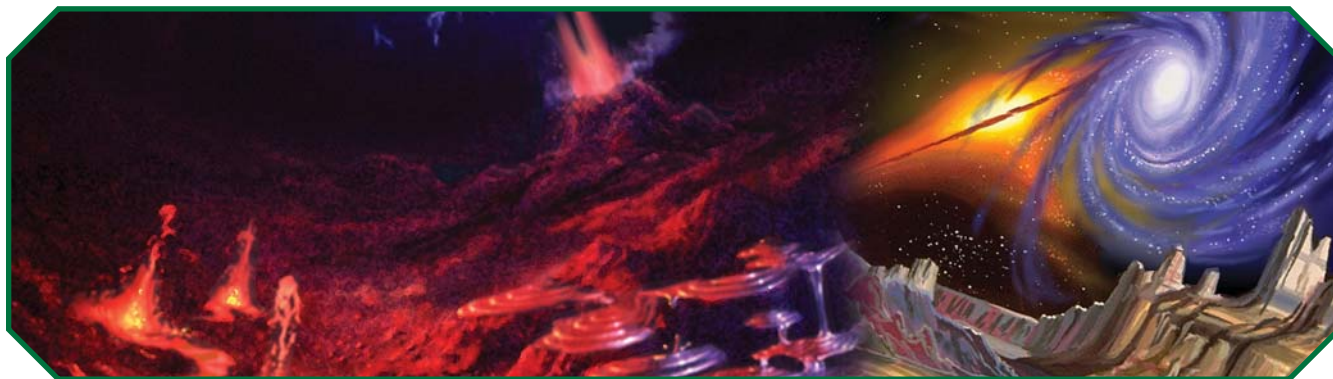


GURPS®

Fourth Edition

SPACE™

PLANETARY RECORD AND WORKSHEET



An e23 Sourcebook for GURPS® from Steve Jackson Games

GURPS, Warehouse 23, and the all-seeing pyramid are registered trademarks of Steve Jackson Games Incorporated. *Pyramid*, *Planetary Record Sheet and Worksheet*, *e23*, and the names of all products published by Steve Jackson Games Incorporated are registered trademarks or trademarks of Steve Jackson Games Incorporated, or used under license. All rights reserved. *Planetary Record Sheet and Worksheet* is copyright © 2006 by Steve Jackson Games Incorporated.

The scanning, uploading, and distribution of this material via the Internet or via any other means without the permission of the publisher is illegal, and punishable by law. Please purchase only authorized electronic editions, and do not participate in or encourage the electronic piracy of copyrighted materials. Your support of the author's rights is appreciated.

**Based on material by JON F. ZEIGLER and
JAMES L. CAMBIAS**

Edited by CHRIS AYLOTT

Graphic Design by JUSTIN DE WITT

Illustrated by ALAN GUTIERREZ

STEVE JACKSON GAMES



Stock #82-0206

Version 1.0, May 12, 2006

These worksheets are designed to track the information generated by the world and system design rules in **GURPS Space**. Once you have compiled this information, you can note down the most important facts on the planetary record sheet (p. 14).

STEP 1: CONCEPT

see p. 74

STEP 2: WORLD TYPE

see pp. 74-77

☐ Hostile

☐ Barren

☐ Garden

Tiny:

☐ Ice

☐ Rock

☐ Sulfur

Small:

☐ Hadean

☐ Ice

☐ Rock

Standard:

☐ Ammonia

☐ Chthonian

☐ Hadean

☐ Garden

☐ Greenhouse

☐ Ice

☐ Ocean

Large:

☐ Ammonia

☐ Chthonian

☐ Garden

☐ Greenhouse

☐ Ice

☐ Ocean

Special World

Type:

☐ Asteroid Belt

☐ Gas Giant

STEP 4: HYDROGRAPHIC COVERAGE

see pp. 81-82

Hydrographic Percentage: _____ %

Asteroid Belt, Tiny World, or Chthonian World: 0%.

Small (Ice) World: 2d×10%; maximum 100%.

Standard (Ice) or Large (Ice) World:
(2d-10)×10%; minimum 0%.

Ammonia World: 2d×10%; maximum 100%.

Standard (Ocean) or Standard (Garden) World: (1d+4)×10%.

Large (Ocean) or Large (Garden) World:
(1d+6)×10%; maximum 100%.

Greenhouse World: (2d-7)×10%; minimum 0%.

STEP 3: ATMOSPHERE

see pp. 78-81

Atmospheric Pressure: _____

Atmospheric Composition: _____

Marginal Atmosphere?

☐ Chlorine or Fluorine

☐ High Carbon Dioxide

☐ High Oxygen

☐ Inert Gases

☐ Low Oxygen

☐ Nitrogen Compounds

☐ Organic Toxins

☐ Pollutants

☐ Sulfur Compounds

☐ Corrosive

☐ Suffocating

Toxic: ☐ Mildly

☐ Highly

☐ Lethally

Effects:

Atmospheric Mass: _____

STEP 5: CLIMATE

see pp. 83-84

_____ × _____ + _____ = _____ K
(3d-3) (step value) (minimum temp. range) Average Surface Temperature

Climate Type: _____ Temperature Range: _____ °F

_____ × [1 + (_____ × _____)] = _____
(absorption factor) (atmospheric mass) (greenhouse factor) (blackbody correction)
from Step 3

Blackbody Temperature (average surface temperature divided by blackbody correction): _____ K

STEP 6: WORLD SIZE

see pp. 85-87

Density: _____

Figuring World Diameter First:

Square root of (_____ / _____) × _____ = _____
(blackbody temperature) (density) (minimum size) (minimum possible diameter)

Square root of (_____ / _____) × _____ = _____
(blackbody temperature) (density) (maximum size) (maximum possible diameter)

_____ × _____ = _____
(density) (diameter) (surface gravity)

Figuring Surface Gravity First:

Square root of (_____ × _____) × _____ = _____
(blackbody temperature) (density) (minimum size) (minimum possible gravity)

Square root of (_____ × _____) × _____ = _____
(blackbody temperature) (density) (maximum size) (maximum possible gravity)

_____ / _____ = _____
(surface gravity) (density) (diameter)

Diameter: _____

Surface Gravity: _____

Planetary Record Map Hex Size: _____ mi. (diameter × 0.07)

STEP 7: RESOURCES AND HABITABILITY

see pp. 87-88

Overall Value: _____

Resource Value Modifier (RVM): _____

+ Habitability Score: _____

= Affinity Modifier: _____

STEP 8: SETTLEMENT TYPE

see pp. 89-90

- ☐ Homeworld
- ☐ Colony
- ☐ Uninhabited

- ☐ Outpost: Military
- ☐ Outpost: Way Station
- ☐ Other Outpost: _____

STEP 9: TECHNOLOGY LEVEL

see pp. 90-91

Setting TL: _____ World TL: _____ ☐ Advanced
☐ Delayed

STEP 10: POPULATION

see pp. 91-93

_____ × _____ × _____ = _____
(base carrying capacity) (affinity modifier) (world's diameter) (carrying capacity)
from Step 7 from Step 6

Carrying Capacity for aliens with special needs:

Current Population: _____ Population Rating: _____

STEP 11: SOCIETY TYPE

see pp. 93-94

- | | | |
|--|---|---------------------------------------|
| ☐ Anarchy | ☐ Caste | ☐ Clan/Tribal |
| ☐ Corporate State | ☐ Democracy | ☐ Dictatorship |
| | ☐ Athenian | |
| | ☐ Representative | |
| ☐ Feudal | ☐ Technocracy | ☐ Theocracy |

World Unity:

- | | |
|------------------------------------|---|
| ☐ Diffuse | ☐ Factionalized |
| ☐ Coalition | ☐ World Government |

Special Conditions:

- | | | |
|--------------------------------------|--------------------------------------|--|
| ☐ Bureaucracy | ☐ Colony | ☐ Cybercracy |
| ☐ Matriarchy | ☐ Meritocracy | ☐ Military Government |
| ☐ Oligarchy | ☐ Patriarchy | ☐ Sanctuary |
| ☐ Socialist | ☐ Subjugated | ☐ Utopia |

STEP 12: CONTROL RATING

see pp. 94-95

Overall Rating: _____

Split Ratings: _____



STEP 13: ECONOMICS

see pp. 95-96

(base per-capita income) + (total income modifiers) = (per-capita income)

Final per-capita income / base per-capita income = _____
(ratio)

Typical Wealth Level: _____ (based on ratio above)

Economic Volume: _____ = per-capita income x population (from Step 10)



STEP 14: BASES AND INSTALLATIONS

see pp. 96-98

Spaceports

- ☐ Class V: Full Facilities (Requires high trade, or PR6+ and a roll of PR+2 or less)
- ☐ Class IV: Standard Facilities (Requires high trade, or PR6+ and a roll of PR+5 or less)
- ☐ Class III: Local Facilities (Requires moderate trade, or a roll of PR+8 or less)
- ☐ Class II: Frontier Facilities (Present on a roll of PR+7 or less)
- ☐ Class I: Emergency Facilities (Present on a roll of 14 or less)
- ☐ Class 0: No Facilities

Installations

- ☐ Alien Enclave (Present on a roll of 6 or less)
- ☐ Black Market (Present on a roll of 9-CR or less)
- ☐ Colonial Office
(Present if PR 3+, on a roll of PR+4 or less)
- ☐ Corporate Headquarters
(Present if PR 6+, TL7+, on a roll of PR+3 or less)
PR: _____ (1d-3)
- ☐ Criminal Base (Present on a roll of PR+3 or less)
PR: _____ (1d-3)

- ☐ Espionage Facility (Present on roll of PR+6 or less)
Type: _____
(1-4: civilian, 5: friendly military, 6: enemy military)
PR: _____ (1d-4 if civilian, 1d-2 if military)

Additional Facilities

(continue rolling until a roll fails):

Type: _____	PR: _____
Type: _____	PR: _____
Type: _____	PR: _____
Type: _____	PR: _____

- ☐ Government Research Station
(Present on a roll of 12 or less)
PR: _____ (1d-4) ☐ Secret
(Roll 1d, station is secret on 1-2)
Second Government Research Station
(If first station exists, on a roll of PR or less)
PR: _____ (1d-4) ☐ Secret
(Roll 1d, station is secret on 1-2)

- ☐ Mercenary Base (Present on a roll of PR+3 or less)
PR: _____ (1d-3)
- ☐ Nature Preserve
(Present on a roll of 12-PR or less)
- ☐ Naval Base
(Present if there is a Class V starport, or on a roll of PR+3 or less)
PR: _____ (1d-1)
- ☐ Patrol Base
(Present if there is a Class IV or V starport, or on a roll of PR+4 or less)
PR: _____ (1d-2)
- ☐ Pirate Base (Present on a roll of 8-CR or less)
Pirate Base PR: _____ (1d-3)

- ☐ Private Research Center
(Present on a roll of PR+4 or less)
PR: _____ (1d-4)
Additional Private Research Center
(roll PR+4 or less again, if there is one center)
PR: _____ (1d-4)
Additional Private Research Center
(roll PR+4 or less again, if there are two centers)
PR: _____ (1d-4)

- ☐ Rebel or Terrorist Base (Present on a roll of 9 or less)
PR: _____ (1d-3)

- ☐ Refugee Camp (Present on a roll of PR-3 or less)
PR: _____ (1d-3)
Additional Camps
(continue rolling until a roll fails):
PR: _____ PR: _____
PR: _____ PR: _____

- ☐ Religious Center (Present on a roll of PR-3 or less)
PR: _____ (1d-3)

- ☐ Special Justice Group Office
(Present on a roll of PR or less)
PR: _____ (1d-3) ☐ Covert
(Roll 1d, office is covert on 1 or 2)

- ☐ Survey Base
(Present if there is a Class IV or V spaceport, on a roll of PR+3 or less)
PR: _____ (1d-3)

- ☐ University (Present on a roll of PR-6 or less)
PR: _____
(Roll 1d; PR 3 on 1 or 2, PR 4 on 3 or 4 PR 5 on 5 or 6)

- ☐ Prison
(Present only if there are no other installations, on a roll of 10-PR or less)
Prison Base PR: _____ (1d-3)



STEP 15: NUMBER OF STARS

see p. 100

First Star: _____

Second Star: _____

Third Star: _____

STEP 16: STAR MASSES

see p. 101

STEP 17: STAR SYSTEM AGE

see pp. 101-102

Population: _____
(base age) + (step A) + (step B) = Age: _____

STEP 18: STELLAR CHARACTERISTICS

see pp. 102-105

Star	Type	Temp	L-Min	L-Max	M-Span	S-Span	G-Span
1	_____	_____	_____	_____	_____	_____	_____
2	_____	_____	_____	_____	_____	_____	_____
3	_____	_____	_____	_____	_____	_____	_____

Star	Current Stage	Luminosity	Temperature	Radius
1	_____	_____	_____	_____
2	_____	_____	_____	_____
3	_____	_____	_____	_____

STEP 19: COMPANION STAR ORBITS

see pp. 105-106

Star	Separation	Radius Multiplier	Eccentricity	Minimum Separation	Maximum Separation
2	_____	_____	_____	_____	_____
3	_____	_____	_____	_____	_____

STEP 20: LOCATE ORBITAL ZONES

see pp. 106-107

Inner Limit Radius: _____
Outer Limit Radius: _____
Snow Line: _____

Forbidden Orbits

Inner Edge: _____
Outer Edge: _____

STEP 21: PLACING FIRST PLANETS

see pp. 107-108

First Gas Giant Orbital Radius: _____

Pre-Designed World Orbital Radius: _____



STEP 22: PLACE PLANETARY ORBITS

see pp. 108-109

Inward	Outward
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

STEP 23: PLACE WORLDS

see pp. 109-111

Planet Number	Orbital Radius	Type	Size
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____

STEP 24: PLACE MOONS

see pp. 111-112

Planet	Inner Moonlets	Rings?	Major Moons (Size Class)	Outer Moonlets
1.	_____	☐	_____	_____
2.	_____	☐	_____	_____
3.	_____	☐	_____	_____
4.	_____	☐	_____	_____
5.	_____	☐	_____	_____
6.	_____	☐	_____	_____
7.	_____	☐	_____	_____
8.	_____	☐	_____	_____
9.	_____	☐	_____	_____
10.	_____	☐	_____	_____
11.	_____	☐	_____	_____
12.	_____	☐	_____	_____
13.	_____	☐	_____	_____
14.	_____	☐	_____	_____

STEP 25: WORLD TYPES

see pp. 113-114

Planet	Blackbody Temperature	World Type
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____
11.	_____	_____
12.	_____	_____
13.	_____	_____
14.	_____	_____

STEP 26: ATMOSPHERE

see p. 114
see also pp. 78-81

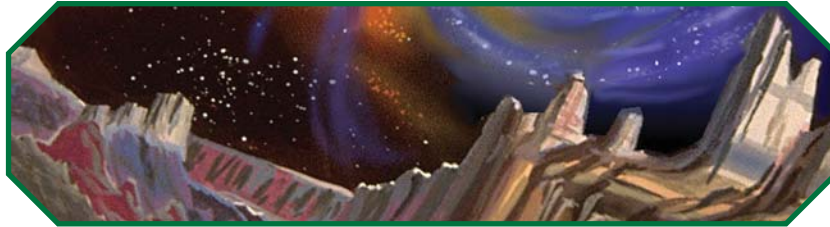
Orbit	Atmospheric Pressure	Composition Marginal?	Corrosive	Suffocating	Toxicity
1.	_____	_____	☐	☐	_____
2.	_____	_____	☐	☐	_____
3.	_____	_____	☐	☐	_____
4.	_____	_____	☐	☐	_____
5.	_____	_____	☐	☐	_____
6.	_____	_____	☐	☐	_____
7.	_____	_____	☐	☐	_____
8.	_____	_____	☐	☐	_____
9.	_____	_____	☐	☐	_____
10.	_____	_____	☐	☐	_____
11.	_____	_____	☐	☐	_____
12.	_____	_____	☐	☐	_____
13.	_____	_____	☐	☐	_____
14.	_____	_____	☐	☐	_____

STEP 27-28: HYDROGRAPHICS AND CLIMATE

see p. 114

see also pp. 81-84

Orbit	Hydrographic %	Blackbody Correction	Average Surface Temperature	Climate Type
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				



STEP 29: WORLD SIZES

see pp. 114-115

see also pp. 84-87

[illegible]

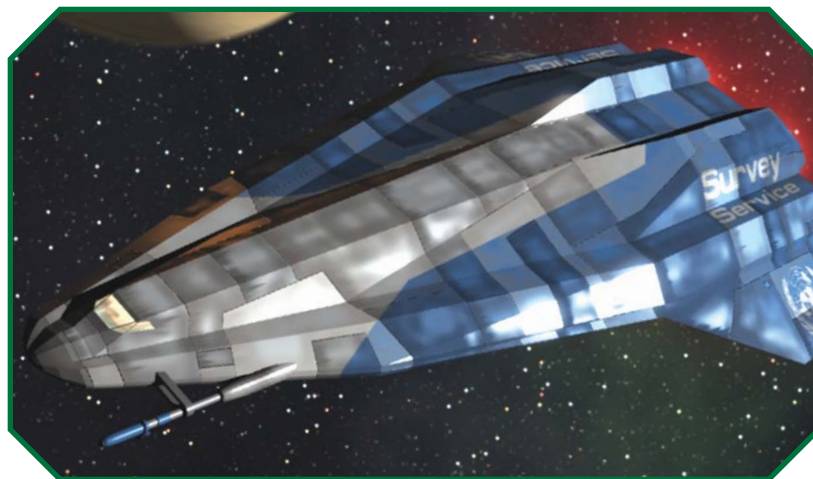
STEP 30: DYNAMIC PARAMETERS

see pp. 115-119

Stellar Orbital Period(s): _____

Stellar Mass(es): _____ (from Step 16)

Orbit	Orbital Radius (from Step 23)	Orbital Period	Planetary Planetary Eccentricity	Minimum Separation	Maximum Separation
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					

[illegible]

STEP 30: DYNAMIC PARAMETERS (CONTINUED)

[illegible]

STEP 31-32: GEOLOGIC ACTIVITY, RESOURCES AND HABITABILITY see pp.

see pp. 119-121
see also pp. 87-88

[illegible]

STEP 33-35: SETTLEMENT TYPE, TECHNOLOGY LEVEL, POPULATION

see pp. 121-122

[illegible]

STEP 36-37: SOCIETY TYPE AND CONTROL RATING

see p. 123

see also pp. 93-95

[illegible]

STEP 38: ECONOMICS

see p. 123
see also pp. 95-96

Planet or Moon	Base Per-Capita Income	+	Total Income Modifiers	=	Per-Capita Income	Typical Wealth Level	Economic Volume
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			
		+		=			

Trade Volume Constant (K): _____

World One	World Two	Distance	Trade Volume

Trade Routes:

STEP 39: BASES AND INSTALLATIONS

see p. 123

see also pp. 96-98

Planet or Moon

Facility

Spaceport Class V

Spaceport Class IV

Spaceport Class III

Spaceport Class II

Spaceport Class I

Alien Enclave

Black Market

Colonial Office

Corporate Headquarters

Criminal Base

Espionage Facility

Government Research Station

Mercenary Base

Nature Preserve

Naval Base

Patrol Base

Pirate Base

Prison

Private Research Center

Rebel or Terrorist Base

Refugee Camp

Religious Center

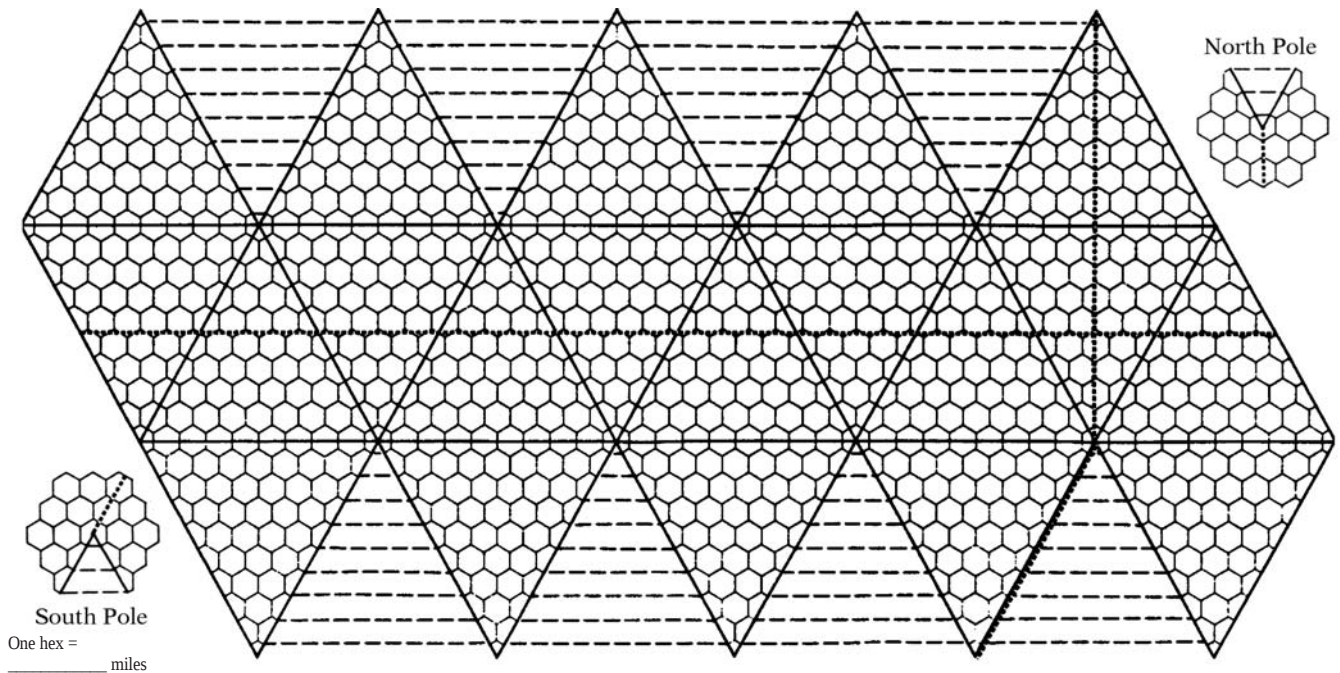
Special Justice Group Office

Survey Base

University

ADDITIONAL NOTES:

PLANETARY RECORD



World Type: _____ Diameter: _____ mi. Gravity: _____ G Density: _____
 Axial Tilt: _____° Atmospheric Pressure: _____ Atmospheric Composition: _____
 Hydrographic %: _____ Climate Type: _____ Temperature Range: _____
 Resource Value Modifier: _____ Habitability Score: _____

Biosphere:

Dominant Life Form: _____
 Other Significant Life Forms: _____

Settlement Type:

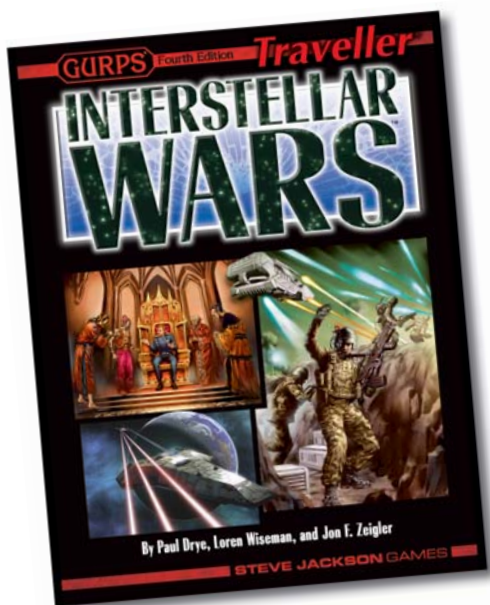
Population: _____ Tech Level(s): _____ Control Rating: _____
 Society Type: _____ World Unity: _____ Special Conditions: _____
 Per-Capita Income: _____ Economic Volume: _____ Typical Wealth Level: _____
 Major Trading Partners: _____
 Starports: _____
 Installations: _____
 Moon(s): _____
 Other Notes: _____

System Information:

Star Name: _____ Type: _____ Luminosity: _____ Location: _____
 Companion Star(s): _____ Number of Planets: _____

Planet	Name	Orbital Radius	Type	Diameter	Density	Gravity	Atmosphere	Notes
1.	_____	_____	_____	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____	_____	_____	_____
6.	_____	_____	_____	_____	_____	_____	_____	_____
7.	_____	_____	_____	_____	_____	_____	_____	_____
8.	_____	_____	_____	_____	_____	_____	_____	_____
9.	_____	_____	_____	_____	_____	_____	_____	_____
10.	_____	_____	_____	_____	_____	_____	_____	_____
11.	_____	_____	_____	_____	_____	_____	_____	_____
12.	_____	_____	_____	_____	_____	_____	_____	_____
13.	_____	_____	_____	_____	_____	_____	_____	_____
14.	_____	_____	_____	_____	_____	_____	_____	_____

GURPS® Traveller® *Interstellar Wars*, now available in print . . .



Or,



Available as a PDF on e23!



Stuck for an adventure? No problem.

**e23 sells high-quality
game adventures
and supplements
in PDF format.**

- Get complete sample adventures free!
- PDFs from the major players in online publishing – plus gems from the up-and-comers, and digital editions of out-of-print classics.
- See the ratings other users have given . . . and add your own ratings.
- Buy it once, have it always. Download your purchases again whenever you need to.

Download ● Print ● Play

e23 is part of Warehouse 23, the online store at Steve Jackson Games. Warehouse 23 is also the official Internet retailer for Dork Storm Press, Atlas Games, and many other publishers. Visit us today at www.warehouse23.com for all your game STUFF!