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Book 3: Worlds and Adventure

SPIRIT OF THE FAR FUTURE

This game is the collective work of Brad Murray, C.W. Marshall, Byron Kerr, and Tim Dyke. We all had different but essential roles to play.

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Travelling

Above all, the Imperium is an economic entity, and starships are required for interstellar trade. Starships use maneuver drives to travel through space (within a given system), and jump drives to travel between systems. Both drive systems are fuelled by refined liquid hydrogen, though unrefined hydrogen (skimmed from the atmosphere of a gas giant) or water can be used (available from planets with a hydrographics code of 3 or greater). Controlled fusion means that fuel consumption for maneuver drives and ordinary operations is minimal: most ships have the ability to operate for about thirty days without refueling. Interstellar travel requires much less efficient.

Maneuver drives provide acceleration, measured by G-force. Maneuver-1 is required to leave atmosphere on most planets, but up to 6 Gs acceleration is possible (Maneuver-6). A typical journey within a system requires constant acceleration towards the destination, a turnaround at the midpoint (accomplished by means of attitude jets), and then constant deceleration until the destination is reached. A ship with M-4 is not four times as fast as a ship with M-1, but it does have four times the acceleration (and deceleration). Typical travel times in-system are as follows (excerpted from CT Book 2, p. 10):

	M-1	M-2	M-3	M-4	M-5	M-6
400,000km*	211m	149m	122m	106m	94m	86m
45M km**	37.3h	26.4h	21.5h	18.6h	16.7h	15.2h
255M km***	88.7h	62.7h	51.2h	44.4h	39.7h	36.2h
600M km****	136h	96.2h	78.6h	68.0h	60.9h	55.6h
900M km*****	167h	118h	96.2h	83.4h	74.5h	68.0h

*typical distance to a planet's satellite
**typical distance to a close planet
***typical distance to a far planet
****typical distance to a close gas giant
*****typical distance to a far gas giant

Because *Spirit of the Far Future* abstracts most of these variables, this list is provided merely to provide a rough sense. The Referee may vary these things as the narrative demands, even assuming travel time is being rigorously kept. Because multiple ships differ both in velocity and in vector, starship combat uses the abstracted linear system described in Book two.

Interstellar travel is measured in parsecs (3.26 light years), which is the distance between hexagons in the two-dimensional representations of space that have become ubiquitous. All jumps take about a week, though distances vary depending on the size of the jump drive and the fuel consumed. Each ship has a maximum jump capability (a number between 1 and 6, corresponding to the maximum distance in parsecs that it can travel in a single jump). Fuel consumption requires 10% of the ship's volume to be dedicated to fuel tanks for each jump number: a Jump-4 ship has fuel tanks equal to 40% of its volume, not including fuel for maneuver. Fuel consumption is the biggest limitation on interstellar travel. Experiments to increase this distance, creating one jump bubble within another for example, have always proved unsuccessful, though misjumps (often resulting from low-quality fuel or improperly maintained drives) can result in random movement of up to 36 parsecs, assuming the ship emerges from jump space at all.

The precise length of a ship's journey is subject to a number of factors. Standard Jump theory expects ships to be 100 diameters from any astronomical body, to remove the chance of stray particulate interfering with the jump bubble. In emergencies, a 10 diameter distance is possible, but no longer truly safe. While a typical jump lasts 170 hours, +/-10%, truly unpredictable travel time is only achieved with the jump tapes bought at starports. Experienced navigators believe that entry and exit point, as well as their skill and a willingness to increase risk, can enable savings of a few hours, though this is hard to text scientifically, because of the number of variables involved. Jumps are typically made at low velocities, since velocity is maintained when a ship emerges from jump, but the vector cannot be predicted in advance.

Jump space is the only faster-than-light means of communication available: even the swiftest couriers (Jump-6) cannot carry news more rapidly than 6 par-

secs per week. This limit means that some news can take weeks or months to reach from the Imperial core to the outer rims, and this reinforces the authority of local (particularly subsector) politics. The Imperial Scout Service maintains a heavily subsidized communications network by means of Jump-4 X-Boats. Sending a message electronically anywhere has a minimal cost (a credits-1 check), though the time it takes for the message to be delivered depends on the distance and whether the destination is on a communications trunk line.

While in jump, a ship is technically no longer in space: the ship is inaccessible to all other entities, and exists in complete isolation. The emptiness of jump space does not really make you go mad, as your childhood stories promise, though certain Marine hazing rituals do involve extra-vehicular activity while in jump. While the gravitic effects of large bodies (stars or gas giants) can effect ships in jump, this is part of a navigator's calculation of a safe course. The gravitic plates that maintain normal gravity for ships operating under thrust while maneuvering also maintain a sense of orientation for ships in jump.

If a ship has sufficient fuel, it can jump again within an hour or so, though most ships spend a week in each system, maneuvering to a world, landing, exchanging cargo and passengers, and traveling to a new jump point. This allows most ships two jumps per month, while still allowing some recreation time on planet for crews (adventure!). Ships are expensive, to own and to operate, and most ships under 1000 tons conducting legal trade need to follow this schedule to remain solvent.

Even for those who do not own a ship, traveling can be expensive. Ships which carry passengers charge a flat rate per passenger per jump, regardless of the distance traveled. There are three classes of accommodation: High passage (a credits-4 check) provides first class accommodation, a private cabin, and the attentions of a steward; Middle passage (a credits-3 check) may entail sharing a stateroom, and less attention from the crew; Low passage (a credits-2 check) entails travel in cold sleep tubes, and may involve some risk to the traveller if there is inadequate medical care on board. Some individuals may try to negotiate a working passage for ships without a full crew complement.

Worlds

Worlds are created exactly as per Book 3 of classic *Traveller*. If you don't happen to have that available, we've created a complete subsector for you to start with and we've tried to avoid using any specifically *Traveller* attributes. This material is in our own *Supplement 1: The Dunbar Subsector*.

That said, there is one handy conversion you might want: extracting world Aspects and Stunts from a Universal World Profile.

UWP Conversion

There are eight elements in a classic *Traveller* UWP: starport, size, atmosphere, hydrographic percentage, population, government type, law level, and technology level. These are best described in the original *Traveller* works so we won't belabour them here, but there are some things we can extract as Aspects (and Stunts in some cases!) for play with the *Fate* system.

The Aspects extracted from the UWP are guidelines only! A referee should feel free to use them or not as fits his story.

Starport

The quality of the starport determines how well the system facilitates the traveller and how easy it is to get ships maintained, fueled, or even constructed.

A class A starport earns a world the Aspects, “Shipyard” and “Luxury hotels”. It also earns the Stunt, “Full service: ships can be refuelled here with high quality fuel, undergo maintenance and repairs, and be fully resupplied.”

A class B starport earns a world the Aspect, “Shipyard”. It also earns the Stunt, “Full service”.

A class C starport earns no Aspects. It earns the Stunt, “Partial service: ships can be refuelled and maintained, but repairs might be unavailable, expensive, or hard to find.”

A class D starport earns the Aspect, “Backwater system”. It also earns the Stunt, “Partial service”.

A class E starport earns the Aspect, “Backwater system”.

A class X starport earns the Aspect, “Forgotten world”.

Size

The primary effect of the size of a world is on gravity. Strictly speaking, gravity is also determined by the density of the world which is not part of the UWP, so there is some flexibility: you could reasonably treat the size as one larger or one smaller if you want a different effect and explain it through lower or higher density.

A world with size code 0 earns the Aspect, “Asteroid belt”. It also earns the stunt, “No gravity: characters must use their Zero-G skill instead of Dexterity to move in combat.”

A world with size 1 earns the Stunt, “No gravity”.

A world with size 2 through 4 earns the Stunt, “Low gravity: characters may use either Zero-G or Dexterity to move in combat.”

A world with size 9 or higher earns the Stunt, “High gravity: characters must use their Strength instead of Dexterity to move in combat.”

Atmosphere

Atmosphere determines how much and how breathable the atmosphere on the primary planet in the system is. How the population deals with this is a matter of technology, but we’ll try to apply some Aspects that will be universal.

A world with atmosphere 0 or 1 earns the Stunt, “No pressure: characters must be protected at all times inside a pressurised structure or a vacc suit.”

A world with atmosphere 2 earns the Stunts, “Low pressure: characters must be protected at all times inside a pressurised structure, vacc suit, or compressor masks” and “Tainted: characters exposed to the atmosphere without filtration are subjected to a strength-2 attack against Endurance, damaging the Health track, every hour of exposure.”

A world with atmosphere 3 earns the Stunt, “Low pressure”.

A world with armosphere 4 earns the Aspect, “Hard to breathe here” and the Stunt, “Tainted”.

A world with atmosphere 5 earns the Aspect, “Hard to breathe here”.

A world with atmosphere 6 earns the Stunt, “Tainted”.

A world with atmosphere 7 earns the Aspect, “Fresh air.”

A world with atmosphere 8 earns the Stunt, “Tainted”.

A world with atmosphere A earns the Stunt, "Poisonous: characters exposed to the atmosphere without filtration are subjected to a strength-4 attack against Endurance, damaging the Health track, every hour of exposure."

A world with atmosphere B earns the Aspect, "Your suit is disintegrating" and the Stunt, "Poisonous".

A world with atmosphere C earns the Stunt, "Insidiously poisonous: characters in anything short of a spaceship or sealed structure are subjected to a strength-4 attack against Endurance, damaging the Health track, every hour of exposure."

Hydrographic percentage

The hydrographic rating specifies the percentage of land mass covered with water on the world, ranging from zero (0%) to A (100%).

A world with hydrographic 0 earns the Aspect, "Desert World".

A world with hydrographic A earns the Aspect, "Waterworld".

Population

The population rating of a world is the exponent base ten of the population of the world. A rating of 3, then, indicates thousands of inhabitants. A rating of 9 indicates billions. This population is as of the last survey, so the current real census might be lower or higher.

A world with population rating 0 earns the Aspect, "Deserted".

A world with population rating A earns the Aspect, "Shoulder to shoulder".

Government

While the government rating of a world actually specifies particular government types, in general it ranges from perfect individual freedom (anarchy) to non-existent personal freedom (oppressive dictatorship).

Law level

The law level rating of a world indicates both how restrictive the law is and how likely it is that characters will be harassed by local law enforcement.

A law level of 0 gives a world the Aspect, "Anything goes".

A law level of 7 or higher gives a world the Aspect, "Onerous laws".

A law level of 9 or higher gives a world the Stunt, "Police State: if players break any local law they will confront law enforcement at some point in the very near future regarding that law."

Technology level

The technology level of a world is an Aspect for the world.

Derived Aspects

Worlds with atmosphere ratings 4-9 (inclusive), and a population 5-7, and a hydrographic rating 4-8 get the Aspect, "Agricultural".

Worlds with atmosphere ratings 3 or less, and a hydrographic rating 3 or less, and a population 6 or more get the Aspect, "Non-agricultural".

Worlds with tainted or no atmosphere (ratings of 0,1,2,4,7, or 9), and a population of 9 or greater get the Aspect, "Industrial".

Worlds with populations 6 or less get the Aspect, “Non-industrial”.

Worlds with atmosphere ratings of 6 or 8, and government ratings 4-9, and population ratings 6-8 get the Aspect, “Rich”.

Worlds with atmosphere ratings 2-5 and hydrographic ratings of 3 or less get the Aspect, “Poor”.

Trade and Starship Economics

While it would be possible to use the existing Traveller detailed rules for cargo and brokering, there are a couple of issues that need resolving. First, the existing rules are notoriously broken, allowing steady income from brokerage without risk, which is no fun. Second, keeping track of precise tonnages and balance sheets of credits spent and credits earned doesn't fit well with the Fate paradigm.

This system is intended to integrate specifically with starship economic issues and model a simple cargo ship at least breaking even in regular service.

Keeping Afloat

Each month a fully crewed ship needs to make an opposed Cargo roll, modified by Broker skill (see below), against the Hull rating of the ship. This assumes the ship is making two jumps, is working full-time to maximize legal cargo, etc., but still allows two periods of three days per month on planets for shore leave (adventure!). Success indicates that the ship remains solvent: crew is paid, fuel is fresh, docking fees and local taxes are paid, minor repairs are made, and a percentage is kept for annual maintenance. This abstract system does not measure any huge profits: it is assumed that running a starship is not going to yield huge personal profits. The system also does not measure jump capability: the extra range offered by jump drives will be countered by the increased cost of the engines and maintenance.

Failure on the roll must be mitigated by consequences on the ship just as combat damage is but, as there is no "track" for this damage, it always gets a consequence on a failed roll, which is repaired as any other damage consequence. That consequence will be mild. If a mild consequence is already on the vessel, then a moderate consequence is taken. If a moderate consequence is already on the vessel then a severe consequence is taken. I the vessel already has three consequences then it is taken out. Inability to accept a financial consequence means the ship is repossessed (or at least marked for repossession), or suffers some similar fate.

Failure also negatively impacts the owner (whoever has the ship as an Aspect and/or Stunt or who holds the title if it was bought during play). On failing a ship economics roll, the owner takes a hit to his Wealth track according to the degree of failure. This may have its own consequences.

A failure might also be mitigated by a character's credit check— the target value is the amount by which the cargo roll was missed.

> *Example: the* Tapered Frog *has a Cargo rating of 2 and a Hull rating of 6— without a broker on board it's a pretty hard roll to make and the owner does indeed blow it. He rolls a* ⊞⊞⊟⊟ *for no bonus to his 2 so that's a failure of 4. That would be a consequence for the ship but also a 4-box hit on every shared crewmember's wealth box. Everyone is going to hurt here. Fortunately, the extremely wealthy patron of the vessel, Winnie Botaro, has Credits-4 and foots the bill by making a Credits check against the failure value— 4. Winnie rolls* ⊞□□□ *for +1, a total of 5. Winnie saves everyone's day. This month.*

Note that if Winnie fails, according to the Credits rules she still gets what she paid for! The ship is saved, financially, and Winnie takes all the Wealth track hits and consequences that come from it. She might not be so keen to help next time though.

Modifiers

Except when they involve Fate points, all modifiers are calculated before the roll; failure is failure.

Situational modifiers which result from player choices may affect the roll negatively (-2): extended shore leave, sub-optimal cargo, etc. These are additive.

Making only a single jump in a month warrants a further -2. Making no jumps warrants -4.

If the ship is on a subsidized trade route (limiting the choice of planetfall for the PCs, and requiring a schedule to be kept, as determined by the referee), or if it is trafficking in illegal cargo (opening many potential hazards in the event of a failure) the ship receives +2. Only one of these benefits may be claimed.

Similarly, ships may expend fate points to apply Aspects to enhance this roll: e.g. "luxury staterooms" on a safari ship.

Ships may elect to carry "Speculative Cargo", which may have a positive or negative value: roll the dice, and take -2 if the result is negative or zero, or +2 if the result is positive.

Financial consequences from previous failures may be compelled to provide -2 each to subsequent rolls.

Brokers

Some ships may carry individuals who are dedicated to turning a profit. Such Brokers are considered part of the crew. They may serve as Stewards or Gunners, but may not hold any other position on the crew. When a ship carries a Broker, the Cargo roll is not modified by Broker skill, but rather the Broker skill is simply added to the roll.

Trade Examples

1. A scout ship (Hull 0, Cargo 1) travels the galaxy selling survey data to scout bases and carrying small packages for elite clientele. The pilot has Broker-2, which earns her +1 on the roll. As long as she takes contracts as they come, she will usually stay solvent, with a base 2 before rolling against 0. If she is heading to Vargr space as she travels (-2), the contracts are less secure and the base is 0 against the hull 0.

2. A 400-ton subsidized merchant (hull 3, cargo 5) enjoys a cushy government-sponsored route between the same two planets (+2). As long as nothing untoward happens, the ship will always break even— even if the roll is ⊖⊖⊖⊖ (-4), 5+2-4=3.

3. A 200-ton free trader (hull 1, cargo 5) is detained for a week, meaning that only one jump is possible in the month (-2). Though there is a Broker-3 aboard, the roll is unaffected, but it is likely that there will be no adverse consequences. Even if the roll is ⊕⊖⊖⊖ (-2), it would still meet the hull size of 1.

Note however that if the ship were shipping sub-optimal cargo (-2), the impact of the broker would benefit the roll: 5 -2 (one jump) -2 (sub-optimal cargo) = 1, modified +1 (because of Broker 3) = 2. With the same roll, the result would be 0, which is less than the hull value of 1, and would mean that the ship receives a financial consequence (“necessary repairs postponed”, “missiles not restocked”, or whatever).

Equipment and Vehicles

While *Spirit of the Century* really has no use for equipment *per sé*, *Traveller* is science fiction and science fiction is kind of inherently gear-oriented. As stunts and Aspects tend to elevate equipment to a heroic attribute of the character, this doesn't seem universally appropriate for *Traveller* either. Consequently we need to some way to differentiate equipment to allow it to come into play, ideally still maintaining the design philosophy of *Spirit of the Century*. So:

When we say equipment we often really mean guns.

Credit checks are the target to acquire the equipment which should be modified upwards by the law level of the system in question. One subject of the Military Grade Credits stunt might negate the law level modification but acquisition is still restricted by actual availability. Availability is based on tech level of the gear (see Traveller) and the world (see Traveller), modified by the Referee's discretion.

Characters begin with some gear. Rather than itemize it, it is assumed based on the skills characters select; quality of gear might also be affected by the skill level: a character with Vacc Suit-1 might have an old tech 9 vacc suit worn by her father; a character with Vacc Suit-4 would have a sleek TL 13 suit, custom fitted. Whatever makes for a good story.

The process of mustering out will in some cases preclude access to "Military Grade" gear, at the Referee's discretion. Further, nothing guarantees the continued presence of the equipment, unless there is also an Aspect to cover it.

Many people will want the highest tech stuff for their characters, and it is worth keeping track of the TL of anything purchased, if only because that can possible serve as an Aspect at moments of crisis. Nevertheless, things do not stay at the same quality once they are invented, and a TL 14 hand comp will be far superior to a TL 8 one.

Creativity can be rewarded. A high TL knife might not do any more damage, but it could be like David Drake's memory plastic knives (which are also found in Classic *Traveller* canon)— a knife that when inactive is a simple cylinder of plastic but when activated by smacking it against a hard surface and assuming a biometric check succeeds, the cylinder deforms to become a hard, sharp, combat blade. Credit checks should be 2 (decent). Something like this might be hard to find, and it may be illegal, but it does not require a special skill or stunt to use.

Starting Equipment

Some skills imply access to some kinds of equipment. Below are a list of associations that one can afford to take for granted.

Strength: access to a gym, perhaps weight training equipment.

Dexterity: access to a gym.

Endurance: running shoes.

Alertness: none.

Credits: frippery.

Resolve: sunglasses.

Admin: a personal organizer and communicator.

Streetwise: cigarettes or local equivalent.

Carousing: none.

Leader: none.

Pilot: a license to fly in system (certification).

Engineering: an iron ring (certification), toolkit, possibly access to a machine shop.

Navigation: certification, hand computer with database of charts.

Gunnery: certification.

Vacc Suit: a vacc suit.

Zero-G: velcro shoes.

Prospecting: maps.

Survey: research database.

Mechanical: toolkit, access to a machine shop.

Electronics: toolkit, access to fabrication facilities.

Gravitics: toolkit, access to a machine shop.

Computer: hand computer.

Communications: hand computer.

Ground Vehicle: certification, gloves.

Air Vehicle: certification, g-suit.

Water Vehicle: certification, life jacket.

Equestrian: a suitable animal, saddle, and tack.

Blade Weapons: a single suitable weapon.

Firearms: a single suitable weapon.

Energy Weapons: a single suitable weapon.

Brawling: gold teeth.

Recon: high quality observation gear (binoculars appropriately souped up to match the character's background tech level).

Forgery: toolkit.

Gambling: dice, cards.

Medical: medkit, appropriate database of information; medical license if Medical 3+.

Survival: emergency kit, rations.

Demolitions: explosives, detonators, wiring.

Broker: certification, contacts.

Art: toolkit.

Science: database of relevant information.

Miscellanous Equipment and Vehicles

Honestly, classic *Traveller* handles this list as well as anyone needs. About the only thing that needs to be addressed is the conversion between the listed prices and the abstracted Credits system so that you can know whether or not you can afford that wheeled ATV.

Equipment costs can be translated to Credit checks using the table below.

If a character fails a credit check, mark a Wealth track box according to how much it was missed by. As always, a character can take a Consequence to reduce or remove that hit. The character should, however, get the item in question. He took a hit on his Wealth track and maybe a Consequence or two and that should reflect the lengths he has gone to in order to finance the purchase. He's made

Cost	Credit check
< Cr10	ignore it
< Cr100	1
< Cr1,000	2
< Cr10,000	3
< Cr100,000	4
< Cr1,000,000	5
< Cr10,000,000	6
< Cr100,000,000	7
< Cr1,000,000,000	8

enemies, got a bad bank loan, stolen from his boss, borrowed from his mom, and generally set himself up for catastrophe. Of course he gets the item!

As the Credit skill is, unlike all other skills, tied to a something fairly concrete, allowing fee tagging of multiple Aspects set up by maneuvers simply doesn't work. Or rather it works too well— three characters without a nickel can each perform a Maneuver to place a free taggable Aspect on the situation (or vendor or whatever) and then a character with, say, Credits-5 could tag all three for an extra +6 bonus and buy a star system. That's not really what we want out of the system so in this case only, no stacking free tags.

*Example: Tamar Bendigo really wants a Hovercraft (who wouldn't?) which costs Cr200,000 (*Traveller Book 3*, p.22). That's a Credit Check of 5 and Bendigo only has Credits-1. He's still got a shot at it, though, so he decides to give the dice a spin assuming he can spend some fate points if he's close. He rolls right in the peak of the bell curve: ⊞⊞⊟⊟ — a zero! That's a 4-box hit to his Wealth stress track which would take him out: □□□×! He'd rather not leave the game crushed by debt so he decides to take a mild consequence and call it a 3-box hit: □□☒. At least he can erase the mild Consequence with a short stress break or maybe a couple of beers. Maybe he can drive tourists around in his new hovercraft for a fee!*

Encounters

The characters built in the character generation system are heroes: the average person in the may only have an apex skill at level 3, possibly at level 4, and it is possible that not all skills in a pyramid are defined. Two or three Aspects are enough. Below some typical characters are presented, for use as NPCs.

Policeman 1 (TL 7-10)
3 Brawling; 2 Ground Vehicle, Firearms; 1 Endurance, Resolve, Vacc Suit; Aspects: serve the public trust; protect the innocent;
Cloth armour, pistol, smoke grenade

Policeman 2 (TL 7-10)
3 Firearms; 2 Streetwise, Intimidation; 1 Endurance, Resolve, Brawling; Aspects: uphold the law; who needs backup?;
Cloth armour, pistol, SMG

Soldier 1 (TL 10-12)
3 Firearms (MG); 2 Resolve, Endurance; 1 Alertness, Demolitions, Vacc; Aspects: just following orders; keep it tidy;
ACR, TL 10 Combat armour

Soldier 2 (TL 10-12)
3 Brawling; 2 Firearms (MG), Recon; 1 Endurance, Dexterity, Vacc; Aspects: my country's good; hungry;

ACR, TL 10 Combat armour, knife

Doctor

4 Medical; 2 Credits, Science; 1 Computer, Admin, Resolve; Aspects: "First, do no harm", In my own time

Thug 1

3 Blade weapons; 2 Gambling, Firearms; 1 Brawling, Endurance, Streetwise; Aspects: Blood is scary; do the job;

Sword, SMG

Thug 2

3 Streetwise; 2 Brawling, Firearms; 1 Carousing, Alertness, Ground Vehicle; Aspects: strike first; stay alive;

Shotgun, knife

Animal Encounters

Wildlife can be generated with the existing classic *Traveller* animal tables. The only changes that need to be made to convert to *FATE* are to adjust the hits and wounds and to supply weapon characteristics for natural weaponry. Weight has no mechanical effect and armour is stated in terms of equivalent personal armour types, so these need no adjustment.

Die	Skill
1	-2
2	-2
3	-1
4-7	0
8	1
9	2
10	3
11	4
12	5
13	re-roll with +6
14-15	6
16	7
17-18	8
19	9
20	10

Animal Hits

Animals have health and composure stress tracks just like people do. Fortunately the classic *Traveller* animal rules supply two numbers for hits— one is the number of hits before unconsciousness and the other is the number of additional hits before death. That turns out to be pretty convenient— we will take the first number as the health stress track and the second number as the composure stress track.

For example, a size roll of 8 on the ANIMAL SIZES AND WEAPONRY table in classic *Traveller* (Book 3, p.33) yields a 200kg animal with hits of 5D/3D. In *Spirit of the Far Future* this animal has a health stress track with five boxes and a composure stress track with three boxes.

Animal Wounds

So how much damage does an animal do? Traveller supplies a wounds value for each animal which is how much the weapon type it wields is modified to account for its size. As we don't roll separately to hit and again for damage in *Spirit of the Far Future*, this doesn't help us much. However, we don't make much distinction between weapon types either so we have a convenient

path before us: the wounds value of an animal is its skill level in its natural weapon type.

For example, our 200kg animal from the previous example has a wounds rating of +1D. To convert it we simply give it a skill of one in its natural weapon.

At the high end of the ANIMAL SIZES AND WEAPONRY table, however,we run into multipliers instead of nice linear additions. No problem— *FATE* is non-linear anyway! So instead of using the multipliers simply continue the wound progression linearly, yielding the table at right.

Animal Weapons

It doesn't seem productive to treat animal weapons distinctly. That is, there's no really important difference at the level of abstraction we're using in *FATE* between horns and claws, so the only weapons that are interestingly different are those that are "as" an existing weapon. In those cases you can, well, just use the weapon characteristics. Easy!

Where an animal weapon is listed as "weapon +1" or similar, add the value to the animal's skill for the weapon exactly as the animal wounds modifiers are applied.

For example, let's say our 200kg animal from the previous example rolls a 13 on the ANIMAL SIZES AND WEAPONRY chart on the Weapons column, which gives it a "claws+1" result. It already has a Wounds result of +1D (which we convert as weapons skill 1), so its combat skill is Claws-2.

Animal Speed

Animals ought to be able to move at a reasonable clip as that's mostly how they manage to stay alive. The animal creation system in classic *Traveller* handily supplies this for us by creating a speed value as part of the ANIMAL CHARACTERISTICS table. This speed is a reasonable Dexterity rating which can be rolled in combat for additional movement over the default one zone. This is exactly the way that player character Dexterity rolls affect movement in combat.

Typical Animal Encounter Table

As our example we'll reproduce the classic *Traveller* example encounter table but use the conversion rules supplied above:

Clear Terrain

Die	Animal	Weight	Stress	Skills
2	1 Hijacker	200kg	5H 3C	Defense-1, Teeth-1, Dexterity-2
3	2 Hunters	12kg	2H 2C	Defense-0, Claws-0, Dexterity-1
4	1 Reducer	12kg	2H 2C	Defense-0, Horns-0, Dexterity-2
5	1 Flying Gatherer	3kg	1H 1C	Defense-0, Claws-(-2), Dexterity-1
6	8 Grazers	400kg	6H 3C	Defense-0, Hooves-2, Dexterity-4
7	7 Flying Graxers	6kg	1H 2C	Defense-0, Teeth-(-1), Dexterity-2
8	1 Grazer	1600kg	8H 3C	Defense-9 (battle dress+4 result), Thrasher-4, Dexterity-2
9	1 Chaser	50kg	4H 2C	Defense-0, Claws-1, Dexterity-2
10	Event: Howling Carnivores! Out of sight animals are heard howling continuously. If the party spends the night nearby they may attack (skill zero success against difficulty zero). Attack with the Hunters at 3 above.			
11	6 Chasers	25kg	3H 2C	Defense-1, Teeth-1, Dexterity-2
12	1 Killer	200kg	5H 3C	Defense-0, Spear-1, Dexterity-1

Experience

Rather than propose a mechanism for advancement, *Spirit of the Far Future* uses a character development system whereby a character might change over time without altering the characters power in game.

Before or after any session a player may move any skill up the skill tree one place (though not past 5) and then must move a skill from that new rank down one level. That is, the skill pyramid must be maintained, always having one skill at rank five, two at rank four, and so on.

Similarly, players should be allowed to change an Aspect that isn't getting any use for an Aspect that relates to in game events from previous sessions so that the characters gradually acquire definition based on actual play.

> *Example: Mizer Tad has Admin-4 and Firearms-3 and wants to reflect the fact that the last few weeks of adventure have been mostly firefights and not a lot of paperwork. Her player elects to change the character to have Firearms-4 and Admin-3. If the skills were not sequential (say Admin-5 and Firearms-3) this would not be allowed.*

Example: Mizer also had an amusing run-in with pirates that left her with a face full of bright blue paint (long story). While the paint eventually washes off, her player decides to remove her "Running Wild" Aspect which she doesn't use much and adds "Wary Of Unaccompanied Packages".

Wargaming

Much to our surprise, during playtesting it became obvious that the combat subsystems stand alone. While we were certainly trying to create a game that delivered as much of *Traveller* as possible while using more modern mechanisms, we didn't expect to get this. But we did. Both the man-on-man combat system and the starship combat system play quite cleanly as wargames with only a few modifications needed to excise the Referee.

The game as it stands does derive from a role-playing game and consequently has some pieces missing that would normally be filled in by creative input from a Referee. Here we'll try and identify those and see if there aren't some mechanical solutions. These may even aid a referee in his regular work.

Fate Points

Addressing the Referee's role in supplying fate points to combatants is examined in the Optional Rule: Zero Sum Fate section following this. This should be adopted for wargaming at least.

Morale

Combat during the role-playing game often ends with one side or another deliberately disengaging — that is, not disengaging for mechanical reasons but rather for story reasons. When wargaming we need mechanical reasons. There are two parts to solving this: automatic composure attacks and special compels for composure track consequences.

Automatic Composure Attacks

Whenever an individual is taken out, remaining individuals must make a Resolve check against a set obstacle with any negative result counting as a composure track hit of the appropriate strength. In specific the obstacles are:

- a peer (similar rank) is taken out in the same zone: 2
- a peer (similar rank) taken out in another zone but in view: 1
- a tactical leader is taken out in same zone: 4
- a tactical leader is taken out in another zone but in view: 3

Special Compels

Consequences from a composure track mitigation may be compelled or free tagged in the usual fashion. In addition, however, composure consequences can be compelled to force the target to move at least one zone on their turn. The target being compelled may choose where and how far, but must move at least one zone away from their current location.

Zero Sum Fate

While playtesting Spirit of the Far Future we encounter many cases where a Referee is not actually needed for the fraction of the game we want to test — say when testing the combat system. In these cases we find that there are gaps in the FATE system that need to be filled. Following are ideas for filling those gaps that will certainly work when playing FATE as a framework for tactical gaming and may work for Referee-less role-playing.

Obstacles

There are three primary obstacles to getting rid of the Referee in FATE:

The Referee is an infinite supply of arbitrated fate points. If the Referee is not present then fate points dry up pretty fast through lack of compels.

The Referee supplies and maintains the context for the game by designing the initial scenario and propelling play towards the story points he wants to hit. He also draws the maps.

The Referee paces the game, pushing players past boring bits and focusing them on interesting bits and generally trying to get the session to a satisfying place by the end of the night.

Solutions

Fate point supply

The solution here is to use a zero-sum fate point system. This means that whenever a fate point is spent by someone, someone else gets it, so a fixed number of fate points are in play and that number never changes. Specifically:

When a player invokes one of his own Aspects, the fate point is paid to anyone (at the invoker's discretion) to whom the invoke is detrimental. The underlying assumption here is that if no one cares whether or not the roll succeeds (that is, it's not obvious that anyone should get the point) then the roll is by definition unnecessary and the action should automatically succeed (say yes or roll rule).

Follow the same rule as above when paying a fate point to invoke a stunt.

Anyone can compel anyone else's Aspects at any time and exchange points as though they were the Referee. The effects of a compel must be normalized, however, as they are normally a highly discretionary effect, so see below.

Any player can compel his own Aspects for a normalized effect (see below), again paying or receiving from the player who is affected, though in this case advantageously.

The effect of a compel is either loss of a single turn (if compelled before any dice hit the table) or -2 on a roll (if compelled after the dice hit the table). There must be a narrative associated with this effect if we're role-playing but that's less necessary if we're just tactically gaming. There should be a genuine story though even if it's not narrated.

Players should be encouraged to haggle compels. Offering two fate if the opponent is not going for one is certainly reasonable. So is turning down two but offering to accept one. In a zero sum economy the players should be encouraged to treat fate points as their own resource with few rules for paying off other players.

If an Aspect is subject to a free tag and has not yet been tagged, anyone can choose to compel it instead for free. Mechanically this means that the person compelling need not supply a fate point if the compel is accepted but must be paid a point if it's turned down. This generates more realistic results to bad consequences like "shattered kneecap" as the opponent can at least force a missed turn.

Using a compel in this way removes the Aspect's "free tag" status — it is now just another Aspect.

Whence the context?

Fair warning: this is a vast simplification of *Universalis*, bent to our perverse will. Yeah, it's *Universalis* converted to *FATE* in order to play *Traveller* without a Referee. Or you could look at it as a kind of boardgame generator.

Before the game proper, start each player with a pool of fate points well beyond what you need for the rest of the game (20 works well but your mileage may vary). Going around the table, each player can state tenets of the game at a cost of 1 fate point. Any player can offer a fate point to deny a proposed tenet. In fact as long as the proposal has more fate points on the table for it than against it, it becomes a tenet.

Set aside the fate points spent to establish context (I'm thinking they may somehow be useful later). What you have left is what you have going in to the

tactical game, so players are forced to trade off contextual control for individual capability within the context,

Players should be buying something fairly concrete, so keep track of who bought each tenet—stealing from Joshua Newman's *Shock: Social Science Fiction*, this person owns the tenet. If there is any question about how the tenet affects play during the game, the owner has final say on its effects. This reinforces the trade off between narrative authority and character autonomy.

Tenet ownership is used to:

- set scenes
- establish environmental Aspects before playing a scene
- draw any map on which a conflict relating to the tenet takes place
- mediate any conflicts relating to the interpretation of the tenet

Disputes between tenet owners (arising from interpretations of a tenet that affect another tenet) should be resolved with a fate fight — each tenet owner in the conflict may draw a fate point from the context pool and may bid their interpretation with their fate points. Anyone may bid on any side. All fate points in the fate fight go into the context pool.

How to control pace?

Play should go around the table in some established order (let's say clockwise). Each player should narrate as they see fit and if a conflict arises it is set up and played out as normal. That regulates pacing, but doesn't get to the numb of the Referee input on pacing, which is to speed it up when it's boring and slow it down when it's fun.

So, if an extended conflict (anything that's going to take a series of opposed rolls to conduct — usually combat — rather than just a single roll) starts in your narration (whether you announce a conflict or someone else objects and requires a conflict to resolve it), you get a fate point from the context pool.

Wargaming Characters

Fully developed characters are not needed if the wargaming option is being played. For straightforward combats, where a more limited field of skills may be thought to be required, it is suggested that the following rules be used. (These principles may also be thought to govern the creation of NPCs by a Referee who are intended only as combat opponents.) These rules remove the collaborative and narrative elements from character creation.

Skills

Characters select 6 skills instead of the usual 15; the apex skill is therefore at level three. Particularly strong characters may additional have a seventh skill, at level 4 or 5.

Stunts

Two stunts are chosen instead of the usual three.

Aspects

Two to five aspects may be selected. The character enters combat with the same number of fate points as there are aspects.

Maps

Maps for a good Spirit of the Far Futur fight, whether for standalone wargaming or for a fight as part of a role-playing session, should be kept simple. We like to lay a piece of paper over the playing area (I buy paper by the roll for this) and then sketch the map. When a few terrain elements have been laid down, it should become obvious how to divide it into zones and apply zone aspects and border values.

A few tips are in order, though, that might not be obvious if you haven't pushed the Spirit of the Century movement system around a little before:

Avoid laying out a grid. The zone system rewards non-orthogonal layout. Zones should not, therefore, represent strict distances but also relationships between space and ease of travel and view. Wide open spaces can be big, for example, while rooms in a starship or building can be much smaller, becoming zones with their walls as boundaries. A long straight corridor can reasonably be a single zone.

Label border values. Any borders between zones that will have a cost to cross should be labeled with that cost.

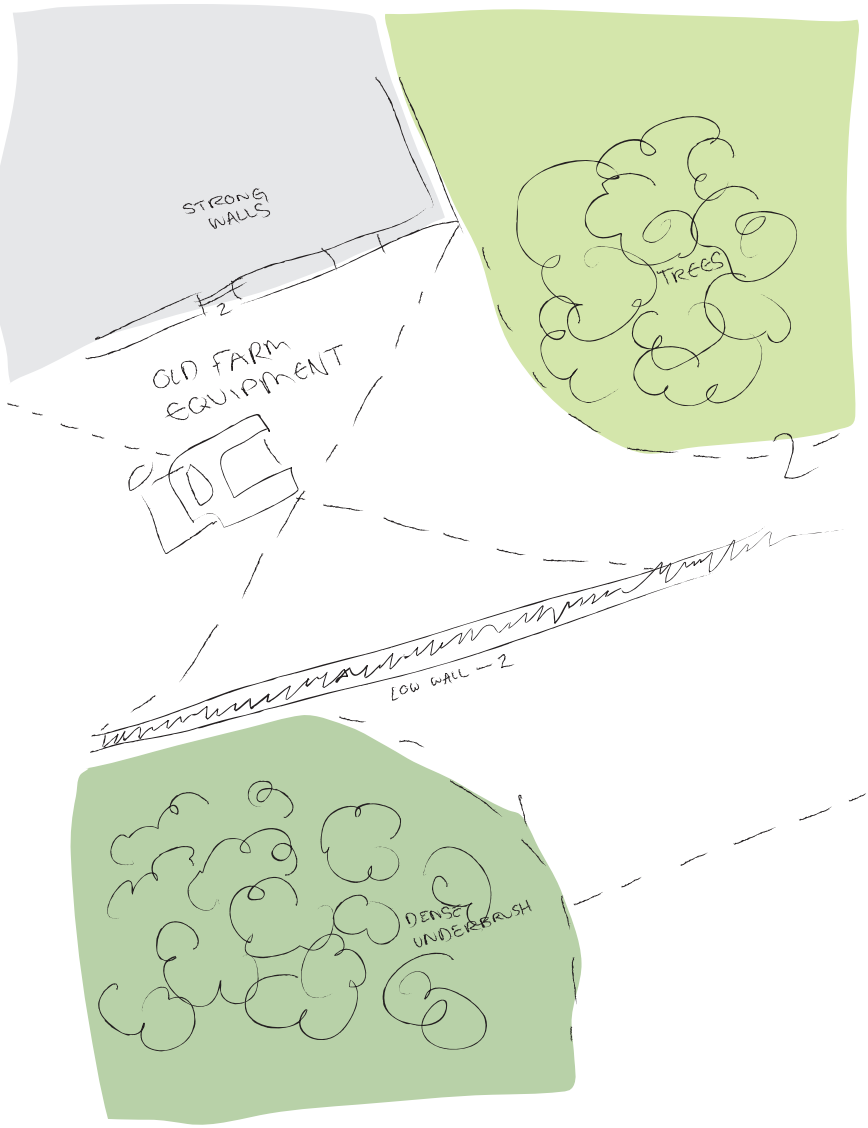
Write the aspects right on the map. If a zone has an Aspect (and this is a great way to model terrain effects), just write the Aspect right on the zone.

Example one: Outdoors

In the map below we have five zones. In the lower left (with a dark green blob under it) is a zone full of scribbles with the Aspect "dense underbrush", which has a border around it with value 1. Entry and exit from the zone is relatively easy but does reduce your movement a bit. Characters inside the zone might tag the zone Aspect defensively to avoid being spotted or reduce the effects of enemy fire. Characters outside the zone might tag the zone Aspect to spot sneaking characters by the moving branches. Anyone might use the zone Aspect as a compel to reduce a character's movement roll or inhibit his shot.

To the right of it is a wide open zone with no Aspects at all. This is a fairly big zone and represents no tactical options. It would probably be wise to get out of here — a zone with Aspects is more powerful to you (and to your enemies) and lets you play the fate point economy, which is a big part of the tactical game.

A low wall with border value 2 divides the map and delinieates the open area that we've divided into four zones. It has a broken truck or something in it and the Aspect "old farm machinery". Entering or exiting the equipment-littered yard is going to be kid of expensive. That "low wall" should also be treated as an Aspect — certainly a good rule of thumb is that if there are words on the map, they are Aspects. Now the wall inhibits movement but also provides cover or any other advantage that a player can narrate around the low wall. Note that we don't really care about the precise position of the old farm equipment — it's drawn there just



to illustrate the Aspect. Any character in that zone can make use of the Aspect regarless of where within the zone the player puts his miniature.

In the upper right is a zone with more scribbles and the Aspect “trees” which has a border with value 2 around it and in the upper left a zone that represents some structure that has the Aspect “strong walls”. There appears to be only one way into the structure: a door with border value 2. Doors are usually stateful borders, so it will cost 2 to open, after which it stays open and costs nothing to pass. For an expenditure of 2 more movement shifts a character could close it again. You might want to dream up a handy notation for stateful borders if they don’t seem intuitive to you.

This map is sufficient for a half dozen characters to interact and have some interesting tactical options available. A map can be much more complicated, obviously, but doesn't need to be: a simpler map suits the system's level of abstraction better than a complicated map.

Example two: Starship Interior

The map for the Manta's main deck is rather more complicated than the previous outdoor map. First, it's bigger — there are a lot more zones. Each zone has been painted one of four colours so that they are distinct from each other. We haven't labelled the ship with any zone Aspects at all, but certainly there's nothing to keep you from doing that— the engineering section might reasonably get "Noisy" if the ship is in operation, for example, and the bridge probably deserves "Crowded".

The longest range on the ship is three zones — that's a long shot down either corridor assuming the doors are open.

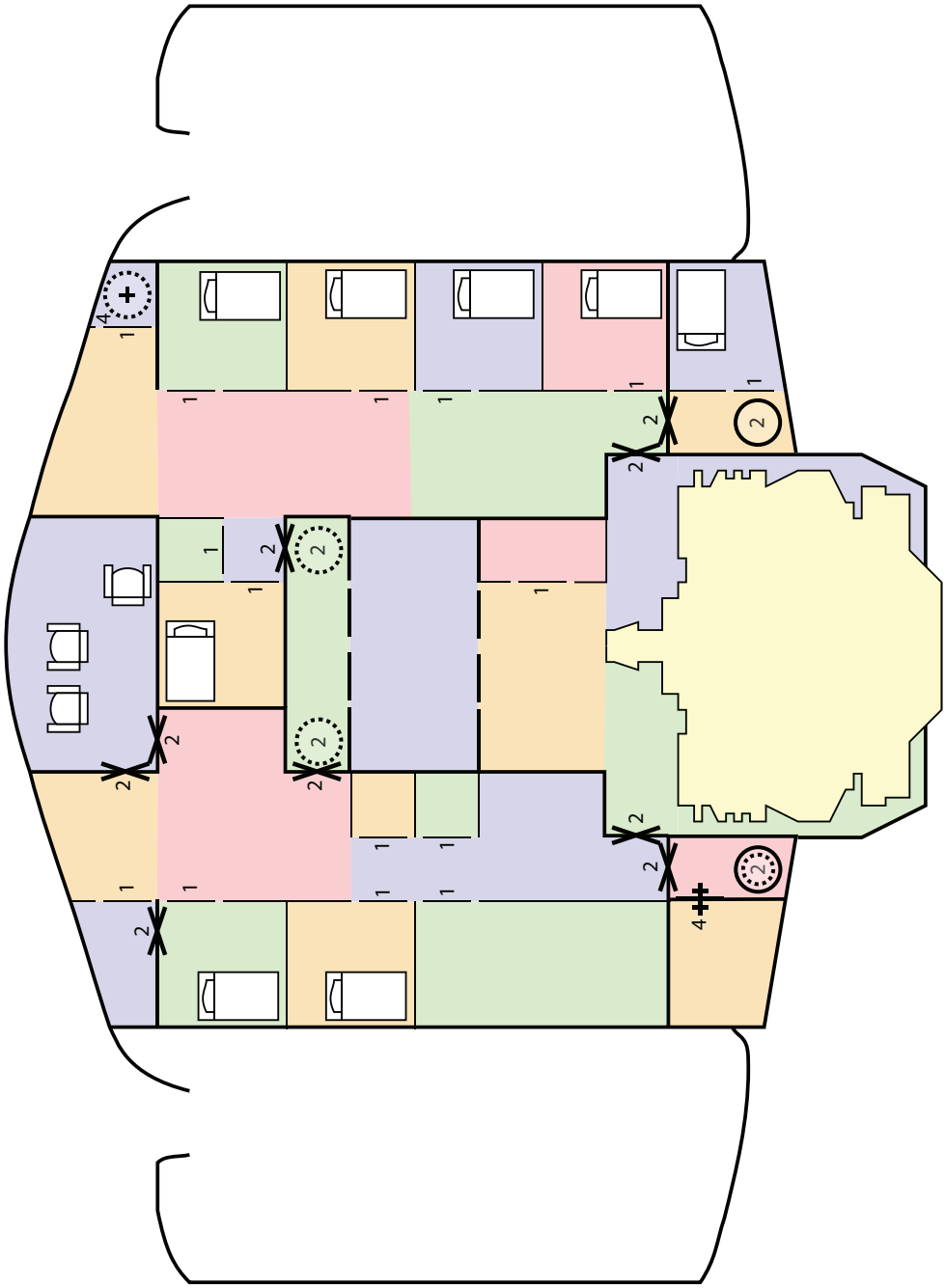
We've used some "standard" symbology on this map and it should be clear how any purchased or free Traveller ship floorplan can be easily mapped out into zones. Here are the (very loose) rules we used:

Rooms with doors that close are a zone, no matter how small.

Split big zones up simply because the range is long.

Overall, try to keep the basic rules for zone ranges: same zone is punching, adjacent zone is poking, on two zones away is throwing, three or more is shooting. Four zones is enought to credibly claim you can escape.

As with the outdoor map, borders (doors in this case) are given numeric values for the number of shifts needed to cross. In all these cases, the borders are stateful. Assume it takes the same number of shifts to open a door as to close it unless the map clearly states otherwise.



Forms

Spirit of the Far Future attempts to embody as many of the tropes in classic Traveller as possible, and one of those is a sense of administrative overhead. To that end, we've included here the sorts of forms you'd expect from any role-playing game, in this case presented as pseudo-Imperial paperwork.

PERSONAL DATA AND HISTORY

1.Date of preparation

2. Name

3. Rank and service

4. Homeworld UWP

5. Commendations

6. ASPECTS

6.1. Homeworld aspect

6.2. Homeworld aspect

6.3. Enlistment aspect

6.4. Enlistment aspect

6.5. Service aspect

6.6. Service aspect

6.7. Cross-training aspect

6.8. Cross-training aspect

6.9. Mustering out aspect

6.10. Mustering out aspect

7. STRESS TRACKS

7.1. Health (3 boxes, 4 if Endurance-1 or 2, 5 if Endurance-3 or 4, 6 if Endurance-5)

☐ ☐ ☐ ☐ ☐ ☐

7.2. Composure (3 boxes, 4 if Resolve-1 or 2, 5 if Resolve-3 or 4, 6 if Resolve-5)

☐ ☐ ☐ ☐ ☐ ☐

7.3. Wealth (boxes, 4 if Credits-1 or 2, 5 if Credits-3 or 4, 6 if Credits-5)

☐ ☐ ☐ ☐ ☐ ☐

8. SKILL ARRAY

	5		4		4
	3		3		3
	2		2		2
	2		1		1
	1		1		1

9. STUNTS

9.1. Stunt and effects

9.2. Stunt and effects

9.3. Stunt and effects

10. Notes

STARSHIP REGISTRATION

1.Tonnage	
2. Starship name	3. Purpose
4. Owner	5. Operator

6. ASPECTS

7. STRESS TRACKS

7.1. Hull

7.2. Data

8. EQUIPMENT

8.1. Jump	8.5. Laser
8.2. Maneuver	8.6. Missile
8.3. Computer	8.7. Sandcaster
8.4. Cargo	8.8. Particle Accelerator

9. STUNTS

9.1. Stunt and effects

9.2. Stunt and effects

9.3. Stunt and effects

9.3. Stunt and effects

10. CREW

10.1. Number of crew	10.5. Gunnery
10.2. Pilot	10.6. Engineering
10.3. Navigation	10.7. Computer
10.4. Commo	10.8. Other

11. MISCELLANEOUS

11. Vehicles