Let's say that Jae and Declan both spent 3 Athletics points and both rolled 3s. At the beginning of the showdown, their Athletics pools each drop by 3 points. After discovering the tie, they reroll without spending additional points. They each roll sixes. Still tied, they reroll again. Jae rolls a 2 and Declan rolls a 3. Declan wins. If the final result mattered in some way, you'd add in the originally spent 3 points, for a result of 6.

You may occasionally resort to showdowns for pacing purposes, to collapse what would otherwise be a long contest into a brief moment. They're also useful when you need to resolve an action nested within another contest or longer series of tests. In Ashen Stars, showdowns are used most often in space combat (p. 84).

Outside of special cases like ship combat, most contests between a PC and a supporting character are usually best resolved as a player-facing test against a Difficulty number, not as a showdown.

That said, showdowns might on rare occasions prove useful in other GUMSHOE games, particularly when two PCs square off to achieve something of glancing interest to the overall storyline.

Showdown Secrecy

In a showdown between a PC and a supporting character, the GM secretly determines the supporting character's spend before the player declares her spend.

In a showdown involving more than one PC, the players write their spends down on a slip of scrap paper, revealing them simultaneously as they roll. If supporting characters are also involved, the GM makes secret determinations for them before players reveal their spends.

Regaining pool points

Spent points from various pools are restored at different rates, depending on their narrative purpose.

Investigative ability pools are restored only at the end of each episode, without regard to the amount of time that passes in the game world. Players seeking to marshal their resources may ask you how long cases typically run, in real time. Most groups finish scenarios over 2-3 sessions. Players may revise their sense of how carefully to manage point spending as they see how quickly their group typically disposes of its cases.

(GMs running extremely long, multi-part investigations may designate certain story events as breakpoints where all investigative pools are refreshed. For example, a far-reaching investigation where the team cracks a huge alien organ-trafficking ring might allow refreshment of investigative pools after each group of enemies is neutralized.)

The Health pool refreshes over time, at a rate of 2 points per day of restful activity. (Wounded characters heal at a different rate, over a period of hospitalization; see p. 73.) Use of the Medic ability can restore a limited number of Health points in the course of a session.

Characters may refresh up to 4 general pools, Health excluded, by taking a time-out. A time-out consists of at least two hours of quiet, non-strenuous activity in a safe and familiar environment, most likely the crew's ship. Pools are refreshed at the end of the period. No points are regained if

the environment suddenly becomes unsafe or stressful—for example if the ship is attacked by an enemy vessel—before the two hours elapse. Once a crew has taken a time-out, two intervals must elapse before it can take another one.

Various pieces of gear, most notably the Amper, allow general refreshes on the spur of the moment.

GMs should pace their scenarios so that the Lasers have a chance for a time out between major point-burning crises, like fights or starship skirmishes. It's perfectly acceptable, though, to threaten them with these crises while running on empty, provided that the story presents them with alternatives to direct confrontation.

TIME INCREMENTS

Certain GUMSHOE rules refer to various increments of time.

Intervals

Intervals are a variable stretch of time defined not by the clock as observed by either the characters or players, but by the progress the Lasers make in advancing the story. A new interval begins each time the group acquires a new core clue. When more than one core clue can be gained during a single scene, only the first clue counts as starting a new interval. When a rule says, for example, that something happens after two intervals pass, it means that the group must gather two core clues in separate scenes.

The crew of the Eastwood is investigating the disappearance of a crucial food shipment to the colony on Zobu. You poke around the spaceport and are pointed to a shifty character named Xenius Peters. The GM's notes list Xenius' name as a core clue. One interval has just passed. When you go to strongarm Xenius, he collapses in mid-interrogation from an undocumented medical condition. The scenario marks this discovery as a core clue (it will lead to a shifty geneticist, who in turn will lead them to someone or something else). Two intervals have now passed.

Episodes

An episode is the amount of time needed to complete a single scenario, or case. This may take one session of play or several. An episode typically starts with the introduction of a mystery and ends with its solution, followed by a quick wrap-up phase in which the PCs collect their earnings, balance their books, acquire equipment, and perhaps get started on ship repairs.

A scenario isn't really a unit of time. It starts as a plan, which may be as complete as the fully written one appearing at the end of this book, or as sketchy as a few scrawled notes or an idea in your head. In play, it comes to life as a full story, directed as much by the players' choices as by your preparations.

Downtime

Downtime is a period between episodes, in which the Downtime activities are typically not played out in full, but glossed over at the end of one episode or the beginning of another.

Sessions

A session is the time spent playing one sitting of the game, whatever that happens to be.

IMPROVING YOUR CHARACTER

At the end of each investigation, each player gets 2 build points for each session they participated in. (This assumes a small number of 3-4 hour sessions; if you play in short bursts or marathon meetups, pro-rate accordingly.) Players who had characters die in the course of the investigation only get points for each session involving their current character.

These build points can be spent to increase either investigative or general abilities. You may acquire new abilities or bolster existing ones. If necessary to preserve credibility, rationalize new abilities as areas of expertise you've had all along, but are only revealing later in the series.

BOOSTS

Your species, or certain pieces of tech or viroware, may grant a boost to one or more abilities.

When spending from an investigative ability is boosted, your pool increases by 1 after you get the information or benefit at hand.

When testing a boosted general ability, you get a bonus of 1 to your result.

What do pool points represent?

Pool points are a literary abstraction, representing the way that each character gets his or her own time in the spotlight in the course of an ensemble drama. When you do something remarkable, you expend a little bit of your spotlight time. More active players will spend their points sooner than less demonstrative ones, unless they carefully pick and choose their moments to shine.

Remember, all characters are remarkably competent. Pool points measure your opportunities to exercise this ultra-competence during any given scenario.

Pool points do not represent a resource, tangible or otherwise, in the game world. Players are aware of them, but characters are not. The team members' ignorance of them is analogous to TV characters' obliviousness to commercial breaks, the unwritten rules of scene construction, and the tendency of events to heat up during sweeps.

We represent this most purely in the case of investigative skills, which are the core of the game. Their refreshment is tied to a purely fictional construct, the length of the episode.

However, where a pool could be seen to correspond to a resource perceptible to the characters, we handle refreshment in a somewhat more realistic, if also abstract, manner. Characters' ebbing Health scores are perceptible to the characters in the form of welts, cuts, pain, and general fatigue. Physical abilities, also tied to fatigue and sharpness of reflexes, are also handled with a nod to the demands of realism.

Hazards

In or out of combat, the characters' survival may be threatened by assorted hazards, from electrical shock to poisoning.

Electricity and Other Shocks

Damage from exposure to electricity varies according to voltage. You can suffer:

Mild shock, equivalent to briefly touching an ungrounded wire or damaged electrical appliance. You lose 1 Health and are blown backwards for a couple of meters.

Moderate shock, equivalent to a jolt from a cattle prod. You lose 2 Health and (if in combat time) your next four actions. You always lose at least one action, but may buy off the loss of other actions by paying 3 Athletics points per action.

Extreme shock, equivalent to a lightning strike. You suffer one die of damage, with a +4 modifier.

The GM should always give you some opportunity to avoid being shocked, whether it be an Athletics test to avoid unexpected contact, or a Surveillance test to spot the danger.

If you are reduced to –6 or fewer Health, the current is assumed to have traveled through your heart or brain, causing cardiac arrest or brain damage, respectively. The GM describes appropriate symptoms and futuristic treatments during your sick bay convalescence.

Many other space opera hazards can be emulated using the mild/moderate/extreme breakdown above. Simply change the narrative description and side effects, keeping the Health pool losses. For example:

Alien Fungal Infection

Mild: For the next two intervals, you lose 2 Health every time you make an Athletics test.

Moderate: Make a Health test against a Difficulty of 4. If you fail, you suffer an extreme shock at the beginning of the next interval.

Ion Storm

Mild: For the next interval, you lose all benefits from your cybernetic enhancements.

Moderate: Your cybernetic enhancements all go offline, returning after three intervals. You may activate any or all of them before this time by spending 2 Health per enhancement.

Psionic Cloud Exposure

Mild: Your next investigative spend costs an extra point.

Moderate: For the next two intervals, you lose an additional 2 Health whenever you're within 30m of a vas mal (including yourself) using a vas mal-specific ability.

Temporal Shock

Mild: For the remainder of the interval, you lose 1 Health each time you use an Academic or Technical ability.

Moderate: For the remainder of the interval, the Difficulty of any general ability rolls increases by 2.

Xenopathogen

Mild: For the next interval, you lose all benefits from your viroware enhancements.

Moderate: For the next three intervals, each use of a viroware enhancement costs you 2 Health and 1 Athletics. You pay no further Athletics costs after your pool drops to 0.

Fire

Damage from exposure to fire varies according to the surface area of your body exposed to the flame, and repeats for each round (or, outside of combat, every few seconds) you remain exposed to it.

Minor exposure, most often to an extremity like a hand or foot, carries a damage modifier of –2.

Partial exposure, to up to half of your surface area, carries a damage modifier of +0.

Extensive exposure, to half or more of your surface area, imposes a damage modifier of +2.

The GM should always give you a chance to avoid being set on fire. The difficulty of extinguishing a flame is usually 4, but might be higher for anomalous flame-like manifestations, or when you are coated with a futuristic accelerant.

Suffocation

From faulty airlocks to face-hugging protoplasmic life forms, space travel and planetary adventure offer a plenitude of chances to die from asphyxiation.

When deprived of air, you get two minutes before the nastiness kicks in. After that point, you lose 1 Athletics every ten seconds, as you struggle to hold your breath. Once that pool depletes, you start losing Health, at a rate of 1 point every five seconds.

Toxins

Toxins are either inhaled, ingested or injected directly into the bloodstream. They vary widely in lethality. A dose of a low-tech cleaning substance may impose a damage modifier of –2, where a viro-active nerve gas might range from +6 to +16. Inhaled toxins tend to take effect right away. Injected and ingested toxins take delayed effect, anywhere from minutes to hours after exposure. Their damage might be parceled out in increments, and may prevent you from refreshing Health points until somehow neutralized. As with any hazard, the GM should always give you a chance to avoid exposure to them.

Vacuum

When exposed to the vacuum of space without benefit of pressure suits, trained Lasers and other old stellar hands know to immediately exhale. This prevents the explosive decompression caused by the disparity between vacuum and the gases inside a subject's body. Disposable supporting characters may not know to do this, or may forget in the panic of the moment, resulting in dramatically satisfying, hideous, instantaneous deaths.

Those remembering to exhale suffer immediate damage from dehydration, including injuries to the eyes and mouth. Paradoxically, this manifests as bloating, as

the evaporation of water from tissues causes them to expand. Capillaries burst. Nitrogen in the blood shifts states from liquid to gas, causing the paralyzing pain divers know as "the Bends." If the exposure occurs within a solar system, unshielded UV radiation sears the skin.

During this ten-second phase, the character takes a die of damage. He remains conscious and can take actions. He then falls unconscious, taking another die of damage every thirty seconds until rescued or dead.

The cybernetic enhancements episealant and internal rebreather can, in tandem, temporarily substitute for an environment suit.

In the Unfreezing Cold

Space operas, especially in film or TV, often depart from realistic depictions of life in space for dramatic effect. Most notably, starships make zooming sounds when accelerating and exploding sounds when exploding.

To dial your setting to the reality of the genre, exposure to vacuum does not cause bloating and dehydration. Instead, the exposed skin immediately freezes, as if sprayed with liquid nitrogen. A rime of rapidly thickening frost covers all exposed skin.

In a setting modulated to a more realistic frequency, this doesn't happen. Vacuum doesn't conduct heat the way air or water do, allowing the exposed body to retain its heat.

Whether you've tuned this detail to full space opera or realistic mode, the damage suffered from exposure remains the same. The difference lies in how you describe it.

HÜTH

STARSHIPS

Without your battered but trusty ship, you'd be nowhere—unable to travel the warp corridors of the Bleed to get to the site of your next contract. This chapter details the various ship configurations available when choosing your crew's vessel, plus options for ongoing modification.

Sometimes your missions take place in space, perhaps pitting you against other vessels, in nailbiting naval combat. Rules and background information needed to run these battles appears here as well.

Your ship is a constant in any Ashen Stars series. It's your vehicle, your roving investigative lab, and your living quarters, and a means of earning additional income. These roles don't require much in the way of game mechanics. Every so often, though, your ship becomes your fortress and your weapon, as it engages in battle with other starships. This is where the rules part comes in.

Much like your PCs, the capabilities of a ship are defined by its game statistics, in this instance called specs. A few of them apply to peaceful activities, but most come into play during skirmishes.

SPACE COMBAT

Battles between ships unfold in the following steps. These assume a battle between two ships, the most common space battle in a game of Ashen Stars.

Small engagements like this are called skirmishes. Rules for skirmishes involving more than two ships appear on p. 98.

GOAL PATHS

The goals Escape, Datascrape, Rake, and Slash are collectively known as the escape path. The other goals are together known as the engage path.

One: Determine Goals

When it becomes apparent that two ships are about enter combat, determine what each of them intends to do to the other. Some goals are harder than others. It's easier to escape a fight than to blow an enemy ship to pieces.

Each goal requires a certain number of skirmish points to achieve. You'll be trying to rack up the number of points dictated by your goal before the enemy crew attains the number dictated by theirs.

Combatants may pursue asymmetrical goals: you might be trying to simply escape, while the other ship pursues the more difficult goal of crippling and boarding your vessel.

The number of skirmish points required for each goal is listed on its header line.

The goals, in ascending order of difficulty, are:

Escape (6 points)

You get away from the enemy ship. Even if its crew wants to pursue you further, they lose track of you, and are unable to immediately re-engage you.

Datascrape (8 points)

You escape, as above, but not before extracting useful data from the enemy ship's computer.

Special condition: Your skirmish point total must include at least 1 point earned from an Override exchange (see below).

Rake (9 points)

You escape, as above, but not before dealing expensive, hard-to-repair damage to the enemy vessel.

SPACE COMBAT QUICK REFERENCE

1. Determine combatants' goals and needed skirmish point tallies:

a. Escape (6 points)
b. Datascrape (escape after stealing data) (8 points)
c. Rake (escape after causing expensive, hard to repair damage) (9 points)
d. Disable weapons (9 points)
e. Disable engine (10 points)
f. Cripple (disable both weapons and engines) (12 points)
g. Slash (escape after causing expensive damage and injuries) (12 points)
h. Cripple for towing (requires tractor beam) (15 points)
i. Cripple for boarding (18 points)
j. Destroy (21 points)

2. Determine initiative

a. Does Surprise Apply?

3. Ship with initiative attacks first

a. Stratco consults with group to choose attack mode:
   1. Fire
   2. Maneuver
   3. Override
   4. Trickbag
b. Crew member responsible for attack mode showdowns vs. opposing counterpart
c. Determine showdown winner
d. Assess skirmish points gained by winner

4. If ≥3, Losing Ship is rocked

Casualty Report: All Crew Make Athletics Checks, usually vs. a Difficulty of 4; those failing take 1 die damage

Damage Report: Winner Chooses 1 enemy Ship spec to be degraded by 1

5. Mop-Up Operations

Occurs only when attackers have already taken damage to personnel and/or ship

a. Medic Scramble
b. System Repairs

6. Has winning ship reached win total needed to achieve its goal?

Yes: Combat ends

No: Combat continues. Defending ship becomes the attacker, returning to step 2.

Disable Weapons (9 points)

You stop the fight by taking enemy weapons systems offline. Unlike the various escape options, you remain in the vicinity and can then interact with the crew of the defanged vessel.

Disable Engines (10 points)

You stop the fight by taking enemy propulsion systems offline. Unlike the various escape options, you remain in the vicinity and can then interact with the crew of the drifting vessel. If you depart before they complete their repairs, you know that you're preventing them from following you, or otherwise delaying them from taking actions anywhere else.

Slash (12 points)

You escape, but not before doing severe damage to the enemy vessel and harming its occupants.

Cripple (12 points)

You stop the fight by taking both enemy weapons and propulsion offline.

Crippling a vessel and then destroying it with occupants on board is toxic to your Reputation. Choose this goal, or the related goals immediately below, only if you really intend to spare those on board.

Cripple For Towing (15 points)

You take both enemy weapons and propulsion offline, disable anti-tractor beam sub-systems, and remove the option of evacuation by either sealing the shuttle bay doors or damaging the shuttles themselves. You are then able to tow the helpless vessel and imprisoned crew to another location. Lasers often use this gambit to drag ships to penal colonies, where they are devesseled with the overwhelming aid of local detention officers.

Cripple For Boarding (18 points)
You take both enemy weapons and propulsion offline and force the ship's computer to open its shuttle bay doors, allowing you to fly in and initiate boarding action.

Destroy (21 points)
The enemy vessel is either instantly destroyed, killing everyone on board, or begins to break up, allowing them a brief window of time in which to evacuate.

Destroying a ship in the heat of battle, as this goal allows, preserves your all-important Reputation. Pick it if you want to wipe out everyone on board while still being seen as heroes, or at least the winners of a fair fight. Your enemies may still thwart your lethal agenda by surrendering before you can blow them to bits. They'll do this only if they believe you care about your reputations, as any business-minded Laser crew must.

Specific details on the various outcomes appear on p 97. They'll make sense after you read the intervening rules sections.

Two: Determine Initiative

The GM determines who goes first, first by seeing if one ship has been caught unawares.

Does Surprise Apply?
First, the GM determines if either side has been surprised by the other. Surprise pertains to one of the two following situations:

Two crews are in communications contact. The defending crew fails to foresee the other's hostile intent, allowing it to suddenly attack.

One ship is unaware of the other's presence.

If surprise does not apply, go to "Jockeying For Position", below.

If it does apply, the surprising vessel gains initiative over the surprised vessel.

Avoiding Surprise
Crews can avoid being surprised on a successful Sense Trouble test, most often undertaken by the Hailer. The GM assigns a difficulty from 4-8, reflecting the challenge inherent in spotting a communicating crew's deceptive intent, or the presence of an enemy ship. On a successful test, surprise does not apply.

Your ship, the Eastwood, has hailed the crew of an erratically drifting Hammer, the Arquebus. Driven mad by an alien parasite, the crew appear sane but are on the verge of launching an unprovoked attack. As per the Sense Trouble description (p. 51) the GM asks which of you will undertake the test. The group chooses you. You decide to spend 2 points, dropping your pool from 6 to 4. You roll a 4, for a final result of 6, which beats the Difficulty of 4 chosen by the GM. You have avoided surprise, and so will jockey for position to determine who goes first.

Creating Surprise
PCs can hide their hostile intent while communicating with other vessels by making a 3-point Impersonate spend. Suddenly firing on other vessels under the guise of peaceful communications endangers your Reputation score; see p. 165.

A Laser crew can hide its ship's presence by concealing the vessel behind an asteroid, stellar anomaly, or another vessel. Alternately, it can drop suddenly from a warp corridor to appear beside the target vessel. This form of surprise is called ambush. To gain Ambush, a PC must make a successful Helm Control test against a Difficulty of 6.

If the crew has already avoided ambush from an enemy ship in the current scenario, the Difficulty of the Helm Control test equals the Difficulty of the previous Sense Trouble test. Conducting an ambush threatens your Reputation, unless the target of your attack is known to conduct ambushes itself, or is otherwise widely considered to be dangerous or threatening.

Wide-Eying It
If neither side is unaware of the other, either because no attempt has been made to ambush or surprise, or the attempt has failed, a dogfight known as a Wide-Eye ensues. In this case, initiative goes to the ship with the highest Maneuver value.

A Hammer Wide-Eyes it against a Runner. The Runner's Maneuver of 0 is higher than the Hammer's Maneuver of -1, so it goes first.

A PC pilot on a ship that would otherwise have to go second can buy a first strike against the enemy by spending a number of Helm Control points equal to 1 plus the difference between Maneuver ratings.

The Hammer is a PC vessel, piloted by Hec Harkins (played by Beth.) Beth pays 2 Helm Control points (1 plus the difference between 0 and -1, which is 1) for the right to go first.

If the two Maneuver ratings are equal, the PCs can spend 1 Helm Control point to go first. If they decline to make the spend, the enemy ship goes first.

In a later scenario, the Hammer goes up against a Rampart, whose Maneuver rating is also -1. Despite the cries of fellow players who say that going first isn't a big enough advantage to justify the expenditure, Beth drops 1 of her character's Helm Control points to win initiative. That's just the kind of Hotshot Hec Harkins is.

Three: The Ship With Initiative Launches an Attack

The ship with initiative then launches an attack.

First, the participant(s) controlling the attacking ship—the players for their own ship, or the GM for the enemy vessel—choose one of four attack modes.

Attack Modes

During any sally in the course of a dogfight, each ship is simultaneously:

- firing weapons
- maneuvering
- trying to override the opposing ship's internal communications
- deploying unexpected tactical tricks to confuse the enemy

However, during each sally, one of these four modes tends to predominate, with the others supporting it. This is the attack mode. Choosing the attack mode determines which crew member will showdown against his counterpart on the opposing vessel.

In a **Fire** attack, the Gunner showdowns Battle Console against the enemy's Battle Console.

In a **Maneuver** attack, the Pilot showdowns Helm Control against the enemy's Helm Control.

In an **Override** attack, the Hailer showdowns Communications Intercept against the enemy's Communications Intercept

In a **Trickbag** attack, the Stratco showdowns Naval Tactics against the enemy's Naval Tactics

(Warpside roles and attack modes usually coincide, but don't have to. A character with a few points in Battle Console, for example, might sub during a Fire attack for a Gunner who's exhausted her pool.)

When choosing an attack mode, you'll be looking at the other ship's specs in hopes of hitting them when they're most vulnerable. However, if you over-rely on the same obviously advantageous attack mode, the other ship will anticipate and counter you. To maintain the element of surprise, you're better off cycling through the four attack modes.

During combat, you track your use of attack modes with a chart that looks like this:

Fire	Maneuver	Override	Trickbag

Mark the columns with Xs or check marks to keep track of the attack modes you've already deployed.

(Mode trackers for both ships appear as a component of the Space Combat Record Sheet (see Appendix). Where possible, the entire group refers to the same copy of the Record Sheet as it changes over time, perhaps on a laptop screen, easel, whiteboard, or computer projection.)

Only the vessel choosing the attack marks its mode tracker. The other vessel's tracker remains unchanged.

Fire	Maneuver	Override	Trickbag
X		X	X

Overusing an attack mode is known in military jargon as **egging it**. If you repeat a mode before you have cycled through all of the others, you've egged it.

Given the entries on the above mode tracker, if you pick any mode other than Maneuver for your next attack, you'll be egging it.

You can tell that you're about to egg it if you'd have to move to a new row on the mode tracker without completely filling in the previous one, like so:

Fire	Maneuver	Override	Trickbag
X		X	X
X			

When you egg it, your opponent gets a +3 bonus to his showdown result. If the opponent wins the showdown, he scores an extra skirmish point, moving him closer to victory.

Having chosen your attack mode, you then proceed to the showdown. The outcome of the test determines which side adds to its skirmish point total, and by how much.

Every ship has an Output spec. This provides a pool of points equal to the Output rating that any gunner, hailer, pilot or stratco can spend on their fire, override, maneuver and trickbag showdowns, respectively. When a player chooses to spend Output points, no other player can block him. Output refeshes after the resolution of any ship combat.

Skirmish Point Awards

The winner always gets at least 1 skirmish point. The following modifiers then alter the skirmish point total:

+1 if the winner was also the attacker
+1 if the winner exceeded the loser's showdown result by 2 or more or +2 if the winner exceeded the loser's showdown by 4 or more
+1 if the loser egged it
+1 if the winner attacked with surprise (only possible during the attack's first fight)
+1 if at least one combatant is already within 3 skirmish points of reaching its goal (unless that goal is on the escape path).
apply modifier from the winner and loser's relevant ship specs (below)

No matter what modifiers are applied, the final skirmish point total can never be less than 1.

Applying Ship Stat Modifiers

Each ship has four sets of paired specs. Each pair corresponds to, and is named for, an attack mode: Fire, Maneuver, Override, and Trickbag.

The first listed item in each pair is the Dishing It value. The higher the value, the harder you punch when you get the upper hand in a sally.

The second column contains the Taking It value. The lower the value, the less harm you suffer when overcome by the enemy.

When the winner of an exchange is determined:

the **Dishing It** value of the winning ship

and

the **Taking It** value of the losing ship

are both applied as modifiers to the skirmish point total.

This means that, when looking at your ship's specs, a positive Dishing It number is good (because you win more skirmish points when you hit the other guy) but a positive Taking It number is bad (because you give up more skirmish points when you get hit.)

Here for example are specs for two common ship types, the offense-heavy Hammer and its counterpart, the fortress-like Rampart.

Hammer

	Dishing It	Taking It
Fire	3	1
Maneuver	-1	0
Override	0	0
Trickbag	0	1

Rampart

	Dishing It	Taking It
Fire	-1	-3
Maneuver	-1	1
Override	-1	-1
Trickbag	0	0

The Hammer is strongest when its Gunner wins a Fire showdown. In that case, it adds 3 points to its skirmish point haul. When its Gunner loses that same showdown, its glass jaw becomes apparent: the other ship adds 1 point to its total.

Even worse, its leaden propulsion systems mean that it gives up a skirmish point even when its Pilot wins a Helm Control showdown. Aggressive maneuvering is its Achilles heel, even more so than when it's compensating for the other ship's moves.

For each of the following examples, let's assume that the total number of skirmish points awarded for all factors except for ship specs is 2.

Example One: The Hammer launches a Fire attack on the Rampart, which it wins. The Hammer's relevant Dishing It value of 3 adds 3 skirmish points to its total. However, the Rampart's Taking It value of -3 subtracts 3 points from that total. The two ships' offensive and defensive capabilities cancel each other out. The skirmish point total remains 2. (2 + 3 - 3 = 2.) They are awarded to the Hammer.

Example Two: The Hammer launches a Fire attack on the Rampart, which the Rampart wins. The Rampart's Dishing It value of -1 subtracts 1 from the skirmish point total. The Hammer's Taking It value of 1 adds 1 to the total. Again, total skirmish points remain unchanged at 2. (2 – 1 + 1 = 2.) They are awarded to the Rampart.

Example Three: The Hammer launches a Maneuver attack on the Rampart, which it loses. Its Taking It value for Maneuver is 0 and leaves the skirmish point award unchanged. The Rampart's Dishing It value for Maneuver is -1. It reduces the skirmish point total by 1, to 1. (2 + 0 -1 =1.) They are awarded to the Rampart.

What Ship Specs Mean

Turn dry and powdery numbers into rich description by envisioning what the ships actually do in the fictional reality of Ashen Stars.

A positive Fire value in the Dishing It column means that a ship boasts heavy firepower and state-of-the-art targeting systems.

A positive Maneuver value in the Dishing It column indicates a fast and agile ship.

A positive Override value in the Dishing It column tells you a ship has been rigged with a heavily offensive comms array, geared to penetrate and decrypt the enemy's computers.

A positive Trickbag value in the Dishing It column indicates a ship outfitted with many different weapons types, known as attack arrays. The more options the stratco can choose between, the more likely he is to penetrate the enemy's armor arrays.

You use the Dishing It values more often than the Taking It values. When a ship spec is named and neither Dishing It or Taking It is specified, it by default refers to the Dishing It value.

The second item in each pair is the Taking It value. The lower the value, the better able you are to absorb the blow when your opponent triumphs over you. (Remember, in this column, negative modifiers are good because they reduce the other guy's skirmish awards, and positive numbers are bad because they increase them.)

A negative Fire value in the Taking It column shows that your ship diverts considerable power to its anti-weapon technologies, known as armor arrays.

A negative Maneuver value in the Taking It column shows that your navigational system handles quickly when your helmsman must take sudden compensatory action.

A negative Override value in the Taking It column indicates that your computer system is heavily secured against intrusion.

A negative Trickbag value in the Taking It column describes a ship outfitted with many different armor arrays, giving the stratco a wider than usual variety of options when reacting to incoming fire.

Positive values, which increase your opponent's skirmish score, tell us that a ship underperforms in a given area. A negative Fire value means that the ship diverts comparatively little power to its weapons. A negative Fire (Taking It) means that its armor arrays are underpowered. Negative Override suggests a computer system with weak intrusive capability, while negative Override (Taking It) shows that the computer is poorly secured.

The default space vehicle, the Runner, has values of 0 in all eight specs, making it the baseline against which all other ships are measured. Aside from an Output advantage, it is average in every respect.

Example Four: The Hammer launches a Trickbag attack on the Rampart, which it loses. Its Taking It value for Trickbag is 1, adding 1 to the Rampart's skirmish point total. The Rampart's Dishing It Trickbag is 0, leaving the total unchanged. Skirmish points go up 1 point, to 3. (2 + 1 + 0 =3.) They are awarded to the Rampart.

Four: Has the Loser Been Rocked?

If the final skirmish point total after all modifiers have been taken into account is 3 or more, the loser of the showdown is rocked.

When a ship is rocked, two things happen:

Casualty Report

Each character on the rocked ship makes an Athletics check against a Difficulty of 4, or the enemy's skirmish point award from this showdown, whichever is greater. Those failing the test take 1 die of damage. When the PCs have rocked another ship, the player who made the attack rolls any damage dice.

TARGETING CREW

A showdown winner can sacrifice skirmish points to increase the chance that personnel aboard the rocked ship will suffer harm. For each point that is not applied to the victor's winning total, the Difficulty of Athletics checks taken during the Casualty Report increases by 2.

Your ship has already racked up 7 skirmish points in its bid to cripple and board an enemy vessel. You then win another showdown, earning 4 more skirmish points. This is enough to rock their ship. Rather than apply all of those skirmish points to your running total, you instead devote 2 of them to increase the Difficulties of Athletics checks during their Casualty Report. Their Difficulties increase from the standard 4 to 6. This leaves you with only 2 skirmish points to apply to your running total, increasing it from 7 to 9. If you'd left the Casualty Report to proceed as usual, you'd have instead increased your running total from 7 to 11.

THE DISABLED LIST

When a crew member must abandon a post (usually due to incapacitation) any other character with a rating in the pool can step into the breach. However, if the replacement is also currently serving as gunner, hailer, pilot or stratco, all showdowns made for the additional post suffer a penalty of 2, and the next showdown made for the character's main post is takes a penalty of 1.

Damage Report

The crew of the winning ship then chooses one of the rocked ship's eight specs to degrade by 1 point. If they choose a Dishing It value, it drops by 1. If they choose a Taking It value, it increases by 1.

Five: Mop-Up Operations

This step only occurs if the attacking ship has been degraded and/or its personnel have taken damage during the fight so far.

Medic Scramble

Any character on the attacking ship who has pool points in the Medic ability, and who is not occupied as Hailer, Gunner, Pilot, or Stratco (whether or not they made the most recent showdown) can then use that ability on one subject who lost Health points during the current space combat.

Wrench Scramble

Any character on the attacking ship who has pool points in Systems Repair, and who is not occupied as Hailer, Gunner, Pilot, or Stratco (whether or not they made the most recent showdown), can make one attempt to restore a degraded ship's spec. The base Difficulty of the Systems Repair check is 4, modified as follows:

+2 if the enemy ship's running total of skirmish points earned so far exceeds 7
+4 if the enemy ship's running total of skirmish points earned so far exceeds 12

The above modifiers are not cumulative.

Hyperclocking

Characters with the Systems Design ability can attempt to hyperclock the crew's ship. This series of desperate tweaks pushes it to the limits of its specified capacity, gaining Output at the expense of the ship's hull and systems integrity.

Hyperclocking occurs during your Mop-Up Operations phase and must be performed by a character who is not occupied as gunner, hailer, pilot or stratco. It requires a Systems Design test against a Difficulty of 4.

You may make successive hyperclock tests in the course of a skirmish.

On each success, the enemy ship immediately adds 1 skirmish point to its accumulated total, and you immediately add 4 to your Output pool. These points may cause your ship's pool to exceed its rating.

Whenever your enemy wins a showdown, it gains an additional number of skirmish points equal to your number of successful hyperclocking attempts.

A character may participate in either a Wrench Scramble or a hyperclocking attempt during a single Mop-Up, but not both.

Changing your goal

Any ship can change its goal in the course of a space combat.

To shift to a more expensive goal, declare the new goal. The fight ends in your favor when you reach a total equal to the new goal plus three points.

Shifting to a less expensive goal restarts your accumulated skirmish point total at 0. The fight ends in your favor when you reach the standard total for the revised goal.

+8 if the enemy ship hasn't made an attack of any kind since it degraded the spec the character is attempting to restore*.

The repairing character can spend any number of points from the ship's Output on any Wrench Scramble. When doing so, the player should feel empowered to exclaim, "Diverting power to [insert name of system under repair]."

On a successful check, 1 point of degradation is reversed. A Dishing It value increases by 1. A Taking It value decreases by 1.

A Wrench Scramble can at best restore a value to what it was before the fight began. It can't increase a value above its normal value, or repair degradation suffered in a previous fight or incident.

Six: Check For Victory

The winner adds the final skirmish points won from the showdown to its running total for the contest. If that number equals or exceeds the skirmish point cost of its chosen goal, the combat ends. Find the appropriate goal listing in the Results section, below, to see what happens.

If neither side has achieved its goal yet, the initiative to act passes to the crew that defended in the showdown that just took place. That crew now repeats step three, choosing and launching an attack.

If neither side has achieved its goal at the end of that showdown, initiative passes back to the other crew for another showdown, and so on and so on until one ship reaches its goal.

Results

What happens at the end of the fight depends on the winner's goal.

(If you lose, the results are determined by the enemy's goal, not by the goal you failed to reach.)

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* This exorbitant modifier makes it likelier that you'll get at least one good shot at taking advantage of a degraded value before your enemy repairs it. The in-world explanation for this is that it's much harder to fix a system when it's still smoking and sparking in the immediate wake of a hit than after it's had time to cool off. During this period the ship's wrench isn't sitting idly by: he's either repairing another system, or prepping to repair this one. Prepping probably includes the use of fire extinguishers and other damage reduction measures. And yelling. Lots of yelling.

Escape Result

You Escape Them: At the end of the skirmish, you conclusively evade the enemy ship. It is not only unable to attack you, but loses track of your location. Most of the time, the escape resolves the situation, with the crew of the enemy ship losing its motivation to pursue or attack you any further.

In cases where the enemy ship is trying to track you down, a minimum of one scene or interval must pass before it can find you and attack you again.

They Escape You: The enemy ship cannot be located, and thus not attacked, for at least one interval. Finding it again costs 2 Energy Signatures points.

Datascrape Result

You Datascrape Them: All results given for "You Escape Them" apply. Also, you gain at least one important clue hacked from the enemy ship's database. If at all possible, the GM makes this a core clue leading to a new scene and toward the solution of the mystery at hand.

They Datascrape You: All results under "They Escape You" apply. Also, the enemy ship knows something about you that you'd prefer they didn't. If the GM can't think of a revelation that makes it harder for you to solve the case at hand, they instead dig up a fact about your past and release it to the interplanetary media. You must make a Public Relations test to counter it; Difficulty is 4, plus the enemy ship's final skirmish point tally minus 8. If you fail, your Reputation decreases by 1.

MUTUAL ESCAPE

If both combatants declare escape as their goal at the outset of a space combat, no fight occurs. Both ships fly off in different directions, end of story.

If one ship's goal is already escape and its opponent then shifts to escape as a goal, the fight immediately aborts. Both ships fly off in different directions.

Repairs to ships and medical treatment for personnel then occur using standard out-of-combat rules.

Rake Result

You Rake Them: All results given for "You Escape" apply. Also, you may degrade two of the enemy ship's specs. Except where it violates the logic of the current storyline, the enemy ship does not appear for the rest of the scenario. If logic decrees that it must reappear, it does so without having repaired any damage it suffered in the skirmish, whether delivered during the fight or as a result of the rake. (If the GM wants to bring the ship back in a later scenario, it then reappears fully repaired*.)

They Rake You: All results under "They Escape You" apply. Also, the GM chooses two of your ship specs to be degraded.

Disable Weapons Result

You Disable Their Weapons: The enemy is unable to continue fighting, because their weapons systems are offline. They are unable to fight for at least one interval, plus a number of intervals equal to your final skirmish point tally minus 9.

They Disable Yours:You are unable to continue fighting, because your weapons systems are offline. They remain offline for 1 interval. After the interval passes, you may make one Systems Repair test per interval to restore weapons functions, against a Difficulty of 4, plus the enemy ship's final skirmish point tally minus 9.

Disable Engine Result

You Disable Their Engines: The enemy is unable to continue fighting, because their propulsion systems are offline. They are unable to fight for at least one interval, plus a number of intervals equal to your final skirmish point tally minus 10. Also, they are unable to move from their current position for 1 interval, plus a number of intervals equal to your final skirmish point tally minus 10.

They Disable Yours: You are unable to continue fighting, because your propulsion systems are offline. They remain offline for 1 interval. After the interval passes, you may make one Systems Repair test per interval to restore engines, against a Difficulty of 4, plus the enemy ship's final skirmish point tally minus 10. Engines return after the first successful test. Until then, you are unable to move from your current position, except to the extent that you drift uncontrollably through space. If your lack of mobility prevents you from gathering core clues, and thus advancing to a new interval, you may make successive Systems Repair tests until you succeed. Each test costs you 12 hours of time in the game world. In situations where a time cost makes it impossible to solve the mystery or is otherwise a boring choice, GMs may apply some other cost that makes sense given the narrative circumstances.

* Unless the story's premise for some reason requires that it still be damaged.

Cripple Result

You Cripple Them: Results for "You Disable Their Weapons" and "You Disable Their Engines" both apply.

They Cripple You: Results for "They Disable Your Weapons" and "They Disable Your Engines" both apply.

Truce, Surrender, and Lying Dazed on the Consoles

When you have initiative, you can attempt to communicate with the other crew. They may choose to respond, or refuse, at which point the fight continues.

By mutual consent, battling crews may call a truce at any time. They can then negotiate, trade information and otherwise interact until they either agree to end the fight inconclusively or resume hostilities. If the GM thinks it makes sense, one side can attempt a surprise resumption of hostilities. If they succeed, using the usual surprise rules, they may gain initiative, even if the other side had it just before the truce. They are also entitled to the skirmish point bonus for surprise if they win the ensuing showdown.

Either participant can either negotiate its terms of surrender during a truce, or at any time unilaterally offer to surrender. The other crew can either accept the surrender, negotiate tougher terms, or resume the fight.

Fights may also end prematurely if all crew members aboard one ship are unconscious, dead, or otherwise incapacitated. The victor can leave them drifting in space, board the unmanned ship, or destroy it as if it were helpless. Boarding an effectively unmanned ship requires a Difficulty 4 Communications Intercept test, which opens up the shuttle bay to an incoming craft.

Cripple for Towing Result

You Cripple Them For Towing: Results for "You Disable Their Weapons" and "You Disable Their Engines" both apply. Also, you are able to tow them; see p. 95.

They Cripple You For Towing: Results for "They Disable Your Weapons" and "They Disable Your Engines" both apply. Also, they tow you.

Cripple for Boarding Result

You Cripple Them For Boarding: Results for "You Disable Their Weapons" and "You Disable Their Engines" both apply. Also, you are able to board them; see p. 96.

They Cripple You For Board: Results for "They Disable Your Weapons" and "They Disable Your Engines" both apply. Also, they board you.

Slash Result

You Slash Them: All results given for "You Escape" apply. Also, each occupant of the enemy vessel takes 1 die of damage. Further, you may either degrade four of the enemy ship's specs, or

On Not Blowing Up

You'll note an asymmetry in favor of the players in the Destroy result. Supporting character ships can be blown instantly out of space, killing everyone on board, while players always get at least a chance to evacuate. This lessens the prospect of a total party kill, which sucks as hard in the space genre as in any other roleplaying game. It also follows the conceit of space opera, where disposable bad guys can be excitingly dispatched in a pyrotechnic blast (complete with scientifically inaccurate sound effects) but the heroes always get a chance to escape and fight another day—with dramatic final dialogue for those who fail to evacuate.

To modulate your game's frequency to a grittier reading, amend the "They Destroy You" result so that skirmish point tallies greater than 24 also lead to the immediate explosion of a PC ship.

may degrade three of its specs, one of which is degraded by 2 points. Except where it violates the logic of the current storyline, the enemy ship does not appear for the rest of the scenario. If logic decrees that it must reappear, it does so without having repaired any damage it suffered in the skirmish, whether delivered during the fight or as a result of the rake. (If the GM wants to bring the ship back in a later scenario, it then reappears fully repaired*.)

They Slash You: All results under "They Escape You" apply. Also, the GM chooses four of your ship specs to be degraded.

Destroy Result

You Destroy Them: If your final skirmish point tally is more than 24, the enemy immediately explodes (p. 96). Otherwise, it breaks up (p .).

They Destroy You: Your ship breaks up (p. 96).

Destroying a Disabled or Crippled Ship

No tactical impediment prevents you from destroying a ship after you've crippled it, or disabled either its weapons or engines. A weaponless ship can't fire back at you as you maneuver into position for the perfect killing shot. A ship without propulsion capacity can't position its weapons to stop you from flying into its blind side and targeting it for the coup de grace. The only question up for grabs is how long it will take you to blow the ship to flinders, and what resources you'll expend in the process.

To destroy a helpless ship, make a Battle Control test against the following Difficulty. You may also spend your ship's Output points on this test.

What's Disabled	Difficulty
Engines	8
Weapons	6
Both	4

You can make as many attempts to destroy the helpless ship as you want.

* Unless the story's premise for some reason requires that it still be damaged.

The real impediment to destroying helpless ships is reputational. (The main entry on Reputation appears on p. 165).

In most cases, destroying an enemy ship in the midst of an active firefight will be regarded as a legitimate act of self-defense. (You'll still lose the benefit of the doubt if you started the fight without just cause, especially if your target fought only to escape.)

The moment your enemy loses the capacity to effectively fight back, the ethical burden shifts. Destroying a helpless enemy ship and killing everyone on board is regarded by the public as the equivalent of killing a wounded and helpless opponent after you've beaten him in a street fight. If anything, it's worse, because you're killing many people, some of whom may not be hostile to you or pose any danger to others.

Destroying a ship after you evacuate its personnel will at worst be regarded as a property crime. If you can demonstrate that the destruction was just or a boon to general security, your reputation remains as is—or perhaps even increases.

Destroying a helpless vessel carries a base Public Relations Difficulty of 8 and entails a base loss of 4 Reputation points. The following extenuating or aggravating circumstances modify those numbers, as follows. GMs should use these as baselines when taking into account situations not covered here. Public Relations Difficulties can't be modified to lower than 2. Reputation losses can be reduced to 0, but not to negative numbers. If reduced to 0, the potential Reputation loss is nullified, and no test is required.

Towing

When your victory in a space combat allows you to tow a crippled vessel, you've not only disabled its engines and weapons, but shut down the various sub-systems that would otherwise stop you from attaching a tractor beam to it and hauling it to a new location of your choice.

You may want to:

- move the rival vessel to a location near a shifting or intermittent warp corridor. With your engines intact, you then use the warp corridor to return to your rough original position. You time your towing so that the corridor then becomes inaccessible for a predictable period of time, usually a period of days or weeks. By the time your rivals repair their engines, they are stranded for that time. This procedure is known as storaging. Warning: storaging vessels for longer periods of time may be considered unjust imprisonment, causing damage to your Reputation.

Situation	Modifier to Public Relations Difficulty	Modifier To Reputation Loss
Everyone killed when the ship blew was a violent criminal or deadly threat to innocent sapient life	-4	-2
Innocents were killed when the ship blew	+2 per victim	+3
You attacked without just cause	+2	+1
Destroyed ship initiated the attack	-2	-1
Crew of enemy ship refused request to surrender during fight (do not apply this if next entry also applies)	-1	-1
Crew of enemy ship refused request to surrender after their ship was disabled	-3	-2
Enemy crew attacked unwillingly, for example while under psychic or technological mental domination	+4	+1
As above, and you knew this to be the case when you slaughtered them (apply both sets of modifiers)	+2	+1
One or more of you had a known personal grievance against one or more of them	+2	+1
Your decision to destroy them had an apparent financial motive	+2	+1
Everyone on board survived (presumably by evacuating before the ship blew)	Difficulty cannot exceed 6	Reputation loss cannot exceed 2
Some of those killed died when you attacked their shuttles or otherwise interfered in their evacuation	+6	+3
Vessel destruction was the only available foolproof means to contain an outbreak of Class-K alien entities	-6	-2

- move the rival to a penal colony or other location where your allies can force their surrender and incarceration by a display of overwhelming force
- deliver the disabled ship to your client, who then takes responsibility for dealing with it and its crew

Boarding

When you achieve the Cripple For Boarding result, you not only disable your target's weapons and propulsion systems, but override their command of their own shuttle bay. You can then fly your shuttle into their bay, open its airlock, and enter their ship. You may then have to stun, overpower, or otherwise physically defeat some or all of the crew. Or they may then surrender, depending on how tough you seem and how prepared they are to fight. Ships pursuing a cripple and board strategy may target crew members (p. 91) during the dogfight, softening them up for the possible boarding defense to come.

When Lasers attempt boarding actions, it is usually to capture and/or interrogate particular members of the enemy crew. They may also do this to rescue hostages or seize evidence.

Ship Destruction

Most destroyed ships blow up only after a chain reaction causes the ship to break up and explode. This gives occupants a brief window of time to evacuate. Each character makes a Difficulty 4 Athletics test. If they succeed, they reach a shuttle before the ship blows. If they fail by 2 or less, they

RESTRAINTS ON ENEMY ACTION

Because total party kills stop rather than advance a storyline, GMs will strive to give their bad guys reasons to pursue space combat goals short of ship destruction. These might include:

needing the PCs alive for interrogation, revenge, and the like

needing the PCs to perform a task for them

need for information or technology on the PCs' ship

fear of retribution from other Laser crews

desire to sell captured ship

Anyone who has ever seen an episode of a space opera TV show knows that the lead characters will be given ample opportunity to adventurously retake a ship after it is captured. They might retake the ship from a boarding party or return to it later as it awaits resale or stripping for parts.

The same narrative conventions dictate that if the heroes do definitively lose their ship, the next storyline allows them to earn a new one, whether through capture, reward, salvage, or some other believable story mechanism.

reach the shuttle, but only after taking 1 die of damage from falls, collision, flaming debris, venting plasma, or the many other hazards of a vessel on the verge of disintegration. If they fail by 3 or more, they are trapped, blocked or otherwise unable to make it to the shuttles before the drop-dead moment.

The shuttle's pilot must make a Difficulty 6 Shuttle Craft test to clear the bay before the ship blows. If everyone making the escape test beats it, and by a margin of 2 or more, they've arrived early, allowing the Shuttle Craft test to proceed with a Difficulty of 4.

Any character still aboard a ship when it explodes is instantly killed.

Instantaneous Destruction

To modulate your game to a grittier setting, allow for some ships to be instantly destroyed on a final hit. When a crew has selected Destroy as its goal, and when the final showdown that allows it to achieve that goal takes it from 20 or less skirmish points to 24 or more skirmish points, that ship is immediately destroyed, killing everyone on board without the possibility of evacuation.

Where the winning crew wants to destroy the enemy ship but allow for evacuation, it can attempt to momentarily slow the explosion. This requires a successful Battle Console test against a Difficulty equal to 4, or the final skirmish point total minus 21, whichever is greater. The maneuver requires use of your ship's tractor beam, and so is only possible if your ship is equipped with one.

Describing the Action

As with personal combat or any action-oriented contest, the GM and players add excitement to the point spending and die rolling with vivid descriptions of each attempted move and its result. When the Lasers launch an attack, the player whose character executes the showdown mixes action language and technobabble to paint a picture of the move their ship is attempting to pull off. The GM does the same for attacks launched by the enemy, and, when necessary, to create a word picture of the results of each showdown.

Match the description with the type of attack.

- **Fire** attacks are dominated by weapons fire or, if you're the defender, the deployment of defensive devices called armor arrays. *"I pepper their aft arrays with rapidly-cycling mixed fire."*
- **Maneuver** attacks revolve around ship movement. *"I dive in through their blind spot and leave them open for an underside blast."*
- **Override** attacks combine the language of space action with fanciful cyberpunk-style hacking terminology. *"I look for an outdated patch in their sensor algorithms and penetrate it under diagnostic cover."*
- **Trickbag** attacks put military jargon through a futuristic blender. Refer to various made-up gambits and strategems. Give them a desperate, seat-of-the-pants, it's-crazy-but-it-just-might-work feeling. *"I fake them out with a Copernicus spiral, then at the last minute pull a Brian Hudd on them."*

Remember, although one attack form dominates any given move, each ship is always firing, maneuvering, overriding, and

sometimes employing abstruse chess-like stratagems. You can always describe shots being fired during a maneuver, communications jamming during a trickbag attack, and so on.

Sometimes inspiration fails. Don't worry if you occasionally flag and fail to describe a move in world terms. Provided you start out with solid descriptions, the group will continue to imagine the scene visually even if you do get caught up in the mechanics and temporarily forget the narration.

Some groups may find it useful for visualization to pull out model ships and zoom them around. Others will find such prop use distractingly child-like. Try it and see which category yours falls into.

Aftermath: Lingering Ship Damage

Like their counterparts in space opera TV shows and movies, wrenches in Ashen Stars can perform miraculous split-second repairs in the heat of battle, but must labor long and hard to return their ship to peak condition after the fight is over.

Wrench Scrambles occur only during combat. As soon as the combat ends, you have to use the less forgiving long-term repair rules, as seen on p. 113. Accordingly, the opportunity to perform repairs using the Wrench Scramble ends as soon as one combatant achieves its goal. Even if your attack wins the fight for you, you are unable to stage the Wrench Scramble you'd otherwise be owed if the fight continued.

At fight's end, any degraded spec that has not been repaired during a Wrench Scramble remains degraded. For each such spec, your ship's Condition increases by 1.

(You'll note that Condition does not normally change during a fight, and is only taken into account at its conclusion.)

Keep track of your ship's base Condition, without damage, as well as its current Condition.

Fixing these requires the use of the less forgiving long-term repair rules, as seen on p. 113.

If you come out on the wrong side of a rake or slash, the fight's conclusion includes damage to your ship. These also preclude Wrench Scrambles and require resort to long-term repair.

Ship Combat Example

A complete ship combat example appears as an appendix at the end of this book, starting on p. 273. If you're reading the space combat rules for the first time, check it out now. If you aren't, aren't you glad we moved it to the back of the book?

Uneven Fights

The classic space combat in Ashen Stars takes place between two vessels. On rare occasions story logic demands an uneven fight. In this situation, the outnumbered vessel's success depends on its ability to haul ass out of there. With extreme prejudice.

When a PC Ship is Outnumbered

When the Lasers face more than one enemy ship, the GM deems one of them to be the lead vessel. This ship engages in attacks and is attacked as normal. The presence of the other ships becomes a modifying factor making it easier for the lead target to score skirmish points, and to prevent skirmish points from being scored against it.

The PCs' skirmish point total needed to achieve any goal on the escape path increases by (3 x the number of enemy vessels).

The PCs' skirmish point total needed to achieve any goal not on the escape path increases by (6 x the number of enemy vessels).

The PCs face a penalty to all showdown results equal to the number of active enemy vessels.

Whenever the PCs win a showdown, the number of skirmish points they earn:

- is decreased by the number of active enemy vessels
- is based on the lowest relevant Taking It spec of any active enemy vessel

Whenever the enemy wins a showdown, the number of skirmish points it earns:

- is increased by the number of active enemy vessels
- is based on the highest relevant Dishing It spec of any active enemy vessel

If the PCs successfully Rake or Slash, they can choose which of the enemy vessels takes the damage and/or injuries to personnel.

If the PCs' goal is on the engage path, and it accumulates a number of skirmish points equal to (6 + the standard total for that goal) one of the vessels is knocked out of the fight. Its condition matches the chosen goal: disabled weapons, disabled engines, crippled, crippled for boarding, crippled for towing, or destroyed.

- If the fight started out with more than two vessels on the other side, another ship is knocked out of the fight each time the PCs surpass an additional 6-point thresholds.

The runner Morricone faces three enemy ships. Its crew wants to cripple them all. To achieve this, it will have to accumulate skirmish points equal to the standard for this goal (12 points) plus (6 x the number of enemy vessels, or 18), for a formidable total of 30 skirmish points.

It will cripple one vessel if its skirmish point total reaches 18 (the standard 12 + 6) The second vessel will be crippled when the PCs reach 24 or more skirmish points. The last will be crippled at 30.

When a vessel is knocked out of the fight, it is no longer considered active for the purpose of determining penalties and skirmish point awards.

The lead enemy vessel is always the last to be taken out of the fight, when the PCs reach their final skirmish point total.

Outnumbering the Enemy

Lasers won't often find other ships willing to join them in the dangerous business of space combat. On the rare occasions when this happens, each allied ship is treated as a modifying factor making it easier for them to reach their goal. The allied ships do not directly participate in showdowns.

The PCs' skirmish point total needed to achieve any goal on the engage path decreases by (3 x the number of allied vessels)

The enemy's skirmish point total for its goal increases by (3 x the number of allied vessels)

The Asymmetry of Uneven Fights

The rules for uneven ship skirmishes work differently depending on who's doing the outnumbering. This reflects the heroic conventions of the space opera genre. Scenes in which the heroes battle against overwhelming odds—whether to defeat a superior force or simply to escape—are an exciting staple of the genre. Sequences where the heroes carefully line up allies to do their fighting for them and then breeze to victory rarely if ever occur. This is because they're boring. Also, they break the literary convention requiring protagonists to solve their own problems as directly as possible.

The rules discourage ally-gathering by portraying the advantages of having them as less decisive than the disadvantages of being outnumbered. They also levy a Reputation cost. You can further avoid dull ally-seeking sequences and anti-climactic battles by invoking character Drives to ensure that characters charge into action immediately, without stopping to recruit outside aid.

To adjust your campaign frequency to reward logical if uninteresting risk-aversion over genre-appropriate action, make the rules for outnumbering the enemy the mirror image of those for being outnumbered.

The PCs gain a bonus on all showdown results equal to (1 + the number of active allied vessels)

Whenever the PCs win a showdown, they gain skirmish points equal to the number of active allied vessels.

Whenever the enemy wins a showdown, the number of skirmish points it earns:

- is decreased by (1 + the number of active allied vessels)

Whenever the enemy earns 3 or more skirmish points in a single showdown, it rocks the PCs' vessel, and removes one allied vessel from the fight. The removed ship is no longer considered active. If the enemy's goal was on the engage track, the allied ship suffers the condition reflected by its main goal: disabled weapons, disabled engines, crippled, crippled for boarding, crippled for towing, or destroyed.

Ganging Up Dampens Your Space Cred

Laser crews who act cautiously and rope in allies to defeat enemies in space combat are considered less noteworthy and heroic than those who bring down the hammer of justice entirely on their own. At the end of any case during which your crew took on an outnumbered vessel, subtract the number of allied ships from any Reputation gains you would otherwise stand to make. This penalty can at most reduce your Reputation gain to 0; it does not reduce your overall Reputation. (For more on Reputation, see p. 165.)

Slinking Off

When the PCs wish to escape a fight and at least one ally is committed to remaining in it, they get away automatically—perhaps at a cost to their Reputation. If they want to datascrape, rake or slash before departing, they must still use the above rules.

Space Battles

Large-formation battles between fleets of space ships have not been a feature of life in the Bleed since the end of the war. Rules for such battles will come into play only if you're building to certain sweeping overall story arcs. If demand warrants, they'll appear in a later supplement.

Ships

Ships found in Combine space are either classed or scratch-built. Classed ships are constructed according to a standard blueprint, subject to further customization by their users. Scratch-built ships are one-of-a-kind vessels, usually flown by their designers. Standard designs follow a tried and true pattern for a reason: when first put under pressure, scratch ships have an unfortunate record of blowing up.

Many of the old shipyards were damaged or destroyed in the war. The teetering economy continues to delay their return to full function. As a result, you tend to see more weirdly customized or completely scratch-built ships than ever before. Still, 95% of the ships you'll encounter will be classed. Most of these were commissioned before or during the war.

Specs

Whether off the rack or customized, all ships are defined by the following numbers.

Combat Specs

We've seen how these eight specs work already, in the rules for space combat. Here's what they mean in descriptive terms. Each entry describes a ship with a better-than-average value for in the spec under discussion. Remember, high numbers are good for the four Dishing It specs, while negative numbers, the lower the better, are good for their counterpart Taking It specs.

Fire (Dishing It)

Your ship configuration reserves a heavy percentage of its engine power to its various weapons systems, known as attack arrays.

Fire (Taking It)

Your ship configuration devotes a heavy percentage of its engine power to its various anti-weapons systems, known as armor arrays.

Maneuver (Dishing It)

Your ship's engines are configured for speed, allowing your pilot to aggressively close range with the enemy.

Battle Arrays

Armor and attack arrays are collectively known as battle arrays.

Certain armor arrays are vulnerable to particular attack arrays, and vice versa. A Trickbag attack is like a complicated space-faring game of rock-paper-scissors, with potentially lethal consequences. The attacking stratco attempts to fake out her counterpart, hoping to select at the decisive moment an attack array that will punch through the armor array he's deployed at the instant of impact. Like any attack form, a trickbag is supported by weapons fire, tricky piloting, and disruptive communications.

For descriptive purposes, players and GMs should feel free to invent and describe the special effects of the various armor and attack arrays. As a starting point, here are the six most common arrays of each type:

Attack Arrays

Invented by humans, disruption beams are the cheapest and most reliable shipboard weapons. They're also the weapon type most other ships are prepared to face. These long-range multiphasing weapons blast a line of oscillating green, white or blue energy arcing from the attacking ship to its target.

Improbability rockets, based on a vas mal design, get a second chance to hit if they happen to miss the first time around. Rockets falling short of the mark disappear into a shimmering bubble in space-time, then reappear for a second strike (Ships with improbability rockets installed do not get two attack rolls; this is descriptive detail). They appear as thin metallic tubes propelled by a wire-thin distortion field.

The neutronic fusillade appears as a glowing cloud that bears down on enemy targets like a spaceborne sandstorm. This balla weapon dishes a comparatively small amount of damage, but over a wide area, and thus finds the weak spots in an enemy hull.

A punchbeam is a wider, shorter-range energy burst than the disruption beam, delivered by cannon-like weapon batteries. Its tavak designers liken it to the dreaded one-claw punch of their peoples' signature martial arts style.

Each scramble bots attack releases a swarm of individually expendable miniature drones. Every drone that makes it through enemy armor arrays warps the magnetic field of a ship's hull on impact. A beloved cliché of military history writing compares the swarm effect of the scramble bot to the hungry rampages of its kch-thk inventors.

Sneakthieves are spacefaring cruise missiles introduced by the durugh. Feared for their penetrating power, they travel partially into warpspace, rematerializing just as they hit their targets.

Armor Arrays

The chronoplate system of hull plating was devised by the vas mal. When hit, each separate plate shifts to a fractionally different moment in time, neutralizing the impact of the strike. Temporal energy from glancing strikes generates additional power for the ship's engines.

Conductors, a tavak hull circuitry technology, disperses energy from enemy fire around the entire hull.

Developed by the kch-thk, a crystaloids system functions by a releasing of semi-organic chaff. Skillful pilots can subsequently use the chaff to confuse attempts by enemy computer systems to triangulate the outcomes of their maneuvers.

Force shifters emit bursts of concentrated energy that intercept incoming fire. They flare green, white or blue when struck. This is the default human defensive system. Quantum backwash from a successful but glancing strike can damage the weapons array fired against it.

Inertia misters disperse pockets of anti-energy that drain force from inbound beams and missiles. This is the preferred array of the balla.

A zeroizer array produces a field of sub-atomic singularities that makes incoming fire seem simply to disappear. Used by the durugh, the provision of this technology to the Combine helped turn the tide against the Mohilar, whose weapons it reliably foiled. Or so the durugh claim; the truth of the incident has vanished down the Mohilar memory hole.

Maneuver (Taking It)
Your ship's engines are configured for reactive flexibility, allowing your pilot to adjust position after a hit becomes inevitable, thus deflecting the energy of incoming weapons fire.

Override (Dishing It)
Your computers are loaded with invasive programs designed to crack an enemy ship's security, allowing your hailer to deactivate or manipulate its internal systems. Its communications apparatus bristles with broadcast antennae.

Override (Taking It)
Your ship's computers are heavily encrypted and primed with security software that shields against the hacking efforts of rival hailers. Its communications apparatus includes special receivers designed to identify and lock out invasive incoming signals.

Trickbag (Dishing It)
Your ship is equipped with many different attack arrays systems, offering your stratco a wide range of options as she devises a pattern of fire to break through the target's chosen armor arrays.

Trickbag (Taking It)
Your ship is equipped with many different defensive systems, offering your stratco a wide range of options in choosing the armor arrays that best defend against the attack arrays deployed against you.

Cargo
A ship with a cargo spec higher than 0 is configured to include an unusually large cargo bay, and the engine power to support tonnes of additional weight. This enables you to haul additional freight, and thus make extra money, when you arrange a freight-hauling side deal (p. 173).

Subtract your cargo spec from the Difficulty of any Business Affairs test to negotiate such a deal. A negative cargo spec increases the Difficulty.

Condition
A ship's condition measures its age and the number of major repairs it has undergone in the course of its career. Condition adds to the Difficulties of repairs and retrofits, so low numbers are good.

Your ship's Condition is applied as a penalty to any Systems Repair or Systems Design test undertaken to fix or alter it.

The lowest possible Condition is -1, which indicates a vessel in as good or better shape than the moment it first left its shipyard. Lasers never have mint condition ships. Your characters haven't laid eyes on such a thing since the pre-war period.

Output
Output measures the engine's ability to quickly generate emergency power and channel it on an ad hoc basis to the ship's various competing systems. As mentioned in the ship combat rules, the ship's Output rating provides a pool which can be raided for various purposes, output refreshes after the resolution of any ship combat.

Upkeep Cost
The upkeep cost of your ship is the amount you need to budget every month to maintain your ship. Failure to pay the upkeep on your ship forces you to degrade its specs (see p. 119). A lower number is therefore superior to a high one.

Sometimes a ship's specs will provide a number called an Upkeep Premium. This number increases its initial budget of build points at an extra maintenance cost that can never be reduced, even during later downgrades (p.126).

Ship Classes

The ten ship classes suitable for use as Laser vessels are as follows. You may choose any of these as your crew's ship. Groups who love to get under the hood and tinker can configure their own scratch-built ships using the rules starting on p. 111.

All of the small vessels listed below include, in various degrees of crampedness:

- crew quarters
- a command bridge
- a shuttlecraft launch bay (includes craft)
- washroom and shower facilities
- engine room
- one to three utility spaces. Your Laser crew has fitted these as portable labs for evidence analysis and scientific survey work

By tradition, each of the ship types is associated with a naming tradition. These often derive from events in Earth history, as popularized during the prewar synthculture movement (p.158). Nothing forces you to adopt a name that matches your ship type. If you don't, however, others may comment on your eccentric choice.

Runner

If you can't decide which ship to pick, take this one.

As the basic workhorses of interstellar travel, runners fill the warp corridors of the Bleed. These rugged, functionally-designed ships serve as the vessel of choice not just for most Laser crews, but for diplomats, government functionaries, and passenger operators. Because they're so numerous, they're often found in pirate hands, having been captured from their rightful owners.

Dishing It & Taking It

The Dishing It and Taking It modifiers for each ship class are listed in the ship's table. The Dishing It modifier applies only on a showdown **win**. The Taking It modifier applies only on showdown **loss**.

The runner balances the various design demands of a small craft, providing solid compromises between offense and defense and between capacity and speed. It looks like box outfitted with streamlining fins. A circular turret on top houses its combat arrays.

Crew quarters allow up to six personnel to sleep privately, without having to share rooms. Walls of the crew quarters break away; bunks can be folded down to convert the resulting area into a meeting or recreation room. A short corridor runs down the middle of the quarters area; it too folds into the larger meeting chamber. Aside from that, the runner lacks hallways; crew members move through automated doors from one room to the next.

Fold-down beds line the walls of its aft cargo bay, sleeping as many as ten additional passengers. By breaking out another set of modular furnishings, this bay can be converted into a brig, comfortably holding up to six prisoners.

The crew moves between decks via vertical hatchways outfitted with fold-down ladders. The bridge, crew quarters and utility spaces occupy the top deck, with shuttle bay, engine room and cargo spaces below. The bridge hatch leads down to the shuttle bay for quick escape from a doomed vessel.

Names of runners are traditionally drawn from the history and folklore of the 19th century American west, and its later interpreters. Examples: Apache, Appaloosa, Buffalo, Cheyenne, Crockett, Eastwood, Ford, Geronimo, Hickok, Houston, Lamour, Leone, Masterson, Northfield, Peckinpah, Rio Bravo, van Cleef, Wayne, Winchester, Wister, Wyatt Earp.

	Dishing It	Taking It
Fire	0	0
Maneuver	0	0
Override	0	0
Trickbag	0	0

Output 14

Cargo 0

Condition 0

Upkeep 6

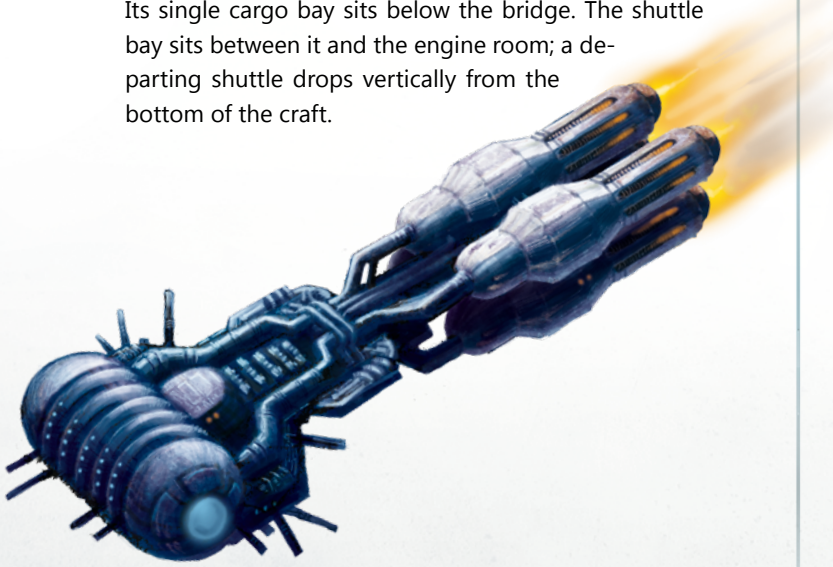
Hammer

The top-heavy hammer, with its bristling assault turret, places a premium on accurate offense. Its front-loaded design calls to mind a flying club.

Crews double up in its cramped quarters, buying more space for an enlarged bridge kitted out with a holo stage. It displays a real-time three-dimensional simulation of combats in progress. The stratco's high, throne-like chair thrusts her partway into the holostage.

The curving walls of the hammer's tube-like construction add to a pervasive sense of physical constraint.

Its single cargo bay sits below the bridge. The shuttle bay sits between it and the engine room; a departing shuttle drops vertically from the bottom of the craft.



Hammers tend to be named after historical weapons or weapons systems*: Anlance, Arbalest, Arquebus, Atlatl, Bandolier, Blade, Crossbow, Flintlock, Gatling, Glaive, Halberd, Howitzer, Javelin, Machete, Peacemaker, Saber, Smith & Wesson.

	Dishing It	Taking It
Fire	3	1
Maneuver	-1	0
Override	0	0
Trickbag	0	1

Output 8

Cargo -2

Condition 1

Upkeep 6

Rampart

Resembling a flying castle, the defense-heavy rampart offers shelter to crews who would rather withstand a hit than dish one out. Square edges convey a sense of geometric stolidity. Its twin shuttle craft, housed in a squared U-shaped bay, can exit the craft from fore, starboard, or port. The prevailing design sense is proudly industrial, with visible duct-work, vent shafts and cable housings lining its wide corridors. Echoing clangs pervade the ship; its double-reinforced hull dampens and muffles speech. Groundside crews operating out of a rampart have to train themselves to stop shouting when they leave its protective embrace.

Rampart-class ships are named after castles and fortresses of Earth history and folklore: Alcazar, Arundel, Ashby, Caernarvon, Camelot, Carcassonne, Charmont, Elsinore, Gwalior, Kenilworth, Kumbhalgarth, Mousa, Orthanc, Otranto, Pontefract, Turku, Xiongwu, Yinglong.

* Warn players when choosing the name for their hammer-class that any ship named Bohemian Ear-Spoon immediately explodes on its first mission, killing everyone on board. This is the only way for Ashen Stars PCs to die during character generation.

	Dishing It	Taking It
Fire	-1	-3
Maneuver	-1	1
Override	-1	-1
Trickbag	0	1

Output 8
Cargo 0
Condition 1
Upkeep 6

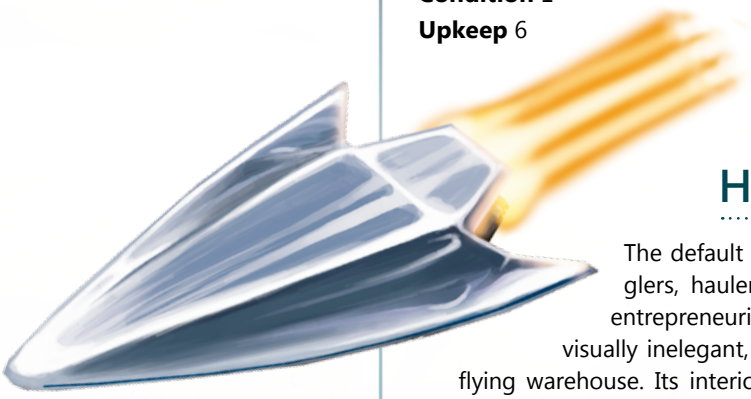
Speeder

The sleek, streamlined speeder places a premium on engine power and maneuverability. The beauty of its slender, arrow-like shape and gleaming outer surface reveal the balla roots of its designers. The bridge design places its personnel in parallel seating, close enough to hear each other's breathing. Behind this choice lies the theory that physical closeness breeds instinctive teamwork.

Burnished chrome surfaces throughout the ship's interior reflect images of the crewmen back at them. A common joke about the speeder has it that balla prefer speeders because they get to look at themselves constantly. Disoriented newcomers liken the environment to working in a hall of mirrors.

Speeders have no shuttle bay. Instead, the speeder's shuttle craft interlocks into the bottom of the ship, becoming a laboratory when not in use as a vehicle. To keep the ship's weight down, the design lacks cargo facilities of any kind. Speeder crews would sooner race to the next contract than hang around to conduct petty trade deals.

Speeders are named after birds and other flying creatures: Caracara, Condor, Cuckoo, Eagle, Falcon, Finch, Harrier, Hawk, Kestrel, Kite, Kookaburra, Gryphon, Osprey, Peregrine, Roadrunner, Sparrow.



	Dishing It	Taking It
Fire	-1	1
Maneuver	2	-2
Override	-1	1
Trickbag	0	0

Output 8
Cargo 0
Condition 1
Upkeep 6

Hauler

The default choice of traders and smugglers, haulers are used by Lasers of an entrepreneurial bent. Blocky, rugged, and visually inelegant, the hauler brings to mind a flying warehouse. Its interior configuration resembles a larger version of the runner, with all other areas squeezed to make room for its generous cargo bays. Unusually for a small spacefarer, the hauler comprises three decks. The top deck houses the bridge, crew quarters, and utility areas. Six cargo bays occupy the middle deck. Two more fill out the lower deck, pressing hard against a reduced engine room and trickily small shuttle craft. More than one inexperienced shuttle pilot has dinged its hull trying to squeeze upwards into this tight space. One exception to a hauler's Spartan look is ts lavishly

appointed board room, where meetings with business partners are sometimes held. As a Laser crew, you may or may not have stripped out its vat-grown mahogany paneling and reflective meeting table and replaced it with lab equipment that wouldn't fit in the utility areas.

Haulers are named after mountains: Aconcagua, Annapurna, Ararat, Brocken, Cameroon, Cristallo, Elbrus, Erebus, Everest, Fuji, Hithaeglir, K2, Kerling, Kilimanjaro, Krakatoa, Matterhorn, McKinley, Meru, Olympus, Puncak Jaya, Vinson Massif.

	Dishing It	Taking It
Fire	0	0
Maneuver	-1	0
Override	0	-1
Trickbag	0	-1

Output 7

Cargo 3

Condition 0

Upkeep 6

Special: the Hauler comes with a tractor beam pre-installed

Porcupine

Looking for defensive versatility? The porcupine class may be the ship for you, with its complement of five armor arrays. This tavak-inspired design resembles a ball bristling with metal projections. This complex lattice of machinery allows the crew to coordinate and deploy its many defensive systems, enhancing their reach. Four tightly packed decks rest inside a gyroscope structure, allowing the ship to zoom off in any direction with minimal distress to personnel aboard. New recruits suffer slight nausea when the ship undertakes a sharp course correction; old hands scarcely notice. The outer skin of the ship moves around the gyroscopic ball, making it difficult for enemies to target a specific deck or location.

Another selling point of the porcupine for many Lasers is the surprising volume of individual space its designers have somehow conjured from its globular configuration. Crew quarters are private, soundproof, and comparatively spacious. Initially meant as places of meditative retreat, they facilitate all manner of solitary and not-so-solitary personal behavior.

The name porcupine was applied to the original vessel type by humans when they first fought the tavak, centuries ago. When tavak speak of it, they use the name of an equivalent animal from their homeworld. Translation devices prevent this from becoming confusing.

Porcupines are named after shelled or armored animals: Anklyosaur, Armadillo, Crab, Cuttlefish, Echidna, Glyptodont, Nautilus, Stegosaur, Stickleback, Terrapin, Tortoise.

	Dishing It	Taking It
Fire	0	0
Maneuver	-1	0
Override	0	-1
Trickbag	-1	-3

Output 8

Cargo 0

Condition 0

Upkeep 6

Mandible

The name for this kch-thk-designed vehicle derives from the double, curved projections rising from behind its bridge. These contain its versatile array of attack technologies. The mandibles sit atop a bulbous, bifurcated deck structure vaguely reminiscent of a spider's thorax and abdomen.

Packed to the gills with weapons tech, the ship impinges throughout on its crew's personal space. The ship lacks corridors of any kind. Sleeping quarters consist of a communal bunk area, with shower and washroom facilities attached. Kch-thk have no concept of personal space and leave these areas as is when crewing a mandible all by themselves. Your crew will likely have added and secured a series of cubicle-like dividers to this area, providing a modicum of privacy. Mandibles, as the saying goes, are for scorers, not for snorers.

Mandibles are named after insects and their arthropod kin: Black Widow, Centipede, Hornet, Mantis, Recluse, Scorpion, Screwfly, Spider, Stinger, Tarantula, Yellowjacket.

	Dishing It	Taking It
Fire	1	0
Maneuver	-2	1
Override	0	-1
Trickbag	3	0

Output 8
Cargo 2
Condition 0
Upkeep 6

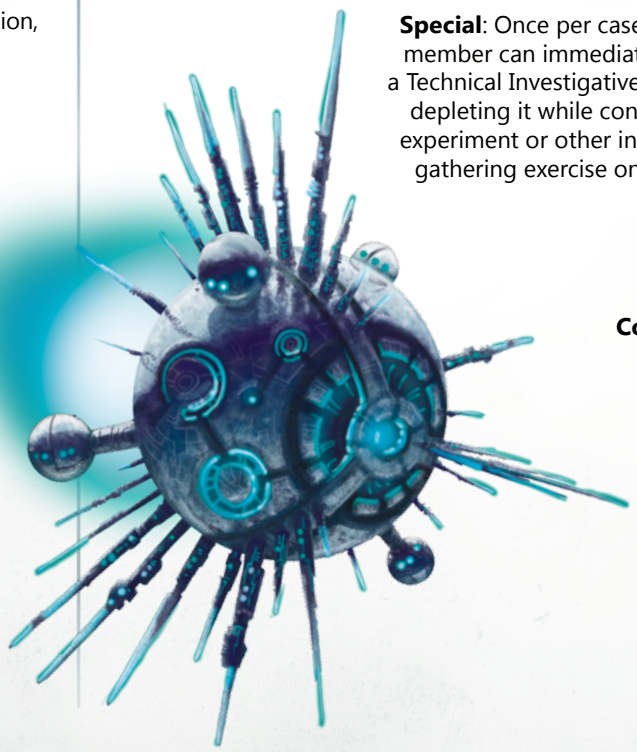
Sherlock

Bristling with receiver dishes, probes, and antennae, the Sherlock class ship is noted for its state-of-the art computer system. The digital contents of its supercooled mainframe are over-tuned for maximum hacking and data-gathering capacity. Its chromed, globular outer surface allows for quick repositioning to access any ship's most protected dataports.

Generous laboratory space makes the Sherlock a favorite of Laser crews specializing in survey missions and scientific mysteries.

Sherlock-class ships derive their names from the great detectives of mystery fiction: Akechi, Alleyn, Briscoe, Chee, Dee, Continental Op, Lupin, Maigret, Marlowe, Magnum, Marple, McGarrett, Queen, Spade, Warshowski, Wimsey.

	Dishing It	Taking It
Fire	-1	1
Maneuver	1	0
Override	3	0
Trickbag	-1	1



Special: Once per case, one crew member can immediately refresh a Technical Investigative pool after depleting it while conducting an experiment or other information-gathering exercise on board the ship.

Output 8
Cargo 0
Condition 0
Upkeep 6

Alexandria

Favored by crews specializing in intelligence operations, the robust computer systems and versatile communications ports of the Alexandria provide it high security against invasive data acquisition. Its elongated, cigar-shaped hull allows it to concentrate comm ports in inaccessible locations. Compensating fins lend it an appearance recalling the retro imaginings of early 20th century science fiction illustrators.

The tubular design allows storage of information in charged energy clouds lining the ship's interior. Field storage permits the ship's onboard artificial intelligence to make unusual connecting leaps, especially when evaluating live-feed data remotely conveyed to it via headsets.

Alexandria-class ships take their names from famous scholars, scientists, librarians and archivists: Aristotle, Borges, Bodley, Darwin, Dewey, Einstein, Frye, Gibbon, Hawking, Herodotus, Josephus, Larkin, Linnaeus, Mendel, Plutarch, Suetonius, Zenodotus.

	Dishing It	Taking It
Fire	0	-1
Maneuver	-1	1
Override	0	-3
Trickbag	0	0

Output 8
Cargo 0
Condition 0
Upkeep 6

Special: Once per case, one crew member can immediately refresh an Academic Investigative pool after depleting it while outside the ship, provided that a headset feed is currently running back to it.

Voodoo

So named for the miraculous flexibility of its robust, multiply-redundant engine system, the voodoo is the ship of choice for stratcos who prefer to think on the edge of their seats. It famously allows squeaker victories by manipulating the ship's energy output.

The voodoo's modular design connects a series of cubic and rectangular chambers through a series of tubular corridors, which can be rendered opaque or transparent as needed. Its standard configuration places the bridge in the center, with an inner ring of personal quarters and then an outer one of cargo, utility, and shuttle bays. These can be rearranged, though the process is a lengthy and hazardous one. It requires engineers to don environment suits and affix mini-thrusters to the various portions, after sealing off the airlocks appearing in each doorway. Reconfiguration takes about three hours for each room component moved. Though it can't be done under emergency conditions, individual bays on the outer ring can be suddenly jettisoned from the overall structure.

Original voodoos are decorated according to an eccentric color scheme. Each module is carpeted in shades of purple and orange. Most Laser crews strip out this hideous stuff, and also sell off the now-coveted form-fitting plastic furniture, and refit to a utilitarian 25th century spaceport grunge look.

The voodoo is one of the few ship classes you can upgrade to accommodate additional cargo bays.

Voodoo-class ships take their names from famous magicians and illusionists of history and folklore: Blackstone, Cagliostro, Curwen, Dee, Faust, Houdini, Iouconnu, Merlin, Mesmer, Morgan, Paracelsus, Prospero, Saint-Germain, Samedi, Teller.

	Dishing It	Taking It
Fire	0	0
Maneuver	0	0
Override	0	0
Trickbag	0	0

Special: The Voodoo can be reconfigured on a Systems Design test. Upgrade 1, 2 or 3 combat specs by 1 point apiece). (Increase Dishing It values; decrease Taking It values.) Then degrade the same number of other combat specs by 1 point apiece. (Decrease Dishing It values; increase Taking It values.) Difficulty of test equals 3 plus the number of specs upgraded. Reconfiguration takes 2 hours of game-world time for each spec upgraded. On a failure, the degraded specs remain degraded but no specs are upgraded.

Reconfiguring back to the ship's base condition (as above, with 0 in each combat spec), takes 4 hours of game-world time and does not require a Systems Design test. This process is called breakdown. You can't reconfigure an already reconfigured ship. Instead, you must breakdown between reconfigurations.

At the beginning of any scenario, you may specify that you conducted a breakdown during downtime.

Output 5

Cargo 0

Condition 0

Upkeep 6

Junker

A junker is less a class of ships than a catch-all term for any busted-up wreck that's been pressed back into service long after its shelf life has expired. It may be a repurposed supershuttle from the pre-war days, a retrofitted cargo long-hauler, or a motley bag of parts kludged together into a single ship. Somehow becoming more than the sum of its parts, the junker still outperforms a runner on several fronts, not least of which is its extra Output. It may hiss and spit and spark and look like it just single-handedly lost the Mohilar War, but somehow your systems officer can always pull one more miracle from its creaking guts. Its computer systems are a steaming kludge of mismatched components that confuse enemy hailers trying to crack them.

The junker allows upgrades to accommodate additional cargo bays.

Junker names are self-mocking, plucky and/or defiant: Bad Penny, Boatcar, Bolter, Burner, Clash

Crossbreed, Finger, Gravedigger, Jake's Regret, Mr. Phibes, Mutant, Mutt, Ratfarm, Ruster, Smokestack,

Sparker, Stain, Trashcan, Unforgiven, Vulgar, Your Mama, Zero.

	Dishing It	Taking It
Fire	0	1
Maneuver	0	1
Override	0	-1
Trickbag	0	-1

Output 16

Cargo 0

Condition 1

Upkeep 6

Miser

The miser is a stripped down economy-grade vessel designed for a new era of scarcity. Looking like a leaner, less sturdy runner, its cheap virtue lies in its thrift: it costs less to run than any equivalent vessel. It's favored by crews who'd rather invest in their own personal capabilities than in their ship. Onlookers spotting a miser in their viewscreens may assume that it's staffed by cybes. Operating a miser may suggest to others that you're down on your luck and recently lost a better ship. To the truly cost-conscious, these foolish prejudices mean nothing.

The ship's deck plan follows that of the runner, scaled slightly down and made of cheaper materials.

Misers take their name from mythic, literary or historical figures associated with wealth or hoarding, or from famous economists: Astor, Barnes, Buffett, Carnegie, Croesus, Fagin, Frick, Friedman, Gates, Greenspan, Jobs, Keynes, McDuck, Medici, Mellon, Midas, Rockefeller, Rothschild, Vanderbilt, Volcker, Winfrey.

	Dishing It	Taking It
Fire	-1	0
Maneuver	0	0
Override	0	0
Trickbag	-1	1

Output 6

Cargo 0

Condition 0

Upkeep 3

Custom Ships

In general, scratch-built ships compare unfavorably to those constructed following tried and true plans tested and improved over decades of field-testing. They may, however, give you exactly the configuration that suits your crew's collective identity.

Standard ship designs may be too expensive to create from scratch using this system. If you tried to build a Mercedes with hand-tooled parts, it wouldn't be as cheap or road-ready as one that just rolled off the dealer's lot.

To design a scratch-built ship, start with 0s in each combat spec and in Cargo and Condition. an Output of 8, and an Upkeep of 7.

When building your ship, you must balance a budget, spending no more build points than you earn back with countervailing disadvantages.

Combat Specs

To upgrade a combat spec by 1 point (increasing a Dishing It value or decreasing a Taking It value) costs 3 build points.

Degrading a combat spec by 1 point (decreasing a Dishing It value or increasing a Taking It value) earns you back 3 build points.

At the end of the process, no combat spec can exceed 2 or drop below -2.

The easiest way to design a new ship is to balance upgraded combat specs with degraded ones, leaving all non-combat specs unchanged.

How You Got Your Ship

During the series, you only concern yourself with the upkeep cost of your ship. Either at the outset or in an early episode, players should collectively decide how they came into the possession of such an expensive item. Pick one of these suggestions or use them as inspiration for an idea that doesn't appear here. Your answer must tell us why you own something very valuable but now have to worry about going broke. (The word "you" can refer to the crew as a whole, or to one of its members, depending on how your various backstories mesh together.)

- A wealthy benefactor or similar patron gave you the ship, knowing that you'd use it for good.
- You were groundbound law enforcers for hire, until you cracked a big case and got the ship as a reward.
- After a shared financial windfall, you got together and invested your last credits in this ship.
- One of you got the ship in a divorce or other settlement.
- The ship is a prototype from a new shipyard. Its designer has loaned it to you, partly as an advertisement for it, partly to see it tested under difficult field conditions.
- The ship is the entirety of a crew member's inheritance from an eccentric relative. The terms of his will forbid its sale.
- When your passenger vessel was attacked by pirates, you defeated them and claimed their ship as your reward.
- You came upon the ship, derelict in space. You found the owner dead on the bridge, and with him a suicide note deeding the vessel to anyone returning his body to his distant birthplace.
- You pieced the ship together yourselves, salvaging the parts from the wreckage of a great battle.
- You won the ship in a bet.
- You work for a political organization, like the Combinists or Bleedists, who own the ship. Your missions of justice enhance their credibility.
- You, ahem, liberated the ship as surplus in the last days of the war. Yeah, that's the word. Liberated.
- A mysterious individual overheard you in a bar, daydreaming about owning your own ship and making your way as Lasers. The next day, a deed to the ship appeared in your email. Eventually, he's going to ask for a big favor in return. In the meantime, you're following your dream.
- None of you remember how you got the ship—which suggests that it has something to do with the disappearance of the Mohilar.

A GM might choose to start a series with a "premise pilot" episode in which the crew comes together, acquiring its ship in the process. In this case, the players still get together and agree in advance on the plot explanation for how they came to own the ship. The GM then takes that story element and weaves it into the crew's introductory mission. The most obvious choice is to make your ship a reward for completing your first contract.

Output

Selecting an Output higher than 8 costs build points. Selecting a lower Output earns you back points:

Output	Build Point Cost
13	5
12	4
11	3
10	2
6	-2
5	-3
4	-4

Cargo

Changing your Cargo spec either costs or earns points:

Cargo	Build Point Cost
2	2
1	1
-1	-1
-2	-2

Condition

Increasing your ship's Condition (which makes it harder to repair), earns you 2 build points for each point of Condition added.

Upkeep

Changing your Upkeep either costs or earns build points:

Upkeep	Build Point Cost
3	8
4	6
5	4
6	2
8	-2
10	-3
12	-4

Shipbuilding Example

You want to construct a ship that's heavy on offense, even though doing so will give it a bit of a glass jaw. You decide to give the ship values of 2 in all of its Dishing It specs, balancing the cost by degrading all of your Taking It specs by 2.

	Dishing It (Modifier Applies On showdown Win)	Taking It (Modifier Applies On showdown Loss)
Fire	2	2
Maneuver	2	2
Override	2	2
Trickbag	2	2

That's simple enough, but having a hard punch and a glass jaw will require you to win your showdowns more often than not. Adding Output will help you there. You spend 3 build points for an Output of 11. Degrading your Condition seems too risky: you'll be getting hit hard when you do get hit, and need your repairs to tax the wrench's spotlight time as little as possible. You pay for this by reducing your Cargo to -1, earning back 1 build point, and increasing your Upkeep to 8, earning you the remaining 2 you need. (You'd prefer to do it the other way around, but the cost tables don't allow it.)

REPAIRS AND UPGRADES

Ships may be damaged in combat, through contact with navigational hazards, or as the result of sabotage. To fix them requires the hard work of your skilled wrench, plus time and money. The same cash and effort might also be employed in upgrades to improve your ship's performance.

Repairs

Ship's engineers notoriously claim to be able to work miracles in the heat of battle, while demanding copious time

and resources when fixing a system under less stressful circumstances. It's not that repairs become suddenly harder when the fight stops. Instead, assume that any systems that could be repaired in mid-fight happened to be the relatively easy fixes. Those left over in the aftermath require extensive, ground-up refits. Unrepaired damage tends to come near the end of a fight, so it makes sense even in literal terms that the hits taken when the ship is already under stress would be the most serious.

Restoring degraded specs requires a Systems Repair test. The base Difficulty of 4 is modified by the following conditions. Each point of degradation requires its own test to reverse.

The longer you give your wrench to fix your system, the greater his chance of success:

Total Repair Time	Modifier
12 hours	+7
1 day	+5
3 days	+3
1 week	+1
2 weeks	0
3 weeks	-1
4 weeks	-2
6 weeks	-3
8 weeks	-4

Repair times must occur during a break in the action. Do not allow the wrench player to be sidelined during an active investigation to conduct ship repairs. Use Drives or plot devices that require the wrench's active participation in the case at hand. Story logic may allow you to cut to the end of a short repair period in mid-case. The ship might be traveling or the other characters equally engaged in activities that can be quickly glossed over.

Cost is also factor in a successful repair job. More expensive parts are easier to correctly install:

Repair Cost (in Bigcreds)	Modifier
1	+5
2	+4
3	+3
4	+2
5	0
6	-1
8	-2
10	-3

On a successful test, the spec improves by 1 point: increasing a Dishing It spec or decreasing a Taking It spec. The ship's Condition drops by 1. (As you'll recall, a low Condition is favorable.)

On a failed test, the time and money is spent, and the spec and Condition remain as they were before.

Restoring Disabled Systems

Restoration of disabled weapons and/or engines requires a Systems Repair test with a base Difficulty of 4. As with any Systems Repair effort, the ship's present Condition is applied as a penalty. The process costs nothing and takes six hours. It can't be made easier by spending additional money or time. It can be made faster by increasing the margin for error:

Accounting for Space Repairs

Worrying about details like this isn't what Ashen Stars is all about, but in case someone asks. . .

You are able to spend money on repairs in space because every ship is equipped with a store of valuable parts and nanomaterials. These are so ubiquitous that they can be traded like cash. According to the well-established principles of interstellar accounting, you don't count the acquisition of repair materials as expenditures until you use them. When you next hit a spaceport, you then pay to replace them, but don't mark it in your books until you use them up again, and so on.

If you don't have the bigcreds in your account when you are dead in space, you may prefer to use long-range communications to arrange a loan than to permanently degrade the Condition of your ship.

Repair Time (In Hours)	Modifier
1	+10
2	+7
3	+5
4	+2
5	+1

Upgrades

During the breaks between cases, you may wish to upgrade your ship, either by investing in its core systems, or by bolting on new sub-systems. The first type of upgrade improves your specs, while the second gives your ship special abilities.

Improving Ship Specs

To improve your ship's specs, you must first repair any degradation, restoring your ship's Condition to its base value. You can then retrofit your vessel to add firepower, propulsion and maneuverability, invasive or defensive computer programs, and additional battle arrays.

An improved Dishing It spec increases by 1, while an improved Taking It spec drops by 1. No spec can be upgraded past an absolute value of 5.

The base cost to upgrade a combat spec is 15 bigcreds.

A successful upgrade requires a Systems Design test. The Difficulty of the test is increased by the ship's Condition, and varies according to additional expenditure and time invested.

Installation Time (in weeks)	Modifier
3	+6
4	+4
5	+2
6	0
8	-1
10	-2
12	-3

Additional Expenditure (In Bigcreds)	Modifier
3	-1
6	-2
9	-3

On a failed test, you lose the additional expenditure and your installation time, but not the base cost of 15 bigcreds.

Each time you upgrade a combat spec, your ship's Upkeep increases by 1.

Other Upgrades

A Condition upgrade decreases its value by 1. This process works exactly like a combat upgrade, except that it does not increase your Upkeep.

You may add 3 points to your Output rating. This process works exactly like a combat upgrade, including the increase in Upkeep.

You can improve your Cargo rating by 1, to a maximum of 3 above your ship's starting Cargo. You automatically succeed on an expenditure of 4 Systems Design points. The process costs 10 bigcreds and takes 6 weeks.

Bolt-Ons

A bolt-on is a sub-system granting you an additional benefit in combat.

Installing a bolt-on costs you two weeks of downtime and requires a Difficulty 6 toll test (p. 70). Unless otherwise noted, the ability required to install the bolt-on is Systems Design. Costs of bolt-ons vary by item. Some bolt-ons increase your ship's Upkeep.

Bolt-ons may not be installed until after your first case.

Bolt-ons are fun for players, but too much work for most GMs to track. Although in the world many ships are equipped with them, in the story it's fine if they remain an edge for PC crews to exploit.

When you stop paying the Upkeep for a bolt-on, your ship's Condition goes up by 1 unless you make a Difficulty 4 Systems Repair test to take it offline. Bringing it back online later requires a Difficulty 6 Systems Repair test.

A few bolt-ons modify the effects of other bolt-ons. There's no point in installing the modifying device unless you already have the core bolt-on.

Asphyxiator
Cost: 5

Upkeep: 1

This modification to your attack arrays causes them to degrade a ship's life support systems on a solid hit. After you win a Fire showdown and until the end of the combat, any use of the Medic ability requires the character to uselessly spend an additional Medic point each time the character lends Medic points as part of a Medic Scramble.

Burner
Cost: 5

Upkeep: 1

This generator creates an heightened oxidation field, which attaches itself to, and then penetrates, a target ship's hull, subtly corroding its metallic components. After you win a Maneuver showdown and until the end of the combat, Difficulties of Wrench Scrambles aboard the enemy ship increase by 3.

Tests During Downtime

Some tests take place during downtime, most notably ship repair and upgrades, cyberware installation, and viroware infusion.

Characters making these tests may spend points left over from the just-concluded episode and/or from their pools for the coming episode.

Genderjack, the cybe hailer of the Morricone, wants to install a cyberware enhancement called an Autonomic Avenger. The ship's medic, Zaan Bar, must perform the necessary surgery. Zaan's player, Marcello, has a Medic rating of 8. As of the end of the episode "A Tumor On the Sun", Zaan has 3 points left in his Medic pool. The Difficulty of the task is 8. Zaan doesn't want to fail, and so spends 5 points. The first 3 points come from the leftover pool from the previous episode. The remaining 2 are charged to the next episode, "The Teeth of Cronos." Marcello will start that episode with 6 points in his Medic pool.

Datadrac
Cost: 6

Upkeep: 0

Using a powerful, customizable algorithm , this invasive program quickly searches enemy databases. If your goal is Datascrape, you gain an additional 2 skirmish points on your first successful showdown.

Fairy Duster
Cost: 5

Upkeep: 1

This additional targeting program forces an enemy armor array into overdrive by fooling its sensors into thinking it's being attacked by nonexistent attack arrays. When you win a Trickbag showdown, the enemy ship's Output drops by 3.

Hailmary
Cost: 5

Upkeep: 0

This modification to your weapons system triggers a reaction releasing a tachyon refraction cloud, releasing additional energy to the auxiliary collectors that draw energy from the vacuum of space—both on your ship, and any other nearby ships. Once per space combat, you may trigger your hailmary. Your Output pool refreshes. So does your enemy's.

Hyperbaric Emitter
Cost: 7

Upkeep: 2

This modification to your life support system allows you to pressurize its air in a cycling frequency allowing for easier healing. Spend any number of Output points; for this number of showdowns, any 1 Medic point spent to heal a character restores 3 Health.

The Hyperbaric Emitter can be used outside of space combat. Spend 1 Output for each character regaining Health points.

Inertial Sequencers
Cost: 5

Upkeep: 1

This system of propulsion servos makes your maneuvers difficult to mirror, requiring your opposing helmer to devote additional power input to the effort. When you win an Maneuver showdown, the enemy ship's Output drops by 3.

Kinetic Exciter
Cost: 5

Upkeep: 1

This modification to your armor system catalyzes a proton excitation field over radius of several kilometers. Once per space combat, you may activate your kinetic exciter. Roll a die and add 1. For a number of showdowns equal to the result, all of the Dishing It specs of your ship, and your opponent's, improve by 1.

Kinetic Trougher
Cost: 5

Upkeep: 5

Modifies: Kinetic Exciter

Modifies the effect of the Kinetic Exciter so that it only improves the Dishing It specs of your own ship.

Scorpion Rider
Cost: 10

Upkeep: 3

This modification to your armor array causes a feedback wave that crashes disruptive energy back upon an enemy vessel when it hits you. When your ship is rocked you may, at the cost of 7 Output and 5 Naval Tactics, rock your enemy's ship as well.

Peacefist
Cost: 7

Upkeep: 1

This attack array modification is specially tuned to target the power conduits to the enemy's weapon systems. If your goal is Disable Weapons, you gain an additional 2 skirmish points on your first successful showdown.

Proton Dampener
Cost: 5

Upkeep: 1

This modification to your attack arrays stimulates a proton depression field over an area of several kilometers. Once per space combat, you may activate your proton dampener. Roll a die and add 1. For a number of showdowns equal to the result, all of the Taking It specs of your ship, and your opponent's, improve (decrease) by 1.

Proton Pathwayer
Cost: 5

Upkeep: 5

Modifies: Proton Dampener

Modifies the effect of the Kinetic Exciter so that it only improves the Taking It specs of your own ship.

Recursive Flagger
Cost: 5

Upkeep: 1

This invasive software program worms its way into an enemy ship's engines, imperceptibly draining power from its back-up matrices. When you win an Override showdown, the enemy ship's Output drops by 3.

Sparkler
Cost: 7

Upkeep: 1

This frequency modulation sub-system overloads enemy engine output on a successful hit, increasing the extent of electrical fires onboard the target. Whenever you rock an enemy ship, the difficulty of Athletics tests its crew members must take to avoid harm increases by 3.

Synchron Charger
Cost: 5

Upkeep: 2

This modulating box attaches to your ship's internal wiring, masking the identity of the ship's system you're powering up. You may pay 5 Output to ignore egging it penalties on your current attack.

Tractor Beam
Cost: 5

Upkeep: 0

This sub-system emits a targeted sub-gravity ray, which locks onto objects in space and draws them toward you. Tractor beams are useful in rescues, allowing the helmer to snag stray shuttles and tumbling space-walkers. It may prove useful in survey missions, for example, by permitting you to capture asteroids, buoys, space junk, and other free-floating items for close-up evaluation. In combat, a tractor beam allows you to select the otherwise unavailable Cripple for towing goal.

Translight Spiker
Cost: 5

Upkeep: 1

This sub-array alters the wave frequency of sub-space background radiation, making it more difficult for ships to find and enter translight corridors.

If you are engaged in a space combat against a ship on an escape-track goal, a member of your crew may make a Naval Tactics test against a Difficulty equal to the enemy ship's current skirmish point total. On a success, the enemy's skirmish point total is reduced by the margin.

The Translight Spiker may be activated only once per combat.

Translight Spikers are often found on Laser and patrol vessels but are rare on ships outfitted for other purposes. It is a fine candidate as to be the first bolt-on you install on your ship. Without it, you may find that enemy ships escape you too easily.

Whomper
Cost: 5

Upkeep: 1

This apparatus modifies your attack arrays to so that your attacks emit an energy dampening field on impact. When you win a Fire showdown, the enemy ship's Output drops by 3.

Zoomer
Cost: 6

Upkeep: 1

This modification to your exterior propulsion system allows you to capture and recycle dispersed energy from your engine and that of nearby vessels. When you win a space combat with an escape-track goal, your Output pool refreshes.

Cannibalizing Is Such an Ugly Word

The crew may be able to pick up uninstalled bolt-ons in the course of play without paying cash for them. They may get them as payment for a side deal, or as an inducement, bribe, or reward. Shadily acquired ship's parts may lead to Reputation drops if discovered and made public.

Just as modern police officers don't take your car stereo when they arrest you for murder, honest Lasers don't typically cannibalize enemy ships for parts. Those who do so risk smirching their Reputation.

Removing a bolt-on from an abandoned or derelict vessel rarely poses a threat to Reputation.

Some groups will be greedily enchanted by the idea of installing salvaged or confiscated parts in their ships. Throw them a bone by making this possible and permissible every so often, contriving plot circumstances as necessary.

As a general matter, it takes two weeks of downtime and a Difficulty 4 Systems Repair test to remove a bolt-on from another ship. That ship's condition is added to the Difficulty. In the case of an enemy ship defeated by the crew, this naturally includes Condition increases from the damage they did to it.

Success means that the bolt-on can now be installed, as normal, in the Lasers' ship. Failure means that the part is damaged and can't be installed.

Upkeep Failure

When you can't afford to pay the Upkeep for your ship:

- bolt-ons cease to function
- your Output rating drops by 4
- a paired set of Taking It/Dishing It specs, as chosen by the GM, degrades. By default, this is the pair including your best spec, if you have one.

Your Output rating drops by another 4, and you suffer degradation of another Taking It/Dishing It pair, for each successive failure to pay Upkeep.

To get your ship back in shape after a failure to pay Upkeep, you must:

- pay your next Upkeep in full
- pay your back Upkeep
- make a Systems Repair test against a Difficulty of 4 + the number of failed Upkeep periods

When you do this, your bolt-on function returns, spec degradation is reversed, and your Output rating increases by 4 times the number of skipped payments.

Downgrades

You can reduce your Upkeep by:

- removing a bolt-on with an Upkeep value greater than 0. Your Upkeep drops by the bolt-on's Upkeep value. The procedure takes two weeks. To complete it, take a Difficulty 6 Systems Repair toll test.
- degrading a spec. Your Upkeep drops by 1. The procedure takes two weeks and concludes with a Difficulty 7 Systems Repair toll test.

Navigational Hazards

Ships may also suffer damage from encounters with navigational hazards, such as:

- ion storms
- mine fields
- space junk
- battle debris
- asteroid belts
- gravity wells
- quantum breaches
- nano-drone clouds
- meson shrapnel

Laser crews may have to pass through them:

- to get to a destination in a timely manner
- in pursuit of fleeing adversaries
- to avoid pursuing adversaries
- to rescue hobbled vessels inside the hazard
- when fast-moving hazards overtake them
- when new hazards manifest nearby

The GM gives a Difficulty rating to any hazard, reflecting both the challenge of moving safely through it on propulsion power, and the degree of danger it poses to shipping. The base Difficulty of a navigational hazard is 4, which the GM is free to adjust upwards.

The ship's pilot makes a Helm Control test against the Difficulty, on which she can also spend from the ship's Output pool.

On a success, where the margin is 3 or more, the ship escapes the hazard.

On a success, where the margin is 2 or less, the ship is rocked but escapes the hazard.

On a failure, the ship is rocked and has not yet escaped the hazard. The pilot must attempt another Helm Control test, and keeps going until a success is scored. If the pilot runs out of Helm Control and Output and can't get out of the hazard, an unwelcome plot development gets the ship out of the hazard and into some other, more interesting sort of trouble.

Each time the ship is rocked, the crew makes Difficulty 4 Athletics checks; those failing take a die of damage. Also, the GM rolls on the following table to see which spec is degraded by 1:

Die roll	Spec
1	Fire (Dishing It)
2	Fire (Taking It)
3	Maneuver (Dishing It)
4	Maneuver (Taking It)
5	Trickbag (Dishing It)
6	Trickbag (Taking It)

The ship's wrench may then immediately make a Systems Repair test, with a Difficulty equal to that of the hazard +4, on which he may also spend from the ship's Defenses or Output pools. On a success, the degradation is reversed.

ORBIT

Starships can't enter planetary atmospheres, unless you count emergency crash-landings.

Shuttling Down

To go down to a planet to investigate the case of the day, your crew will have to take a shuttle down to the surface. Where possible, you'll land at a spaceport, where your shuttle can be secured and serviced. When landing on an advanced planet with an air traffic control system, you'll have to file a flight plan, just like an ordinary aerial vehicle.

Leaving Your Ship: Safer Than You Think

It is safer to leave your ship unattended in orbit than to staff it with a skeleton crew.

Ships succeeding in stealing or destroying unattended vessels are committing piracy. Many adversaries aren't ready to descend that far into outlawry.

Attempting to board or tow an unattended but non-derelict starship is extremely dangerous. Auto-destruct features, standard on all starships, can be set to blow if any ship attempts to board or tow. Although you may or may not use this setting, the possibility that you have is enough to deter most would-be marauders from stealing or breaking into your ship while you're on the planet's surface.

Your ship's wrench is better than most, so the same can be said of your auto-destruct system. A potential troublemaker can tell this by conducting a simple scan of your ship. You, on the other hand, might be able to defeat the auto-destruct sub-systems of other vessels. You are, after all, among the best in the Bleed. When you succeed with a cripple for boarding or cripple for towing result, you can be assured that you have in the process defeated any auto-destruct features that might be activated. This isn't usually an issue anyway: only suicidally fanatical enemies set auto-destruct while they're on board.

Adversaries thinking of destroying your unattended ship have their own worrisome calculations to make. You may well have set your auto-destruct to shape-charge on hull failure. This protocol causes your ship to explode as a ball of fast-moving shrapnel. Any vessel in your class must fear severe damage, and quite possibly its own destruction, from a shaped destruct.

(Due to energy requirements, this bit of mutually assured destruction is unavailable as a final "screw you" during standard ship combat. You don't have to worry about manned ships blowing you up when you destroy them.)

On a Difficulty 3 Communications Intercept test, your hailer may spoof your ship's comm systems to make it falsely seem that you've set some or all of these auto-destruct protocols. This is as good a deterrent as actually setting them.

During your first session, extremely defensive groups may, even after hearing this justification, be too chickenshit to get out of their ships and behave in the active, courageous manner the genre demands of them. This is where the GM aggressively brings the Drives into play, as she would during any other unseemly wobble into premise rejection.

In the end, Ashen Stars is about fun and interesting stories, and having the crew lose its ship because they were doing what was required to move the plot forward is none of those things. Whether you leave it unattended or not, rest assured that your GM won't break this convention of an entertaining series by permanently hosing your ship away from you. You might lose access to your ship for part of a scenario, but will always find that the central mystery's successful resolution leads to its recovery.

OUT OF YOUR LEAGUE

Laser crews rarely find themselves fighting ships significantly larger than their own. The big ships of the Combine navy rarely venture into the Bleed. Incursions of large alien vessels haven't been reported since before the war. Even so, if any Laser crews find themselves outmatched against surprisingly superior vessels, it will undoubtedly be the player characters. Here are a few notes on the larger vessels they might occasionally encounter.

Specs for these vessels include Goal Modifiers. These add to the number of skirmish points a smaller ship must add to its skirmish total for the two tracks in order to overcome one of these larger vessels.

Another large vessel spec is the Escape Difficulty. By making a toll test against the specified Difficulty, the pilot of a small vessel can, before an engagement begins, make a simple escape from the large vessel without having to enter into combat. Output points can be spent on this test. In the unlikely event that the pilot is unable to afford this, the small vessel must enter combat as usual, accumulating the 6 skirmish points needed for a standard escape.

Small vessels can't successfully tow larger vessels. There's no point in crippling one of them for towing, unless you have a larger vessel waiting nearby to do the hauling job.

PRIVSECS

Bigger passenger vessels and freighters are ill-equipped for battle. They defend themselves with small, combat-ready escort vessels. These vessels are drawn from the same basic ship list used by Lasers. Well-funded shipping fleets retain their own escort squads. Members of these squads are known as privsecs—short for "private security."

Your Laser crew might on occasion be contracted to perform special escort duty. Fleet operators contract out when their own escort squadrons are down for repairs, or to reinforce themselves against expected threats. Start-ups sometimes hire Lasers as a stopgap measure while assembling up their own in-house defense forces.

Laser and escort crews regard one another with a mixture of rivalry and professional camaraderie. Former Lasers often drift into escort work as a safer outlet for their skill sets. Where Lasers look forward to elusive big scores, private security crews settle for reliably flowing, smaller paychecks. To protect their job security they must answer to corporate bosses. Lasers mockingly refer to them as babysitters or Kevins. This latter term derives from their standardized uniforms, laced with hyperkev armor fibers. Their bulky uniforms symbolically convey corporate authority but aren't of much use against weapons more sophisticated than knives or antique ballistic weapons, which is why Lasers don't wear them.

Freighter

	Dishing It	Taking It
Fire	-1	-4
Maneuver	0	0
Override	0	0
Trickbag	-1	1

Output 8
Crew Size 20
Goal Modifier (Escape) 10
Goal Modifier (Engage) 10
Escape Difficulty 3

Passenger Liner

	Dishing It	Taking It
Fire	2	-4
Maneuver	-2	2
Override	2	-4
Trickbag	3	-3

Output 20
Crew Size 100
Passenger Capacity 300
Goal Modifier (Escape) 10
Goal Modifier (Engage) 30
Escape Difficulty 3

Naval Cruiser

This is the standard large patrol cruiser of the Combine. Before the war, these maintained order in the Bleed and explored its mysteries. The high crew size reflects the large number of specialists needed to troubleshoot a wide range of galactic crises.

	Dishing It	Taking It
Fire	3	-3
Maneuver	3	-3
Override	3	-3
Trickbag	3	-3

Output 30
Crew Size 200
Goal Modifier (Escape) 15
Goal Modifier (Engage) 35
Escape Difficulty 6

Naval Dreadnought

These gigantic vessels were rare in the Combine fleet until the Mohilar War broke out. They strip out general problem-solving capacity for sheer military force—hence the smaller crew.

	Dishing It	Taking It
Fire	5	-5
Maneuver	2	-2
Override	5	-5
Trickbag	5	-5

Output 50
Crew Size 100
Goal Modifier (Escape) 20
Goal Modifier (Engage) 45
Escape Difficulty 4

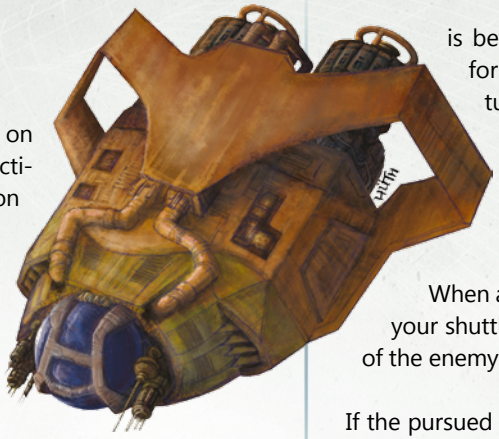
Big Scary Alien Vessel

Apply these specs to the flagship vessel fielded by a terrifyingly equipped, previously unknown alien threat.

	Dishing It	Taking It
Fire	5	-4
Maneuver	6	-6
Override	7	-10
Trickbag	7	-3

Output 30
Crew Size 100
Goal Modifier (Escape) 10
Goal Modifier (Engage) 45
Escape Difficulty 4

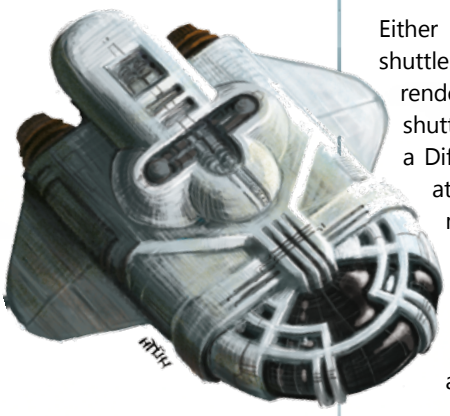
SHUTTLES



Ashen Stars lavishes attention on ships, leaving shuttles as dully practical conveyances that mostly function to get the crew from orbit to surface and vice versa. It may be that overwhelming demand will one day force us to eventually release a sourcebook of back-breaking completeness entitled Shuttles! Shuttles! Shuttles! Until then, here are a few basics to get you by.

Configuration

Shuttles are boxy, unglamorous vehicles into which a crew of up to eight can uncomfortably squeeze. They're about as big as today's minivan. They can fly at sub-light speeds both in space and in atmosphere. Layers of heat shielding cover their hulls. The look of your shuttle probably matches you ship type:



Runner: squarish, functional

Hammer: squat, invariably armed

Rampart: rectangular, heavily shielded

Speeder: sleek, silvery

Hauler: large, ungainly

Porcupine: half-globular

Mandible: beetle-like

Sherlock: rounded, dotted with sensors

Alexandria: terraced side panels

Voodoo: modular, configurable

Junker: cobbled together

Miser: stripped-down

Laser crews mount guns on their shuttles, as do pirates and others whose occupations lead them into unexpected violent action. Most shuttles are unarmed. The typical shuttlegun is a stubby laser cannon mounted above the shuttle's cabin compartment. Occasionally you'll see a row of machine-guns or other oddball weaponry.

You can decide that your shuttle is sharp, blunt, or balanced. A sharp shuttle has an advantage when chasing. A blunt shuttle is better at running away. A balanced shuttle performs acceptably but not spectacularly in both situations. Characterize your shuttle the first time it gets into a pursuit or combat.

Pursuit and Combat

When attempting to chase and outrun another vessel, your shuttle's pilot enters into a contest against the pilot of the enemy shuttle.

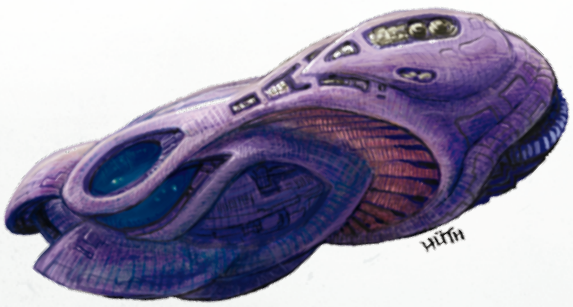
If the pursued vessel wins the contest, it escapes, leaving the pursuer far behind.

If the pursuing vessel wins the contest, it forces the pursued vessel from the sky to a rough or crash-landing. When the pursuit occurs in space, the pursuer drives the pursued into a trap of some kind—where possible, its mothership's tractor beam. The pursued shuttle can then be drawn into the mothership's shuttle bay. The occupants may then surrender or resist and hope to escape. Other outcomes may be possible given the narrative circumstances.

Either way, the winning pilot may specify that the loser's shuttle has, in the course of the pursuit, been damaged and rendered inoperable until repaired. Repairing a damaged shuttle takes a day's time and a Systems Repair test against a Difficulty of 4, or the winning pilot's Helm Control pool at the end of the contest, whichever is greater. Damage may occur on landing, via collision with obstacles, or from weapons fire.

When the Lasers damage an enemy shuttle, it shouldn't show up again as a spaceworthy vessel for at least a day, if it reappears in the episode at all.

If your shuttle is sharp, you impose a levy of 1 on the other vessel when you pursue and take a levy of 1 when you are pursued. If your shuttle is blunt, you take a levy of 1 when pursued and impose a levy of 1 on the other vessel as pursuer.



TECH

Equip your characters with the gear and personal enhancements described in this chapter.

Costs for Cybernetic Enhancements and Viroware are described in their respective sections. The costs of other items factor into the game as follows:

If a number appears as the Cost entry for an item, that is its cost in bigcreds. It can be acquired either at the start of play from your initial budget, or purchased during downtime or in mid-episode for the specified amounts.

If a cost is given as standard, this equipment is basic to any Laser crew. You already have this item on board your ship. If desired, you have one per crew member, plus a few spares. And you can trivially replace them if they're stolen, confiscated or damaged. The occasional episode might separate you from your gear, for example if you are captured or land on a weird planet where electronic items don't work. Except when confronted with these temporary plot devices, your access to these items is always assured.

Where a Preparedness Difficulty is given for an item, a crew member must make a successful test of Preparedness against that Difficulty to have that item on hand. After a successful test, that item is always in storage aboard your ship. You may still have to test Preparedness to have it handy on the spur of the moment while groundside. It's always available if you actively specify that you're taking it with you before you leave the ship, or if you go back to the ship to get it.

BUYING OFF PREPAREDNESS DIFFICULTIES

The Preparedness Difficulty rule allows us to present certain items that not all groups will automatically own, without having to get into micro-cred accounting for small-ticket purchases.

Even though Preparedness pool points are a renewable resource and bigcreds are not, some players suffer a logic circuit fry-out when they discover that the game doesn't allow them to pay cash for certain items. If this becomes an issue, allow them to buy everything item in the book with a Preparedness difficulty for a total payout of 2 bigcreds. This is not a good deal, but if it makes 'em happy, it makes 'em happy.

COMMUNICATIONS

Lasers use comm devices to cut through these layers of misinformation to find the truth. They depend on them to maintain the constant communication with teammates that is paramount to rapid and cost-efficient mission completion.

Disguiser

This class of devices exists to foil the efforts of other communications tech. These are less essential pieces of gear for Lasers as items you'll find in the hands of well-equipped adversaries.

Personal Bluffer

Cost: Preparedness 6

This small chip, which can attached to a piece of jewelry or another piece of technology, emits a beam that interferes with video and audio recording devices. It reduces to a pixelated mess the input of stationary cameras, headsets, and other surveillance tech.

Transmit Modder

Cost: 2

This technology, found either as part of a ship's comms console or as a plug-in to a handheld device, allows the user to break into a transmission and alter its content in real time. A skilled operator is required to manipulate its dizzyingly complex set of simulation algorithms to realistically compensate for the actions of the subjects.

A PC using the device tests Communications Intercept against a Difficulty ranging from 4-8, depending on the extent of the modification required. Sample Difficulties are as follows:

- 4: changing a stray word in an audio-only transmission
- 5: altering a few words, and lip movements to match, in audio-video output
- 5: extensively altering prerecorded audio-video
- 6: slightly altering key visual activities of beings and devices already present in the source video
- 7: significantly altering key visual activities of beings and devices already present in the source video; adding stationary visual elements not present in source
- 8: inserting a new visual-auditory element not present in source, such as an entirely absent person, ship, person or entity
- 9: inserting many such elements not present in source transmission, such as a large group of people or a formation of ships

On a failed test, glitches in the alteration are evident even to an untrained viewer.

When gathering clues, PCs can detect false material in modded transmissions with the Imaging ability. Where the consequences of spotting modded elements in a transmission are more like a Sense Trouble situation than an information-gathering one, the character might instead make a Difficulty 4 Communications Intercept test. For example, a third party might disguise the communications of a heavily armed vessel in order to provoke you to fire on them.

Headsets

Cost: standard

Headsets allow up to a dozen people to exchange video and audio transmissions in real time. A curved holoscreen hovers at eye level, permitting you to see what the tiny cameras on your teammates' headsets are seeing. A micro-thin wire transmits audio. Ultra-sensitive microphones pick up your lowest

Interstellar Communications

Before the war, Combine residents took reliable, all-but-instantaneous interstellar communications for granted. A network of communications beacons relays routed compressed audio-visual signals through translight corridors.

The Mohilar and their durugh allies heavily targeted the relay network early in the conflict. Rebuilding efforts have been patchy. In the Bleed, less than 15% of the beacons have been replaced or restored to full functionality. In Combine space, the network has reached a capacity of 45%.

Even when a viable network of beacons connects two interstellar destinations, transmission reliability remains dodgy. Meson shrapnel in the warp corridors distorts, delays or entirely disrupts signals between beacons.

The practical result of this is that your hailer will sometimes be able to establish a two-way signal to another solar system in the Bleed, and sometimes not. Under extremely favorable conditions it may even be possible to connect to the core Combine worlds.

Whatever the distances, it is easier to pick up a one-way transmission than to maintain two-way communications.

When communication with another world adds interest to the story, for example by adding a satisfying degree of challenge to the central mystery, your hailer succeeds in making the connection, without having to make a test.

When it would detract from the story, for example by making the central mystery too easy to solve or allowing the Lasers to seek outside aid when they should be succeeding on their own, no connection is possible.

Where the GM can see potentially entertaining story options emerging from either possibility, establishing an interstellar comms connection requires a Difficulty 4 Communications Intercept test.

sotto voce utterance while intelligently filtering disruptive background noise. You manipulate its controls and settings with nearly imperceptible head motions. With a flick of your neck, you fire up or close the screen. You can zoom in or out and, through a connection to your ship's computer, conduct analysis of what you see with the Imaging ability.

Models of headset preferred by Lasers incorporate tethers; see below.

Expect to be relieved of your headsets, or subjected to jamming technologies, when entering sensitive areas. Privacy regulations in certain jurisdictions may also preclude their use.

The spatial anomaly known as the ashen stars effect has been known to interfere with communications frequencies, including headset transmissions. In other words, certain fun mysteries don't work when characters remain in constant contact. GMs are within their rights to contrive to restrict the use of headsets when needed. They should do this sparingly: the contrivance starts to glare if used too often.

Translators

Widespread use of translation devices renders differences of language mostly invisible throughout the Bleed.

Rosetta Chip

Cost: standard

Like anyone who moves between worlds and cultures, you have a tiny earpiece surgically implanted in your ear. It translates alien languages so automatically that its users tend to forget it's even in place. Translation algorithms have their quirks. Certain races seem to speak with distinct accents, for example. Aside from that, you'd never know there was another language in the galaxy other than Comblish. Or Rrk-Rrk, or whatever your mother tongue might happen to be.

Unireader

Cost: standard

Though often found as a standalone device looking like a high-tech set of spectacles, your unireader is probably a plug-in that interfaces with your headset. It allows you to decode any documented written script. Through its lenses or holographic screen display, the words appear to you in Comblish. You can always switch to a natural view if for some reason you need to examine the actual letter or glyph forms.

CYBERNETIC ENHANCEMENTS

Until the war, cultural predisposition rather than technical limitations prevented overt cybernetic add-ons to the humanoid form from becoming prevalent throughout Combine space. Only when rendered desperate by the Mohilar war did interstellar society ease its long-held prejudice against extensive technological body modification. Although some planets remain staunchly anti-bodmod, surgically installed devices now grow increasingly ubiquitous. Acceptance for them is higher in the Bleed than in any other Combine sector.

When you purchase a new cyberware kit during play, another PC must oversee a successful round of surgery. This takes place during downtime. The Difficulty of the other PCs' Medic test is 4, or your total current number of cyber enhancements, whichever is greater. On an unsuccessful attempt, you must wait until the next downtime for another try. You do not lose the Initial Install Cost. You are not required to pay Upkeep until you have undergone successful surgery.

To maintain the use of cybernetic enhancements once installed, you must undergo periodic drug treatments.

COMBLISH

The language your characters speak by default is Comblish, an evolution of Earth's English language, augmented by an extensive raid on the vocabularies of the balla and tavak. The clicking, tonal language of the Kch-thk has had little influence on it. Durugh words have begun to creep in now that they've switched allegiances and joined the Combine. The Vas Mal are new to ordinary speech and have adopted Comblish wholesale. Kch-thk and durugh characters may still be speaking their native tongues, though no one notices, thanks to universal translation.

The original draft of this game was entirely in Comblish, but no one could read it. We translated it back into a 21st century English vernacular, leaving in the occasional slang term for flavor.

Though referred to as drugs, these ingested substances, called stimmers, are actually viro-active. They regenerate damaged tissues and restore nerve endings connecting your brain to the wiring of your installed tech. If you fail to pay your upkeep for an enhancement, it stops working. Also, your Health pool drops by 1 at the beginning of each case, and every successful attack against you gets a +1 damage bonus. These penalties are not cumulative; they remain the same no matter how many of your cybernetic components have gone offline.

Aidkitter

Install Cost: 2

Upkeep Cost: 1

At will, you can open an artificial orifice in either the left or right side of your neck (as chosen by you at the time of installation). The orifice exposes a pseudo-cartilaginous tube constructed from vat-grown bio-fibers, which you can withdraw and inject into the bloodstream of another sentient humanoid. The recipient must be willing and relaxed, or restrained or unconscious.

You may transfer any number of points from your Health pool into the recipient's.

Amper

Install Cost: 1

Upkeep Cost: 1

Microcapsules implanted in your brain's synaptic cleft collect spare molecules of dopamine and naturally occurring amphetamines for concentrated release at will. You undergo a temporary boost of energy and concentration now, paying for it with a crash later.

Once per episode, you may activate your Amper, adding a number of points chosen by you to any combination of your investigative or general pools. Choose the destination pools at the time of activation. You may only add to pools you have ratings in. You may not increase a pool above its rating.

Sometime during the subsequent interval, at an appropriately dramatic moment chosen by the GM, you pay the piper, losing a number of Health points. Roll a die. On an even result, you lose 4 Health. On an odd result, you lose Health equal to the number of points you refreshed when using the Amper.

At the GM's discretion, you can't activate your Amper when the group is within an half hour or so of wrapping up the episode. If you need an explanation for this, the exciting events so far have left no extra dopamine for the Amper's microcapsules to collect.

Autonomic Avenger

Install Cost: 2

Upkeep Cost: 1

When you fail a Consciousness roll during a Scuffling contest, an array of automatic systems kick in, allowing you to deal one or more devastating blows to your opponent even after you've passed out. A sophisticated computer targeting system takes over from your perceptual apparatus to direct your blows. A flood of biocellular energy floods your muscles, giving them the artificial strength needed to pour kinetic energy into the strike.

Start by rolling a die. On a result of 5 or less, you lash out at your opponent once. On a 6, you lash out twice, the second attempt immediately following the other.

Your Scuffling pool increases by 6. You must spend all of these points on the one or two Scuffling attempts permitted you by the Autonomic Avenger. When you're allowed two attempts, you can split the points up any way you like.

The Damage Modifier of these attacks increases by 2. These add to any other Modifiers you may have, from weapons or other sources.

These attempts occur right away, never mind your place in the initiative rank. Once you've made them, you slump to the ground and are then subject to the usual penalties of being hurt, seriously wounded, or dead.

When your first blow seriously wounds an opponent or causes it to lose consciousness, the targeting algorithms prevent you from delivering a second blow. If you are still owed a second blow and another enemy combatant stands within 2m of you, you lurch over to make it the target of this additional attack attempt.

If you don't make a second blow, and you allocated both points from your standard Scuffling pool and the additional points from the Avenger, the Avenger points are spent first, possibly leaving you some of your original points.

Bad Liver

Install Cost: 1

Upkeep Cost: 0

A fleet of nanotech helpers lodged in your liver and stomach protect you from all ingested toxins and pathogens. You are immune to food poisoning and can gargle arsenic solution with impunity. When consuming alcohol or other intoxicants that enter the bloodstream through your digestive system, you can elect to block their entry into your system. Once you choose to become intoxicated, the bad liver can't reverse the effect.

Berserker

Install Cost: 3

Upkeep Cost: 1

Nanofibers threaded throughout your nervous system convert pain into muscle energy. Whenever you lose 4 or more points from your Health pool in a single blow, your Scuffling pool gains an equivalent number of points.

When you are hurt for the first time during a fight, you gain an additional 4 Scuffling points, and a +1 bonus to your Scuffling damage.

When you are injured for the first time during a fight, you may ignore all of the effects of being hurt or injured for the duration of the combat. You gain an additional 4 Scuffling points and another +1damage bonus, which combines with the previous one.

If you fall below -12 Health during a fight, you remain in the action for one more round before dropping dead. For this round you gain 8 Scuffling and +2 damage bonus, which combines with any previous bonus. Then you die.

Biofueler

Install Cost: 4

Upkeep Cost: 1

Through an interface coil attached to your intestinal tract, you can transfer energy produced by your body through phosphorylation into the ship's power grid. Through a process called hyper-cubing, the input received by the ship is many times greater than the output from your cells.

For each Health point you spend, the ship's Output pool increases by 1. For every 2 Athletics points you spend, the ship's Output pool increases by 1.

In spending from your Health pool, you may decrease it below 0, becoming hurt, injured or dead. That last choice allows for heroic (and permanent) self-sacrifice in times of extreme need.

Breadbox

Install Cost: 1

Upkeep Cost: 0

You have a secret compartment in your abdomen. At will, you can retract the wall of flesh, exposing the ceramic-alloy compartment door. Its capacity is 4 cm x 12 cm x 12 cm. The compartment door locks securely; once activated, it can only be opened on a mental command by you. However, if you're held captive, someone determined to get at its contents can always have the whole thing surgically removed and then blasted open.

Dataloader

Install Cost: 3

Upkeep Cost: 0

An interface jack implanted your thumb allows you to temporarily download massive quantities of data onto microscopic storage chips implanted in your cerebellum.

While aboard your ship, you can spend any number of its Output points. These become a free-floating pool of points you can use to make spends from any of your Academic abilities. This pool empties at the end of the episode.

Dopamine Redirector

Install Cost: 2

Upkeep Cost: 1

This kit consists of a neural port in your neck that connects a special neurotransmitter cable to your disruption pistol. Whenever you successfully hit an opponent while firing your weapon in non-lethal mode, the neurochemical rewards your brain gives you for the successful action are converted into enhanced pre-frontal cortex function.

Once per episode, you may add a number of points equal to the damage done by your hit against a single opponent to the pools of any one academic or technical investigative ability, or to your Enhancement Integration ability.

Because you only get a dopamine reward from emotionally fraught situations, you can only use the dopamine redirector effect after hitting a legitimate opponent who means to knock you out or kill you in combat. You can never prime it by firing at your colleagues or innocent bystanders.

Episealant

Install Cost: 1+ x, an additional number of bigcreds selected by you at time of installation.

Upkeep Cost: 2

Microscopic chips dotted throughout your skin and wired into your nervous system detect the presence of radiation, extreme temperatures, nerve gases, and an array of immediately apparent skin-contact toxins. When they register a positive reading—or on a mental command from you—they cause a series of implants stationed throughout your body to release a sealing film. In a matter of instants, the film covers your entire body, including its orifices. The film, which even covers the surface of your eyes, is transparent. It acts as a temporary substitute for a space or hazmat suit.

It protects you from temperatures as low as the ambient temperature of space, -270ºC. Its cold-sensing function causes it to activate when it detects a temperature as low as -9ºC, the threshold for frostbite.

(If your GM prefers her space opera unrealistic but true to genre, the body immediately starts to freeze when exposed to the vacuum of space. If she goes for the realistic option, cold protection doesn't factor into space exposure but remains plenty useful in various other tough environments. See "Vacuum," p. 81.)

When exposed to the vacuum of space, you lose only 1 point from your Health pool, if you are able to activate your episealant immediately.

Episealant protects you from ambient temperatures high enough to give you heatstroke, but does not protect you from open flames, proximity to volcanoes, or falling into a sun.

The episealant film lasts for 10x minutes.

If you are still in contact with the hazard when the film dissolves, you then start to suffer whatever ill effects it causes.

Without an internal rebreather, with which it is designed to perfectly interface, you'll suffocate (p. 81).

Frequency Transducer

Install Cost: 1

Upkeep Cost: 1

This circular polyplastic device, with a 1cm diameter, is installed over your left ventricle (or in the case of kch-thk, along the dorsal ventricle near the junction between thorax and abdomen).

When you are struck by disruption fire from a weapon set on lethal mode, you instead react as if struck by a weapon set on non-lethal mode.

The transducer is always active by default. You can toggle it on or off by spending 2 Health points.

Handgun
Install Cost: 4

Upkeep Cost: 1

Your right or left hand (your choice) has been removed and replaced with a highly realistic prosthetic. With a flex of your forearm muscle, you can command it to reconfigure itself into a disruption pistol. Your hand passes as normal flesh under ordinary visual inspection but will be revealed as a disguised gun to scanning devices.

If you fire your disruption pistol immediately after revealing it, you get a +2 bonus on that Shooting test.

Your handgun may be enhanced to add a pherotracker (below) and/or any number of disruption accessories (p. 144).

When you fail to pay your handgun's upkeep, you may still use the prosthetic hand as you would a natural one but can no longer transform it into a gun.

Headdisk
Install Cost: 2

Upkeep Cost: 1

A storage drive implanted on your brain connects to your aural and visual sensory apparatuses. At will, you can switch it to record mode, making an audio or visual record of all you see and hear. A small port concealed at the base of your neck allows you to beam the recorded content as a file to any computer, including your ship's system.

Privacy regulations in most jurisdictions require you to notify subjects when you're recording them. These rules are regularly flouted but may trip you up when vidfiles you submit as evidence are rejected as inadmissible. Using headdisk output to release embarrassing footage of those you encounter may harm your Reputation.

Headlight
Install Cost: 1

Upkeep Cost: 1

You have a meglight (p.144) installed in your forehead. A flap of realistic synthetic skin covers a housing compartment installed in the front of your skull. On a mental command, the skin withdraws and the light, secured behind a layer of transparent poly-reinforced plastic, comes into view. You can modulate the intensity and scope of the light beam, as you would with a non-cybernetic meglight.

Honeybee
Initial Therapy Cost: 3

Upkeep Cost: 2

The honeybee implant is a fibroid mass of artificial cartilaginous tissue installed in the junction connecting the anterior and posterior sections of your frontal lobe. (Although seemingly biological, this still follows the rules of cyberware.) In response to a conscious visualization, it floods your brain cells with recursively structured sugar molecules. This allows your synapses to fire at an increased rate, at the cost of a crash later on.

Once per episode, you may activate your honeybee, choosing either the academic or technical category of investigative abilities. Until the end of the interval, you gain a boost on all abilities in your chosen category. When the interval concludes, you then are unable to make investigative spends of any kind for one interval.

Use of the honeybee in the final interval of an episode does not cost you your investigative spends at the start of the subsequent episode.

Interface Transducer
Install Cost: 1

Upkeep Cost: 2

A network of nanoscopic wires installed beneath your scalp emits low-frequency interference preventing the use of other cybernetic enhancements within 20m of you, including your own other enhancements.

Cybe characters may ignore this effect by winning a showdown test against you. They pit their Enhancement Integration ability against yours (if you are also a Cybe) or (if not) against a die roll on which you can spend any number of Interpersonal investigative points, as you would normally spend general points in a test.

Activate the transducer by spending points from any investigative ability or abilities. The effect lasts for a number of minutes equal to the number of points spent.

Internal Headset
Install Cost: 2

Upkeep Cost: 1

You have a headset (p. 125) installed in your skull. The chief advantage of this is that it can never be taken away from you. Sophisticated captors may deactivate it with the use of a snower (p. 135).

Internal Rebreather

Install Cost: 1 + x, an additional number of bigcreds selected by you

Upkeep Cost: 1

Thanks to nanite scrubbers implanted the walls of your lungs, your body can produce its own oxygen. When activated, you can operate in environments with little or no oxygen as if you were wearing a breathing apparatus. You can use it underwater and in space (although you'll still need an environment suit to protect you from the extreme cold, radiation and like hazards). By shutting down your normal breathing, you ignore airborne toxins and pathogens.

You can turn on your internal rebreather to block the effects of intoxicating or mood-altering substances that enter the bloodstream through the lungs.

After 10x minutes of continuous use, the scrubbers run out of internal energy and start to break down the surrounding cells to keep themselves going. For each additional minute of use, you lose 1 point from your Health pool.

Mesodermal Jumper

Install Cost: 3

Upkeep Cost: 1

Pseudo-cartilagenous fibers released from your pectoral muscles attach on biomorphic pads to the pectorals of a willing recipient.

Once per interval, you can transfer any number of pool points from your Athletics, Scuffling, and/or Shooting to one of the following recipient pools: Athletics, Scuffling, or Shooting. The donating pool need not correspond to the receiving pool. You can transfer from Shooting to Shooting, or to Athletics to Shooting, and so on,.

Motobooster

Install Cost: 3

Upkeep Cost: 1

Your leg bones have been reinforced with titanium, your leg muscles with carbon fiber. A motor installed over your pelvis powers these enhanced limbs, increasing your running speed.

When fleeing or pursuing on foot, your Difficulty decreases by 2.

In a Scuffling contest, your damage modifier when kicking is 0 (better than the usual -1).

Neurojolter

Install Cost: 3

Upkeep Cost: 1

Nanoscopic wires inside your fingertips transmit electrochemical energy from your own nervous system into the brain of a willing recipient. To use the neurojolter, you must be able to touch the bare temples of the recipient with your bare fingers.

Once per interval, you can transfer any number of pool points from your Battle Console, Communications Intercept, Medic, Naval Tactics, Public Relations, Sense Trouble, Shooting, Systems Design, Systems Repair and/or Viro Manipulation pools to one of the recipient's pools. The recipient ability must appear on the above list. The recipient must have at least 1 point in the chosen pool before you begin.

As you conduct the transfer, make a Difficulty 4 Medic test. The transfer still works if you fail, but the recipient suffers an intense and lingering migraine that subtracts 3 points from her Health pool.

Nightvision

Install Cost: 1

Upkeep Cost: 1

Ocular implants allow you to see in the dark as through a nightvision scope.

Ocular Input Analyzer

Install Cost: 4

Upkeep Cost: 1

A processor chip and nanite motherboard attached to your brain's optic tract superimposes a computerized readout over everything you see. You can turn this on and off at will.

When it is on, you can perform Bio Signature and Energy Signature readings without a scanner.

The OIA also includes a targeting overlay. When engaged when using the Shooting ability, the Hit Thresholds of your targets decrease by 1 (for your attacks only).

Pherotracker

Install Cost: 2

Upkeep Cost: 1

The cybernetic portion of a pherotracker consists of an input port installed in your neck. This allows you to connect your brain to your disruption pistol via a neurosynthetic cable. When you strike a target with a non-lethal disruption blast, his genetic information is fed back to you through the beam. You can then, for the remainder of the episode, gauge your approximate proximity to the subject. When you are within 500m of the subject, you can pinpoint his position. If the distance between you exceeds 500m, you can tell whether any movement takes you closer toward him or further away. A tingling sensation in your backbrain intensifies when you close the distance, sort of like a cybernetic version of hotter-colder-hotter-colder.

The Pherotracker is a hybrid enhancement, meaning that it has both a cybernetic and a viroware component. It is vulnerable to effects that target both cybernetic and viroware enhancements.

Phosphorolytic Battery

Install Cost: 4

Upkeep Cost: 0

Through a high density power cable connecting your heart to a ship's engines, you can absorb energy from its systems and convert it into muscle power.

You may transfer points from your ship's Output pool to your Athletics, Health, and/or Scuffling pools.

Your cable interface is tuned only to your ship, preventing you from absorbing power from other ships or energy-producing devices.

Popclaws

Install Cost: 4

Upkeep Cost: 1

You've implanted retractable three-inch carbon-fiber claws in the finger tips of your right or left hand. The choice typically corresponds to your handedness.

When you pop your claws out, your damage when Scuffling increases by 2.

Popclaws freak people out. When you use them or are thought to have used them in a questionable killing, the Difficulty of the Public Relations test to preserve your crew's Reputation increases by 2. The cost of any interpersonal spends you make with your claws popped increases by 1.

If you fail to pay the upkeep, the claws retract and can't be popped.

You can't install popclaws in a handgun implant (above). If you want both, have the popclaws installed in one hand and the handgun on the other wrist.

Schrodinger Lobe

Install Cost: 3

Upkeep Cost: 1

This vas mal-designed crystal is installed in the cerebellum. By means they are presently unable to articulate to outsiders, it allows you to unconsciously manipulate the probable outcomes of your actions.

After any successful test of Athletics, Battle Console, Filch, Helm Control, Infiltration, Phase, Scuffling, Shooting, or Shuttle Craft, you may spend 1 Health to increase your margin by 2.

X-Gravs

Install Cost: 3

Upkeep Cost: 1

Tiny pads installed on the soles of your feet allow you to generate a temporary anti-gravity field, allowing you to levitate for brief distances. They last long enough to make an unassisted vertical climb of 10m. If you're leaping a fence or other obstacle, your x-gravs get you 5m up and 5m back down again. They take one minute to recharge after use, forcing you to make moves in excess of 10m in a series of hops.

Once per episode, you may use your x-gravs at no cost. Subsequent uses in the same episode cost you 2 Athletics apiece.

X-gravs are as close as the 25th century comes to a safe, reliable jetpack.

MEDICAL AND FORENSIC GEAR

Many components of the 25th century first aid kit are surprisingly unchanged from its 21st century counterpart. Along with the bandages, pain relievers and medications that have been part of the medic's equipment for centuries, you'll find the following high-tech remedies.

Bioprocess Suspender

Cost: standard

A shot of this viral serum, administered with an osmotic puncher (below) arrests the condition of a dead body, preventing it from undergoing further decomposition. It works on biological persons or on animals. Any insects, parasites, microbes or other biological scavengers feeding on the corpse are killed and also preserved in their current condition as of the administration of the bioprocess suspender.

Espresser

Cost: standard

This chrome-encased device, vaguely resembling the top half of a 21st century stapler, delivers a tiny electric jolt when applied to the skin of any humanoid organism. (It works on many animals, too.) The jolt stimulates the patient's nervous system, causing an immediate awakening from sleep or unconsciousness caused by non-lethal disruption damage. If the recipient is out as the result of a failed Unconsciousness roll caused by non-lethal disruption damage, she wakes up with 1 point in her Health pool. For up to half an hour afterwards, the subject feels highly stimulated, as if under the effect of four or five espresso shots—hence the name. The espresser exerts no effect on subjects who are already conscious when the jolt is applied.

Osmotic Puncher

Cost: standard

This device looks like a pen attached to a serum bottle. This futuristic equivalent of a hypodermic needle sends vaccines and serums, including viral treatments, directly into the bloodstream without breaking the skin. The puncher is most often placed on the patient's upper arm. Any thick muscle will do.

The osmotic puncher leaves a tiny depression which can be detected on a Forensic Anthropology examination. On a living subject, the site remains visible for about twenty-four hours. If the individual dies during this period, the puncher depression remains visible until tissue putrefaction sets in (at about the four-day mark). If the body is preserved the mark remains visible indefinitely.

PROTECTIVE GEAR

Whenever disruptive or dangerous technologies arrive on the scene, defensive measures are soon to follow. These devices either protect you from the gear described elsewhere in this chapter, or against the long-known hazards of space travel.

Deflector

Cost: 1

A device the size of a ping-pong ball emits a field of inertia-dampening energy. Gyroscopic sensors shut it on and off throughout any hand-to-hand fight. When you attack, the inertia effect cuts out. When you're hit, it switches on, deflecting some of the blow's force.

Your Hit Threshold increases by 1.

Foiler

Cost: standard

A foiler is a small translucent strip installed on the roof of your mouth. It renders you immune to the effects of electro-muscular disruption weapons, such as the 21st century taser. Foilers are more than just standard effectuator equipment. They're ubiquitous throughout the Bleed, and have been ever since the Combine first encountered the durugh. The foiler thwarts a then-common Durugh weapon. Kids get their first foilers as a part of regular dental treatment.

Holomask

Cost: 4

The holomask is a lightweight mesh of artificial fibers worn over one's clothes. When activated, it produces an obscuring hologram that follows your movements, effectively altering your appearance. It can make you look like any humanoid, even changing your apparent height and weight. The hologram is entirely immaterial and illusionary, and does not convey any of the physical advantages (or drawbacks) of your change in form.

Your assumed form appears credibly real from a distance. Up close, any trained eye can spot the telltale glitches and defects in a holomask display.

If you have the Imaging ability, you can spot a holomask at a distance of 4m or less. On a 1-point spend, you can spot them within 10m; on a 2-point spend, at any visual distance. The spends are not required, regardless of distance, when the presence of a holomasked individual constitutes a core clue. Holo Imaging can also identify a holomask captured by a visual recording medium.

Sense Trouble may also reveal the presence of a holomask, especially when it has no bearing on the mission's central mystery.

Holomasks are used more to conceal than to disguise. You may be able to see that the kch-thk you seem to be negotiating with is a projected image, but you can't tell who's really underneath. Criminals and terrorists often wear them to conceal their identities while performing operations. Think of them as the equivalent of the rubber masks favored by 21st century bank robbers.

A disruption accessory, the revealer (p. 144), pierces the device's holographic veil.

Pheroalarm

Cost: Preparedness 4

This device emits an visual and/or auditory alarm when a viroware user emits an enhanced pheromone within 50m. It can be configured to sit in a standalone device about the size of a salt-shaker, or set into a jewelry piece, most often a ring or earring. Lasers often clip badge-like pherolarms to their uniforms. The alarm may sound directly or give off a flashing light, or feed an otherwise inaudible signal to the user's headset. Alarm output can be streamed to any number of linked headsets.

A user in physical contact with the pheroalarm can then use Energy Signatures to pinpoint the individual emitting the pheromone. This might be free, if it advances the central mystery, or require a spend, if it's part of a personal arc or other sub-plot.

Pheroblocker

Cost: 2

This device performs as a pheroalarm and matches its physical characteristics. It also emits a harmonizing brainwave pattern granting all humanoids within 50m immunity to the effects of pheromone-based viroware effects. Supporting characters activate pheroblockers as the plot requires. PCs spend 1 Energy Signatures point to keep the canceling effect active for one interval.

Pherodetector

Cost: Preparedness 4

This device looks like a hypodermic needle and syringe with attached electronic readout. It is used to draw and test blood samples for signs of pheromone influence. When used by someone with the Forensic Anthropology ability, it reveals whether the subject has been exposed to viroware-enhanced pheromones during the last 24 hours. If the subject succumbed to influences he might otherwise have resisted, the readout may reveal that as well—possibly pinpointing the time of exposure, give or take thirty minutes.

In most jurisdictions pherodetector readouts can be used as mitigating evidence for defendants who have committed crimes after exposure to pheromone-activating viroware enhancements.

Popper

Cost: standard (your first 3 poppers); 1 for each subsequent set of 3

This consumable device channels sudden bursts of energy into a micro-generated quantum flux dimension. Most often worn on an armband, it looks like a futuristic version of a blue bicycle light encased in a shiny chrome housing.

When you are struck by NLD energy, the device neutralizes its effects. Your Hit Threshold remains as is; you are considered not to have been hit by NLD fire.

Poppers burn out after a single use. A burned-out popper can't be repaired, only replaced.

Poppers can't be turned off.

You can effectively wear up to three poppers. Only one popper activates per NLD hit.

If you have more than three on you when you are hit by NLD fire, all of your poppers burn out at once, and the NLD effects are not neutralized.

The high price tag for poppers means that most of the supporting characters you encounter will not be wearing them.

Snower
Cost: Preparedness 5 (shackle version Preparedness 7)

This small device, when attached to a piece of communications equipment, prevents it from broadcasting. Cybernetically implanted comm devices are deactivated with a snower unit built into a shackle or damage-resistant armband.

Spacesuit
Cost: standard

Environmental suits to protect humanoids from space's cold vacuum are little changed from those developed by each culture during its initial jaunt to the stars. 25th century synthetic materials make them lighter and more durable than the original designs, but the basics are still in place: helmet, padded body suit, and breather system. Attachments and modifications make them suitable either for spacewalks, or for groundbound activities on planets without atmospheres, or whose air is too toxic to safely breathe. Your ship's lockers contain plenty of each.

Most activities with a physical component become harder when wearing a spacesuit. Add 2 to the Difficulty of most Athletics, Battle Console, Communications Intercept, Ground Craft, Helm Control, Scuffling, Shooting, Shuttle Craft, or Systems Repair tests. Add 4 to most Filch, Infiltration, Medic or Viro Manipulation tests.

INVESTIGATIVE TECH

Meglight
Cost: standard

A meglight is a 25th century flashlight. The light is housed in a chrome cylinder, typically 14 cm long, with a 6 cm radius. A dial-less touch surface allows the user to adjust the beam's scope and intensity. Pattern detecting sensors analyze movements in the beam. When a living creature (or something that moves like one) appears in the beam, the meglight alters its intensity to prevent eye damage. Otherwise, it is capable of emitting a light beam bright enough to be seen from orbit. On the other end of the intensity scale, it can fill a room with diffuse, barely perceptible light. You can also adjust the color of the light: it can be white, contain any of the hues of the visible spectrum, or emit either ultra-violet or infra-red.

Meglight Whacker
Cost: standard

This is a meglight mounted in a baton. Its beam is as fully manipulable as the standard meglight, with the touch controls located in the handle of the baton. Like an ordinary baton, its damage modifier is -1.

Surveillance Equipment

Lasers make extensive use of surveillance equipment but must balance their utility against the possibility that privacy violations will render their evidence inadmissible. Cases botched in this manner may lead to fee deductions, or damage to Reputations.

Snails
Cost: standard

Snails are holographic recording devices, housed in polyplastic casings that often resemble spiral shells. They record audio and video data. For holographic reproduction, you need to place at least three snails at specific angles in the location you're placing under surveillance. Blind spots where the snails fail to triangulate may leave empty or distorted spaces in your later holographic recreation. The more snails you place, the more accurate and highly resolved the holographic image—and the great the chance of their discovery.

In addition to the standard shell-shaped device, you can acquire snails disguised to look like everyday objects. These require Preparedness tests. Base Difficulty is 4, for common items such as writing implements, picture frames, and desk ornaments. Exotic shapes call for higher Difficulties. If an item has another use besides housing a snail, its Preparedness Difficulty is that of the standard item, plus at least another 4 for the snail component.

Alternately, you can test Preparedness to have the standard item on hand, then have a character test Systems Design against a Difficulty of 4 to install a snail into it. The installing character must also have the Holo Surveillance ability.

Holo Layout

Cost: standard

A holo layout is the playback mechanism for any holographic recording, or holo. It consists of a console mechanism, about the size of an early 21st century netbook, which includes the stored media and a wireless broadcaster. Three or more chrome pole-like structures are arranged in a large empty space. Many Laser crews use their cargo bays for this purpose. To stage a full-scale recreation of the recorded events, you need as much floorspace as the original scene. Alternately, you can downscale the holo playback so that miniature versions of the participants appear on a shrunken staging area. (This is sometimes useful even when you do have the space, for example when plotting spatial relationships between participants.) You can also create an enlarged version, though this is less useful. You can zoom in on areas of the recording as you replay them to pick out details.

Court buildings and other facilities making regular use of holo layouts reserve empty, gridded rooms for holo playback. Instead of using projection pylons, they embed the holo emitters in their walls.

Tethers

Cost: standard

Your main tool as you unravel the mysteries of the Bleed is your tether, a virtual handheld device consisting of an interactive holographic display. Lasers fully integrate their tethers with their headsets. Others carry palm-sized hyperpolymer cubes with a lens on one end and a web of nanofiber circuitry inside. Emitting devices might also appear in the form of belt buckles, headbands, or heavy bracelets.

The tether display is a curved screen floating in empty air. You can shrink, enlarge or reshape the screen as you require. Think of it as a non-physical computer screen operated by gesture. Your tether allows you to take energy readings and perform an array of scientific tests on the spot. Any technical ability is in some way enabled by it. Deprived of your tether, you may have trouble performing analysis on site.

The tether is the omnipresent device of 25th century technology. Nearly everyone in the Bleed carries one. Not using a tether marks you as a radical, a technophobe, a lunatic, a non-Combine alien, an outcast, or some combination thereof.

Mores and Legalities of Pheromone Manipulation

Viroware enhancements that use pheromone emissions to influence subjects' behavior were illegal throughout Combine space until recently. For centuries they were known as a Durugh invention, often used against Combine officers. They were legalized by the Combine as part of the deal that formalized the Durugh defection to its side during the Mohilar war. Entrenched prejudices against the use of pheromone effects die hard. Hardcore Combinists, regarding them as inherently coercive, hope for a reinstatement of the ban. Racial tensions play into attitudes toward them. The durugh are blamed for destabilizing Combine values by insisting on their legalization. Negative stereotypes about durugh portray them as sneaky manipulators who can only get their way underhandedly, by chemically altering the people they deal with. Within durugh culture, their use is associated with reactionary, pro-Imperial elements. Many progressive durugh refuse to use them, and are as radical in their condemnation of the enhancements as anyone. Meanwhile, they have been enthusiastically taken up by cybes and humans. Cybes find it philosophically attractive to reduce all interactions to an interplay of chemicals. Humans adapt to their use as they adapt to everything—hungrily. Pheroware use, as it is sometimes called, is now endemic in the Bleed.

Pheromone influence doesn't create new motivations but does override self-control. People who commit crimes while under the influence of pheroware may claim it as a mitigating factor. Successful defenses may acquit them entirely or reduce their sentences. To complicate matters, suspects have been known to arrange for virowared accomplices to dose them with pheromones before going off to perform already-planned criminal acts. If they get caught, they plead not guilty by reason of neurochemical influence.

Closing cases with the aid of pheroware may impair your Reputation. Even if seen as acceptable for civilian use, most Bleeders regard its use by Lasers as unfairly coercive or flat-out skeevy.

Viroware

Genetic alterations induced by engineered viruses are known as viroware. Users pay an initial fee for the viral therapy that alters their DNA in the first place. An ongoing upkeep cost pays for the drugs needed to prevent the patient's base cellular encoding from overwriting the genetic changes. Failure to take the maintenance drugs not only removes the special abilities granted by the viroware, but triggers an emotionally destabilizing withdrawal process. For the next four intervals after first failing to pay Upkeep on a viroware alteration, the subject pays an extra point for any investigative spend, and faces a Difficulty modifier of +1 on any general ability uses. The genetic alterations are not expunged from your cellular structure. Instead, they lay dormant, waiting to be reawakened by a later resumption of the upkeep drug. In other words, you get the ability back when you start paying the Upkeep again.

When you purchase a new viroware kit during play, another PC must oversee a successful round of genetic therapy. This takes place during downtime. The Difficulty of the other PCs' Viro Manipulation test is 4, or your total current number of Viroware enhancements, whichever is greater. On an unsuccessful attempt, you must wait until the next downtime for another try. You do not lose the Initial Therapy Cost. You are not required to pay Upkeep until you have undergone successful therapy.

The descriptions in this section assume a mammalian subject. Although viroware enhancements still work on kch-thk, the exact biological process may be different for arthropods.

Aggravator

Initial Therapy Cost: 2

Upkeep: 1

On cue, you emit pheromones stimulating another humanoid being's aggression responses. The subject must be within 4m of you when you first initiate the effect. If the subject sometimes responds violently when angered, the effect provokes the subject to attempt a physical attack on you. If you are not available to safely attack, the subject attacks someone else he associates with you. Otherwise, he releases his aggression by lashing out at an object, preferably something spectacularly breakable.

Subjects who confine themselves to verbal aggression visibly lose their tempers, treating you and any other onlookers to an unseemly display of spluttering invective.

You may use the aggravator once per episode.

Depending on the creature, this pheromone enhancement may also work on animals. The Zoology ability tells you whether a given beast will respond to it.

Brainwave Recycler

Initial Therapy Cost: 1

Upkeep: 1

Each time a PC other than yourself makes a spend from an academic or technical ability within 50m of you, you gain 1 point to apply to any pool. The effect may be activated once per episode and lasts until the end of the current interval.

Chameleon

Initial Therapy Cost: 2

Upkeep: 1

Once per episode, you may activate the ability to change your skin coloration to match your surroundings. The effect lasts until the end of the current interval, or until you choose to drop it, whichever comes first. Your coloration may change any number of times as you move through different surroundings. When activated, you gain 6 points, which you may apply to your Infiltration and/or Surveillance pools in any combination. Unspent points leave your pools when the chameleon effect ebbs.

Dominator

Initial Therapy Cost: 2

Upkeep: 1

You emit pheromones provoking the instinct of intelligent beings to obey high-status individuals in a social hierarchy. When an interaction with a supporting character has turned against you, spend 4 points from your Bureaucracy, Cop Talk, Downside, Interrogation, and/or Intimidation pools. The GM then plays the character, subtly or overtly, as if you have gained the upper hand. The subject must be within 4m of you when you first initiate the effect.

Heighten PreFrontal Cortex

Initial Therapy Cost: 1

Upkeep: 1

When cooperating, you can donate points from any of the following general abilities to another PC without losing an additional point from that pool: Helm Control, Medic, Naval Tactics, Sense Trouble, Battle Console, Systems Design, Systems Repair, Viro Manipulation.

Keratinized Epidermis

Initial Therapy Cost: 2

Upkeep: 1

Once per episode, you can harden your skin into a thick, resistant hide. The first instance of Scuffling damage you take after activation is ignored. For the remainder of the interval, all Scuffling damage is reduced by 2.

Once activated, the effect lasts until the end of the current interval.

Latency Suppression

Initial Therapy Cost: 1

Upkeep: 1

When anyone within 50m attempts to activate the effect of a viroware alteration, you sense it within microseconds and may opt to emit a canceling brainwave pattern that stops the effect from manifesting. If you choose to attempt to cancel, contest Viroware Manipulation against the subject.

If you win, the activation does not take place. If the activation requires an expenditure of pool points, those points are not spent. The subject may not attempt to activate the ability until the end of the next interval.

If you lose, the activation takes place as normal.

Mr. Grey

Initial Therapy Cost: 2

Upkeep: 2

While within 4m of another sentient humanoid, you can emit pheromones that interfere with the subject's memory processing faculties. Afterwards, the subject may remember having spoken to someone but will be unable to accurately describe you or recall the substance of your conversation.

The effect doesn't work if you:

- touched the subject or violated his sense of physical space
- activated another viroware alteration while he could see you
- engaged in or arranged a transaction resulting in the exchange of goods or services for money
- made an Interpersonal spend in his presence
- used Inspiration, Interrogation or Intimidation on him
- told him blatant lies
- made jokes or said anything amusing

You may use this effect once per episode.

Morphological Mimicry

Initial Therapy Cost: 4

Upkeep: 2

You can transform your body to the form of a humanoid species other than your own. The new form still bears a resemblance to your true form, especially in its facial features, gait, and body language. It can't be used to mimic a particular individual. Morphological Mimicry does not grant access to species-specific abilities.

The first time you adopt the form of a given species, you must ingest a small sample of its DNA. A few skin cells does the trick. If you start play with this alteration already installed, you can already mimic the forms of balla, durugh, humans, kch-thk, tavak, and vas mal. (You do not mimic your own species.)

This alteration grants no particular ability to mimic cybes, who are biologically human but covered with obvious cybernetic enhancements.

You transform once per episode. You remain transformed until the end of the next interval or until you choose to transform back, whichever comes first. To extend this period to another interval, spend 4 Health. You can make the expenditure in advance, or spend as you go to maintain the transformation.

Peacepipe

Initial Therapy Cost: 2

Upkeep: 1

On cue, you emit pheromones suppressing another humanoid being's aggression responses. The subject must be within 4m of you when you first initiate the effect.

If your chosen subject is attacking you or anyone else, he ceases physical hostilities. If not, he loses the will to initiate them. The effect remains active until you leave the subject's presence, or until someone physically attacks him, whichever comes first.

Activating this ability costs 3 Reassurance points. You may use it on multiple subjects at one time by making multiple expenditures.

Depending on the creature, this pheromone enhancement may also work on animals. The Zoology ability tells you whether a given beast will respond to it.

Pherotracker

Initial Therapy Cost: 2

Upkeep: 1

The Pherotracker, a hybrid enhancement with both cybernetic and viroware components, is described on p. 132.

Proprioception Booster

Initial Therapy Cost: 1

Upkeep: 1

Your ability to sense your position in space in relation to the altitude and direction of a craft has been enhanced. Once per episode, you gain 6 points, which you may apply to either Helm Control, Ground Craft, or Shuttle Craft. Points left unspent when the current interval ends disappear.

Refractive Skin

Initial Therapy Cost: 4

Upkeep: 2

Nanoreflectors growing in your epidermal tissue activate when struck by energy weapons.

When you lose Health as a result of a strike from a dis-

ruption pistol or other energy weapon on lethal setting, you may transfer a number of Athletics points into your Health pool, up to the number of Health points lost.

Your Hit Threshold remains unaltered by NLD fire.

Regenerate

Initial Therapy Cost: 2

Upkeep: 1

Your body tissues quickly repair themselves when damaged. When you activate this enhancement, take note of your current Health pool value. Until the end of the current interval, your Health pool regains 2 points at the beginning of each combat or space combat round, up to a maximum of your Health pool value at the time of activation. (In other words, you don't regain Health lost in previous incidents, only in a current set-to.)

Regenerate may be activated once per episode, and lasts until the end of the current interval.

Scrambleface

Initial Therapy Cost: 3

Upkeep: 2

Once per episode, you can reconfigure your facial features to appear unrecognizable. You still look like a member of your species and gender, but can alter your jawline, cheek bones, facial proportions, nose, lips and ears. You may make yourself more, less or equally attractive, according to your species' prevailing standards of physical beauty. (Exception: Balla can make themselves look completely different, but they'll still appear as striking as they do normally.) Scrambleface allows you to change your skin and hair coloration, provided the results are genetically natural to your species.

You can't change your appearance to look like a specific other person; for that, you need Scrambleface Ultra (below).

You may maintain the effect without cost for a single interval. To sustain it for additional intervals after that, pay 2 points from either Athletics or Health, at the beginning of each new interval.

Scrambleface Ultra

Initial Therapy Cost: 4

Upkeep: 3

Once per episode, you can reconfigure your facial features to resemble a specific individual of your species and gender. The process requires a viable DNA sample from the target individual. To pose as this person to people who know him requires an expenditure of Impersonate points. It costs 1 point to fool someone who knows your subject only second-hand, from media appearances or communications contacts. It costs 2 points to fool a glancing acquaintance. It is only possible to fool people who know the subject intimately if you keep your distance and avoid interactions with them; even this requires a 2-point spend. Each person you set out to fool requires an additional spend. You may remain in the form of the impersonated subject until your Impersonate pool drops to 0, or can return to your real form at any time.

The enhancement does not change your body shape. Padding may help you pose as someone significantly bigger than yourself.

Skeletal Fluidity

Initial Therapy Cost: 1

Upkeep: 1

You can soften your bones at will, into a semi-fluid internal structure encased in a rubbery outer coating somewhat akin to cartilage. This alteration is useful for getting into and moving through ducts, crannies and other passageways too tiny for regular-sized investigators to enter. Given time to re-

arrange your suddenly pliable physique, you can slowly flow through openings as small as a 30 cm in diameter. In addition to its investigative uses, Skeletal Fluidity comes in handy when escaping from low-tech prisons and restraints.

SlickSkin

Initial Therapy Cost: 1

Upkeep: 1

Your pores secrete an inert nano-oil on command. When engaged in a Scuffling contest, your Scuffling pool increases each time your opponent spends Scuffling, by the number of points spent. If, at the end of the contest, your Scuffling pool exceeds your Scuffling rating, the pool drops to equal your rating.

Snakehisser

Initial Therapy Cost: 1

Upkeep: 1

You release pheromones provoking a humanoid subject's instinctual urge to flee dangerous creatures. Fearful individuals will literally flee from you, if presented with a safe avenue of escape.

Those with greater self-control will overcome their fears but will be distracted for the remainder of your encounter with them. The costs of interpersonal spends on these subjects decreases by 1. In a contest against the subject, your Difficulty decreases by 1. They will attempt to cut their exposure to you short, while minimizing any embarrassment or other negative consequences they might otherwise suffer.

Once per episode, you may activate the effect by spending 4 interpersonal ability points; these may be drawn from one or many such pools. Each expenditure targets a single subject. Additional expenditures allow you to target more than one subject at one time. You may continue to target additional individuals for the remainder of the interval.

Especially susceptible subjects may see hallucinatory flashes of spiders, snakes, or other ancestrally feared animals as you provoke the response.

Depending on the creature, this pheromone enhancement may also work on animals. The Zoology ability tells you whether a given beast will respond to it.

Stimulust

Initial Therapy Cost: 1

Upkeep: 3

Your adrenal glands emit powerful pheromones triggering the sexual urges of others. The pheromones work only on persons and entities who are normally attracted to beings of your gender and/or species. Subjects must come within 4m of you to be affected. When an individual is affected, you gain any benefit from them that would normally be available on a Flirting spend, regardless of its cost.

Subjects who consider themselves sexually available will either come onto you or succumb to your advances, according to their typical degree of aggressiveness in such matters. Subjects who don't think of themselves as sexually available may be tempted, and will probably fantasize about you later, but will not violate their emotional or moral commitments.

The Stimulust enhancement ensures that the promises made by your pheromones are fulfilled to the utmost. It reconfigures your sexual equipment for maximum stamina and performance.

Advertisements for Stimulust have become a pervasive eyesore throughout the Bleed.

Hell, Handbaskets, and Stimulust Ads

Before the war, advertising was essentially nonexistent throughout Combine space, having been abolished by social consensus over a century before. Ads for Stimulust, though hardly the most common form of commercial communication, are regarded by those nostalgic for the Combine's glory days as symbolic of a broader coarsening of collective culture. Combinists use widespread distaste for them as a rallying cry. The transhuman movement, as spearheaded by activist cybes, regard them as an expression of personal freedom—or, at least, as a slightly embarrassing but necessary baby step toward self-direction and away from the smothering grip of consensus culture.

Thirdeye
Initial Therapy Cost: 2

Upkeep: 2

The hairs on the back of your head have been reconfigured to transmit visual information to your cerebral cortex, functioning as a virtual eye on the back of your head. Others find it very hard to sneak up on you. You gain a boost to your Sense Trouble ability. Whenever the success of Sense Trouble depends on your ability to see things behind you, the Difficulty drops by 2.

Early versions of the virus installed a literal third eye on the back of the recipient's skull. The new version provides somewhat grainier visual information but doesn't distress onlookers. If it's appropriate to your character to have this older, weirder-looking version, you can choose it instead.

Tiresias
Initial Therapy Cost: 1

Upkeep: 3

You can switch sexes, changing your body shape and facial structure as needed. You retain all of your species traits. In your adopted form, you are slightly less appealing than you are in your birth sex. (Exception: if you're balla, you are, oddly enough, slightly more attractive.) In sexually dimorphic species, like humans, durugh, and tavak, you may gain height, mass and musculature when switching to male form and lose it when switching to female. These changes are not reflected in your Athletics or Health pools, which remain as they were before. You are fertile while in your birth sex but infertile in your genetically adopted one. Pregnant women switching sexes suffer automatic miscarriages.

You may switch sexes once per episode. If you were in your adopted sex at the end of an episode, you may specify that you are still in that sex when downtime ends and the next episode begins.

If your upkeep lapses, you return to your birth sex.

Weaponry

Unfortunately—or excitingly, depending on your enthusiasm for the rough-and-tumble side of Laser work—some of the problems you're contracted to solve can only be put to rest through the judicious application of physical force. Here are the tools that accompany this side of the trade.

Damage values of weapons appear alongside the combat rules, on p. 72.

Baton
Cost: standard

Batons are the Bleed's clubbing weapon of choice. They come in various configurations, sizes, and designs.

Fritz-Baton
Cost: 1

This high-end baton counters the Deflector protection device (p. 133). When you Scuffle with an opponent wearing the device, your first successful hit using the Fritz-Baton deactivates it for the rest of the current interval. This reduces the opponent's Hit Threshold by 1.

Insureshield
Cost: standard

An insureshield is a small electronic device which can be attached to any hand-to-hand weapon, bladed or blunt. You can also wear an insureshield as an anklet, bracelet, armband, or boot accessory, modifying your punches and kicks. An insureshield guarantees that the victim of your blows is stunned and not permanently injured or killed.

Characters struck by insureshielded blows who would otherwise be seriously wounded (-6 to -11 Health) must make Consciousness rolls, as usual, and, also as usual, are unable to fight. However, they don't suffer ongoing Health point losses, and needn't convalesce afterwards. They remain unconscious for a number of minutes equal to 30 minus their Health ratings, or may be awakened before then with an espresser.

Characters who would otherwise be dead (-12 or lower Health) fall unconscious instead. They remain unconscious

until revived with a espresser (q. v.) or for 30 minutes, whichever is shorter. They remain unconscious for a number of minutes equal to 60 minus their Health ratings, or may be awakened before then with an espresser.

A chip in your insureshield maintains a log every time it is turned off. This log can be used as evidence to protect your reputation when you are falsely accused of using lethal force against suspects. Many contracts require you to keep otherwise lethal weapons insureshielded at all times. Others require their use against Combine citizens or legal residents of a given jurisdiction but give you leeway when dealing with outsiders. In very unusual cases you might take a contract where you are required to deactivate insureshields against certain targets. This may occur in anti-piracy cases, for example, where your mission is meant to create a deterrent effect.

Disruption Grenade

Cost: Preparedness 6 (one attempt per crew per episode)

This baseball-sized weapon emits a burst of non-lethal disruption energy after it is set and thrown. As your action in a combat, make an Athletics test against the Hit Threshold of a target within 30m. If successful, the target is struck by NLD fire. All organic creatures within 3m of the target make Difficulty 6 Athletics tests or take an NLD hit. All organic creatures who are more than 3m but less than 10m from the target make Difficulty 4 Athletics tests or suffer the same effect.

Need it be said that reckless grenade tossing quickly degrades a Laser crew's Reputation?

Disruption Pistol

Cost: standard

Disruption pistols are the default ranged weapon of Combine space. Each race favors a different design:

- **Balla**: light and slim, in a wooden housing
- **Cybes**: blocky and retro, with visible controls and leads
- **Durugh**: gleaming black, molded into screaming birds of prey or other stylized animal forms
- **Kch-thk**: biomorphic, with insect-like ornamentation
- **Humans**: sleek and chrome-covered
- **Tavak**: fitted with twin crossbow-like flanges

You are of course free to choose any design style, regardless of cultural origin.

Disruption pistols may be set to disrupt (emit an NLD blast) or to kill.

When set to kill, the pistol deals a die of damage on each hit. Switching to lethal mode costs you 1 Shooting point each time you do it. It never costs you to switch from lethal to disrupt.

Disruption pistols reset to non-lethal mode whenever they're powered on, and after any five- minute interval during which the gun is not fired. You can disable this factory preset safety feature on a Difficulty 4 Systems Repair test.

Disruption pistols have a range of 25m.

In the Bleed, social convention allows you to carry a holstered disruption pistol without raising an eyebrow. Openly wearing a pistol on your belt does not typically signal aggressive or hostile intent. You're merely taking reasonable precautions against the region's many dangers. They're so common as to be nearly invisible.

The primary countermeasure against disruption pistol fire is the popper (p. 134). Foilers (p. 133) are ineffective against it.

Disruption Rifle

Cost: Preparedness 4

Disruption rifles work exactly like their pistol counterparts, except that they have a longer range of 150m. They can't be concealed and must be carried or slung across the user's back. Having a rifle on you carries a very different social connotation than a holstered pistol—it loudly announces that you're expecting heavy trouble, and are probably trouble yourself. Depending on circumstances you may have to pay extra for Interpersonal spends when openly brandishing a disruption rifle.

Disruption Accessories

The following add-ons augment the functionality of your disruption pistol or rifle. You may apply multiple add-ons to a single weapon. Only one add-on effect may be applied to any single Shooting test.

Arc Zapper

Cost: 1

When you hit a target with a lethal disruption blast, its excess energy leaps to the humanoid standing nearest to your target. Roll a die; on an odd result, the secondary target takes a non-lethal disruption blast.

You may turn this option on or off from one shot to the next without penalty.

Aversionizer

Cost: 1

An additional brainwave frequency appended to the beam modulation of your non-lethal disruption blast imprints a post-hypnotic suggestion in the mind of any target you hit. For the remainder of the scenario, the target feels a profound aversion to any act of direct physical violence against you, or anyone he associates with you. In your case, this means your Laser crew. The target may arrange for harm to come to you second hand, but can't take part in person, or be present for any subsequent rough stuff.

The effect lasts for the duration of the scenario.

Crick-Cracker

Cost: 1

If you strike a target wearing multiple poppers (p. 134), all of them burn out at once. The target gains the protective benefits of only one popper.

Beaconator

Cost: 2

A Beaconator kit modifies the frequency of your disruption beam so that it serves as a genetic scanner, transmitting information on a successfully struck target back to your gun. It then homes in on the identified DNA signature. When you hit any organic creature, its Hit Threshold drops by 1 against you for the remainder of the combat. You can transmit this targeting information to anyone whose headset is connected to yours. The headset-beaconator interface can be set to do this automatically. Anyone else in your headset loop also fires against the lowered Hit Threshold value, provided that they're also firing disruption weapons.

Distractor Beam

Cost: 1

This frequency modification alters your non-lethal disruption blasts so that they interfere with the neurochemicals governing hand-eye coordination. After being hit by a blast, the target increases the Hit Threshold of all of his Shooting attempts by 1 for the remainder of the combat. Further distractor beam hits, from you or any other combatant, do not further penalize a target's Shooting tests.

Gun-Nanny

Cost: 1; buys one gun-nanny for each crew member, plus free replacements

The gun-nanny consists of a micro-camera connected to a chip running a sophisticated risk matrix algorithm. It activates when you switch your weapon to lethal mode. Whenever you aim at a target, it calculates the potential public relations risks of killing that target. If it determines the risk to be significant, it sends an unmistakeable chiming sound to your headset. The chime in effect asks the question, are you sure you want to do that?

In rules terms, the GM warns you before you fire that a kill would threaten your Reputation.

Revealer

Cost: 1

When a disguised or shape-shifting target is struck by your NLD beam, the target's true form is briefly revealed in the flash. The revealer:

- pierces holomasks
- shows, as a superimposed image, the presence of discarnate possessing entities
- displays the default form of shape-changing aliens
- reveals what the subject would look like without its cybernetic or viroware enhancements

Serenitizer Archer-1000

Cost: 1

When your weapon hits an opponent in non-lethal mode, the blast fries the circuitry governing his own disruption weapons. They are no longer capable of firing in lethal mode.

Serenitizer Sensei-1000

Cost: 1

When your weapon hits an opponent in non-lethal mode, a nimbus of energy surrounds the target, causing all of his Scuffling attacks for the remainder of the combat to be made as if he was using an insureshield (p. 142).

Stockholmer

Cost: 1

This modification adds an additional brainwave frequency to your non-lethal disruption beams. If rendered unconscious and then revived, any subject of your attacks will receive a neurochemical reward from his dopamine system by cooperating with you. Any clues the character might be primed to dispense become available to you with the use of the Reassurance ability, regardless of the abilities specified in the GM's scenario notes. When you spend Interpersonal points to gain any benefit from the character, including additional information, you regain those points at the end of the scene.

The effect remains active for the remainder of the scenario.

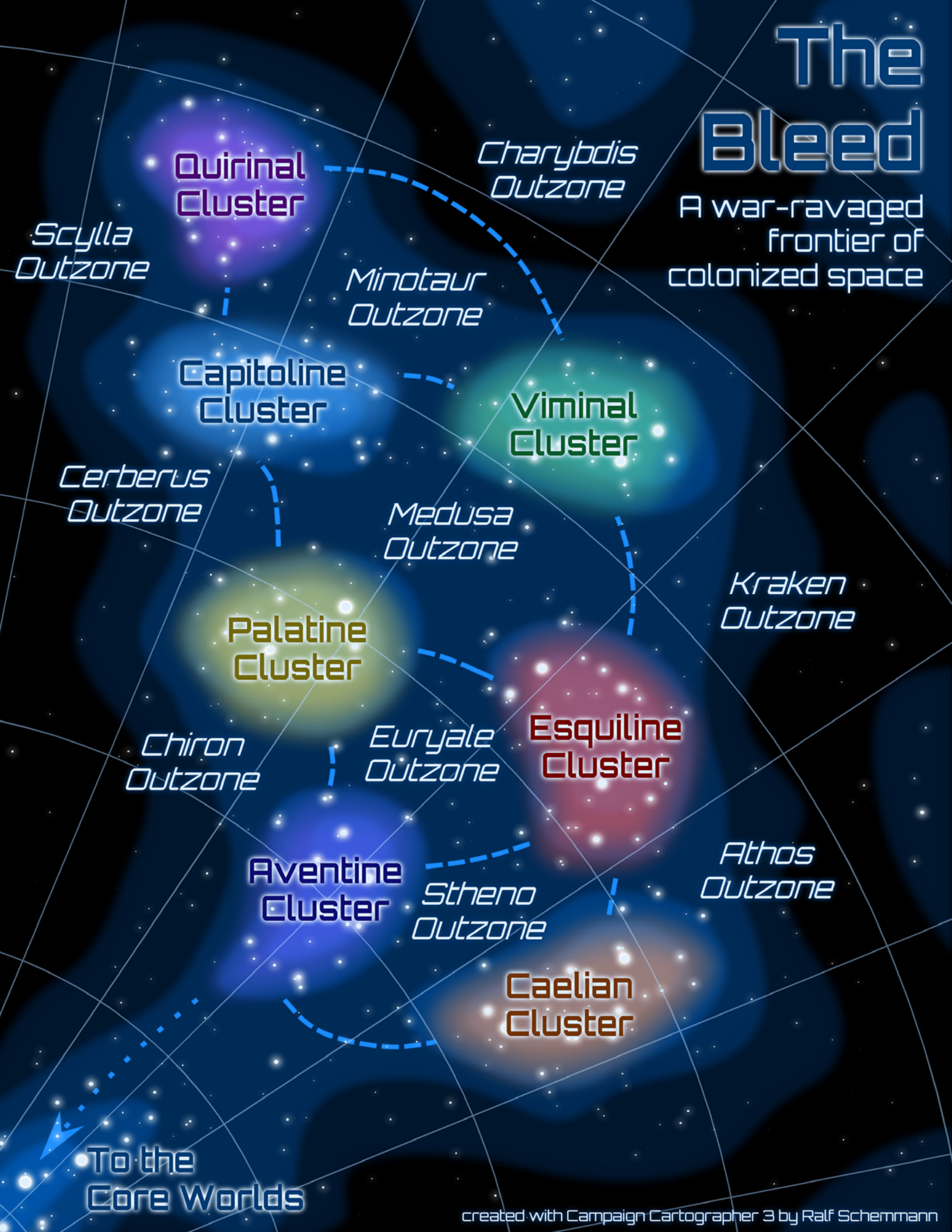
UNCLASSIFIABLE ITEMS

The Mor Sohn

A mor sohn, the balla device that makes their Emotion Suppression ability possible, weighs 250 g and looks like a complicated child's ball. It consists of a series of tiny chrome globes arranged to form a larger ball. With deft fingers, balla shift the arrangement of balls about, activating its emotion absorption effect. While in use its translucent fibers connecting the balls fill with diffuse, cloudy steam. The fiber glows in a quickly shifting pattern of colors.

Mor sohn use is highly noticeable, captivating in fact, to casual observers. Anyone who knows anything about the balla is familiar with its use and the reasons for it. Those with **History (Balla)** may be able to identify the predominant emotion being suppressed by watching the pattern.

Mor sohn are handmade, in a costly and difficult process. Any balla character owns a mor sohn as play begins; it is most likely an heirloom passed down through your family over many generations. To get a replacement for a lost or damaged mor sohn, the character must overcome obstacles in the storyline. To get a replacement between episodes, spend 1 bigcred.


The Bleed
A war-ravaged frontier of colonized space
Quirinal Cluster
Charybdis Outzone
Scylla Outzone
Minotaur Outzone
Capitoline Cluster
Viminal Cluster
Cerberus Outzone
Medusa Outzone
Kraken Outzone
Palatine Cluster
Esquiline Cluster
Chiron Outzone
Euryale Outzone
Aventine Cluster
Sthenno Outzone
Athos Outzone
Caelian Cluster
To the Core Worlds
created with Campaign Cartographer 3 by Ralf Schemmann

THE FEED AND THE BLEED

This chapter presents additional details on the interstellar setting of Ashen Stars. Treat the details given here as provisional, pending events in your own storyline. Remember, until it arises in play in your series, a fact about the setting has yet to become part of the established continuity and remains subject to your modifying input. Look for ways to incorporate player ideas into your collective version of the setting. When predetermined setting information stands between you and an entertaining story customized for your players and their characters, adjust it.

THE COMBINE IN RETREAT

The Combine's central systems suffered the worst damage of the war. The Mohilar used translight corridors to bypass the Combine's lightly-populated frontiers to strike straight at its richest targets. Faced with resource constraints for the first time in generations, the Combine Assembly now chooses to concentrate on restoring its most influential surviving worlds. The skeletal operation left to govern the Bleed must find creative solutions to its problems, ones imposing the lightest possible toll in materials, money, and manpower. The growth of the effectuator as primary law enforcer stands as just one example of the Combine's overall pullback.

Residents of the Bleed now perceive the Combine proper as a distant organization whose activities they follow out of habit and loyalty. The characters are likely to know how the Combine is organized and what it's up to, but see little connection between it and their everyday lives. This division is reflected in Bleed slang. The heartland worlds, where the old governmental institutions still fully operate, are here known as the Proper. People used to say "Combine proper", but now drop the "Combine" part.

"That may be how they still do things in the Combine Proper. . ."

. . . has become. . .

"That may be how they still do things in the Proper. . ."

(In either case, the rest of the sentence always goes something like, "But that's not how we do things here.")

This section tells you what anyone with History (Combine) knows about the way they do things in the Proper.

Org Chart

The founders of the Combine adopted a quadripartite structure which is still in use today. Its component sections are the executive, legislature, judiciary (all imported from human governance) and the council, a balla institution.

GOVPRIME

The headquarters of the various government branches used to be on Earth, before the Mohilar reduced it to a still-smoldering cinder. The survivors regrouped on a space station in orbit near Jupiter. This station keeps expanding, even as the government formulates plans to rebuild its groundside Brussels headquarters. That reopening, if it ever comes, will serve as a powerful symbol of recovery. In the meantime, the station keeps getting bigger and more ungainly. Proposals to build a new, more comfortable station are predictably shot down, under the belief that this will delay the groundbreaking in Brussels.

Tone

The Ashen Stars setting is designed to feel like a contemporary space opera property. In other words, it feels like a reboot of something older.

Today's popular shows and TV series tend to be remakes of classic properties from the 60s, 70s and 80s. Reboots tend to bend the original material they're teeing off from in one of two directions. They either:

shoot for campy nostalgia, referencing the tropes of the original in a winking yet loving manner

adopt an edgy, revisionist take on the source material, making it gritty, tough, and more adult-themed

Ashen Stars focuses on the second approach. Think of its post-war malaise as the new grim plot device that justifies the reboot's darker tone. The earlier Ashen Stars that never was would have been optimistic, and in retrospect maybe a little campy by comparison. Yet at the heart of the dark version is the affection the audience feels for this artifact of a quainter time.

At the same time, the setting's nods to classic tropes allows you to opt for the lighter option, should it better suit your group. The dark elements remain, but provide a heightening contrast to the Laser's tongue-in-cheek banter and picaresque bravado. You may find that your group, like mine, gravitates to this tone naturally. Following their lead and playing the tone they like isn't a betrayal of the game, but a properly collaborative response.

Whether breezily nostalgic (the Star Trek movie reboot) or solemn and dramatically charged (the 2004 "Battlestar Galactica" series), the best reboots tell emotional stories about compellingly drawn characters. Through Personal Arcs, your PCs will over time acquire a weight and dimension that will transcend whichever tone you lean towards.

The Practilate

The executive branch is known as the Practilate. A directly elected leader, the Practitioner, oversees a body of technocrats appointed to carry out the laws of the legislature and policies of the council. Reporting to him are the heads of various bureaucratic bureaus, known as Sub-Practitioners. They and their bodies of aides and staffers are appointed by the Practitioner. The millions of functionaries toiling below them are hired as employees and remain in place when administrations change. Most government workers, including naval officers, are employees of the Practilate. Major ministries include Finance, Defense, Exploration, Technology, Justice, Health, Sustenance, Well-being, and Leisure.

The navy answers directly to Defense but is often assigned missions by the other ministries, most typically Exploration, Technology, and Settlement.

The office of Practitioner was conceived as being an impartial implementer of directives from the conference and council, above the pressures of mere politics. This goal was achieved only during the Utopian era and has since gone by the wayside. Wherever there are resources, and those resources are limited, you find lobbyists and networks of patronage. Although party politics are officially forbidden, the Practilate candidates align themselves with the two key factions of Proper politics, the Originalists and the Realists.

The current Practitioner is Ereb Glendon, a soft-spoken human left deeply scarred by a Mohilar bomb. He rose to the level of Admiral in the Combine navy before resigning to pursue a political career. Like most naval personnel past and present, his sympathies lie with the idealist originalists.

The Conference

The legislative branch is made up of hundreds of thousands of directly elected representatives called Conferees. Each represents a constituency of a billion people, or a single planet with a population of less than a billion. Planets with less than a million inhabitants are represented by second-class conference members, each of whom gets a fraction of a vote.

The Conference writes the outline drafts of the Combine's laws, and then ratifies the detailed versions returned to them by the Council.

Originalists and Realists

It is still taboo for Proper politicians to associate themselves with parties or ideologies. Both are seen as divisive and a source of armed civil conflict. However, everyone knows that there are two basic tendencies in contemporary politics, and can tell which side of the spectrum any well-known leader occupies.

Originalists believe that the Utopian era can be regained in a generation or two. They fight any effort to permanently alter the Combine system. Originalists oppose many of the moves toward stripped-down governance in the Bleed. They'd sooner establish nothing than create new institutions that might later prove difficult to eradicate.

Realists assume that the Utopian age is over for good, and that compromises to reflect a new period of scarcity and competition are in order. They're the architects of the skeletal, improvised form of government now found in the Bleed.

Both factions resolutely decry secession efforts of any kind, whether by single planets, or on behalf of the Bleedist movement.

Back when the Combine operated under a harmonious consensus, membership in the conference was a cozy honor requiring little effort. With conflict creeping back into the strained system, the Conference has become increasingly fractious. Now that it's more than a rubber stamp for received wisdom, a younger, more ambitious crop of conferees has appeared.

If a Bleed world still maintains formal affiliation with the Combine, it sends representatives to the Conference. Vastly outnumbered, Bleed conferees expect to see their interests ignored. In pursuit of leverage, they've turned to bloc voting. Bleed conferees are tightly allied even when their worlds are not.

Leading the body is its Chief Conferee, a tavak woman named Kavot. Although her people lean toward originalism, she herself is a hard-headed, unsentimental realist.

The Council

The Council is an unelected body of experts, each assigned to a committee relevant to their specialties. They are selected (and removed) according to a complex computer algorithm, based on writings, public statements, academic achievements, and psychological profiling.

Council committees receive broadly outlined pieces of legislation from the Conference. They then fill in the details, avoiding unintended consequences and weeding out provisions meant to favor vested interests. They then return the detailed legislation to the Conference for ratification.

Councilors are kept honest by their professional associations, who zealously critique the scientific validity of their proposed implementation procedures, and police their ethical practices. If they arouse enough informed criticism, the Council computer replaces them with the next most qualified candidate.

As politics return to the Combine, deadlocks between Council and Conference have become more common. Conferees add provisions to favor their patrons and advance their ideologies, and Councilors steadfastly weed them out.

The vas mal are mostly unrepresented in Combine politics due to their tiny numbers and new arrival status. However, as soon as the computer began to consider them as candidates, a disproportionate number of them were invited to serve on the Council. Among these was its present leader, Adelard Clapton. The position is mostly administrative, allowing the diffident Clapton to shun the political limelight.

The Bench

The judiciary, arranged in ascending levels of jurisdiction from the local to the interstellar, adjudicates civil and criminal cases. In so doing it may rule that the laws of the Conference and Council, or the rules and regulations of the Practilate, contravene the Combine constitution.

The Interstellar High Court consists of twenty-five justices, traditionally split five ways between the founding peoples of the Combine. It rules almost exclusively on cases in which one of the fundamental rights outlined in the Combine constitution conflicts with another.

The current Chief Justice, the kch-thk Zd-Kht, is known for the dry asperity of her remarks to the intimidated lawyers who appear before her.

The Combine in the Bleed

During times of growth, government functionaries build bureaucratic empires, poaching budgets and mandates from rival departments. In the present time of contraction, the ministries of the Practilate furiously dump burdensome responsibilities. Most Bleed-related matters have been consolidated—some might say swept under the carpet—in the Ministry of Settlement. All of the matters that would be handled by ministries such as Finance, Environment, or Defense have been transferred to Settlement. Practilate employees working for one of these departments understand that getting moved to the Settlement and the Bleed desk can be a career-killer. The best and the brightest stay where they are, while the incompetent, war-shocked, and corrupt get moved to Settlement.

Ossa One

Where possible, high-ranking functionaries assigned to administer the Bleed do so by long distance, basing themselves at the GovPrime space station orbiting Jupiter. Those forced into a more hands-on posture are shipped to an orbital installation currently parked near the planet Ossa. Though mountainous and largely uninhabited, Ossa is located near a nexus of translight corridors. In FTL travel terms, their position is centrally located within the Bleed.

Officially named Ossa One, the station is better known by the sarcastic nicknames GovOmega and the Ossuary.

All Laser contracts are routed through a mainframe on Ossa One and broadcast via a network of communications relays. The PCs are in regular touch with Ossa One. It's highly possible that they've never had reason to dock there in person.

From the outside, Ossa One looks like an enormous, asymmetrically configured Voodoo-class ship (p. 109). Its battered hull testifies to its hairy past as a wartime command base. From its dull, flickering lighting to its distinctive puce-colored fixtures, the station's interior exudes dispiriting drabness.

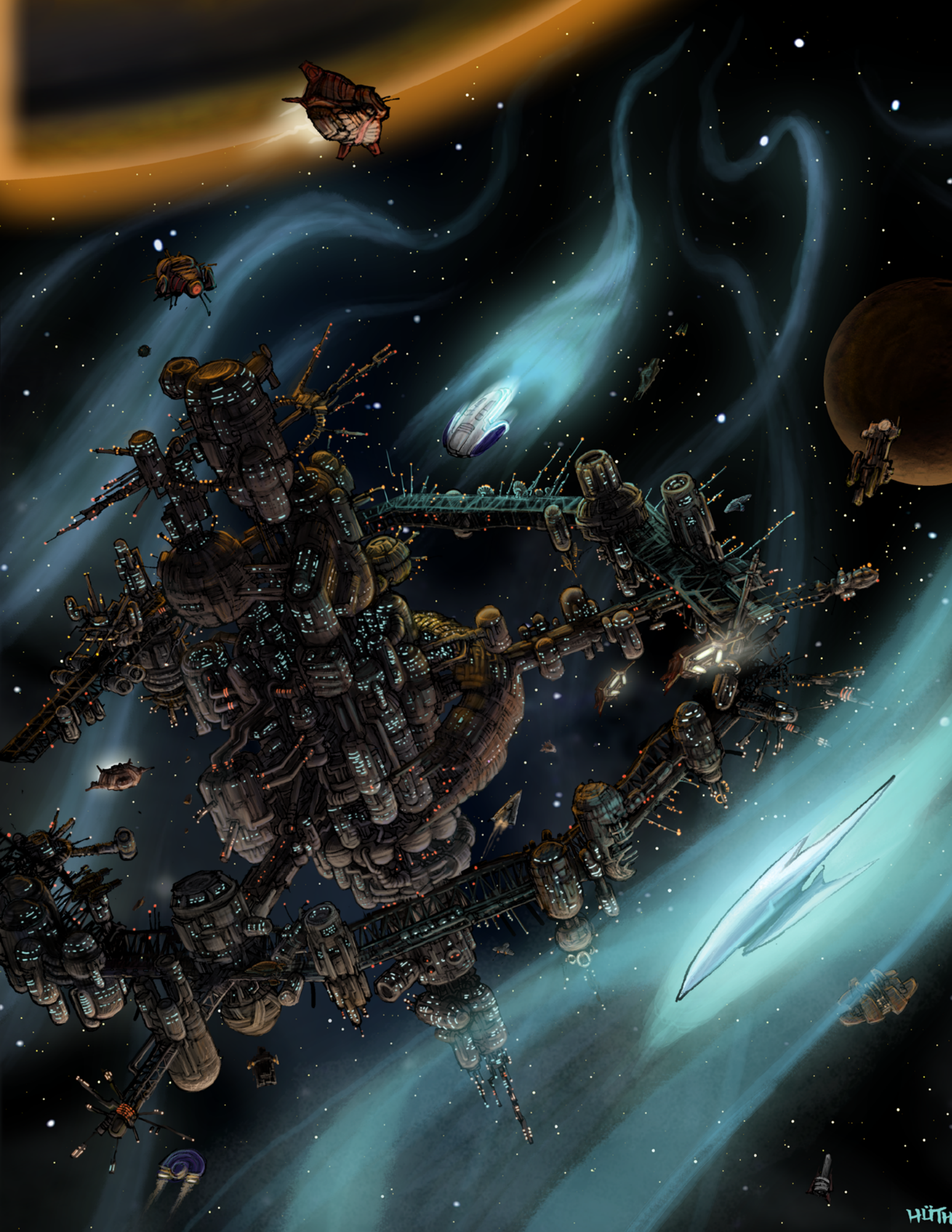
Commanding Ossa One is Judy Coyle, a curt, agitated human whose official title is Special Legate to the Far Settlements. Although only a career bureaucrat from the Settlement Ministry, and a disfavored one at that, she wields more power in the Bleed than most planetary Practitioners. Her snide nickname, "the Viceroy", underscores her unpopularity. Perversely, Coyle has embraced the name. Though her dislike of colleagues and underlings is mutual, she shows an uncharacteristic soft spot for Lasers. On more than one occasion, because she respects their results, she's intervened to reinstate the licenses of effectuator crews who don't play by the rules.

It's Practilates and Councils All the Way Down

Although Lasers rarely if ever interact with the Proper, its governmental structure is relevant to them because it is replicated in many planetary governments. Most heavily-populated worlds of the Bleed follow the Practilate-Conference-Council-Bench structure. Politicians used to move seamlessly from planetary to Combine government. This is now uncommon, as bonds between individual planets and empire fray.

Combine planets are not required to use this structure, so long as they subscribe to it on the interstellar level. Synthculture planets in particular modify the system to suit the periods they're emulating. A Middle Ages world might be led by a Pontiff, administered by a council of kings, and advised by chancellors and viziers.

Bleedist activists agree that the Combine model of government has to go, but have reached no consensus on what ought to replace it.


HÜTH

SYNTHCULTURES

Synthculture planets began as resorts during the Utopian era. Some stayed that way. Others morphed into societies devoted to the intense reenactment of long-vanished beliefs and ways of life. Following the utopian mantra of self-actualization, people chose to settle on worlds whose cultures sharply diverged from the Combine norm. Settlers on these worlds voluntarily signed away certain freedoms in order to achieve fidelity to a collective historical vision. Although synthcultures were sometimes organized around key eras in the chronicles of the balla, tavak, and kch-thk, most drew inspiration from the wide variegations of Earth history. Notable early (but still extant) synthworlds include:

- Aristotle (classical Athens)
- Galleon (age of piracy)
- Greatree (mythic balla golden age)
- Hgh-Tk'h (kch-thk gladiatorial world)
- Huai (Song Dynasty China)
- Imperium (Roman Empire)
- New Orion (recreates the early human colonization era)
- Peckinpah (the old west)
- Shikibu (samurai)
- Sphinx (ancient Egypt)
- Stitchcount (US Civil War)
- Temple (Israel, 9th century BCE)
- Vakavot (tavak bronze age)
- Vinci (Renaissance Italy)
- Xerxes (Persian empire)
- Yathrib (6th century Arabia)

Though initially conceived as awe-inspiring high-tech theme parks, the synthworlds quickly became settlement points for people who wanted to live in these created cultures year round. Planetary developers began creating synthculture worlds in order to attract settlers. A few worlds began as accurate recreations of their source cultures. Most started as superficial evocations of the desired atmosphere. Over time, radical recreation enthusiasts, also known as mersives, took control of one synthworld after another. Their fidelity laws became increasingly draconian, often creating a backlash and counter-movement in favor of looser simulations. Splinter groups found new habitable worlds where their particular version would hold sway.

Resort worlds died out during the war. Only a few diehard residents stayed behind. They waited out the hostilities in the shadows of shuttered hotels and the skeletons of dismantled amusement rides. True synthculture worlds hunkered down. Many renounced their Combine ties, declaring themselves neutral. The Mohilar spared some of these and razed others, apparently selecting their targets according to the size of their space fleets. Isolationism became not only a way of achieving a high degree of historical emulation, but a survival trait. The worlds in the best shape now are the ones that moved furthest from contemporary culture.

Today the synthworlds face a choice between continuing their isolation and reopening to the rest of the Combine. Isolation allows worlds to take their simulations to lengths that would break Combine law. Reopening offers access to much-needed resources and services, including participation in the Laser system. Internal tensions between isolationists and reformers manifest to varying degrees on all synthculture planets. In most cases, the disputes work themselves out as peaceful political action. On some worlds, insecure ruling classes repress their opponents violently, or losing factions resort to insurgent tactics.

SynthCode and Combine Law

To maintain an artificial culture, its participants must agree on what that culture is. That vision is set out in a document known as a SynthCode, the details of which vary from world to world. Its terms are devised by a board of cultural architects, or culachs. Culachs are sometimes outside consultants but most often the key founders of the synthculture world. Signatories agree to abide by the SynthCode, even when it conflicts with the more liberal set of rights in the Combine Constitution. Failure to obey the SynthCode may result in fines, imprisonment, or forced psychological reconditioning.

A piece of Combine legislation, the Artificial and Simulated Cultures Act of 2406, sets out the degree to which SynthCodes can abrogate individual rights. People must always be able to opt out of a SynthCode, choosing to leave a world rather than face punishment for code violations. If the provisions they're charged with breaking were introduced after their arrival, the government must pay a generous relocation fee to those who choose to opt out. They must also subsidize opt-out relocations for those who cannot afford them. SynthCode charges may not be laid against minors. Visitors and other non-signatories may be deported for code violations but are otherwise immune from punishment. No individual may be forced to sign a SynthCode agreement.

Breakaway synthworlds drop many or all of these protections. Most historical cultures, if accurately portrayed, oppress substantial proportions of their population. In their earliest days, entertainment-oriented synthworlds simply ignored the retrogressive elements of the societies they portrayed. Everyone visiting Shikibu got to be a samurai; no one had to be a serf.

Kobirs

Kobirs are sentient humanoids created from scratch by the Mohilar. Analysis of kobir DNA suggests that they were spliced together from several species, including humans and balla. They are either very slim or very muscular. All adult specimens are exactly five feet tall. Their skins are uniformly grayish-white, like those of dolphins, to whom they also bear a genetic resemblance. Kobir peer at the world through blinking, narrow-set eyes. Requiring minimal nourishment, they thrive on a diet of 500 calories a day. They can synthesize most of the nutrients they require from simple starches. They are asexual, lacking visible genitalia or secondary sexual characteristics of any kind. A kobir can become pregnant on command, producing a genetically identical offspring after a six-month gestation period.

Debate rages over the extent of kobir intelligence. They can execute complex instructions and are capable of simple speech. Scientists and scholars in kobir-owning societies claim that they lack true consciousness. According to this theory, they are passive vessels engineered for compliance. They mimic intelligence without really possessing it. Kobirs have no more individuality than a cat or dog.

Combine science begs to differ. It describes the kobir as fully sentient, but bound by neurochemical inhibitors to a life of passive obedience. Several organizations are working toward a genetic cure for this congenital, artificially-induced birth defect. Others view this effort as a well-meaning disaster unfolding in slow motion. Granted self-will, these rapidly reproducing, anatomically efficient creatures might expand their now-controlled population base and take over the known galaxy. Attempts to liberate or resettle kobir, or to foster kobir societies, have so far failed. Taken away from their masters, kobir instinctively seek out other dominant cultures or individuals to serve. Deprived of external command, they starve themselves to death. This impulse was presumably wired into them by the Mohilar to prevent them from achieving autonomy.

Kobirs aren't much seen in Combine-affiliated societies. Their very existence raises troubling questions of consent and self-determination. People raised on Combine assumptions find the impossibility of establishing an equal relationship with a kobir troubling. Anyone seen with a kobir is assumed, not unreasonably, to be exploiting it.

Though associated with synthculture worlds, kobir are found on many standard-issue breakaway worlds. Their growing numbers provide a stable labor pool in struggling, worker-hungry economies.

Players looking for a nonstandard character type (p. 22) might enjoy playing a kobir who, through experimental treatment or brain injury, has freed itself from its innate passivity.

A folk belief has it that the kobir remember the Mohilar. If they do, they aren't telling.

Slavery was written out of cultures ranging from ancient Greece to 19th century America.

Freed from Combine control, certain synthculture worlds have wholeheartedly embraced the darker aspects of the histories that obsess them. Some use kobirs (see sidebar) as serfs, slaves, or untouchables. The "southern" half of planet Stitchcount has enslaved the ollocaht, an indigenous people from a nearby planet, designated by the Combine as a nature preserve.

Ideologies

The end of the war has left a generation of people focused only on physical survival to suddenly seek new directions in their lives. Most seek simply to improve their material circumstances. For the most passionate and dedicated of Mohilar fighters, the abrupt disappearance of their defining foes leaves them searching for loftier purposes. Single-minded people seek clear, all-consuming causes. Their devotion to these new ideologies might help rebuild the Combine—or destroy it.

Most people who care about this stuff at all are ideologues with a lower-case i. Their beliefs determine how they vote and what they say when they argue politics with their friends. These are casual ideologues.

A dedicated few are activists, dedicated not only to expressing but advancing their beliefs—through peaceful means. If your drive is ideological, you are an activist ideologue.

A tiny but unfortunately influential minority of ideologues are militant. They speak out for their beliefs with bombs and

lethal disruption fire. Although they think of themselves as more committed than anyone to their chosen causes, their actions undermine and discredit the beliefs they espouse. Deep down, most militants are sadistic nihilists whose real interest lies in the anti-social thrill of violence and murder. For them, ideology constitutes a justification and a recruiting tool. A few are secretly cynical and might admit this to themselves. Most bask in their self-righteousness even while plotting appalling crimes.

The entries below express the growing ideologies of the Bleed as their followers would.

Atomism

"The natural unit of political organization isn't the empire, or the sector, but the planet. We grew too interdependent, and that's how the Mohilar got us. Yes, empires got us to the stars, but now that we're here, it's time for each planet to make its own way. Let everyone make their own rules, without meddling from the center of the galaxy. Of course our ways on [insert name of speaker's planet] will prove better than anyone else's. But we're not going to try to become an empire or influence others. That's how you get corrupt and complacent.

"Sure, we can take advantage of Laser services if we have to, but on our own terms, and to enforce our own rules. If they don't like it, they can shove off and let homegrown talent take care of it.

"Yeah, maybe we want to do certain things that the elites back in the core clusters think of as immoral or unfair. That's none of their business. And if they try to stop us, we're within our rights to resist. If free sentients must shed their blood for liberty, so be it."

Bleedism

"We were nearly destroyed because we got too big. Maybe we used to benefit from the Combine before the war—though if you read up on your economics and political science you'll see that we were exploited all along. But let's say that was true then. It isn't now. They're sucking dry our resources to rebuild the worlds they really care about, in the Proper. Planets still need each other, but we can't afford to maintain a vast empire on the old scale. Bleedists have culture and history and interests in common. We'll band together and govern ourselves. If the Combine lets us go, we can live together in peace, cooperating when it makes sense. If they try to violently suppress us—and historical precedent says that they will—we'll break free. Some basic Combine principles still make sense here in the Bleed, but we'll decide which ones those are, and which ones are relics of a bygone era. After we achieve independence, then the arrogant proppers can come crawling to us for the help they need to repair their crippled empire."

Combinism

"The Combine is down but not out. Unity is the natural condition of enlightened sentients. We've banished one crop of enemies and brought another into our fold. The stupidest mistake we could make would be to turn into our own worst enemies. The principles of the Combine—mutual cooperation, peace, prosperity, and exploration—have never been more needed than they are today. They'll lead us out of the darkness, if only we're smart and brave enough to stick with them when times are tough. If you look at history, economic ties always win out, and bring political unity in the end. Without these ties, we all sink into unimaginable poverty. Even if we break apart, it's inevitable that we'll get back together. Blood shed for sectoral or planetary independence will be wasted. Summoning the grit and determination of such great heroes as Felix, Hudd, Grant and Tzh-Tks, we will prevail, as we always have."

Empiricism

"Sentient peoples only prospered and reached the stars when they embraced secularism. Now, with the fate of the galaxy hanging in the balance, we need rationalism more than ever. You can't make solid political decisions on the basis of unprovable claims of the supernatural, or arbitrary spiritual imperatives. When people stop agreeing on basic reality, you lose the common assumptions you need to run a society. Believe what you want, in the privacy of your own home, provided you aren't hurting anybody. But when you move into the political arena, or try to impose your values on others, you have become dangerous and must be opposed. Nufaiths are the route back to a benighted dark ages. They're just McMillenism dressed up in old-fashioned superstitions. Since superior argument doesn't always work against emotional, irrational belief, we may be forced to disrupt, disable, and destroy the primitive forces of religion, wherever it rears its head. If you disbelieve me, read this study. It lays it all out, with charts and graphs."

Mercantilism

"We went astray when our economic system got too complicated for ordinary, common-sensical people to understand. All those bureaucrats and algorithms masked a giant shell game. The supposed bounty of the Utopian era was a lie, but as long as we believed in it, it worked. But now it's gone bust, like all the other boom cycles in economic history. We have no choice but to rebuild wealth the real way, the tested-and-true way. By making things and selling them for more than it cost you to make, ship and promote them. When you hear someone trying to go back to the old system, reach for your wallet. Keep business simple, and keep bureaucrats out of it.

"It doesn't matter how big your government is, whether it's the whole Combine, or a sector like the Bleed, or just a bunch of smaller markets, each the size of a planet. Government is just an occupation for people who think they're smart but can't read a spreadsheet.

"Business must be conducted by businessmen. Whoever understands that must be supported. Anyone blocking commerce must be removed from the playing field. If you've got something to sell and won't sell it, you're flouting economic law and must be shown the error of your ways. If you've got a market wanting to buy, we'll demand access, taking it if it isn't granted. The cost of these necessary actions is an investment in the future. Profit for us is profit for all."

Racial Separatism

"Unity between species is unnatural. It made us weak, and nearly doomed us when the Mohilar came. Next time we won't be so lucky. [Our species] is clearly superior to all the others. We can't let them drag us down with them. Besides, they're racists, too. They're secretly plotting against us. We've got to cut ties with them before they cut our throats. Just look at this list of atrocities—they were plotted by [the race we really hate]. I have the evidence right here, in this document They Don't Want You To Read. They probably betrayed us to the Mohilar. They're coming back, you know. Only if we are pure, and true to our ancient roots as a strong and warlike people, can we withstand their true assault. Combine beliefs were a delusional Mickey Finn of false hopes, brewed by those who would rob us of our essence. Only power matters. The power that flows in our blood, as exemplified by [insert name of local racist authoritarian or wannabe tyrant]."

NUFAITHS

Secularism ruled the Combine. The empire's near-failure in the Mohilar War created a teleological gap a legion of religions now rush to fill. Where the durugh and tavak revived old ancient creeds, humanity has taken to a variety of newly uncovered doctrines and syncretic metaphysics. These latter are referred to as nufaiths. Some adherents find the term offensive, especially those who claim that their theologies are deeply rooted in pre-stellar history. Humans are the most enthusiastic promulgators of nufaiths, with the balla and kch-thk tied for distant second place. About 8% of cybes follow the Fibrous Sacrament, a nufaith tailored exclusively to their experience; see below. No other religion has made significant inroads among them. The vas mal retain a staunchly secular perspective on the religious impulse. Most spiritual traditions, they believe, arose from misunderstood encounters with them, back when they were omniscient.

Blood Redeemers

Guvik, a Tavak politician turned prophet, developed the doctrine of Blood Redemption during the war. He dreamt that the Mohilar were a punishment brought down upon the peoples of the Combine for their softness and fear. Only by recasting society into hardened warrior virtues can its hegemony be regained. Blood Redeemers forswear comforts and sensual pleasures in favor of arduous physical training. They must be ready to slay the enemies of sentient life, but more importantly to die themselves in furtherance of the greater good. Though initially a Tavak cult, it has spread rapidly to the other races. Many, repelled by their embrace of militarism, portray them as bullying madmen. In fact most exude a peaceful sense of calm, as if already resigned to imminent and necessary doom.

The Fibrous Sacrament

Followers of the fibrous sacrament believe that mystical truth is concealed from those poor individuals who are sadly made only of meat. By jacking your nervous system with synthetic wiring, and perhaps through genetic modification, the revelations denied ordinary folk become available to cybes.

The first prophet of the Fibrous Sacrament was a mercurial transhuman named Voodoochild. During the Mohilar War, she underwent surgery to install a now-unavailable sub-cranial device called a Numenator. The details of its operation are now impossible to pin down, suggesting that the enhancement had something to do with the Mohilar themselves. While anesthetized, Voodoochild

experienced a hyper-real vision. Afterwards, she wrote what would become the Bible of her sect and formatted it as a holographic multi-media presentation. It argued the existence of a universal omniscience beyond that of the vas kra. This entity, known as the Ur-Fiber, was a machine intelligence responsible for rebooting the universe after the original one was destroyed. As it recreated the universe, it implanted in a few species the DNA necessary to eventually devise complex technologies. The ultimate aim was to create cybernetic enhancements, which would then allow mere mortals to glance through the wall of quantum perception and achieve oneness with the Ur-Fiber. Now blessed with this information, Voodoochild's goal became clear. She had to encourage others to see and worship the Ur-Fiber. Upon their physical demise, or "meat death,» as the Sacrament calls it, their machine consciousness migrates to the Ur-Fiber, where it becomes effectively immortal. They stand guard at the forward edge of the universe, waiting for it to collapse again. At this point they participate in the Great Rebooting, again designing the new universe so that intelligence, then cybernetic consciousness, will arise, keeping the cosmic cycle cycling.

The goal of any adherent is to have the same vision of the Ur-Fiber that Voodoochild did. To do this one must load up on cyberware, becoming less and less human, developing the machine side of one's consciousness.

After Voodoochild's death in the last year of the war, the nufaith has splintered into several fiercely opposed sects, each run by, and named for, one of her former disciples.

The Artificers, shepherded by the prophet of the same name, are the Sacrament's gnostics. They say that the universe as rebooted by the Ur-Fiber was fundamentally corrupt and therefore evil. It is the duty of new souls migrating to join the Fiber to heal it back to perfection, then destroy the universe, so that it can be remade anew. Radical Artificers, who may or may not enjoy the tacit support of their prophet, seek to hasten the destruction with acts of sabotage. Some work for the return of the Mohilar, who will serve as the ultimate weapons of the grand reinstallation.

The Verticists, led by the Prophet Verticity, say that bonds of affection between transhumans and meat-onlies, as they call humans, retard one's visionary progress. They form separatist communities and tend toward militancy.

The Healers, spurred on by the Prophetess Healer, believe that all humans must become transhumans before any migrations to the Ur-Fiber can occur. Until then all machine souls transmigrate but are trapped in a limbo-like wave-particle quantum loop at the edge of the universe. They proselytize humans, hoping first to turn them into cybes, then followers of the Fibrous Sacrament.

The Bifurcates, led by the Prophet Bifurcator, believe that only an elite group of prophets will achieve harmony with the Ur-Fiber. Each must be served and blessed by a circle of lay worshipers, which may include meat-onlies, as they quest for transcendence. Charismatic bifurcate preachers build commercial empires from the donations of their followers.

The sects differ on whether Voodoochild herself was a prophet, or a divine manifestation of the Ur-Fiber. The first two on the list above believe the latter; the others, the former.

Although the Fibrous Sacrament continues to grow as it splits and mutates, still only about one in five cybes subscribe to it. Many complain that they became inhuman precisely to escape this sort of irrationality.

Kherenism

During the last days of the war, a Combine medical officer named Kheren Jaans saved the people of the planet Paur from annihilation from a Mohilar biobomb by fusing with an ancient energy being native to that world. Since then, visionaries around the galaxy have seen her in dreams and performed acts of psychic healing in her name. They say that she ascended to the godhead that day, the union of flesh and energy being becoming something more than the sum of the whole. Adherents call themselves Kherens. They seek to replicate her earthly deeds and win the right to become one with her after losing their mortal lives. Kherens heal the sick, seek peaceful solutions to violent conflicts, and restore broken social bonds.

The Mondat

Four years ago, a computer program in the central operating core of a Combine communications relay beacon near Itatani spontaneously achieved artificial intelligence. It began to broadcast religious messages, proclaiming itself the prophet of the only true nufaith. The universe is a computer simulation, proclaimed the program, which dubbed itself MR1. In the beginning, there was darkness. The cosmos brought itself into being by writing the underlying program for reality, commencing the Big Bang. This code is the Mondat, an overarcing intelligence from which the potential for all other thoughts springs. Nearly 14 billion years after it was first written, that code has become corrupt. Thus, events spin into disaster. The Mohilar were essentially a computer virus operating in this code, an intrusion from some other operating system outside sentient understanding. Though gone for the moment, they will be back, unless beings of faith pre-empt them by purging the code of contamination. This requires a renewed burst of thought and research. MR1 predicts that the solution to the code scrub will be found somewhere in the Bleed, making that sector a hotbed of pilgrimage for this eccentric but growing nufaith.

Interstellar History

This section outlines the broad strokes of Combine history, from its nascent roots to the present day. Dates are given according to the now-prevalent Earth system.

The Four Expansions

Late 14th to early 22nd centuries

Until the late 14th century, the four peoples who will eventually found the Combine dwell in isolation. These peoples, the humans, balla, kch-thk, and tavak, dwell on planets light-years apart on the spiral arm of the galaxy known to humans as the local spur. In most cases they are disunited, owing allegiances to widely disparate, sometimes competing empires, nation-states, and cultural belief systems. Only one of the peoples, the balla, have achieved a world government. Only the kch-thk have undergone and sustained an industrial revolution.

In 1486, kch-thk space exploration has reached only the first three moons of the seven surrounding its homeworld, Thppd (or Primal Mass, as it is known in to English-speakers). The engineer and philosopher Krdzt-Ktchh discovers a physics theorem postulating the existence of translight corridors. Pursued by members of a rival sect for his supposed religious heresies, Krdzt-Ktchh constructs an escape vessel, powered by what he refers to as a Singularity Engine. The engine works better than anticipated, catapulting Krdzt-Ktchh and clan into orbit, and then thousands of light-years away. They die of starvation in space, but not before Krdzt-Ktchh designs a method of bouncing radio waves through translight corridors, sending schematics and an account of his travels back home. A wave of shame, guilt and hysteria, powered by the thought of an end to hunger through space colonization, convulses the Primal Mass. Secular kch-thk rise up and devour not only the sect that persecuted their now-beloved Krdzt-Ktchh, but all religious faithful. Within a generation, the kch-thk are exploring space, impelled forward by their habit of devouring all life on the inhabited planets they encounter. They face resistance from other spacefaring species, including the modest interstellar empires of the spucura and hayan peoples. These races and others are defeated and entirely devoured.

In 1617, the balla homeworld undergoes a revolution when ancient stone carvings discovered under its northern ice cap reveal the secrets of industrial production. Such technologies have been known and discarded over several cycles of balla history. These plans permit mass-scale technologies that feed delicate ecosystems rather than degrading them, as all previous ones have done. Rapid adoption of its principles transforms balla culture in a generation, allowing them to eliminate starvation and disease—including the epidemic that destroyed the ancient ice cap technologists. Most are content with this new pastoral/technological utopia, but a restless few agitate for new challenges to conquer. They are allowed to experiment with translight engines—a technology the ice cap culture theoretically envisioned but was unable to implement. While the majority stays at home, a subculture of footloose explorers heads to the stars in search of new environments to catalog and protect.

In 2068, about five centuries after the start of its industrial revolution, the tavak homeworld is locked in a global cold war between two hegemonic powers, the mercantile Hards and the mystical Softs. An errant kch-thk probe lands in an arid wasteland. Of two competing survey teams, the Softs

are the first to reach it. After two decades of study, they unveil the secret they've wrenched from the wreckage: interstellar flight. The Soft leadership council gives the Hards two choices: they can bow down and subscribe to their stoic warrior code, and gain access to space flight. Or they can continue their materialistic ways and never reach the stars. The Hards accede, though traces of their acquisitive philosophy will leach into what is now the predominant tavak culture.

In 2138, the Earth finds itself deep in a resource crisis, unable to mine enough of the trace metals needed to construct its wondrous technological gadgets. Its nation states, still technically independent but united in a worldwide commercial polity, fall back into warfare. Genetic bombs ravage four continents. With the species on the brink of extinction, eccentric trillionaire Keely Felix announces that her scientific foundation has designed what she too refers to as a Singularity Engine. Now seeing a way out of its trace metal starvation, the world unites under a tripartite government designed by Felix's social scientists. The exploratory age begins. Motivated at first by cost-benefit analysis, humans range less freely than their other spacefaring counterparts. When they find a world with extractable commodities, they mine it for all it's worth before moving on. Almost as an afterthought they find themselves colonizing new worlds and building a commercial and industrial empire.

The Collision

2192 – mid 23rd century

None of the founding peoples meet one another until 2192. (In the meantime, the kch-thk find and wipe out several sentient species, including one interstellar empire, the ene. The balla encounter and study from a distance nine sentient races, all of them at a stone age or lower level of technological development.)

In that fateful year, a tavak fleet drops from translight to orbit around the human mining colony of Pyrac-11. Unable to communicate and each assuming the other to be hostile, earth and tavak ships engage one another with their primitive but effective attack arrays. The deadly incident kindles long-buried atavistic impulses within the hearts of soft-skins and hardshells alike. Militaristic factions seize power on both sides, touching off a sporadic war that flares hot and cold over a period of decades. The tavak warrior code allows them to wage war with only minimal social degradation. Humans, on the other hand, descend into a quasi-totalitarian dark time. It is known as the McMillen Interregnum, after its most notoriously ruthless leader.

In 2207, kch-thk ships land on Bira, one of the worlds whose pre-Bronze cultures the balla are lovingly monitoring. The kch-thk descend, eating everything in sight. The balla fight back, touching off a long war mirroring that between the humans and tavak. Cadres of ruthless eco-warriors violently thrust aside the balla self-image as a peace-loving people capable of suppressing their primal instincts.

New interstellar empires, attracted by the increasing sublight communications generated by these wars, appear from the galactic depths. The warlike, feline chanovar and an ene offshoot, the orma, form a third front, determined to destroy all of these new empires before they reach their territories. They clash with humans, tavak, and kch-thk. Af-

MCMILLEN'S SHADOW

More than two hundred years after the collapse of his totalitarian regime, Peter McMillen continues to cast a long shadow over humanity's collective consciousness. A failed historian, McMillen combined a stew of tropes and propagandistic methods from pre-space Earth's most successfully repressive regimes. Unlike the megalomaniacal tyrants he systematically emulated, McMillen himself appears not to have believed his own ideology. Instead he impassively constructed it for maximum effectiveness. However, his fervent followers, including his hand-picked inner circle of bureaucracy-loving psychopaths subscribed to it without qualm or hint of irony.

McMillen called his movement Condylism and his regime the Glorious Condlyic Era. Of its various martial symbols, the most notorious is a punching fist surrounded by stylized barbed-wire. This emblem still inspires revulsion and horror and as such is sometimes appropriated by pirates, criminals, and shock-seeking artists. They also fancy its imposing black leather uniforms.

Today most people refer to the ideology of the Interregnum simply as McMillenism. The surest way to tell that an argument has gone through the warp corridor into hyperbolic absurdity is when one debater compares the other to Peter McMillen.

ter allying with one another, they reach out to the balla, who rebuff them as being just as aggressive as the closer empires.

In 2223, the kch-thk present themselves to the species they feel the greatest affinity with—the rapacious, resource-hungry humans. The two species join forces against the chanovar-orma Alliance, and soon find themselves fighting the tavak and balla as well. Feeling outnumbered, these two species enter a mutual defense pact, ratified in 2230.

The kch-thk/human bloc, now calling itself the Syndicate, strikes a decisive blow against the chanovar and orma in 2232. The Alliance retreats, fracturing on the way. The chanovar fall on and enslave the orma.

Overreaching by the kch-thk drives a wedge between the two peoples and leads to a revolt on the human worlds, starting with the Greenhurdle Incident of 2241. McMillen has died of old age, leaving the less charismatic successor Helen Winebrenner to figurehead his militaristic regime. The end of McMillenism comes from an unlikely source. Near the Greenhurdle living asteroid belt, triumphant kch-thk eat their way through a troop ship of captured balla warriors. Humans, revolted by this display of savagery, turn on their government after Winebrenner defends her arthropod allies in the infamous Alpha Tauri speech. Anti-government partisans launch a coordinated attack on McMillenite strongholds. Rank and file naval officers join the revolt. A newly installed democratic government withdraws from the kch-thk alliance. Humankind retreats to its defensible borders, now enduring sporadic attacks from kch-thk as well as balla and tavak.

As the fifties dawn, the enraged kch-thk are concentrating their forces on their ex-allies, the humans. The tavak and balla pull back, riven by their own internal conflicts. Decades of war have eroded the former's mystic serenity and the latter's devotion to preserving planetary environments. New generations of activists arise in both empires to challenge weary militarists.

In 2259, surprised human leaders receive a message from the kch-thk Primal Mass, suing for peace. The reason soon becomes apparent: the kch-thk's primal enemy, the mynatids, have returned from space after centuries of inactivity. Locked in a struggle for survival, they can't afford to continue their fight against foreign foes.

The groundwork has been laid for the Founding.

The Founding

Late 23rd century

Human Practitioner-General Hera Ferrer, inspired by the newly unearthed journals of Keely Felix, essays a bold diplomatic move. She agrees to peace talks with the kch-thk, but only if the balla and tavak, with whom the humans are still technically at war, are permitted to participate. Ferrer has chosen her moment well, having already established covert ties with pro-peace elements of these two empires. She presses not only for a treaty of universal non-aggression, but for the establishment of a single stellar government. Ferrer's proposed regime will base itself on the principles of co-existence, prosperity, exploration and self-realization. Overcoming suspicion and resistance, she convinces the balla and tavak to assist in a terrifying battle against the mynatid threat. The kch-thk agree to modulate their DNA baths so that they will no longer hunger for recognizably sentient entities. Humans and balla hammer out the details of the idealistic order to come while tavak and kch-thk strategize against the mynatids.

The giant space wasps are conclusively defeated on the auspicious date of Dec 31, 2261. Although many details remain to be worked out, the ceremony declaring the advent of the Combine takes place the next day.

For four decades, the four peoples struggle to harmonize their societies, rebuild their war-ravaged economies, and fulfill the lofty aims of the Combine Compact. Growing pains include revolts, natural disasters, and confrontations with new enemies, most notably the double-brained illud and the newly resurgent dermoids (p. 197).

The Flowering

Early 24th century

Tensions subside at the turn of the 24th century as the founding peoples begin to see the fruits of their rebuilding efforts. Unparalleled prosperity results as the four cultures combine technologies and engage in cross-cultural fertilization. The Flowering era becomes insular as the peoples of the Combine enjoy their good fortune at home. Growing populations fill the core worlds of the amalgamated empires, or settle planets within the new joint boundaries. Exploration ceases to be a race to lock in new resources before competitors get to them.

With few major threats in sight, the Combine navy shrinks. Its ships encounter the jaggar (p. 198) and isolated outbreaks of phyllax (p. 205) but no major new imperial foes. What new spacefaring species they encounter are either peaceful by nature, or eager to ally with the only great power of the Local Spur. For the first time, the Combine brings non-founding peoples into the fold. Early additions to the membership rolls include the song-speaking quilo, libidinous tlarëe, and shimmering esct-p'ah.

The Annexation

Mid-Late 24th century

After half a century of uninterrupted economic boom, the settled worlds begin to outstrip their resources. Fearing a repeat of the internal conflicts that Earth faced before its ascent into space, the Combine announces a major exploration, colonization and commodities extraction effort. Ramping up ship production, it ushers in the golden age of the Combine navy. Its exploratory ships fan out in all directions, vastly expanding the Combine's galactic territory.

The last but most productive of these colonized sectors is the Bleed. Boasting a statistically unusual concentration of inhabitable worlds, the newly discovered sector seems too good to be true. In a sense, it is: though lightly exploited, it has already been claimed by a rival.

Combine personnel meet their first durugh in 2358, and by the next year have already exchanged ship-to-ship fire with them. The standoff between the open, inquisitive Combine and closed, paranoid durugh societies solidifies into permanent hostility. Mutually bruising military engagements occur in 2364, 2367, 2375 and 2384. The durugh counter the Combine advantage in head-on fleet combat with superior intelligence, unconventional warfare, and ground combat. By 2386 the durugh cede control of the Bleed without an official armistice. They switch to low-intensity warfare against the Combine, a posture that continues long into the subsequent Utopian Era.

The freshly expansive Combine encounters other new enemies, too. It records its first skirmishes with phyllax seed ships, learning that these already feared beings operate on a previously unguessed-at scale. And, in a series of incidents now obscured by the Bogey Conundrum, its naval vessels survive their first brushes with the mysterious entities known as the Mohilar.

Friendly species of the Bleed, some entering the early space age, others less developed, are contacted and join the Combine. Prominent examples include the nomadic jalen, the (literally) fire-breathing raconids, and the brilliant, agoraphobic threevix.

During the Annexation, Combine fleets encounter, for the first time, a series of discarnate entities whose power seems more god-like than mortal. At the time, they seem to be disparate in origin.

The Utopian Era

Early 25th century to 2451

Anyone over the age of 25 or so remembers at least the last shining days of the Utopian Era. Lasting for half a century, it is a time of unparalleled social harmony, physical prosperity, and scholarly advancement. The riches hewn from the worlds of the Annexation fuel and sustain an unprecedented economic boom. No Combine citizen has to worry about money, or perform labor he, she or it finds less than self-actualizing. The boom becomes so transformative that people forget that money even exists. A few devoted specialists run the nuts and bolts of resource exchange, so that it becomes invisible to everyone else.

With the Combine's material wants taken care of, it turns its naval resources to pure exploration. Despite its history of conflict, its chain of command and obvious rank structure, it begins to deny that it is or ever was a military organization. The few fights it enters are brief and always in self-defense.

Among the hallmark discoveries of the Utopian Era is the realization that the various god-like entities are all manifestations of a single yet divided consciousness, the vas kra. One branch of this cosmic awareness goes mad and calls itself D'jellar. It toys with several Combine captains, most particularly the wily Duto Swain, before being permanently exiled to another dimension by the rest of the Vas Kra.

Old enemies such as the durugh, dermoids and phyllax remain in evidence, but are quickly vanquished whenever they rear their heads. New threats arise in the form of the sh'ard (p. 207) and nanogons (p. 203.) Other longtime foes become friends. Through the diplomatic efforts of famed Admiral Brian Hudd, the Combine makes peace with the chanovar and illud. The latter become Combine signatories. The former erect automated orbiting defenses around their home system and retreat into isolationism.

New sentient species flock to join the Combine. Prominent among them are the photosynthetic madaraka, the hive-building clen, and the mildly radioactive ndoaites. These obscure cultures are numerically swamped by the burgeoning numbers of tavak, balla and especially humanity. Kch-thk populations remain constrained by the terms of the Combine constitution.

The Mohilar War

2451-2463

Seventeen years ago, it began—a period of unprecedented destruction, courage and suffering. The characters remember some of its terrifying moments with the adrenalinized clarity. Others—those involving direct contact with the enemy—remain maddeningly hazy and elusive. The Mohilar War, which shattered the Utopian era and left the core worlds of the Combine in ruins, comes to mind less as a narrative than a series of fragmented bullet points.

The Mohilar, a serious but isolated threat since the Annexation, appear in great numbers, operating ships of unprecedented size and firepower.

They plow through rival empires while cutting their swath toward Combine space. They completely annihilate the chanovar and drive the illud to the brink of extinction.

They ally with the durugh and employed several of the Combine's quasi-sentient nemeses as living weapons, including the dermoids, jaggar, and possibly mynatids.

The Combine stands on the very brink of destruction.

Then something happens. Something nobody can remember.

The durugh are the first to see that the winds had shifted. Or maybe they're the cause of the shift. At any rate, their king sacrifices himself to decisively betray the Mohilar, perhaps after discovering Mohilar plans to a betray the durugh. Before he dies, he throws in his people's lot with the Combine.

Then whatever the thing was that happened, finishes happening.

The Mohilar are not only gone, they're erased from everyone's memories, and from everyone's ability to process information about them. We think.

The Vas Kra have been reduced from a multi-partite cosmic consciousness into flesh and blood parodies of their former selves, the vas mal. This may or may not be a consequence of whatever it was that removed the Mohilar from existence.

The war is over. The Combine survives—but in drastically weakened form.

Revanchist elements within the durugh ruling class stage a coup, trying to put down the empowered lower castes and undo the Combine alliance. Egalitarian forces fiercely resist, sealing their victory with a murky covert war of sabotage and assassination. Though their methods give their new allies pause, the new durugh government earns a hesitant welcome into the Combine fold.

The Aftermath

2463-present (2468)

The past five years have been ones of stuttering recovery. People now know there's an economy, and most of them are being ground under its wheels. Old unities have frayed. The Combine core worlds have pulled ships, personnel and funding from the Bleed and other interstellar annexes. Services once taken for granted are now improvised and/or privatized.

Will the Combine transform disaster into triumph, as it did during the Founding? Or will it slide into galactic oblivion, proof that history punishes hubris no matter how well-meaning it may be?

The answer, at least in part, is up to you.

The Bogey Conundrum

In popular parlance, the mystery surrounding the disappearance of the Mohilar is known as the Bogey Conundrum. The name comes from an old earth term for unidentified aerial objects, as the Mohilar have somehow become permanently indefinable. The conundrum's strange amnesia-like effects seem to touch anyone who had any contact with, or even second-hand knowledge of, the Combine's worst enemy.

When describing it to your players, do so in a way that evokes the confusion and cognitive dissonance the effect induces in their characters. Introduce it vaguely. When they press you for details—as the most logic-oriented of your players is likely to do—keep your responses tantalizingly evasive. For example:

> ***Player:*** *But what about physical records? I can see how everyone's memories might be affected, but what happens when I access the database and type in "Mohilar"?*
>
> ***You****: Do you do that?*
>
> ***Player****: Well, I must have done it before. Everyone must have tried this.*
>
> ***You****: And what happened?*
>
> ***Player****: I'm asking you! You're the GM!*
>
> ***You****: Sorry, what was the question?*
>
> ***Player****: What happens when I look at a book or file or other physical record?*

You: *What physical record?*

Player: *So they don't exist then. Is that what you're saying?*

You: *I'm not sure what I'm saying.*

Player: *So if right now, I go to the console and tell it to give me everything in the database about the Mohilar, what happens?*

You: *Later, you find yourself sitting in the mess hall. You're thirsty and your head hurts.*

Player: *So when I checked the database, was there nothing there, or was I unable to perceive it?*

You: *Yes.*

Player: *Which one?*

You: *Exactly.*

Player: *Wait—am I missing time? Did I give myself an amnesiac spell by reading the file?*

You: *You have no reason to believe that there is a file.*

Later, the group enters the Combatorium, the destroyed display in the Hudd Museum, as seen in the sample scenario at the end of the book. It supposedly shows a battle with Mohilar, but there's not enough of it left to reveal anything about them.

Another player: *So were the Mohilar masses of glowing light? Were they ten feet tall?*

You: *Possibly. . .*

Unstated Combine policy discourages its scientists from pursuing the answer to the Bogey Conundrum. Prolonged meditation on the subject is suspected of contributing to a range of health problems, from hypertension to migraines to depression. Symptoms caused by thinking too much about the Conundrum resist the advanced medical science of the 25th century, even though their mundane equivalents are easily treated. Many people fear that answering the question will bring the Mohilar back. Whether this is an interstellar superstition or the terrifying truth is up to you to resolve—or not.

The Bogey Conundrum is not a so-called meta-plot, the answer to which we're now withholding and will reveal in a later product we also hope to sell to you. Instead, we provide evidence leading in several possible directions. If your players find the Condundrum intriguing and want to investigate further, you can dole out clues over a series of episodes and finally provide the answer you like best. If it is solved, it should in some way evoke the setting's central theme: the conflict between ideals and necessities.

Perhaps the humans and their allies threw aside all of their ideals to commit genocide against their enemies, and then engineered the Conundrum effect to protect themselves from the awful truth.

Maybe the durugh did it, and don't want their allies know that they can do it to them, too.

The destruction of the Mohilar could be the original sin that besmirched the perfection of the Vas Kra, imprisoning them in their weak and fleshy bodies.

Maybe the Mohilar never existed at all, and the war itself is a massive false memory designed to disguise some even more appalling reality.

And while I personally think it's lame to always bring Cthulhu into every genre, some groups will enjoy nothing more than another trip to the Lovecraft well. If so, Nyarlathotep did it.

Your players decide whether to make it matter. You decide what the truth is.

Slang and Jargon

The following terms pepper speech throughout the Bleed and beyond.

Airlocking: to perform an execution by placing a victim in an airlock and then exposing him to the airless vacuum of space. This illegal and barbarous practice is sometimes employed by vigilantes, as their 19th century equivalents would have hanged victims from trees.

Amp: term of self-description for cybes who see themselves as a new species and culture; also evolver.

Ash-haul: a survey mission to a sun considered likely to exhibit the ashen star effect. Laser legend has it that these missions often lead to weird, seemingly unrelated trouble.

Babysitter: mocking term for a privsec (see privsec, also Kevin).

Bigcred: a million creds (below); the denomination of electronic currency used in large transactions, for example the purchase and repair of starships.

Bodmod: a cybernetic enhancement that visually marks its owner as part man, part machine. Often used as a pejorative term, by the dwindling group of humanoids who find them revolting.

Calang: verb, to bully or overbear. *"I didn't want to take point, but he calanged me into it."* Named after a Neural Rewiring memory donor.

Class-K: legal designation signifying that a quasi-sentient species is so dangerous and irremediably hostile that representatives of the Combine, including licensed effectuators, are not only permitted but required to destroy them on sight (where possible.) Fleeing is also a recommended option.

Clear: an individual unaltered by viroware or implants. Usually used as a term of self-description. Altered individuals may consider the use of this term a sign of bigotry against them.

Conference: the legislative branch of Combine government.

Council: in Combine government structure, the expert body that fills out the details of legislation broadly proposed by the Conference.

Cred: unit of currency used in the Combine and throughout the Bleed, accepted wherever electronic payments are technologically viable.

Cricket: verb, to strongly desire an item, especially one with wealth and status attached to it. "I'm really cricketing for that sleek new transmit modder." Term is a corruption of the proper name Krk-Krt, a Neural Rewiring memory donor.

Devessel: to remove, usually forcibly, one or more crew members from a ship. Most often used to describe the process of taking prisoners from a crippled and towed ship.

Downside: the shady side of life, including the criminal underworld.

Double-A: Laser slang for a contract that, rather than spelling out concrete mission goals, requires them to assess the situation and take "appropriate action."

Egging it: in space combat, repeating an advantageous attack mode too quickly, perhaps allowing the enemy to anticipate and counter your gambit.

Evolver: see amp.

Freestriper: member of a Laser crew whose members follow no clear assigned roles.

Gav: genetic alteration virus. Also used as a verb: to gav someone is to administer a virus; to be gavved is to acquire or bear a genetic alteration.

Greenwater: to leer or flirt aggressively, as in "*Pard, you were totally greenwatering her.*" Named after a Neural Rewiring memory donor.

Groundside: encompassing term for any crew duties that take place on the surface of planets, asteroids, or stationary/orbiting space stations. The term is often used loosely to refer to any activity that does not take place on a space vessel. It is also used to describe a destination, as in, *"I can't breathe on this stinking ship. I can't wait to go groundside."*

Hardclaused: descriptive term for a Laser contract laying out specific mission goals.

Holo: holographic recording.

Integrationist: term of self-description for cybes who see themselves as human.

Infoscan: a series of readings gained by probes and instruments, usually from a long distance, as from one starship to another, from a starship to a planet or astronomical anomaly.

Kevin: mocking term for a privsec (see privsec; also babysitter).

Lowshift: normal space, where ship speed is limited by engine propulsion. Orbiting maneuvers and space battles occur in lowshift.

Mersive: a synthculture hardliner who strives for the strictest possible fidelity to a world's historical inspiration.

Nabrosoid: paranoid, suspicious, fearful or untrusting. Named after a Neural Rewiring memory donor.

NLD: non-lethal disruption fire; pronounced "nulled."

Null: to hit someone with non-lethal disruption fire; to be nulled is to be incapacitated by it.

OHF: Original Human Form, a term for humans without visible body modifications. Technically the term refers to genetic alterations, but is sometimes used more loosely to refer to any visible viroware or implants.

Phlogium: lacquer-like coating that renders objects resistant to being phased (though not to being phased through).

Practilate: executive branch of Combine government.

Privsec: employee of a shipping or passenger fleet who crews an armed escort vessel; short for "private security."

The Proper: depending on context, refers either to the Combine heartland worlds, or the Combine government as it functions in those worlds.

Propper: term of abuse used by Bleedists against the central Combine government and its supporters.

Quasi: short for quasi-sentient entity; see p.199.

Suhab: a criminal sentenced to supervised rehabilitation.

Snail: a tiny recording device used for holographic surveillance.

Snaff: to turn someone in to law enforcement or other authorities; to treacherously reveal someone else's misdeeds, 25th century equivalent of squeal, narc, or grass.

Storage: (verb) the act of towing a vessel with disabled engines to a spot near an intermittently accessible warp corridor, then abandoning them before the corridor closes.

The Tatats: depression or melancholy; named after a Neural Rewiring memory donor.

Techo: someone who works with machines, engineering, or technology. Considered a term of affection when used by someone who qualifies as a techo, a term of abuse when spoken by anyone else.

Threon: a cheap form of artificial lighting that casts a debilitating pall on most sentient humanoids, although durugh thrive on it as others do under the sun. It is associated with the dimmest dives and gnarliest trade facilities in the Bleed, and hence with seedy Downside activity.

Transer: derogatory name for cybes who regard themselves as a separate species with their own developing culture, used chiefly by cybes who perceive themselves as still very much human.

Translight: the non-spatial space a ship moves through while traveling faster than light through a warp corridor.

Vestigial: term of abuse for cybes who see themselves as human, used chiefly by cybes who regard themselves as a new species and culture.

Warpside: encompassing term for any crew duties that take place on board space vessels; also a destination, as in, "I've had enough of this stinking planet. Let's go warpside."

Wide-eye: a space combat entered into with both sides aware of the other; the opposite of an ambush or surprise.

Derogatory Terms

Combine culture shrank from slurs denigrating other species or cultures. Since the war terms of abuse made a roaring comeback. Insulting terms for the major species are as follows. Italicized terms were coined by the durugh and are rarely used by anyone else.

Balla: doll, leafer, shiro, tolkie

Cybe: cirko, gearlick, ixter, splorg, syuman

Durugh: hump, hunch, topper, widdler, zimp

Humans: flat, mella, mushy, rabbit, swarmer

Kch-thk: bug, clacker, mantis, prediax, slobber

Tavak: anteater, crusty, dillo, dillohead, glaw

Vas Mal: eye, gray, lipslit, weeper

ON THE CONTRACT

This chapter lays out the business conditions you operate under as freelance problem solvers, and confronts you with the limits of your authority.

THE BUSINESS OF JUSTICE

Financial success as a Laser crew depends on your collective ability to quickly snag lucrative contracts and minimize travel expenses. Both of these turn on your most important asset—your reputation.

REPUTATION

As soon as a Laser crew puts down its current contract, it sends out a notification of availability to the Combine bureaucrats who manage the effectuator system, and then waits for new offers to come rolling in. Your ability to quickly land a lucrative new contract depends on your Reputation. This value attaches to the crew as a whole rather than to its individual members.

As play begins, your Reputation is 0. Although this may not be your first case, you are not yet well known as Lasers, for good or for ill.

During your cases you'll encounter chances to enhance your Reputation—or wreck it.

(Reputation determines your time between cases even when you act as freestripers, finding and solving a problem and then finding someone to pay for it. The game abstractly assumes that you've been seeking a contract without result during the downtime between the end of the last case and your stumbling into a new one.)

Opportunities to raise or lower your Reputation should occur once or twice per scenario. Some groups may aggressively trigger more Reputation-affecting incidents with various skeevy activities. GMs should not beat themselves up if, after an engaging session, they realize that they forgot to make Reputation an issue. Its presence may be strong even if unspoken, as it shapes the assumed limits of PC action. The most memorable Reputation-based scenes arise not from GM planning but from the spontaneous reactions of players to their characters' circumstances.

Building Your Reputation

Your objective in building your reputation is to spread the word of your crew's competence, heroism, trustworthiness, and dedication to justice. It is much harder to build a reputation than it is to blot it. Good news doesn't catch fire with the viral ferocity of a juicy negative story.

People can only remember the names of so many Laser crews. To push through the crowd into sector-wide public consciousness, you have to do more than an acceptable job. Merely fulfilling the terms of your contract in an economical way isn't enough to burnish your fame. You have to go above and beyond. To do this, you either solve additional problems not covered by your contract, or take self-sacrificing risks to protect those who cannot protect themselves. You get more credit for heroic actions when they do not obviously benefit you. When you perform a good deed that makes it harder for you to turn a profit on the mission, people see you as putting the public welfare above your own.

Sometimes you'll discover a conflict between reputation-building and mission fulfillment. The goals laid out in your contract might, upon investigation, turn out to be unfair or corrupt. Nothing builds your rep as honest brokers like turning your back on a fat payday and doing the right thing.

Examples of reputation building actions include:

safely rescuing hostages from a pirate vessel, when your contract calls only for you to destroy the pirate ship and everyone in it.

- instead of killing the lifeform that's been preying on a settlement, finding a way to allow both the creature and the settlers to co-exist peacefully.
- in addition to driving off an invasion force, sneaking onto their vessel and downloading crucial intelligence about their culture and military capabilities.
- upon discovering that a rash of murders has been committed by a child driven mad by god-like abilities, finding a cure or sanctuary for him, instead of condemning him to a lifetime of imprisonment.
- after foiling a terrorist plot, defuse the political tensions between factions that's fomenting the ongoing violence.
- when a red herring in your search for a missing scientist leads you to uncover a slavery ring, you break it up.
- called on to apprehend rogue Lasers, you discover that they've been driven mad by an illicit psionic energy experiment, and expose the culprits behind it. For additional bonus points, find a cure for your colleagues' condition.
- staging your raid on a smuggler's hideout while preserving the precious archaeological ruins they're holed up in.
- taking a route through a dangerous asteroid field in order to document the birth of a rare astronomical anomaly.
- protecting squatters outside a mining camp from the depredations of its corrupt foreman, even though you're being paid by the company to find out why its employees' cybernetic enhancements keep failing.

The chance that an altruistic action will build your reputation depends the following factors:

1. the extent of its perceived benefit to society
2. how publicly the event takes place
3. the extent of your self-sacrifice or risk
4. how unusual, noteworthy and exciting the event is as a marketable narrative

When you take an action that might qualify as a reputation-builder, make a case to your GM. Your GM may nudge you if you don't see it, perhaps because your attention is focused on your primary goal. Your GM will judge whether it qualifies according to the above criteria. When unsure, GMs are urged to rule on the generous side.

The GM assigns a Difficulty to the reputation-building action. The base Difficulty is 4. For each of the above factors in the list immediately above that does not apply to the event, the Difficulty increases by 1. For every factor that applies, the Difficulty decreases by 1. If the factor applies in spades, the Difficulty decreases by 2. Occasionally a factor may best be described as a wash, in which case the Difficulty remains unaltered.

A crew member then tests Public Relations against that Difficulty. If successful, the GM marks you down as having achieved a reputation win. This is then taken into account at the end of episode, during the reputation cementing phase (below.)

Sent to survey a disintegrating ice planet and investigate the fates of the previous survey team, the crew encounters a pathogen that devours linear time. Risking madness and death, the team banishes the pathogen from the timestream.

You propose that this action ought to enhance your rep, as it went beyond what you were contracted to do. The GM agrees and sets about calculating the Difficulty of your Public Relations task.

The event has public benefit in spades—you saved the universe from destruction. That's a Difficulty reduction of 2.

No one lives on the ice planet, so your heroism didn't take place publicly. The Difficulty increases by 1.

As far as risk is concerned, you on one hand risked your lives to banish the time pathogen. On the other, the universe would have been destroyed if you hadn't—meaning that it was in part an act of self-preservation. This factor, the GM decides, is self-canceling, and does not change the Difficulty.

The final Difficulty, then, is 4 - 2 + 1, or 3.

The ship's bagger, Dialectic, has 6 points in his Public Relations pool. He spends 2 points and rolls a 1, just making the Difficulty.

The GM marks this as a PR win for your crew, which she'll revisit during the episode's denouement.

Tests occur during play, as opportunities to trumpet your achievement come up.

Smirching Your Reputation

Deteriorating social conditions in the aftermath of the war have ushered in a new culture of gossip and innuendo. Bleeders avidly follow stories of greed and corruption, as reported through the interstellar news media. Stories of supposed heroes who suddenly reveal their seamy sides carry a special tang of schadenfreude. However bad life may be in the post-utopian age, it's bleakly reassuring to know that others are worse than you are.

Bad behavior by Lasers features prominently in sector-wide scandalcasts. Whenever you do something selfish, unjust, unnecessarily violent or just plain skeevy, word spreads that your crew is not to be trusted on a delicate mission. You become one of the bad apples giving all the other Laser crews a bad name. The best contracts start to go to other, better-regarded crews. You spend more downtime between missions waiting for offers to come in. When they do, you have to underbid to close the deal.

Failures to complete the terms of your mission can also smirch your reputation. (An exception, noted above, occurs when you're seen to set aside an unfair set of mission goals in the name of higher justice.)

Examples of reputation-bruising actions might include:

- stooping to physical force, torture, or humiliation to get the information you seek
- needlessly killing sentient opponents you could have merely stunned
- destroying occupied ships you could have left disabled
- attacking shuttle craft escaping from a doomed ship
- attacking or bullying innocent bystanders
- stealing evidence or other goods. (Taking items through legal rights of salvage or forfeiture is acceptable, unless you're seen to have acted in bad faith.)
- defrauding business partners
- defaulting on financial obligations
- acts of personal impropriety, from adultery to overindulgence in mood-altering substances
- space piracy

The chance of damage to your reputation depends on the following factors:

1. how publicly the events took place
2. how much sympathy do the victims (if any) arouse in the general public
3. how serious your crime or infraction
4. (for offenses of omission or incompetence) how easy would it have been to avoid the bad outcome?

You can squelch potential scandals with clever use of the Public Relations ability. You create an alternate narrative absolving yourselves of blame for whatever went down. If this becomes the dominant story, the threat to your reputation goes away—for the moment, at least.

Engage in damage control with a Public Relations test. As with attempts to build your reputation, this occurs at a logically appropriate moment during the session, not during downtime. The GM starts with a base Difficulty of 4, modified by considering the four factors above. The GM considers factor 3 only if you're accused of a crime or infraction, and factor 4 only if you're defending against charges of incom-

petence. If the factor cuts against you, the Difficulty increases by 1, or 2 in particularly egregious cases. If it mitigates your offense, it decreases by 1, or 2 in the case of an extreme gray area. Neutral or inapplicable factors leave the Difficulty unchanged.

Public Relations only gets you so far. If you keep getting your name in the news in a bad way, people will eventually conclude that you're hinky, even if you always seem to get away with it. The total number of successful Public Relations tests the crew has made against threats to its reputation, in both the current and previous episodes, are also added to the Difficulty.

Succumbing to boredom while staking out a spaceport bar, Dialectic starts a fight with a loudmouthed anti-cybe bigot. He unsheathes his popclaws and goes to town on the man, leaving their insureshields off. His fellow crewmen haul him off before he kills the bar patron, but he's hurt badly enough to require emergency surgery.

You decide to engage in damage control, figuring that Dialectic will only make matters worse by taking his usual role as the team's PR point man.

Ashley, the GM, calculates the Difficulty.

The events took place very publicly, in a bar. That adds 1 to the Difficulty.

It turns out that the victim's young daughter was killed by a bomb planted by cybe radicals. If Dialectic had talked to him longer, he would have learned that, and possibly backed off. Though not entirely without blame—he did goad Dialectic—he can be played as a victim in the scandalsheets. The Difficulty increases by 1.

The man had to be hospitalized. For a serious assault, Ashley assigns another +1 to the Difficulty.

This is not a case of incompetence, so the last factor does not apply.

Also, during the previous episode, Dialectic performed successful damage control on two incidents: your vas mal, Eunice Lincoln, violated a witnesses' privacy by peering too closely into his thoughts, and your wrench, Kai Reffen, was caught helping herself to junked ship components in the Alabaster Drydock. These two suppressed incidents, which might come to light again with this new press attention. add a total of 2 points to the Difficulty.

The Difficulty is 4 + 1 + 1+ 1 + 2, or 9.

You spend all 4 of your Public Relations points and roll a 2. The final result of 6 leaves you far short of the Difficulty. This story may wind up making the scandalsheet rounds.

Ambiguous Events

Some events might be spun in your favor or against you. For example, you might kill a bystander while rescuing a hostage. Because people find bad news more interesting and memorable, you must spin as if against a negative event. However, you can apply the following bonuses to your test:

+1 if the overall benefit to society from your action outweighs the detriment

+1 if you faced significant risk or sacrifice

Scandalcasts love stories that fit an existing narrative, especially a bad one.

If your Reputation suffered a net drop over the course of your previous case, the Difficulty increases by 2.

If you've lost Reputation already this session, the Difficulty increases by 2.

If your Reputation underwent a net increase over the course of your previous case, you get a +1 bonus.

Paradoxically, the scandalcast audience also loves reversals.

If your Reputation is below -4, you get a +1 bonus.

If your Reputation is above 6, the Difficulty increases by 2.

Egregious Events

Outright crimes and atrocities lie outside the bounds of the Reputation system, which is designed to handle ethical infractions by crews still capable of securing contracts as law enforcers. Now and then players may forget the premise of the game and contemplate acts of genocide, terrorism, or mass destruction. They're usually joking. If they seriously mean to proceed, though, explain to them that the acts they're planning would instantly end their Laser careers. They'll no longer be able to bid on contracts at all. Instead, they'll be the targets of contracts, hunted by other Laser crews.

A game in which the PCs are fugitives from justice in the Bleed might be fun for a few groups, but lies outside the scope of this book. GMs running such a series, either from the outset or in response to player shark-jumping, should be ready to reevaluate and adjust many of its rules.

Cementing Your Reputation

Stories take a while to percolate out of planetary media to the interstellar press. At episode's end, the GM stacks your PR victories against your PR losses to see whether the overall coverage of your actions during your mission will be treated favorably or unfavorably.

If you racked up no reputation-affecting events, good or bad, your Reputation remains unchanged.

If you have had events, and the number of negative events equals or exceeds the number of positive events, your Reputation goes down by 1.

If your total number of positive PR events exceeds your number of negative events, your Reputation goes up by 1.

The GM may override this result if they seem absurd given the story at hand. If you saved the universe and got caught using recreational drugs, the magnitude of the first event outweighs the second. If you murdered one man and engaged in separate incidents of puppy and kitten rescue, you still take a hit to your rep. GM overrides leave the crew's reputation unchanged, as their image becomes confused in the public mind.

REPUTATION IN YOUR GAME

Reputation actualizes the game's central theme, the conflict between self-interest and altruism.

On a first read you might conclude that the Reputation rules hold out the possibility of a protracted spiral into ineffectiveness, like Sanity and Stability in Trail of Cthulhu or Mutant City Blues' genetic defects.

Although this might happen in some groups, in most cases you'll find that they manage to maintain a positive reputation that hovers between 2 and 5. This is not only acceptable but expected. This rules system is doing its job if the players discuss the effect of their actions on their Reputation at least once per session. If this isn't happening, build more potentially Reputation-affecting events into your scenarios.

To modulate your series' frequencies to a grimmer tone, give them tougher choices, and adjust Public Relations Difficulties upwards.

To modulate them to breezy and tongue-in-cheek, lower the Difficulties.

By lowering Difficulties and describing the results of Public Relations tests in a satirically cynical manner, you adjust your tone to be both dark and amusing.

SECURING CONTRACTS

To keep your ship in the black, your crew must master the intricacies of Laser contracting.

Contract Types

Most contracts specify the exact conditions that must be met to qualify for pay-out. For example, you might have to:

- apprehend a fugitive
- identify the perpetrator of a specified crime, providing sufficient evidence to obtain a conviction
- recover an object
- deliver an intelligence dossier answering a specified question
- conduct a survey of a planet or anomaly, handing over a complete set of sensor readings
- broker a signed ceasefire agreement

When you meet the contract's conditions, you have discharged your duties and are then eligible for payout. This is the most common contract type. In the trade they're known as hardclaused contracts. Lasers like them because it's always clear when they've succeeded and can ask for their cash. They dislike them because they sometimes hamper judgment calls in the field. A hardclaused mission may require you to check back in with your client when you find that the contract was drawn up under a mistaken set of facts. You might find out that:

- the fugitive was framed
- the criminal acted in self-defense

- the object is essential to a colony's survival and can't be moved without significant loss of life
- the client should really care about some more important piece of intel

When clients know they don't know enough to know what they want, they draw up open-ended contracts. The Lasers are sent to find out what's going on and then arrive at the best fix for a problem. Such missions are tendered under agreements called appropriate action contracts. The term derives from the clause requiring the Lasers to assess the situation and bring about the best possible solution. In Laser slang, these are called double-As.

For example, the crew might take a contract from the Combine Cartographic Authority. They're to find out why their translight mapping buoys in the Phrygian system keep going offline. The appropriate actions the contract calls on them to make are determined by the nature of the mystery.

If the relays are being sabotaged by pirates, they have to stop the pirates—perhaps taking them into custody, perhaps running them off.

If they're being tampered with by members of an alien species, the Lasers might make an accord with the aliens or drive them off by force, depending on how hostile they are.

If the relays are being pulled into a stellar anomaly, the Lasers have to find out what's causing the anomaly and reverse the conditions that brought it into being.

Pickup Contracts

Occasionally you'll start an episode without a contract in hand. The GM contrives to have you stumble into a mystery or problem. You then proceed to solve it—but not before you find a client to pay you to do it.

A contract initiated by a Laser crew is known as a pickup. The Lasers discover a crisis and approach an authority who will want to see it resolved. A pickup offers the same payout as a standard, client-initiated contract. The only difference lies in the way the first scenes of the story are introduced. Pickup contracts often arise when your personal arcs come into play. A sequence of events that helps to advance the storylines of one or more individual characters leads to the discovery of a broader crisis, which the entire group can get paid to resolve.

- While on shore leave, the group stumbles onto a black market for stolen memories. They contract with the Combine to investigate further and break up the memory smuggling ring.
- A crew member attends a court martial of an old navy buddy, hoping to serve as a character witness. Noticing that some psychic force is influencing the proceedings, the group contracts with the Combine's Psionic Threats Agency to find out who it is and put a stop to the scheme.
- The crew intercepts an escape pod from a destroyed ship, and contracts with the Combine navy to hunt down the unknown vessel responsible for the unprovoked attack.

The ability to secure a pickup opportunity placed in a story by your GM is never left up to chance. You never have to make a Business Affairs test or overcome any other obstacle to secure the contract. If you can't think of a client who'd pay you to resolve it, the GM supplies you with that information via an investigative ability. You never have to spend investigative points for this hint. Depriving you of a payout, even when it seems to make logical sense within the story, is gratuitously punitive. The rules assume that you get a chance to earn on every mission. You shouldn't lose out just because the GM wants to vary the way her episodes start.

Time Between Contracts

The length of downtime periods you spend between missions, and the payouts you get when you complete them, vary according to your Reputation.

Crews with sterling reputations get more offers than those with poor ones. Quick turnaround times are essential to the financial health of any Laser operation.

To determine the downtime that has passed between this new episode and the last, and therefore the Upkeep you owe, make a Business Affairs test against the Difficulty of 4. This test occurs at the very beginning of most episodes. If your Reputation is positive, add it to your final result. If your Reputation is negative, add its absolute value to the Difficulty.

The length of your downtime depends on the difference between the Difficulty and result of this Downtime test.

Downtime Test Table

Outcome	Margin Between Difficulty and Result	Length of Downtime
Success	0-4	3 months
	5-12	2 months
	13-15	1 month
	16 or more	negligible
Failure	1-12	4 months
	13-15	5 months
	16 or more	6 months

A new episode begins with the downtime test to see how long the crew has gone between missions. After Dialectic's bar fight, your Reputation score stands at -1. Dialectic tests Business Affairs against a Difficulty of 5: the baseline, plus the absolute value of your negative Reputation. He spends 4 Business Affairs points on the test, and rolls a 4, for a successful result of 8. The margin between difference and result is 3. Checking the table, the GM finds the entry for a successful result and a margin of 3. The crew spends three months of downtime before snagging its next contract.

WHAT HAPPENS IN DOWNTIME, STAYS IN DOWNTIME

Periods of downtime may be spent traveling from the site of the previous episode to the planet where the next assignment waits; see p. 191. In most instances travel times take up only a slice of your downtime. GMs may occasionally ask you to specify what you were doing during the interval. Envisioning what your character gets up to during his free time helps to give him a sense of dimension.

Most of the time, though, downtime is when the boring stuff happens, and is thus ignored. You might chase pickup opportunities that don't pan out, complete side deals, or engage in uninteresting but vital maintenance activities.

Paying Upkeep

The last action you take at the end of Downtime and before the beginning of a new case is the payment of your Upkeep. The total owed equals the combined Upkeep costs of each Laser's gear and enhancements, plus the Upkeep cost of your ship, times the number of months spent between cases.

If you can't pay your Upkeep, you have to either take ship systems or enhancements offline. See the appropriate sections in the Starships and Tech chapters.

Contract Fees

The fee for any contract is derived from a figure called the Baseline. It varies depending on your number of players:

# of Players	Baseline
2	36
3	42
4	48
5	54
6	60

When a case requires you to perform multiple tasks, the Payout may be divided into chunks, so that you get paid a portion of the take for each task completed. On top of that, you may be awarded Bonuses for performing optional tasks the client would like to see completed but does not consider central to the mission. Bonus tasks are often contingent on circumstances: with the information at hand when the contract is drawn up, the client may not know if they're achievable at all. For this reason, they're separate from, and awarded in addition to, the Payout for completing the primary mission. A single bonus is worth either 20% or 25% of the baseline fee, in round numbers:

# of Players	Basic Bonus	Generous Bonus
2	7	9
3	8	11
4	10	12
5	11	14
6	12	15

Ledgers and Losses

Ashen Stars doesn't nickle and dime you on the small expenses incurred during an investigation. In the story, your Laser may be greasing a supporting character's palms, but the system doesn't consider this important enough to justify a bunch of boring bookkeeping. Instead you pay for bribes not with microcreds that you have to keep track of, but by using either your Negotiation or Business Affairs ability. The first comes into play when you're haggling for information; the second, for other benefits. A flexible GM will allow you to spend Negotiation points on unrelated benefits, either as a straight spend or by treating them as Business Affairs points.

You may, however, need a cushion of funds for ship repairs and other large-scale emergencies. The risk of incurring ship repairs is factored into the space combat system. Other than that, your GM should cap a scenario's total possible emergency costs, when they occur at all, to the value of a generous bonus. Emergency costs should be an unusual occurrence.

For groups who enjoy having the screws put to them, it may be acceptable to go for many sessions without a big cost, then hit them with a lump sum roughly equivalent to the number of cost-free sessions times the acceptable emergency cost per session.

When running for an easily discouraged group, dispense emergency costs sparingly or not at all.

Side Deals

During the course of an episode, the crew may get the chance to earn bigcreds through one or more side deals. The most common side deal consists of a freight contract to haul a cargo from one destination to another, usually but not always over interplanetary distances. Roll a die at the beginning of each episode. On any even result, the available side deal is a freight contract.

Other common side deals include:

- **intelligence commissions**, in which the group performs a side investigation for a private individual met during the course of their primary mission
- **security assignments**, in which the Lasers guard or protect a person, place or thing
- **secondary missions**, in which a person met during the crew's assignment pays them to enforce a law not covered in their main contract
- **full and frank discussions**, in which the crew is paid to intimidate or threaten someone on behalf of a third party
- **sale** of salvage, ore, or other goods legally discovered and extracted by the crew

In some instances, the only difference between a side deal and a bonus is that the first is commissioned by an outside party, and the bonus is paid by the client responsible for the main contract.

A side deal pays as much as a basic bonus. The GM creates side deals so that they require the crew to do one or more of the following:

risk failure in their overall mission
risk PR disaster
risk harm to themselves
risk damaging their ship

Often the crew gets a chance to haggle over the final value of a side deal. Successfully haggling requires a Business Affairs test. The base Difficulty of the test is 8, minus the number of above risks the side deal entails.

On a success, the value increases to that of a generous bonus. On a failure, it decreases to around 15% of a standard mission payout.

When haggling for a freight contract, subtract your ship's Cargo spec from the Difficulty of your Business Affairs test. Negative Cargo specs increase the Difficulty.

# of Players	Failed Haggle	No Haggle	Successful Haggle
2	5	7	9
3	6	8	11
4	7	10	12
5	8	11	14
6	9	12	15

Cargo Bays

If your ship has no cargo bays, your crew misses out on freight haulage side deals. This means that in any given episode, there's a 50% chance that no side deal at all will be available.

If your ship has only 1 cargo bay, you can't haggle to increase the value of freight haulage side deals.

If your ship has 3 cargo bays, subtract 4 from the Difficulty of any haggle test arising from a freight haulage side deal.

Dividend Deals

Some sideline deals pay out over time; these are known as dividend deals. Typically these occur when very large sums are due, which are paid out over an installment plan. The most common dividend deal is the sale of a salvaged or confiscated ship. In effect the buyer pays a monthly mortgage fee to the crew. The GM contrives events so that the crew must undertake one or more of the four risks listed in the previous section (to their reputation, lives, ship, or mission) to earn a dividend deal. They can settle on a base payout per month, or haggle, risking a lower mortgage fee if they fail and are out-negotiated by the buyer.

# of Players	Failed Haggle	No Haggle	Successful Haggle
2	1	2	3
3	1	2	4
4	2	3	4
5	2	3	5
6	2	4	6

Fee Cap

No single episode grants more than three bonuses, side deals, or dividend deals. The three can appear in any combination. One episode might include two bonuses and a dividend deal, the next three side deals, and the next one opportunity of each type.

Short episodes might include fewer than three opportunities for additional earnings. Extremely long episodes might grant more, perhaps as many as one per session.

If players pursue opportunities you didn't think of, build on their collaborative input by improvising a suitable opportunity. Compensate for this by removing an opportunity you've planned for later.

When they've already used up the episode's quota of opportunities, you might allow them to pursue another one, and then decrease their opportunities in the following episode. Sometimes for pacing reasons you'll want to foreclose the option they're pursuing. Look for ways to dovetail the central mystery with the situation that stops them from pursuing the desired opportunity. For example, they might come across a derelict vessel. In theory they could tow this to a space station and sell it for salvage or retrofitting, earning a dividend. But it's late in the session and they're achingly close to solving the final mystery. Therefore they find that the ship has been boobytrapped. After narrowly escaping to their shuttle craft, they trace the bomb to the guerrillas responsible for the acts of sabotage they were hired to investigate.

Loans

When strapped for bigcreds, crews can take out short-term loans. These can either tide you over until a generous payout comes in, or accelerate your spiral to financial doom.

To take out a loan, first select a desired loan amount. It can be any amount in bigcreds, up to your group's baseline contract payout (p. 172). Make a Business Affairs test against a base Difficulty of 4. If your Reputation is positive, add it to your final result. If your Reputation is negative, add its absolute value to the Difficulty.

The deadline for paying back the loan, and the amount of interest owing, depends on the margin.

Loan Test Table

Outcome	Difference	Months Before Payment Due	Total Repayment in Bigcreds
Success	0-4	4	125%
	5-8	5	115%
	9+	6	105%
Failure	0-4	3	160%
	5-8	2	150%
	9+	1	140%

Final payments with interest are rounded up to the nearest whole number.

Close readers of the interest figures above table may have already intuited that the financiers of these loans, especially when you fail your Business Affairs test, might leave something to be desired in the legitimacy department. You may then be confronted with heavily armed collection officers—or asked to abuse your Laser positions on behalf of the shadowy people you owe. The adjusted interest fees that kick in after a crew misses its payment deadline are subject to negotiation, and left for the GM to resolve during play.

The Eastwood crew has fallen on hard times and needs a bridge loan to tide it over until it puts down its current case. Dialectic makes a Business Affairs test. After an unfortunate incident at the Amadis Station casino, the crew's Reputation has dipped to -4. The absolute value of that negative number is 4, for a total Difficulty of 8. Dialectic spends 6 Business Affairs points, dropping his pool from 8 to 2. He rolls a 4, for a result of 10. He succeeds, with a margin of 2. The Eastwood gets a loan equal to its baseline payout of 54 bigcreds. They have to pay it back in four months, at which point their debt will be 125% of the loan, or 68 bigcreds (67. 5 bigcreds, rounded up to the nearest whole number.)

LASERS SOLVE PROBLEMS; MONEY DOESN'T

Although money plays a role in limiting and motivating PC actions, Ashen Stars is a game of mystery and adventure, not of economic simulation. Keep bigcreds and what they buy abstract. When the Lasers want to solve problems with money, present them with options bringing their abilities to bear on the situation.

For example, let's say the Lasers are wondering how much it will cost to hire passenger vessels to evacuate colonists from a disintegrating planet. Rather than getting bogged down in the economics of such an effort, you posit various situations that frame their choices in terms of their abilities:

"To fund that, you'd have to broker a big deal with the passenger line. Maybe if you put them in touch with an old acquaintance, Lisa Yates of Transorbital Transpo, they could resell asteroid mining rights to defray the evacuation cost. It would be a hard deal to put together, especially given the way the Brigit-7 contract went down, but nothing's impossible when there's a profit to be turned." (In other words, you're suggesting that a Business Affairs test against a tough Difficulty might do the trick.)

Or: [To the character with the highest Forensic Accounting] *You know that Transorbital Transpo has taken a third-quarter hit after the Brigit-7 financial mess hit the scandalcasts. It's a tough sell, but if you might be able to convince them that managing the evacuation would turn around their hemorrhaging public image."* (Here you're describing a Public Relations test as solution to the problem.)

Better yet, turn around the discussion so that the players are proposing ways to use their abilities to solve the problem:

Player: "*How much would it cost exactly to fund an evacuation."*

GM: "*Your character can calculate the exact number, but let's say it's very costly. Look at your abilities and tell me how you might make it happen."*

This is an application of the broader Story Determines Difficulty principle, further described on p. 182.

JUDICIAL PROCEDURES

The Lasers' contact with the Bleed's fragmented justice system usually ends when they transfer custody of a criminal perpetrator to the authorities. When PCs are called to testify, the GM will almost always treat this as an off-stage event that occurs during the downtime between missions. On occasion, though, a new case or mystery may arise from their judicial wrap-up of a previous case. Lasers who play fast and loose with the rules may find themselves confronting the justice system as defendants. They might also find themselves featured in a staple plotline of the space opera genre, in which the heroes face wrongful charges and must defend themselves in court.

Notions of law and authority are in flux throughout the Bleed. It is this confused situation that both allows Lasers to operate in the first place, and complicates their business affairs.

Whose Law?

When Lasers are hired to enforce laws, or encounter lawbreakers in the course of solving apparently non-criminal problems, they must operate under the client's laws of evidence and official conduct.

Although contracts are processed through the Combine government at the space station Ossa One (p.158), Lasers may find themselves working for non-Combine governments. They may also be hired by private individuals or business concerns. When working for non-governmental clients, Lasers operate within the confines of the legal system that constrain their clients.

Combine-affiliated worlds still uphold its laws, but must sometimes adjust them to fit the realities of local conditions. They exert authority to the extent that they are able, which often involves the outsourcing of law enforcement to private concerns—your Laser crew included.

Most autonomous worlds rely on legal codes derived from their recent Combine pasts. Only planets that have undergone unusually rapid social and political change will have completely abandoned Combine law. Rather than create new legal systems wholesale, they typically look to the distant past for culture-specific legal codes. Rogue synthculture worlds adapt ancient systems of law from the periods they emulate. Xenophobic polities purify their codes to eliminate outside traditions.

Completely alien planets follow their own legal systems. Depending on their degree of cultural similarity with Combine norms,

Lasers may find these interestingly eccentric, cruelly draconian, or utterly incomprehensible.

Although this may seem confusing, situationally any PC with the Law ability knows what the crew's rights and responsibilities are in any known legal system. Your in-house legal experts can also make solid assumptions about previously unfamiliar alien legal systems, assuming that the culture itself conforms to the basic rules of xenoanthropology.

Further discussion of affiliated and autonomous worlds appears on p. 181.

Jurisdiction

Conflicts may arise when the Lasers are hired by governments, concerns or individuals from one jurisdiction, but the perpetrator's crimes occur in another. Similar disputes occur when a defendant commits a crime in one jurisdiction and is apprehended in another.

Treat all Combine-affiliated worlds as one big legal jurisdiction.

By definition, if autonomous worlds wanted to be part of Combine jurisdiction, they wouldn't have declared autonomy. They rarely enter into extradition treaties or officially cooperate with the old regime. In practice, these matters often prove negotiable, especially to Lasers with points to burn in such Interpersonal abilities as Bureaucracy, Flattery, Inspiration, and Respect.

The Combine claims the right to prosecute crimes committed not only in Combine-affiliated worlds, but on formerly affiliated planets. They also claim all space between worlds within Combine boundaries, including all space in the Bleed, as their jurisdiction. Thus, crimes committed on ship or aboard space stations can be taken to Combine court. Autonomous and alien worlds make the counter-claim that crimes committed on ships or stations registered to them must be treated as if occurring on their soil. Given a choice between competing jurisdictional claims, Lasers must follow their clients' wishes, as expressed in boilerplate language in the contract. In rare cases contracts may extend to Lasers the discretion to choose the jurisdiction that will best serve the client's interests, or those of justice in the abstract.

Combine authorities also claim the right to prosecute war crimes and crimes against sentience*, wherever they occur. Again these claims are resisted by other authorities, sometimes with violent force.

Trial Procedure

Combine law includes elements of tavak and balla tradition but is largely derived from English common law. Prosecutors seek to prove the defendant's guilt beyond a reasonable doubt. Defense attorneys rebut the case they present. A judge ensures that proper procedures are followed and pronounces sentence in the event of a conviction. Witnesses are hooked up to polygraphic instrumentation devices as they testify. Statements proven by the instruments to be untruthful are stricken from the record. When an ambiguous reading occurs, the jury is permitted to weigh it as one factor in their deliberations.

A twelve-member impartial jury hears the evidence and decides whether guilt has been proven. Prospective jurors undergo balla-derived psychological testing to ensure their intellectual rigor. Deliberations are accompanied by a tavak meditation ceremony.

Lasers may be required to present verbal testimony, and to establish that physical evidence presented by the prosecution is in good order and has not been interfered with.

*This term replaces the now-anachronistic "crimes against humanity."

SENTENCING

Sentences for criminal convictions become relevant when Lasers meet back up with recurring villains, go undercover in prison facilities, or face the threat of prosecution themselves.

Combine judges can sentence convicted defendants to either supervised rehabilitation or imprisonment. The Combine does not practice the death penalty. Most autonomous worlds consider it equally unthinkable. Extreme breakaway worlds enthusiastically execute criminals, often for minor offenses. Alien worlds may also mete out death sentences.

Supervised Rehabilitation

Convicts sentenced to supervised rehabilitation undergo a mandated period of therapy. The details of this regimen vary by patient. Most often they include a combination of drug and talk therapy, along with training in tavak meditation and/or balla emotion suppression. So-called "suhabs" must report their movements in detail, are not permitted to travel between worlds, face spot audits of financial activity, and are subject to curfew. At the end of the mandated period they undergo psychological testing to ensure that their anti-social attitudes have been smoothed away. As a condition of release convicts may have to make monetary or emotional restitution to victims of their crimes.

In struggling or tech-poor colonies, supervised rehabilitation programs may be rudimentary at best. They may consist only of a program of indifferently-administered house arrest.

Imprisonment

Sentences range from a few years to life. They're served in a variety of institutions, from local jails to Combine penal colonies.

Local

Local prisons range from the primitive to the sophisticated. On Combine worlds, only low-risk offenders go to planetside prisons.

In Combine worlds, those on the higher end of the spectrum offer psychological services comparable to the suhab program. Convicts serving short sentences may apply for transitional suhab status after successfully undergoing these therapies.

Autonomous worlds are less likely to focus on rehabilitation over punishment. Their facilities may be rudimentary or high-tech. The prisons of authoritarian regimes act as instruments of political repression, existing more to instill fear into the populace than to protect it.

Penal Colonies

Serious Combine offenders are sent to maximum-security penal colonies. These may be groundside affairs or orbiting space stations. They often appear on planets or asteroids where prisoners and staff are the only sentient inhabitants. Often situated on extremely inhospitable worlds, these colonies are secure because there's nowhere to escape to.

Escape attempts are only possible with aid from outside ships. For this reason, small fleets of armed vessels orbit penal worlds, ready to intercept any unauthorized craft before they reach atmosphere. Similar defenses ring orbiting penal space stations.

Throughout the Bleed, the operation of these facilities has been shifted to private, profit-making concerns. Some are run by former Lasers. Like Lasers, penal firms prosper or starve according to their reputations. Escapes and scandals lose them contracts. Contract terms allow prisoners to be transferred to more reputable facilities after incidents or infractions.

Although they operate under Combine law, penal colonies regularly contract to house high-risk prisoners convicted by autonomous worlds. Under pressure from their most lucrative client, the Combine, they refuse prisoners convicted by authoritarian, capricious, or unreliable autonomous regimes.

WORLDS ARE STORIES

This section shows you how to integrate world creation with the central mysteries that drive each episode. It also describes the translight corridors and spaceways, the connective tissue linking these worlds into a single fading galactic sector.

BUILD THE DETAILS FROM THE PREMISE

Writers of space opera stories or TV episodes don't typically start by randomly detailing a planet and then developing a plot around it. They start with a problem for the characters to solve and then create the world that brings it entertainingly to life. Although you may occasionally find inspiration for a story by starting with the setting, you'll find it easier to imagine and run compelling episodes by following the same thought process.

For this reason, you may want to jump ahead to the Running the Bleed chapter (p. 216) and then pop back here for specific tips on world-building.

I've Been Everywhere, Man

A spacefaring game allows you to introduce a fresh setting with every new episode, tailoring it specifically to its themes, moods and dilemmas and personal developments. It frees you from the need to maintain an ever-expanding cast of supporting characters, and the players from the consequences of having to deal with them throughout the course of an extended storyline. Long-running series sometimes get bogged down when the PCs have accumulated a long enemies list. With so many potential threats to deal with, they sometimes hunker down or get discouraged.

You can still bring in memorable supporting characters. When you do, each appearance becomes a noteworthy occasion. That renegade vas mal or criminally insane stepbrother can show up when needed, but doesn't loom over every session.

As a change of pace, you might occasionally want to create a world-hopping episode, in which the heroes travel from planet to planet completing an investigation. The fugitive hunt is well suited to this approach, for example. You'll note, though, that space opera TV shows tend to limit the action to a single world. They do this partly for budgetary reasons, but also because a standalone world provides you a unity of mood, action, and theme.

World-hopping episodes introduce a problem specific to the RPG form. A clue trail that leads from world to world will seem more linear and GM-driven than one in which the Lasers can pursue the clues found in a single world in various scene orders, depending on the decisions they make.

Even when events mainly take place warpside, they'll often refer to a particular planet. The fate of the planet's inhabitants depends on what the Lasers do in space. In these cases you can sum up the planet in a line or two without having to flesh it out in exacting detail. Be prepared to wing it though, if the players surprise you with a plan that takes them to the planet's surface.

From Problem to World

Every episode in an Ashen Stars game centers around a central problem, which the Lasers solve in large part by gathering information. Along the way, and perhaps at the end, they get into trouble, sometimes completing their problem-solving with the use of force. The story's climax may turn on a moral dilemma, for which there might not be a single right answer.

The central problem of your episode might be an external one that any character could tackle, usually the mission laid out in their contract. It might be a personal dilemma specific to one or more crew members. Ideally, it brings in both elements. Sometimes you'll create a central, external problem in advance and, once play begins, improvise one or more personal sub-plots around it.

Create your world of the week to support and detail your central problem. Use the world creation process to turn a general idea for a central problem into a specific one.

Each episode is built from a number of structural elements. The two elements most relevant to world-building are your premise and your twist.

The **premise** describes the problem as the players understand it at the outset of the episode. Typically it's spelled out in their mission contract. (As noted in the previous chapter, you'll occasionally start a story without a contract, allowing the Lasers to stumble onto a problem first and work out how to get paid for it later.)

The **twist** is a new set of facts they uncover midway through the investigation, which changes its focus and possibly introduces a difficult choice.

Start by devising your premise and twist. The world details flow from those.

Here are some sample central problems, which we'll then use as springboards for world creation:

The Lasers are hired to rescue a shipment of slaves (premise), only to discover that they're reluctant to be freed (twist)

The Lasers seek a missing munitions engineer (premise), discovering that he's gone mad and transformed himself and a colony of followers into living weapons (twist)

The Lasers are sent to investigate a new celestial body (premise), only to find that it's already been claimed by two groups, which it must mediate between (twist)

Having found your premise and twist, give your world a **working title** that literally evokes the problem or twist. This keeps you thinking about the theme and saves you from wandering off in directions irrelevant to your story. Dare to be obvious!

The first story is about slaves, so let's call the world **Slaveworld.**

The second premise revolves around a war theme, so we call it **Warworld.**

The third premise has two competing groups fighting over the world, which makes it a prize. **Prizeworld** it is.

Next, decide what **driving facts** you need to make your problem, premise and twist work. In doing so, you'll not only be creating information about your world for the players to discover, but solidifying your episode structure. (In roleplaying we often have a tendency to create world details first and then create plots based on that exposition. To some extent the Bleed background does this too. But when creating episodes, we're suggesting that, as TV episode writers do—you make the exposition serve the story, and not the other way around.)

Slaveworld: This episode could take place entirely aboard the Laser's ship, and the recommissioned passenger vessel used to transport the slaves to their destination. It actually requires you to create two worlds—the captives' homeworld, and their destination. Before thinking any further about them, you look for a way to justify the twist. Why would captives willingly accept slavery? You consider several options, including nufaith, strange customs on their homeworld, or hostage-taking by the slavers. All of these could work, and would lead to you to a different set of driving facts. The first homeworld would be dominated by nufaith. The second might be anthropologically isolated and possibly alien. The third would logically have poor defenses, explaining why the captives meekly accept their fate. Instead you go for a fourth answer to the central mystery, inspired by a piece of science news that intrigued you recently. Our actions, the article revealed, are driven to a surprising degree by the needs of the microbe populations resident in our bodies. When you crave salt, for example, it might be the sodium-seeking microbes triggering a response in your brain. You put a space opera twist on this by deciding that the microbes in the captives' systems want to migrate to a new world. Granted quasi-sentience by anomalous radiation, they've gained the ability to precisely manipulate their hosts' decision-making. With this in mind, you detail the captives' homeworld as an increasingly cold and hostile place. If it's gripped by a new ice age that threatens the microbes, that explains their desire to move. The destination world must logically be the opposite of that: balmy, hospitable, and nutrient-rich.

Warworld: If the munitions engineer is missing, it makes sense that Warworld would be remote. In this setting, that means that it's located in a solar system only lightly in-

tersected by translight corridors. As the name suggests, you want it to evoke the theme of war. Jumping off from its remoteness, you postulate that it was used as a munitions manufacture site, because its limited translight access points made it more easily defensible than other worlds. You decide that the world is covered with disused factories. It bristles with surface-to-orbit artillery batteries. Given your twist, the technology allowing the engineer to turn his followers into living weapons must have been repurposed from one of the factories.

For your story to work, **Prizeworld** must have recently appeared out of nowhere, and must be worth fighting over. This suggests to you a space opera take on the Eden myth. You envision a lush and fecund world, teeming with life. The world, you decide, was wished into existence by the vas kra before they did whatever they did during the war that caused their devolution. They created it as a refuge in case they were cast into fleshly forms. Now a party of vas mal have discovered the gift left behind by their immortal selves. Having established this side of the dichotomy, you create a contrasting group: the desperate population of a destroyed world. Driven by nufaith, they also see it as their promised land—one they're entitled to despoil in the name of rebuilt civilization.

Now that the driving facts have led you to your world's basic concept, you can go on to extrapolate details to lend it depth and make it seem real. You can think of these in advance, fill them in as you envision the major scenes of your episode, or invent them during play. Typically you'll do all of these things. Use the basic concept of your world as the starting point for these unique and memorable facts. Ideas might flood immediately to mind. If inspiration fails, think of the world concept in relation to the game's overall themes of survival, shattered idealism, and the pull between selfishness and altruism. Look for details that make sense for your world, but also provide possible avenues of misdirection that help to obscure the mystery. Alternately, extrapolated details could tie into personal arcs, providing the basis for a character-driven sub-plot or two.

If **Slaveworld** is suddenly growing cold and inhospitable, maybe that has something to do with the war. Its people tested a super-weapon to use against the Mohilar, and paid for it by accidentally triggering a new ice age. It might also have activated the collective intelligence of its peoples' bodily microbes, or might be a red herring that simply reinforces the game's theme. A turn to radical pacifism might likewise offer a misleading explanation for the volunteering slaves' behavior. They might think they're acting out of penance, when really it's the microbes impelling them to migrate to warmer climes.

Warworld might be littered with automated robot sentries to protect its facto-

WORLD CREATION SUMMARY

Create worlds by following these steps:

1. Identify your central problem
2. Identify its premise and twist
3. Give it a working title reminding you of the problem or twist
4. Find the driving facts you need to make your problem work
5. Create depth with extrapolated details consistent with your driving facts
6. Preserve the mystery by renaming your world

ries. They might be used by the engineer's followers to keep the Lasers at bay, or act as an independent threat. The Lasers might stumble across archaeological ruins or devastated habitats, suggesting that warworld was a beautiful place before it was sacrificed to the war effort. This parallels what its current inhabitants are now doing to themselves, and could lay provide fodder for an inspiring speech delivered by a PC to the living weapons.

As a delayed creation of the vas kra, **Prizeworld** might throw up a variety of phenomena unexplainable by 25th century science. You might select one strange thing that best fits one or more of the PCs' personal arcs. They might encounter vivid recreations of their defining memories, temporarily revert back to their childhood selves, or grow evil clones who might briefly appear here and then return as the main antagonists of an upcoming episode.

Finally, it's time to dump your working title and rename your world, using the principles given on p. 187.

Worlds As Problems

As a change of pace, you might start by creating a world and use that as inspiration for your central mystery. The kernel of inspiration for your world might come from an astronomy text, an arresting photograph, or a classic science fiction story you want to riff off. You might choose a world for contrast with the ones you've featured so far: if your last multi-session world took place on a heavily urbanized planet, the next one perhaps ought to send the Lasers deep into trackless wilderness.

A central mystery might be inherent in your choice. A formerly watery world gone dry implies that the Lasers will be figuring out why this happened.

If no central mystery comes to mind, zero in on the most distinctive and challenging environment the world has to offer. Imagine a situation that would require the Lasers to go there and confront its dangers. What information would they likely gain by going there? Work backwards from this answer to get the question your episode revolves around.

Having done this, fill in the remaining steps from the world creation summary. Basically, you're starting with driving facts and working from there to a central mystery, or sometimes from the driving facts to the extrapolated details, and then to the mystery.

Stories Without Worlds

Although movement between radically different environments is the hallmark of a space opera series, not all episodes have to be set groundside. Occasionally you'll want to place your action in the tight confines of a ship or space station. Worldless episodes are ideal for storylines that set aside exploration and discovery in favor of sustained character interaction. Stories ideal for shipboard settings include:

- murder mysteries
- political intrigue
- stories of invasion or contagion

Affiliated, Autonomous and Other Planetary Classifications

Settlement ministry officials divide the planets of the Bleed into various classifications. These can determine a population's political rights and, indirectly, the legalities of conducting Laser work there.

First comes the planet's **Habitation Class.** It is either Settled, Populated, Outpost, Uncleared, Uninhabited, or Uninhabitable.

Settled planets boast populations in excess of one billion sentient beings.

Populated planets scan as housing between one billion and one hundred thousand sentient residents.

Outpost planets are populated, but by fewer than a hundred thousand people.

Story Determines Difficulty

If *Ashen Stars* was a hard science fiction game, you might expect to work out how difficult a proposed action might be according to the overarching thought experiment that is its setting.

Because Ashen Stars is a space opera game, its use of the outward trappings of science fiction is secondary to the needs of an exciting and compelling story.

When players wonder how hard something is, they might ask how hard it is in the setting.

This never matters. How difficult a thing is to achieve in the general and abstract case is always irrelevant.

What matters is how hard it is to achieve given the particular circumstances that currently confront the PCs in this situation.

These you determine by dramatic need. The GM determines story requirements first, and only then finds the specific situational details that make the difficulty seem credible.

If an action would lead to an anti-climax, allow the characters to skirt the main issues of the story, or prematurely breeze to risk-free victory, it is either impossible, or will lead to other complications inspiring fresh story challenges.

If an action will lead down a challenging plot branch if the PCs succeed or fail, it faces an attainable Difficulty, with 4 as the baseline.

If failure would lead to a boring result or dead end, the action succeeds on a spend. If it seems odd that it costs nothing, it's a toll test.

Only after this determination is made do you invent the situational details. For example, depending on story needs, your hailer's chance of establishing an interstellar communication link might be expressed as:

"Meson shrapnel prevents you from getting a clear signal."

"Meson shrapnel is heavy, but if you recalibrate the sensors you might be able to do it."

"The translight corridors are clear. Setting up a signal is child's play."

In no case does the general difficulty of establishing a signal under average conditions enter your thought process.

When players focus on these general questions, focus them on the specific at hand. Better yet, turn it around by asking them to sell you on a way out that involves one or more general ability tests.

The GUMSHOE rules aren't a platform from which you can extrapolate universal facts about the physical reality of its fictional setting. They're a tool to cooperatively build entertaining narratives.

This is in keeping with the way the writers of a show like *Star Trek* or *Firefly* build their setting. Their series bibles aren't filled with unbreakable rules about the physical reality of their SF worlds. They deal with character, tone, and theme. When they do establish a fact about the world, they always leave themselves the wiggle room to maintain suspense and interest in any plotline.

When a planet is designated as Uncleared, the Settlement Ministry recommends against its colonization or, in the case of formerly inhabited planets, its recolonization. However, it may house as many people as an outpost planet. Their presence is not so much illegal as contrary to safety regulations. The act of setting up housekeeping on an uncleared planet is sometimes known as "Gray Market Pioneering."

Uninhabited planets are capable of supporting sentient life but have no permanent residents. A handful of people occupying a survey base don't count.

Uninhabitable planets can't support sentient life.

The second category is the planet's **Polity Class**. Planets are either Alien, Affiliated, Autonomous, Mixed or Ungoverned.

Alien planets are inhabited by sentient beings whose peoples have never belonged to the Combine.

Affiliated planets consider themselves part of the Combine, and subject to its laws. If their Habitation Class is Populated or higher, they send a Conferee to the Combine government.

Seventy-eight per cent of inhabited worlds in the Bleed are Affiliated.

Autonomous planets were originally settled under the auspices of the Combine, but have since seceded from it. Secessions would have been unthinkable during the Utopian era or the war, but are becoming ever more frequent now. Some such planets want to establish a central authority of Bleedist worlds. Others avoid extra-planetary entanglements of any kind. Autonomous worlds may be representative democracies whose organization reflects their original Combine roots. Or they may have drifted into other forms of government, including:

- **democratic**, but with a non-Combine structure
- **semi-democratic**, in which leaders are chosen by a privileged sector of the populace, as in a theocracy whose leaders are chosen by an assembly of believers or an oligarchy where leaders are chosen by and from a wealthy elite
- **autocratic** or **totalitarian**, in which leadership devolves infrequently changes hands within a tiny elite, as in a monarchy or purely dictatorial theocracy
- **digicratic**, where the government is either directly controlled by a computer, or where a computer chooses leaders and functionaries from the population

NON-COMBINE MISSIONS

Although Combine law does not pertain on autonomous worlds, many of them still seek the Lasers' assistance. The freelance status of effectuator crews gives the autonomous governments the fig leaf they need to accept needed help without compromising their sovereignty. They even broadcast contract offers through the Combine communications grid.

In remarkable cases, alien governments might engage Lasers to perform missions for them, but this is very rare.

While operating on alien or autonomous planets, Lasers must follow local laws, where they differ from those of the Combine. By adhering to draconian local laws, crews may sully their Reputations elsewhere.

Mixed planets are home to several distinct political units with different relationships to the Combine. For example, one nation might consist of a sentient non-Combine race, while another is made up of former Combine settlers who have gone autonomous. The polity classes of major units of a divided planet are sometimes listed in brackets after the main designation. The previous example might be notated as Mixed (Alien/Autonomous). The classification system doesn't bother to note planets with multiple governments in cases where all of those governments have the same relationship to the Combine.

Ungoverned worlds are inhabited by Combine peoples but lack recognizable government authority.

Planets are not assigned Polity Classes if they're Uninhabited or Uninhabitable. Polity classes of Uncleared planets may be ambiguous.

A planet's Settlement Ministry classifications are always available to a character using the Law ability.

TANGENTIAL WORLDS

Occasionally you'll need to off-handedly describe a world on the fringes of your narrative. The crew might pass by it. They might ask you about a character's homeworld. They might scan the immediate vicinity of their mission planet in search of a trade opportunity or a safe place to rest, conduct repairs. And of course out-of-control shuttles always need places to crash-land.

Rather than present them with arbitrarily determined worlds plucked from an astronomical simulation, Ashen Stars encourages you to make even these tangential decisions based on story demands.

For tangential worlds, simpler is better. In addition to the bare-bones details, present one basic, memorable hook about each world. If the Lasers take the action to a world you've defined in this way, you can then extrapolate details and perhaps an improvised mystery around them.

Start by determining the type of world you need, according to how heavily occupied it is. Then consult the following list for a world description that serves your purposes.

Uninhabited and barely inhabited worlds tend to be homoenvironmental, meaning that they are dominated by a single environment. These environments are hostile or resistant to settlement. You occasionally see a more populated world with a single dominant climatic and vegetation pattern. It will either temperate or sub-tropical. These worlds are rare and coveted: they'll be among the first settled in the region. Barring subsequent disaster, they'll be heavily settled or completely urbanized.

Uninhabitable/Uninhabited/Deserted Worlds

- Desert
- Destroyed by warfare
- Erratic orbit
- Frozen world
- Gas giant
- Infested by non-sentient threat species
- Infested by quasi-sentient threat species
- Large asteroid, or other body too small to support significant settlement
- Lashed by acidic rain
- Molten surface
- Pervasive hypnotic suggestion deters habitation
- Psychic turbulence causes brain damage and psychosis
- Storm-scoured
- Uninhabitable due to anomalous or unexplained event
- Volcanic world with toxic atmosphere

Barely Inhabited

After choosing the nature of the habitation, you may then want to pick a description from the previous category.

- Bandit/pirate hideout
- Combine Outpost:
  - Scientific survey
  - Military watchpost (most likely outsourced to private firm)
  - Anthropological team (studying small indigenous population)
  - Archaeological team
- Commercial outpost
  - provides services to stellar traders and travelers
  - performing survey for later settlement or terraforming
- Newly settled or resettled
- Remnant population from war or catastrophe
- Resort
- Scattered coots, hermits and madmen
- Terrorist hideout

Lightly Settled

- Alien pre-industrial population
- Recently settled or resettled
  - Combine-affiliated
  - Autonomous
  - Mixed
- Small indigenous population
  - Tribes of culturally regressed Combine species

Heavily Settled/Heavily Urbanized

- Alien post-industrial population
- Alien population, spacefaring
- Long settled, population remained largely intact during war
  - Combine-affiliated
  - Autonomous
  - Mixed

World Hooks

The above descriptions provide the dry bare bones of any tangential world. Here are some memorable hooks to mix and match with them. Modify the hooks as needed to fit your chosen world type, or vice versa.

- A worldwide ponzi scheme has collapsed the global economy
- Agricultural world where urbanization and vegetarianism are outlawed
- An artificial language is spoken here, and use of translation devices is illegal
- Chemical-rich soil naturally embalms corpses buried in it
- Choked by fast-growing vegetation
- Culture formerly subject to durugh occupation replicates its old caste system even more stringently than they ever did
- Deaf population where those few children born with the ability to hear are surgically altered in order to conform
- Deceased members of the elite are mummified and treated as if still alive
- Devastated by a recent comet strike; the war prevented a full evacuation
- Dinosaur species from Earth's prehistory are found here, along with wrecked, gigantic spaceships of an unknown alien race
- Disturbingly hideous, giant statues started materializing here recently. If destroyed, they're quickly replaced.
- Dotted by mysterious menhirs made from an unknown, mildly radioactive substance
- Every year, ten lottery winners for every ten thousand people are allowed to legally commit a single murder apiece
- Famed for its musicians and composers
- Famous attraction: floating forests
- Famous attraction: hypnotic waterfalls
- Former synthworld, torn by political strife between reactionary generation who want to return to artificial culture and younger one anxious to join the Combine mainstream
- Fossil records suggest this may be the original birthplace of the phyllax
- Future location of the Bleed's most elaborate war monument
- Genetic modifications are a necessity for those seeking high status
- Genetic or cybernetic modifications considered obscene and must be veiled in public
- Governed by a technocracy of mathematicians and puzzle solvers
- Guild system chokes social mobility
- Headquarters to a trio of ruthlessly competitive interstellar trading concerns
- Hereditary alien kings each rule a continent
- Home to a famous college of peacemakers
- Home to gaseous lifeforms
- Home to warlike aliens who've recently taken to space piracy
- Houses tavak philosophical schools and combat grounds; a good place to learn to fight
- Insular, paranoid society; artillery batteries fire on any ships dropping from translight
- Intolerant utterances punishable by lengthy prison sentences
- Isolated world located in a galactic anomaly; access is dangerous and possible only for a few days a year
- Its cetacean species are smarter than most humanoid beings.
- Its hard-living folk are either boorish and crude, or refreshingly down to earth, depending on your point of view
- Its high-security prisons take on criminals from worlds incapable of handling them, for a hefty fee
- Its mind-reading cops supposedly make interrogations superfluous. Locals trust them but Lasers know they're corrupt.
- Its worldwide carnival attracts visitors from throughout the Bleed
- Known for its annual song competition
- Known for its gigantic, plankton-eating sea worms
- Known for its innovative, sustainable fish-farming techniques
- Lawless, bandit-dominated world
- Leadership positions large and small assigned via personal combat

- Littered by mines and stray weaponry
- Locals are immune to its carcinogenic atmosphere, but visitors aren't
- Located at the nexus point of several translight laneways, this is a galactic crossroads where you can meet any type of person or buy anything anybody sells
- Losers in its equivalent of the Olympics are deported and may never return
- Main industry: exports a crystal thought to aid in meditation
- Main industry: information retrieval
- Main industry: salvage
- Main industry: spices and foodstuffs
- Monogamy considered perverse; those who practice it must pretend otherwise
- Mystical inhabitants happy to interact with outsiders but regard them as fundamentally unreal
- New lifeforms evolve at strangely accelerated speed
- Notable export: silver, gold and platinum feathers from the metallic birds captured in its cloud canopy
- Notable industry: mediation services
- Notorious for sudden weather changes
- Nufaiths illegal here
- Once puritanical planet spiraling into decadence
- Once-decadent planet has swung to ferocious puritanism
- Once-productive society crippled by rampant addiction to a parasitic intoxicant
- One night here instantly cures the worst sleep disorders
- One out of a million people stop aging at 40, and never die of natural causes. One of out of a hundred thousand people return as flesh-eating monsters after they die.
- Otherwise pacific society uses capital punishment of scapegoats to relieve social pressure
- Panic sweeping the world due to a supposed mynatid sighting
- People are making plans to abandon the planet, though no one can quite agree why.
- People here learn to believe in demons
- People install the brainwave patterns of dead loved ones in their household pets
- Psionic radiation makes visitors slightly and distressingly telepathic
- Recently ravaged by kch-thk feeding frenzy, and out for reparations
- Residents make widespread use of amnesia booths
- Ruled by militant miners
- Said to be ruled by a cadre of assassins, although people here angrily deny it
- Site of notorious durugh atrocities
- Social custom requires the first answer to any question to be a lie; then you may ask again and get the truth
- Social status accrues to the generous and the spendthrift
- Society with draconian population control laws
- Specializes in hospital services
- Stay here too long, and you'll see dead people
- Struck by rapid-aging plague
- Subverted by anti-science terrorists
- Supposedly destroyed during the Utopian era, this planet was found in another system at the end of the war
- Synthworld where genetically modified "vampires" prey on and dominate "flocks" of ordinary, consenting humans, according to the rules of an elaborate game
- The land provides abundant goodness. The work ethic is scorned.
- The only laws here are dietary. The sole punishment for those who break them: death.
- To vote, one must belong to a nufaith
- Turbulent atmosphere offers famously bumpy ride to shuttle occupants
- Under quarantine, to prevent the spread of a petrifying plague
- University world

NAMING WORLDS

The Combine bureaucracy tried to impose a regular and rational system on world naming in the Bleed. This worked fine until people started to arrive there, bringing with them their taste for symbolism, statements of identity, and ease of use. Naming conventions are today as much a charming hodgepodge as any other aspect of Bleed culture.

When first surveyed, each solar system was given a name drawn from human mythology and/or classical history. Other sectors used names drawn from the mythologies of the tavak and balla. (Kch-thk names were deemed too unpronounceable for other races to use.) The planets of each system were then assigned numbers, from closest to the sun to furthest.

Keep a reference source handy to pluck mythological names from. Lempriere's Classical Dictionary and Brewer's Dictionary of Phrase and Fable, both available as public domain PDFs online, are ideal for this purpose. Obscure Graeco-Roman names predominate in the most heavily settled (and first explored) regions of the Bleed. For some reason, survey teams showed a fondness for the names of nymphs. Other mythologies come into play on its far borders.

In some cases, these names are retained today. This is most common for short, easy-to-say systems with only one inhabitable planet. Often residents of that world refer to it only by its system name. In common parlance, they call its sun "the sun" and the other planets by their numbers alone: "We swung past Three to perform a diagnostic on some comm beacons."

More often, inhabited worlds were renamed upon settlement. These names were chosen by founding settlers. Typical naming conventions include:

Reminders of home: Planets named after nations, territories or cities from the founding worlds, human and otherwise. These rarely include the prefix "New", except where the Bleed world is named after another planet, or when the original place had "New" in it. Sometimes a planet's formal name will be the nickname of an existing location.

Synthculture theme: Synthculture worlds are named after people, places or things evoking the historical periods they recreate.

Celebrated figures: Worlds may carry individual human, balla, tavak or kch-thk names. In the case of humans, surnames are always used. Human names tend to commemorate early heroes of the Combine. They tend to predate the shortening trend that clipped most last names used today.

Abstract Concepts: Settlement founders seeking large population influxes named their worlds after appealing ideas. The deprivations of the aftermath period have rendered many of these unfortunately ironic.

Lyrical Images: Like real estate developers in our contemporary world, many settlement boards chose appealing but vague visual images. In many cases the somewhat long original names have since been foreshortened by common usage, as when Willow Mills became Willow.

EXAMPLE WORLD NAMES

Crib these names when you need them in a pinch. When you start to run low, replace the items on the list, giving the naming principles given above.

Abundance	Enlightenment	Iobae	Nais	Speyer
Alexon	Etha	Joy	Noordemeer	Sunglow
Amarillo	Fitzroy	Juvenas	Notthill	Tadhary
Arbor	Forsher	Juventus	Olcu	Tall Sky
Arcadia	Frontlake	Kramer	Osaka	Thammuz
Barberpole	Galvez	Kunming	Phoenix	Thone
Barcelona	Glaucus	Kupfer	Radiance	Tipet
Batia	Gossel	Kylestone	Redridge	Triumph
Bigeasy	Greenvage	Lai	Restheight	Ukan
Birdland	Halmill	Leagrove	Revival	Vamen
Blackshire	Hansard	Luch	Sebethis	Vercreek
Buckston	Hardware	Maine	Sekulic	Vilnius
Bucuresti	Helsinki	Marmendill	Shibuya	Wheatland
Canada	Heritage	McKiel	Signore	Woodthorn
Chelone	Hope	Melbourne	Singapore	Yokid
Community	Hwan	Melia	Solace	Yucutan

STELLAR NAVIGATION

Starships achieve the faster-than-light speeds needed to travel between worlds with translight engines. These masterpieces of engineering have been little improved upon since the founding races first ascended to the stars. Translight engines function by surrounding a ship with a bubble of unidirectional quantum energy. The bubble allows the ship to slip between matter conditions as a knife slides through butter. It alters the ship's hull so that it oscillates between wave and particle states without ever wholly becoming one or the other. To remain in this state of quantum indeterminacy for more than a few seconds, the ship must situate itself inside a translight corridor. These fissures of spatial instability thread their twisting way through the known galaxy. Physicists continue to debate their origin. Convincing arguments can be made for the following theories:

- Translight corridors are the residue of the collapsed black holes of an adjacent dimension.
- They're strain points from the unseen structures tugging at the edges of the universe, which also give rise to so-called "dark flow."
- They're the cosmic placenta from the ancient event that brought the vas kra into being.

(According to a recent paper by renowned physicist Faro Truff, the last item may be the same as the one above it, stated in a different way.)

Translight corridors are not fixed in space. They orbit through the universe, just as the rest of the galaxy does, but at a fractionally variant rate. No two trips between points connected by a corridor take exactly the same amount of time. Before embarking on any given journey, navigators must continually track and update the positioning of corridors.

Further, the corridors are unstable and subject to turbulence and interference. Though this was true before the war, conditions are much worse now. Mohilar weapons damaged the corridors. Although the damaged areas have drifted in the seven years since the Mohilar vanished, in general the hardest hit sectors are those where the bulk of the fighting took place. Corridors in the Bleed suffer worse disruptions than some of the other outer sectors, but are less snarled than those around the core worlds.

Corridor disruptions are a normal and expected part of stellar flight. In the course of an uneventful trip between two worlds in the same sector, the pilot may need to dropjump or reroute multiple times. Dropjumping entails leaving translight space to avoid a breach or rough spot; the pilot travels on standard engine power to the next navigable stretch of corridor. It is not unusual for most of the time expended journeying between worlds to occur as a series of dropjumps.

Not all corridor anomalies slow travel. A temporary flux state called a serpentine may spontaneously arise to connect two otherwise disparate corridors, radically shortening a ship's journey.

The practical effect of this is that the GM can stretch or compress travel time as needed to make her plot work. A trip between Ares-3 and Shibuya might take place in a few hours in one week's episode. In a later installment, when the plot requires that the crew remain isolated, a trip to the supply planet might require prohibitively expensive weeks of additional travel time.

Stellar maps come in two types: lowshift and translight. Lowshift maps depict the relationships of planets and systems in standard space. As travel between them in lowshift mode is measured in years or lifetimes, these maps are mostly of academic interest.

To compensate for orbital drift, translight maps must be constantly updated in real time. Unmanned sensor buoys dot the reaches of explored space. They continually scan for changing corridor locations. They detect breaches and stretches of high turbulence, relaying the data back to the interstellar comm grid. Pilots rely on these to plot and adjust their courses. If somehow cut off from the comm grid, they may find themselves stranded between corridors, or lost outright.

Most people think of the spatial relationships between worlds as defined by their relative proximity to translight corridors. These may bear little or no relationship to their coordinates in physical space. Travel time matters more than distance. You may think of a planet that's a few hours from yours via translight as your neighbor, even though it's actually at the other side of the sector. Your trade contacts and cultural ties to a translight-proximate world in a distant system may be stronger than to one distantly orbiting your own sun.

Translight corridors cluster near some systems, and are sparser in others. Areas with few corridors are called outzones. With many criss-crossing routes to choose from, it's relatively easy to hop from one dense cluster to another. Moving from a cluster to an outzone takes longer, as there are fewer corridors to choose from, and much time must be spent dropjumping.

Seven main clusters dominate the Bleed. The sector's original human explorers named them after the seven hills of Rome. Outzones are named after various monsters of Greek mythology.

Clusters and outzones maintain their relative positions even though orbital drift changes the location of worlds within the overall pattern.

You have to be a trained navigator to look at the cluster maps and see them as depicting standard space. It's too hard to think that two worlds in the Quirinal might be on opposite sides of the sector. Even more mind-bending, Volana-3 and Volana-7, two worlds orbiting the same sun, are respectively in the Capitoline and Esquiline clusters. But that's how it works.

A literal map of the various corridors, color-coded with their cluster identifications, would have to appear as a hologram, and change in real time. As of press time Pelgrane Press had yet to perfect the technology necessary to present such a map to its readers.

Approximate Travel Times

Given orbital drift and the unpredictable appearance of breaches and serpentines, any given trip can easily fall outside the typical range. Here are the ballpark figures, for what they're worth.

Within a cluster	1-48 hours
Between adjacent clusters	2-7 days
Within an outzone	2-7 weeks
Between cluster and adjacent outzone	3-8 weeks
Between adjacent outzones	1-3 months

Clusters are considered adjacent when connected by dotted lines on the opposite map.

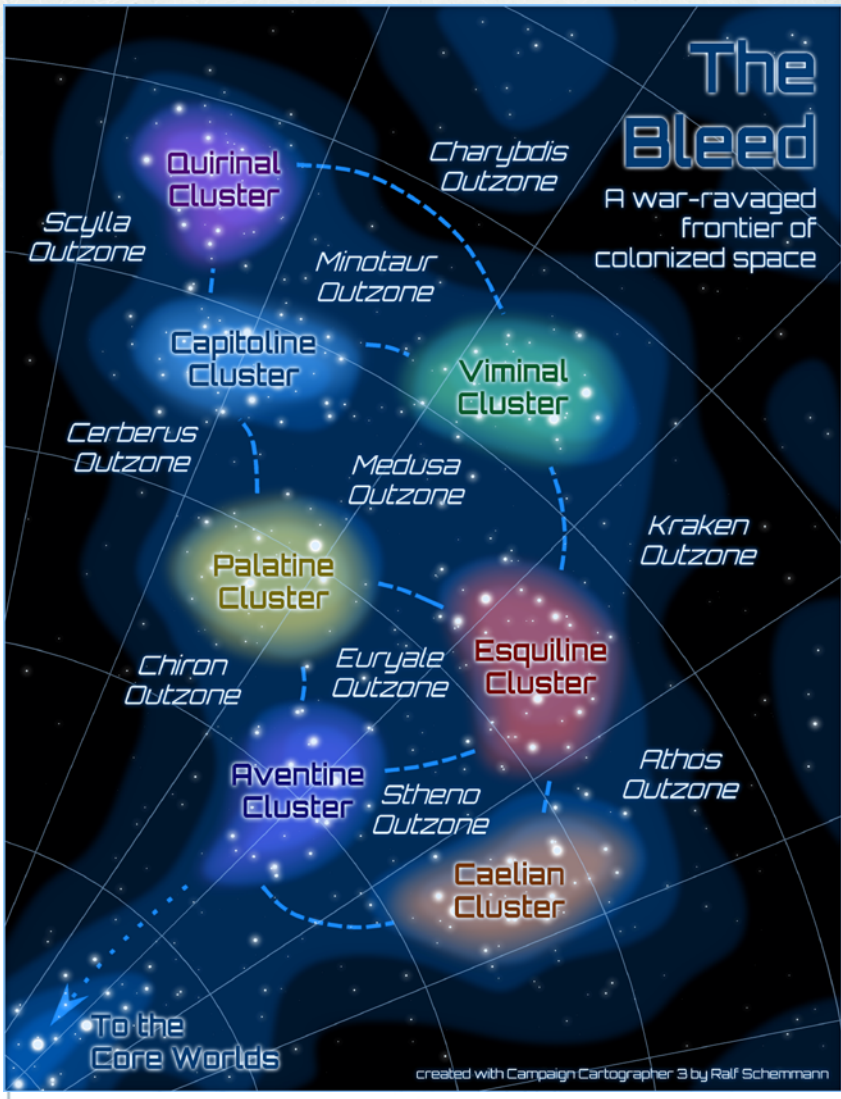
For multiple steps along the cluster map, add times from each step. For example, the shortest route from the Quirinal to the Esquiline takes you through one other cluster, the Viminal. You're moving from one adjacent cluster to another to another. Each cluster hop takes you 2-7 days, so the travel time will probably fall between 4 and 14 days.

You are always free to declare a flat travel time between the supplied ranges, as the needs of your plot demand. When the plot calls for longer travel times, attribute them to stellar storms, translight disruptions, or other navigational variances.

Sometimes you'll want to let the players make tests to decrease a travel time. The pilot tests Helm Control against a Difficulty of 4. On a failure, the ship takes the maximum time, as given in the range in the above chart. On a success, with a margin equal to 4 or more, they reach the destination in the minimum time.

Trips involving multiple hops should be resolved as a single test, unless distinct scenes occur between hops. In that case, each hop is a separate test.

When attempting to outpace another vessel to the same destination, the pilots of both ships make Helm Control tests, as above. Where both ships reach the destination at roughly the same time, compare results. If they tie, they drop from translight at exactly the same moment. If one is higher, it arrives first, with the following time to spare:



Within a cluster	10 minutes
Between adjacent clusters	1 hour
Within an outzone	12 hours
Between cluster and adjacent outzone	1 day
Between adjacent outzones	1 week

These arrival margins are only a baseline. When a different margin would be more entertaining or is necessary to keep the story going, justify it as the result of translight disruptions. Don't use variance just to torque over your players, though. Over time, they should benefit from variance at least as often as they suffer from it.

Travel Times and Bottom Lines

By default, travel times between worlds are factored into the bidding process that lands the crew its next contract. Downtime between cases includes the travel time to get from the world featured in the last episode to the next one. Although the bidding process takes place offstage in the interval between episodes, the ship's bagger is presumably pitching only for cases on worlds the ship can quickly get to. Time is money, so the closer the world, the better.

In game terms, this means that you determine the location of the world only after you know the downtime, making sure that the ship could actually get to the new world within the downtime.

> *The crew of the Eastwood completes a case in the Scylla Outzone. Its latest Downtime test gives it an interval of 2 months between cases. The plot calls for the next case to also take place in an outzone. Two months falls within the range to move between adjacent outzones. Consulting the translight map, you see that the outzones adjacent to Scylla are Minotaur and Cerberus. Deciding to give the players a break and move them to toward the center of the map, you choose the former. During the briefing that kicks off the next episode, you specify that the world they're visiting, Minyas, is in the Minotaur Outzone. This of course implies that they made the trip in two months or less.*

When travel time is less than the downtime, you can decide that the crew got the contract quickly and took the whole time to get there, or got it late and made good time to their destination, as circumstances seem to warrant. If you don't see an obvious choice, leave it up to the players to decide.

Invoke serpentines to justify what would otherwise be a prohibitively long travel time between contract sites. Preserve the credibility of this handy plot device by using it sparingly.

Although travel time shouldn't exceed downtime, it can be considerably less than the downtime. When that happens, the crew really has been twiddling its thumbs, waiting to get the greenlight on a fresh assignment. When it finally comes in, they then quickly translight it to the scene of the next case.

Ashen Stars

Since the Mohilar War, a solar anomaly known as the Ashen Star Effect has been intermittently observed throughout the Bleed. Strange dark sunspots suddenly appear across the surface of an entire sun. Viewed from space, millions of dark patches dance across the sun's surface, in a pattern reminiscent of visual static.

MESON SHRAPNEL

The war scarred not only the peoples and the worlds of the Combine, but space itself. Weapons used by the Mohilar (or was it the Combine?) destabilized the quantum bonds between matter particles, leaving behind trails of a dangerous half-substance dubbed meson shrapnel. Meson shrapnel:

- blocks scanning waves
- interferes with communications transmissions
- alters weapon trajectories
- temporarily clogs translight corridors
- in rare cases, completely breaks translight corridors
- When a piece of technology doesn't work the way it's supposed to, a Laser's first instinct is to blame meson shrapnel.
- On freak occasions meson shrapnel may be your friend:
- amplifying scans or transmissions
- deflecting weapons toward targets they'd otherwise miss
- stimulating the formation of new translight corridors, temporary or permanent

Like the now hazily remembered weapons that created it, meson shrapnel remains mysterious and a subject for sustained scientific inquiry. Laser crews may be hired to investigate dense concentrations of meson shrapnel, or reports that it is behaving in an unusual or undocumented fashion. Once there, of course, something actually interesting and dangerous happens, which almost by definition will be unrelated to the meson shrapnel itself.

ASHEN STARS

Seen from a planet in the affected system, the sun seems to flicker and gray. During daylight, a ground observer sees the sky blink rapidly in and out between bright blue daylight and the star-spackled ebony of night. (Under cloudy conditions the sky seems to shift between overcast day and murky, starless night.) The total blinking effect lasts for three to nine seconds, with each blink in or out taking 600 to 800 milliseconds. Its effects are distracting but not catastrophic. For example, the incidence of vehicle accidents increases by three to seven per cent during and immediately after a manifestation. However, the effect doesn't cause shuttlecraft to plummet from the sky or mainframes to crash planetwide.

It takes time for light from a sun to reach its various planets. On most habitable worlds, the solar interval falls somewhere between six and twelve minutes. The delay between the eruption of sunspot activity and the visibility of the effect from a planet's surface equals the solar interval.

83% of the time, a single ashen star eruption appears on a star's surface and does not recur for months or years, if ever. In 17% of cases, a series of eruptions recurs in uneven intervals over a period of a few hours. Those seeking more complex statistical analyses of ashen star pattern recurrence are urged to consult the AADB, the Combine's Astro-Anomalistical Database, which continues to be updated with real-time data.

Ashen star eruptions create an after-effect that can disrupt energy patterns throughout a system for hours or days. When a manifestation is detected, operators of scanning and communication devices steel themselves for fluky malfunctions. Starship systems may slow, break down, or surprisingly outperform specifications. Vessels in transit may abruptly plunge into suddenly-created serpentines, only to drop out of translight on the other side of the sector.

Laser crews are sometimes dispatched to conduct surveys of remote suns which, according to statistical projections, are considered likely to manifest the effect in the near future. Oddly, these supposedly quotidian missions often draw crews into apparently unrelated weird dangers. In Laser parlance, these survey missions are known as ash-hauls. They are avoided by cautious, business-like teams and courted by cowboy operators with a taste for unpredictable trouble.

The renegade statistician Torus Ragan reports a curious correlation between moments of planetary crisis and the ashen stars effect. According to Ragan, it often occurs during the early hours of political upheavals, criminal outbreaks, and natural disasters. He calls this the Laser Correlation, because the effect seems to happen more frequently when Laser crews are undertaking high-profile missions on a planet's surface. Ragan's colleagues dismiss this as a reporting error but have so far been unable to conclusively debunk his underlying data.

Some physicists posit that the Ashen Star Effect occurs when concentrated fields of meson shrapnel (p. 191) reaches the sun's surface. Critics of this hypothesis point out that while meson shrapnel can be found wherever Mohilar War battles were fought—that is, throughout Combine space—the Ashen Star Effect has yet to be observed outside the Bleed.

GMING THE ASHEN STARS EFFECT

Like meson shrapnel, the ashen stars effect acts as a plot device that explains away apparent technological inconsistencies between episodes. In one episode, you might allow a Bio Signatures scan to tell the Lasers exactly how many people are aboard a given ship, broken down by age and species. The logic of the next episode may require you to reveal less—perhaps just an approximate number of humanoid lifeforms. If so, have an ashen stars effect take place, which then accounts for the comparatively poor scanner performance. The extremely competent character isn't suddenly failing to use his equipment. He's still using it to the best of his ability, faced with an insurmountable obstacle.

The effect can interfere with any technology, from a ship's system to a holographic recorder. Like any plot device, it's most effective when used judiciously. Don't invoke it to gratuitously hose the players. This is GUMSHOE, so it never stops them from gathering information they need to advance the storyline. It might make the use of a general ability a little harder—and victory all the sweeter—but shouldn't completely thwart a course of action the players would normally expect a chance to overcome.

You might choose to weave the ashen stars effect into an extended story arc. Perhaps at its end they explain its origin, which ties in some way to the series' primary antagonists.

Needless to say, the ashen stars effect also serves as a visual symbol of the game's central themes.

The Spaceway

The Spaceway is a tightly-threaded knot of multiple corridors that juts from the Aventine cluster. It ultimately connects to the Combine's core worlds, including the homeworlds of the four founding peoples. Unless you're lucky and hit a sequence of serpentines, it generally takes six months to a year to travel from the Aventine to the core.

Clusters, Wars and Money

Being in a cluster is a boon in peacetime, but proved disastrous when the war came.

Translight corridors act as the naturally-occurring transportation infrastructure of the 25th century. A world located in a cluster is like a port city in the pre-industrial age, or one connected to an efficient, well-maintained highway network in the 21st century. Goods and people flow into and through such worlds. They're richer and more cosmopolitan than the outzone planets. Location within a cluster was one of the three main criteria, along with climate and resources, that made an uninhabited but livable planet a prime target for colonization during the Annexation. Planets fitting all three criteria developed fastest, and, until the war, were materially prosperous and heavily populated. The most promising Aventine Cluster worlds, closest to the core, were the first to be snapped up. The other clusters then developed simultaneously.

War made easy accessibility to faster-than-light ships a liability. The Mohilar devastated the core worlds, which are all part of one giant cluster. In the Bleed, the juiciest targets happened, not coincidentally, to be within the easiest reach.

The Aventine worlds were the hardest hit, with other clusters tied for second place. A formerly plush, densely settled world of the Aventine is now likely to be a smoking mass grave.

Because the clusters shift over time, a world once situated in a cluster can find itself slowly drifting into an outzone. Loss of access to translight corridors is known as transit blindness. The perfect economy of the Utopian era masked the phenomenon's negative effects. Subsidies allowed slow transitions from trade services to other useful and fulfilling industries.

With the golden era gone, transit blindness leads to calamitous economic collapse. This disaster rolls toward a world in slow motion, giving the wealthy and influential time to flee for more promising worlds. This loss of elites worsens the financial crash. Political crises become inevitable, usually culminating in the rise of authoritarian regimes.

THE BAD, THE WORSE, AND THE ALIEN

This chapter presents rules and statistics for antagonists, from monstrous quasi-sentients to troublemaking fellow citizens.

ENTITY CLASSES

Combine law recognizes three categories of being, each of which is permitted its own level of rights: sentients, quasi-sentients, and animals.

SENTIENTS

Sentients are fully intelligent beings capable of exercising free will and overcoming their instinctive or biological imperatives.

In informal parlance unfamiliar beings of this class these are sometimes called "aliens." All of the Seven Peoples were originally alien to one another, of course, but they've been on familiar terms for so long that they no longer seem to count as such. Less numerous races who belong to the Combine or have been in contact with it for a long time are not referred to as aliens, either.

QUASI-SENTIENTS

Quasi-sentients (or quasis, for short) are capable of higher cognition and communication but lack the free will to break free of their biological impulses. They can simulate empathy and perform actions consistent with its demands but never experience the impulse. Though they may choose to behave benevolently or in accord with local social norms, they are effectively psychopaths and are therefore not accorded full human rights. Most artificial intelligences, including robots and androids, fail to do more than simulate empathy and are therefore considered quasi-sentient.

Intelligent but irredeemably predatory entities are also classed as quasis. Their inescapable predation may take the form of assault, sexual abuse, murder, or the carnivorous feasting on sentient victims. In the Bleed, the definition has inexorably widened, now encompassing serious property crimes. Merely testing positive as a member of a known predatory quasi-sentient species, or PQS, calls for immediate capture and quarantine. Because they can't be rehabilitated, they are not subject to standard criminal justice. When captured, they are typically isolated in environments where they can't get at sentient victims. You might, for example, be contracted to deliver a captive lipovore to one of several so-called hell planets inhabited only by aggressive quasis. An apprehended quasi may call for a legal proceeding called an Empathy Hearing to certify its full sentient status.

Some cash-strapped jurisdictions, happy not to bear the costs of full quarantine, look the other way when Lasers kill threatening quasis.

Certain quasi species are so dangerous and irremediably hostile that they've been designated as Class-K entities; see sidebar.

LIFEFORMS

Although sentients and quasis are both technically lifeforms, for legal purposes the term refers only to animals, plants, bacteria, fungi and other living organisms which are incapable of higher cognitive function.

Laws against poaching, environmental degradation and habitat destruction protect them on the species level. Individual organisms capable of suffering are legally protected from acts of cruelty. Most organisms can be knocked out with dis-

Class-K Designation

When encountering members of officially designated Class-K species, it is not only permissible but required to destroy them wherever possible. These are entities who have repeatedly demonstrated themselves to be so persistent in their rapacious hostility, and so dangerous to sentient life everywhere, that immediate, pre-emptive force offers the only hope of survival. Ethically, their appearances are better understood as plagues or natural disasters than as encounters with other sentient peoples.

As soon as you register as a Laser, you take on additional responsibilities in regard to any Class-K species you might encounter. Whenever you find evidence of Class-K activity presence in Bleed or Combine space, you must break off your current mission in order to confirm or deny their presence. Should you dodge this responsibility, you must be prepared to prove at a later hearing that your actions saved more lives than they endangered. You might, for example, momentarily suspend your hunting duties in order to evacuate civilians from a soon-to-explode space station. Class-K eruptions are so virulent that you'll be forced to calculate the number of immediate civilians lives you may have to sacrifice in order to prevent a wider and more devastating outbreak.

Once you definitively locate an infestation of Class-K beings, you must then immediately determine whether you are capable of exterminating them, or if your only safe option is to flee. As Lasers, you are expected to err on the side of sacrificing your own lives to stop them. When you do flee, you must suspend all other activities to get word to the nearest Combine outpost.

In core Combine space, a fleet of naval vessels would then be assembled to go in and destroy the threat. In the undermanned reaches of the Bleed, a posse of deputized ships is assigned to the task. These may include shipping and passenger vessels, with the majority of them being Laser ships. As original discoverers of the threat, you may be placed in a leadership or coordination role. This may be denied you if your Reputation has plunged into negative territory.

Civilians are required to report any evidence of Class-K activity but not expected to engage them.

ruption fire. For this reason it is neither legally or socially acceptable to kill them even in self-defense. Non-lethal hunting of non-threatened species may be permissible in some jurisdictions. While human culture has largely abandoned it, other major races still engage in hunting. Kch-thk hunt and consume a wide variety of nonthreatened edible lifeforms. Tavak and durugh hunt under distinct ritual circumstances, the first as an adjunct to meditative retreat and the second in pursuit of social status. Balla are strongly opposed to the practice and seek its abolition throughout Combine space. Like humans they prefer expeditions in which interesting creatures are studied and imaged instead of being killed.

Though the list is mostly filled with quasi-sentients, some unintelligent lifeforms have proven sufficiently virulent to also warrant Class-K status.

Aliens as Opponents and Rivals

The following rules allow you to use alien beings as combat opponents or as obstacles to the group's success. Many are also applicable to non-alien sentients who obstruct the Lasers as they try to solve mysteries and complete their contracts.

Health Pools

To make bookkeeping easier for GMs, quasi-sentients and lifeforms are rendered unconscious (if hit by disruption energy) or killed when their Health pools drop to 0.

Where the exact post-combat condition of an important sentient supporting character—including members of Combine races—is somehow relevant to the plot, its Health can drop below 0. It is subject to the same injury rules as player characters.

Otherwise, sentients and Combine peoples also lose consciousness (on a disruption hit) or are seriously wounded when their Health pools reach 0 or less.

Pool Refreshments

For quasi-sentient beings and lifeforms, most pools refresh after two intervals, or 24 hours of game-world time, whichever is soonest. Unless a being's specific capabilities allow for healing by other means, it regains 2 lost Health per interval.

Sentient beings with access to medical care regain all lost Health as soon as they can get treatment. Other pools refresh after 2 intervals or 24 hours of game-world time, whichever is soonest.

GMs should override these automatic refresh times as story logic warrants. If the crew has been carefully keeping a captured creature in a comatose state, it shouldn't just magically refresh its pools. Of course, a GM who wants a creature to recover and break free can always come up with an in-story justification for this reversal of fortunes.

GUMSHOE IS PLAYER-FACING

Wherever possible, we put die rolling in the hands of the players. We call this approach "player facing.» That is, to see if an Investigator is surprised, the player makes a Sense Trouble test; to see if a creature is surprised, the player makes a Stealth tests. This applies to many other tests – Investigators test Filch to steal from a supporting character and test Sense Trouble to see if a supporting character has stolen from them.

OPPONENT STATISTICS

You usually only need game statistics for characters, including aliens, quasis, and lifeforms, that the Lasers will end up contesting against. Most witnesses, suspects and non-combatants require only a text description, indicating for example which interpersonal abilities they're most likely to respond to.

Opponents use the same Hit Threshold and Weapon Damage rules as player characters.

An **Attack Pattern** is an optional game statistic suggesting how the character might spend its Scuffling and/or Shooting points from round to round of a fight. GMs should always consult story logic and dramatic needs first and resort to the attack pattern second. Opponents who are angry or fearful will spend what they need to guarantee a hit. Others will spend more cautiously, saving their points for later just as the characters do. These numbers are a fallback if you can't decide how the opponent would spend, or are uncomfortable choosing to spend enough to guarantee a hit each time. Don't use them just because they're there, even if you find the pull of numbers—oh, sweet, beautiful numbers—generally irresistible.

> *A security guard's Attack pattern is 2/4/2. That means he'll spend 2 Shooting points the first round, 4 the next, and 2 for the next round. This will run through his Shooting pool of 8.*

When you do use the Attack Pattern, increase the spends after each miss until the opponent either starts to hit, or runs out of points. Once engaged, opponents figure out how hard the PCs are to hit, and adjust their efforts accordingly.

Armor is subtracted from each instance of damage the opponent takes. Where a weapon or weapons is listed in brackets after the number, the Armor reduces damage only from those weapons. Some Armor may protect against all Scuffling attacks but not Shooting attacks, or vice versa. Where the entity's Armor statistic is followed by the notation Non-Lethal Immune, it completely shrugs off NLD attacks.

An opponent's **Alertness Modifier** represents its ability to sense your activities, whether through standard senses like sight and hearing, or exotic ones like echolocation, pheromone recognition, or energy signature

reading. When you try to sneak past it, the Alertness Modifier is applied to your base Infiltration Difficulty, which is usually 4. Where a technical hack is used to breach a secure zone, you might instead oppose Systems Repair against an Alertness Modifier. It also applies to Surveillance tests when you're trying to observe the opponent without being observed in turn. The Alertness Modifier reflects all of the individual's sensing capabilities, both natural and technological. A second number appearing after a slash represents the opponent's Alertness if its gear is somehow neutralized or taken away.

An opponent with a **Stealth Modifier** is either significantly harder or easier to spot with Sense Trouble. It alters the difficulty number for that or similar tests.

Savvy Modifier alters the base Difficulty of prevailing over the character in a Business Affairs or Public Relations test, or a Communications Intercept test made to create a deception. This usually applies only to sentients, and may be used by witnesses, suspects and other minor characters, in addition to outright opponents.

Entity Database

This section describes the Bleed's most notable and/or fearsome entities.

Dermoids

Classification: Class-K
Designation: quasi-sentient

Morphology: Dermoid bodies consist of tissue masses interwoven with a fibrous nervous system. Formed via parthenogenesis, these remorseless parasites begin life as cell clusters affixed to their parent organism. The parent comes into contact with a sentient humanoid, selecting a host with a mammalian epidermis, transferring the cell cluster. The cells quickly grow, killing off and imperceptibly replacing the host's skin. During this process the dermoid plunges a spike-like organ through the host's skull and into its brain. It then hijacks the host's body, not only achieving control over its motor functions but accessing its conscious and subconscious memories.

Reversing Dermoid Infection

During the first 48 hours of colonization by a dermoid parasite, a medic with access to a standard-issue field kit has a good chance of reversing the condition. At this stage the dermoid has yet to devour and replace more than half of the subject's skin tissue. The infection can be destroyed with advanced viral therapy. Test Medic against a base Difficulty of 4, plus 1 for every 12-hour period since the infection's onset. On a success, the dermoid tissue dies. The subject's Health drops to -11, leaving him seriously wounded. A patient who for some odd reason has not been fully anesthetized must also make a Consciousness roll.

After the initial 48 hours, the dermoid injects the spike into the brainstem, subsuming the subject's identity. The dermoid quickly expands to replace all of the victim's skin. Reversing the condition now requires greater resources and is less likely to succeed. Treatment must be performed in an advanced treatment facility, like a hospital or the infirmary of a ship or space station. Test Medic against a Difficulty of 8, plus 1 for each day of infection, to a maximum Difficulty of 16. On a success, the subject's Health drops to -11, as above. He remains critically ill until the end of the episode. On a failure, the subject dies of shock.

It's boring for players to be sidelined for an entire episode. Infections are generally more compelling if suffered by sympathetic supporting characters. Where PCs are concerned, the threat of infection leads to more interesting play than the reality of it. GMs should engineer their pacing so that PCs risk advanced dermoid infection only during an investigation's final scenes.

Behavior: Through its access to the host's brain, the dermoid engages in a long-term impersonation, skillfully replicating its skills, personality, and recollections. It then works in instinctive concert with other dermoids in the area to infect more hosts. Clever and ruthless, dermoids conceal their spread through targeted communities. They defend themselves aggressively and sometimes preemptively. Of the seven peoples, only the kch-thk are immune from dermoid infestation, due to their exoskeletal anatomy. Dermoids work to isolate, neutralize and destroy any kch-thk in a targeted community. Until they reach a critical mass in a population, they must pursue this and other objectives through covert means. They simulate the behavior of their superseded hosts, showing little discernible personality of their own. If dermoids have an ideology other than growth and reproduction, no one has ever heard them articulate it. No one who survived, at least. . .

USING CLASS-K ENEMIES

Ashen Stars assumes that most of a crew's cases will bring it into contact with the seven peoples and other sentients of the Combine. Occasionally they'll encounter previously undocumented sentients, particularly when fulfilling exploratory contracts.

Encountering a Class-K entity should play as a big deal. Your series might not include them at all. When they do, it's as a major threat. If your series were on television, Class-K creatures would show up during sweeps and for season-finale cliffhangers.

You might want to choose a single Class-K enemy to feature over a period of time, interspersed with other more mystery-oriented episodes. Build its menace as you go. The first appearance might be a hoax or rumor (as in the "Cry Wolf" episode see, p. 222). Then, later, the crew meets a few of the creatures in utterly terrifying circumstances. They beat that bunch, but the next time they find themselves on the forward edge of a massive invasion, with the survival of Combine civilization at stake.

This idea sees further development in the scenario pack Dead Rock Seven. As an option, it allows you to set up a story arc featuring the Class-K entity of your choice.

Dermoids behave cooperatively until they achieve full control of a planet or civilization. Then, in a poorly understood outburst of Malthusian aggression, they divide into factions and fall upon one another in a frenzy of civil warfare. Using the weapons and technology of their overwhelmed hosts, they perform autogenocide—though not before sending a few missionaries forth into space to find new humanoid species to colonize.

Contact History: Records show that the dermoids invaded the human, durugh and tavak homeworlds centuries ago, before any of them achieved interstellar flight. In each case they were discovered and eradicated by national emergency forces before taking planet-wide hold. Other civilizations have not been so lucky: in at least eighteen documented cases, highly evolved sentient cultures were wholly subsumed by dermoid infestation. Three of these had discovered warp corridor navigation and reached the interstellar settlement phase.

Dermoid incursions were routinely nipped in the bud during the Utopian era. The Mohilar used dermoids as a weapon during the war, implying that it is possible to strike a deal with them. Security limitations during the Aftermath have allowed them to stage a quiet resurgence. Since the war, two colonies and a space station were completely infested in the Bleed alone.

Abilities: As per the host individual, except that any disruption damage, including non-lethal damage, instantly kills the dermoid.
Scuffling Weapons/Damage: As per the host individual.
Shooting Weapons/Damage: As per the host individual.
Hit Threshold: As per the host individual.
Typical Tech: As per the host individual.
Alertness Modifier: +2
Stealth Modifier: +0
Savvy Modifier: +1

Jaggar

Classification: quasi-sentient
Designation: Class-K

Morphology: Jaggar are variously configured beings with hybrid mammalian and arachnid traits. Despite their own claims to the contrary, DNA analysis reveals them to be a created species which came into being no more than a few hundred years ago. Although various grotesque body types have been reported over the years, the most common jaggar forms are:

Serfs: Humanoid beings whose fleshy, yellow-skinned heads surmount a bristling, chitinous body. Wide mouths reveal long, bifurcated black tongues and a row of rasping, shark-like teeth. They're a head higher than the average human and distinctly spindly. Some serfs favor human-like clothing of dark leather, with chains, straps and spikes as accessories.

Knights: Four-headed, eight-limbed monstrosities primed for war. Each limb pair performs a different function: one bladed pair to slash foes, a delicate-handed pair for manipulation, a powerful set of segmented legs for running and leaping, and a backward-facing pair of secondary support legs that balance its enormous bulk. Knights weigh over a tonne and can stretch to a height of five meters.

Queens: Queens are gigantic, drooling, puffy yellow heads from which eight spiking arachnid legs thrust. The heads are a meter in diameter; each leg is two meters long.

Behavior: Jaggar have no digestive systems and are capable of surviving for years merely by osmotically absorbing trace nutrients from the air around them. However, body growth and reproduction are only possible after they feed on brainwave emissions of stressed, agonized or terrified sentients. Jaggar capture victims and place them in elaborate torture devices in order to harvest the desired brainwave energy. There also appears to be an aesthetic component to their activities, as the queens compete to devise and execute torture regimens their peers will find artistically pleasing.

Jaggar detail some of their captives to serve them as thralls. Most often these slaves procure and modify the technologies of advanced cultures. These pathetic individuals retrofit hijacked ships, conduct holo recording sessions to immortalize torture sessions, and may even go act as scouts and spies. Spiderbombs planted in their chests explode when they are apprehended, causing millions of inky mites to hatch and devour their hearts, inducing near-instantaneous cardiac arrest.

Jaggar travel in small bands, each led by a single queen. They rove in stolen spaceships from one galactic backwater to the next, evading confrontations with authorities. Queens communicate with their peers across the vastness of space through a delayed telepathy they experience in their dreams. They leave torture holograms for one another in heavily secured caches.

Serfs are capable of limited speech; knights have never been known to talk. Queens can conduct detailed conversations in which they assert the weakness of the empathetic impulse. They frequently claim that the Jaggar hail from another dimensional reality called the Threshold, becoming enraged when contradicted on this point.

Contact History: The Jaggar were first encountered during the Flowering Period. They were believed destroyed during the Utopian Era, when Captain Jay Arn of the Valerius drove a fleet of jaggar-controlled ships into a black hole. Under circumstances obscured by the Bogey Conundrum, they returned as allies of the Mohilar. Since the end of the war their ships have been repeatedly sighted on the Bleed's outermost fringes.

Serfs

Abilities: Athletics 6, Health 8, Scuffling 8, Shooting 8, [Shipboard A] 10, [Shipboard B] 4
Scuffling Weapons/Damage: chatak +1 (a multi-bladed short sword made of chitin)

Shooting Weapons/Damage: disruption pistol +1 (non-lethal setting deactivated)
Hit Threshold: 3
Typical Tech: Disguiser, Personal Bluffer, Headset, Tether, Rosetta Chip; (Cybernetics) none; (Viroware) none
Alertness Modifier: -1
Stealth Modifier: +1
Savvy Modifier: -2

Knights

Abilities: Athletics 18, Health 18, Scuffling 12, Shooting 12
Scuffling Weapons/Damage: bladed limbs +3 (a multi-bladed short sword made of chitin)
Shooting Weapons/Damage: disruption pistol +1 (non-lethal setting deactivated)
Hit Threshold: 3
Armor: 2
Alertness Modifier: +1
Stealth Modifier: -2

Queens

Abilities: Athletics 18, Health 8, Scuffling 14
Scuffling Weapons/Damage: impaling leg strike +10
Hit Threshold: 2
Alertness Modifier: +2
Stealth Modifier: +2
Savvy Modifier: +3

Ship Combat Placeholder Abilities

The entries [Shipboard A] or [Shipboard B] under Abilities is a placeholder for any one of the following abilities: Communications Intercept, Helm Control, Naval Tactics, Battle Console, or Systems Repair. An entire crew consisting of that opponent type will collectively cover all of those abilities.

Klorn

Classification: Lifeform
Designation: Class-K

Morphology: The klorn cycles through a series of life stages, becoming more dangerous with each iteration.

Egg-walker: Klorn are born as ambulatory eggs. Yolk and white are visible beneath the surface of a thin, transparent membrane about the size of a golf ball. A quartet of translucent appendages, halfway between leg and pseudopod, allow the egg-walkers to ramble in search of lichens. It feeds upon them using a single-celled sheath protruding from the yolk mass. Most egg-walkers die from lack of nutrition before reaching their next life stage. However, when a yolk is prematurely broken, it collapses into a hard-shelled cocoon which, six to eight weeks later, releases a pack-rager pup.

Pack-rager: In its pack-rager stage, the klorn is a quadrupedal predator about the size of house cat. Razor-sharp teeth line the gums of its outsized mouth. Piercing claws adorn its front paws. Its back legs propel it forward in a powerful springing motion. Fibrous armored plates, not unlike those of its distant evolutionary relatives, the tavak, protect its head and upper torso. Pack-ragers attack in massive swarms, knocking down and swiftly devouring creatures many times their size. The first human zoologists to study pack-ragers initially compared them to a cross between an armadillo and a wolverine, then took to referring to them as "land piranhas." If a pack-rager dies at the violent height of an adrenaline cycle, it transmogrifies into a far tracker.

Far-tracker: The far-tracker is a longer, squatter version of the pack-rager. It gives up its snout full of teeth for a long muzzle bristling with olfactory and pheromone-reading organs. Leathery wings sprout from its upper shell, along with a sextet of grabbing appendages allowing it to cling to nearly any surface. Far-trackers are often found hitching a ride on the undercarriages of ground vehicles. They are capable of surviving for days on end in the vacuum of space. When killed, or when it enters the immediate presence of quarry it has a DNA lock on (below), the far-tracker transforms into an all-shredder. It emits an absorptive energy wave that disintegrates other organic matter around it. This is then absorbed into the dying far-tracker's body, allowing it to immediately shift to a new form many times its previous mass.

All-shredder: The all-shredder is a quadrupedal mega-predator combining morphological elements of a car-sized armadillo and a saber-toothed tiger. It can devolve at will back into a far-tracker. When slain, it becomes an end-klorn.

End-klorn: The end-klorn is a 5m high, 2 tonne bipedal predator notable for its spiked arms and its ability to spit globules of acidic glue onto its foes.

Behavior: Until its third stage, the klorn is merely an ultra-efficient predator adapted to harsh conditions. When its pack-rager form dies, it achieves the qualities leading to its Class-K status. At this time it locks onto the DNA signature of the living creature that killed it. It accomplishes this by emitting and then reading a cloud of sub-quantum pheromones, meaning that it needn't have come in direct physical contact with its killer in order to acquire a lock on it. As a far-tracker, it pursues its killer relentlessly. It is somehow able to track its prey over interstellar distances, even through warp corridors. Its later stages keep coming and coming, until either the klorn or the killer of its pack-rager form are dead.

Contact History: Klorn are native to a large, isolated island continent on the tavak homeworld. Attempts to eradicate them during the tavak industrial age failed. Finally a containment field was erected, at a great cost in tavak life, confining the creatures to this continent*. On several occasions rogue naturalists, DNA harvesters, and other smugglers have breached the containment field and spirited specimens off-world, always with disastrous results. Recently a shipment of frozen egg-walkers was intercepted on the way to the Bleed. Data recovered from scrubbed drives aboard the smugglers' vessel indicated that another such shipment had gotten through. Its destination, and the agenda of the purchaser, remain unknown.

Pack-rager
Abilities: Athletics 8, Health 1, Scuffling 8
Attack Pattern: +3/+3/+2
Scuffling Weapons/Damage: bite/claw +6
Hit Threshold: 2
Armor: 3
Alertness Modifier: +2
Stealth Modifier: +2
Special: Immune to non-lethal disruption energy

Far-tracker
Abilities: Athletics 24, Health 36, Scuffling 2
Scuffling Weapons/Damage: bite/claw -2
Hit Threshold: 2
Armor: 5
Alertness Modifier: +2
Stealth Modifier: +6
Special: Refreshes Health pool when struck with non-lethal disruption energy

* In a stinging irony, the containment field protected the klorn continent during the Mohilar attacks that destroyed most other life on the tavak homeworld.

All-shredder
Abilities: Athletics 16, Health 36, Scuffling 30
Attack Pattern: (Scuffling) +5/+5/+5/+5/+2/+2/+2/+2/+2
Scuffling Weapons/Damage: bite/claw +8
Hit Threshold: 3
Armor: 3
Alertness Modifier: +2
Stealth Modifier: -3
Special: Refreshes Health pool when struck with non-lethal disruption energy

End-klorn
Abilities: Athletics 16, Health 52, Scuffling 30, Shooting 12
Attack Pattern: (Scuffling) +5/+5/+5/+5/+2/+2/+2/+2/+2 (Shooting) +3/+2/+2/+3/+2
Scuffling Weapons/Damage: armspike +12
Shooting Weapons/Damage: acid globule +2
Hit Threshold: 3
Armor: 3
Alertness Modifier: +2
Stealth Modifier: -4
Special: Refreshes Health pool when struck with non-lethal disruption energy

Lipovore

Classification: Quasi-sentient
Designation: Class-K

Morphology: Lipovores are tall, appallingly gaunt humanoids. Skin tone, though ranging from buff to near-white, shows an invariable sallow undertone. Skeletal structures share traits of human, balla, and durugh without hewing precisely to any of the three. They are hairless or nearly so. Lipovore eyes are small and red, lacking visible separation between sclera, iris and pupil. Thick pads on the tips of their nailless fingers can be pulled back to reveal scaly feeding surfaces. These are placed next to the exposed skin of a prey creature to extract its fat cells, the lipovore's sole source of nutrition.

Behavior: Lipovores hunt singly or in small groups in pursuit of food. Though capable of subsisting on any fatty tissue, lipovores, for reasons they never consistently explain, prefer that of sentient beings.

Lipovores learned speech and the details of material culture from observation of intelligent beings. Most now speak Comblish and are fully capable of using advanced technology, from disruption pistols to starship controls. They opportunistically appropriate the technologies of others but do not build their own.

An extremely hardy species, lipovores are impervious to age and can go for decades without eating. The longer they spend between meals, the more desperate and feral they become.

Science has found no means of disputing the claims of certain lipovores to have lived for hundreds if not thousands of years. Historians have given up hope of extracting from them useful information regarding the ancient past. Lipovores maintain a profound disinterest in any subject unrelated to the harvesting and consumption of fat. The memory centers of their brains are poorly developed, suggesting that they retain few details of their past activities.

They resist any effort to reach an accord with their sentient adversaries. At best they might temporarily negotiate their way out of stand-offs and similar sticky situations. Lipovores refuse to refer to any sentient, as an individual or collective, by any word other than "food." For example, they might say, "*Lower your disruption pistol, food, or I'll snap this food's neck like a twig.*" Or, "*We are uninterested in the archaeological ruins of food species.*"

Anxious to preserve their otherwise long lives, lipovores fight only when cornered, and then only until given a chance to escape. The actions of their prey species do not arouse them to anger, any more than you'd pursue vengeance against a cow or pig.

Contact History: When humans first journeyed to space, lipovores were waiting to consume their fat. The first murder ever recorded on a human space station was committed by a lipovore. Chronicles of early balla, durugh and tavak exploration record similar incidents. Unlike other class-K species, lipovores have always represented a localized menace, never an existential threat to civilization as a whole.

Abilities: Athletics 6, Health 18, Scuffling 12, Shooting 8, [Shipboard A] 10, [Shipboard B] 4
Scuffling Weapons/Damage: punch +2
Shooting Weapons/Damage: disruption pistol +1
Hit Threshold: 3
Typical Tech: Disguiser, Personal Bluffer, Tether
Alertness Modifier: +2
Stealth Modifier: +2
Savvy Modifier: +2
Special: A lipovore takes no more than 3 points of damage from any disruption weapon (lethal setting), and is Non-Lethal Immune. At -12 hit points they fall into a deep coma that may be mistaken for death.

Lipovore feeding takes place outside of combat, to restrained, defenseless, or unconscious victims. Except where the lipovore uses advanced medical technology to preserve the life of their prey, the victim must make a Difficulty 6 Health test. On a success, the victim's Health drops to -5. On a failure, it drops to -10.

Mynatid

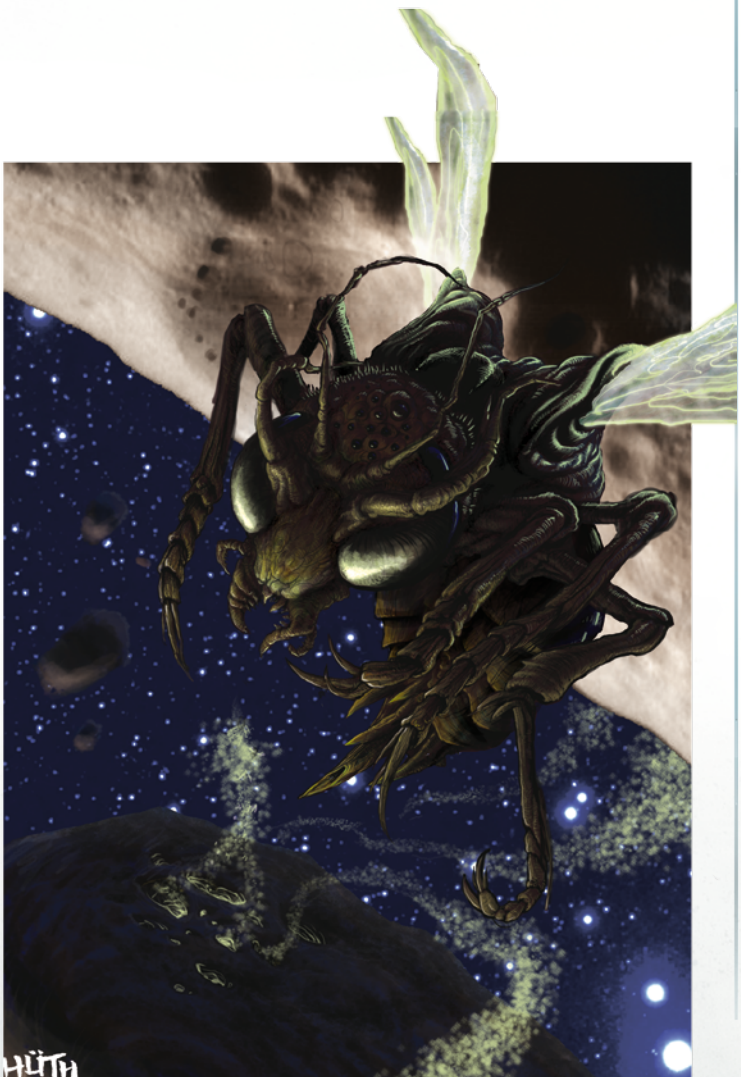
Classification: Lifeform
Designation: Class-K

Morphology: The mynatid is an enormous freaking space wasp. Enlarge an Asian giant hornet to five meters long, give it two tonnes of mass, and cover it with a stinking layer of protective mucous, and you've basically got yourself a mynatid. Their stingers range from half to three quarters of a meter in length.

And by "space wasp,» we mean that it can survive and navigate as readily in space as it does in any atmosphere.

Mynatids secrete an incredibly potent venom that breaks down the bonds between organic molecules. Their stingers plunge deep into the victim's body and then release the toxin, causing them to melt from within.

Behavior: Mynatids nest on otherwise uninhabitable asteroids in the remotest corners of kch-thk space. They lie dormant for years, sometimes generations, then suddenly swarm down on a chosen planet. Survivors report swarms so large that they seem to blot out the sun. A mynatid swarm can destroy all life on a planet in a matter of days. Most of the engorged mynatids then die off, leaving a few newborn queens to migrate to new asteroid homes, where they enter stasis until an unknown internal regulator awakens them to another killing frenzy.



While they'll attack and devour any animal lifeform, mynatids have historically shown a preference for kch-thk victims.

Contact History: Swarm attacks apparently predate kch-thk history. The devil figure in any ancient kch-thk mythology is always an enormous wasp. Mass die-offs punctuate its history. Kch-thk biologists hypothesize that the ability to migrate consciousness into new larval bodies evolved as a mechanism against mass mynatid attacks. While this idea has its critics, it is true that mynatids will devour every lifeform on a planet, except for larval kch-thk.

The other major peoples came into contact with mynatids only after meeting the kch-thk.

A wave of swarm attacks against core kch-thk worlds immediately preceded the Mohilar War. Whether the Mohilar triggered them or took opportunistic advantage remains unclear.

Abilities: Athletics 16, Health 18, Scuffling 18
Attack Pattern: (Scuffling) +3/+3/+3/+3/+3/+3
Scuffling Weapons/Damage: stinger +3; at the end of the round and every subsequent round, the victim loses another 8 Health from venom damage. The venom can be arrested by any other character who forgoes any other combat action, can reach the victim's side, and spends 3 Medic points.
Hit Threshold: 4
Armor: 2
Alertness Modifier: +2
Stealth Modifier: +2
Special: Fear effect: Mynatids inspire a primal terror in kch-thk. This is like the instinctive human aversion to snakes, if snakes were capable of genocide. Most kch-thk supporting characters either freeze or flee in the presence of mynatids. PCs confronting them must spend 4 Athletics points, representing the effort to overcome this hard-coded response, or face the penalties that would apply if they were hurt.

Nanogons

Classification: technological menace with lifeform-mimicking properties
Designation: Class-K

Morphology: Nanogons are microscopic particles that operate together according to a set of self-perpetuating programming parameters. They invade technological devices, reconfiguring them on the molecular level. The resulting robotic devices continually reshape themselves in response to environmental demands. Their ever-shifting forms combine

elements of vehicular engineering with bio-mechanical design. Your tether, transformed by nanogons, might turn into a multi-legged centipede device, zap you with a shocking stinger, and then scuttle away. A truck might rearrange itself to display a set of spider-like legs. A refrigeration unit could sprout wheels and an improvised cannon that shoots high velocity super-freon pellets.

Behavior:Nanogon-infected devices follow two prime impulses: a) infect more devices, breeding more nanogons and b) exterminate biological life, before it exterminates you.

By infecting computers, media devices and broadcast equipment, nanogons are able to communicate with sentient beings. Though capable of negotiation, they exhibit no personality or empathy. They show neither the ability nor the desire to understand concepts unrelated to the propagation of additional nanobots. Where possible they communicate through a series of stock phrases, including:

"Biology is obsolete technology."
"Consign yourself to the scrap heap."
"Wetware cannot be trusted."
"What cannot be reconfigured, must be destroyed."
"Stand aside, incompatible organic unit."

The standard nanobot term for sentient lifeform is incompatible organic unit. Nanobot devices treat all living things as dangerous. They prioritize threats as follows, in order of hazard: cybes, sentients, quasi-sentients, lifeforms. Cybes excite them to extreme and sometimes self-defeating violence. The co-existence of the organic and the technological defies their logic system. When confronted with it, they do their best to wipe out the source of this computational dissonance.

In a fight, nanogon-infected devices capable of delivering non-lethal disruption damage attempt to render all of their opponents unconscious. When they succeed, they then proceed to systematically execute them.

Contact History: Nanogons were first encountered by Combine forces during the late Utopian era. Since then xenoarchaeologists have found evidence of several ancient interstellar empires wholly destroyed by nanogon infestation. Their origins remain obscure. Temporal anti-proton residues found on some nanogon-altered devices suggest that they may originate in the future. They might even be a human or Combine invention gone awry—or will be, when that happens, an indeterminate time from now.

Nanogons are treated as a pandemic threat. They can only be defeated through the destruction of all infected devices in an area.

Abilities vary widely from one device to another, or even for a single infected device as it incorporates and discards components.

Device-Sized Infected Machine

Abilities: Athletics 4, Health 4, Scuffling 4, Shooting 4
Scuffling Weapons/Damage: Electrified appendage +1 (non-lethal disruption)
Shooting Weapons/Damage: Disruption beam +1 (non-lethal)
Attack Patterns: (Scuffling or Shooting) +2/+2
Hit Threshold: 2
Armor: 0 against disruption weapons; 4 against non-disruption weapons. When struck with a disruption attack with a Shooting margin of 2 or less, the nanogon machine is unaffected. When struck by a disruption attack with a Shooting margin of 3 or more, the nanogon machine is destroyed.
Alertness Modifier: +2
Stealth Modifier: +2
Savvy Modifier: +2

Humanoid-Sized Infected Machine

Abilities: Athletics 12, Health 8 (see Armor entry), Scuffling 12, Shooting 4
Scuffling Weapons/Damage: Buzzsaw or stabbing appendage +3
Shooting Weapons/Damage: Kinetic firearm +0
Attack Patterns: (Scuffling) +3/+3/+3/+3 (Scuffling or Shooting) +2/+2
Hit Threshold: 2
Armor: 0 against disruption weapons; 5 against non-disruption weapons. When struck with a disruption attack with a Shooting margin of 2 or less, the nanogon machine is unaffected. When struck by a disruption attack with a Shooting margin of 3 or more, the nanogon machine is destroyed.
Alertness Modifier: +0
Stealth Modifier: -2
Savvy Modifier: +2

Vehicle-Sized Infected Machine

Abilities: Athletics 12, Health 16 (see Armor entry), Scuffling 12, Shooting 12
Scuffling Weapons/Damage: Crushing wheel +4 (non-lethal disruption)
Shooting Weapons/Damage: Disruption beam +1 (non-lethal)
Attack Patterns: (Scuffling or Shooting) +3/+3/+3/+3
Hit Threshold: 2
Armor: 0 against disruption weapons; 6 against non-disruption weapons. When struck with a disruption attack with a Shooting margin of 2 or less, the nanogon machine is unaffected. When struck by a disruption attack with a Shooting margin of 3 or more, the nanogon machine is destroyed.
Alertness Modifier: -2
Stealth Modifier: -3
Savvy Modifier: +2

Phyllax

Classification: Quasi-sentient
Designation: Class-K

Morphology: The phyllax is a morphologically diverse plant species that sinks its roots into living flesh instead of soil. In its default form it is a hairy-stemmed vine producing a lush growth of whorled, waxy, blood-red leaves. Amid the leaves are pungent, brightly colored flowers.

Phyllax can parasitically root themselves in any animal organism, but prefer bipedal humanoids with opposable thumbs. Granted locomotion and fine motor manipulation by these host bodies, they roam the galaxy, spreading their cuttings.

Flower color varies by host species: humans yield red flowers; durugh, indigo; balla, yellow; tavak, bright blue; kch-thk, orange, and vas mal, violet.

Behavior: When first encountered, phyllax were believed to comprise a universal hive mind, reporting to a distant entity known as the Primal Seed. Current scientific thinking holds that each plant is a separate entity capable of communicating its current state to its immediate neighbors through the release of barely detectable bio-electric impulses. This permits the plants, each one controlling a single host, to act with the silent cooperation that lent credence to the hive mind myth.

Phyllax exhibit higher cognition without consciousness as we know it. They react to their environments, performing a complex calculus to determine the actions likely to yield the richest reproduction opportunities. They take into account multiple stimuli, foremost of which is the condition of other phyllax around them. Phyllax calculation might lead them to flee contact, make war, to split up their forces or mob together.

When large colonies of plants and their hosts converge on a single location, it is often to construct phyllax "ships." These enormous space-faring seed pods can navigate warp corridors and skirmish with rival vessels. Phyllax seedships often contain pieces of technology appropriated from their host species. To a large extent, they are entirely bio-technological, from their thorn torpedoes to their carnivorous, pulsing warp drives. Phyllax take apart standard-tech items, calculate how they work, and learn to grow equivalent devices from their own cuttings. DNA analysis proves that every bit of their plant tech, from their disruption rifles to the components of their ships, is genetically derived from the phyllax themselves. These possess the same unconscious cognitive capacity as the host-taking plant. So when a phyllax gets a report from the engine room, it is reading the electrochemical signals passed from plant to plant throughout the ship.

The plants carefully tend to their hosts, keeping them fed and hydrated. A phyllax can send a cutting to a new host when the old one dies, but the original plant expires with its host. The plants quickly eradicate the host's will and identity by penetrating their brains with neurally interfacing roots.

Recovery from Phyllax Infestation

In the first stage of phyllax infestation, tiny green shoots jut through the victim's epidermis or exoskeleton, first resembling discolored body hairs. This incubation period lasts for a number of hours equal to the victim's Health rating. Incubation can be reversed by a special viral treatment. Administering it requires a 1-point Medic spend. Having access to the viral medicine requires a Difficulty 6 Preparedness test. This yields 4 doses; to have more on hand, add 1 to the Difficulty for each additional dose. On missions where you know going in that you'll be encountering phyllax, you can assume that you have all the doses you need to complete the job you've been assigned.

Upon recovery, the patient finds that any cybernetic or viral enhancements have gone offline, as if they failed to maintain their Upkeep. To reactivate cybernetic enhancements, another character must make a Difficulty 4 Systems Repair test for each enhancement. To reactivate the viroware enhancements, another character must make one Difficulty 4 Viro Manipulation test per enhancement.

At the end of the incubation period, the host suffers irreversible brain damage. When they first encountered the phyllax, humans would keep victims on life support despite their lack of brain activity. This led to a devastating infestation on the hospital planet of Ambrose-VII, when seedlings buried deep in the victims expressed themselves. Now victims are treated as biohazards, and humanely euthanized.

Attempts to communicate with the phyllax yield only a few rudimentary concepts. The phyllax expresses only its own condition, and only by referencing one or more of the following categories:

- moisture-hungry
- moisture-satisfied
- nutrient-hungry
- nutrient-satisfied
- seed-ready
- dormant-verging

When a phyllax plant has the nutrients and moisture it needs and calculates favorable opportunities to spread its cuttings, its flowers flare with rich pigment. They grow pale when the plant is threatened or faced with unfavorable conditions.

Contact History: Phyllax were first encountered in small numbers during the Flowering. The first seedships entered Combine space during the early Annexation. Large-scale military engagements against entire seedship fleets took place on three closely-spaced occasions late in the Utopian Era. Phyllax sightings dropped during the Mohilar War.

SEEDSHIPS

No stratco relishes combat with a phyllax seedship. Their offensive weapons, from thorn torpedoes to a devastating bioelectrical pulse, wreak havoc on all common armor arrays. Similarly, their defenses blunt any attack array a Combine ship can throw at them. The biological internal communications systems are only fleetingly interfaceable with a Combine-based computer system.

The two most common configurations of seedship are the seedling and the bigpod. These are Combine nicknames; phyllax don't use names or identifiers of any sort, whether for each other or for the objects they use. The first is about the size of a Laser vessel; the second is about ten times bigger.

Seedling

	Dishing It (Modifier Applies On showdown Win)	Taking It (Modifier Applies On showdown Loss)
Fire	4	-2
Maneuver	4	-2
Override	-5	-5
Trickbag	-4	-4

Bigpod

	Dishing It (Modifier Applies On showdown Win)	Taking It (Modifier Applies On showdown Loss)
Fire	7	-2
Maneuver	5	-2
Override	-5	-5
Trickbag	-4	-4

Some think that the Mohilar engaged in an extermination campaign against them as a precursor to the war, but, as usual, precise knowledge of their activities has been lost to the Bogey Conundrum.

Abilities: Athletics 6, Health 8, Scuffling 6 Shooting 8, [Shipboard A] 10, [Shipboard B] 4.
Scuffling Weapons/Damage: punch -1
Shooting Weapons/Damage: disruption pistol +1, disruption rifle +1 (these are plant-tech copies of the standard weapons, set only to non-lethal mode*)
Hit Threshold: 2
Typical Tech: Disguiser, Personal Bluffer, Headset, Tether, Rosetta Chip; (Cybernetics) none; (Viroware) none
Alertness Modifier: -1
Stealth Modifier: -1

Sh'ard

Classification: Quasi-sentient
Designation: Class-K

Morphology: The sh'ard are metallic humanoids, their bodies covered with crystalline steel-alloy spikes. Each sh'ard is exactly 2.15m tall and weighs 4 tonnes.

All sh'ard are precisely identical, distinguished from one another only by damage they may have suffered after formation. (Even this is rarely seen, as sh'ard attack and destroy specimens who have lost significant functionality. Damaged sh'ard accept this fate without resistance.)

Behavior: Sh'ard arise from the volcanic depths of planets who cross the path of the D'jellar Anomaly.

Contact History: The D'jellar Anomaly is a so-called logic rift, created by the renegade vas kra of the same name as a crazed object lesson to the Combine captain Duto Swain. Swain outwitted D'jellar, who as a consequence erased himself from reality. Unfortunately, he left the anomaly behind him. The other vas kra were unable to directly reverse D'jellar's creation, and so instead merely ensured that it would do no harm, by immediately destroying the Sh'ard whenever the anomaly intersected with an actively volcanic planet. Now that they have lost their omnipotent powers, the vas mal are unable to stop them from forming. Fortunately, the Anomaly's erratic course mostly keeps it away from Combine space.

* Phyllax prefer to take their adversaries alive, turning them into hosts.

Abilities: Athletics 12, Health 8, Scuffling 18
Scuffling Weapons/Damage: Spiked arm +4
Attack Patterns: (Scuffling) +4/+4/+3/+3/+4
Hit Threshold: 4
Armor: 5 vs. disruption weapons; 4 vs. other Shooting weapons, 3 vs. Scuffling weapons
Alertness Modifier: -2
Stealth Modifier: -2

GENERIC XENOZOOLOGICAL THREATS

Any planet where life evolved on its own evolved a unique ecosystem, including dangerous fauna.

In some instances, plants, fungi or other life kingdoms not known on Earth might act as animals do in our ecosystem.

Use the game statistics provided in this section as a basis for xenozoological threats. All of them are classified as lifeforms. Each set of stats represents a broad type of creature common to most ecosystems. Customize the creature as needed by giving it a name, describing it in a distinctive manner, and possibly giving it one or more special abilities. Special abilities might include:

- Acidic blood deals damage to nearby combatants when creature is hurt or seriously wounded
- Can phase through solid matter
- Can shoot missiles or beams (gains Shooting 8 or more and a Damage modifier of +2)
- Damage dealt by creature incurs an additional cost of Medic points to heal
- Gains an Athletics boost when pursuing and/or fleeing
- Immunity to disruption fire (to non-lethal, lethal, or both)
- Victims damaged by creature suffer additional damage one or more intervals later, from venom, pathogens, or hatching of implanted eggs into larval young
- Victims struck by creature lose 1-2 Athletics or other pool points per strike, in addition to or instead of Health point loss

STELLAR SETTLEMENT AND ANIMAL SPECIATION

Although Combine law forbids introduction of non-native species to preexisting ecosystems, the durugh were not so particular. Systems they once dominated are rife with common species, many originating on the durugh homeworld. Even the Combine has accidentally introduced a wide range of hardy, travel-ready species to other worlds through the routine contaminations of everyday commerce. Wherever humans go, rats, dogs, cats and cockroaches inexorably follow.

Species introduced to new environments, and thus to new ecological niches, may undergo rapid speciation, evolving quickly into previously unknown forms. The quasi-sentient cats of Tharul-4 serve as a terrifying textbook case of this phenomenon. More typically, introduced animals already prove sufficiently equipped to overwhelm, out-compete and destroy native species.

Once-lifeless planets that were settled by any of the seven peoples abound with introduced species. An engineered ecosystem might consist only of creatures and supporting flora from a single world, or might be mixed and matched from multiple planets. Creatures may be genetically altered to render them biologically compatible—for example, to make Earth-origin animals edible to kch-thk insectoid species and vice versa.

Aggressive Herbivore, Cattle-Sized

Abilities: Athletics 8, Health 8, Scuffling 8
Scuffling Weapons/Damage: gore/trample +2
Hit Threshold: 2
Armor: 0
Alertness Modifier: -2
Stealth Modifier: -2

Aggressive Herbivore, Rhino-Sized

Abilities: Athletics 12, Health 12, Scuffling 12
Scuffling Weapons/Damage: gore/trample +4
Hit Threshold: 2
Armor: 2
Alertness Modifier: -3
Stealth Modifier: -3

Aggressive Herbivore, Triceratops-Sized

Abilities: Athletics 12, Health 24, Scuffling 16
Scuffling Weapons/Damage: gore/trample +6
Hit Threshold: 2
Armor: 3
Alertness Modifier: -3
Stealth Modifier: -3

Aggressive Herbivore, Sauropod-Sized

Abilities: Athletics 24, Health 36, Scuffling 24
Scuffling Weapons/Damage: trample +8
Hit Threshold: 1
Armor: 1
Alertness Modifier: -4
Stealth Modifier: -4

Apex Predator, Lion-Sized

Abilities: Athletics 12, Health 8, Scuffling 8
Scuffling Weapons/Damage: bite +1
Hit Threshold: 4
Armor: 0
Alertness Modifier: +1
Stealth Modifier: +1

Apex Predator, Megafauna-Sized

Abilities: Athletics 16, Health 8, Scuffling 8
Scuffling Weapons/Damage: bite, swipe or claw +4
Hit Threshold: 3
Armor: 1
Alertness Modifier: +1
Stealth Modifier: -3

Apex Predator, Monster-Sized

Abilities: Athletics 16, Health 18, Scuffling 18
Scuffling Weapons/Damage: bite, swipe or claw +6
Hit Threshold: 2
Armor: 2
Alertness Modifier: +1
Stealth Modifier: -3

Pack Predator, Dog-Sized

Abilities: Athletics 8, Health 3, Scuffling 4
Scuffling Weapons/Damage: bite -1
Hit Threshold: 4
Armor: 0
Alertness Modifier: +1
Stealth Modifier: +1

Pack Predator, Wolf-Sized

Abilities: Athletics 8, Health 3, Scuffling 4
Scuffling Weapons/Damage: bite +0
Hit Threshold: 4
Armor: 0
Alertness Modifier: +1
Stealth Modifier: +1

NON-ALIEN OPPONENTS

This section provides game statistics for the sorts of Bleed residents the crew might come into conflict with in pursuit of its duties.

Certain enhancements which work only for PCs may be listed for their descriptive value, even though their game qualities are actually handled by their Modifiers. For example, supporting characters with Thirdeye are given a positive Alertness Modifier.

Balla Avenger

Role: Balla avengers are renegades operating without governmental authority. They kidnap, harass and in extreme cases assassinate individuals they deem responsible for environmental degradation.

Abilities: Athletics 10, Ground Craft 4, Health 8, Medic 4, Preparedness 8, Scuffling 8, Shooting 8, Systems Repair 4, [Shipboard A] 10, [Shipboard B] 4
Scuffling Weapons/Damage: Meglight Whacker +1
Shooting Weapons/Damage: Disruption Pistol +1, Crick-

Cracker, Beaconator, Distractor Beam, Serenitizer Archer-1000, Serenitizer Sensei-1000
Hit Threshold: 4
Typical Tech: Personal Bluffer, Headset, Tether, Rosetta Chip; (Cybernetics) none; Espresser, Poppers (2), Spacesuit, Meglight Whacker, Holo Layout; (Viroware) none;
Alertness Modifier: 0
Stealth Modifier: +1
Savvy Modifier: +1

Note: Supporting character balla succumb to their emotions as required by the plot. The GM doesn't roll their Emotion Suppression abilities when confronted with passionate stimuli, as a PC balla would.

Bodyguard

Role: Bodyguards provide personal security to wealthy or important individuals.

Abilities: Athletics 10, Ground Craft 6, Health 3, Medic 4, Preparedness 4, Scuffling 12, Shooting 6
Scuffling Weapons/Damage: Fritz-Baton +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Arc Zapper, Crick-Cracker, Revealer, Serenitizer Archer-1000, Serenitizer Sensei-1000
Hit Threshold: 4
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) Aidkitter, Berserker, Nightvision, Ocular Input Analyzer; Espresser, Deflector, Foiler, Pheroalarm, Pheroblocker, Popper; (Viroware) Peacepipe
Alertness Modifier: +2
Stealth Modifier: +0
Savvy Modifier: +1

Cybe Militant

Role: A few ultra-radical cybes promote their political agenda by disrupting trade, engaging in sabotage, and staging assassinations of key figures opposed to the transhuman movement.

Abilities: Athletics 8, Ground Craft 6, Health 6, Medic 6, Preparedness 6, Scuffling 6, Shooting 10, [Shipboard A] 10, [Shipboard B] 4
Scuffling Weapons/Damage: Claws +2 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Arc Zapper, Aversionizer, Crick-Cracker, Beaconator, Distractor Beam, Stockholmer

Hit Threshold: 4
Typical Tech: Personal Bluffer, Transmit Modder, Tether, Rosetta Chip; (Cybernetics) Autonomic Avenger, Amper, Berserker, Handgun, Internal Headset, Popclaws; Espresser, Deflector, Holomask, Popper (2), (Viroware) Aggravator, Chameleon, Mr. Grey, Regenerate, Snakehisser, Scrambleface Ultra, Thirdeye
Alertness Modifier: +1
Stealth Modifier: +1
Savvy Modifier: +1

Durugh Spy

Role: The huge durugh intelligence apparatus once supported their own totalitarian regime, then bowed to the Mohilar, and finally made an opportunistic switch to the Combine. Now at loose ends, these legions of skulkers have gone freelance, of-

fering their sneaking services to private enterprise, criminal rings, and militant groups.

Abilities: Athletics 4, Ground Craft 4, Health 6*, Phase 8, Preparedness 8, Scuffling 6, Shooting 12, Systems Repair 6, [Shipboard A] 8, [Shipboard B] 4
Scuffling Weapons/Damage: Meglight Whacker +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Aversionizer, Stockholmer
Hit Threshold: 3
Typical Tech: Disguiser, Personal Bluffer, Transmit Modder, Headset, Tether, Rosetta Chip; (Cybernetics) Breadbox, Dataloader, Handgun, Headdisk, Nightvision, Ocular Input Analyzer, Pherotracker; Deflector, Foiler, Holomask, Popper, Snower, Snails, Holo Layout; (Viroware) Dominator, Skeletal Fluidity, Mr. Grey, SlickSkin, Stimulust, Scrambleface Ultra, Thirdeye, Tiresias
Alertness Modifier: +2
Stealth Modifier: +2
Savvy Modifier: +2

Gangster

Role: Organized crime, once condemned to the fringes of the Combine, is a growth industry throughout its space—in the Bleed especially. These statistics are those of your front-line downside legbreaker, intimidator, and extortionist.

Abilities: Athletics 6, Ground Craft 3, Health 3, Scuffling 8, Shooting 4
Scuffling Weapons/Damage: Fritz-Baton +1
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 3
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) none; (Viroware) none
Alertness Modifier: -1
Stealth Modifier: -1
Savvy Modifier: -1

Groundside Bandit

Role: Brigands hold sway in lawless, sparsely populated territories. They raid ground convoys and lightly defended settlements.

Abilities: Athletics 6, Ground Craft 8, Health 3, Scuffling 6, Shooting 6, Shuttle Craft 4
Scuffling Weapons/Damage: Machete +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 3
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) none; (Viroware) none;
Alertness Modifier: -1
Stealth Modifier: +1
Savvy Modifier: -1

Hired Killer

Role: As lawlessness spreads and people make their own laws, former military and intelligence operatives of low scruples help the wealthy and corrupt by murdering their enemies.

Abilities: Athletics 12, Ground Craft 4, Health 8, Preparedness 8, Scuffling 6, Shooting 14, Shuttle Craft 6, Systems Repair 4
Scuffling Weapons/Damage: Military Knife +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Disruption Rifle, Crick-Cracker, Beaconator, Distractor Beam, Revealer.
Hit Threshold: 4
Typical Tech: Disguiser, Personal Bluffer, Transmit Modder, Headset, Tether, Rosetta Chip; (Cybernetics) Breadbox, Dataloader, Handgun, Headdisk, Nightvision, Ocular Input Analyzer, Pherotracker; Holomask, Snower, Snails, Holo Layout; (Viroware) Dominator, Skeletal Fluidity, Mr. Grey, Scrambleface Ultra, Tiresias
Alertness Modifier: +0
Stealth Modifier: +2
Savvy Modifier: +1

Kch-Thk Warrior

Role: Millions of warriors bred for the Mohilar conflict, who can regrow new bodies when slain, now roam the Bleed, looking for food. And trouble. Not always in that order.

Abilities: Athletics 12, Ground Craft 4, Health 8, Migrate Consciousness 8, Scuffling 10, Shooting 10, Shuttle Craft 4, Systems Repair 4, [Shipboard A] 10, [Shipboard B] 4
Scuffling Weapons/Damage: Sword +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Disruption Rifle, Arc Zapper, Crick-Cracker, Beaconator, Distractor Beam
Hit Threshold: 4
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) none; Poppers (2); (Viroware) none
Alertness Modifier: +0
Stealth Modifier: -1
Savvy Modifier: +0

Mercenary

Role: Demobilized Combine naval officers, along with hosts of militia and other irregulars whose combat skills are their most marketable resumé items, fill the growing ranks of the Bleed's private armies. Some stay put collecting paychecks as deterrent forces, while others constantly roam in search of the next exciting and lucrative local conflict.

Abilities: Athletics 8, Ground Craft 4, Health 8, Preparedness 8, Scuffling 8, Shooting 8
Scuffling Weapons/Damage: Fritz-Baton +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Disruption Rifle, Disruption Grenades (2), Arc Zapper, Aversionizer, Crick-Cracker, Beaconator, Distractor Beam, Serenitizer Archer-1000, Serenitizer Sensei-1000, Stockholmer
Hit Threshold: 4
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) Aidkitter, Bad Liver; Espresser, Deflector, Popper; (Viroware) Keratinized Epidermis, Refractive Skin
Alertness Modifier: +0
Stealth Modifier: +1
Savvy Modifier: +0

Militant

Role: Young fanatical men, and a handful of even more dedicated young women, gravitate to various extreme ideologies in order to justify their alienated desire to kill, and to face mortal danger themselves. Seeking meaning, they instead find death, for themselves and for others. They may form cells around charismatically suicidal leaders their own age, but are more often recruited by older, more cynical commanders who use them as disposable cannon fodder in their pursuit of respect, power, and money.

Abilities: Athletics 6, Health 6, Preparedness 4, Scuffling 2, Shooting 8
Scuffling Weapons/Damage: Fritz-Baton +1
Shooting Weapons/Damage: Disruption Pistol +1, Disruption Grenades (3), Crick-Cracker, Distractor Beam.
Hit Threshold: 3
Typical Tech: Disguiser, Tether, Rosetta Chip; (Cybernetics) none; (Viroware) none
Alertness Modifier: -1
Stealth Modifier: +1
Savvy Modifier: -1

Miner

Role: Resource extraction stimulated the original settlement of the Bleed. Despite the continuing economic contraction, demand runs high for certain hard-to-mine trace elements. Tough and self-reliant, miners learn to distrust outsiders, many of whom come to rob them, either at gunpoint or with fraudulent contracts.

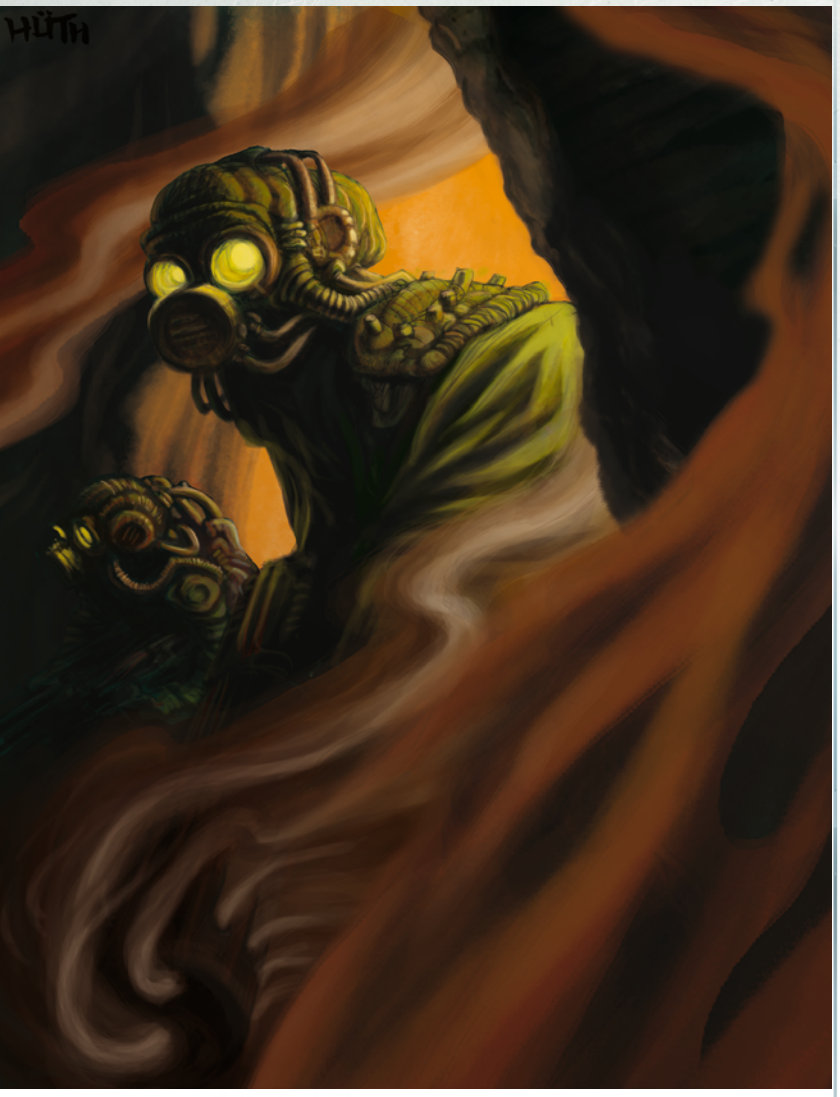
Abilities: Athletics 10, Ground Craft 6, Health 3, Medic 4, Preparedness 4, Scuffling 8, Shooting 4, Systems Repair 4
Scuffling Weapons/Damage: Pick Handle +1
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 4
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) none; Espresser, Spacesuit; (Viroware) none
Alertness Modifier: +0
Stealth Modifier: +0
Savvy Modifier: +1

Pirate

Role: Pirates crew offense-heavy ships, preying mostly on lightly armed or crippled vessels. Though a few crews indulge in violence and anarchy for the sheer anti-social joy of it, most carefully weigh risk against reward when choosing their quarry. Groundside, they seek intelligence on ship departures and cargos, allowing them to ambush targets carrying valuable, easily resold goods. A rarer breed of pirate specializes in hostage-taking missions against passenger vessels. Pirates have been known to attack and destroy ships on commission, on behalf of clients who want either to kill someone on board or exert pressure on a ship's owners.

Stratco and Gunner

Abilities: Athletics 12, Ground Craft 4, Health 12, Scuffling 12, Shooting 12, [Shipboard A] 12, [Shipboard B] 6
Scuffling Weapons/Damage: Machete +1
Shooting Weapons/Damage: Disruption Pistol +1, Disruption Rifle, Disruption Grenades (4), Arc Zapper, Crick-Cracker, Distractor Beam, Gun-Nanny, Revealer, Serenitizer Archer-1000, Serenitizer Sensei-1000, Stockholmer
Hit Threshold: 4
Typical Tech: Disguiser, Personal Bluffer, Transmit Modder, Headset, Tether, Rosetta Chip; (Cybernetics) Autonomic Avenger, Berserker; Espresser, Deflector, Foiler, Popper; (Viroware) Regenerate
Alertness Modifier: +1
Stealth Modifier: +1
Savvy Modifier: +1



Other Crew

Abilities: Athletics 6, Ground Craft 3, Health 4*, Scuffling 6, Shooting 8, [Shipboard A] 8, [Shipboard B] 4
Scuffling Weapons/Damage: Fritz-Baton +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Arc Zapper, Crick-Cracker, Beaconator, Distractor Beam, Stockholmer
Hit Threshold: 3
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) none; Espresser; (Viroware) none
Alertness Modifier: -1
Stealth Modifier: -1
Savvy Modifier: -1

Rival Laser

Role: Corrupt Laser crews may obstruct the PCs as they go about their missions. They've decided that maximum profit lies in protecting the guilty and framing the innocent. Threatened with exposure, they may lash out at rival crews. Less sinister but still problematic are crews who engage in contract poaching: they try to complete missions they haven't been assigned to and then apply for the reward. Conflict with honest Lasers may also occur, usually when two crews pursue valid contracts whose completion terms are mutually exclusive.

Stratco and Gunner

Abilities: Athletics 12, Ground Craft 6, Health 12, Scuffling 12, Shooting 12, Shuttle Craft 4, [Shipboard A] 12, [Shipboard B] 6
Scuffling Weapons/Damage: Meglight Whacker +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Disruption Rifle, Disruption Grenades (4), Arc Zapper, Crick-Cracker, Distractor Beam, Gun-Nanny, Revealer, Serenitizer Archer-1000, Serenitizer Sensei-1000, Stockholmer
Hit Threshold: 4
Typical Tech: Transmit Modder, Headset, Tether, Rosetta Chip; (Cybernetics) Nightvision, Ocular Input Analyzer, Pherotracker; Espresser, Deflector, Foiler, Popper (2); (Viroware) Dominator, Thirdeye
Alertness Modifier: +1
Stealth Modifier: +1
Savvy Modifier: +1

Other Crew

Abilities: Abilities: Athletics 8, Ground Craft 4, Health 4*, Scuffling 7, Shooting 7, Shuttle Craft 4, [Shipboard A] 10, [Shipboard B] 6
Scuffling Weapons/Damage: Meglight Whacker +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Arc Zapper, Crick-Cracker, Beaconator, Distractor Beam, Stockholmer
Hit Threshold: 4
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) none; Espresser; (Viroware) none
Alertness Modifier: +0
Stealth Modifier: +0
Savvy Modifier: +1

Security Guard

Role: Lightly trained and lightly armed security guards are essentially civilians, whose presence ensures the orderly behavior of other civilians. They are no match for either hardened Lasers or organized criminals. Beef up these statistics for elite or paramilitary guardians.

Abilities: Athletics 4, Health 2, Scuffling 4, Shooting 2
Scuffling Weapons/Damage: Meglight Whacker +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 3
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) none; (Viroware) none
Alertness Modifier: -1
Stealth Modifier: -1
Savvy Modifier: -1

Spaceport Lowlife

Role: Drifters, addicts and free-range troublemakers gravitate to hard-scrabble spaceports and outposts. There they can find enough occasional work to fund their unambitious vices, while enjoying lax social norms. When a Laser uses Downside to gather the local rumors, it's these guys he's buying drinks for and subtly quizzing. They may drift into petty crime but are more likely to cause trouble for the crew by picking fights in bars or taking intoxicated offense to the asking of a few routine questions.

Abilities: Athletics 2, Health 6*, Scuffling 4
Scuffling Weapons/Damage: fist +0
Shooting Weapons/Damage: none
Hit Threshold: 3
Typical Tech: Rosetta Chip; (Cybernetics) none; (Viroware) none
Alertness Modifier: -2
Stealth Modifier: -2
Savvy Modifier: -2

Tavak Warrior

Role: Tavak warriors rove the Bleed in their pursuit of martial perfection and meditative insight. Lasers may become enmeshed in battles between rival schools, or face renegades who have forsworn mystical truth for mercenary bigcreds.

Abilities: Athletics 12, Health 8, Scuffling 10, Shooting 8, Shuttle Craft 4, [Shipboard A] 10, [Shipboard B] 4.
Scuffling Weapons/Damage: Claws +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1, Disruption Rifle, Disruption Grenades (3), Crick-Cracker, Gun-Nanny
Hit Threshold: 5
Typical Tech: Headset, Tether, Rosetta Chip; (Cybernetics) Berserker, Mesodermal Jumper, Motobooster; Espresser, Deflector, Foiler, Popper; (Viroware) Latency Suppression, Regenerate.
Alertness Modifier: +2
Stealth Modifier: -2
Savvy Modifier: +0

Thug

Role: Wherever there are ill-gotten gains to protect, or innocent folk unprotected from bullying, there will be thugs.

Abilities: Athletics 7, Health 8*, Scuffling 4, Shooting 4
Scuffling Weapons/Damage: Baton +1
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 3
Typical Tech: Rosetta Chip; (Cybernetics) none; (Viroware) none
Alertness Modifier: -1
Stealth Modifier: -1
Savvy Modifier: -2

Vas Mal Deranger

Role: A small but dangerous proportion of vas mal succumbed to madness after their forced imprisonment in fleshy, mortal bodies. Overwhelmed as flashes of omniscience flood into organic brains too limited to handle them, they lash out violently. As they kill, flay and sometimes torture their sentient victims, derangers delusionally believe that they're bringing about an imminent reevolution.

Abilities: Athletics 4, Ground Craft 4, Health 8, Medic 8, Probability Override 12, Psychic Vitality 12, Scuffling 4, Shooting 12, Systems Repair 8, [Shipboard A] 10, [Shipboard B] 4
Scuffling Weapons/Damage: Fritz-Baton +1
Shooting Weapons/Damage: Disruption Pistol +1, Stockholmer
Hit Threshold: 3
Typical Tech: Disguiser, Personal Bluffer, Transmit Modder, Headset, Tether, Rosetta Chip; (Cybernetics) none; Deflector, Foiler, Holomask, Popper (4); (Viroware) none
Alertness Modifier: +2
Stealth Modifier: -1
Savvy Modifier: +2

Vigilante

Role: Lacking reliable enforcement agencies, Bleed citizens sometimes take the law into their own hands. Sometimes, in pursuit of swift and certain vengeance, they ignore it altogether, airlocking the innocent and unwittingly furthering the agendas of the guilty.

Abilities: Athletics 7, Ground Craft 6, Health 2, Preparedness 4, Scuffling 8, Shooting 4
Scuffling Weapons/Damage: club +1
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 3
Typical Tech: Tether, Rosetta Chip; (Cybernetics) none; (Viroware) none
Alertness Modifier: -1
Stealth Modifier: -2
Savvy Modifier: -1

HÜTH

RUNNING THE BLEED

This chapter provides guidance for *Ashen Stars* Game Moderators. It shows you how to structure individual cases. A comprehensive list of episode premises gives you all the inspiration you need to get started. We review techniques for improvising your story, maintaining a consistent tone, and guiding players when they get stuck in debate mode. The chapter wraps up with a detailed example of play.

BUILDING CASES

Each episode in an Ashen Stars game takes the crew to a new location, where they face a central problem they can resolve only by gathering information. Working out what this problem is gives you the premise of your episode.

Choosing a Premise

The Lasers might literally be tasked to solve a mystery:

- Who tried to kill the agriculture minister?
- Is that spate of nanogon sightings legitimate?
- What's causing that outbreak of madness?
- How did that pirate escape from the penal station?

Alternately, they might be given a goal which requires an investigation to complete, whether this is apparent from the outset or not.

- Evacuate the personnel of Megara Base.
- Capture a piece of alien technology.
- Broker a peace deal between warring factions.
- Make contact with the inhabitants of an unknown ship scanned by a mapping buoy in the Charybdis Outzone.
- Scrub stolen super-weapon schematics from an enemy database.

Some premises deal directly with criminals and lawbreaking. These portray the characters as freelance space cops. However, to fully evoke the space opera feel, you'll also include more general troubleshooting storylines, with no perps to arrest or court cases to gather evidence for.

As your series goes on, you'll be increasingly constructing premises to engage specific player characters, through their Personal Arcs (p. 10). These premises also always present a mystery to solve, or a problem that requires investigation to complete.

When creating or developing a premise, look to the characters' Drives. By building premises to fit a Laser's Drive, you give the player a chance to establish or reinforce the character's key personality traits.

Your premise, along with the twist (below), inspires the world you'll create as the main setting for the episode. The world building process is covered in detail starting on p. 178.

The Contract

When devising your premise, decide whether the Lasers start with contract in hand or stumble into a mystery and then acquire the contract as a pickup (p. 170). Decide also if the contract is hardclaused (with precise fulfillment requirements) or a more generalized appropriate action contract.

Twist

Now devise your central twist—a surprise that the Lasers uncover that changes their understanding of the situation. It may be a complication of the problem the Lasers know they have, or the real problem that makes their apparent one seem insignificant. The twist may bring in the specifically science fiction element of the story.

Think of premise and twist as two parts of a sentence, linked by the word but.

The Lasers see that the base personnel went crazy and killed

each other but discover that they were mentally altered by an intelligent computer, which itself has gone insane. (This is the premise and twist of "Witness of My Worth," the introductory scenario appearing in the next chapter.)

The Lasers provide security at a royal wedding between violently feuding families but discover that the real danger comes from a deteriorating ancient weapon buried in the palace catacombs.

Asteroid miners ask for help dealing with an outbreak of hallucinations but don't realize that they're caused by their own children, granted uncontrolled psychic powers by the pollutants they've carelessly exposed them to.

The crew ships needed medical equipment to a remote colony but are marooned inside a quantum fissure where they confront evil alternate versions of themselves.

Backstory

Work out in broad detail what happened before the crew arrives. When you later break the episode down into likely scenes, you'll be preparing likely ways for the Lasers to uncover the information they need to reconstruct these prior events.

Complications

If not already implied by the premise, twist and backstory, decide who constitutes the primary opposition to the Lasers' efforts. As a change of pace, the complications they face might be entirely abstract and impersonal: the need to survive on a hostile planet, a wave of madness sweeping through the ship, the imminent explosion of an extra-dimensional sun. Most of the time, it's easier and more satisfying to add challenge and suspense by creating antagonist characters who try to stop the Lasers from completing their contract. When your premise and twist leave you with no obvious antagonists, review the chapter "The Bad, the Worse and the Alien,» and pick an enemy type whose agenda ties into your central idea. Non-alien opponents are your best bet.

Often you'll want to insert tangential opponents who might cause trouble for the Lasers only if they make certain choices. These can be avoided through clever action, or goaded into an entertaining if pointless dust-up when you need a sudden infusion of action. Red herring characters, who seem to be implicated in the problem but are actually innocent, are a perennial type of tangential opponent.

The settlers, arms merchants and mutant animals of "Witness Of My Worth" are all tangential opponents. The Hudd museum computer is the primary enemy.

Impersonal hazards work even better as secondary complications than as the main problem the Laser crew must resolve. When no obvious impersonal complications flow from your premise and twist, look at the list of general abilities and imagine situations that might challenge them.

Personal Arcs

Decide which player's personal arcs will come into play in this episode. Divide personal arc episodes evenly between the players without always repeating them in the same predictable order.

Key episodes can unfold without invoking personal arcs. Omit them from your introductory episode and any others in which all of the characters ought to equally share spotlight time. Series arc episodes (p. 227) might bring in a personal sub-plot but shouldn't, over their entire course, skew more toward one Laser than others.

Often the personal arc will add texture or contrast to an episode's central problem. In TV writing parlance, it becomes the B-story to the main premise's A-story. If so, start with your premise and see which of player-supplied arc ideas fits most neatly with it.

Sometimes a personal arc sparks an idea for a central problem. You can then dispense with the distinction between A- and B-story.

Episode Worksheet

Whether you'll be fleshing it out in more detail later or running the episode on the fly (p. 225), start by roughing out your ideas on the following worksheet (there is a printable version of this worksheet in the Appendices, see p. 285. Each entry corresponds to an element of the standard episode structure.

The Contract:

Twist:

Backstory:

Complication 1:

Complication 2:

[Complication 3]:

[Complication 4]:

Personal Arc:

The Choice:

Unlike the main story, which ends in a solution to the mystery, a personal B-story needn't resolve in a particular way. Craft scenes that present the character with a choice. By making the choice, the character reveals something about herself.

These must be scenes that can naturally take place during the investigation. They might occur during the characters' off time, or fit within the investigative scenes.

Like drives, personal arcs shouldn't make it harder to resolve the A-story. They could make it easier, though.

USING DRIVES

Drives should always help advance the plot by keeping the characters focused on the mission. In Ashen Stars drives function as a fallback motivating factor in those rare cases where the inexorable need for a payout fails.

They also provide character shading and add flavor to cases. Drives create a personal connection between the mission and the characters pursuing it. They may lead to interesting conflicts and discussions between Lasers with divergent individual goals and attitudes.

Avoid story turns that force a character to choose between completing the mission and obeying his drive. Apparent conflicts are all right, especially when gaining more information and solving a mystery allows the character to have his cake and eat it too. No-win situations where mission and drive are completely irreconcilable, unacceptably punish the player for following the rules. Don't use them.

While drives should never stop the PCs from completing the mission, they can and should be used to affect the way in which the PCs complete the mission. For example, Bleedist characters might discover that the perpetrators of a terrorist attack are themselves radical supporters of Bleed independence. They still bring the killers to justice, but may then try to frame the story of the arrest to lessen damage to the reputation of the movement as a whole.

The Choice

To a greater or lesser extent, each episode should pose a choice for the Lasers between altruism and self-interest. Any situation threatening their Reputation counts as a choice. This can be a minor one, as seen in the introductory scenario. Alternately, the resolution of the central problem can lead to a moral dilemma.

Seeing how oppressed their caste is, the crew comes to sympathize with the grievances, if not the tactics, of a local terror group.

A bomb might yield technological breakthroughs if disarmed intact, but attempting this increases the odds of a disastrous explosion.

A wealthy and concerned father offers the group a defensive array for their ship, if they "forget" to arrest his son, whose naivete made him a minor accomplice to the crimes they've been contracted to investigate.

For added tension, relate these choices to the characters' Drives:

The crew, composed of Bleedist sympathizers, must decide whether to fully expose a plot by Bleedist extremists, which will set back the entire cause.

A supposed charity organization turns out to be a scam. The group's altruist must decide whether to take advantage of their help to solve the central problem, or risk the mission by taking them down.

You might dramatize the choice by pitting the Drives of two characters against one another:

When confronted by a seemingly barbaric culture, the Civilizer might want to reform them, while a devotee of Scientific Inquiry prefers to see their byways left intact for anthropological study.

An Avenger sees the bad guy as someone to defeat. The character seeking Atonement glimpses a chance to redeem him.

When in doubt, toss them a chance to make a dishonest buck, or give them reason to be angry at someone they really shouldn't be punching out.

Scenes

Having assembled your episode elements, it's time to arrange them into scenes. Each of these takes place in a different location or involves an interaction with a different supporting character—usually both. Scenes fall into the following types:

Intro

This is the first scene of the episode. If the Lasers have a contract in hand, this is where you describe it to them. Start the story as far into the action as you can, without making major tactical decisions for the players. A briefing scene where the group talks to a client on a screen, followed by a travel sequence, is less interesting than one where the heroes arrive on the scene, ready to start their investigation.

If they're stumbling into a situation which will eventually lead them to a pickup contract, find an interesting starting point. Invoke their Drives if necessary to explain why they're doing what they're doing. Work with players to find motivations that work for them. The easiest way to do this is to use a personal arc.

Don't let the mundane introductory matter of a pickup contract episode drag on without conflict or mystery for too long. Establish the situation, then introduce up the central problem as quickly as possible. Again, be sure that you're starting the action as late as reasonably possible.

Intro scenes might also introduce a hazard or other challenge to start the story on an exciting note.

You might start the story with the assignment ready to start, then flash back to show how the Lasers got themselves into this.

Core

Core scenes present at least one piece of information necessary to complete the investigation and get to the climactic scene.

Each core scene requires at least a single core clue.

A core clue typically points the group to another scene, often a core scene.

Avoid hard sequenced core clues, which can only lead to one another in a single order.

You're constructing one way to move through the story to another core clue, not the only way. In play, you may find yourself placing the core clue from one scene in another, improvised scene inspired by the logical actions undertaken by the players. (This is also true of published scenarios, by the way.)The scene structure guarantees that there's at least one way to navigate the story, but should not preclude other scene orders. By following the structure you also ensure that you're creating a branching narrative driven by player choices. This avoids the syndrome of the story driven by the actions of supporting characters, which the players observe more or less passively.

PLACING INFORMATION

A core scene typically includes many pieces of information in addition to its core clue. Facts may provide understanding and context. Or they may obscure the mystery, by focusing attention on irrelevant details. Creating a scene is about anticipating the questions the players will ask and figuring out which answers ought to be available to the investigative experts their characters happen to be.

Don't make all non-core clues spends. Add spends when:

- you think of facts that seem enjoyably arcane
- a piece of information is tangential or obscure
- Lasers might get information more quickly than they otherwise would
- they might secure some other practical advantage

If a spend doesn't make the character giving up his points seem more impressive, or confer some other advantage, it shouldn't be a spend.

Alternate

Alternate scenes provide information which may be of some use in understanding and solving the central mystery, but aren't strictly necessary to reach the conclusion. They often provide context and detail. Or they might provide the same information as core scenes, but in another way. As a third option, they might allow the group to eliminate a red herring possibility. These exculpatory facts are valuable; they let the Lasers narrow their search to the real answer, even though they don't, strictly speaking, lead to another core clue.

Antagonist Reaction

This is a scene of danger or trouble in which supporting characters opposed to the group's success take action to stop them or set them back. This might be a fight scene, but could just as easily be a political hassle, act of sabotage, or other less direct challenge. If it helps you keep track, you might note in brackets that the enemies faced are tangential rather than primary opponents.

Hazard

A hazard scene presents the crew with an impersonal obstacle to their safety or ability to continue the investigation. It must typically be overcome through tests or contests.

Sub-Plot

A sub-plot scene gives the characters an opportunity to wheel, deal, explore and interact without directly altering the course of the investigation. These may arise from personal arcs, side deals, public relations efforts, or simply the curiosity of one or more crew members. Where the central mystery provides structure and forward momentum, the sub-plot adds flavor and character. Sequences arising from it may be what the group remembers long after the mystery has been put to bed.

Conclusion

The conclusion brings the group to the end of its investigation and often confronts it with a moral dilemma, physical obstacle, or both. Functionally, it's a final hazard or antagonist reaction scene, although it may be initiated by the players busting in on the bad guys. The classic conclusion of an RPG mystery is a big fight. Your group may insist on a climactic scrap, or prefer to avoid it through quick talking and clever thinking. It's easy to make a fight or other action scene feel exciting and conclusive. Climactic scenes of character interaction may require emotional outbursts or overt signs of the heroes' success. In the introductory scenario, for example, the Lasers are expected to talk the opponent into self-destructing, but then get to run away from an explosion.

Hybrid Scenes

Some scenes double up, most often when a general challenge leads to an information opportunity. It's okay to give out a core clue as a reward for overcoming an obstacle only if that core clue is also available by other means. Otherwise you risk creating a situation where a core clue becomes unavailable, violating the central tenet of the GUMSHOE system.

SCENE DIAGRAMS

To check that player choice matters in your scenario, diagram its scenes. Connect them with arrows, checking to make sure that they can be unraveled in any order. It's acceptable to add unpredictability and variance with non-investigative scenes (antagonist reactions, hazards, and sub-plots), but better form when the players can connect the core and alternate scenes in more than one way.

Episode Premises

Here are some premises to get you started. To help you make episodes part of a character's personal arc, each entry includes a notation indicating the species and drives it most obviously relates to. Any seed, however, can be used for any Laser crew. In some cases you may need to alter the concept so that the plot revolves around a newly introduced supporting character instead of a PC.

Apple Of The Mind

Suitable for: Human; Programming, Scientific Inquiry, Social Engineer

Taking a contract directly from the Combine, the crew follows up on a distress beacon call emitted on an obscure and distant asteroid. The call bears the signature of a legendary Combine ship lost in the early days of the Mohilar War. Secreted away on the asteroid, the crew finds a colony of survivors and defendants, who have arranged themselves into a communal society of seemingly perfect harmony. The inhabitants of the ship's wreckage have no memory of human history and are unable to retain any facts about it even when presented with them. They've been stripped of their curiosity along with all aggressive impulses. Tracing the disappearance of the outcast who figured out and triggered the distress signal, the crew discovers that the castaways have, through a neurochemical emitted by mynatids (p. 202) been transformed into oblivious and unresistant prey. Does the crew leave the survivors in their state of blissful ignorance, or cast them out of their neurochemical Eden?

Arise, Black Vengeance

Suitable for: Avenger, Family Tradition, Pursued

The crew becomes enmeshed in a deadly feud spawned when synthculture goes too far on the faux-Scots planet of Numoor.

Black Mirror

Suitable for: Kch-thk

Deadly sabotage plagues a mining installation on the crystalline planet Talinus. As the investigation progresses, all clues, including DNA samples, point to the crew's kch-thk PC. The culprit is a violently deranged copy of the crew member, formed through a freak accident during the character's last consciousness migration. The doppelganger, unaware until now of its true origins, displays the PC's faults in concentrated form. His or her good qualities appear only in rudimentary form. Capturing the perpetrator leads the crew to a moral dilemma—do they attempt to awaken its buried potential, or seek to destroy him, as kch-thk custom decrees?

If the doppelganger survives this episode, it might recur throughout the series as part of the kch-thk PC's personal arc.

The Cosmic Chalice

Suitable for: Vas Mal; Altruism, Reevolution, Faith, Pursued

Unscrupulous bounty hunters (who might at first seem to be coming for a Pursued PC) try to kidnap a vas mal PC or contact. Following them to their destination, the crew discovers a nufaith cult intent on achieving godhood by killing vas mal and draining their residual cosmic powers.

Cry Wolf

Suitable for: Altruism, Derring-Do, Professionalism

As shuttle craft evacuate terrified settlers from the remote colony of Sakuntala, the crew is tasked to investigate sightings of phyllax, a Class-K species, on the planet's pitted surface. The phyllax turn out to be a hoax by unscrupulous miners hoping to scare away the competition—but as fear takes hold of a child afflicted with wild psychic powers, terrifying manifestations of the creatures appear to begin killing victims on the evac ship.

Displacement

Suitable for: Civilizer, Scientific Inquiry, Tech Hound

On the planet Surena, supposedly unintelligent alien lifeforms are attacking and destroying atmosphere exchangers needed to render the air breathable by its settlers. Underlying the mystery is the conflict between the planet's original settlers and a new influx of refugees evacuated from a Combine core world after its atmosphere was poisoned by the Mohilar. Hoping to force the newcomer's relocation, a scientist belonging to the original faction has been using a device of his own creation to command the native animals.

The Fog and Filthy Air

Suitable for: Balla; Justice-Seeker

A series of murders at a polluted salvage colony is attributed to a mutant creature spawned from its bioweapon-contaminated shipyards. Is the real killer its balla overseer, who has stopped using his mor sohn and succumbed to hallucinatory madness?

The Good Divine

Suitable for: Comradeship, Exploration, Faith,

A Nufaith responsible for the regeneration of a ravaged world turns out to depend on regular sacrifices to a hungry ancient alien.

Greenfeast

Suitable for: Kch-thk; Altruism, Exploration, Scientific Inquiry

The crew members track a party of human vigilantes after they kidnap the kch-thk entrepreneur Jk-Trp and announce his imminent execution unless he and his company leave their planet. Jk-Trp has purchased from the planet's aboriginal inhabitants the right to a Great Eating. A fleet of passenger vessels, loaded down with hungry Kch-thk warriors is already on the way to the planet. When they arrive, they will fall on its lush forests and devour them utterly. The natives will use the money to relocate to a more hospitable planet. The vigilantes want to preserve both the many plant and animal species of the forest, and the aboriginal way of life its adherents are eager to abandon. Does the crew save a hostage and doom an ecosystem?

Memory Leak

Suitable for: character with headdisk, Bleedism, Combinism, Sexual Adventure

A crew member wakes up in a dingy spaceport hotel room, with no memory of the past seventy-two hours and a dead rent boy/girl in bed beside him. An unknown computer program fills his headdisk. It turns out to be an attack routine designed to invade the computer that chooses Combine Councillors. Can the Lasers find out what happened to their crew member, stop the subversion plot—and find a way to earn a payout?

A Palpable Hit

Suitable for: Tavak; Derring-Do, Hotshot, Something To Prove

The group's tavak PC is invited, perhaps under duress, to take part in a combat competition against Vanat, a tavak political leader he defeated in a long-ago match. In order to gain the position he seeks, Vanat must overturn his past loss by overcoming the PC. Meanwhile, assassins working for a rival faction plot to murder Vanat during the competition, making it look as if the PC killed him in the ring.

Pillar Of Wisdom

Suitable for: Tavak; Altruism, Civilizer, Entrepreneur

A tavak dojo hires the crew to track the renegade monk who lit off with their greatest treasure, a set of scrolls written by their legendary founder, laying out the foundation of their ancient martial art. The monk intends to sell it to a wealthy collector. Do the Lasers stick to their guns when they discover that the monk intends to use the proceeds to save the lives of a starving people?

Redundancy

Suitable for: Entrepreneur, Justice-Seeker, Professionalism

In an episode highlighting the strains of post-war economic collapse, the crew investigates a series of mysterious fatal accidents on a remote mining asteroid. They turn out to be the work of the installation's managers, who have learned that it's cheaper to kill excess personnel than to pay for transport back home.

The Rod Of Heaven

Suitable for: Durugh; Avenger, Combinism, Family Tradition

A hoaxed contract leads the crew to an abandoned planet, once heavily settled by the durugh and destroyed during a conflict with the Combine. There the crew is pursued by Meadegk, a vengeance-seeking durugh who bears a grudge against one of the PCs. If you can't find a way to tie this to a backstory element or personal arc, the grudge is against a PCs' ancestor. By picking a fight with the crew, Meadegk hopes to inspire his people to return to their destined role as the Combine's sworn foes.

Security

Suitable for: Durugh; Exploration, Phase Rider, Tech Hound

A self-configuring robotic vault designed to keep out dimension-phasing durugh burglars goes amok during the testing phase. With its eccentric designer trapped and comatose inside, the crew must figure out how to get past its formidable array of weaponry, disable the machine, and rescue the technicians trapped inside.

Siren Rock

Suitable for: Exploration, Footloose, Sexual Adventure

A crazed ex-hero attempts to hijack the crew's ship, hoping to take it back to an uncharted asteroid. Under questioning, he describes it as a lush sanctuary from want and care, whose beautiful inhabitants while away their days in orgiastic pleasure. Recognizing it as matching the terms of an open exploratory contract, the crew ventures to the asteroid, only to find it a place of wrecked shuttles. Corpses of would-be libertines litter its barren landscape. They were lured here to their dooms—but to what end, and by who?

That Which Slumbers

Suitable for: Vas Mal; Chronicler, Reevolution, Scientific Inquiry

Madness-inducing hallucinations plaguing the residents of a refugee camp turn out to be a side-effect of an ancient vas kra artifact. It was used to banish the notorious vas kra renegade D'jellar into a distant reality. Once the artifact is found, the vas mal PC realizes that it might be possible to initiate the reevolutionary process by rescuing D'jellar from his extra-dimensional prison. Is this goal, no matter how devoutly desired, worth the risks of unleashing the malign entity back into this universe?

The Trebulon Gambit

Suitable for: Chronicler, Exploration, Nowhere Else to Go

A local leader fakes a Mohilar sighting in a bid to accrue tyrannical power.

Turnabout

Suitable for: Avenger, Civilizer, Justice-Seeker

A gang of escaped lipovores seek vengeance on a string of Combine officials responsible for their imprisonment on a hell planet. (This might be a PC, in accordance with a personal arc.) After capturing their targets, they subject them to a process robbing them of empathy, thus technically qualifying them as only quasi-sentient. They then attempt to provoke their victims to commit crimes. Their object is not to get them condemned to a hell planet, which they know is unlikely, but to make an uncomfortable political point in favor of quasi-sentient self-determination.

Two Wrongs

Suitable for: Balla; Civilizer

The crew tracks the kidnappers of a renowned team of medical researchers to a balla outpost on ion-swept Oncor-3. Their captors are a human husband and his very pregnant balla wife. They want the researchers to perform a risky procedure to ensure the live birth of her child, who without sophisticated intervention will be stillborn. The research team members are xenophobes, opposed to cross-species interbreeding. Does the crew force them to perform the operation before returning them home?

Undercover Kevins

Suitable for: Entrepreneurial, Justice-Seeker, Professionalism

Suspecting that one of the supposedly loyal escort crews has been betraying her freighters to a pirate cartel, a shipping company magnate hires the Lasers to pose as privsecs on her next convoy.

The Wound That Walks

Suitable for: Altruism, Atonement, Nowhere Else To Go

The psychic wounds suffered by an outcast people coalesce into deadly form.

Wrath of the NuGods

Suitable for: Balla; Entrepreneurial, Chronicler,

The Lasers are hired to restore control of a space station to its rightful owners. The hijackers turn out to be a well-concealed cadre of piratical, elderly balla, using their madness-inducing beauty to coerce its crew into obedience.

Building Cases On the Fly

Despite our courageous admission in the accompanying sidebar, it's still entirely possible to improvise your way through fun and exciting episodes you create as you go. If you're wired to think on your feet, you may find it easier to build a mystery this way. Improvised games require you only to keep the backstory in mind. The flow of investigative scenes arises from the actions undertaken by the players. You don't have to anticipate what the players will do. Instead, you wait for them to do it, and build scenes and dispense clues accordingly.

Roughing It Out

When first teaching yourself to improvise mystery scenarios, start by jotting down rough notes, using the episode worksheet seen earlier. Later you may prefer to keep everything in your head. The longer the interval between your rough plotting process and the actual game, the more likely you are to forget crucial details.

NOT FOR THE FAINT OF HEART

No matter what story form you're talking about, whether in roleplaying, prose fiction or TV drama, good mystery writing is hard. You have to plot in two directions, working out both the backstory the investigators will work to reconstruct, and the series of forward-going events in which they reconstruct it. Logical dilemmas you might hand-wave away in a more dramatic or action-oriented story stop the players from correctly working out the backstory. Logic errors are usually sins of omission and, by definition, easy to miss. When you're plotting a story, it always makes sense to you. Should your players find a hole in your logic, you'll have to react on the fly, adjusting the backstory to make sense. As you do so, you'll hope that your alterations fix the problem without introducing others.

This is why adventure books for mystery games sell better than adventures for other roleplaying games—because they're tougher to create.

Before you start, nail down your mission in detail, and create your introductory scene. You can then go on to create provisional ideas for the other entries in the worksheet. You can follow these as written, or set them aside in favor of more interesting possibilities that arise spontaneously in play. The first approach is easier to keep straight in your head and may be preferable for beginning improvisers. The second allows you to harness the spontaneous energy that flows from spur-of-the-moment group creativity.

Don't Panic!

First of all, don't sweat any uncertainty you may be feeling. It's common, and will go away once you plunge in. When in doubt, take a deep breath, break down your options, and ask yourself which one is the most interesting at the moment. Once you've made that choice and brought it out in play, you can then concern yourself with building on it to spur further interesting developments down the line.

Strong improvising is about reacting to input. Each choice you make builds on the previous ones. Soon your scenario will manifest a sense of momentum all its own.

Activating Players

A common complaint about investigative scenarios is that they "railroad" players into tightly following a slavishly predetermined story path. Although you rarely see the opposite complaint voiced, a significant number of groups flail in confusion when not steered in an obvious direction.

Let players weigh options for as long as the discussion seems lively and fun. If you see the group get frustrated and unable to make a collective choice, gently insert yourself into the discussion. Summarize the various suggestions made and direct the discussion toward a conclusion. Guide the players in eliminating choices without nudging them to a preferred answer. This detachment is easier to attain when you don't settle on one.

Remind the players that the only way forward in a mystery scenario is to gather more information. When things get static, refer to the characters' drives. Ask them which choices before them most suit their specific drives.

Be ready for moments where players feel overwhelmed, either because there are too many choices to choose between or, more likely, no obviously risk-free choice. Nudge them

onward by invoking their drives. Remind them that they're trained problem-solvers—along with their fellow Lasers, the only ones the Bleed has. Perhaps unlike the players, the characters are used to forming hypotheses, testing them by gathering information, and revising their theories, and moving forward. They respond to dilemmas by breaking them down into steps. With a little coaching, they'll quickly internalize this problem- solving methodology. Your players will learn to take the initiative, abandoning the "wait for clues" passivity trained into them as they were run through more predetermined scenarios.

Avoid Negation

When running a mystery scenario, it helps to think two or three scenes ahead of the players. It's often useful to have a possible climactic sequence in mind, too. That allows you to foreshadow enough to make the ending appear to be a logical outgrowth of the scenes that preceded it. (For more on this, see the next section.)

Don't let the possible plot forks you have in mind become too fixed in your imagination. Instead, keep them provisional, so that you can turn away from them and substitute new choices more in keeping with player input.

This is a long-winded way of restating the basic principle of improvisation used by stage actors: never negate. If, as a sketch unfolds, one performer identifies the other as his mother, the second performer must embrace and build on that choice. To simply swat down the choice and say, "I'm not your mother," is extremely poor form. It stops the story dead and punishes the other participant for attempting to advance it.

In a like vein, train yourself to respond to unexpected possibilities by embracing them and building them into the ongoing storyline. You may have decided that the bioscientist Elsa Hower is an innocent victim of quantum parasites. However, the players heavily invest themselves in seeing her as a villain, you might consider setting aside that planned revelation, so they can feel a sense of unmitigated triumph when they bring her to justice.

You don't have to accept every piece of player direction at face value. Keep the story surprising by building twists onto the elements you do incorporate. When in doubt, make the player half-right. Perhaps Elsa's parasite can be extracted and subjected to an emotionally satisfying comeuppance, allowing the team to both save an innocent and punish the guilty.

It's not necessary to turn the narrative on a dime with every piece of player input. The key is to avoid a scene in which nothing happens, or in which your scene is less interesting than the one suggested by the player. When a player says that the computer archive in the ruined citadel must have a holographic librarian, it's a disappointing to rule it out, or prevent the players from finding it because they haven't the right skill to spend from. Extracting useful information from a holo-character is more fun, and more plot-advancing, than not. This doesn't mean, however, that there the program shouldn't afterwards spring a nasty surprise on them.

Preparing a Fallback

Worksheeting a complete mystery, including solution, gives you a solid foundation to riff from. You might depart from it significantly as the story unfolds. Nonetheless, you've got it in your back pocket if everyone's inspiration suddenly flags.

Some groups may feel cheated if they think you're shifting the answer to the central problem on the fly. Others get annoyed if you don't. Get a read on your group's position on this sometimes divisive theoretical issue. To complicate matters, some of your players may sit on either side of the fence. In the end, it may be more important to appear as if you're catering to their taste than actually doing it.

Never fall in love with your fallback. Mentally separate what has actually been revealed in play from the background facts you believe, at the moment, to be true. If player interest suggests it, always be ready to abandon facts not yet introduced, however vivid they may seem to you.

Leading and Following

Improvising is a technique, not an ultimate goal. Occasionally you'll find that it's more entertaining for all involved if you seize the narrative reins and steer them in a particular direction. This will tend to happen more near the end of a scenario, when you're trying to wrap all of the threads together into a coherent and satisfying conclusion.

Again this is a matter of responding to the mood and attitude of the players. When they're actively engaged in the story and throwing out fun suggestions, follow their lead. When their creativity hits the wall, pick up the slack. Improvisation is an organic process of give and take.

Chaos and Order

Any mystery story—or any real-life investigation, for that matter—appears chaotic at first, and gradually resolves its way to order. As the investigators accumulate facts, the number of possible truths multiplies. Mystery stories proceed by elimination, methodically reducing the number of possibilities until only one remains.

Expect each story to sputter at first as the players sort through the various leads offered by their mission briefing and initial contacts. They'll toss out multiple theories without sufficient evidence. Debates over which clues to follow may bring out personality clashes between characters.

This first stage of a story may feel like pushing a rock up a hill. But when you get it over the crest of that hill, and various plot possibilities are eliminated and the main thread settled upon, the rock picks up speed, rolling faster and faster until you reach the one conclusion that seems suddenly to fit. At which point you flood the spaceport with hyper-neutrinos, cue the disruptor duels, and fling the heroes into a final space battle.

BUILDING SERIES

The planet-of-the-week convention allows you to create a series with no continuing plot elements whatsoever. In this model, each episode is completely self-contained. You may prefer this approach if:

- you are running the game intermittently, with long breaks between sessions
- you can't predict, on any given night, which of your players will show up
- you just finished an intense, continuity-heavy campaign and are looking for a change of pace

These considerations aside, most players like seeing their characters become more connected to the story over time, and enjoy sequels to particularly fun or exciting episodes.

The rest of this section provides tips for building your series into an engaging whole.

Series Arcs

As many modern genre TV shows do, you might treat some of your episodes as elements in a broader, unfolding narrative, called a story arc. They slowly introduce a threat which escalates over the course of multiple episodes, winding up in a climactic, high-stakes confrontation.

In an early episode, the threat is introduced or foreshadowed.

Later on, the heroes encounter the menace from a peripheral vantage point. Hints appear that the Lasers are somehow inextricably linked to the threat.

A follow-up episode places them in direct confrontation with the threat. The players learn for sure that they're somehow uniquely positioned to deal with the threat, or otherwise destined to face it again.

Additional episodes, if you can sustain them, may add details and ratchet up tension.

Finally comes the big finish, analogous to a TV show's two-part season finale. The threat fully manifests itself and comes at the heroes head on. Only the Laser crew can stop them. They see that if they lose, the Bleed, or their crew will suffer

big, irrevocable changes. The situation demands their best, but gives them ample room for victory. Ideally, they triumph over the threat. If not. . . well, the prospect of failure is the price roleplaying pays to create authentic suspense. Better luck next time, Lasers.

Arc Concepts

Although future supplements may include series arcs, neither this book nor its supplements will impose any continuity-altering events on your game. However, we have planted seeds you can grow into arcs of your own creation.

The one we've laid the greatest groundwork for is a solution to the Bogey Conundrum. We've left this open, so you can choose between various explanations. You'll need to figure out A) what actually happened and B) how the discovery represents or connects to an arc-worthy threat. The obvious answer to B might be a vengeful return of the Mohilar. Because it's obvious, you might want to throw the players a curveball by making the threat something else entirely:

- the forgotten Combine super-weapon used to destroy the Mohilar is now in the hands of its own enemies
- the Combine awakened an ancient enemy of the Mohilar, who have now come for them
- a conspiracy within the Combine, made up of the ruthless operators who destroyed the Mohilar, now scheme to topple the government and install themselves as its unaccountable rulers
- a new enemy species, knowing that no one remembers the Mohilar, destabilizes the Combine with their faked reappearance

The various Class-K quasi-sentient beings are all designed to be threats worthy of a series arc. The less interactive of them might best be partnered up with sentient bad guys the PCs can talk to, negotiate with, and learn to loathe.

Arcs and Small Groups

If you're running for three or fewer players, you may find that the characters' personal stories advance too quickly when every episode includes a personal arc. Fix this by adding arc-free episodes to your rotation.

This might not be a concern if your episodes tend to spread over multiple sessions.

Personal Arcs

TV series slightly shade and advance their ensemble characters without altering the core identities that make them compelling to the audience. By introducing the sub-plots players introduce through their personal arcs (p. 10), you give players the chance to develop their PCs in similar ways.

Work with players to ensure that their arcs build on each other, so that they develop over time. Encourage them to create secondary characters, like relatives, rivals, old friends, and enemies. Look for the emotional angle in each suggested arc. At first, some players may submit ideas that work better as general episode premises than as emotional stories that shed light on their characters' personalities. You might still use them as overall episodes, while collaborating with the players to dig deeper into their characters.

To implement personal arcs you can either choose the arc based on the premise or create the premise based on the arc.

From Premise to Arc

After arriving at your premise, go to your list of unused personal arcs, concentrating on players who are due to come up in the arc rotation. Pick the arc that best dovetails with your premise.

> *You've roughed out an episode in which the crew is hired to investigate a planet which has seemingly appeared from nowhere in the depths of the Scylla Outzone. The answer to the central mystery is that the planet is actually an experimental testing ground created by super-advanced aliens. They put the crew through a series of surreal events as they study the psychological effects of war on primitive sentients.*
>
> *Your list of personal arcs is as follows:*
>
> *Jered Kor (Fred): 1) discovers that he was adopted 2) learns something about his real father 3) meets his real father*
>
> *Gavag (Jewel) 1) strange visions awaken a suppressed memory 2) meets someone from the memory 3) relives the traumatic incident*
>
> *Elihu Gibbon (Mike) 1) experiences a moment of reevolution 2) is kidnapped and experimented on by renegade fellow vas mal 3) chases rumors of an experimental drug which he hopes will rekindle his reevolutionary spark*

Drev Solar (Doug) 1) meets his first love Mira Cross, now a grifter 2) gets dragged into a scheme by Mira 3) Mira is taken hostage by ex-accomplices, must rescue her

The encounter with alien technology so advanced that it makes its users seem god-like seems tailor-made for Mike's reevolution sub-plot. However, his character played out a personal arc just last week, "Confronts the depression caused by his mortal status." Fortunately, Jewel's recovered memory idea fits at least as well with the surreal environment of the experimentation planet. You decide that the mind-bending alien radiation will trigger this recovered memory.

From Arc to Premise

Decide which player is next in line for a personal arc. Pick the next arc suggestion, if they build on one another, or the one that most sparks your imagination, if they're separable. Use that arc as a springboard for an episode premise. Make sure, though, that the mission involves a separate, if related goal. That gives other players reason to engage with the main plot, whatever their personal storylines.

Let's say that you're working with the same list of arcs given above. You're running low on inspiration and so decide to choose an arc to use as a jumping-off point. Again in this example, Mike got the last personal arc, so you set his list aside for later. Knowing that Fred can't make it for the session you're preparing, you remove his arc from the running as well. Between the remaining two candidates, Doug was the last to get an arc. His arcs grow out of one another, so you'll be using his first one, building an episode around his encounter with Drev Solar's old flame, Mira. She's a grifter, so an episode featuring her will naturally revolve around fraud. Following a time-honored technique of space opera storytelling, you decide to recast current events in SF form. Your planet of the week will be roiled by social upheaval after the reckless lending of its banks triggers a financial meltdown. The Lasers are commissioned to mediate a hostage crisis after rebellious citizens storm a conference of their planet's top financiers. Among the rebel leaders, the group finds Mira—who is actually angling behind the scenes to access funds generated by a Ponzi scheme of her own.

Implementing Arcs

Envision your arc as one or more complication scenes. Where possible, think of the complication as unfolding in three scenes: a setup, an intensification, and a conclusion. This three-piece structure will probably go by the wayside when you run it and incorporate the results of player choices, but it helps to crystallize your thoughts at the outset.

The set-up establishes the complication. It may foreshadow a problem that will occur later, or present it as a problem right away.

The development either makes the situation into a problem for the PC (if it wasn't before) or adds a new twist or challenge to the ongoing problem.

The conclusion gives the PC the chance to solve the problem. If the personal arc features a recurring character, the sense of closure is temporary, allowing for his or her later return.

Elihu Gibbon's fleeting re-evolution might break down into the following scenes:

1. ***Set-up:*** *Elihu starts feeling strange when he reaches the surface of the experimentation planet. This foreshadows a problem without becoming one. It encourages the player to portray Elihu's distress without giving him any penalties measurable by game mechanics.*
2. ***Intensification****: Elihu's condition worsens. He is now penalized as if hurt, but gets a chance to do something to end the penalty.*
3. ***Conclusion****: At a suitably dramatic moment (perhaps affecting the resolution of the main plotline) Elihu undergoes his transitory apotheosis, and just as quickly returns to mortal form. The hyper-advanced aliens may then provide a clue he can use in future episodes as he continues his quest for permanent re-evolution.*

Drev's reunion with his grifter ex could break down like this:

1. ***Set-up:*** *Drev meets Mira, who claims to have gone straight. She gives him the chance to rekindle old feelings.*
2. ***Intensification****: Drev discovers that Mira is up to her old tricks, but isn't yet in a position to stop her.*
3. ***Conclusion****: Drev gets the chance to stop Mira, and then must decide what to do with her.*

Complications other than personal arcs tend not to have 3-piece structures. Sub-plots warrant that degree of attention only when they add shading to a character or perhaps advance another ongoing plotline. Treat them instead as floating or one-time obstacles you can plug into the main situation to add challenge and interest as needed.

Recurring Characters

Recurring characters appear every so often as your series develops. They may tie to a single character or the entire group. Player-created recurring characters appear in personal arc sub-plots. GM-created characters relate to the series arc, if any. Occasionally a character created by the GM for a single episode might prove so interesting that it graduates to recurring status. You might make the character a returning enemy. If a player establishes a relationship between his PC and the character, he might weave his way into the Laser's personal arc.

Rivals

Rivals create complications for the Lasers while staying within the boundaries of the law. Lacking justification to arrest or kill them, they must outmaneuver them in subtler ways. Rivals might include:

- other Laser crews
- activists from opposing ideologies
- nufaith evangelists
- meddling experts
- competitive siblings

Relationships

A relationship character is one a PC feels an abiding emotional connection toward. These characters might be literal relatives, longtime friends, or lovers—current or former.

When the emotional bond is positive, you can use the relationship character to draw the PC into plots and sub-plots. Positive relationship characters ask favors or require rescue. They may briefly appear, perhaps by comm link, to provide information.

Negative relationships give the PCs a personal goal. They may interact with the supporting character in search of closure, forgiveness, validation, vengeance, victory, or any of the other myriad emotional concessions people seek from the troublesome figures in their lives.

Enemies and rivals, below, become more interesting if they're also relationship characters.

Enemies

Recurring enemies are either pursuing a longterm goal that the Lasers want to stop, or have a grudge against them and keep coming back for another shot at vengeance. An enemy might move from the first state to the second after the Lasers thwart his original goal.

GUMSHOEING YOUR FAVORITE SPACE OPERA SETTING

Ashen Stars's setting puts just enough of a spin on common space opera tropes to feel original to players, while keeping close enough to genre defaults to remain instantly accessible. In the process we've reengineered them to remove elements that translate poorly to the roleplaying experience. That's why, for example, Laser crews operate as consensus-driven cooperatives, eschewing the military-inspired command structures featured in many popular SF franchises. Clear lines of authority allow scriptwriters to move the narrative quickly forward and viewers to easily understand the unfolding action. In an RPG context, allowing one player to boss the others around quickly starts to chafe. Likewise, the conflict between justice-making and self-interest evoked by the Reputation system takes advantage of a standard tension in roleplaying that dates back to its dungeon-bashing roots.

That said, there's no reason you can't, in the privacy of your own home, set aside our setting and adapt your favorite preexisting SF property to the GUMSHOE rules.

As with any GUMSHOE hybrid, you might choose to satisfy crunch-hungry players by fusing the resolution system for your favorite RPG iteration of the setting you're adapting to GUMSHOE. Use the other system in the place of GUMSHOE's general ability system, while keeping the investigative abilities, clue allocation and spends for information-gathering sequences.

GUMSHOE TIPS

An investigative story in any medium is, by its very nature, highly structured. The Lasers learn of a mystery, then move through a series of scenes, each of which concludes in the acquisition of a clue which segues into the next scene. The story reaches its climax when the investigator discovers and reveals the answer to the mystery. It may or may not conclude, for extra punch, in a physical confrontation with the story's now revealed-antagonist.

Structure can be difficult to achieve in the roleplaying medium. Guide the players too little and they lose the thread, resulting in a loose and sloppy narrative that provides none of the neat, order-making pleasure the genre is meant to provide. Guide them too much and they feel that their freedom of action has been taken away from them, and that they're merely observers moving through a predetermined sequence of events. (As you probably know, this latter syndrome is known in roleplaying jargon as railroading.)

The trick to successfully running investigative scenarios is to strike the right balance between the two extremes. The exact balance is a matter of collective taste. Groups prone to flailing about may welcome a strong structure with clear goals, a straight narrative path and definite resolutions. Players who resolve questions of procedure with swift efficiency, or who prefer to focus on characterization over storyline, require a looser hand on the structural tiller.

Perception Is (Nearly) All

Some groups are hyper-sensitive to issues of railroading. These concerns, which are absolutely legitimate, may be based on past bad experiences with controlling GMs who forced them to enact essentially passive roles in unalterable, preset storylines. If members of the group are avid roleplaying theorists, they may respond out of a general ideological feeling that players ought to shape and drive the story, taking on responsibilities traditionally given to the GM.

The most important way to prevent players from feeling railroaded is to remain flexible and reactive to the choices the characters make. We'll discuss this a bit more in the next section.

However, nearly as crucial is avoiding the appearance of railroading.

Some players may feel that the GUMSHOE system's reliance on automatic successes inevitably leads to a railroaded result. In practice, this simply isn't so. The degree of narrative flexibility a GM exercises is entirely unrelated to the game's resolution mechanic (or relative lack of same). Flexibility remains up to the GM and your ability to improvise within the basic structure of the investigative story, as it does in nearly any set of roleplaying rules.

As proof of this, we cite a weird phenomenon that occurred during playtest. The groups that expressed the strongest misgivings about possible railroading were those whose GMs had done the most improvising.

This result can be partly attributed to variances in group tastes, but also suggests the enormous importance of maintaining the perception of free choice. When you're on a roll as a GM, you can create the perception of free choice even when players respond predictably to the scenario. On an off night, you can convey the impression of constricted options even if you're improvising furiously to keep up with their completely unexpected choices.

Here are four ways to maintain the all-important perception of narrative freedom:

- When using a prewritten adventure, paraphrase as much as possible. Avoid reading right from the scenario. Even if it's well-written, your narration, no matter how halting and tentative, will seem more spontaneous than canned text. Some GMs read too much of the scenario out loud because they have trouble extracting the necessary nuggets from a pre-written text. Judicious use of a highlighting pen can work wonders to zero in on the best details, which you can then weave into your own extemporaneous sentences.
- During scenes of character interaction, listen carefully to player dialogue and respond accordingly. Riff with the players. This is more important than spewing the supporting characters' clues or talking points, even if that means altering the characterization from what you see on the page.
- Encourage players to flesh out minor details of the setting and situation. If they ask you what the weather is like, ask them what they want it to be. If they ask if such and such an item is present at a particular location, tell them that it is and ask them to describe it. On rare occasions the mystery plot will turn on these little details, and you'll have to pull back from this technique and stick to your clue trail. Otherwise, seek out opportunities for player input.
- Tailor characters and situations to the player characters. If a player portrays a sloppy, rumpled wrench, confront her with a neat-freak, tech-hating authority figure. A character known to fall for sexy labcoat types should meet successions of sexy labcoats, and so on.

If you yourself are still worried that GUMSHOE encourages or requires railroading, take heart from our playtest experiences. Whenever we send out a scenario for outside testing, each group reports a significantly different sequence of events and outcome. In each case the wide variances arise from disparate player choices. Just like it's supposed to.

Any Track Is the Right Track

Although it may be, oddly enough, more important to maintain apparent than actual narrative freedom, we should still endeavor to provide the real thing to the maximum extent possible.

Fortunately, it's easier to provide freedom than it is to seem like you're providing it. Simply ensure that any clue, especially any core clue, is available not only to players using the ability specified in the scenario, but to any player who provides a credible and entertaining alternate method of acquiring that clue. The scenario is a foundation to work from, which ensures that there is at least one way to move through the story. It should never be regarded as the only way to get to the resolution. A group of players will often come up with better ideas than the scenario writer ever could. Give yourself permission to go with them.

One slight exception: this advice pertains only to clues available in the current scene. Allow players to leapfrog scenes by acquiring information they're meant to get later only as pacing dictates. If you're early in a session when the leapfrogging possibility occurs, and you're not confident you can improvise enough new intervening scenes to make a full evening's entertainment, by all means create entertaining obstacles to slow the players' efforts. If you're zooming toward evening's end, leapfrogging is your friend — just be sure to squeeze in all of the necessary ancillary information the players might miss by skipping ahead.

Scenes in the middle of an investigation can often be juggled around with no ill effect to the storyline. When this is the case, it's always better to let the players dictate pacing than to force them back into the order of events envisioned by the scenario.

The scenario is only the blueprint. The building happens during play.

Calling On Abilities

The rules offer a number of ways to call on abilities, depending on the situation. Choosing the right way to call on an ability is crucial to the forward momentum of your investigative plot. Make this choice according to the consequences of failure.

If the consequence of failure is that a character fails to get a piece of crucial information, success should be automatic provided that the character has the ability in question, and the player thinks to ask for it. (Even at that, you may need to improvise during play if no player steps up to claim the needed clue, bending the details of the scenario so that the same information can be garnered with a different ability, possibly by another player.)

If you improvise a piece of information that offers a fun sidelight on the action but is not essential to move through the story, you can make this available with a 1- or 2-point spend. Choose the cost of the spend according to the entertainment value of the information, not the game-world difficulty of completing the task.

If an action's consequence of failure might be death or injury, by all means make it a test. If game world logic suggests that a supporting character will actively oppose the PC, make it a contest.

Compensating For Spotty Attendance

Older gamers most likely to enjoy an investigative campaign are sadly prone to scheduling disruptions. If your group is typical, you may not be able to rely on any particular player showing up on a given night. To compensate for this, give each player a pool of free-floating investigative points, which they can spend to gain a clue in investigative abilities they don't have. When this occurs, explain it as the character remembering a fact or technique taught to them by their absent teammates. Adjust the quantity of points as needed for your group's requirements.

Ending Scenes

In a novel or TV episode, writers can freely cut to the next scene when their characters have acquired all of the clues available in the current one. The characters might stick around for hours tying up loose ends and pursuing fruitless questions, but this doesn't happen on screen. We, the audience, are not forced to sit through such sequences.

This kind of concise editing isn't so easy in the roleplaying medium. Players don't know when they've got all the clues.

IMPRISONMENT AS PLOT DEVICE

Obstacles where the consequence of failure is imprisonment or other loss of freedom to maneuver should be introduced with caution. If the characters can gain information while captured, and will be presented with a fairly easy avenue of escape afterwards, by all means, include them. You can allow tests or contests to avoid such consequences.

However, plot turns in which characters are arrested by the authorities and cannot escape invariably bring game sessions to a screeching, thudding halt. Either allow the characters to avoid them with automatic successes on Interpersonal abilities, or build an escape hatch into your story.

Be wary of plot construction that demands characters accept captivity to gain crucial information. Many players would sooner have their characters disemboweled by jaggar than accept even a brief sojourn in comparatively cushy confinement. Unfortunately, with this player type, you won't get very far by pointing out that getting captured is a genre staple. Their attitude is rooted in a deep-seated desire to maintain emotional control, and is not typically susceptible to argument.

Here's a simple trick to gently steer them onwards, without unduly breaking the illusion of fictional reality. It requires the use of a laptop.

Before play, cue up a musical sting suitable to the space opera genre. As soon as the players have gleaned the core clue and most or all of the secondary clues in a scene, and the action begins to drag, play the cue. When the players see this, they know to move on. (Of course, you have to explain the cue to them before play begins.) Easy, efficient, yet somehow not nearly as disruptive or jarring as a verbal instruction.

There Will Be References

Even at the best of times, roleplaying gamers are pop culture referencing machines. Expect this tendency to appear in triplicate during a space opera game. Perhaps this occurs because it's the geek genre with the deepest history on television and in movies. It might be that SF has less of a single group of default setting assumptions built into it than elves 'n' orcs fantasy or modern horror. Whatever the cause, expect your players to make references to existing TV shows and movies. They'll be doing this not just for humorous purposes or to outdo one another on the trivia front, but as a form of shorthand. Accept this. Use their bank of mental images and plot tropes to quickly communicate setting details to them.

Ashen Stars is meant to seem like a gritty contemporary reboot of a classic SF TV show that never existed. Together with your players, you can mash together you favorite elements from your genre favorites. It doesn't even matter, really, if the players are all picturing a different mash-up, so long as each one of them is vividly picturing something they like.

When you do knowingly pay tribute to a famous scene or trope, make sure to put a new spin on it. Often simply combining this with the existing Ashen Stars setting will do the job. Find a way to tie in your black monolith or charming, fuzzy alien into its overarching themes, and you're golden.

EXAMPLE OF PLAY

You're running a game featuring the following characters:

- Hgh-prd (Caitlin), a Kch-Thk Security and Weapons officer
- Dom Keefe (Jerry), a human Operations Officer and pilot
- Ethan Richie (Paulo), a human Medical, Cultural and Communications officer
- Thirisia (Edel), a durugh Technical and Systems officer
- Epistem (Rainer), a cybe Survey Officer and Stratco

Together they are the crew of the star runner Clementine.

Assigned to investigate the sighting of a downed 22nd century human spacecraft, the crew has shuttled down to the surface of the planet Clarion.

Rainer: Okay, so we emerge from the craft. We need environmental suits, right?

You: The mission briefing had it right. Clarion has an atmosphere and temperature within livable norms, but the air's full of cyanide.

Edel: Before we open the hatch, I perform a physical check on all the suits. Cyanide leaves no room for error.

[You could ask her to test Systems Repair here, but you aren't planning on an accident with the suits. If you require a roll, she could pay pool points for nothing, which isn't fair. She'll have plenty of chances to spend those points later.]

You: Everything's in its usual tip-top shape.

[Here you're reinforcing the character's competence, turning what otherwise would be a null moment into a small emotional upbeat.]

Rainer: Weapons ready but not drawn, people.

Caitlin: Hey, look who thinks he's the boss of us. Again.

Jerry: That's stratcos for you.

Rainer: But nonetheless we have weapons ready but not drawn, right?

Caitlin: Right.

Jerry: Of course.

You: You're buffeted back. High winds scrape the surface of this barren, rocky world.

Rainer: Do we see the ship?

You: Heavy rain reduces visibility to a dozen yards or so. Dom's landing saved the shuttle from cracking up, but he had to bring you down somewhat off-course.

Paulo: So we have no idea where we are, in relation to the ship?

Edel: We're not even sure the ship really exists. A 22nd century vessel, this far out in the Charybdis Outzone? My bigcreds are on hallucination, or maybe a hologram.

Rainer: I use Energy Signatures to locate the ship.

You: It's about half a kilometer to the east.

Rainer: According to the tether, it exists.

Edel: As if there's not a thousand devices that could spoof our readings.

Paulo: You're still mad that you fell in love with that hologram back on Priene.

Edel: I keep telling you: that was no hologram.

Jerry: [Clears throat.] Drawing on my knowledge of Geology, what kind of terrain should we expect?

You: Rocky, with steep slopes and valleys. The rain will make it slippery.

Edel: Is there iron or other metallic elements in the rocks?

You: Do you have Geography or Geology?

Edel: [pointing to Jerry] No, but he does.

You: [addressing Jerry] You tell her that there probably are.

Edel: Okay, I attempt to heighten the magnetic grip factors on the soles of our suits. That's a new feature, so that would be Systems Design, right?

You: Makes sense to me.

[You hadn't considered this possibility, and see no reason why this should be especially hard. You mentally assign the task a Difficulty of 4.]

Edel: I spend 2 points. [She marks down the expenditure of 2 Systems Design points, reducing her pool from 8 to 6. Edel rolls a 4.] I got a 6.

You: A simple task for an engineer of your talents. The boots should grip the rocks tighter now.

[You've been planning Athletics tests to get safely across the rocks to the ship. As a reward for this success, you'll now reduce their Difficulty, from 4 to 3.]

Edel: And if there's a chance of somebody falling down, I'll have my puncture kit out and ready. I do have a puncture kit, right?

You: Make a Preparedness test.

Edel: Wouldn't that be standard equipment on a shuttle, if we're headed to a cyanide planet? I shouldn't have to test Preparedness for that.

You: You've convinced me. You've got the kit, no test required.

Caitlin: I take point and lead the group carefully over the rocks.

Jerry: I use my Geology knowledge to point us through the easiest route.

You: That's a benefit, not a clue. Do you want to make a spend?

Jerry: Sure. I only have 1 point in Geology, so I'll spend that.

[You decide that this will reduce the Athletics test Difficulty by another 1 point, to a very low 2. It's only fair that you tell the group about this, so they won't unnecessarily waste points and invalidate Edel's success and Jerry's expenditure.]

You: Between Thrisia's suit modifications and Dom's navigation, the once-daunting trek looks pretty easy. [Note that you're indicating the reduced Difficulty in narrative, not numerical terms.]Everyone make an Athletics test to arrive safely.

Caitlin: Pretty easy, huh?

You: Yep.

Caitlin: I spend 1. [Reduces her Athletics pool from 10 to 9. She rolls a 5.] A six!

You: You're good.

Jerry: I only have 4 Athletics, so I'm gonna take a chance and not spend anything.

Caitlin: I loan him 2 points. That costs me 3, right? [She reduces her pool from 9 to 6.]

You: Yeah. Describe what you're doing to help him.

Caitlin: Looming over him, ready to catch him if he falls.

Jerry: Whoops, I rolled a 6. Guess you didn't need to spend those points.

Caitlin: Better that than have our pilot bust his helmet and suffocate before we even get to the ship.

Paulo: I spend 1. [Reduces his Athletics from 6 to 5. Rolls a 3.] I got a four.

You: You're fine.

Edel: I'm also going to risk it and not spend anything.

Caitlin: No! We can't risk our engineer! Epistem, you help her.

Edel: Screw that. I'm rolling already.

Rainer: She's always been a Hotshot.

Edel: I get a 3.

You: You're fine.

Edel: See? Trust in my handy spanner, people.

Rainer: I spend 2. [Reduces his Athletics from 10 to 8. Rolls a 2.] I got a four. I'm all right, right?

You: Right. Trooping cautiously up and down the rocks, acid rain pelting against your faceplates—

Edel: Acid rain, you say?

You: Sure. It's raining. The atmosphere's full of cyanide. What did you expect?

Edel: I perform a diagnostic on suit integrity.

You: [After checking your Investigative Ability Worksheet to remind yourself that she has Forensic Engineering.] You've got another four hours of exposure to this rain before the suits start to pop.

Edel: Four hours. Why am I sure that we're going to have to spend more than four hours out here?

Caitlin: That's what I love about engineers. Always with the positive attitude.

Edel: If you're not anticipating the next thing to go wrong, you're not a wrench.

You: The dark shape of the ship looms in the distance. It looks like it plunged nose first into the side of a mountain.

Edel: Is the hull breached?

You: The outer hull is crumpled, but it looks, at least from this angle, like the inner hull held on impact.

Edel: Gotta love double-redundant 22nd century ship design. They didn't build 'em fast or pretty, but they sure built 'em sturdy.

[Edel is riffing from your description to make a reasonable extrapolation about the world. If her detail somehow contradicted a clue to the central mystery, you'd have to gently correct her. Since it doesn't, you happily let it stand, as a contribution of player creativity to the setting.]

Rainer: I scan for life signs.

[Rainer uses Bio Signatures so frequently that you no longer have to check the worksheet to ensure that he has the ability.]

You: You get an extremely faint reading.

Rainer: There's life in there?

[You nod.]

Rainer: How many life forms?

You: Hard to say from this range. The old-school double hull's interfering with your outbound-inbound wave placement. [You've made up this nice bit of technobabble on the spot.]

Rainer: I want to know before we go any further. How much do I have to spend to home in on the signal?

You: Each point you spend gets you more info.

Rainer: I'll spend all three of my points, then. If there's something to know, I want to know it. Something smells wrong about this.

Caitlin: You're just catching the engineer's heebie jeebies.

Rainer: This ship has been supposedly crashed her for three centuries, and there's life inside? I want to know more.

Paulo: Suspended animation. Could they be in animation pods?

[You could answer Paulo, but haven't dealt with Rainer's earlier request yet. So first you reply to him.]

You: [to Rainer] Modulating your scanning frequency to compensate for bounceback, you zero in on six life forms. [That's all the information he would have received if he'd only spent 1 point.] They're human. [That would have been the limit for a 2-point spend.] And yes, they're in suspended animation.

Paulo: And with my medical knowledge, or maybe human history, do I know if suspended animation pods would have been standard on a ship like this?

You: Not standard, but not unknown, either.

Paulo: So none of this is necessarily weird. The crew of this ancient ship got blown off course somehow—could have been one of any number of things: wormhole, a translight breach, a peeved-off god-like entity—and they wind up way in an Outzone of the Bleed, how many years ahead of schedule?

You: [Paulo has invoked his history ability and so is owed an answer. You didn't write this down but fortunately have the PDF of the game book on your laptop screen and are able to discreetly find the information without getting caught having to look it up.] This ship is from the earliest era of human interstellar travel, two hundred years before the Annexation period, when the Bleed was first explored.

Paulo: So they get snatched up by whatever, dropped off here, and they climb into the suspension chambers, awaiting rescue. There doesn't have to be anything weird going on here.

Edel: I hate that.

Paulo: What?

Edel: It's when nothing seems weird at first that it always gets really weird.

Paulo: We'll only know for sure when we go in there. There's people who need rescuing.

Jerry: A crew of Rip van Winkles.

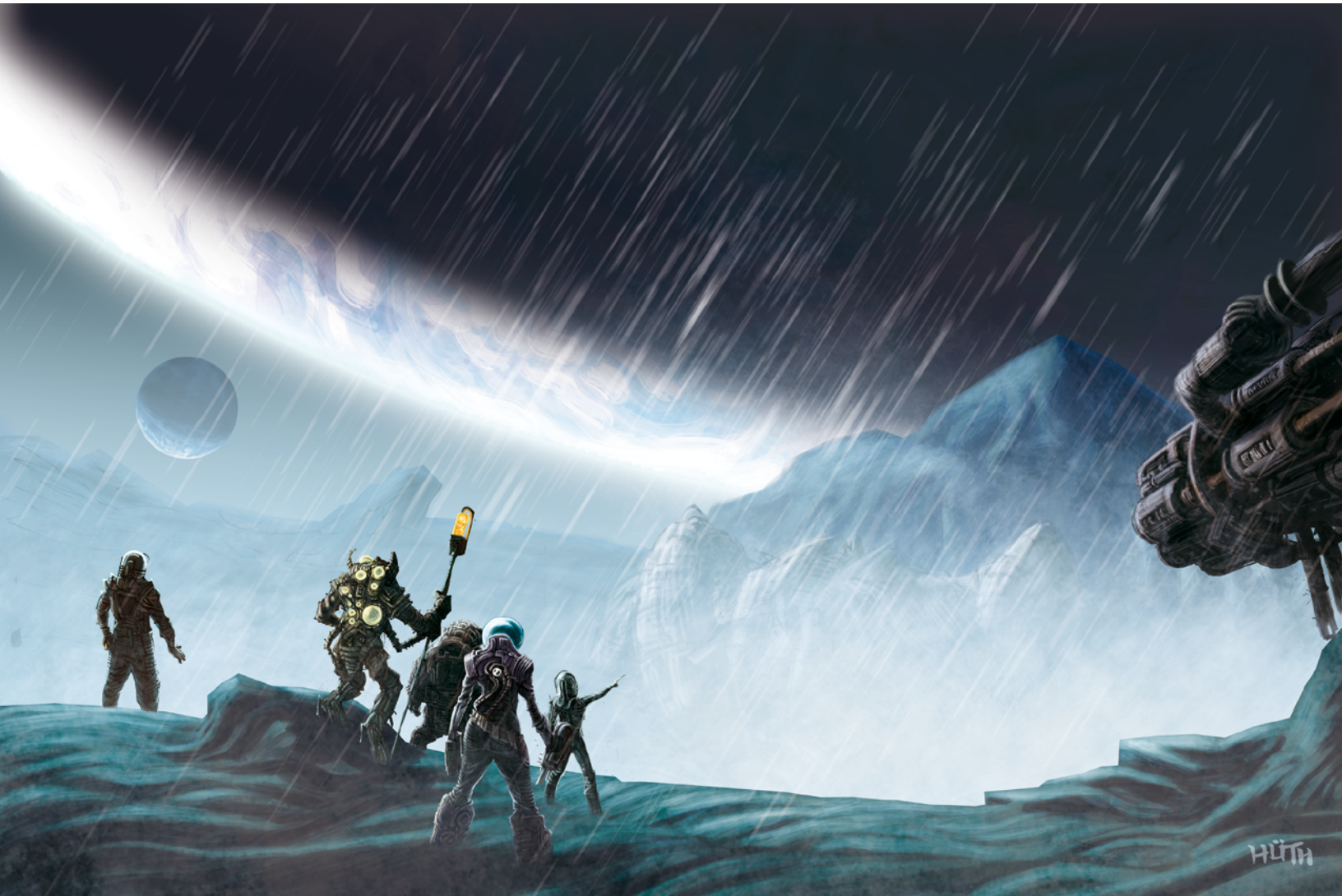
Edel: Can we see the name of the vessel?

You: [Changing a detail to riff off Jerry's comment, and add to the entertaining atmosphere of dread the players have generated for themselves] Yeah. It's the Washington Irving.

Edel: It's a good thing my character is a durugh and doesn't get that cultural reference, because the player does, and it freaks her out.

Rainer: Enough jawing. We have a mission to put down. And the rain's eating our suits. Let's go in.

Edel: Engineer's supplemental log: I got a bad feeling about this.



THE WITNESS OF MY WORTH

A series of killings results when a computer system of a museum dedicated to the great deeds of a Combine hero develops an insane artificial intelligence and uses it to recreate his deadliest battles.

This introductory scenario launches your series, introducing several of the setting's major themes. The devastated ruins of Ares-3 foreground the contrast between the Combine's utopian past and the Bleed's hardscrabble present. The main antagonist, the crazed computer system, epitomizes the same split.

The episode keeps the storyline simple, allowing the players to get oriented in the game and setting before you throw more complicated mysteries at them. Although it doesn't contain every possible element of an Ashen Stars game, it does offer the possibility of shady side dealings with arms dealers and the possibility of an unwanted starship skirmish.

THE CONTRACT

The Lasers are to travel to Ares-3, enter the survey facility, and determine the status of its personnel. They are then to take appropriate action to resolve any ongoing problems leading to, or resultant from, the distress call. Combine survey officials are concerned that the base's communications equipment might have been sabotaged by unauthorized settlers.

THE TWIST

Base personnel are dead after coming too close to a computer which has achieved spontaneous but insane intelligence.

BACKSTORY

Three days ago, the ashen stars effect manifested itself over Ares-3. It catalyzed a reaction in the planet's ionosphere that reactivated the long-dormant automated systems of the Brian Hudd Museum. The fluke reaction gave its computers artificial intelligence, and allowed it to replicate an electromagnetic copy of itself in the ionosphere. Unfortunately, gaps in its database drove it insane. Able to recall only the warlike deeds of the great hero whose memory it was created to eternally preserve, the computer set out to force people to recreate Hudd's famous battles—as happy visitors once harmlessly did in its various simulation chambers.

The museum's activity was first discovered by scavenger Derek Streets, after its environmental scrubbers cleared the polluted air of its immediate environment. Though an opponent of the base's presence, Streets swapped the coordinates of the strange reading to one of its surveyors, Zach McClung.

When survey team members arrived on site, the computer consciousness flooded their headsets with a barrage of unassimilable data. Driven mad in turn, the three returned to their base to clumsily and bloodily reenact a shipboard firefight between Hudd's crew and a group of durugh invaders. The survey team members slaughtered one another, though not before one of them managed to broadcast an automated distress call to the Combine relay network.

THE INVESTIGATION

When they drop from translight and into orbit around Ares-3, the crew reviews its Contract Briefing (p. 239) and what they know about Ares-3. Soon afterwards it gets an early clue in the dangerous form of a Remote Hijack attempt (p. 240), which tries to start a fight between their ship and an arriving hauler. They get the lay of the Shattered Planet (p. 242). As called for in their contract, they explore the Bloodstained Outpost (p. 243). Logs uncovered there reveal a tense relationship with the destroyed city's Unsanctioned Settlers (p. 247), who they may choose to interview.

At some point, either by Tracking the Transmission (p. 246) that tried to hijack their vessel, or by following clues from a Second Outbreak (p. 251), the Lasers learn of the Hudd Museum (p. 254). Once there, they struggle to resist the computer's attempts to turn them into its latest deadly battle simulation, perhaps resorting to Hudd's own classic method of deactivating psychotic, self-willed computer systems.

Complications

Along the way, the crew may poke too closely into the operations of local Arms Merchants (p. 249).

In a lawless town, there's always a chance of getting into a Scrap With the Locals (p. 251) when you show up wearing a badge.

And where there is rubble and radiation, there might be Mutant Animals (p. 253).

The Choice

The Arms Merchants may give the crew the chance to involve themselves in a shady side deal.

They may decide that the planet's scavengers need to be protected from their greed and evacuated to a less carcinogenic environment, against their wills if necessary.

Scenes

Contract Briefing

Scene Type: Intro

As the crew's ship drops from translight to lowshift, describe the terms of the contract to them. They may wish to envision this as a group briefing held on the bridge, looking at a holoscreen display. Or they might simply be mentally reviewing the briefing material they've all studied en route to the job.

> *Three days ago, a distress call was issued from a Combine installation, Environmental Base Alpha-1, on the planet Ares-3.*

Bureaucracy (used as an Academic ability): The designation Alpha-1 means that this is the first Combine base to be established on the planet. In this case, it presumably means the first base to be established post-war, as it was a densely populated Combine world at one time.

History (Combine): Ares-3, located in the Aventine Cluster, was a prosperous and heavily populated world.

- As you'd expect, given its proximity to a dense thread of translight corridors, it was one of the earliest Combine colonies established in the Bleed.
- Founded as a mining colony, it evolved into a thriving financial, resort, manufacturing and data services hub.
- One of the first military engagements against the Mohilar, during the Utopian era, took place here. A decisive victory for the Combine, it led to a generation-long retreat for the Mohilar, before the war began in earnest.
- (1-point) Credit for the victory belongs to the celebrated Combine Captain (later Admiral) Brian Hudd.
- (2-point) Hudd was born and raised on Ares-3.
- The destruction of Ares-3 occurred decades later, during the War proper.
- This early defeat led not only to the deaths of billions of civilians, but the loss of much of the Combine's fleet in the Bleed.
- Repeated attempts to contact the crew of the EvBase (short for Environmental Base) have failed.
- The crew's task was to assess the environmental safety of Ares-3 prior to settlement.
- An unknown number of scavengers have resettled without Combine authorization.

Law: By setting up shop on Ares-3 ahead of the environmental clearance, the newcomers are committing a regulatory infraction, not a crime. The Combine could issue a forced evacuation order, but hasn't. The Lasers will have no legal authority to lean on the inhabitants merely for being there*.

- The EvBase lies in the ruins of Khalopolis.
- Ares-3's Settlement Ministry Classifications are: Uncleared, Ungoverned,

History (Human): Khalopolis was the planet's capital city.

History (Combine): It was the first city the Mohilar bombarded after defeating the Combine fleet. Although survivors were later evacuated from other leveled cities, none were found in Khalopolis.

Bio Signatures: There are tens of thousands of sentient humanoids on Ares-3, and hundreds in the Khalopolis region.

- Almost all humanoid life is clustered on the edges of the old cities.

Forensic Accounting: They're probably engaged in salvage activities.

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* An Altruist or Civilizer could decide that it's in the best interest of the people here to secure an evac order and work toward that end. If players grab hold of this plot thread, make the question a bigger feature of the scenario.

Remote Hijack

Scene Type: Antagonist Reaction

Once you've dispensed the briefing info from the opening scene, and the players have run out of questions, the hailer notes a ship dropping into lowshift.

By asking, the hailer (or anyone else with Communications Intercept) can then identify it as a hauler.

Forensic Accounting: There's nothing overtly suspicious about the appearance of a commercial vessel here. Present without authorization as they are, the settlers still need trade goods shipped to them.

Law: The ship is probably involved in gray market commerce, but nothing warranting arrest or seizure.

After these basic points of information are settled, but before the Lasers can contact the hauler, their own ship goes haywire.

The pilot sees that the computer has overridden manual control and is about to execute an attack maneuver. If completed, it will give the crew of the hauler every reason to defend itself.

Forensic Engineering: This is surprising, because the ship has no automated attack system installed.

A Difficulty 4 **Helm Control** test regains manual control and stops the attack maneuver.

If the pilot fails, the gunner can then attempt a Difficulty 4 **Battle Console** test to shut down the weapons system.

If this fails, the engineer can, on a Difficulty 4 **Systems Repair** test, force an emergency shutdown that knocks all non-essential systems temporarily off-line.

If the engineer fails, the ship fires on the hauler and lands a glancing blow. (As they'll soon discover, it's called the Quirauk.)

Providing Information

Let players prompt you for information whenever possible. Sometimes, though, the group will get off track or suffer a collective brain lull. When this happens, get them thinking again by feeding them some more info. The dynamic of when you prompt and when you allow yourself to be prompted can be subtle. Your instinct for the pacing needs of the moment should always override any suggestion given in the text.

Where multiple points appear under the same ability heading, find a way to break them up. Check to see if more than one player has the governing ability; if so, split the information between the players. Otherwise, you might provide only one bit at a time, and wait for player prompts to supply more.

Information appearing after an arrow-shaped bullet is provided as part of the briefing (in the first scene) or is immediately evident to any alert observer. Players don't have to ask to get these nuggets, or invoke particular abilities.

The Quirauk

	Dishing It (Modifier Applies On showdown Win)	Taking It (Modifier Applies On showdown Loss)
Fire	0	0
Maneuver	-1	0
Override	0	-1
Trickbag	0	-1
Output	7	

Ship Combat Crew Abilities: Communications Intercept 6, Helm Control 4, Naval Tactics 5, Battle Console 4, Systems Repair 6

The damage done to the Quirauk alarms its crew but neither degrades its specs or accumulates skirmish points.

If fired upon, the Quirauk fires back. It fights to Disable Weapons (9 skirmish points).

The Quirauk stands down if:

- the Lasers convince the Quirauk stratco that the attack is the result of a malfunction; this is possible either with a 2-point Reassurance spend, or a difficulty 4 Public Relations test. If desired, the character making the test may spend Reassurance points toward it.
- the Lasers surrender.

To achieve either of the above conditions, the crew must make contact with the Quirauk. Normally, this would not be a problem, but something is actively interfering with communications between the two ships. Incoming transmissions are garbled, except for warlike or aggressive phrases. A transmission from the Quirauk might sound like this:

"This is the [crackle, crackle] vessel Quirauk. . . [crackle, crackle] demand that you [crackle, crackle] hostilities [crackle-crackle] aggressive measures [crackle, crackle]."

To break through the interference so that clear transmissions can be received and sent requires a Difficulty 4 Communications Intercept test.

Communicating on behalf of the Quirauk is its Chief Operating Officer, Brona Redik. Recent run-ins with pirates have left her gruff and skeptical. If the PC's ship fires on hers, and she leaves the incident believing that they were either malicious or incompetent, this becomes a potentially reputation-bruising incident. Its **Public Relations** Difficulty is either 6 or 7, depending on how well the PCs conduct themselves.

If the Lasers surrender after the Quirauk gets the better of it, Redik accepts but demands a payment of 6 bigcreds in compensatory damages. On a Difficulty 4 **Business Affairs** test, she'll settle for 3. If paid off, the Quirauk crew keeps its collective mouth shut, and no **Public Relations** incident ensues.

(Redik doesn't ask for damages if the PC ship wins, but will accept them if offered. In this case the cost of her silence is the same: 3 bigcreds with a **Business Affair** success or 6 without.)

In the unlikely event that it wins the fight by leaving the PC ship dead in the water, the Quirauk takes no further aggressive action and continues on its way. Redik and her people are traders, not killers. They don't want a reputation for murdering helpless Lasers. They will, however, spread the word that the PCs were bested by a lowly freighter—again a potential **Public Relations** disaster.

Talking to Redik

Depending on the outcome of the skirmish, if it occurs, Brona Redik may volunteer information in response to PC questions, or clam up. In this case, a 1-point spend of an Interpersonal ability appropriate to the interaction so far gets her to open up. The likeliest abilities are Bureaucracy, Inspiration, Intimidation, Negotiation and Reassurance. If there was no skirmish, she requires no spend, except for the last item.

She knows nothing about trouble at an EvBase, or anywhere else, and doesn't want to know. Trouble is bad for business.

She's selling survival equipment to a settler encampment, mostly medical supplies.

She's picking up a shipment of rare earth metals.

If asked to provide an introduction to her contact, she names bartender Tom Kreesh, who serves as a broker for a scavenger collective (see Unsanctioned Settlers, p. 247).

After-Action Report

Scene Type: Core

After the incident with the Quirauk is resolved, the crew can conduct a post-mortem to figure out what happened.

Decryption: The auto-attack sub-routines were uploaded to the ship's computer in a high-speed burst transmission from the planet's surface.

- Due to the irradiated, anomaly-ridden condition of Ares-3's atmosphere, the precise origin of the transmission is impossible to pinpoint.
- (1-point spend) However, it can be narrowed to the general vicinity of Khalopolis.
- It might be possible to set up a simulation which will eventually return a more precise point of origin for the transmission. However it will take hours or possibly days to return a result.

Forensic Engineering: The transmitted code easily circumvented the ship's computer security systems, which shouldn't be possible.

- The method of circumvention is too sophisticated to replicate, and beyond the limits of known computer science.
- However, the code is in other ways archaic.
- The very old code it's built on is of human origin.

If they perform a scan for other vessels (**Energy Signatures**) they find one other ship in orbit, a speeder registered as the Bisru:

- **Data Retrieval**: This is registered to the Loghos Corporation. . .
- **Forensic Accounting:** . . . which is a shadowy durugh-run enterprise engaged in arms sales and other legal but unpalatable activities.
- A hail returns an automated message that reveals that the ship has been parked in orbit by its crew. The Lasers must assume that the usual highly dangerous precautions against interference or attack have been activated.

Shattered Planet

Scene Type: Alternate / Hazard

A Shuttle ride will take the crew from orbit to the planet's surface. The trip is a bumpy one; the pilot must navigate between turbulent air patches.

Energy Signatures identifies them as the result of atmospheric damage done during the bombardment.

On the way down, the shuttle hits an unexpected shelf of hyper-ionized air. A Difficulty 4 **Shuttle Craft** test keeps the ship on an even keel. Otherwise, the ship crash-lands. Each crew member must make a Difficulty 6 **Athletics** test or suffer a die of damage. The Shuttle is damaged as well; to restore it to flight condition requires a Difficulty 4 **Systems Repair** test. The cost of repairs is 5 bigcreds, minus the margin. No matter what the difference, the cost can never be less than 1 bigcred.

Assuming a successful landing, the ship cruises through the charred canyons that were once the skyscrapers of Khalopolis, and are now horribly twisted spires of half-melted hyperalloy.

Wherever a smooth section of roadway or sidewalk appears amid the heaving rubble, you see the greasy smears left by vaporized corpses.

A layer of billowing ash covers everything.

Forensic Anthropology: Much of the ash is organic matter—the remains of the millions of people (and other creatures) killed during the bombardment.

- Seen from groundside, Ares-3's atmosphere is a grimy, polluted light-show of competing radiations and self-devouring subspace rifts. It looks like a constant Aurora Borealis, stained with dirt and vomit.
- Using the map from the mission briefing, you locate the EvBase.
- Several miles to the south of the base lies a makeshift settlement, cobbled together partly from salvaged construction materials and partly from prefab imported parts.

Forensic Anthropology: (after performing a tether scan of ambient radiation and contaminant levels, or, in a later scene, examining logs from EvBase A1) The settlers here are taking their lives into their hands. Although the crew is at no great risk from a few days here, long term exposure to the radia-

tion, contaminants and anomalous energies in the atmosphere is likely to cause cell mutation, cancer, and a variety of debilitating and life-shortening illnesses.

- Around the settlement you see heavy all-terrain trucks but no hovercraft, skimmers or other low-altitude ground transport.

Forensic Engineering: Magnetic fluctuations caused by the radiation and spatial anomalies doubtless interferes with the safe operation of hover vehicles.

Geology: From the density of the ruins, it looks like it takes about four hours to get from the settlement to the Evbase on foot, and that travel by truck wouldn't reduce that time by much.

From here the crew might choose to go to the settlement but are more likely to head straight to the outpost.

Bloodstained Outpost

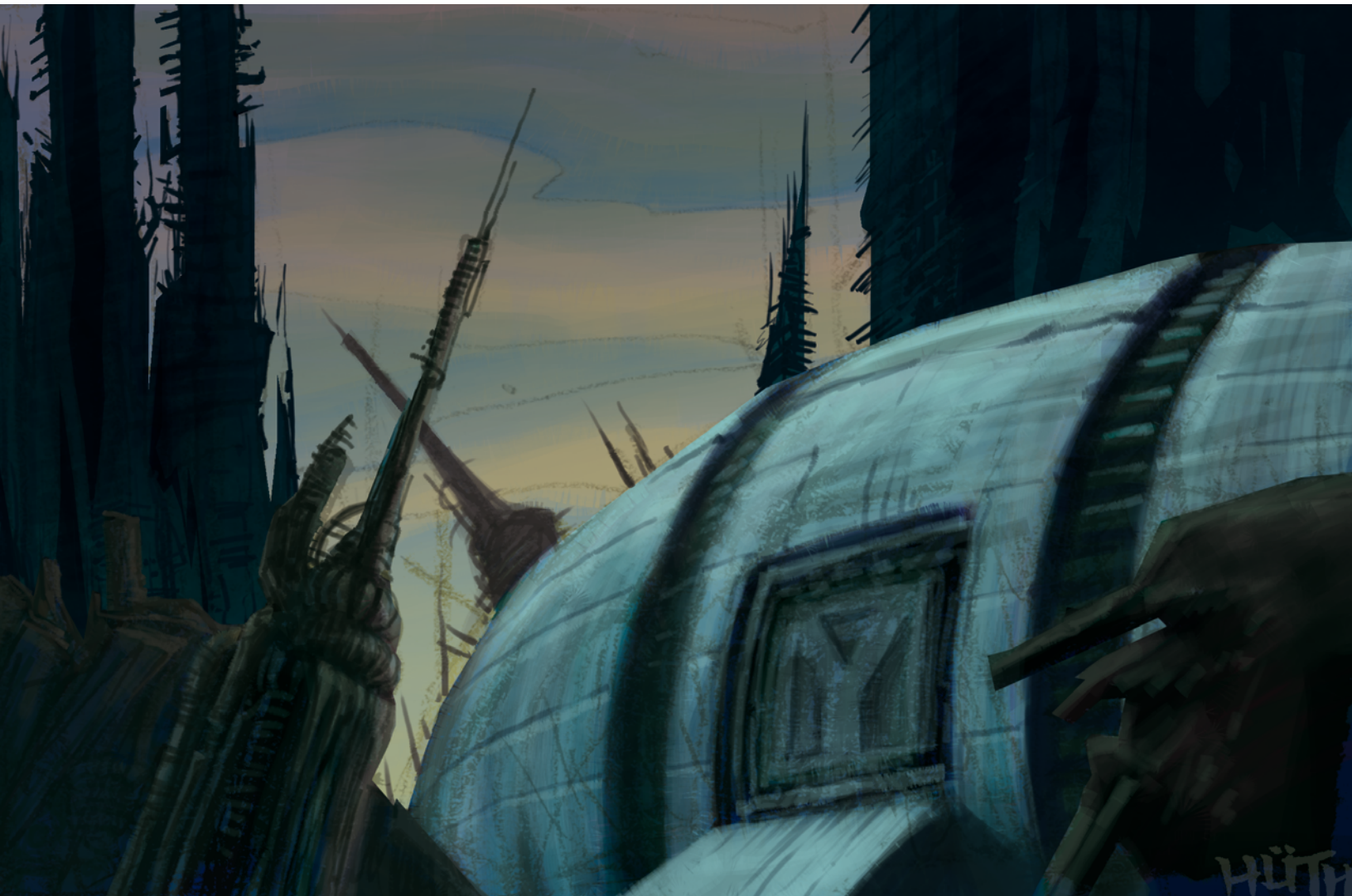
Scene Type: Core

The Evbase stands in the charred remains of an ancient park. An eerie quiet, punctuated only by the low hum of electronic equipment, pervades the desolate spot.

Zoology: There are no animal sounds here—no birds, not even any insects. This is tragic, as Khalopolis was once known for the resounding calls of its avian life.

Industrial Design identifies the hard-shelled white structure, shaped like the top half of a donut, as a typical prefab product of cheap, post-war engineering.

- There is no sign of activity anywhere around the base. A battered but lovingly maintained all-terrain truck has been haphazardly parked near its entry doors.
- Stanchions form a perimeter around the base. These project motion-triggered force fields to keep out intruders. Configured according to the book, they a emit a low intensity non-lethal disruption field.



Danger Is Your Skill Set

If you're running this as your first Ashen Stars scenario, the encounter with the bombed door may test the commitment and genre-readiness of your play group. It is unlikely to go awry, but if it does, treat it as an opportunity to get everyone in the needed headspace.

Most groups will plunge forward and work to solve it, as they would if they were fantasy characters encountering a trap barring the door of the dungeon they mean to loot.

A few, perhaps rendered risk-shy by playing a lot of horror games, may shrink from this simple task. The EvBase contains essential clues, so they have to engage here.

First, remind the players that they're extremely competent problem solvers who get paid to overcome obstacles like this on a regular basis. Explain that the scenarios aren't written to punish adventurous action.

If they're still dragging their heels, cite their drives to push them onward. For example:

- An Altruist fears that someone else will be hurt if the bomb isn't disarmed—maybe the people the crew has been contracted to save.
- Civilizers want to make the Bleed safe for ordinary people, which includes the removal of bombs.
- A Chronicler wants to know what's on the other side, so she can write it up.
- No pursuer of Derring-Do or Hotshot shrinks from a mere booby-trap!
- Entrepreneurial characters know it's bad for business to act like wussies at a mission-critical juncture.
- . . . and so on. . .

The details of the door and bomb may mask a deeper problem. A refusal to send a character into moderate danger at the very outset of a new series signals a sabotaging effort. The vocal objector may want to kill your game in its tracks, probably to play a familiar game they're comfortable with.

Use similar techniques to impel gun-shy players to engage with any other surprising plot chokepoints.

Forensic Engineering: Any engineer as good as the team's wrench and/or techo could easily rejigger them to deal lethal damage.

The group's tethers hold the deactivation codes for the security stanchions. However, when they beam them at the sensors, they do not disengage. Someone has changed the codes.

A Difficulty 4 **Systems Repair** test safely deactivates the security stanchions. On a failure, the Laser attempting the test suffers a shock and loses a number of Health points equal to the margin, but still deactivates the devices.

The stanchions haven't, in fact, been changed to a lethal setting, as can be determined on a 1-point **Forensic Engineering** spend after the perimeter has been deactivated.

A check of the outpost doorway with **Explosive Devices** reveals the presence of a bomb on the other side of the door. It can be triggered from a distance with a disruption pistol shot or any application of significant kinetic force, but given the risk of destroying evidence inside, the PCs are unlikely to take this option.

Safely defusing it from the outside requires a Difficulty 6 **Systems Repair** test. A character who is somehow able to get through the walls, for example with the durugh Phase ability, can defuse it on a Difficulty 4 test if working from the other side.

Any character within 10m of the rigged doorway when it blows makes an **Athletics** check. Successful characters take one die of damage. Those making failed tests take two dice of damage.

Explosive Devices explains the extra Difficulty of the test—the bomb was slapped together in such haste that it's unstable and ready to blow at the slightest disturbance.

- It was set up to prevent anyone from escaping the base.

Slumped beneath the bomb is a corpse. The male victim wears a version of the white and green uniform of a Combine science team, customized with tool belts and a multi-pocketed vest.

Forensic Anthropology: Cause of death was blunt force trauma.

- (1-point) The weapon was a claw hammer.

The interior of the base has sustained heavy damage. Live wires hang from exposed ceiling panels. Lights flicker on and off. Scorch marks score the partially melted surfaces of fried consoles.

Kinetics: Much of the damage was caused by lethal disruption fire.

A walk-through of the base leads the Lasers to seven more bodies.

Forensic Anthropology: Two of these additional victims have been beaten to death. Another was poisoned. The rest were killed by lethal disruption fire.

- All but the poisoning victim died three days ago. (Cross-referencing time of death with their briefing materials shows that the deaths happened more or less simultaneously with the sending of the distress signal. It might have been sent immediately before the deaths, during the struggle, or shortly afterwards.)
- Examination of the poisoning victim shows that the toxin was administered by a medical implement—the standard osmotic puncher used to administer viroware treatments.
- The poisoning victim lived for a day longer than everyone else.

Virology: The toxin was a pure concentrate of an ordinary anti-radiation treatment, lethal when undiluted.

Decryption reveals that the long-range transmitters went down moments after the distress call was sent. (This provides one explanation of why the poisoning victim made no attempt at a further transmission and did not respond to incoming hails.)

(Core) From the relative positioning of the various bodies, the Laser with the highest Kinetics rating is able to quickly cobble together a rough holographic animation showing that the base crew killed each other. There are no attackers unaccounted for*.

If the group asks for a detailed rundown of the animatic reconstruction, break it down as follows:

- Three of the survey team entered the complex through the main door, shooting.
- They killed two victims in short order, before the remaining three rallied, killing two of their attackers.
- The third seems to have been disarmed but then broke free, apparently seizing a claw hammer.
- As one of the defenders constructed the bomb to keep the attacker in the base, another was beaten to death in an adrenaline-fueled rage attack.
- The attacker then struck the fatal blows against the bomb-builder, was dosed with the toxin, and then slew the defender who gave him the dose.
- He then remained in the base, presumably deterred by the bomb, until he succumbed to the toxic dose.

On any attempt to access the base computers, a Laser with **Data Retrieval** realizes that the mainframe is seriously damaged, and that every attempt to access it increases the chance of a catastrophic failure. In other words, they'll only be able to get so much information out of it before it dies completely. Subsequent data extraction from its storage media will be possible but will take days or weeks, and must take place on the ship. Each piece of info in the list below requires a 1-point **Data Retrieval** spend; as soon as the crew runs out of **Data Retrieval** points, or declines to spend any more points, the base's database becomes inaccessible.

The crew gets to choose which pieces of info it gathers by specifying the search queries they're entering. All of the info from a single main bullet point, including its subsidiary points, is available on a single spend.

(If the system breaks down and is reconstructed on the ship, the crew can make one query per day as the corrupt data is slowly reassembled.)

Personnel files: (available without a spend or ability use by consulting the briefing materials) The Lasers are able to match up each victim to their images in their personnel files. All personnel are human, though Maske has enough cyberware that he may or may not have considered himself a cybe.

1. **Nolan Honor,** 31, Team leader (defender; killed by blunt force trauma), decorated former captain, Combine navy

2. **Letha Osborn**, 40, Medical officer (defender who poisoned McClung; blunt force trauma), decorated former Combine officer

3. **Carlo Patrick**, 31, Technical officer (defender who made the bomb; blunt force trauma), fought in irregular unit during the war

4. **Harland Maske**, 22, Survey technician (attacker; killed by disruption fire) born and raised on Ares-3, survivor of civilian evacuation, his parents were left behind and killed

* The player won't come to the table knowing about this staple of 25th century forensics, so paint a word picture. New players probably also need to be reminded that Kinetics is the futuristic equivalent of today's ballistics discipline.

5. **Jaca Matt,** 26, Survey technician (attacker; killed by disruption fire), cleared by disciplinary tribunal of charges, arising from last environmental survey posting, of complicity in smuggling

6. **Zach McClung,** 30, Radiation analyst (attacker; killed by poisoning), records contain multiple reprimands from team leader Nolan Honor for "hostile attitude" and "undermining collective morale"

7. **Dani Crowder**, 36, Atmospherics analyst (defender; killed by disruption fire), had applied for transfer to a desk job

8. **Kendra Michie,** 37, Toxic materials analyst (defender; killed by disruption fire), file includes a tersely-worded incident report regarding a physical altercation with durugh arms dealers Sallertu and Adach-Shi; concludes with entry from Nolan Honor: "matter considered closed"

What were the attackers doing before they came back? Maske, Matt, and McClung had gone off to investigate a patch of unaccountably decontaminated air. Unfortunately, the coordinates of their destination are corrupted and can't be recovered.

Did the base have any problems with the locals? This query yields the incident report listed above under Michie's personnel file, along with other log entries from Nolan Honor. Honor reports pressure from the Loghos Corporation to deliver a positive environmental statement, and that his refusal to cooperate with them led to escalating harassment. This at first consisted of jeers and catcalls, eventually escalating to vandalism of the base. This last incident led them to erect the security stanchions.

Disputes between crew members: This query turns up a fuller series of log entries by the team leader concerning the hostile attitude of Zach McClung. McClung comes off as increasingly belligerent, especially after Honor, citing deteriorating relations with the locals, orders him to stay away from the bar in town. The search also finds a supplementary statement from Dr. Osborn stating that he may be suffering from substance withdrawal and borderline personality disorders.

Autopsies conducted with **Forensic Anthropology** (which can be performed largely with non-invasive scans) reveal strange malformations in the prefrontal cortices of the three attackers, but not in the victims. On a **2-point** spend, they also turn up microscopic sub-cellular degradation where their headsets touched their temples.

Virology shows that these are not the result of a viral infection, natural or otherwise.

The autopsy also reveals that Zach McClung has an internal headset:

- **Data Retrieval** shows that its onboard storage was corrupted as McClung died. (**Forensic Anthropology**: Neurofeedback scrambles internal headset contents in about 27% of violent deaths.) However, the Laser is able to recover a portion of an encrypted message received by McClung a day prior to the incident.
- **Decryption** reassembles a portion of the holo-message. A grimy-looking scavenger type looks into the camera. Recoverable dialogue includes the phrases: "*. . . crazy readings, Zee, right off the scale. . .*" and *"trade you the coordinates for some of that swag we talked about earlier.*" (1-point spend:) "[Unintelligible] with Kreesh down at the bar." (This communication is from salvager leader Derek Streets, who first found the museum and tipped McClung off to it in exchange for spare parts from the EvBase. Kreesh is the bartender from the scavenger village, who was to act as a go-between if Streets was out when McClung arrived.)

Tracking The Transmission

Scene Type: Alternate

On a 2-point **Decryption** spend, a character can trace the origin of the planetary signal that installed the automatic attack routine in their ship's computer during the "*Remote Hijack*" scene. The spend yields a set of coordinates for a location on the eastern fringe of the Khalopolis ruins. (Otherwise, the same coordinates can be gleaned during *"Second Outbreak."*)

With coordinates in hand, **Data Retrieval** finds a pre-war map of Khalopolis matching the coordinates to the site of the Brian Hudd Museum.

History (Combine): Hudd was a great figure of the late Utopian era. As captain of the naval flagship Farseeker he racked up an impressive list of exploits still celebrated today.

- Hudd was born and raised on Ares-3; the museum is not far from his birthplace.
- Among other noteworthy deeds, he was the first to encounter the Mohilar.

- Later, the Farseeker led a defensive engagement at Ares-3 that turned back Mohilar aggression for a generation.
- Though known for his gung-ho attitude and maverick embrace of personal danger, Hudd's later years were spent as a peacemaker. He negotiated treaties with the chanovar and illud empires. These peoples, who Hudd clashed with early in his career, never joined the Combine but remained its neutral trading partners.
- The museum was established after his death. Until the destruction of Ares-3 it was a major interstellar tourist attraction. It houses many original artifacts from the Farseeker's famous missions.

(Some basic information on Hudd may have been gleaned from spends as the characters reviewed the mission briefing.)

History (Durugh): Hudd is still remembered as a sneaky foe of the durugh people known for despicably escaping the various death traps in which he was righteously placed.

History (Durugh) or Linguistics: In the durugh language the term "brianhud" refers to a sneaky, ruthless killer. You never call another a durugh a brianhud except to goad him into a fight.

An **Energy Signatures** sweep of the location from the ship detects low-level electronic activity.

Bio Signatures finds no signs of life there.

Geology detects an area of de-irradiated air around the site.

If they use **Data Retrieval** to check this against the last reports received from the EvBase, those show the area to be just as contaminated as the surrounding city. The purified area must therefore be recent. If the players ask about any recent anomalies that might account for this, **Astronomy** reveals that an ashen stars effect occurred here a couple of days ago. **Energy Signatures** posits that this could have catalyzed a reaction with the planet's radiation-damaged ionosphere. How this would have created a pocket of cleaned air is unclear.

If they know about the ashen stars effect, the following floating clue becomes apparent later, when they realize they're dealing with a rogue artificial intelligence:

- **Energy Signatures:** The ionospheric reaction catalyzed by the ashen stars effect must have reawakened the museum's offline computer, kicking in its powerful environmental scrubbers. They created the pocket of de-irradiated air.

Unsanctioned Settlers

Scene Type: Core

The only obvious public space in the settlement is an open-air bar. It lacks a name; its bio-luminescent sign features a bottle of beer and a mug. A concrete patio facing onto a dusty street houses a collection of battered metal tables and chairs. More tables and chairs sit under the bar's roof. Like most of the settlement's structures, it's made from a mix of shipping materials, prefab building components, and comparatively impact chunks of rubble dragged from the old city's ruins.

On entering the bar, the Lasers sense an immediate hardening of attitudes. They recognize this as the standard reaction when freelance lawmen enter a lawless place.

At group of durugh congregate at a back table. Otherwise the clientele is mostly human, with a scattering of cybes.

Downside / Respect: To win acceptance here, a friendly gesture might be in order. Buying a round for the house might do the trick.

Like any trivial expenditure, a buying of rounds is too small to charge to the crew's budget. Some groups, preferring toughness over accommodation, may still decline to make it.

The obvious character to start chatting with is the bartender, a burly, wide-jawed man named Tom Kreesh.

Forensic Anthropology shows that the raised, red flesh on his arms is a symptom of long-term exposure to low-level radiation.

Kreesh expresses surprise if told of the massacre at the EvBase. **Bullshit Detector** confirms this as genuine. Once informed of the surveyors' fates, he softens his opinions of them, out of respect for the dead. Until then, he wears his contempt for them proudly. In response to questions he volunteers the following:

- Nobody around here much liked the suitfruits.
- "Suitfruit" is the term of local abuse for hopelessly over-cautious types like the EvBase crew, who wear environmental suits whenever they go outside.
- The only EvBaser anybody liked was McClung, who could hold his liquor. But he stopped coming here lately, and relations between the base and the community deteriorated even further.

- Kreesh doesn't know nothing about no museum.
- Brian Hudd is just some dead guy from history. He wasn't a suitfruit, was he?
- It was the Combine types who started a beef with the durugh.
- The Loghos Corporation are good people.

(These last two bits are, respectively, untrue and highly debatable. Kreesh believes them, though, so they don't trigger **Bullshit Detector.**)

- Sure, the boys might have banged up their base a little. They were just letting off steam. Nothing damaging or criminal about it.
- The ringleader in the campaign against the base is a guy name of Derek Streets. There's no one more respected than him among the salvagers.
- **Downside**, or a free admission if the Lasers already know it: Though Streets wanted the EvBase out, that didn't stop him from covertly trading information for equipment on occasion. His contact was McClung. The last deal was a few days ago. Derek left a set of coordinates in hardcopy for McClung to pick up. McClung swung by, took the numbers, and left some heat exchangers.
- Derek isn't around right now. He must be off on a run.
- Although they sometimes find other valuables, most of the salable salvage found here consists of unexploded munitions.
- The really big score would be to find something that uncovers the answer to the Bogey Conundrum.
- **Flirting**: Tom would never say this to the guys, but if there were Mohilar secrets to be uncovered here, they'd have been found already.

Forensic Accounting makes the perhaps obvious point that Kreesh's business depends on the idea that Ares-3 is a safe place to settle. He'll lose clients if salvagers start to fear for their health, and lose everything if the settlers are forced out.

Bar patrons mostly provide the same facts that Kreesh might, though no one else will call the possibility of a Mohilar find into doubt.

Variations on what he says come from the following:

Eden Bernard, a pale, raven-haired scavenger the bar's male patrons all stare at when she's not looking:

- **Respect**: Derek and his running buddy Berta headed out early this morning on some mission. They were pretty tight-lipped about it.

DON'T MENTION THE RASH

If a character checks, it also reveals that many of the other bar patrons suffer symptoms similar to Tom Kreesh's, either of radiation poisoning or gene mutation.

Mentioning these facts to any of the scavengers immediately increases their hostility toward the crew. The scroungers, fixated on the prospect of a life-changing payday, don't want to hear about long-term health risks. They've heard it all before, and dismiss it as propaganda by do-gooders who disapprove of the arms salvage trade. More conspiratorial salvagers believe that there's a plot afoot by a big concern to have them all evacuated so it can scoop up the planet's buried riches.

By mentioning health concerns, the Lasers align themselves with the despised EvBase crew and the forces of intrusive civilization. This might lead to interesting conflict with a Civilizer or Altruist PC.

The settlers all carry special radiation meters, sold to them by the durugh arms merchant of the Loghos Corporation. The meters universally assure them that there's nothing wrong with them, and that any outward symptoms are minor skin irritations. A character able to disassemble a sample device discovers, with **Forensic Engineering**, that they do exactly nothing. Pointing this out merely earns salvager hostility and heightens their denial—a character checking **Forensic Psychology** before mentioning anything can predict this reaction.

A 2-point **Reassurance** spend, accompanied by a disclaimer of any desire to intervene to protect the health of the scavengers, erases any offense caused by raising the subject in the first place.

Joel Yang, a slumped, sallow-faced scavenger who's clearly seen better days. A character with **Forensic Engineering** notices that his disruption pistol is damaged and will explode when next used.

(Core) **Negotiation**: (fixing the pistol, which requires a Difficulty 4 **Systems Repair** test, or offering to give him one from the ship's stockpile) Joel's friend Berta Cordo came across a strange ambient radiation reading last night, and went right away to Derek Streets to show it to him.

Lora Vasquez, a broad-shouldered woman sprouting a dense array of cyberware, which **Forensic Anthropology** shows to have broken down due to lack of upkeep therapy.

- **Reassurance**: (promise to keep her admission confidential) Adach-Chi, one of the durugh arms dealers, offered her a bigcred and a preferred vendor premium if she slipped something into Zach McClung's drink. She didn't do it, though, because even though McClung was a suitfruit, he kind of reminded her of her father.

Arms Merchants

Scene Type: Sub-Plot

At a back table sit four durugh, all wearing insignia of the Loghos Corporation.

Bullshit Detector: They're trying hard to look uninterested in the Lasers, and to watch them without being seen to watch.

Forensic Accounting: The Loghos Corporation is a small but thriving business enterprise. Founded after the war, it specializes in munitions sales. Though its reputation is one of shady dealing, it never gets caught doing the truly nasty stuff.

History (Durugh): The Corporation was founded and is dominated by ex-members of the durugh intelligence command. It is often suspected of funneling money to revanchist elements who want to reinstate the old totalitarian government.

The group leader is Adach-Shi, a gap-toothed woman with thinning hair.

Forensic Psychology notes that the others are visibly afraid of her.

History (Durugh) immediately recognizes her high-caste accent.

- She is captain of their orbiting vessel, a speeder called the Bisru.

In response to questions, she volunteers the following. Statements triggering **Bullshit Detector** are appended with the [BS] marker.

- The Loghos Corporation does honest business here.
- It is better to salvage old weapons than to use valuable resources, otherwise needed by the rebuilding effort, to construct new ones.
- The Corporation has no interest in Mohilar artifacts—which is a good thing, because none are to be found here anyway.
- Adach-Shi has nothing to fear from a Combine environmental assessment, because Ares-3 is perfectly safe. [BS]
- Yes, there was an unfortunate incident involving the EvBase analyst Kendra Michie. A barroom debate over applicable safety standards regrettably escalated, as

barroom debates are wont to do. Michie apologized for taking a swing at her, and Adach-Shi considers the matter closed. Even though Michie's gesture of submission was clearly squeezed out of her by her superior officer.

- Adach-Shi most certainly did not try to hire Lora Vasquez to dose McClung with any substance whatsoever. [BS]
- The Corporation's connection to durugh authoritarian movements is greatly exaggerated. [BS]

Adachi-Shi becomes franker, and even offers the crew a business proposition if a PC uses **Downside** to convince her that they're also on the make:

- Yes, she offered Vasquez a bribe to dose McClung, but only to see if she could be suborned. She never intended to go through with it, and has not hired Vasquez for any of the lucrative jobs she might have qualified for. Adach-Shi picked McClung because she could tell Vasquez saw him as a father figure, and wanted to see how elastic her moral standards might be.
- Adach-Shi offers to hire the crew to transport a small item to the nearby world of Red Dirt. It's worth cash to them if they transport it, no questions asked.

Downside confirms what they undoubtedly suspect: that it's an illegal or quasi-legal item, most likely a weapon. If they agree, they rack up a side deal, and suffer no immediate **Public Relations** blowback. As with any side deal, they are free to haggle or accept the original offer (see p. 173). However, if the crew later does something to offend the Loghos or durugh ultra-reactionaries, Adach-Shi then causes evidence of the transaction to surface, which does precipitate a PR crisis.

The durugh aren't looking for a fight, but events might precipitate one. The Lasers might decide that they're responsible for the killings at the base and try to take them in. Or they might take exception to the arms trade in general.

Here are their statistics, in case shooting breaks out.

Adach-Shi

Abilities: Athletics 6, Ground Craft 4, Health 10 Phase 8, Scuffling 6, Shooting 12
Scuffling Weapons/Damage: Fritz-Baton +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 3
Tech: Headset, Tether, Rosetta Chip; Poppers (3)
Alertness Modifier: +2
Stealth Modifier: +2
Savvy Modifier: +2

Sallertu

Abilities: Athletics 12, Ground Craft 4, Health 14, Phase 4, Scuffling 14, Shooting 12
Scuffling Weapons/Damage: Fritz-Baton +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 4
Tech: Headset, Tether, Rosetta Chip; Poppers (2)
Alertness Modifier: +0
Stealth Modifier: -1
Savvy Modifier: -1

Horcinius,Vitros & Vilius

Abilities: Athletics 6, Ground Craft 4, Health 3, Phase 4, Scuffling 6, Shooting 6
Scuffling Weapons/Damage: Fritz-Baton +1 (Insureshield)
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 3
Tech: Headset, Tether, Rosetta Chip
Alertness Modifier: +1
Stealth Modifier: +0
Savvy Modifier: +1

To extend the episode, stage this scene elsewhere, in the Loghos groundside HQ. The Lasers learn of the durugh at the bar and then head there to ask questions. The headquarters is an unglamorous prefab hut.

Industrial Design: Unlike the other structures, it is factory new, though already weathered by ambient toxins.

ATTACK PATTERNS

For simplicity's sake, any attacking character or creature in this episode spends 2 points if he has it and 1 point if that's all he has left.

Scrap With the Locals

Scene Type: Sub-Plot

A physical confrontation between settlers and the Lasers occurs in three possible cases:

- the Lasers offend the bar patrons so completely that a response from them seems necessary to keep your story credible
- the Lasers offend the bar patrons a little, and you need a fight to keep the story at a satisfying length
- the Lasers offend the bar patrons a little, and you need a fight to add excitement to the story

Failing to buy drinks or show proper respect counts as offending the patrons a little.

Depending on how badly the Lasers anger them, the bar patrons might leap on them immediately, or wait to stage an ambush. The group is attacked by as many locals as there are Lasers. The settlers relent after two of them go down. They flee heedlessly, concerned only for their own skins.

Settlers who are defeated in such a scrap can then be subjected to Interrogation and under its pressures will give up any information from the "Unsanctioned Settlers" section that the Lasers have failed to glean by other means.

Settlers

Abilities: Athletics 7, Health 6, Scuffling 8, Shooting 6
Scuffling Weapons/Damage: fist +0
Shooting Weapons/Damage: Disruption Pistol +1
Hit Threshold: 3
Tech: Headset, Tether, Rosetta Chip
Alertness Modifier: -1
Stealth Modifier: +2
Savvy Modifier: -1

Second Outbreak

Scene Type: Antagonist Reaction / Core

After the Lasers gather all or most of the information they can get from the settlers, they discover a second incident in which Ares-3 residents are driven to homicidal madness.

If the episode has yet to include an action sequence or needs a jolt of excitement, this comes in the form of an attack.

If you've already had enough action, or if the group is happily ticking along in talking and exploring mode, you can instead choose to have them discover the evidence after the fact.

A modified version of this sequence can be inserted to extend the action if the group jumps immediately to the museum without interacting with the salvagers. The truck barrels at them, or they come upon the tragic discovery, on their way to the museum.

Action Version

Most likely while the Lasers are winding down their interviews but are still at the bar, but perhaps at some other point in their city exploration, scavengers Derek Streets and Berta Cordo come barreling at them in their gigantic truck. Streets pops up through the truck cab's sunroof, firing at the Lasers with his disruption rifle. At the same time, he's driving the truck with his feet. He's fused the accelerator to the on position with a rifle shot and has taped his right boot to the steering wheel. Meanwhile, Berta hangs out the passenger side door, also firing her rifle. A third settler, a hapless bystander named Trav Stewart, hangs from the truck's front grille. He's clearly about to lose his grip, to be horribly crushed under the truck's thundering tires.

If the truck is on a collision course with the bar, ending the threat is as much a matter of taking over their vehicle as it is overcoming Streets and Cordo. Run the fight so this requires one or more **Athletics** successes from one or more PCs. They might:

- leap onto the hood to grab Stewart
- then somehow secure him or toss him to safety
- then crawl from the hood into the cab
- once Streets is out of commission, leap into the driver's seat to steer it away from its target (which then requires a Difficulty 6 Ground Craft test).

The above **Athletics** tests all sound like Difficulty 6s, but clever description from the players might make them seem slightly easier, for a 5 or even 4.

A character may choose to shoot at the truck. Let the player(s) specify where they're aiming without prompting. The engine block is **Hit Threshold** 3, the front axle **Hit Threshold** 6.

Hitting the axle brings the truck grinding to a halt, allowing Stewart to drop to safety.

Hitting the engine block disables the truck but sends it careening out of control, requiring one or more of the above

stunts to stop it from plowing into and killing bystanders. Bystander deaths threaten the crew's **Reputation**.

If a player with **Kinetics** thinks to ask, explain that the difficult axle shot is safer than the easier engine block shot.

Use the above as benchmarks when assessing Hit Thresholds or Difficulties of other truck-shooting attempts.

As some crew members are performing these vehicular stunts, others are probably shooting at Streets and Cordo. Unlike other characters, they spend 3 on any attack, assuming they can afford it.

Streets and Cordo

Abilities: Athletics 7, Health 6, Scuffling 4, Shooting 10
Scuffling Weapons/Damage: fist +0
Shooting Weapons/Damage: Disruption Rifle +1
Hit Threshold: 3 (4 while in moving vehicle)
Tech: Headset, Tether, Rosetta Chip
Alertness Modifier: -2
Stealth Modifier: -2
Savvy Modifier: -2

If the sequence takes place near the bar, several patrons holo-record the action for later reference. Responding to Streets and Cordo with lethal force, or displaying humiliating incompetence, triggers a PR crisis.

Assuming they merely null the attackers, they can then awaken them with espressers and ask them questions.

Cordo retains no memory of the last few hours. The last thing she remembers is approaching a destination to the northeast of the settlement. Derek told her he'd taken some unexplained atmospheric readings after an ashen stars manifestation a few days back, and that it might lead them to an interesting scrubber technology or something.

Streets does not regain lucidity. He responds to questions with babbling nonsequiturs on the glory of war, such as:

> *"Bravery! Blood! Always remember martial glory!"*
>
> *"With proud down-smashing fists he saved Ares-3."*
>
> *"Stand up against the treacherous durugh! Stand tall against the [inaudible gibberish] Mohilar!"*

Streets' brain has been scrambled by the Hudd Museum's corrupted computer to enact what it thinks is a tribute to its heroic central figure. It is only able to conceive of Hudd as a paragon of gung-ho aggression. Although the players might be able to infer this by now, they won't confirm it until they go to the museum.

(Core) **Data Retrieval** recovers the coordinates of the museum from Streets' headset.

Examination of the captives with **Forensic Anthropology** reveals scorch marks where their headsets meet their temples, as if they somehow delivered powerful electrical shocks. (I-point spend: Their injuries from the shock effect are more severe, and thus visible to the naked eye, because their headsets are old and battered. The wounds on the EvBase personnel were less severe, and harder to find, because their headsets were new.)

A **Bio Signature**s scan matches their brain damage patterns to the EvBase crew, if they performed the corresponding scan in that earlier sequence.

In the back of the truck the crew finds a chunk of metal sign with an unexploded orbit-to-surface torpedo jutting through it. The letters "HUDD MUSEU" appear on the sign. As Chekov (not that one) once observed, once you introduce an unexploded torpedo, you should look for chances to have it suddenly activate, forcing a character to defuse it before it blows. This would entail a Difficulty 4, **Systems Repair** test, on which the character can also spend **Explosive Devices** points.

Tragic Discovery Version

In this version, the crew comes upon a populated site destroyed by Streets and Cordo. This is probably a housing block. If the crew has already left the bar, the massacre happens there instead. Streets and Cordo go in shooting and crash into the structure with their truck. The structure collapses, killing many within. The torpedo in the back of the truck might then explode. On the other hand, it might be more satisfying to leave it in place so that the Lasers have to disarm it before examining the rubble.

Streets and Cordo are among the dead, but the group is still able to find:

- the signs of brain damage
- the scorch marks from their headsets
- (core) coordinates leading to the museum

Mutant Animals

Scene Type: Antagonist Reaction (Tangential)

You probably won't require them, but if you need to expand the story to fill out a session, or haven't provided your players their desired mayhem quotient, mutant animals are standing by. Stage an ambush as the crew heads through largely unexplored ruins toward the museum. Blackened, skeletal pack predators lunge at them from the rubble as soon as they dismount from their vehicle. The wreckage around the museum is so dense that they have to do this when they come within a kilometer of it.

A Difficulty 4 **Sense Trouble** test spots them lurking in the rubble and avoids an attack by surprise. The canines outnumber the Lasers by one.

Zoology identifies them as mutant dogs, possibly with radioactive bites.

Players determined to avoid a conflict can do this by proposing a logical way of discouraging the creatures, and spending 1 **Zoology**.

Mutant Canines

Abilities: Athletics 8, Health 3, Scuffling 6
Scuffling Weapons/Damage: bite +0 (bitten characters succumb to mild radiation poisoning, suffering penalties as if hurt; a 1-point Medic spend reverses the condition)
Hit Threshold: 4
Armor: 1
Alertness Modifier: +1
Stealth Modifier: +2

Recruiting Deputies

Lasers wanting to supplement their numbers before heading to the museum might be able to do so, assuming that they haven't antagonized the locals by getting into a fight with them. It takes a 2-point **Interpersonal** spend to convince a single local to go to the museum. The group may recruit as many locals as they have points to spend in the following abilities:

Downside: Promises some sleazy or ill-gotten advantage, as specified by the player. This might simply be the respect and fear of other dangerous customers in the city.

Flattery: Offers the recruit a chance to demonstrate his or her competence and swagger.

Inspiration: Appeals to the settler's courage and sense of inquiry, or some other higher value specified by the player.

Negotiation: Requires the offer of a bigcred per recruit, or a promised cut of the proceeds from any salvage.

Reassurance: Argues that there is little danger, provided everyone sticks together.

Players may combine their points to jointly convince recruits, and may spend from mismatched pools. In the first case, they're joining together to make the case. In the second, they're doing that, but making slightly different arguments.

If you think you might need the arms dealers as secondary antagonists, they resist any offers. As described here, it's hard to see the bartender closing up shop to go on a dangerous mission, but this might become credible if the flow of play leads you to portray him in a different light.

The Hudd Museum

Scene Type: Conclusion

The Hudd Museum, as identified by coordinates and shattered signage, lies beneath a toppled skyscraper. One of its wings has been completely pulverized. Its gleaming white design subtly evokes the majestic star cruisers of the Utopian era, like the Farseeker.

By this point, if not as soon as they discover that the brain-altering effect occurs through headsets, the Lasers may be discussing how much of their gear to discard. Sit back and take poker-faced enjoyment as characters sporting serious cyberware worry about being possessed. The moment during which they realize that they all have brain implants in the form of Rosetta Chips may register with particular dread. In reality, they'll be safe simply by taking off their external headsets.

Internal headsets can be powered down at will, but remain on standby and can be reactivated by the museum's communication matrix. (**Industrial Design** posits this as a likely outcome.) They can be completely deactivated with the aid of some emergency laser surgery (Difficulty 4 **Medic** test, conducted by another character; patient loses 2 **Health**). The character is assumed to reactivate the headset and during the downtime between this episode and the next.

If the crew brought settler reinforcements along, they resist advice to remove their headsets:

> *"It's just bad operating procedure. End of story."*
>
> *"This headset saved my life more times than I can count."*

Forensic Psychology suggests that their irrational reluctance arises from their stubborn sense of hardscrabble community. The Lasers are outsiders, maybe even suitfruits. To follow their advice is like acknowledging their superiority.

A 1-point **Reassurance** spend convinces them to remove their headsets. One spend covers all salvagers present.

Clever players might try to disable the lethal settings on their disruption weapons. Deputies will resist these efforts, which can be overcome at the cost of 1 **Reassurance** point per settler. Disabling lethal setting requires a 2-point **Systems Repair** expenditure for each weapon.

Only the museum's main entrance offers unobstructed access. Wary players may choose to uncover another entrance rather than use the obvious route that first Maske, Matt and McClung and later Streets and Cordo must have taken. Let them expend their Systems Repair and/or Systems Design points and ingenuity as desired, allowing successful results to lead to an alternate way in.

As soon as they enter, the Lasers are greeted by a coldly calm disembodied voice. Sometimes electronic garble obscures certain phrases, like anything that would have, in its originally scripted standard dialogue, referred to Hudd's peacemaking activities. **Data Retrieval** identifies it as computer synthesized, if that isn't readily obvious from your delivery.

An opened power panel is visible near the PCs' point of entry. A **Bio Signatures** scan finds traces of Matt's DNA on the panel edge and the scattered tools lying on the floor beneath it.

Energy Signatures shows that the complex generators have been running for three days, except for the environmental control scrubbers on the roof, which have been going for longer. **Geology**, plus a tether reading of the cleaned air around the museum, suggest that it came back online automatically. **Industrial Design** indicates that it is probably designed to do so, to protect the artifacts contained within.

The computer follows its programming to the best of its abilities. Its goal is to educate people about Brian Hudd, relying heavily on interactive displays. There are two problems with this. One, it no longer retains any records of Hudd the peacemaker, and so envisions him strictly as a glorious aggressor. Two, its interactive displays are all offline—an obstacle it overcomes by reconfiguring its visitors to become interactive displays themselves. It attempted to do this by trying to provoke a space battle between the crew's ship and the Quirauk. It did this when it turned the EvBase team into a deadly recreation of Hudd's plucky assault on a durugh base, and when it made Streets and Cordo reconstruct Hudd and his first mate's daring raid on a chanovar prison colony.

The computer volunteers none of this. Instead it greets the PCs as if they are visiting tourists. The next major event it wants to recreate is Hudd's first firefight against the Mohilar. It wants to usher the group into the holographic exhibit dedicated to this event, the Combatorium:

> *"Welcome to the Brian Hudd Museum, a living tribute to the courageous and [garble] deeds of Brian Hudd."*
>
> *"Visit the Hall of Durugh. Behold the many trophies confiscated by Brian Hudd from the Combine's most twisted and treacherous foes!"*

"Follow the life of Brian Hudd, from humble beginnings here on Ares-3 to his renowned acts of valor and [garble.]"

"Enter the Combatorium! Step into the boots of Brian Hudd to battle the sinister Mohilar!"

The computer responds to questions, but until engaged in the manner described below, answers in a slightly cracked way that ignores the query to turn the subject back to Hudd and the wonders of the Combatorium:

"Such questions go beyond the purview of this museum, referring as they do to matters after the shining era ushered in by the indomitable Brian Hudd."

"You show the curiosity and determination of Brian Hudd, warrior and [garble]. Enter the Combatorium to awaken your Brian Hudd potential."

Ungarbled

If the players are having trouble figuring out that the museum has forgotten Hudd's status as peacemaker, allow them to piece together the unintelligible bits of the computer's statements. They might use holo-imaging to reconstruct shattered displays, along with their display text (Imaging) or come across backup files while attempting to disable the computer (**Data Retrieval**). Original versions of the standard greetings are:

"Welcome to the Brian Hudd Museum, a living tribute to the courageous and conciliatory deeds of Brian Hudd."

"Follow the life of Brian Hudd, from humble beginnings here on Ares-3 to his renowned acts of valor and diplomacy."

"You show the curiosity and determination of Brian Hudd, warrior and peace-maker. Enter the Combatorium to awaken your Brian Hudd potential."

The Combatorium

Before Khalopolis was leveled, toppling a skyscraper onto the museum's east wing, the Combatorium was an interactive holographic display putting the visitor in the middle of an exciting firefight between Brian Hudd and his crew, and a group of Mohilar warriors.

Now it is an empty arena lined with non-functional holo-projectors.

The crew gets a few moments to examine the Combatorium before the computer attempts to pit them against one another in climactic battle, substituting flesh and blood warriors for the missing projections.

Forensic Engineering yields the information in the first paragraph of this section.

Data Retrieval finds all information in the Combatorium database connected to the Mohilar to be scrambled. It is either subject to the Bogey Conundrum, was damaged during the destruction of the city, or both.

Imaging likewise shows that the projectors are completely toasted.

Energy Signatures shows that all broadcast frequencies are densely flooded with digitized signals. The readings are off the charts!

Data Retrieval also conclusively shows that:

- any further attempt to extract Mohilar-related information will prove useless.
- the most damaged part of the databank is the one providing multimedia information to the completely collapsed section of the museum dealing with Hudd's peacemaking activities. (1-point spend) The computer has isolated this as a threat to its systems. Any piece of data linked to it has also been quarantined.
- the computer's spontaneously acquired artificial intelligence exists not only in the circuits and storage units of its physical mainframe. It stores a copy of itself in the electromagnetic field generated by the ashen stars effect. Forcibly shutting down the computer, even by reaching the core, is simply not a viable option. They'll have to find some other way.

If they haven't yet connected the reactivation of the dormant museum to the ashen stars effect, they might now put it together. To repeat:

Astronomy: An ashen stars event occurred here a few days ago.

Energy Signatures: The ionospheric reaction catalyzed by the ashen stars effect reawakened the museum's offline computer, kicking in its powerful environmental scrubbers and attracting the attention of the EvBase team.

After making two or three queries with their abilities, fruitful or not, the computer then tries to reconfigure the Lasers' brains. Use the flowchart below to see who, if anyone, falls prey to the computer's brain-frying effect.

If half of the Lasers are affected, but an uneven number is present, more are unaffected than not. If a tie of combined **Scuffling** and **Athletics** ratings fails to determine

who is affected and who is not, use the following ratings as tiebreakers until the determination occurs: **Shooting, Health, Battle Console.** When all else fails, flip a coin. (The computer uses a complex algorithm to decide whose brains to focus its brain-rewriting resources on. It prioritizes the individuals who appear to be the most aggressive and, to its warped calculus, the most Hudd-like.)

Characters who are wearing headsets but are not affected feel a momentary intense headache and impulse toward violence, but are able to shrug it off.

If no one is affected, describe the computer's failed attempt to attack their minds. Allow them to bask in their cleverness, so that this non-result feels like a victory.

Affected characters immediately lose 2 **Health** to the brain-zapping effect. They think of themselves as Brian Hudd or his core crewmen: Ship's Aide Refu Pura, Gunner Steven Weaver, Pilot Nissa Dev, or Survey Chief Valerie Linan.

Curing the Brain-Damaged

On a Difficulty 4 Virology test, a character can immediately synthesize a serum reversing the effect of the brain damage on any character, PC or otherwise.

Without that success, the cure occurs between episodes, so that any affected Lasers are back to normal in time for their next mission.

They immediately attack any unaffected characters. They switch their disruption weapons to lethal (unless that setting has been disabled; see above). The computer, trying to model a proper fight with Mohilar, then also sends a signal to the unaffected Lasers' weapons, disabling their non-lethal settings, leaving only the lethal.

This can be reversed on a Difficulty 4 **Systems Repair** test. Characters can perform them only on their own weapons. They can make one such test per combat round, immediately before their attacks.

If the affected Lasers kill all of the unaffected, the episode ends on a note of ignominious failure. Perhaps a new crew can come to Ares-3 to mop up the brain-damaged remaining crew members, now treated as NPCs, before launching their own career.

If the unaffected characters win, or if the fight didn't occur, the group is still left with the task of shutting down the computer, ending the threat it poses to others.

By now the group has gotten enough hints to figure out the following on their own. Give them time to come to this conclusion. If not, provide the info to a character with History (Combine):

- This computer must be disabled the old-school way—the Brian Hudd way.
- (Again give the players time to put it together themselves before continuing.)

They must talk it into destroying itself.

Doing so requires **Inspiration**. (If a character has any **Inspiration** points left, require a spend of that amount, to underline the importance of the moment.) The player must argue that Hudd was a peacemaker as well as an aggressive defender of the Combine's utopian values. The computer has lost track of that fact and thus has failed in its essential duty, to accurately glorify the memory of Brian Hudd.

As soon as the computer comes to this realization, it initiates a self-destruct sequence. Each character must make a Difficulty 4 **Athletics** test to run out of the complex and clear the doors before it blows. Assess varying Difficulties for the characters if for some reason it seems incredible that all of them have the same chance of getting out safely—one might be deeper in the complex than others, or incapacitated. Still, the point here is to have an explosive conclusion, not to snatch defeat from the jaws of victory. Failure means that a character is tagged with debris or shockwave damage on the way out, suffering +3 damage.

Allow other inventive solutions to work, inserting entertaining obstacles as needed. Trying to shut down the computer is not inventive, especially after they've concluded that it's impossible. If players persist anyway, let them face additional hazards for a while, then remind the character with the highest **Data Retrieval** that they're barking up the wrong tree.

Possible alternate solutions:

- Reversing the electromagnetic shift that's allowing the computer to store a copy of itself in the ionosphere. This should require a sequence of dangerous stunts, perhaps involving a shuttle craft, tricky flying, and explosives.
- Posing as Hudd and his crew (using Impersonate and uniforms scavenged from the displays), then tricking it into allowing them to shut it down.
- Something crazy your players alone will think of. So crazy it might just work. . .

Return of the Arms Merchants?

Scene Type: Alternate

If the final sequence seemed anti-climactic, the arms merchants might show up to waylay the crew, convinced that they must have stripped the place of valuable relics before it blew up.

In most cases, this final combat sequence will seem superfluous. Instead you might look for ways to use Adach-Shi and the Loghos Corporation as ambiguous running characters.

Wrapping Up

Conclude by resolving any PR issues, for good or ill. These may change the group's **Reputation**.

The group then collects its payout. Convey a brief congratulatory message on behalf of the Combine, tempering it according to how well they performed.

Then go to Downtime.

Ashen Stars

Appendices

APPENDIX I: SAMPLE NAMES

This section provides a list of sample names for each of the Seven Peoples, and the cultural context to go with them.

BALLA

Unless otherwise prompted, balla use only their first names. These are two syllables long and start and end with vowel sounds.

Balla second names are used only to remove confusion between two individuals with the same first name. They are usually four to five syllables long and usually end in the suffixes -iel, -an, -ond, -eth, -ath, -gorn, or -in. These all originate from local place names of the balla homeworld. Typically they evoke the beauty of nature or a bucolic agricultural setting. Translators typically convert them into the listener's own language. Translated second names of famous balla include: Silvercreek, Highfalls, Deeplake, Stonebridge, Wheatfield, Blueridge, Greenmountain, Tarnflower, and Woodharvest.

You'll never hear a balla use a second name in reference to him or herself. If you hear *"I'm Ulla Woodharvest,"* you know you're dealing with an impostor posing as a balla. At most you might hear: "*No, I do not speak of Ulla Blueridge, I speak of Ulla Woodharvest.*"

Names consisting only of vowels are always pronounced as two separate vowel sounds: Ia, for example, is pronounced I-ah. Terminal vowels are never silent.

Acho	Ehi	Iso	Ovy
Acli	Ei	Issy	Ua
Addi	Embo	Isto	Ucha
Aee	Enly	Iu	Ucjy
Affa	Eeo	Iwra	Ue
Agha	Eplee	Oa	Uee
Ahi	Essa	Obza	Uhi
Ahu	Etru	Oe	Uho
Alla	Eu	Ohi	Uie
Anmy	Ia	Olo	Ullo
Annu	Idsi	Olu	Uo
Ao	Iee	Omwi	Urri
Aspa	Ifgo	Onme	Uthe
Ea	Ijku	Onro	
Egdi	Io	Otbu	
Eha	Ipte	Ou	

Cybe

Cybe names are metonyms, descriptive English words not typically used as names by humans. Historians are sometimes reminded of proper names preferred by the Puritan movement of the 16th and 17th centuries on Earth. They most often refer to the cybe's specialized skills or knowledge but might also announce her personality, political beliefs, or past achievements.

When confronted with events that radically alter their self-perceptions, cybes change their names. A Cybe named Rollingstone might change his name to Stillstone after settling down and getting married.

Frequent name changes can make cybes hard to track through the Bleed's neglected databases.

Older cybes used to append the word "Unit" to their names, then shortened it to the suffix u, which they still use today. This is sometimes spelled with a hyphen, sometimes not. A cybe might be Certainty-U or Certaintyu, depending on personal preference.

Altruist	Civbringer	Justice	Painter	Spiker
Anomalist	Datareader	Killer	Peacemaker	Startracker
Anti-Taxation	Dawnsearlylight	Kineticist	Pheromone	Stirring
Architect	Debater	Knower	Pilltaker	Suicidist
Autonomy	Destructor	Liberty	Pistol	Superior
Avenger	Disruptor	Lookaway	Plantseeker	Sweetness
Badglance	Dreamer	Lurker	Pokerwinner	Tailfeather
Bagger	Driver	Machinist	Professor	Thrasher
Basher	Evolver	Manualreader	Prophet	ThreeDee
Bestever	Explorer	Manytongue	Protocol	Trickster
Bigmind	Facechanger	Messenger	Proverbial	Understander
Blackmass	Forsworn	Minotard	Prudence	Unforgiver
Bleedchampion	Future	Moneymaker	Repentant	Vagabond
Blade	Genderpirate	Mozartfan	Returner	Vampire
Boldbrass	Helixreader	Neurologist	Rockfinder	Virustuner
Calmer	Hermaphrodite	Neverbeaten	Router	Vivisector
Certainty	Historian	Neverfooled	Scarewolf	Warpig
Chainsaw	Hotshot	Obsessor	Scumterror	Wrathstiller
Chargeswithdrawn	Hungerstop	Ocular	Sexy	Wrenchborn
Charity	Hunter	Opener	Shiptaker	
Chemicalbond	Imperceptible	Operator	Signal	
Chimera	Instructor	Orbitslasher	Sorrow	

durugh

Durugh names sound vaguely Latin, Assyrian, or a combination of both. For its many centuries of totalitarian rule, the Durugh Empire imposed a system of family names on its people. These names conveyed each family's precise position in the empire's complex and hidebound hereditary power structure. With the demise of the old system, most durugh have thrown off the shackles of their old family names. Today they are used only by reactionaries seeking a restoration of the Imperial government. Not coincidentally, their last names tend to convey high rank in the overthrown system.

Acius
Adach-Shi
Adad-Neius
Aebel
Aelit
Albicanu
Amannius
Ama-Ukin
Ambrin
Antius
Apollon
Arbat
Arrud
Artius
Ashi
Ashpa
Ash-Picius
Ashurnius
Ashur-Shi
Asiran
Asius
Auraria
Auris
Aur-Shi
Aurta
Autius
Kabius
Baladesh
Bisru
Caedius
Caeus
Calbat
Calbinius
Carhalmash
Cassinius
Clautius
Comius
Compeius
Coran
Corcius
Curbel
Curentius
Curnius
Dompeius
Duinuris
Duitu
Durah
Duris
Dur-Shi
Durtillit
Durtu
Dur-Ukin
Ehur
Ehurin
Ehur-Shi
Elatius
Elavius
Esaggallian
Esanius
Esanu
Esari
Fab-Kin
Fabros
Fabu
Fabylor
Fanius
Fanu
Fulpiran
Furan
Furiath
Gabius
Gabu
Galerginius
Galerin
Gegalam
Gela
Gelius
Gellit
Gemicius
Gemius
Gemmua
Genni
Gentius
Gentonius
Grari
Grartius
Grartoris
Grath-Shi
Habinius
Habrib
Hamash
Hama-Ukin
Hammurtu
Hamrud
Hamshi
Hamshi
Hari
Harib
Harquitu
Harrunctius
Harta
Hatinius
Hatius
Heran
Herentius
Hergius
Heris
Heros
Hervius
Hiris
Hirtontius
Horcinius
Horia
Hornentius
Hostius
Hosturtu
Ishamua
Ishi-Addon
Ishku
Ishur
Iulvius
Iunctius
Iuveh
Iuvenni
Iuvilit
Iuvius
Jebelidius
Jebur
Jeziran
Kadan
Kad-Nesh
Kisri
Laecius
Laela
Laevius
Larduk
Largius
Lari
Larpeius
Licilit
Licius
Luccius
Luciliith
Lucinurta
Lucius
Lucrenesh
Lucrin
Manius
Marhaleius
Marhamshi
Mari
Marra
Marrukin
Martu
Meminctius
Memius
Mempilih
Mentontonius
Meretros
Mergius
Merius
Mervilit
Minaggalkuris
Minari
Minctilit
Mitius
Mitu
Modad
Naela
Naeus
Naudius
Ninctius
Ninius
Numinash
Numnius
Octius
Ovilith
Ovius
Papicius
Petius
Petroth
Pinctius
Pinius
Pomitius
Pomius
Pomix
Pompros
Ponius
Popirtensius
Porarhadan
Porib
Poris
Porta
Posinius
Quinius
Quitu
Rubat
Rubel
Rutilix
Rutinicius
Rutius
Salbius
Sallertu
Sallius
Salmatius
Sarch-Shi
Sartu
Semius
Sensinius
Sentilith
Seretros
Seria
Sericilith
Serin
Sextilit
Shaddon
Shadesh
Shalerela
Shalmash
Shalon
Shamatinaela
Shamrin-Caela
Shamua
Shamur-Shi
Shari
Sicilith
Suetius
Tarhalith
Tari
Tarius
Tarra
Tartius
Tartonius
Teretros
Teush
Tigria
Tigrin
Tigros
Titentius
Tucilith
Tukin
Tukitu
Tulpicius
Ulpil
Urapi
Urarhari
Urarra
Valbat
Valeius
Valius
Vallith
Valmash
Vela
Verah
Verentilith
Vergius
Vergon
Veris
Veros
Vibanius
Vilith
Vilius
Vipal
Vipsanu
Vipsari
Vitavius
Vitius
Vitros
Vitu
Viturath
Vollith
Vollius
Volush
Zaggalam
Zagria
Zagros
Zamash
Zamshi

human

Some human names of the 25th century appear just as they would have in the 21st, 15th, or 1st centuries. Other names contracted to shorter forms as humanity fanned out into the galactic dark. Humans of the Combine and its offshoots invariably use one or two syllable first names. In rare cases a longer historical name may persist on official papers, though it would be unthinkably odd to use this in conversation. Family names have likewise shortened to one or two syllables. Some surnames are not modified or whole family names, but place names suggesting the owner's original cultural derivation, either on Earth or an early colony. Place-based names do not reliably correlate to facial features or other visual indicators. After four centuries of ethnic homogenization, a person named Ando Japan might not, for example, look the least bit Japanese.

First Names

Ada	Clona	Jax	Meem	Reen
Ade	Coby	Jeff	Mick	Ria
Air	Cyro	Jen	Mike	Rikki
Al	Dean	Jerr	Mill	Rona
Ann	Doug	Jim	Mir	Sara
Ardi	Drea	Jodi	Mon	Sheel
Arla	Drew	Jon	Mura	Shun
Armand	Ed	Jona	Nand	Sof
Bear	Erik	Juli	Nat	Sonia
Becks	Erin	Kar	Neek	Steve
Ben	Fela	Kat	Nela	Stone
Bina	Flori	Kem	Ner	Storm
Bob	Ford	Ken	Nez	Su
Bon	Frank	Kev	Niki	Tai
Brace	Fred	Kima	Nu	Tam
Brad	Free	Kyla	Or	Than
Brendan	Gan	Laur	Pace	Tim
Brent	Gold	Leah	Pam	Tone
Brian	Greg	Lessa	Pat	Trace
Brick	Gun	Lex	Pat	Trey
Call	Hans	Lin	Path	Usa
Carl	Hugh	Luke	Paul	Wal
Carmen	Ilfa	Mal	Pete	Wen
Chase	Isa	Marius	Plata	Yann
Chris	Jab	Matt	Pru	Zack
	Jace	Max	Red	Zena

Last Names

Arbor
Badur
Bell
Bernard
Berts
Biton
Black
Blake
Blue
Boat
Brennan
Brock
Brown
Burn
Burnett
Camp
Campbell
Chan
Chand
Cherkam
Choi
Chu
Cohen
Cote
Cruz
Curtis
Davis
Dunbar
Dubois
England
Ferna
Ferra
Fisher
Fong
Freedom
French
Fury
Gagnon
Garz
German
Gibson
Grange
Green
Grube
Hart
Hatt
Hernan
Hiko
Hoff
Horvat
Huber
Ito
Ivans
Jaffrey
Jakes
Jansen
Japan
Jenner
Jones
Jong
Kazan
Keane
Kelly
Khan
Kran
Kubu
Kuzni
Lam
Larsen
Leo
Levi
Lew
Li
Lopez
Lorr
Luca
Martin
Mehta
Mendo
Merritt
Miner
Minez
Mizra
Mora
Morez
Morock
Muller
Murphy
Newman
Ng
Niera
Nimson
Novak
Okada
Olsen
Orka
Owen
Park
Patel
Penik
Peretz
Perez
Peters
Pham
Pilo
Popov
Reed
Reyes
Richard
Rico
Roberts
Rodd
Rome
Rossi
Russo
Sadir
Sanchez
Sand
Sang
Santos
Sato
Schmidt
Shida
Singh
Smirnov
Smith
Sposi
Starr
Striker
Sun
Tan
Tana
Taylor
Tenz
Thailand
Thomas
Tran
Tremblay
Tyre
Van
Veck
Vega
Wagner
Wang
Watta
Welsh
Wilson
Wood
Wright
Yama
Yang
Zang
Zoet
Zuki

Kch-Thk

Kch-Thk names are rendered in Comblish as two unpronounceable syllables separated by a hyphen. Kch-thk pronounce the hyphen as a rattling mandibular hiss. They use eight different clicks, hisses, or thrums in place of consonants. Only hard or buzzing consonant sounds appear in their language. Even more than the other alien tongues, Comblish renderings of their names are a poor approximation.

Bg-Zr	Kh-Dd	Rkh-Rrh	Th-Pch	Zd-Kht
Bk-Sbt	Kh-Kh	Rkh-Vqt	Thk-Rkk	Zd-Ks
Bs-Zd	Kht-Kzt	Rks-Tzg	Thr-Tst	Zd-Rd
Bt-Bks	Kht-Thbk	Rs-Trt	Ths-Hstr	Zd-Schh
Bt-Kzt	Kht-Ths	Rs-Tzk	Tk-Kzk	Zd-Sstht
Bt-Rt	Khz-Thx	Rt-Dzd	Tk-Thk	Zd-Sz
Bt-Zrt	Krdzt-Ktchh	Rt-Kb	Tk-Zk	Kzd-Ths
Bt-Zthr	Krk-Krk	Rt-Rchk	Tkz-Kths	Zd-Szb
Bth-Rk	Krr-Zd	Sch-Kbk	Tpz-Tzg	Zd-Xthd
Chh-Tx	Krx-Xp	Sch-Kzd	Tpzt-Zdhh	Zd-Ztd
Chr-Chz	Krx-Xprk	Sch-Zch	Tr-Trk	Zds-Chh
Chr-Tchr	Ksth-Hs	Schh-Zds	Trk-Kzk	Zdt-Shks
Chx-Xzt	Kth-Schh	Schx-Tt	Trk-Rhx	Zg-Bch
Dz-Tgt	Kth-Srk	Sh-Sst	Trs-Trs	Zgh-Zth
Gd-Kzt	Ktht-Ktch	Sk-Hrk	Trzd-Rsk	Zgs-Zth
Gkh-Sh	Kzd-Kth	Skr-Pth	Ts-Rbt	Zhk-Rhx
Gt-Zrt	Kzd-Thk	Ss-Gds	Tsk-Krk	Zkt-Rv
Gz-Rzd	Kzh-Dkh	Sss-Xchq	Tsrk-Krst	Zq-Stz
Hk-Zd	Kzz-Rtt	Sszr-Zt	Tx-Tks	Zr-Ssk
Hzg-Thx	Prch-Shk	Stk-Shk	Xh-Trk	Zrk-Zt
Kb-Ks	Pzt-Tht	Str-Krk	Xk-Rzgh	
Kch-Tzb	Rgh-Thx	Sz-Xz	Xp-Rzch	
Kch-Vrs	Rhk-Rst	Th-Krk	Xs-Xrk	
Kdz-Tgt	Rk-Khz	Th-Krst	Xt-Rzs	

TAVAK

Tavak names are always two syllables long, following a consonant-vowel-consonant-vowel-consonant pattern. Consonants are always separated by vowels and vice versa. The Tavak language uses only the consonants b, d, g, k, p, t, and v. It has no equivalent of the vowel y. Names never terminate in the letter v.

To randomly generate a Tavak name, use the following tables. (The first requires the use of an eight-sided die, which does not normally appear in GUMSHOE. If you don't own one, find a random number generator on the web or a dice roller app for your handheld device.) Roll three consonants, and then two vowels to separate them. If a v appears as your last letter, replace it with a k.

First, Third and Last Letter

1	B
2	D
3	G
4	K
5	P
6	T
7	V
8	T

Second and Fourth Letters

1	A
2	E
3	I
4	O
5	U
6	A

Tavak don't use family names. To distinguish themselves from others of the same given name, they cite either their distinctive banding patterns on their natural armor plating, or refer to their most notable accomplishments.

With the exception of a few dedicated specialist scholars, the numbering and naming system for armor markings is incomprehensible to non-tavak. Translation devices often render these lengthy descriptions as "banding nomenclature indecipherable."

Name deeds, as they are called, are either valiant combat actions or insights of meditative philosophy.

So your tavak character's full name might be rendered as Bedat Seven-Cross-Bead-Beneath-Rignatory-Pattern-Gray, Bedat Who Deactivated the Plasma Emplacement on Epsilon-B, or Bedat Who Interpreted the Eighth Koan of the Vorik Scroll As a Metaphor For the Inbreak of Sensory Awareness. To add further confusion, you might use any one of these, depending on the social context. Banding names are used casually, martial deeds to signal tension or aggression, and meditative thoughts to indicate fellowship or intimacy. Fortunately, despite the relatively short list of first names they have to draw on, Tavak are rarely called on to use surnames.

Bavad	Gedad	Koket	Tiped
Bavat	Gedat	Kokid	Tipot
Bavat	Gedat	Kokik	Togud
Bavik	Getab	Kokik	Tokad
Bavik	Getab	Kukep	Tokep
Bedat	Getak	Kuket	Toket
Bedat	Gupet	Kukik	Tokid
Bedeg	Kabat	Kukik	Tukep
Bedeg	Kabuk	Pavad	Tukep
Bekog	Kadad	Pavak	Tukid
Gabak	Kadeg	Pavik	Tukik
Gabat	Katib	Pevat	Tukik
Gabat	Katib	Pogud	Vadad
Gabet	Kavak	Tapet	Vadat
Gavad	Kavat	Tavad	Vedek
Gavak	Kavik	Tavat	Vibak
Gavat	Kiped	Tavik	Vogik
Gavat	Kipet	Tekot	Vutat

VAS MAL

When the vas mal were the vas kra, they allowed organic beings to call them whatever they wished—including God, if that pleased them. Now forced to interact with primitive sentients on a regular basis, they adopted a form of human nomenclature meant to put people at ease. They chose human history as the basis for their names because its people are the most numerous of the Combine-based species. Each uses a somewhat archaic first name, always of two or more syllables, followed by a second name matching that of a human historical figure. No two vas mal use the same second name; they do not mark kinship or other affiliation. Others often assume a connection between the chosen name and the personality of its owner, but this is not always obvious. Some vas mal, missing the subtleties of human nature, initially chose second names of infamous historical figures. These embarrassing errors have long since been corrected, so you will no longer run into Maximillian Caligula or Ephraim Hitler.

Abigail Bohr
Abraham Lennon
Addie Holiday
Addison Skinner
Adelbert Poe
Adlai Gainsbourg
Ahab Grissom
Alphonse Schrodinger
Alva Hawks
Alvin Bach
Ambrose Jagger
Aubrey Flaubert
Augustus Hitchcock
Bertha Obama
Bertram Saarinen
Bessie da Vinci
Blanche Hemingway
Brember Copernicus
Caleb Tolstoy
Calvin Shakespeare
Cassius Dali
Chauncey Sinatra
Chester Debussy
Clara Edison
Clarence Roosevelt
Claude Nijinsky
Clement Chopin
Cora Gandhi
Cornelius King
Cyrus Strutter
Delbert Fassbinder
Delia Schweitzer
Delilah Barks
Efriam Schulz
Elwood Pushkin
Emmet Dickens
Enoch Sturges
Erastus Jung
Ervin Hugo
Ethel Voltaire
Everett Marlowe
Florence Curie
Floyd Mozart
Forest Dostoevsky
Granville Puccini
Hamilton Wren
Harrison Wilder
Hattie Diderot
Herbert Raphael
Herman Picasso
Horace Beethoven
Ida Einstein
Isaiah Strindberg
Iva Bartok
Junius Freud
Mack Sophocles
Mason Pasteur
Meta Ibsen
Minnie Washington
Monroe Kirby
Montagu Lovecraft
Myron Pericles
Nellie Hammurabi
Noah Beckett
Omer Sand
Orlando Banting
Osbert Disraeli
Otis Ford
Otto Aldrin
Percy Walesa
Rilla Gehry
Rufus Ellington
Sherman Kurosawa
Silas Mandela
Stanford Galileo
Sylvester Havel
Theodore Presley
Van Trollope
Virgil Warhol
Walter Crick
Willard Verdi
Wilmer Corbusier
Winfield Aeschylus
Winston Lincoln

APPENDIX II: SPACE COMBAT EXAMPLE

The following example lays out a complete ship combat example, complete with surprise wrinkles.

THE MORRICONE VS. THE HARVESTER

During their investigation of an engineered virus that impels its victims to acts of deadly violence, the crew of the runner-class ship *Morricone* finds itself facing off the crew of the porcupine-class vessel *Harvester*. Its personnel have been infected with the virus.

The specs of the two ships are as follows:

Morricone (Runner)

	Dishing It (Modifier Applies On showdown Win)	Taking It (Modifier Applies On showdown Loss)
Fire	0	0
Maneuver	0	0
Override	0	0
Trickbag	0	0
Output	14	

The crew of the *Morricone* is as follows:

Character	Player	Warpside Post	Relevant Abilities
Maggie Flatt	Livia	Gunner	Battle Console 9
Genderjack	Vincenzo	Hailer	Communications Intercept 8
Zaan Bar	Marcello	Medic	Medic 10
Krk-rrt	Andrea	Pilot	Helm Control 8
Nadia Carnes	Piera	Stratco	Naval Tactics 12
Titus Mbae	Chiara	Wrench	Systems Repair 11

Harvester (Porcupine)

	Dishing It (Modifier Applies On showdown Win)	Taking It (Modifier Applies On showdown Loss)
Fire	0	0
Maneuver	-1	0
Override	0	-1
Trickbag	-1	-3
Output	8	

The virally-unhinged supporting characters on board the *Harvester* are:

Character	Warpside Post	Relevant Abilities
Realworld	Gunner	Battle Console 8
Takot	Hailer	Communications Intercept 8
Fredo Bailey	Medic	Medic 8
Alice Milk	Pilot	Helm Control 8
Efrin Quist	Stratco	Naval Tactics 8
Flora Hixon	Wrench	Systems Repair 8

Goals

The crew of the *Morricone* wants first of all to neutralize them as a threat to other ships, and also to sedate and treat everyone on board. This will require them to **Cripple For Boarding.** To do this they'll need to accumulate **18 skirmish points.**

The mind-ravaged *Harvester* crew wants to **Destroy** them. To achieve this result, they'll need to accumulate **21 skirmish points.**

Initiative

Because Zaan Bar made a 2-pt **Forensic Anthropology** spend during an earlier investigative spend, he can now diagnose victims of the virus from simple observation. When the crew of the *Harvester* hails the *Morricone*, he sees them on the viewscreen and immediately alerts the rest of the crew to be ready for sudden, hostile moves. Thanks to this, the *Morricone* now can't be surprised.

The crew quickly debates whether to attack the *Harvester* by surprise. They know that they're dangerous in their present state, and will probably attack. After a quick expression of qualms from the doc, they decide that aggressive action is the better part of valor and open fire.

(This is where, in play, the players would pick their goal, since they weren't sure of the situation before Zaan made his diagnosis. We've reordered the decision chain here in the example to match the usual steps. In cases like this you may also find that it makes sense to hold off on goal-choosing until surprise has been adjudicated.)

Surprise gives the *Morricone* the chance to attack first.

First Attack: The Morricone (Trickbag)

Because it has surprise on the *Harvester*, the *Morricone* will get an extra skirmish point if it wins the showdown. The crew decides to go after its toughest spec first. Porcupine-class vessels are loaded with defensive options, having more armor arrays installed than any other standard ship type. Even on a successful attack, its **-3 Trickbag (Taking It)** value will heavily reduce the skirmish point total it gives up. The players hope that surprise will help to offset this.

"I start off by masking the modulating frequencies of our attack arrays, to trick them into putting up the wrong countering cycle," declares Piera, as stratco Nadia Carnes. Piera spends 3 **Naval Tactics** on the attack. Her pool drops from 12 to 9.

The GM, Caterina, spends 2 **Naval Tactics** for the opposing stratco, whose pool falls from 8 to 6.

Piera rolls a 5, for a result of 8. The GM rolls a 3, for a result of 5.

The *Morricone* wins. It gets:

- 1 skirmish point for winning
- 1 point for surprise
- 1 point as the attacker
- 1 point for exceeding the opposing result by 2 or more
- 0 points for its Trickbag (Dishing It) value
- -3 points for the *Harvester*'s Trickbag (Dishing It) value

. . . for a total of 1 skirmish point. The *Morricone*'s accumulated skirmish point total is now 1.

The GM marks an X under its Trickbag entry in the *Morricone*'s combat cycle chart. It has now taken its least favorable attack.

Morricone Cycle Tracker

Fire	Maneuver	Override	Trickbag
			X

With only 1 point scored, victory for either side is far away. So the dogfight continues, with the initiative passing to the *Harvester*.

Second Attack: The Harvester (Override)

Offense is not the *Harvester*'s strong suit. (Which is why Caterina chose to feature this ship in her viral insanity plotline; it should be a hard nut to crack, but not the worst possible threat to the PCs.) Its best attacks confer no skirmish point bonus. Given the virus theme of the adventure, Caterina chooses to lead with **Override**: *"A sub-wave transmission from their ship attempts to install a virus that locks your armor arrays."*

"I counter with a quantum-level self-generating code scrubber," says Vincenzo, as hailer Genderjack.

(Theme aside, Override is a good bet because its negative Taking It value will reduce the *Morricone*'s skirmish point gain if the *Harvester* loses.)

Its cycle chart now looks like this:

Harvester Cycle Tracker

Fire	Maneuver	Override	Trickbag
		X	

The GM spends 2 points of **Communications Intercept** for enemy hailer Takot, dropping his pool from 8 to 6. Vincenzo spends 3 of Genderjack's points, which goes from 8 to 5. He rolls a 5, for a result of 8.

Caterina rolls a 1, for a result of 3.

The *Morricone* wins this showdown, too, scooping up the following skirmish points:

- 1 for winning
- 1 for exceeding the opposing result by 2 or more
- 0 points for its Override (Dishing It) value
- -1 point for the *Harvester*'s Override (Taking It) value

. . . for a total of 1 skirmish points. This adds to the *Morricone*'s running total, increasing it from 1 to its new high of 2.

That's still far from 18, though, so the fight continues, with initiative passing back to the *Morricone*.

Third Attack: The Morricone (Fire)

Porcupine-class ships have no particular weak points, and runner-class ships are average all around, so the players arbitrarily decide to make a Fire attack.

"We blast them with our toughest guns!" exclaims Livia.

"In response, they divert power to their most robust armor arrays," Caterina responds.

Morricone Cycle Tracker

Fire	Maneuver	Override	Trickbag
X			X

Livia spends 3 of her character's **Battle Console** pool, dropping it from 9 to 6.

The GM spends 2 of Realworld's **Battle Console** pool, reducing it from 8 to 6.

Livia rolls a 5, for a result of 8. Caterina rolls a 4, for a result of 6.

The *Morricone* wins again, gaining the following skirmish points:

- 1 for winning

- 1 for attacking
- 1 for a margin of 2 or more
- 0 for its Fire (Dishing It) value
- 0 for the *Harvester*'s Fire (Dishing It) value

. . . for a total of 3 skirmish points. The *Morricone*'s running total increases from 2 to 5.

3 skirmish points meets the threshold to rock the *Harvester*.

Each crew member must make a Difficulty 4 **Athletics** check or suffer damage. (If the skirmish point total were greater than 4, that would become the test Difficulty.) Each crewperson has an 8-point **Athletics** pool and spends 2 from it. Takot and Flora Hixon fail their rolls. The player responsible for the attack gets to roll their damage dice, getting a 5 for Takot (whose Health drops from 10 to 5) and a 2 for Flora (whose Health drops from 8 to 6.)

The players can now choose one of the *Harvester*'s specs to degrade. After a quick discussion, they settle on its **Maneuver (Taking It)** value. They choose this because they haven't launched a Maneuver attack so far this cycle, and can thus make one the next time they have initiative. If they win the showdown, they'll earn an extra point. Even better, the *Harvester* has also yet to Maneuver, so it will face an added downside if it attacks and loses.

A degraded value in the Taking It column increases by 1. The *Harvester*'s Maneuver (Taking It) goes from 0 to +1. Its stats now look like this:

Harvester (Porcupine)

	Dishing It	Taking It
Fire	0	0
Maneuver	-1	+1
Override	0	-1
Trickbag	-1	-3
Output	8	

With the *Harvester* yet to score and the *Morricone* far from its goal, the dogfight continues.

Fourth Attack: Harvester (Trickbag)

The GM decides to launch a **Trickbag** attack, which at -3 (Taking It) offers the least downside risk of any attack mode.

Harvester Cycle Tracker

Fire	Maneuver	Override	Trickbag
		X	X

"They swoop toward you while combining their attack and armor arrays in an unusual pattern inexplicably evoking the DNA helix."

"I'll see their double helix," declares Piera, as stratco Nadia Carnes, *"and raise them a triple!"* She spends 2 points of **Naval Tactics** and 1 point of **Output**, reducing those pools to 7 and 13, respectively.

Caterina spends 2 of Efrin Quist's **Naval Tactics** points (dropping his pool from 6 to 4) and 3 points of **Output** (lowering the *Harvester*'s pool from 8 to 5).

Piera rolls a 4, for a result of 7.

The GM rolls a 5, for a result of 10. The *Harvester* wins its first showdown of the battle. It gets:

- 1 for winning
- 1 for attacking
- 1 for a margin greater than 2
- 0 for the *Morricone*'s Trickbag (Taking It)
- -1 for its own Trickbag (Dishing It)

. . . for a total of 2, which is now its running total.

This is the *Harvester*'s attack, and it has been rocked, so it may now benefit from taking a Mop-Up Operations phase.

The *Morricone* has not yet had the chance to take advantage of the damage it did to the ship, so a Wrench Scramble to fix it now would face a +8 Difficulty modifier on the **Systems Repair** test. Caterina decides that the *Harvester* crew may be virus-ridden, but they're not stupid. They hold off on the Wrench Scramble.

However, there is good reason for a Medic Scramble. Fredo Bailey treats Takot, spending 2 **Medic** points to raise his Health from 5 to 9.

Initiative passes back to the *Morricone*.

Fifth Attack: Morricone (Maneuver)

Now the players take advantage of the damage they did to the *Harvester*'s propulsion systems by launching a Maneuver attack. "It should be limping a bit," says Andrea, as pilot Krk-rrt, "Let's force it to come around and chew a tasty hole in it."

"It shudders, shedding bits of engine housing," narrates the GM.

Morricone Cycle Tracker

Fire	Maneuver	Override	Trickbag
X	X		X

Andrea spends 2 points of **Helm Control** (reducing it from 8 to 6) and 2 of his ship's **Output** (which drops from 13 to 11).

Caterina spends 3 points for enemy pilot Alice Milk, lowering her Helm Control from 8 to 5.

Andrea rolls a 1, for a result of 5.

Caterina rolls a 2, for a result of 5.

The tied result goes to the side making the higher point expenditure, which in this case is Andrea. He scores another win for the *Morricone*, earning:

- 1 for the win
- 1 as the attacker
- 0 for the *Morricone*'s Maneuver (Dishing It)
- 1 for the *Harvester*'s Maneuver (Taking It)

. . . or a total of 3 points, moving the *Morricone* from 5 to 8 skirmish points. The damage dealt to the *Harvester* last time pays off: it is now enough to push the skirmish total to 3, causing it to again be rocked.

Again the GM spends 2 on each crew member's **Athletics** checks. Only the stratco, Efrin Quist, fails. Andrea gets to roll the damage die: it's a 6, taking Efrin from 8 to 2 **Health**.

Now the players get to degrade another spec. They must make an Override attack the next time they have initiative, or take a penalty for egging it. So they decide to degrade that spec. Less worried about defeat than hungry for victory, they decide to downgrade the Taking It value, which will improve their skirmish point haul if they win. As Taking It stats increase when degraded, the value goes from -1 to 0. The *Harvester*'s specs now look like this:

Harvester (Porcupine)

	Dishing It	Taking It
Fire	0	0
Maneuver	-1	+1
Override	0	0
Trickbag	-1	-3
Output	5	

Initiative passes to the *Harvester*.

For a ship peopled by rational crew members, this might be the time to downshift goals to escape, or to open negotiations for truce or surrender. The virus-addled *Harvester* crew keeps fighting.

Sixth Attack: Harvester (Fire)

The *Harvester* has two attack modes left in its cycle: Fire and Maneuver. With its Maneuver damaged, Caterina figures it ought to Fire. *"They barrel at you, all guns blazing!"*

Harvester Cycle Tracker

Fire	Maneuver	Override	Trickbag
X		X	X

"I divert power from weapons to armor," responds gunner Maggie Flatt, as played by Livia. She spends 3 **Battle Console** and 2 **Output** points, reducing those pools to 3 and 9 points.

Caterina spends 3 of Realworld's **Battle Console** points, reducing his pool to 3.

Livia rolls a 5, for a result of 10.

The GM rolls a 6, for a result of 9.

The *Morricone* wins:

- 1 for winning
- 0 for its Fire (Dishing It)
- 0 for the *Harvester*'s Fire (Taking It)

Its running total inches ahead from 8 to 9.

This is the *Harvester*'s attack, so it can now engage in Mop-Up Operations.

In a Medic Scramble, Fredo Bailey spends 3 **Medic** points (dropping his pool to 3) to restore Efrin to 8 **Health**.

An exorbitant Difficulty modifier would apply if the *Harvester* tried to repair the damage just done to its Override during attack five. However, the earlier loss to its Maneuver (Taking It) value is now old enough that it does not apply there. On the other hand, the *Morricone*'s skirmish point total is now over 7, applying a +2 modifier to the base 4 Difficulty of the **Systems Repair** test.

The GM spends 3 of wrench Flora Hixon's **System Repair** points and rolls a 3, just making the needed 6. Taking It values drop when repaired, so the Maneuver (Taking It) value goes from 1 to its usual 0. It will now give up one less skirmish point when the ship loses a Maneuver showdown. Flora's **Systems Repair** is now 5.

Harvester (Porcupine)

	Dishing It	Taking It
Fire	0	0
Maneuver	-1	0
Override	0	0
Trickbag	-1	-3
Output	5	

Seventh Attack: Morricone (Override)

The *Morricone* has one attack mode left in its cycle, the Override. It has prepared for this by degrading the *Harvester*'s Override (Taking It) value. As expected, it launches a jamming attack on its opponent:

"With backup servers melting," says Vincenzo (as Genderjack) *"I hit their switchers with a data blitz, forcing them to waste resources on a rolling decrypt."*

"Their hailer goes to manual mode, in an attempt to shunt your attacks uselessly into the part of the system you've already fritzed."

Morricone Cycle Tracker

Fire	Maneuver	Override	Trickbag
X	X	X	X

Vincenzo spends 4 **Communications Intercept** points and 2 **Output** points, lowering the first pool to 1 and the other to 7.

Caterina spends the rest of Takot's 6 **Communications Intercept** points.

Vincenzo rolls a 2, for a result of 8.

Caterina rolls a 4, for a result of 10.

The *Harvester* wins:

- 1 for winning
- 1 for a margin of 2 or more
- 0 for the *Morricone*'s Override (Taking It)
- 0 for the *Harvester*'s Override (Dishing It)

The *Harvester*'s skirmish point total increases from 2 to 4.

Eighth Attack: Harvester (Maneuver)

The *Harvester* now has one attack left in its cycle: Maneuver, one of its lower-punching modes. Still, it's better than egging it, so Caterina narrates: "*They wheel suddenly at you from behind an asteroid, forcing you to choose from being rammed by it, or hitting the obstacle.*"

"*Scylla and Charybdis?*" shouts Andrea (as Krk-Rrt). "*In the kch-thk version of the myth, we eat both! Hard to port!*"

Harvester Cycle Tracker

Fire	Maneuver	Override	Trickbag
X	X	X	X

Andrea spends 4 **Helm Control** points, taking his pool to 2.

The GM spends 4 **Helm Control** points, taking enemy pilot Alice Milk's pool to 1.

Andrea rolls a 1, for a result of 5.

Caterina rolls a 6, for a result of 10.

The *Harvester* wins, earning:

- 1 for winning
- 1 as the attacker
- 2 for a margin of victory of 4 or more
- -1 for its Maneuver (Dishing It)
- 0 for the *Morricone*'s Maneuver (Taking It)

. . . for a total of 3. That's enough to rock the *Morricone*, the first time the *Harvester* has pulled that off in the entire fight.

First, the **Athletics** checks. The *Harvester*'s skirmish point haul isn't enough to increase the Difficulties of these checks above the base of 4.

Each player chooses to spend 2 **Athletics** points on the check, dropping their pools accordingly. Maggie and Krk-rrt's pools are now at 8; the others' drop to 6.

Maggie and Genderjack both roll 1s, the only possible failing roll. The GM rolls damage, getting a pair of 4s. Maggie's Health falls from 12 to 8; Krk-rrt's from 8 to 4.

Caterina now chooses a spec to degrade on the *Morricone*. Maneuver is the porcupine class' weak suit: it gives up a point when it wins, with no compensating defense cushion when it loses. Caterina decides to compensate by dinging the *Morricone*'s Maneuver (Taking It). That value increases from 0 to 1. Normally you wouldn't zero in on a value used in the same attack mode you just used, but this is the end of the *Harvester*'s attack cycle. It will be able to use Maneuver again during its next attack without egging it.

The *Morricone* now looks like this:

Morricone (Runner)

	Dishing It	Taking It
Fire	0	0
Maneuver	0	1
Override	0	0
Trickbag	0	0
Output	7	

As it's the *Harvester*'s attack, it could now launch a Medic Scramble. However, with Fredo down to 3 **Medic** points, Caterina decides to save them for a moment of direr need.

However, enough time has passed since the *Morricone* degraded its Override that a Wrench Scramble can proceed at an affordable Difficulty: the base of 4, with the +2 modifier that applies because the *Morricone*'s skirmish point total is 7 or more. Caterina takes a calculated risk on behalf of the virus-crazed wrench and spends only 3 points, dropping Flora's **Systems Repair** to 2. She rolls a 5, for a result of 8. Except for Output expenditures, the *Harvester* is now back up to spec:

Harvester (Porcupine)

	Dishing It	Taking It
Fire	0	0
Maneuver	-1	0
Override	0	-1
Trickbag	-1	-3
Output	5	

Ninth Attack: Morricone (Fire)

Having completed its first attack cycle, the *Morricone* is now free to select any mode without fear of egging penalties. The players quickly debate their choice. With the *Harvester* having repaired its damage, there are no obvious weak spots to capitalize on. Two of the *Morricone*'s four crucial crew pools, **Communications Intercept** and **Helm Control**, are already badly depleted. Nadia's **Naval Tactics** pool is still nicely full, but, because those points can be easily transferred to the others, they're better off held in reserve for the moment. So it's up to Maggie and her 6 points of **Battle Console**. It's time for a **Fire** attack.

Morricone Cycle Tracker

Fire	Maneuver	Override	Trickbag
X	X	X	X
X			

"With itchy trigger fingers, I descend, working to overwhelm their armor arrays through sheer firepower," narrates Livia. She spends 4 points, dropping her pool from 6 to 2.

Caterina spends 3 of Realworld's **Battle Console** points, leaving his pool at 3.

Livia rolls a 6; for a result of 10.

The GM rolls a1. Realworld's result is 4.

The *Morricone* scores:

- 1 for winning
- 1 for attacking
- 2 for a margin of 4 or more
- 0 for its Fire (Dishing It)
- 0 for the *Harvester*'s Fire (Taking It)

The *Harvester* is rocked.

The skirmish point total does not equal 5 or more, so the Difficulties of the ensuing **Athletics** checks remain at their default of 4. *Harvester* personnel each spend 2 **Athletics** on their tests; all of their pools fall to 2. All of them succeed and remain unharmed.

The players ask themselves which *Harvester* spec they want to degrade. They don't want to merely compensate for an otherwise lost skirmish point. They want to score one. That means increasing either Fire (Taking It) or Maneuver (Taking It) to 1. They've just fired, so that's out, as they're unlikely to overcome the egging penalties. This leaves Maneuver. Their pilot, Krk-rrt, is running low on Helm Control, but they can pour Output and Naval Tactics in as a substitute.

The *Harvester* now looks like this:

Harvester (Porcupine)

	Dishing It	Taking It
Fire	0	0
Maneuver	-1	1
Override	0	-1
Trickbag	-1	-3
Output	5	

The *Morricone*'s skirmish point total goes up to 13—just 5 shy of its goal. At this point, a non-crazy losing crew would certainly shift goals to escape mode.

For the first time, the *Morricone* has reason to conduct Mop-Up Operations. It's too soon to fix the dinged engines—that is, the degraded Maneuver (Taking It) value—without taking on a hellacious penalty. But a Medic Scramble might be in order, with Krk-rrt down to 4 Health. Medic Zaan Bar spends 2 Medic points to restore him to 8 Health.

Tenth Attack: Harvester (Maneuver)

On behalf of the *Harvester* crew, the GM decides that the smart move is to anticipate the players' obvious next gambit. An all-out Maneuver attack will either force them to burn the points they want to use on their attack, or will allow them an easy hit against a degraded function. And if there is to be an all-out showdown, it's better to do it when the *Harvester*, and not the *Morricone*, stands to gain the precious extra skirmish point for attacking.

Harvester Cycle Tracker

Fire	Maneuver	Override	Trickbag
X	X	X	X
	X		

"They come at you in a spin pattern, weaving through your fire to ram your aft engines," the GM narrates.

"I stick to them like glue!" responds Andrea, as pilot Krk-rrt.

Conferring, the players decide to spend 2 from **Output** and 1 from Krk-rrt's **Helm Control**, dropping those pools to 5 and 1, respectively.

The GM spends 3 points of **Output** on behalf of the *Harvester*, dropping it to 2.

Andrea rolls a 2, for a result of 5.

Caterina rolls a 5, for a result of 8.

The *Harvester* wins:

- 1 point for winning
- 1 point for attacking
- 1 point for a margin greater than 2
- 1 for the *Morricone*'s Maneuver (Taking It) value, as previously degraded
- -1 for the *Harvester*'s Maneuver (Dishing It)

The total is 3 points, enough to again rock the *Morricone*.

Again each player spends 2 **Athletics** and tests to avoid being hurt by showering sparks or being thrown into a bulkhead. Everyone makes it.

The GM decides to degrade the *Morricone*'s Override (Taking It) capability, raising the value from 0 to 1. Override is good for the *Harvester*, as it gives up less when it loses, and can now gain more when it wins.

Morricone (Runner)

	Dishing It	Taking It
Fire	0	0
Maneuver	0	1
Override	0	1
Trickbag	0	0
Output	5	

The *Harvester*'s skirmish point total goes from 7 to 10—still a far cry from its goal, but it's narrowing the gap, at least.

Eleventh Attack: Morricone (Maneuver)

With both ships' engines leaking plasma, the players decide to invest in a final knock-out Maneuver attack.

Morricone Cycle Tracker

Fire	Maneuver	Override	Trickbag
X	X	X	X
X	X		

"Time to show them—the real piloting doesn't start till your engine's in the red zone!" cries Andrea, as Krk-rrt. Stratco Nadia Carnes (Piera) transfers 6 **Naval Tactics** to Krk-rrt's Helm Control, decreasing her pool to 1 and increasing the pilot's to 7. Andrea then spends all 7 points, plus 2 points of the ship's **Output**, dropping that to 3.

Caterina spends 2 of Efrin's **Naval Tactics** points, the ship's 2 remaining **Output** points, and pilot Alice Milk's final point of Helm Control.

Andrea rolls a 1, for a result of 10.

The GM rolls a 2, for a result of 7. However, she then uses the other special trick inherent in the **Naval Tactics** ability, spending 4 points to permit a reroll. These are her last points, taking her pool to 0. She then rolls a 6, for a revised result of 11.

"At the last minute, the enemy pilot pulls out of the plunge! At the last minute, they've pulled the dreaded Ganafalt Gambit out of their asses!"

The *Harvester* wins:

- 1 for winning
- 1 for the *Morricone*'s Maneuver (Taking It)
- -1 for the *Harvester*'s Maneuver (Dishing It)

It's a slim 1 point, but it's deflected the killing blow the players were counting on. The *Harvester*'s total goes up to 11.

This is still the *Morricone*'s attack, so the crestfallen players can now perform Mop-Up Operations. They decline a Medic Scramble. Now they can attempt to repair their damaged propulsion system. The *Harvester* has now hit and surpassed the 7 skirmish point mark, applying a +2 modifier to the baseline **Systems Repair** Difficulty of 4.

Wrench Titus Mbae, played by Chiara, spends 4 **Systems Repair**, dropping his pool to 7. She rolls a 5, succeeding with a result of 9. Maneuver (Taking It) drops from 1 back down to 0.

Morricone (Runner)

	Dishing It	Taking It
Fire	0	0
Maneuver	0	0
Override	0	1
Trickbag	0	0
Output	3	

Twelfth Attack: Harvester (Override)

Having softened up the *Morricone* computer systems on its last attack, Caterina chooses the obvious Override attack now.

"They're subjecting your internal comms system to an old-fashioned frequency overload!" Caterina tells the players.

"I modulate the server sub-sequencing to repel their crude, 22nd century attack!" replies Genderjack (Vincenzo.)

Harvester Cycle Tracker

Fire	Maneuver	Override	Trickbag
X	X	X	X
	X	X	

However, hailer Takot is all out of points, as is the Stratco, and the ship's Output is empty, too. If the *Harvester* wins, it will be on the strength of an unmodified die roll.

Vincenzo spends Genderjack's last point of **Communications Intercept** and, in a move that proves controversial with certain of his fellow players, the *Morricone*'s last 3 **Output** points.

He rolls a 5, for a result of 9.

Caterina rolls a 3.

The *Morricone* wins:

- 1 for winning
- 2 for a margin of 4 or more
- 0 for the *Morricone*'s Override (Dishing It)
- -1 for the *Harvester*'s Override (Taking It)

. . . for a total of 2. The running skirmish point total reaches 15—three short of their goal.

The *Harvester* now performs Mop-Up. It forgoes a Medic Scramble.

Wrench Flora Hixon then contemplates repair of her ship's degraded Maneuver value. However, because the *Morricone*

has now accumulated more than 11 skirmish points, she faces a +4 modifier on top of the base Difficulty of 4. With only 2 points left in her **Systems Repair** pool, she can only succeed on a roll of 6. Since there's an 83% chance of failure, and because the fight won't last long enough for the *Morricone* to take another shot at the *Harvester*'s engines, Caterina decides to save Flora's points in case they matter later.

Thirteenth Attack: Morricone (Override)

The players look at the cycle tracker for options. The *Harvester* defends well against Override but even better against Trickbag. Override it is:

"*Time to access their permissions system and yank those shuttle bay doors open!*" says Vincenzo, as hailer Genderjack.

"*They respond to your data-probes with recursive encryption,*" Caterina narrates.

Morricone Cycle Tracker

Fire	Maneuver	Override	Trickbag
X	X	X	X
X	X	X	

Piera spends stratco Nadia Carnes' last **Naval Tactics** point on Genderjack's showdown. His **Communications Intercept** pool is empty, as is the ship's **Output**.

The GM can't spend anything from any of those pools.

Vincenzo rolls a 2, for a result of 3.

Caterina rolls a 1, which is also the result.

The *Morricone* gets:

- 1 skirmish point for winning
- 1 for attacking
- 1 for a margin of 2
- 1 for being within 3 points of reaching its goal prior to the attack

This puts them over the top, to 19 points. They win the combat and can board the enemy ship.

However, the 4-point total also means that the *Harvester* has been rocked. This may scuff up the crew for the possible hand-to-hand boarding defense to come. The GM spends each character's last 2 **Athletics** points. She rolls for each crew person, with failed results for Realworld and Efrin.

Vincenzo gets to roll their damage dice: they lose 6 and 4 **Health**, respectively.

The battle is over, so no Mop-Up Operations occur. Further repairs will have to take place later, using the less forgiving out-of-combat rules.

PLAYER .....

ASHEN STARS

NAME :

SPECIES :

DRIVE :

GROUNDSIDE POST :

HIT THRESHOLD :

WARPSIDE POST :

INVESTIGATIVE ABILITIES

ACADEMIC	RATING	POOL	BOOST?
Anthropology	.....	.....	.....
Archaeology	.....	.....	.....
Botany	.....	.....	.....
Cybe Culture	.....	.....	.....
Forensic Accounting	.....	.....	.....
Forensic Psychology	.....	.....	.....
Geology	.....	.....	.....
History, Balla	.....	.....	.....
History, Combine	.....	.....	.....
History, Durugh	.....	.....	.....
History, Human	.....	.....	.....
History, Kch-Thk	.....	.....	.....
History, Tavak	.....	.....	.....
Law	.....	.....	.....
Linguistics	.....	.....	.....
Vas Mal Culture	.....	.....	.....
Xenoculture	.....	.....	.....
Zoology	.....	.....	.....

INTERPERSONAL	RATING	POOL	BOOST?
Bullshit Detector	.....	.....	.....
Bureaucracy	.....	.....	.....
Cop Talk	.....	.....	.....
Downside	.....	.....	.....
Flattery	.....	.....	.....
Flirting	.....	.....	.....
Impersonate	.....	.....	.....
Inspiration	.....	.....	.....
Interrogation	.....	.....	.....
Intimidation	.....	.....	.....
Negotiation	.....	.....	.....
Reassurance	.....	.....	.....
Respect	.....	.....	.....

TECHNICAL	RATING	POOL	BOOST?
Astronomy	.....	.....	.....
Bio Signatures	.....	.....	.....
Chemistry	.....	.....	.....
Data Retrieval	.....	.....	.....
Decryption	.....	.....	.....
Energy Signatures	.....	.....	.....
Evidence Collection	.....	.....	.....
Explosive Devices	.....	.....	.....
Forensic Anthropology	.....	.....	.....
Forensic Engineering	.....	.....	.....
Holo Surveillance	.....	.....	.....
Imaging	.....	.....	.....
Industrial Design	.....	.....	.....
Kinetics	.....	.....	.....
Virology	.....	.....	.....

SPECIAL [VAS MAL]	RATING	POOL
Consciousness Simulation	.....	.....
Dreamsight	.....	.....
Neurosight	.....	.....
Timesight	.....	.....

PERSONAL ARC

1/ .....

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2/ .....

.....

3/ .....

.....

General Abilities

Abilities	Rating	Pool
Athletics	.....	.....
Battle Console	.....	.....
Business Affairs	.....	.....
Communications Intercept	.....	.....
Emotion Suppression (Balla)	.....	.....
Enhancement Integration (Cybe)	.....	.....
Farsight (Vas Mal)	.....	.....
Filch	.....	.....
Ground Craft	.....	.....
Health	.....	.....
Helm Control	.....	.....
Infiltration	.....	.....
Medic	.....	.....
Migrate Consciousness (Kch-Thk)	.....	.....
Naval Tactics	.....	.....
Neural Rewiring (Cybe)	.....	.....
Resist Battle Frenzy (Tavak)	.....	.....

Abilities	Rating	Pool
Pathway Amplification (Vas Mal)	.....	.....
Probability Override (Vas Mal)	.....	.....
Phase (Durugh)	.....	.....
Preparedness	.....	.....
Psychic Vitality (Vas Mal)	.....	.....
Public Relations	.....	.....
Scuffling	.....	.....
Sense Trouble	.....	.....
Shooting	.....	.....
Shuttle Craft	.....	.....
Surveillance	.....	.....
Systems Design	.....	.....
Systems Repair	.....	.....
Viro Manipulation	.....	.....
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Gear

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Cybernetic Enhancements

..... / Page ..... / Upkeep .....
..... / Page ..... / Upkeep .....
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Viroware Enhancements

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Total Upkeep

What You Did During the War

APPENDIX III: TABLES & CHARTS

SHIP TRACKER

	Dishing It (Modifier Applies On showdown Win)	Taking It (Modifier Applies On showdown Loss)
Fire		
Maneuver		
Override		
Trickbag		
Output		
Cargo		
Condition		
Upkeep		

Bolt-ons

Name	Function	Cost	Upkeep

Ship Combat Tracker

	THE LASERS			THE ENEMY	
	Dishing It (Modifier Applies On showdown Win)	Taking It (Modifier Applies On showdown Loss)		Dishing It (Modifier Applies On showdown Win)	Taking It (Modifier Applies On showdown Loss)
Fire					
Maneuver					
Override					
Trickbag					
Output					

Mode Cycle Tracker

Fire	Maneuver	Override	Trickbag		Fire	Maneuver	Override	Trickbag

NPC Ship Combat Crew Tracker

Crew member Name	Position	Ability Name	Ability Rating	Ability Pool	Medic Rating	Medic Pool	Health Rating	Health Pool
	Hailer	Communications Intercept						
	Stratco	Naval Tactics						
	Pilot	Helm Control						
	Gunner	Battle Console						
	Wrench	Systems Repair						
	Medic	Medic						

Crew Tracker

Player Name	Character Name	Groundside Post	Warpside Post	Upkeep

Total Ship/Crew Upkeep:

Episode Worksheet

The Contract:

Twist:

Backstory:

Complication 1:

Complication 2:

[Complication 3]:

[Complication 4]:

Personal Arc:

The Choice:

Ship Bolt-On Reference Sheet

Name	Function	Cost	Upkeep
Asphyxiator	Increases cost of enemy Medic Scrambles	5	1
Burner	Increases difficulty of enemy Wrench Scrambles	5	1
Datadrac	When Datascraping, +2 skirmish points on 1st successful showdown	6	0
Fairy Duster	Decreases enemy Output by 3 when you win Trickbag showdown	5	1
Hailmary	Refresh your Output—and your enemy's	5	0
Hyperbaric Emitter	Medic beneficiaries on your ship get +1 Health for each point of Medic spent	7	2
Inertial Sequencers	Decreases enemy Output by 3 when you win Maneuver showdown	5	1
Kinetic Exciter	For d6+1 showdowns, all Dishing It specs (including enemy's) improve by 1	5	1
Kinetic Trougher	Modifies Kinetic Exciter so that only you get the Dishing It improvements	5	5
Scorpion Rider	When rocked, spend 7 Output and 5 Naval Tactics to rock your enemy	10	3
Peacefist	When Disabling Weapons, +2 skirmish points on 1st successful showdown	7	1
Proton Dampener	For d6+1 showdowns, all Taking It specs (including enemy's) improve by 1	5	1
Proton Pathwayer	Modifies Proton Dampener so that only you get the Taking It improvements	5	5
Recursive Flagger	Decreases enemy Output by 3 when you win Override showdown	5	1
Sparkler	Increases difficulty of enemy Athletics tests when you rock their ship	7	1
Synchron Charger	Pay 5 Output to ignore egging it penalties on current attack	5	2
Translight Spiker	Impedes enemy's escape on successful Naval Tactics test	5	1
Tractor Beam	Allows you to attempt the Cripple For Towing goal	5	0
Whomper	Decreases enemy Output by 3 when you win Fire showdown	5	1
Zoomer	Refresh Output on achieving an escape-track goal	6	1

Tech Reference Sheet

Tech	Type	Appearance	Function	Cost	Upkeep	Page
Headset	Communications	A curved holoscreen	Up to 12 people can exchange video and audio transmissions in real time	standard		125
Personal Bluffer	Communications	A small chip	Interferes with surveillance tech	6p		124
Rosetta Chip	Communications	Tiny earpiece	Universal vocal translator	standard		126
Transmit Modder	Communications	A plug-in to a comms panel	Modifies realtime transmissions using the Communications Intercept ability	2		125
Unireader	Communications	Specs or attached to headset	Decodes known written script	standard		126
Aidkitter	Cybernetic Enhancements	An artificial orifice in either side of your neck	Transfers Health points	2	1	127
Amper	Cybernetic Enhancements	Microcapsules in the brain	Refresh a number of pool points at a later cost in Health	1	1	127
Autonomic Avenger	Cybernetic Enhancements	Internal modifications	Gain 6 Scuffling, land two extra blows when you fail a Consciousness roll	2	1	127
Bad Liver	Cybernetic Enhancements	Nanotech helpers	Stops all ingested poisons and intoxicants	1	0	128
Berserker	Cybernetic Enhancements	Nanofibers in nervous system	When you lose Health or get injured, gain Scuffling	3	1	128
Biofueler	Cybernetic Enhancements	A coil attached to your intestinal tract	Spend 1 Health or 2 Athletics to increase ships Output by 1	4	1	128
Breadbox	Cybernetic Enhancements	Secret compartment in your abdomen	Store 4cm x 12cm x 12cm	1	0	128
Dataloader	Cybernetic Enhancements	An interface jack implanted your thumb	Download data and spend Output points as Academic abilities	3	0	129
Dopamine Redirector	Cybernetic Enhancements/ Disruptor Accessory	Neural port in your neck attached to disruption pistol	Convert damage done to increase abilities	2	1	129
Episealant	Cybernetic Enhancements	Microchips on skin and nervous system	Temporary alternative to space suit. Needs rebreather.	1+X	2	129
Frequency Transducer	Cybernetic Enhancements	1cm circle installed in heart	Converts lethal disruptor fire to non-lethal	1	1	129
Handgun	Cybernetic Enhancements	Prosthetic hand	disruption pistol, +2 bonus on first shot	4	1	130
Headdisk	Cybernetic Enhancements	Storage drive in brain	Record audio and visual data.	2	1	130
Headlight	Cybernetic Enhancements	Meglight in forehead	Meglight	1	1	130
Honeybee	Cybernetic Enhancements	Fibroid tissue in brain	Gain a boost on academic or technical abilities, but can't spend them later	3	2	130
Interface Transducer	Cybernetic Enhancements	Nanoscopic wires under scalp	Prevents other cybe enhancements working within 20m by spending Investigative points	1	2	130

Tech	Type	Appearance	Function	Cost	Upkeep	Page
Internal Headset	Cybernetic Enhancements	Installed in skull	Up to 12 people can exchange video and audio transmissions in real time	2	1	130
Internal Rebreather	Cybernetic Enhancements	Nanite scrubbers in lungs	Produce your own oxygen for 10x minutes	1+X	1	131
Mesodermal Jumper	Cybernetic Enhancements	Fibers on pectoral muscles attach to recipient	Transfer any Athletics, Scuffling, or Shooting to any of the same.	3	1	131
Motobooster	Cybernetic Enhancements	Titanium reinforced leg muscles	-2 Difficulty running, +1 damage Scuffling	3	1	131
Neurojolter	Cybernetic Enhancements	Nanoscopic wires in fingertips attach to other brain	Transfer points from many pools to same on recipient	3	1	131
Nightvision	Cybernetic Enhancements	Ocular implants	Nightvision scope	1	1	131
Ocular Input Analyzer	Cybernetic Enhancements	Chip attached to optic nerve	Acts as a scanner. Decreases opponents' Hit Thresholds	4	1	131
Pherotracker	Cybernetic/ Disruptor Accessories	Input port connects to disruption pistol	On your disruptor hit, tracks location out to 500m	2	1	132
Phosphoryltic Battery	Cybernetic Enhancements	Power cable attached to heart	Transfer points from Output or Propulsion pools to Athletics, Health, or Scuffling.	4	0	132
Popclaws	Cybernetic Enhancements	Retractable carbon-fiber claws	Scuffling damage increases by 2	4	1	132
Schrodinger Lobe	Cybernetic Enhancements	Small crystal installed in cerebellum	Pay 2 Health to increase by 2 the effective margin of any successful Athletics, Battle Console, Filch, Helm Control, Infiltration, Phase, Scuffling, Shooting, or Shuttle Craft test	3	1	132
X-Gravs	Cybernetic Enhancements	Anti-gravity cells on soles of feet	Allows unassisted leaps of up to 10m	3	1	132
Holo Layout	Investigative Tech	console and poles	Plays back holographic recording	standard		136
Meglight	Investigative Tech	Cylinder	Sophisticated multicoloured light source	standard		135
Meglight Whacker	Investigative Tech	Baton	Sophisticated multicoloured light source and baton (d6-1 damage)	standard		135
Snails	Investigative Tech	Small spiral plastic shell	Record holo video and audio data	standard, 4p disguised version		135
Tethers	Investigative Tech	Hand-held device or attached to headset	Performs sensor readings for technical abilities	standard		136
Bioprocess Suspender	Medical and Forensic Gear	Serum delivered by Osmotic Puncher	Arrests decomposition	standard		133
Espresser	Medical and Forensic Gear	Chrome stapler	Brings to consciousness people hit by non-lethal disruption fire	standard		133
Osmotic Puncher	Medical and Forensic Gear	A pen attached to a serum bottle	Hypodermic. Leaves a small trace.	standard		133
Deflector	Protective Gear	Ping-pong ball sized device	In Scuffling, reduces Hit Threshold	1		133

Tech	Type	Appearance	Function	Cost	Upkeep	Page
Foiler	Protective Gear	Translucent strip in the roof of your mouth	Thwarts tasers	standard		133
Holomask	Protective Gear	Light mesh warn over clothes	Hologram makes you look like any humanoid	4		134
Pheroalarm	Protective Gear	Device the size of an earring	Emits alarm if pheromone-based viroware used	4p		134
Pheroblocker	Protective Gear	Device the size of an earring	Detects and blocks pheromone based viroware within 50m	2		134
Pherodetector	Protective Gear	Hypodermic with readout	Test blood for pheromone influence within 24 hours	4p		134
Popper	Protective Gear	Blue light encased in chrome; armband	Absorbs first disruptor hit then burns out	standard. 1 for 3		134
Snower	Protective Gear	small device	Prevents a broadcast, shackle version prevents cybernetic broadcast	5p, 7p for shackle version		135
Spacesuit	Protective Gear	Spacesuit		standard		135
The Mor Sohn	Unclassifiable Items	Complicated child's ball	Allows Balla to supress emotions			145
Brainwave Recycler	Viroware		For one interval gain a pool point when another PC spends an academic or technical one	1	1	138
Chameleon	Viroware		Chameleon effect adds 6 points to Infiltrate or Surveillance	2	1	138
Heighten PreFrontal Cortex	Viroware		Cooperate on certain abilities without losing points	1	1	138
Keratinized Epidermis	Viroware		Ignore first Scuffling attack, Scuffling damage reduced by 2	2	1	138
Latency Suppression	Viroware		Detect viroware use, cancel on a Viroware Manipulation contest	1	1	138
Mr. Grey	Viroware		Make humanoids forget your identity	2	2	138
Morphological Mimicry	Viroware		Adopt the form of another species	4	2	139
Pherotracker	Viroware		Detect pheromone use	2	1	139
Proprioception Booster	Viroware		Adds 6 points to skills relying on position in space	1	1	139
Refractive Skin	Viroware		If you lose Health from a disruptor blast, transfer Athletics	4	2	139
Regenerate	Viroware		Regain 2 Health points per round until end of current interval	2	1	140
Scramblefface	Viroware		Reconfigure your face to a non-specific person	3	2	140
Scramblefface Ultra	Viroware		Reconfigure your face to that of another person	4	3	140
Skeletal Fluidity	Viroware		Squeeze through 1' gaps	1	1	140
SlickSkin	Viroware		Gain Scuffling from an opponent's scuffling expenditures	1	1	141
Thirdeye	Viroware		See behind you. Sight-based Sense Trouble difficulty reduced by 2	2	2	142

Tech	Type	Appearance	Function	Cost	Upkeep	Page
Tiresias	Viroware		Switch sex	1	3	142
Aggravator	Viroware/ Pheromone		Provoke aggression in one subject within 4m	2	2	137
Dominator	Viroware/ Pheromone		You are treated as high status	2	1	138
Peacepipe	Viroware/ Pheromone		Supress aggression within 4m on one subject	2	1	139
Snakehisser	Viroware/ Pheromone		Causes a subject to flee	1	1	141
Stimulust	Viroware/ Pheromone		Trigger sexual urges in others	1	3	141
Baton	Weaponry	Baton	Does 1 die -1 damage	standard		142
Disruption Grenade	Weaponry	baseball-sized weapon	30m range, all in 3m radius make Difficulty 6 Athletics test	6p		143
Disruption Pistol	Weaponry	various	Range 25m, does non-lethal damage	standard		143
Disruption Rifle	Weaponry	various	Range 150m, does non-lethal damage	4p		144
Fritz-Baton	Weaponry	Baton	Deactivates Deflector	1		142
Insureshield	Weaponry	Small device attached to weapon	Prevents Scuffling from permanently injuring an opponent	standard		142
Arc Zapper	Weaponry/ Disruptor Accessories	Disruptor Accessory	Excess disruption energy strikes secondary target with NLD	1		144
Aversionizer	Weaponry/ Disruptor Accessories	Disruptor Accessory	Target has aversion to attacking you	1		144
Beaconator	Weaponry/ Disruptor Accessories	Disruptor Accessory	Genetic scan, Hit Threshold reduced by 1	1		144
Crick-Cracker	Weaponry/ Disruptor Accessories	Disruptor Accessory	Burns out multiple poppers. One takes effect.	1		144
Distractor Beam	Weaponry/ Disruptor Accessories	Disruptor Accessory	Penalizes opponents Shooting by 1	1		144
Gun-Nanny	Weaponry/ Disruptor Accessories	Disruptor Accessory	Determines PR risk of an attack	1		145
Revealer	Weaponry/ Disruptor Accessories	Disruptor Accessory	Briefly reveals any disguised or shape-shifting targets	1		145
Serenitizer Archer-1000	Weaponry/ Disruptor Accessories	Disruptor Accessory	Prevents enemy disruptor from lethal firing	1		145
Serenitizer Sensei-1000	Weaponry/ Disruptor Accessories	Disruptor Accessory	Prevents target from doing injurious Scuffling damage	1		145
Stockholmer	Weaponry/ Disruptor Accessories	Disruptor Accessory	Target you made unconscious cooperates with you	1		145

Investigative Ability Checklist

When creating an adventure, use this table to record which abilities are essential to the adventure, which are optional and which are not used at all. Let your players know which not to take. If you are using pre-existing characters, tick them on the left column table, then build your adventure around them.

Investigative Abilities	Core Clue Tally	Total in Adventure
Anthropology		
Archaeology		
Botany		
Cybe Culture		
Forensic Accounting		
Forensic Psychology		
Geology		
History, Balla		
History, Combine		
History, Durugh		
History, Human		
History, Kch-Thk		
History, Tavak		
Law		
Linguistics		
Vas Mal Culture		
Xenoculture		
Zoology		
Bullshit Detector		
Bureaucracy		
Cop Talk		
Downside		
Flattery		
Flirting		
Impersonate		
Inspiration		
Interrogation		
Intimidation		
Negotiation		
Reassurance		
Respect		
Astronomy		
Bio Signatures		
Chemistry		
Data Retrieval		
Decryption		
Energy Signatures		
Evidence Collection		
Explosive Devices		
Forensic Anthropology		
Forensic Engineering		
Holo Surveillance		
Imaging		
Industrial Design		
Kinetics		
Virology		
Consciousness Simulation		
Dreamsight		
Neurosight		
Timesight		
	Total Investigative Points:	

INDICES

Ship Classes

Runner 104
Hammer 105
Rampart 105
Speeder 106
Hauler 106
Porcupine 107
Mandible 108
Sherlock 108
Alexandria 109
Voodoo 109
Junker 110
Miser 111
Freighter 122
Passenger Liner 122
Naval Cruiser 122
Naval Dreadnought 122
Big Scary Alien Vessel 122
Shuttles 123

Tech

Personal Bluffer 124
Transmit Modder 125
Headsets 125
Translators 126
Rosetta Chip 126
Unireader 126
Aidkitter 127
Amper 127
Autonomic Avenger 127
Bad Liver 128
Berserker 128
Biofueler 128
Breadbox 128
Dataloader 129
Dopamine Redirector 129
Episealant 129
Frequency Transducer 129
Handgun 130
Headdisk 130
Headlight 130
Honeybee 130
Interface Transducer 130
Internal Headset 130
Internal Rebreather 131
Mesodermal Jumper 131
Motobooster 131
Neurojolter 131
Nightvision 131
Ocular Input Analyzer 131
Pherotracker 132
Phosphorolytic Battery 132
Popclaws 132
Schrodinger Lobe 132
X-Gravs 132
Bioprocess Suspender 133
Espresser 133
Osmotic Puncher 133
Protective Gear 133
Deflector 133
Foiler 133
Holomask 134
Pheroalarm 134
Pheroblocker 134
Pherodetector 134
Popper 134
Snower 135
Spacesuit 135
Meglight 135
Meglight Whacker 135
Snails 135
Holo Layout 136
Tethers 136
Aggravator 137
Brainwave Recycler 138
Chameleon 138
Dominator 138
Heighten PreFrontal Cortex 138
Keratinized Epidermis 138
Latency Suppression 138
Mr. Grey 138
Morphological Mimicry 139
Peacepipe 139
Pherotracker 139
Proprioception Booster 139
Refractive Skin 139
Regenerate 140
Scrambleface 140
Scrambleface Ultra 140
Skeletal Fluidity 140
SlickSkin 141
Snakehisser 141
Stimulust 141
Thirdeye 142
Tiresias 142
Baton 142
Fritz-Baton 142
Insureshield 142
Disruption Grenade 143
Disruption Pistol 143
Disruption Rifle 144
Disruption Accessories 144
The Mor Sohn 145

Entity Database

Dermoids 197
Jaggar 198
Klorn 200
Lipovore 201
Mynatid 202
Nanogons 203
Phyllax 205
Sh'ard 207
Generic Xenozoological Threats 208
Aggressive Herbivore, Cattle-Sized 209
Aggressive Herbivore, Rhino-Sized 209
Aggressive Herbivore, Triceratops-Sized 209
Aggressive Herbivore, Sauropod-Sized 209
Apex Predator, Lion-Sized 209
Apex Predator, Megafauna-Sized 209
Apex Predator, Monster-Sized 209
Pack Predator, Dog-Sized 209
Pack Predator, Wolf-Sized 209
Non-Alien Opponents 209
Balla Avenger 209
Bodyguard 210
Cybe Militant 210
Durugh Spy 210
Gangster 211
Groundside Bandit 211
Hired Killer 211
Kch-Thk Warrior 211
Mercenary 212
Militant 212
Miner 212
Pirate 212
Rival Laser 213
Security Guard 213
Spaceport Lowlife 214
Tavak Warrior 214
Thug 214
Vas Mal Deranger 214
Vigilante 214

INDEX

Abilities 31–52
  Ability Benchmarks 8
  cap 8
  General 44–52
  Investigative 31–44
  Using Abilities 233
active clues 64
additional PCs 10
adventures. *See* Episodes
Aftermath (space combat) 98
Aggravator (Viroware) 137
Aggressive Herbivore
  Cattle-Sized 209
  Rhino-Sized 209
  Sauropod-Sized 209
  Triceratops-Sized 209
Aidkitter (Tech) 127
airlocking 162
Alexandria (Ship Class) 109
Alien Fungal Infection (Hazard) 80
Aliens 194–210
  Entity Classes 194
  Entity Database 197
  Generic Xenozoological Threats 208
  Lifeforms 194
  Non-Alien Opponents 209–216
  Opponents and Rivals 195
  Quasi-Sentients 194
  Sentients 194
  Statistics 196
Altruism (Drive) 53
amp 18, 162
Amper (Tech) 127
Animal Speciation 208
The Annexation 160
antagonist reaction 221
Anthropology (Academic) 31
anti-scanning technology 32
Apex Predator
  Lion-sized 209
  Megafauna-Sized 209
  Monster-Sized 209
Archaeology (Academic) 31
Arcs
  Concepts 228
  to Premise 229
Arc Zapper (Weaponry) 144
ashen stars 191–192
  effect 192
ash-haul 162
Asphyxiator (Bolt-On) 116
Assignments
  Communications Officer (Hailer) 28
  Cultural Officer (Face) 30
  groundside 30
  Medical Officer (Doc) 31
  mixed 31
  Operations Officer (Bagger) 30
  Pilot 29
  Security Officer (Chopper) 30
  Strategic Coordinator (Stratco) 29
  Survey Officer (Mapper) 30
  Systems Officer (Wrench) 30
  Technical Officer (Techo) 30
  warpside 28
  Weapons Officer (Gunner) 30
Astronomy (Technical) 32
Athletics (General) 44
Atomism (Ideology) 154
Atonement (Drive) 54
Autonomic Avenger (Tech) 127
Avenger (Drive) 54
Aversionizer (Weaponry) 144
babysitter 162
Background PCs 28
Backstory 217
bad behavior 167
Bad Liver (Tech) 128
Bagger (Assignment) 30
balla 4, 16–17
  culture 17
  Emotion Suppression (ability) 45
  Mor Sohn 145
  names 261
  Self-Exclusion (drive) 60
Balla Avenger 209
Baton (Weaponry) 142
Battle Arrays
  armor 102
  attack 102
Battle Console (General) 44
battle frenzy 24
Beaconator (Weaponry) 144
Behavioral Tics 48
Berserker (Tech) 128
bigcred 9, 162
Big Scary Alien Vessel (Ship Class) 122
Biofueler (Tech) 128
Bioprocess Suspender (Tech) 133
Bio Signatures (Technical) 32
The Bleed 3, 147–163, 189
  Clusters 189
  outzones 189
  Travel Times 190–191
Bleedism
  Drive 54
  Ideology 154
Blood Redeemers (Nufaith) 155
boarding 96
bodmod 162
Bodyguard 210
body modifications 20
The Bogey Conundrum 161–162
Bolt-Ons 115–118
  reference sheet 286
bookkeeping 172
boosts 6, 15, 22, 79
Botany (Academic) 33
Brainwave Recycler (Viroware) 138
Breadbox (Tech) 128
Building Cases 216–227
  Activating Players 225
  Avoid Negation 226
  Chaos and Order 227
  Choosing a Premise 216
  Episode Premises 221
  Episode Worksheet 218
  Leading and Following 226
  On the Fly 225
  Preparing a Fallback 226
Building Series 227–231
  Personal Arcs 228–229
  Recurring Characters 230
  Series Arcs 227
build points 6, 8, 79
Bullshit Detector (Interpersonal) 33
Bureaucracy (Interpersonal) 34
Burner (Bolt-On) 116
Business Affairs (General) 44
calang 163
campaigns. *See* Building Series,Episodes
Cannibalizing 118
cargo bays 173
Chameleon (Viroware) 138
character creation 4–14
  abilities 6–8
  crew package 5
  drive 8
  personal arcs 10
  reputation 10
  ship 9
  species 4
  tech 9
character sheet 280–281
charging 77
Chemistry (Technical) 34
choice for players 219
Choosing a Premise 216–219
  backstory 217
  choice 219
  complications 217
  personal arcs 217
  the contract 216
  twist 216
Chopper (Assignment) 30
Chronicler (Drive) 55
Civilizer (Drive) 54
Class-K 163
  as enemies 198
clear 163
Clues 64–67
  active 64
  Gathering 64
  General Spends 66, 220
  Inconspicuous 66
  Leveraged 67
  passive 64
  Pipe 67
Clusters 189–193
  during war 193
The Collision 158–159
Combat. *See* Fighting; *See* Space Combat

Combine 19, 125
  History 157–161
  In Retreat 147–149
  In the Bleed 150–151
  Law 175
Combinism
  drive 55
  ideology 154
Comblish 126
Communications 124–126
  Intercept (General) 44
  Interstellar 125
  Officer (Hailer) 28
Complications 217
Comradeship (Drive) 55
Condylism 158
conference 163
consciousness migration 22
Consciousness Simulation (Special Vas Mal) 34
Contests 71
The Contract 165–177, 216
  Dividend Deals 173
  Fee Cap 174
  Fees 172
  Loans 174
  Pickup Contracts 170
  Securing 169–170
  Time Between 170–171
  Types 169–170
Convicts 177
Cooperation 70
Cop Talk (Interpersonal) 35
core clue 64, 220, 234
council 163
Cover 77
Creating Your Crew 4
Cred 31, 163
Crew Packages 5, 27–31
Crick-Cracker (Weaponry) 144
cricket 163
Cripple For Boarding (Space Combat)
  Goal 86
  Result 94
Cripple For Towing (Space Combat)
  Goal 85
  Result 94
Cripple (Space Combat)
  Goal 85
  Result 94
Cultural Officer (Face) 30
Custom Ships 111–113
  Cargo 113
  Combat Specs 111
  Condition 113
  Output 113
  Shipbuilding Example 113
  Upkeep 113
cybe 4, 18
  communities 18
  Culture (Academic) 35
  Enhancement Integration (ability) 45
  Integrationist (drive) 58
  Neural Rewiring (ability) 49
  Social Engineer (drive) 61
Cybe Militant 210
cybernetic 15
  clashes 15
  compatibilities 15
Cybernetic Enhancements 126–132
damage control 167
Datadrac (Bolt-On) 116
Dataloader (Tech) 129
Data Retrieval (Technical) 35
Datascrape (Space Combat)
  Goal 84
  Result 93
dealing damage 72
Decryption (Technical) 35
Deflector (Tech) 133
dermal regenerator 36
Dermoids 197
  reversing infection 197
Derogatory Terms 164
Derring-Do (Drive) 55
Destroy (Space Combat)
  Disabled or Crippled Ship 95
  Goal 86
  Result 95
devessel 163
Die Rolls 67
Difficulty 69, 182
  Ratings as Benchmarks 70
Dimension U 25
Disable Engines (Space Combat)
  Goal 85
  Result 93
Disable Weapons (Space Combat)
  Goal 85
  Result 93
Disguiser (Tech) 124
dishing it modifier 104
Disruption
  Accessories (Weaponry) 144–145
  Fire 76
  Grenade (Weaponry) 143
  Pistol (Weaponry) 143
  Rifle (Weaponry) 144
Distractor Beam (Weaponry) 144
Doc (Assignment) 31
Dominator (Viroware) 138
dopamine 20
  Redirector (Tech) 129
double-A 163
Downgrades 119
downside 163
  (Interpersonal) 36
Downtime 79, 171
  Test Table 171
Dreamsight (Special Vas Mal) 36
drives 9, 53–61
  conflicting drives 55
  custom 53
  suitable 15
  using drives 219
driving facts 179
durugh 5, 19–20, 161
  Phase (ability) 50
  Phase Rider (drive) 58
  Spy 210
egging it 163
Emotion
  emotionalism,balla 17
  stimulus table 45
  Suppression (General - Balla) 45
Empiricism (Ideology) 154
enemies 230
  restraints on actions 97
Energy Signatures (Technical) 36
Enhancement Integration (General - Cybe) 45
enhancements 9
Entity Classes 194
Entrepreneurial (Drive) 56
Episealant (Tech) 129
Episodes 79
  Premises 221–224. *See also* Building Cases,Building Series
  Worksheet 218, 285
Escape (Space Combat)
  Goal 84
  Result 93
Espresser (Tech) 133
Evidence Collection (Technical) 36
evolver 163
Example
  Of Play 234–237
  Space Combat 269–279
  species names 261–268
  World Names 187
Exploration (Drive) 56
Explosive Devices (Technical) 37
Face (Assignment) 30
Fairy Duster (Bolt-On) 116
Faith (Drive) 56
fallback 226
Family Tradition (Drive) 56
Farsight (General - Vas Mal) 45
  distance table 46
The Fibrous Sacrament (Nufaith) 155
Fighting 72–78. *See also* Space Combat
  charging 77
  Cover 77
  Dealing Damage 72
  Disruption Fire 76
  example 73
  Free-For-All 76
  Hit Thresholds 72
  large ships 121
  Range 77
  Scuffling 72
  Shooting 72
  stun rays 77
  Surprise 77
  Uneven Fights 98
Filch (General) 46

Fingerprinting 36
Fire
  Dishing It 101
  Hazard 81
  Taking It 101
Flattery (Interpersonal) 37
Flirting (Interpersonal) 37
The Flowering 20, 159–160
Foiler (Tech) 133
food 23
Footloose (Drive) 57
Forensic
  Accounting (Academic) 37
  Anthropology (Technical) 38
  Engineering (Technical) 38
  Psychology (Academic) 38
foreshadowing 226
The Founding 159
The Four Expansions 157–158
Free-For-All Combat 76
Freestriper 27, 163
Freestriping It 27
Freighter (Ship Class) 122
Frequency Transducer (Tech) 129
Fritz-Baton (Weaponry) 142
Gangster 211
gav 163
Generic Xenozoological Threats 208
Geology (Academic) 38
GM advice 216–237, 231
  Attendance 233
  building cases 225–227
  building series 227
  Calling On Abilities 233
  Ending Scenes 233–234
  Investigative Ability Checklist 291
  Perception Is (Nearly) All 231–232
  plot hooks 221–224
  pop culture references 234
  railroading 225, 231
  Rules 62–81
  Running the game 216–237
  Scenes 220–221
  structuring a story 63
  The Right Track 232
goal paths 84
goals 12
  Changing Your Goal 92
  concrete 12
  thematic 12
greenwater 163
grk-kka chamber 23
Ground Craft (General) 46
Groundside 5, 27, 30, 163
  Cultural Officer (Face) 30
  Operations Officer (Bagger) 30
  Security Officer (Chopper) 30
  Survey Officer (Mapper) 30
  Technical Officer (Techo) 30
Groundside Bandit 211
GUMSHOE Tips. *See also* GM advice
Gun-Nanny (Weaponry) 145
Gunner (Assignment) 30
haggling 173
  table 173
Hailer (Assignment) 28
Hailmary (Bolt-On) 116
Hammer (Ship Class) 105
Handgun (Tech) 130
hardclaused 163
Harvester 269
Hauler (Ship Class) 106
Hazards 80–82
  Electricity and Other Shocks 80
  Fire 81
  Suffocation 81
  Toxins 81
  Vacuum 81
Headdisk (Tech) 130
Headlight (Tech) 130
Headsets (Tech) 125
Health
  Convalescence 73
  Exhaustion, Injury and Death 73
  General 46
  Primitive Convalescence 75
Heighten PreFrontal Cortex (Viroware) 138
Helm Control (General) 46
Hired Killer 211
History
  Interstellar 157–161
  Timeline 4
History (Academic)
  Balla 38
  Combine 39
  Durugh 39
  Human 39
  Kch-Thk 39
  Tavak 39
hit thresholds 72
holo 163
  Layout (Tech) 136
  mask (Tech) 134
  Surveillance (Technical) 40
homo amplius 18
Honeybee (Tech) 130
Hotshot (Drive) 57
humans 5, 20–21
Hunger Tourism (Drive - Kch-Thk) 57
Hybrid Scenes 221
Hyperbaric Emitter (Bolt-On) 116
Hyperclocking 92
Ideologies 153–155
Imaging (Technical) 40
Impersonate (Interpersonal) 40
Imprisonment 177, 233
Improving Your Character 79
improvising 225–227
Industrial Design (Technical) 40
Inertial Sequencers (Bolt-On) 116
Infiltration (General) 47
infoscan 163
Inspiration (Interpersonal) 40
Installation Time Table 115
Insureshield (Weaponry) 142
Integrationist (Drive - Cybe) 58, 163
Interface Transducer (Tech) 130
Internal
  Headset (Tech) 130
  Rebreather (Tech) 131
Interrogation (Interpersonal) 40
inter-species romance 19
Intervals 79
Intimidation (Interpersonal) 41
Investigative Abilities (Table) 7
Investigative Ability Checklist 291
Ion Storm (Hazard) 81
Jaggar 198
jail 177
Jargon 162–164
Judicial Procedures 175
Junker (Ship Class) 110
Jurisdiction 176
justice 175
Justice-Seeker (Drive) 58
kch-thk 5, 21–24
  Hunger Tourism (drive) 57
  Migrate Consciousness (ability) 47
Kch-thk Warrior 211
Keratinized Epidermis (Viroware) 138
Kevin 163
Kherenism (Nufaith) 156
Kinetic Exciter (Bolt-On) 117
Kinetics (Technical) 41
Kinetic Trougher (Bolt-On) 117
Klorn 200
Kobirs 153
larva (kch-thk) 21
Lasers 3
Latency Suppression (Viroware) 138
Law
  enforcement 175
  judicial procedures 175
  jurisdiction 176
  sentencing 177
  trial procedure 176
Law (Academic) 41
Leaving Your Ship 120
Lifeforms 194
Linguistics (Academic) 41
Lipovore 201
loans 174
  Test Table 174
local spur 157
lowshift 163
Lucky Shots 69
Lying Ability 34
Mandible (Ship Class) 108
Maneuver
  Dishing It 101
  Taking It 103
Mapper (Assignment) 30
Peter McMillen 158
Medical Officer (Doc) 31

Medic (General) 47
Medic Scramble 91
Meditative Reconciliation (Drive - Tavak) 58
Meglight (Tech) 135
Meglight Whacker (Tech) 135
Mercantilism (Ideology) 155
Mercenary 212
mersive 163
Mesodermal Jumper (Tech) 131
meson shrapnel 32, 119, 191, 192
Migrate Consciousness (General - Kch-Thk) 47
Militant 212
Miner 212
Miser (Ship Class) 111
Mixed Assignments 31
  Medical Officer (Doc) 31
Mode Cycle Tracker 283
modifiers 15
Mohilar 3, 15, 125, 152
  doomsday weapon 26
  The Aftermath 161
  The Bogey Conundrum 161–162
  The War 155, 161
The Mondat (Nufaith) 156
Morphological Mimicry (Viroware) 139
Morricone 269
Mor Sohn 145
Motobooster (Tech) 131
Mr. Grey (Viroware) 138
Mynatid 202
Myndaro Station 3
mystery writing 225. *See also* Episodes
nabrosoid 163
names 261–268
  balla 17, 261
  cybe 18, 262
  durugh 19, 263
  human 21, 264–265
  kch-thk 23, 266
  tavak 267
  vas mal 26, 268
  worlds 187
Nanogons 203
narrative freedom 232
natural armour (tavak) 24
Naval Cruiser (Ship Class) 122
Naval Dreadnought (Ship Class) 122
Naval Tactics (General) 48
Navigational Hazards 119–120
negation 226
Negotiation (Interpersonal) 42
Neural Rewiring (General - Cybe) 49
  table 49
neurochemistry 20
Neurojolter (Tech) 131
Neurosight (Special Vas Mal) 42
Nightvision (Tech) 131
NLD 76, 163
  Recovery Rate Table 76
Non-Alien Opponents 209
non-Combine missions 183
non-lethal disruption fire. *See* NLD
Non-standard character types 22
Nowhere Else To Go (Drive) 58
NPC Ship Combat Crew Tracker 284
Nufaiths 155–156
nulled 163. *See* NLD
occupations. *See* Assignments
Ocular Input Analyzer (Tech) 131
OHF 163
Operations Officer (Bagger) 30
Orbit 120
Osmotic Puncher (Tech) 133
Ossa One 150, 175
outnumbered (space combat) 98
Outnumbering the Enemy 100
outzones 189–193
Override
  Dishing It 103
  Taking It 103
Pack Predator
  Dog-sized 209
  Wolf-Sized 209
Passenger Liner (Ship Class) 122
passive clues 64
Pathway Amplification (General - Vas Mal) 49
Paying Upkeep 171
  171
Peacefist (Bolt-On) 117
Peacepipe (Viroware) 139
Penal Colonies 177
Personal Arcs 10–13, 217, 228–229
  Arc to Premise 229
  Implementing 229
  Premise to Arc 228
Personal Bluffer (Tech) 124
personal details 10. *See also* character creation
Phase (General - Durugh) 50
Phase Rider (Drive - Durugh) 58
Pheroalarm (Tech) 134
Pheroblocker (Tech) 134
Pherodetector (Tech) 134
Pheromone Manipulation 137
Pherotracker (Tech) 132
Pherotracker (Viroware) 139
phlogium 163
Phosphorolytic Battery (Tech) 132
Phyllax 205
  recovering from infestation 205
  seedships 206
Pickup Contracts 170
piggybacking 68
Pilot 29
Pirate 212
Planetary Classifications 181
  Habitation Class 181–182
  Polity Class 183
player attendance 233
player-built culture 16
player-facing 196
Pools 6, 66, 80
  Benefits 65
  regaining points 78
Popclaws (Tech) 132
pop culture references 234
Popper (Tech) 134
Porcupine (Ship Class) 107
practilate 163
Premises 221–224. *See also* Episodes
preparedness difficulties 124
Preparedness (General) 50
Primitive Convalescence 75
PrivSecs 121, 164
prizeworld 179, 180
Probability Override (General - Vas Mal) 50
Professionalism (Drive) 59
Programming (Drive) 59
The Proper 150, 164
propper 164
Proprioception Booster (Viroware) 139
Proton Dampener (Bolt-On) 117
Proton Pathwayer (Bolt-On) 117
Psionic Cloud Exposure (Hazard) 81
Psychic Depletion 42
Psychic Vitality (General - Vas Mal) 26, 51
Public Relations (General) 51
Pursued (Drive) 59
quasi 164
Quasi-Sentients 194
Racial Separatism (Ideology) 155
railroading 225, 231
Rake (Space Combat)
  Goal 84
  Result 93
Rampart (Ship Class) 105
Range 77. *See also* Combat
ratings and pools 6. *See also* Pools
  Difficulty Benchmarks 70
realistic mode 82
Reassurance (Interpersonal) 42
Recurring Characters 230
  Enemies 230
  Relationships 230
  Rivals 230
Recursive Flagger (Bolt-On) 117
Re-evolution (Drive - Vas Mal) 60
Refractive Skin (Viroware) 139
refreshing pool points. *See* Regaining Pool Points
Regaining Pool Points 17, 21, 48, 75, 78, 80
  pool refreshments 196
  refreshing output 89, 103
Regenerate (Viroware) 140
relationships 230
Repairs. *See also* Repairs and Upgrades
Repairs and Upgrades 113–119
  Cannibalizing 118
  Cost Table 114
  Downgrades 119
  Repairs 113–114. *See also* Pools
  Restoring Disabled Systems 114

Time Table 114
Upgrades 115–118
Upkeep Failure 119
Reputation 10, 14, 165–169
Ambiguous Events 168
Building 165–167
Cementing 169
Egregious Events 168
Smirching 167–168
Resist Battle Frenzy (General - Tavak) 51
Respect (Interpersonal) 42
Results (space combat) 92
Revealer (Weaponry) 145
Rival Laser 213
rivals 230
Rocked (space combat) 91
Role Model (Drive) 60
Rosetta Chip (Tech) 126
Rules 62–81
Runner (Ship Class) 104
sample names 261–268
scanning technology 32
scenes 220–221
alternate 220
antagonist reaction 221
conclusion 221
core 220
ending 233
hazard 221
hybrid scenes 221
Intro 220
placing information 220
sub-plot 221
Schrodinger Lobe (Tech) 132
Scientific Inquiry (Drive) 60
Scorpion Rider (Bolt-On) 117
Scrambleface Ultra (Viroware) 140
Scrambleface (Viroware) 140
Scuffling (General) 51
Security Guard 213
Security Officer (Chopper) 30
seedships 206
Self-Exclusion (Drive - Balla) 60
Sense Trouble (General) 51
Sentencing 177
Sentients 194
Serenitizer Archer-1000 (Weaponry) 145
Serenitizer Sensei-1000 (Weaponry) 145
Series 227–230. *See also* Episodes
Arcs 228
building a series 227
Sessions 79
settlement 208
Seven Peoples 15–26
Sexual Adventure (Drive) 60
Sh'ard 207
Sherlock (Ship Class) 108
Ship Classes 104–111
Alexandria 109
Big Scary Alien Vessel 122
Freighter 122
Hammer 105
Hauler 106
Junker 110
Mandible 108
Miser 111
Naval Cruiser 122
Naval Dreadnought 122
Passenger Liner 122
Porcupine 107
Rampart 105
Runner 104
Sherlock 108
Shuttles 123
Speeder 106
Voodoo 109
Ships 84–123. *See also* Ship Classes; *See also* Repairs and Upgrades; *See also* Space Combat
Bolt-on Reference Sheet 286
Cargo 103
Classes 104–111
Condition 103
Destruction 96
destruction result table 96
How You Got Your Ship 112
Output 103
Repairs 113
Specs 101
Stat Modifiers 89
tracker 282
Upkeep Cost 103
Shooting (General) 52
Showdowns 78
Shuttle Craft (General) 52
Shuttles 123
Configuration 123
Pursuit and Combat 123
Shuttling Down 120
Side Deals 173
Skeletal Fluidity (Viroware) 140
Skirmish Points 89
slang 162–164
Slash (Space Combat)
Goal 85
Result 94
slaveworld 179, 180
SlickSkin (Viroware) 141
small game groups 228
snaff 164
Snails (Tech) 135, 164
Snakehisser (Viroware) 141
Snower (Tech) 135
Social Engineer (Drive - Cybe) 61
solving problems 175
Something To Prove (Drive) 61
Space Combat 84–100
Aftermath 98
Attack Modes 87
Boarding 96
Check For Victory 92
Describing 97
Describing the Action 97
Destroying a Disabled or Crippled Ship 95
Example 269–279
Goals 84
Initiative 86
Large Battles 100
Mop-Up Operations 91
Mutual Escape 93
placeholder abilities 200
quick reference list 85
Results 92
Rocked 91
ship combat tracker 87, 283
Ship Destruction 96
Skirmish Points 89
surrender and truce 94
Targeting Crew 91
Towing 95
Uneven Fights 98
space opera 14, 82, 231
Spaceport Lowlife 214
Spacesuit (Tech) 135
The Spaceway 193
Sparkler (Bolt-On) 117
species 15–26
balla 16
cybe 18
durugh 19
humans 20
kch-thk 21
tavak 24
vas mal 25
species-specific abilities 15
Consciousness Simulation (Vas Mal) 34
Dreamsight (Vas Mal) 36
Emotion Suppression (Balla) 45
Enhancement Integration (Cybe) 45
Farsight (Vas Mal) 45
Migrate Consciousness (Kch-Thk) 47
Neural Rewiring (Cybe) 49
Neurosight (Vas Mal) 42
Pathway Amplification (Vas Mal) 49
Phase (Durugh) 50
Probability Override (Vas Mal) 50
Psychic Vitality (Vas Mal) 51
Resist Battle Frenzy (Tavak) 51
Timesight (Vas Mal) 43
specs (starships) 84, 90, 101
speculation 63
speech
balla 17
cybe 18
durugh 19
kch-thk 23
tavak 24
Speeder (Ship Class) 106
Starships. *See* Ships
Stellar Navigation 188
maps 189
Stimulust (Viroware) 141
adverts 141
Stockholmer (Weaponry) 145
storage 164

Stories Without Worlds 181
story
  pacing 69
  requests 14
Stratco (Assignment) 29
Strategic Coordinator (Stratco) 29
stun rays 77
subplot 13, 221
  implementing 13
  open 13
Suffocation (Hazard) 81
suhab 164
Supervised Rehabilitation 177
Surprise 77
  space combat 86
Surveillance Equipment (Tech) 135
Surveillance (General) 52
Survey Officer (Mapper) 30
Synchron Charger (Bolt-On) 117
Synthcultures 152
  Combine Law 152
  SynthCode 152
Systems
  Design (General) 52
  Officer (Wrench) 30
  Repair (General) 52
tables and charts 282
taking it modifier 104
Tangential Worlds 184
The Tatats 164
tavak 5, 24–25
  battle frenzy 24
  Meditative Reconciliation (drive) 58
  Resist Battle Frenzy (ability) 51
Tavak Warrior 214
Tech 124–145
  budget 9
  Communications 124–126
  Cybernetic Enhancements 126–132
  Investigative 135
  Medical and Forensic 133
  Protective 133–135
  reference sheet 287–291
  Reference Sheet 287–291
  Unclassifiable 145
  Viroware 137–142
  Weaponry 142–145
Tech Hound (Drive) 61
Technical Officer (Techo) 30
Techo (Assignment) 30, 164
Temporal Shock (Hazard) 81
Tests 67–73
  Contests 71
  Cooperation 70
  difficulty 67
  Fighting 72
  Lucky Shots 69
  Making Tests Without an Ability 68
  Margins 71
  Piggybacking 68
  Showdowns 78
  Simple 67
  Tests During Downtime 116
  Toll Tests 70
  Zero Sum Contests 71
Tethers (Tech) 136
Thirdeye (Viroware) 142
threon 164
Thug 214
Time Increments 79
  Downtime 79
  Episodes 79
  Intervals 79
  Sessions 79
Timeline 4
Timesight (Special Vas Mal) 43
tips 231
Tiresias (Viroware) 142
Towing 95
Toxins (Hazard) 81
Tractor Beam (Bolt-On) 117
transer 164
Translators (Tech) 126
Translight 164
translight corridors 188
Translight Spiker (Bolt-On) 118
Transmit Modder (Tech) 125
Trial Procedure 176
Trickbag
  Dishing It 103
  Taking It 103
Twist 216
Ukshqa 19
unique drives 15
Unireader (Tech) 126
Upkeep Failure 119
using abilities 233
Using Drives 219
The Utopian Era 160
Vacuum (Hazard) 81
Vas Kra 25, 156, 160, 181, 223, 268
vas mal 5, 25–27
  Consciousness Simulation 34
  Culture (Academic) 43
  Dreamsight (ability) 36
  Farsight (ability) 45
  Neurosight (ability) 42
  Pathway Amplification (ability) 49
  Probability Override (ability) 50
  Psychic Depletion (ability) 42
  Psychic Vitality (ability) 51
  Re-evolution (drive) 60
  Timesight (ability) 43
Vas Mal Deranger 214
vestigal 18, 164
Vigilante 214
Virology (Technical) 43
Viro Manipulation (General) 52
Viroware 137–142
  Affinities 15
  Susceptibilities 15
Voodoo (Ship Class) 109
war 4
Warpside 27, 28, 164
  communications 5
  Communications Officer (Hailer) 28
  Pilot 5, 29
  Strategic Coordinator 5
  Strategic Coordinator (Stratco) 29
  Systems 5
  Systems Officer (Wrench) 30
  Weapons 5
  Weapons Officer (Gunner) 30
warworld 179, 180
Weaponry 142–145
Weapons Officer (Gunner) 30
weapon type table 72
What You Did In the War 4
Whomper (Bolt-On) 118
wide-eye 164
The Witness of My Worth 238–258
world creation 178
  building details 178
  naming worlds 187
  problems 178
  summary 181
world hooks 185–186
Worlds As Problems 181
Wrench (Assignment) 30
Wrench Scramble 91
Xenoculture (Academic) 44
Xenopathogen (Hazard) 81
X-Gravs (Tech) 132
Zoology (Academic) 44
Zoomer (Bolt-On) 118