Bluž, Naždur
Age 42
Navy, Engr 1; Scout, Courier 2
Promo Term 26
HW: Kamaj

Qualifications: Astrogation, Comms, Diplomat,
  Engineer (PP, MD, LS), Life Science (Biology),
  Medic, Mechanical, Pilot (Spacecraft),
  Sensors, Survival, Zero G

1: Forced out of the Navy after causing death of
  crewman. Plead Guilty.
2: Rescue - Failed
3: Alien Contact - Classified
4: Jumped by Pirates - Decorated
5: Route.
6: Alien Contact - Classified

Burns, Ellen, MD
Age 42 F
HW: not yet defined; no HW skills.

Qualifications: Comms, Medic, Investigate, Life
  Science (Cybernetics, Psionicology),
  Persuade, Physical Science (Chemistry),
  Social Science (Psychology),

1 Breakthrough in limb reattachment prep
2 Secret Project 94B
4 Debunk a Charlatan
6 Victim of Home invasion.

Choi, Sawan, Cpl
Age 33 F
HW: Sheboygan
Scholar Scientist 3, Sp.Pat Tech 1
P T1234

Qualifications:Admin, Engineer (JD), Investigate,
  Physical Science (Physics), Vacc Suit 1

1 Secret Physics Project
2 Prestigious Prize - Concordat Physics Prize
3 Accused of crime; Not convicted, but broke

Dagger, Dirk, Ensign, Scout
Age 50
HW: Alfar   Ni
Navy, Engr 4; Scholar, Field Scientist 1; Scout,
  Survey 3
Pr T12 67   Comm T3
TAS

Qualifications: Astrogation, Computer, Engineer
  (JD), Gun Combat (Pistol), Gunner (Turret),
  Mechanic, Melee (blade), Persuade, Physical
  Science (Physics), Recon, Sensors, Space
  Science (Planetology), Steward, Survival, Vacc
  Suit

1: Foil crime aboard. Enemy, +2 Adv
2 Diplomatic Mission.
3: Op to abuse position. Refuse, +2Adv
4 Diplomatic Mission
5 Expedition goes wrong, job lost
6 Survey Route -
7: Rescue Success.
8: Exempary Service

Harker, Nathaniel Thorsten, Corporal
Age 20 M
HW: Kamaj, Ga Hi
Promotion Term 1

Qualifications: Gunnery (Turret), Vacc Suit

1: Secret Mission - Project 35Z

McCree, Rhonda, Lt
Age 31
Homwworld Kamaj - Mainlander

Patrol, Trooper 1t
Commission in term 1

Qualifications: Guner (Missile), Leadership,
  Remote Ops, Tactics (ground), Zero G

1: Haz Mission

Novaya, Celia, Lt
Age 23 F
Homeworld Coatl
Patrol, Trooper 1t
Commission in term 1

Gun Combat (Rifle, Heavy Wpns), Leadership,
  Medic, Vacc Suit, Zero G

1: Vacc Suit Training

Quincy, Jonas Jonathon, Lt
Age 31
Homwworld Quetzal
Navy, Line 3t
Commission in term 1
Promotions in terms 2,3

Qualifications: Admin, Astrogation, Computer,
  Gunner (turret), Vacc Suit, Zero G

1: NE- Save Crewman, Ally
2: Astroid Belt Duty
3: Advanced Training Computer

Tuit,Shelton Meyer, Top Sergeant
Age 62
Homeworld, Aurora
Space Patrol Tech 6 Trooper 5
Promo in term: 2346789AB
TAS Member

Admin, Athletics (Strength), Gunnery,
  Computers, Gun Combat (Slug Rifle),
  Mechanical, Melee (Blade), Pilot (Ships),
  Sensors, Tactics (Military, Naval), Vacc Suit,
  Zero G

1. Shore Duty - Admin
2. Border Worlds tour.
3. Cause death of 2 Crew in order to save the
  ship
5. Major Space Battle - The Argor Band
6. Hazardous mission
7. Action Vs Pirates
8. Hazardous mission
10. Captured by pirates

Tuit, Zari, Private
Age 19 F
Homeworld: Racine.
Left Bank, Uplands.
Space Patrol Tech 0

Skill List

Admin

Advocate

Animals (Farming, Riding, Training, Veterinary)

Athletics (Archery, Co-ordination, Endurance, Flying, Strength)

Art (Acting, Dance, Holography, Instrument, Sculpting, Writing)

Astrogation

Battle Dress

Broker

Carouse

Combat Engineering (Fortifications, Camouflage, Land Mines, Sensor Surveillance)

Comms

Computers

Deception

Diplomat

Discipline

Drive (Hover, Mole, Tracked, Wheeled)

Engineer (Manoeuvre Drive (M-Drive), Jump Drive (J-Drive), Electronics, Life Support, Power

Explosives

Flyer (Grav, Rotor, Wing)

Gambler

Gunner (Turrets, Ortillery, Screens, Capital Weapons)

Gun Combat (Slug Carbine, Slug Rifle, Slug Pistol, Shotgun, Energy Rifle, Energy Pistol, Zero-G Weapons)

Heavy Weapons (Flamethrowers, Launchers, Man Portable Artillery, Field Artillery)

Instruction

Interrogation (Doubletalk, Torture)

Investigate

Jack of All Trades

Language (Anglic, ___)

Leadership

Life Sciences (Biology, Cybernetics, Genetics, Psionicology)

Mechanic

Medic

Melee (Unarmed Combat, Blade, Bludgeon, Natural Weapons)

Navigation

Persuade

Pilot (Small Craft, Spacecraft, Capital Ships

Physical Sciences (Physics, Chemistry, Electronics) Recon

Recruiting

Remote Operations

Seafarer (Personal, Sail, Submarine, Ocean Ships, Motorboats)

Sensors

Social Sciences (Archeology, Economics, History, Linguistics, Philosophy, Psychology, Sophontology)

Space Sciences (Planetology, Robotics, Xenology)

Stealth

Steward

Streetwise

Survival

Tactics (Military Tactics, Naval Tactics)

Trade (Biologicals, Civil Engineering, Space Construction, Hydroponics, Polymers)

Vacc Suit

Weapon Engineering (Drones, Blades, Slug Throwers, Energy Weapons, Weapons)

Zero-G

Homeworld: Growing up on your homeworld gave you skills that depend on the planet's nature. You can select any skill that matches your homeworld's planetary description and trade codes. If you came from a planet already established, then consult those sources for the planet's description.

Ag	Agricultural:	Animals 0
As	Asteroid:	Zero-G 0
De	Desert:	Survival 0
Fl	Fluid Oceans:	Seafarer 0
Ga	Garden:	Animals 0
Ht	High Technology:	Computers 0
Hi	High Population:	Streetwise 0
Ic	Ice-Capped:	Vacc Suit 0
In	Industrial:	Trade 0
Lt	Low Technology:	Survival 0
Po	Poor:	Animals 0
Ri	Rich:	Carouse 0
Wa	Water World:	Seafarer 0
Va	Vacuum:	Vacc Suit 0

Education: A formal education gives you a basic level of competence in various sciences and academic disciplines. Any character may choose from the following list:

Admin 0, Advocate 0, Art 0, Carouse 0, Comms 0, Computer 0, Drive 0, Engineer 0, Language 0, Medic 0, Physical Science 0, Life Science 0, Social Science 0, Space Science 0, Trade 0.

Skill Packages
As a group, select one of the following skill packages.

Traveller Skill Package: Pilot (any) 1, Sensors 1, Comms 1, Gunner (any) 1, Gun Combat (any) 1, Persuade 1, Stealth 1, Medic 1.

Mercenary Skill Package: Sensors 1, Comms 1, Medic 1, Leadership 1, Heavy Weapons (any) 1, Gun Combat (any) 1, Gun Combat (any) 1, Stealth 1.

Trader Skill Package: Pilot (any) 1, Sensors 1, Medic 1, Streetwise 1, Broker 1, Advocate 1, Diplomat 1, Astrogation 1.

Starship Skills Package: Pilot (any) 1, Gunner (any) 1, Engineer (any) 1, Mechanic 1, Sensors 1, Medic 1, Comms 1, Astrogation 1.

Explorer Skills Package: Pilot (any) 1, Astrogation 1, Sensors 1, Survival 1, Recon 1, Gun Combat (any) 1, Stealth 1, Medic 1

Diplomat Skill Package: Advocate 1, Diplomat 1, Persuade 1, Stealth 1, Streetwise 1, Deception 1, Computers 1, Comms 1.

Investigator Skill Package: Advocate 1, Admin 1, Investigate 1, Persuade 1, Stealth 1, Streetwise 1, Computers 1, Sensors 1, Gun Combat (any) 1

Criminal Skill Package: Pilot (any) 1, Sensors 1, Stealth 1, Deception 1, Persuade 1, Streetwise 1, Broker 1, Medic 1.

Ageing Table (2d6-Terms)							
Roll	1+	0	-1	-2	-3	-4	-5	-6
P-1	0	1	2	3	2	1	0	0
P-2	0	0	0	0	1	2	3	3
M-1	0	0	0	0	0	0	0	1

Homebrew Task Variant
2d6+(A+B) for….

Simple	4+	MT
Easy	6+	
Routine	8+	MT
Average	10+	
Difficult	12+	MT
VDifficult	14+	
Formidable	16+	MT
V Formidable	18+	
Impossible	20+	MT

3d6-(A+B) x 1/2 minimum time
A or B can be stat or skill or special rating.

VehD	SH	DH	TH	SpD
0	0	0	0	0
1-3	1	0	0	1-4
4-6	2	0	0	5-8
7-9	0	1	0	9-12
10-12	3	0	0	13-16
13-15	2	1	0	17-20
16-18	0	2	0	21-24
19-21	0	0	1	25-28
22-24	1	0	1	29-32
25-27	0	1	1	33-36
28-30	1	1	1	37-40
31-33	0	0	2	41-44

Rng	P	Cl	Sh	M	L	VL	D
Max Rng	1.5	3	12	50	250	500	
Melee Attacks							
Unarmed	+0	−1	—	—	—	—	—
Sm Blade	+0	−1	—	—	—	—	—
Lg Blade	−1	+0	—	—	—	—	—
Bludgeon	−1	+0	—	—	—	—	—
Ranged Attacks							
Thrown	—	+0	−1	−2	—	—	—
Pistol	−1	+0	+0	−2	−4	—	—
Rifle	−3	−1	+0	+0	+0	−2	−4
Shotgun	−2	+0	−1	−2	−3	—	—
Assault Wp	−1	+0	+0	+0	−2	−4	−6
Rocket	−4	−2	−1	+0	+0	−2	−4
Parabolic Attacks							
Thrown	—	-1	-2	-3	—	—	—
Launcher	—	—	—	−2	−3	—	—
Artillery	—	—	—	—	+0	+0	−1
Natural Attacks							
Claw	+0	−1	—	—	—	—	—
Teeth	+0	−1	—	—	—	—	—
Horns	+0	−1	—	—	—	—	—
Hooves	−1	+0	—	—	—	—	—
Stinger	−1	+0	—	—	—	—	—
Thrasher	+0	−1	—	—	—	—	—

ELESTRIAL CONCORDAT
CENTRAL COMMITTEE
BRIEFING DOCUMENT

CONCORDAT SURVEY RESULTS
YAL 999

SECURITY CLEARANCE: VIOLET
EFFECTIVE DATE: 25/13/999
PREPARATION DATE: 20/13/999
DISTRIBUTION DATE: 1/0/1000
DISTRIBUTION LIST:
- ALL SPACER-TICKET HOLDERS.
- ALL MEMBER GOVERNMENTS.
- ALL HIGHER EDUCATION INSTITUTIONS.

Concordat Briefing Data

Definitions

Name	Hex	U	P	P		B	P M G P T	TradeCodes
System Listing	Or	*	S A H P G L	TL			P M T Z	Trade Codes

Name is name of word

Hex is Hex Number

UPP is A-BCDEFG-H

A	Starport	X,E,D,C,B,A
B	Size	R,S,0-C
C	Atmosphere	0-F
D	Hydrographics	0-A
E	Population	0-C
F	Government	0-H
G	Law Level	0-H,J-N
H	Tech Level	0-B

B is bases

N	★	Navy
S	▲	Scout/Mail System
R	⊗	Research
H	♥	Hostel
P	☠	Pirate
C	�	Consulate
L	⊙	Law Enf. (Space Patrol)

PMGPT is

P	Population Multiplier
M	Moons
G	Gas Giants in System
P	Planetoid Belts in System
T	Temperature (FCTHB)

	P	Plutonian
	F	Frozen
	C	Cold
	T	Temperate
	H	Hot
	R	Roasting

PMTZ is

P	Population Multiplier
M	Moons
T	Temperature (FCTHB)
Z	Stellar Zone (I,H,O)

Or is Orbit Number

P is primary Star

Trade Codes

See Core Rulebook

Mainworld Symbols

◎	No Water, Pop
◉	Water, Pop
◑	Fluid, Pop
○	No Water, No Pop
●	Water/Fluid No Pop
☼	Unknown System
☀	Star Only, no worlds
❖	Asteroid Belt Mainworld

Other Symbols

∅	Gas Giants
∴	Planetoid Belts

Map Grid	Center Stuff
0409	✎ Hex
▲★ A ⊙✱☠	✎Starport
♥⊗ ◉ ∅ ∴	✎Mainworld
KANAJ	✎Name
✍ ✍	Side stuff
Bases Bases	Upper Row
Bases Other	Lower Row

Office of Standards

Official Calendar Months

M	Days (Julian)	
0	1	Landing
1	28 (2-29)	March
2	28 (30-57)	April
3	28 (58-85)	May
4	28 (86-113)	June
5	28 (114-141)	July
6	28 (142-169)	August
7	28 (170-197)	September
8	28 (198-225)	October
9	28 (226-253)	November
10	28 (254-281)	December
11	28 (282-309)	January
12	28 (310-337)	February
13	28 (338-365)	Flight
14	1 (366)	Jump

Jump is observed every 4th year only, per Command Council of YAL 10

Official Week Names

Origin unknown, Traditional

Days	Name
1-7	New
8-14	Waxing
15-21	Full
22-28	Waning

Official Day Names

Origin unknown, Traditional

1	Sunday
2	Monday
3	Tuesday
4	Wensday
5	Thursday
6	Friday
7	Saturday

Official Times

Year:	365.25 standard days
	1 day + 13 months
	Every 4th year: + 1 day
Month:	28 Standard Days
	4 Standard Weeks
Day:	24 standard hours
Hour:	60 Standard Minutes
Minute	60 Standard Seconds

Second: 9,192,631,770 cycles of Cesium 133 radiation

Shorthand dates: d/m/yyyy
dd/mm/yyyy

Standard Measures

1G:	$10 m/s^2$
C:	300,000,000m/s
1Td	$14 m^3$
1Tc	$10 m^3$ or 10Mg
1Tm	10Mg aka10,000kg
G_:	$1E9\_$
M_:	$1E6\_$
K_:	$1E3\_$

Currencies of the Concordat (and value in Cr)

Cr, Crc	Concordat Credits	A9 (1)
$\mathcal{M}$	Elestrial Mark	A9 (1)
Bu	Kamaj Buck	AA(1.07)
	Racine	D2 (0.07)
P	Quetzal - Aztican Peso (per 10)	AB (1.14)
$	Quetzal - Mayaci Dollare	AB(1.10)
¢	Quetzal - Olmecan Coin	BB (1.07)
Ag	Auroran Glows (Defunct)	A8 (0.93)
₩	Alfar Unit, Work Unit	E8 (.64)

The Concordat

The concordat consists of approximately 1.2 billion Humans on 5 major worlds. The status of the primate colony in the Aurora System is unknown, as is the Aurora Separatist Human Colony. At this time, no contact is had with outside populations, and the Concordat sciences are insufficient to jump outside the Alfar Trace. All humans in the Trace, including the extinct population of Aurora I, are descended from the original colonial expedition which arrived on 1/0/0.

The Central Government is a Civil Service Bureaucracy with appointments made by the Central Committee. Each member government receives two voting ambassadors on this committee, and three non-voting Ambassadors-cadet on the committee. All member governments select their cadets however seen fit; the remaining counselors select from a member's cadets when a vacancy occurs. Ambassadors and Ambassadors-Cadet may be removed by their Government or by majority vote of the Council. No Ambassador may be removed by their government until having served at least 4 years.

The concordat maintains a small navy, and a mail fleet. Mail couriers depart mondays on the Kemaj—Quetzal and Quetzal —Elestial runs. The Elestial—Racine run departs Elestial on Waxing Mondays and Racine on Waning Mondays. Additionally, a ship is left on-station at racine, crews changed with the mail run, in case of emergency; the ship rotates back to Quetzal in march and july for maintenance.

For traditional reasons, the mail fleet is known as the Scout Service; duties include the mail and census bureaus.

Concordat "citizenship" is solely through citizenship of a member government.

The constitutional document, Signed 1/0/524 YAL, is entitled the Concord of Elestial. It guarantees a navy, a space marine, space patrol, and a mail service, with census detail assigned to the mail service, guarantees that Nobles may retain and continue to pass on titles while residing in other member polities, guarantees local governmental autonomy, bans Chemical, Nuclear, Biological, and Meson warfare under pain of genocide, and forbids internal or external genocide on worlds with member populations. The Concordat provides right of appeal to local convictions of citizens by other than their home polity, provides for extradition procedures, and defines murder, barratry, piracy, kidnapping, treason against the concordat, currency forgery, and mail tampering as Concordat Crimes.

Concordat Documentary History begins only a few years before landing. What is known is that there are humans from at least to home worlds, Dirt and Terra; which is which is unknown at present. Two non-human races share origins on one of them, Simians, a 1 to 1.5m tall species with prehensile feet, limited fur, and generally heightened sexuality, and Vargr, which appear to be related to wolves on both homeworlds. Both these species were uplifted by the humans of their homeworld.

The Emperor of Homeworld declared war on history and upon all historical documents at some point. It was forcibly destroyed whenever possible. After a few generations, hidden oral histories were being enshrined into religious texts; the Emperor declared himself, his predecessors, and heirs to be God's incarnate avatars, and declared the God Emperor and his crusade to ban worship of anyone else. Rampant chipping of the citizens in the second generation of this purge, plus desecration of temples, lead to the Exodus.

The Exodus was permitted by the God Emperor, but persons were searched on the outgo for anything religious or historical, and it was destroyed. None the less, some texts were successfully smuggled.

Landing, as you should know already, was made on Landing, 0YAL (1/0/0), at Alfar. The ships' drives destabilized during transit, and were no longer serviceable.

From Alfar, it took a few generations to build the tech base sufficient to colonize the other worlds. The following survey results are presented for the Council's benefit.

Homeworld Briefing

No further contact is known from Homeworld. The exodus from Homeworld started with gathering political will to revolt against the "God Emperor" as he suppressed all other faiths, ruthlessly suppressed Simian Rights, and otherwise turned society upon its head.

Since Homeworld is not accessible, and the details of how the transit were made were lost, a recapitulation of known data is in order. It is presented out of sequence due to historical importance.

Homeworld as a system is known to have two stars, a G5V with an M9D companion at about 183.9 billion kilometers orbit. Homeworld's system has two belts, inside Homeworld's orbit, and Jove, a gas giant.

There are 3 races known to have inhabited the system: Humans, Vargr, and Simians. The Vargr and Simians are known to have arrived with a group of humans from the other Homeworld.

Homeworld is, physically, 12,600km diameter, with a standard atmosphere at 1 bar, tainted by industrialization effects, with 72% hydrographics. Space discernible man-made features include the vast cities, the grand pyramids, and the Ancestor's Walls; the age of these is unknown. They require magnification in low orbit, but are visually discernible at only 2x power at 200km above ground.

Model A1M-9 Merchant

TD	MCR	PU	SYSTEM
200	8	0	Hull
0	0.8	0	Streamlining
10	1	0	Bridge
0	0.015	0	Model 1
10	10	{6.}	JD9A
2.4	3	{2.}	MD9A
5	7	[2.]	PP9A
1	0.3	0	Single Turret
0	0.5	1	Pulse Laser
48	6	0	12x SR: P, N, E, G, S, M, 6 pass
20	0	0	Fuel, Jump
2	0	0	Fuel, PP 2wk
100.6	0	0	Cargo
200	36.615		
	-3.662		Std Discount
200	32.953		List Price

A low end mixed hauler. She must run really close to full to make ends meet.

Model A1M-B Merchant

TD	MCR	PU	SYSTEM
200	8	0	Hull
0	0.8	0	Streamlining
10	1	0	Bridge
0	0.015	0	Model 1
10	10	{6.}	JD9A
2	4	{2.}	MD11A
4	8	[2.]	PP11A
1	0.3	0	Single Turret
0	0.5	1	Pulse Laser
48	6	0	12x SR: P, N, E, G, S, M, 6 pass
20	0	0	Fuel, Jump
2	0	0	Fuel, PP 2wk
104	0	0	Cargo
200	38.615		
	-3.862		Std Discount
200	34.753		List Price

An improved low end hauler. The extra tonnage does not make up for the increased costs when being a freighter; for speculation, however, it can.

These have only been manufactured since YAL995.

Model R1M-9 Merchant

TD	MCR	PU	SYSTEM
400	16	0	Hull
0	1.6	0	Streamlining
10	2	0	Bridge
0	0.015	0	Model 1
15	20	{12.}	JD9B
3.6	6	{4.}	MD9B
9	14	[4.]	PP9B
1	0.3	0	Single Turret
0	0.5	1	Pulse Laser
48	6	0	12x SR
			P, N, 2E, G, S
			M, 5 pass
40	0	0	Fuel, Jump
			4
			0
			0 Fuel, PP 2wk
269.4	0	0	Cargo
400	66.415		
	-6.642		Std Discount
400	59.773		List Price

A midrange mixed load. She must run really close to full to make ends meet.

4982	Maint
26400	Salaries
8800	Fuel
24000	

Model R1L-9 Merchant

TD	MCR	PU	SYSTEM
400	16	0	Hull
0	1.6	0	Streamlining
10	2	0	Bridge
0	0.015	0	Model 1
15	20	{12.}	JD9B
3.6	6	{4.}	MD9B
9	14	[4.]	PP9B
	1		
	0.3		
	0		Single Turret
0	0.5	1	Pulse Laser
200	25	0	50x SR
			C, P, N, 2E, G,
			9S, M, 35 pass
40	0	0	Fuel, Jump
			4
			0
			0 Fuel, PP 2wk
117.4	0	0	Cargo
400	85.415		
	-8.542		Std Discount
400	76.873		List Price

Required Shares: 29

A small passenger liner. 35 passengers. Better quality stewards can handle more passengers, resulting in either double occupancy or in reduced crewing. Subject to activation as a troopship.

6407	Maint
57700	Salaries
8800	Fuel
100000	LS
-350000	HP
-72000	Cargo

Model TP-A Patrol

TD	MCR	PU	SYSTEM
400	16	0	Hull
0	1.6	0	Streamlining
50	8		Armor 10
10	2	0	Bridge
0	0.16	0	Model 2
2	1	0	Sens: +0 BMil
15	20	{12.}	JD9B
27.6	36	{24.}	MD9M 6G
53	91	[26.]	FuPP9N
14	16	[4.]	FiPP10B
3	3.3	0	Triple Turret x3
0	1.5	3	3x PL-9
0	3	6	3x BL-9
0	12	9	3x PA-10
0	0.6	0	Triple fixed
0	2.25	0	3x MSL
48	6	0	12x SR
			C, P, N, 4E, 4G
			M
80	0	0	Fuel, Jump x2
78	0	0	Fuel, FuPP 6wk
4	0	0	Fuel, FiPP 1yr
15.4	0	0	Cargo
400	221.41		
	-22.141		Std Discount
400	199.279		List Price

The Mystic Flux Class, formally the TP-A, is Concordat's Space Patrol Corvette. The crews are small, close knit, and quite lethal.

The hull is a distinctive octagonal extrusion.

The Fission power plant is specifically for long-term operations; it's the normal day-to-day patrol plant. When confronted with hostiles, the fusion plant is started up.

Turrets may be either 3x(PL+BL+PA) or (3xPL)(3xBL) (3xPA), at the captain's discretion.

Note that it isn't uncommon for this model ship to make 3 jumps on internal tankage; it's just over half the Fusion Plant fuel for a third jump. Normal cruise is on the fission plant alone, at a measly 1G.

The crew of 13 is often augmented by up to 8 troops.

Command grades are Major through Colonel, nominally Lt. Col. There are about 200 TP-A ships in service, and the oldest are set to be scrapped.

Model TPX-B Patrol (1 May 1000)

TD	MCR	PU	SYSTEM
400	16	0	Hull
0	1.6	0	Streamlining
50	8		Armor 10
10	2	0	Bridge
0	0.16	0	Model 2
2	1	0	Sens: +0 BMil
25	40	{12.}	JD11D
23	48	{24.}	MD11M 6G
40	104	[26.]	FuPP11N
12	18	[4.]	FiPP11B
4	0.2	0	FPP 80T/d
3	3.3	0	Triple Turret x3
0	1.5	3	3x PL-9
0	3	6	3x BL-9
0	12	9	3x PA-10
0	0.6	0	Triple fixed
0	2.25	0	3x MSL
48	6	0	12x SR
			C, P, N, 4E, 4G
			M
80	0	0	Fuel, Jump 1j2
78	0	0	Fuel, FuPP 6wk
4	0	0	Fuel, FiPP 1yr
5	0	0	Mail Bin (Cargo)
16	0	0	Cargo
400	267.61		
	-26.761		Std Discount
400	240.859		List Price

The Mystic Flux Refit 1 Class is Dr Jones' experimental
testbed. The drive bays are completely reorganized, but fit
the same section of the bays, adding a mail bin and 4 tons
of fuel purification. Theoretical performance is J2, but that
has yet to be realized as of the date in service.

Model FP-A Frigate

TD	MCR	PU	SYSTEM
800	80	0	Hull
0	8	0	Streamlining
100	40		Armor 10
0	80	0	Reflec
16	2	0	Bridge
0	0.16	0	Model 2
2	1	0	Sens: +0 BMil
25	40	{24.}	JD9D
27.6	36	{24.}	MD9M 3G
98	256	{32.}	FiPP9R
6	6.6	0	Triple Turret x6
0	3	6	6x PL-9
0	6	12	6x BL-9
0	24	18	6x PA-10
0	1.2	0	2x Triple fixed
0	4.5	0	6x MSL
224	28	0	56 SR: 4C, 2P, N, 13E, 8G, M, 2A, 25ST
160	0	0	Fuel, Jump x2
80	0	0	Fuel, FiPP 4yr
30	16	0	Ship's Boat
6	1.5	0	3x Armory
4	0.5	0	Briefing room
21.4	0	0	Cargo
800	635.46		
	-63.546		Std Discount
400	572.915		List Price

The Model FP-A frigate is the Concordat Navy's primary vessel. It is modeled after the frigates of the God Emperor, but improved to TL 10.

The Concordat navy has about 130 frigates, organized in squadrons of 4 lines of four ships per line. This is a Commander's Command.

The Space Patrol operates 4 of these as flag units, but does not actually see the "need" for them. One each is on station over Kamaj, Racine, Quetzal, and Elestrial. Space Patrol command for these is always a Colonel.

10 staterooms are set aside as a brig.

It should be noted that the ship can only sustain fire with the pulse lasers; the heavier weapons drain the reserve power quickly; 5 salvoes is the limit.

Concordat Briefing Data

0101	0201 ☆	0301	0401 ☆	0501	0601	0701	0801
0102 ☆	0202	0302 ☆	0402 ☆	0502	0602 ☆	0702	0802
0103 ☆	0203 ☆ ∅∴ Homeworld	0303 ☆	0403 ☆	0503	0603	0703	0803
0104	0204 ☆	0304 ☆	0404 ☆	0504	0604	0704	0804
0105 ☆	0205 ☆	0305 ☆	0405	0505	0605 D ⊙ Racine	0705 X ⊙ ∅∴ Aurora	0805
0106	0206	0306	0406	0506	0606 A ⊙ ⊙ ∅ Elestrial	0706	0806
0107	0207	0307 * ☆ Stepping	0407	0507	0607 ▲ A ⊙ ♥⊗ ⊙ ∅ QUETZAL	0707	0807
0108 ☆	0208	0308	0408	0508 E ⊙ ∅∴ Alfar	0608	0708	0808
0109 ☆	0209	0309	0409 ▲★ A ⊛ ♥ ⊙ ∅∴ KAMAJ	0509 E ○ ∅ Ryokan	0609	0709	0809
0110	0210	0310 / 0110	0510	0610 ☆	0710	0810	

Concordat Briefing Data

Name	Hex	U	P	P				B	P	M	G	P	T	TradeCodes			
_____	0102	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0103	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0105	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0108	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0109	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0201	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
Homeworld	0203	_	8	7	7	_	_	_	_____	_	2	1	3	_	_____		
_____	0204	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0205	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0210	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0302	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0303	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0304	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0305	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
Stepping Stone	0307	*	6	1	1	_	_	_	_____	_	_	_	_	_	_____		
_____	0401	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0402	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0403	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0404	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
Kamaj	0409	A	5	6	8	9	A	A	A	NSHL	_	2	3	1	Ga	Hi		
_____	0501	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
Alfar	0508	E	5	3	8	5	3	6	8	–	_	0	5	1	Ni		
Ryokan	0509	E	3	0	0	0	0	0	0	–					Ba	Va		
_____	0601	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
Racine	0605	D	6	5	4	5	8	5	2	–					Ag	Ga	Lt	Ni
Elestrial	0606	A	A	B	8	6	5	5	9	CL	_	0	2	0	T	Fl	Ni	Cp
Quetzal	0607	A	3	0	0	9	7	9	B	SHRL	5	3	1	0	Hi	In	Na
Main		A			9				B		5							
Sec		B			9				B		2							
Ter		B			7				B		?							
_____	0610	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		
Aurora	0705	X	2	0	0	_	_	_	_	_____	_	_	_	_	_	_____		
_____	0801	_	_	_	_	_	_	_	_____	_	_	_	_	_	_____		

Racine, New Wisconsin 0705   Racine, Sheboygan, Eau Claire

Cultural Distinctions: Nexus - lots of off world visitors and Conservative - resistant to change

Government Factions: Corporation, Labor Union

System Listing	Or	*	S	A	H	P	G	L	TL	P	M	T	Z	Trade Codes
Alpha	P		K	4	V									
Madison	0		S	G	G					3				
	0/5	X	1	0	0	0	0	0	0					
	0/25	X	0	0	0	0	0	0	0					
	0/45	X	2	0	0	0	0	0	0					
Green Bay	1		L	G	G					8				
	1/4	X	2	0	0	0	0	0	0					
	1/6	X	5	5	2	0	0	0	0					
	1/8	E	0	0	0	0	0	0	0					
	1/9	X	4	1	1	0	0	0	0					
	1/10	X	1	0	0	0	0	0	0					
	1/11	X	1	0	0	0	0	0	0					
Sheboygan	1/12	E	5	8	5	2	0	0	6					
	1/25	X	4	A	1	0	0	0	0					
Racine	2	D	6	4	5	5	8	5	2	S	6	0	H	Ag Ga Lt Ni
Beta	5		K	8	V									
Milwaukee	0		B	D										
	0/5	X	3	1	0	0	0	0	0					
	0/7	X	9	A	8	0	0	0	0					
	0/8	X	3	0	3	0	0	0	0					
	0/9	X	7	7	9	0	0	0	0					
	0/10	X	4	1	3	0	0	0	0					
	0/12	X	5	6	8	0	0	0	0					
	0/14	X	4	0	7	0	0	0	0					
	0/17	X	7	8	9	0	0	0	0					
	0/45	X	7	5	8	0	0	0	0					
	0/46	E	8	4	9	0	0	0	0					
Lafayette	1	X	3	0	0	0	0	0	0					
Eau Claire	2	X	7	A	3	3	3	0	1					

(weird minor race, thus not subject to atmospheric TL restrictions)

"As it was in the beginning, as it is now, so shall it be, for all eternity." Message engraved in letters 5 centimeters deep in the hull of the derelict colonization vessel that now serves as the headquarters for the Canal Department, chief agency of the Racine bureaucracy. Some suggest that this message may have once been religious in nature, but now it is a cultural description.

In the decades after colonization civilization collapsed on Racine due to civil unrest, eventually the TL collapsed to 0 but the people of Racine never forgot their off world origins. Hundreds of years ago an aristocracy formed and gradually conquered the planet, establishing a corrupt dictatorship administered by local bureaucrats appointed by the nobility. About 200 years ago, a few years after the Recontact, most of the nobility were assassinated by imported off world weapons. A short but brutal civil war followed and at its end the nobility was all dead. The bureaucracy remains and still governs the planet relatively benevolently and well, all though the difficulty of the civil service exams ensures that only the well to do can afford to give their children the education they'll need to pass the entrance exams. [Depending on their job duties local Bureaucrats might be members of almost any Traveller career, although there is no local space and the wet navy is riverine only.]

The planet Racine has a population of about 676,000 people all located on the only island continent, the Hyperaustral. The Southern Ocean covers most of the rest of the southern hemisphere of the planet [38%] and the northern hemisphere is an almost lifeless desert. About 4% of the planets surface is covered in small lakes and seas, those in the northern hemisphere are invariably shallow salt lakes, but those in hyperaustral are sometimes fresh. There are no ice caps.

Landing, the largest settlement on the planet, has about 19,000 people. It is located on a large island in the middle of the Green River, about 100 kilometers from the mouth, at a latitude of about 75 degrees south [hex row 10]. All but a few hundred of of the planets population lives in the irrigated agricultural settlements surrounding it on both sides of the river in an area about 500 kilometers long

but only 30 kilometers wide.

Because Racine has no axial tilt or orbital eccentricity all its climactic variation comes from the relative distance between it and Beta. The planet Racine has a mean temperature of 59.6 C [139.3 F], rising to 76.7 C [170.1 F] at periBeta and dropping to 'only' 47.9 C [118.2 F] at anteBeta.

At tropical latitudes, given the low pressure and high temperature, the seas literally simmer at the surface, limiting temperatures in the region to about 85 C due to reflective cooling as the clouds rise, and resulting in very powerful storm formation, and a nearly perpetual cloud band. covering 20° to either side of the equator.

However at the high southern latitudes where the population lives the temperatures are much more reasonable, averaging 23.6 C [74.5 F], rising to 40.7 [105.3 F] at periBeta and dropping to 11.9 C [53.4 F] at anteBeta. Racine has an orbital period of 272.99 standard days. [0.6932 standard year. The local day is 25.8871 hours long so a local year is 253.18 local days. However the orbit of the planet around Alpha is not important, what really matters is how often it 'laps' Beta as they both orbit Alpha. Since Beta orbits Alpha once every 5.9793 standard years, or every 8.6256 Racine years Racine will be at periBeta or anteBeta every 304.64 standard days, or every 282.5 local days. With the thin atmosphere the nights can get quite cold [-19.4 degrees C [34.9 F] below average for the season] and it is not uncommon for landing to get a few millimeters of snow on 'winter' (anteBeta) nights but this never lasts all day. Daytime highs average 5.4 degrees C [+9.6 F] over the average for the season.

There are about 15,000 off worlders on Racine at this time and the government is working hard to attract more. Because of the low local tech level the cost of living is very low, and a retired offworlder on a pension can live much better than they ever could at home. The government of Racine spends a great deal of its limited funds on importing off world construction equipment and workers to help maintain the agricultural canals because they find it more productive than taking workers from the fields to do so with primitive local means. Off worlders may not become local citizens, nor may their children. Mixed marriages are quite rare but less formal dalliances are accepted and having an offworlder for a lover is a sign of status.

While the government welcomes off worlders and the people are friendly towards them they are also remarkable resistant to off world ways. While they welcome technological imports they are deeply resistant to social change. Off world sociologists suggest that the bureaucracy may gradually become an aristocracy again in a few hundred years, but for now the bureaucracy is seen as an agent of peace, and nobility as the agent of war. Racine is a surprisingly secular and non religious society whose citizens all nominally believe in animism, but very few of whom take it seriously.

Concordat Briefing Data

Mainworld Cultural Distinctions:
Mainworld Government Factions:

System Listing	Or	*	S A H P G L	TL	P M T Z	Trade Codes
Primary	K8IV					
Asteroid Belt	3	A	P 0 0 5 6 7	A	NSL	6	r	l	Military Rule
	4		LGG			5	
	4/4	X	1 0 0 0 0 0	0		-	R	
	4/5	X	8 A 0 0 0 0	0		0	r	
	4/8	X	2 0 0 0 0 0	0		-	R	
	4/40	X	1 0 0 0 0 0	0		-	R	
	4/45	X	3 0 0 0 0 0	0		-	H	
Kamaj	5	A	5 6 8 9 A A	A	NSH	2 3 0	Ga Hi
Kanal	5/6	X	5 A 8 0 0 0	0		-	T	
	5/55	X	2 0 2 0 0 0	0		-	T	
	5/60	X	2 0 2 0 0 0	0		-	T	
	6		SGG			1	
	6/15	X	1 0 0 0 0 0	0		-	T	
	7		SGG			3	
	7/2	R					
	7/6	X	1 0 0 0 0 0	0		-	C	
	7/45	X	2 0 0 0 0 0	0		-	F	

Kamaj, diameter 8141km, is the only Habitable planet in it's system. 10% percent of the population of the system are asteroid miners, with Litle or no time experienced on planet.

Kamaj's population in split culturally into Mainlanders, Islanders, and Voodar. The Mainlander population is known for extreme xenophobia, to the point that off worlders have not seen them in 200 years.

Islander culture is based as around Naval life, in both forms. (it should be noted that their is a fierce rivalry between 'wet'and 'void' navy.) Islander culture has the feel of the american south of the 19th century.

The Voodar are the psionic 'underclass' (at least that is how they are viewed by the Islanders), they see themselves as the protectors of the islanders, who they see as misguided and confused children.

Kamaj's large "Moon", Kanal, diameter 7798km, and has a nitrogen and carbon dioxide atmosphere at about 0.3 Bar atmosphere pressure.

The Asteroid Belt holds a naval, scout, and patrol base; the navy has an additional base in the islands, and the scouts maintain a base in orbit.

Quetzal   0607   Quetzal x3

Mainworld Cultural Distinctions:
Mainworld Government Factions:

System Listing	Or	*	S A H P G L	TL		P	M	T	Z	Trade Codes
Primary Name	P		G5IV							
Paris	0	E	4 0 0 2 6 8	A	L	2	0	R		Mr
	1	X	8 6 8 0 0 0	0		0		R		
	2	C	0 0 0 3 3 4	A		6		R		
Coatl	3	C	8 8 4 8 A B	7		8		R		
Axotl	4	E	5 5 5 8 C F	5		3		T		
	9		M0D							
Quetzal	9/0	A	3 0 0 9 7 9	B	SHR	5		T	h-	Hi In Na
Hades	9/1	X	5 A 0 0 0 0	0		0		R		
	9/2		LGG							
	9/2/1	X	R 0 0 0 0 0	0						
	9/2/2	X	R 0 0 0 0 0	0						
Xoctomil	9/2/4	X	5 5 A 4 4 3	8		4		T		
	9/2/5	X	2 0 0 0 0 0	0		-		F		
Mixotl	9/2/10	X	6 5 6 2 2 2	4		1		C		
	9/2/35	X	4 1 0 0 0 0	0		-		C		
	12	X	1 0 0 0 0 0	0		0	0	p		

Quetzal is the major world in the Doylee System. If it wasn't for it's position in the Alfar Trace no one in right mind would live there, as it is only 20% of the population is considered to be in their right mind. Ringed by a giant sectionalized glass dome that is used for production of food, the population of all three governments live in subterranean habitats.

The Quetzali government Aztica has a bit of a frontier mentality. Weapons are openly carried, and local law is centered upon punishing individuals only. Aztica's High Port, in geosynchronous orbit above the Aztica Shuttle Center, houses 2 major civilian yard complexes, as well as an extensive system of docking berths. Azticans distrust Olmecans, and are engaged in a rather tense cold-war with Mayaci. Their Tech Level 11 applies only to ship drives, metalurgy, and Lasers, and they have only attained this since 998. While capable of building TL 11 Jump Drives, they do not have the theoretical base to do so.

Mayaci is another faction of the Quetzali balkanization. The Mayacians have a more stably TL 11 base than the Azticans, being TL 11 in Power Production, Medicine, Computers, and Holography. The Mayaci areused to extensive security and safety compliance checks, and do not place much trust in individual responsibility. The Mayaci religion is based upon propitiation of a variety of gods by criminals being sacrificed by lottery; 5 are sacrificed each year, to appeas the 5 great gods.

Olmeca is one of the founding members of the Concordat. They are a fully mature TL 10, with TL 11 medical goods imported from Mayaci. The Mayaci broke off from their parent Olmeca several centuries ago. The Olmecan Nobles are well loved, and sacrifice one of their own each year to appease the Gods. Only the reigning princes are immune. Citizens are implanted with audio monitors, and the central computer system monitors all Olmecans for improper actions or words. Offworlders among the Olmeca will monitored discretely by the computer; any crime is likely to be detected and reacted to. Crimes are treated as mental illnesses; those who can not be treated are adopted into a noble family, and sacrificed the following year in addition to the normal noble sacrifice.

Coatl and Axotl are both non-members of the Concordat; they are fairly insular, and lack a presence off world. Coatl maintains a system of orbital defense fighters. Both have provisions for trade at the ports, and welcome concordat crews. Both use a currency called the Qip (Q), with very different values.

Xoctomil is technically a colony of Aztica. They use the Aztican Peso.

Mixotl is an independent colony, originally Olmecans, which has not applied for full membership in the concordat, but having a non-voting member as a protectorate.

Hades is a world roasting due to high greenhouse and low albedo.

Paris is ruled by the Patrol. It is the patrol basic training center, and the actual population of 220 patrol staff is cadre and repair base staff. Up to 1000 trainees might be present at any given point, and base housing provides for up to 2000 transients at any given point.

Concordat Briefing Data

Aurora   0705   NO MEMBER WORLDS

Cultural Distinctions: Liberal
Government Factions: Corporation, Labor Union

System Listing	Or	*	S A H P G L TL		P M T Z	Trade Codes
Aurora	P		M0V			
Aurora I	0	X	2 0 0 _ _ _ _	–	_ 2 T H	
Hail Belt	1	?	0 0 0 _ _ _ _	–	_ – F O	As Va
Aurora II	2		L G G		A	
	2.3	X	R 0 0 0 0 0 0	–	0 0	
c	2.6	X	1 0 0			
c	2.7	X	1 0 0			
c	2.8	X	1 0 0			
c	2.9	X	1 0 0			
c	2.10	X	3 0 0			
c	2.11	X	2 0 0			
f	2.20	X	S 0 0			
f	2.40	X	7 8 A 3 0 0 6			
f	2.45	X	6 A A 0 0 0 0			
Aurora III	3		S G G		2	
	3.7	X	1 0 0 0 0 0 0			
	3.12	X	S 0 0 0 0 0 0			
Aurora IV	4		L G G		8	

Survey Report shows Aurora I was impacted by Asteroids about YAL 13/824. No survivors are known. Originalis Dome and Downport were completely destroyed; a 100km crater sits where the dome was. Occidentalis Dome is a field of craters. Borealis dome took a direct hit on the central fusion core, and exploded from within. Australis Dome, only 180 km from Originalis Dome, was rent open to space; exploration crews found all habitat areas destroyed.

Survey reports radio traffic from the hail belt, and reaction drive vessels. The radio traffic is presumed to be in Simian. An estimate of 30 habitats of unknown size were detected; belt survey was not a priority. The colonies are presumed to be the Simian Separatists who left in YAL 50.

Appendix 1 - Forms

Stellar Map, Blank

0101		0301		0501		0701	
	0201		0401		0601		0801
0102		0302		0502		0702	
	0202		0402		0602		0802
0103		0303		0503		0703	
	0203		0403		0603		0803
0104		0304		0504		0704	
	0204		0404		0604		0804
0105		0305		0505		0705	
	0205		0405		0605		0805
0106		0306		0506		0706	
	0206		0406		0606		0806
0107		0307		0507		0707	
	0207		0407		0607		0807
0108		0308		0508		0708	
	0208		0408		0608		0808
0109		0309		0509		0709	
	0209		0409		0609		0809
0110		0310		0510		0710	
	0210		0110		0610		0810

SHIP DESIGN PARADIGMS

The ship design system is adapted from standard reference manuals.

The PU production per turn is equal to the base fuel for PP's, and they can store 3x that. (2 per letter)

MD require PU equal to the base production of a PP of the same rating.

JD require 3x the base production of a PP of the same rating

Turret Pulse Lasers cost 1PU/shot

Turret Beam Lasers cost 2PU/shot

Turret PAs cost 3PU/Shot

Basic operation costs 1PU/1000Td.

Crew

(Add Computer Model to TL for all crew calculations)

Command: Crew/TL (excl. Adm & Cmd) ↓

Pilot: 1, 2 if military or >1000Td

Navigator: 1 if 200Td+

Engineers: Td Drives/(3xTL) ↑

Gunners: 1 per turret, 2 per Bbt

Medic: 1/(10*TL) pass ↑

Steward: HP/4 + MP/10 ↑

Maint: Td/(TL*100) ↓

Admin: 1/(TL*2) crew (excl. Cmd) ↓

GEN		PP			MD	JD	
EFF	LTR	PU	STO	F/W	PU	PU	F/J
200	A	2	6	1	2	6	20
400	B	4	12	2	4	12	40
600	C	6	18	3	6	18	60
800	D	8	24	4	8	24	80
1000	E	10	30	5	10	30	100
1200	F	12	36	6	12	36	120
1400	G	14	42	7	14	42	140
1600	H	16	48	8	16	48	160
1800	J	18	54	9	18	54	180
2000	K	20	60	10	20	60	200
2200	L	22	66	11	22	66	220
2400	M	24	72	12	24	72	240
2600	N	26	78	13	26	78	260
2800	P	28	84	14	28	84	280
3000	Q	30	90	15	30	90	300
3200	R	32	96	16	32	96	320
3400	S	34	102	17	34	102	340
3600	T	36	108	18	36	108	360
3800	U	38	114	19	38	114	380
4000	V	40	120	20	40	120	400
4200	W	42	126	21	42	126	420
4400	X	44	132	22	44	132	440
4600	Y	46	138	23	46	138	460
4800	Z	48	144	24	48	144	480
5000	AA	50	150	25	50	150	500
5200	AB	52	156	26	52	156	520
5400	AC	54	162	27	54	162	540
5600	AD	56	168	28	56	168	560
5800	AE	58	174	29	58	174	580
6000	AF	60	180	30	60	180	600
6200	AG	62	186	31	62	186	620
6400	AH	64	192	32	64	192	640
6600	AJ	66	198	33	66	198	660
6800	AK	68	204	34	68	204	680
7000	AL	70	210	35	70	210	700
7200	AM	72	216	36	72	216	720

	JD		MD9		MD11 RMD7		MD13 RMD9		MD15 RMD11		FuPP9 ½ FIPP7		FuPP11 ½ FIPP9		FuPP13 ½ FIPP11		FuPP15 ½ FIPP9	
	T_D	MCR	T_D	MCR	T_D	MCR	T_D	MCR	T_D	MCR	T_D	MCR	T_D	MCR	T_D	MCR	T_D	MCR
A	10	10	2.4	3	2	4	1.6	5	1.2	6	5	7	4	8	3.5	9	3	10
B	15	20	3.6	6	3	8	2.4	10	1.8	12	9	14	7	16	6	18	5	20
C	20	30	6	9	5	12	4	15	3	18	13	21	10	24	8.5	27	7	30
D	25	40	8.4	12	7	16	5.6	20	4.2	24	17	28	13	32	11	36	9	40
E	30	50	10.8	15	9	20	7.2	25	5.4	30	21	35	16	40	13.5	45	11	50
F	35	60	13.2	18	11	24	8.8	30	6.6	36	25	42	19	48	16	54	13	60
G	40	70	15.6	21	13	28	10.4	35	7.8	42	29	49	22	56	18.5	63	15	70
H	45	80	18	24	15	32	12	40	9	48	33	56	25	64	21	72	17	80
J	50	90	20.4	27	17	36	13.6	45	10.2	54	37	63	28	72	23.5	81	19	90
K	55	100	22.8	30	19	40	15.2	50	11.4	60	41	70	31	80	26	90	21	100
L	60	110	25.2	33	21	44	16.8	55	12.6	66	45	77	34	88	28.5	99	23	110
M	65	120	27.6	36	23	48	18.4	60	13.8	72	49	84	37	96	31	108	25	120
N	70	130	30	39	25	52	20	65	15	78	53	91	40	104	33.5	117	27	130
P	75	140	32.4	42	27	56	21.6	70	16.2	84	57	98	43	112	36	126	29	140
Q	80	150	34.8	45	29	60	23.2	75	17.4	90	61	105	46	120	38.5	135	31	150
R	85	160	37.2	48	31	64	24.8	80	18.6	96	65	112	49	128	41	144	33	160
S	90	170	39.6	51	33	68	26.4	85	19.8	102	69	119	52	136	43.5	153	35	170
T	95	180	42	54	35	72	28	90	21	108	73	126	55	144	46	162	37	180
U	100	190	44.4	57	37	76	29.6	95	22.2	114	77	133	58	152	48.5	171	39	190
V	105	200	46.8	60	39	80	31.2	100	23.4	120	81	140	61	160	51	180	41	200
W	110	210	49.2	63	41	84	32.8	105	24.6	126	85	147	64	168	53.5	189	43	210
X	115	220	51.6	66	43	88	34.4	110	25.8	132	89	154	67	176	56	198	45	220
Y	120	230	54	69	45	92	36	115	27	138	93	161	70	184	58.5	207	47	230
Z	125	240	56.4	72	47	96	37.6	120	28.2	144	97	168	73	192	61	216	49	240
AA	130	250	58.8	75	49	100	39.2	125	29.4	150	101	175	76	200	63.5	225	51	250
AB	135	260	61.2	78	51	104	40.8	130	30.6	156	105	182	79	208	66	234	53	260
AC	140	270	63.6	81	53	108	42.4	135	31.8	162	109	189	82	216	68.5	243	55	270
AD	145	280	66	84	55	112	44	140	33	168	113	196	85	224	71	252	57	280
AE	150	290	68.4	87	57	116	45.6	145	34.2	174	117	203	88	232	73.5	261	59	290
AF	155	300	70.8	90	59	120	47.2	150	35.4	180	121	210	91	240	76	270	61	300
AG	160	310	73.2	93	61	124	48.8	155	36.6	186	125	217	94	248	78.5	279	63	310
AH	165	320	75.6	96	63	128	50.4	160	37.8	192	129	224	97	256	81	288	65	320
AJ	170	330	78	99	65	132	52	165	39	198	133	231	100	264	83.5	297	67	330
AK	175	340	80.4	102	67	136	53.6	170	40.2	204	137	238	103	272	86	306	69	340
AL	180	350	82.8	105	69	140	55.2	175	41.4	210	141	245	106	280	88.5	315	71	350
AM	185	360	85.2	108	71	144	56.8	180	42.6	216	145	252	109	288	91	324	73	360

TURRET SLOT WEAPONS							
WEAPON	TL	OPTIMUM RANGE	DAMAGE	AF DICE	AMMO	COST (MCR.)	PU
Pulse Laser	7	Short	1d6	2	PU	0.5	1
Beam Laser	7	Medium	1d6	0	PU	1	2
Particle Beam	8	Long	3d6 + crew hit	0	PU	4	3
Missile Rack	6	Special	by missile	0	1 + mag	0.75	0
Sandcaster	7	Special	Special 0.25	0	1+mag	0.25	0
BARBETTE WEAPONS							
WEAPON	TL	OPTIMUM RANGE	DAMAGE	AF DICE	AMMO	COST (MCR.)	PU
Pulse Laser	7	Short	2d6	2	PU	0.5	3
Beam Laser	7	Medium	2d6	0	PU	1	6
Particle Beam	8	Long	4d6 + crew hit	0	PU	4	12
Missile	6	Special	by 3 Missile Flight	0	20 flights		
Heavy Missile	9	Special	by missile	0	1+Mag	0.75	0
Railgun	9	Short	3d6	0	20	0.25	0
50 TON BAYS							
WEAPON	TL	OPTIMUM RANGE	DAMAGE	AF DICE	AMMO	COST (MCR.)	PU
Missile Bank	6	Special	12 Missile Flight	0	20 flights	12	0
Particle Beam	8	Long	6d6 + 2 crew hits	0	PU	20	40
Fusion Gun	12	Medium	5d6	0	PU	8	50
Meson Gun	11	Long	5d6 + crew hit	0	PU	50	50
Meson Flicker	13	Long	1d6+ crew hits	4	PU	80	50
Heavy Missile	9	Special	by 3 missile flight	0	6 flights	12	0
Railgun Bay	9	Short	3d6	8	200	30	20
Ortillery Railgun	9	Short	8d6	0	50	30	20
100 TON BAYS							
WEAPON	TL	OPTIMUM RANGE	DAMAGE	AF DICE	AMMO	COST (MCR.)	PU
Large Meson Flicker	13	Long	2d6 +1 crew hits	4	PU	160	100
Heavy Missile Bay	9	Special	By 6 missile flight	0	6 flights	24	0
Large Railgun Bay	9	Short	3d6	12	400	60	40
Large Ortillery Railgun	9	Short	12d6	0	50	60	40
MISSILES							
TYPE	TL	ACCEL & ENDUR	DAMAGE	AF DICE	TONS EA	COST KCR	
Standard	6	10G 10T	1d6	N/A	0.05	15 per 12	
Nuclear	8	10G 10T	4d6	N/A	0.05	45 per 12	
Long Range	9	15G 7T	1d6-1	N/A	0.05	30 per 12	
Multi–warhead	7	8G 10T	1d6 hits 1d6-1 ea	N/A	0.05	30 per 12	
HEAVY MISSILES							
TYPE	TL	ACCEL & ENDUR	DAMAGE	AF DICE	TONS EA	COST KCR	
Heavy Conventional	7	10G 10T	4d6	N/A	2.5	5 ea	
Heavy Nuclear	7	10G 10T	6d6 + Crew hit	N/A	2.5	15 ea	
Bomb-Pumped Laser	9	10G 10T	6d6 Laser	N/A	2.5	18 ea	
Ortillery	9	1G 2T	8d6	N/A	2.5	12 ea	

FITTINGS				

EXTERNAL SYSTEMS				
SYSTEM	TL	TONNAGE	MCR	NOTES
Breaching Tube	10	3 tons	3	DM+1 to board if not aiming for Airlock
Docking Clamp	8	3% Capacity	0.5*Td	Clamped vessel carried externally, can be jumped with at reduced performance
Grappling Arm	8	2	1	250m remote manipulator arm system
Rad Shielding				

HULL MODIFICATIONS SYSTEMS				
SYSTEM	TL	TONNAGE	MCR	NOTES
Aerodyne	7	5% of ship	0.01*HullTD	DM+2 Piloting in Atmosphere, aerodynamic lift.
Distributed Hull		0	-10% Hull	Ship may not enter atmosphere nor land.
Fuel Scoops	8	0	1	Allows skimming fuel
Heat Shielding	7	0	0.1*HullTd	Non-powered Reentry Easy, 10-60 min
Self-Sealing Hull	9	0	0.01*HullTd	prevents decompression
Stealth Coat	11	0	0.1*HullTd	DM-4 to be detected by Radar/Lidar
Streamlined Hull	7	0	+10% Hull	Ship may enter atmosphere reliably

Auxiliary Drives				
SYSTEM	TL	TONNAGE	MCR	NOTES
Solar Panels	8	2*PU	0.2*PU	Generates power when NSpace, & ≤0.1G thrust. Huge surface area; approximately 1000m² per PU
Solar Sail	8	5%	0.1*HullTD	0.01G, Huge surface area; 1km² per td of sail.
Reaction MD	7	See Tables	See Tables	burns 2.5% hull per G-hour.
Emergency Power	9	10%	10%	+4 PU/step, can be drawn on after plant out but not destroyed.
Power Storage	7	0.3*PU	0.1*PU	Additional PU storage.
Fission PP	7	See Tables	See Tables	Fuel is per year in fissionables; Higher TL's smaller
Fuel Purification	9	1	0.05	process 20Td fuel per day

INTERNAL				
SYSTEM	TL	TONNAGE	MCR	NOTES
Armory	10	2	0.5	1 per 50 crew, marines count 5 crew each.
Briefing room	8	4	0.5	DM+1 tactics
Hangar	8	1.3x Craft	0.2*tons	Repairs allowed on subcraft.
Laboratory	12	4	1	1 scientist, 1 field
Launch Tube		25x Craft Td		launch 10 per 6m turn. (instead of 1 per 30min)
Library	8	4	4	Extra training in jump. 5 pers. may take 1 week per jump.
Vault	14	12	6	6Td capacity, 4HP, 4 SP.

INTERNAL - HABITATION				
SYSTEM	TL	TONNAGE	MCR	NOTES
Stateroom	8	4	0.5	quarters for 1-2 persons
Long Term Life Sup.	8	20	2	provides indefinite LS (food, air, water) for 1 person by hydroponics and aeroponics.
Luxuries	8	1	0.1	Counts as 1 level steward skill (2 HP or 5MP)
Low Berth	9	0.5	0.05	1 person capacity
Emergency LB	9	1	0.1	4 person capacity.

SENSORS						
SYSTEM	CODE	TL	TONNAGE	MCR	DM	INCLUDES
Standard	Std	8	0	0	DM-4	Radar, Lidar, Visual
Basic Civil	BCiv	9	1	0.05	DM-2	Std+ Thermal
Basic Milspec	BMil	10	2	1	DM+0	BscCiv+ Jammer
Advanced Milspec	AMil	11	3	2	DM+1	BscMil+ Densitometer
Very Advanced Milspec	VAMil	12	5	4	DM+2	Adv+ NAS
Survey	Svy	12	10	10	DM+1	Adv + Drones, etc, Faster survey
Counter–Measure	CM	13	7	6	DM+4	Adv
Military Counter-Measure	MCM	15	20	25	DM+6	Adv

SENSOR UPGRADES						
SYSTEM		TL	TONNAGE	MCR	DM	NOTES
Improved Signal Processing	ISP	11	+1	4	Add'l DM+2	+1 range band (ex. NAS), x2 Jamming
Enhanced Signal Processing	ESP	13	+2	8	Add'l DM+4	+2 Range band (ex NAS)
Distributed Array	DstA	11	x3	x3		Min 5000Td Hull; increased ranges
Extended Array	ExA	11	x3	x3		Increased ranges, +2 to be detected.

Armor Table					
Armor Type	TL	Max	Protection	Cost	Notes
Titanium Steel	7	Lower of TL or 9	2 per 5%	5%	Armour does not need to be added in
Crystaliron	10	Lower of TL or 13	4 per 5%	20%	5% elements, but it must be added in
Bonded Superdense	14	TL	6 per 5%	50%	whole armour point values. No Retrofit.
Reflec	10	3	3, takes 0%	0.1/Td	No tonnage, max once, vs laser only

BRIDGE TYPES				
SYSTEM	TL	TONNAGE	MCR	NOTES
Basic	6	2%, min 10	0.5 per 100Td	No DM's
Command	12	x2	x1.5	DM+1 Tactics and Initiative
Compact	8	x.75	x1	DM-1 all rolls
Detachable	10	x1.5	x1.5	0.1G Lifeboat mode. 2 weeks fuel, soft-landing capable
Hardened	12	x1	x1.25	1000 Rad protection, no EMP.
Holographic	13	x1	x1.25	DM+2 Initiative

Drive Code	Eff	Gravitic M–Drive		Reaction M–Drive		Fusion P–Plant		Chemical P–Plant	
		Tonnage	MCr	Tonnage	MCr	Tonnage	MCr	Tonnage	MCr
sA	20	0.5	1	0.25	0.5	1.2	3	2	1
sB	40	1	2	0.5	1	1.5	3.5	2.5	1.25
sC	60	1.5	3	0.75	1.5	1.8	4	3	1.5
sD	80	2	3.5	1	2	2.1	4.5	3.5	1.75
sE	100	2.5	4	1.25	2.5	2.4	5	4	2
sF	120	3	6	1.5	3	2.7	5.5	4.5	2.25
sG	140	3.5	8	1.75	3.5	3	6	5	2.5
sH	160	4	9	2	4	3.3	6.5	5.5	2.75
sJ	180	4.5	10	2.25	4.5	3.6	7	6	3
sK	200	5	11	2.5	5	3.9	7.5	6.5	3.25
sL	220	6	12	2.75	5.5	4.5	8	7	3.5
sM	240	7	14	3	6	5.1	9	7.5	3.75
sN	260	8	16	3.25	6.5	5.7	10	8	4
sP	280	9	18	3.5	7	6.3	12	8.5	4.25
sQ	300	10	20	3.75	7.5	6.9	14	9	4.5
sR	320	11	22	4	8	7.5	16	10	5
sS	340	12	24	4.5	9	8.1	18	11	5.5
sT	360	13	26	5	10	8.7	20	12	6
sU	380	14	28	5.5	11	9.3	22	13	6.5
sV	400	15	30	6	12	9.9	24	14	7
sW	420	16	32	6.5	13	10.5	26	15	7.5
sX	440	17	34	7	14	11.1	28	16	8
sY	460	18	36	7.5	15	11.7	30	17	8.5
sZ	480	19	38	8	16	12.3	32	18	9

Tons	MCr	Personal		Ship Scale		Ship Hulls				Capital Ship Hulls				
		HP	SP	HP	SP	Hull	MCr	HP/SP	Bridge	Hull Td	MCr	HP/SP	Bridge	Drives
10	1	2	4	0	1	100	2	2	5	2250	225	45	45	2
15	1.1	3	5	0	1	200	8	4	5	2500	250	50	50	2
20	1.2	4	6	0	1	300	12	6	6	2750	275	55	55	2
25	1.25	5	7	0	1	400	16	8	8	3000	250	50	60	2
30	1.3	6	8	0	1	500	32	10	10	3250	325	65	65	2
35	1.35	7	9	1	1	600	48	12	12	3500	350	70	70	2
40	1.4	8	10	1	1	700	64	14	14	4000	400	80	80	2
45	1.45	9	10	1	1	800	80	16	16	4500	450	90	90	3
50	1.5	10	10	1	1	900	90	18	18	5000	500	100	100	3
55	1.55	11	11	1	1	1,000	100	20	20	5500	550	110	110	3
60	1.6	12	12	1	1	1,100	110	22	22	6000	600	120	120	3
65	1.65	13	13	1	1	1,200	120	24	24	6500	650	130	130	4
70	1.7	14	14	1	1	1,300	130	26	26	7000	700	140	140	4
75	1.75	15	15	1	1	1,400	140	28	28	7500	750	150	150	4
80	1.8	16	16	1	1	1,500	150	30	30	8000	800	160	160	4
85	1.85	17	17	1	1	1,600	160	32	32	8500	850	170	170	5
90	1.9	18	18	1	1	1,700	170	34	34	9000	900	180	180	5
95	1.95	19	19	1	1	1,800	180	36	36	9500	950	190	190	5
100	2	20	20	2	2	2000	200	40	40	10000	1000	200	200	5

"Realistic" Main World Generation

Size: 2d6-2
if roll <0, Size = 0
If Rolled Size=10, Opt +2d2-2
Opt: If Rolled Size=0 and Mainworld:1d6

1-4:	Size P, Atm 0, Hyd 0
5-6:	Size 0

Atmosphere: 2d6-7+Size

if size 0–2:	Atm =0

If Size 3-4 &

Rolled Atm	Final Atm
0-2	0
3-5	1
6+	A

Temperature: 2d6

Roll	Result (Code)
≤-4	Plutonian (P)
(-3)–1	Frozen (F)
2–4	Cold (C)
5–9	Temperate (T)
10–11	Hot (H)
13+	Roasting (R)

Atmos.	DM
0-1	±0
2-3	-2
4,5,E	-1
6,7	±0
8-9	+1
A,D,F	+2
B,C	+6

Location - World	DM
Inner Zone	+6
Hab Zone, Inner Edge	+4
Hab Zone, Main	±0
Hab Zone, Outer Edge	-4
Outer Zone	-6
Moon Orbiting giant at 1–5 diameters	+4
Moon Orbiting Giant at 6–10 diameters	+2

Hydrographics: 2d6-7+Size

Size 0-1	Hyd=0

Size 3-4 &

Atm A	DM-6

Size 5+

Atm 0,1	DM-6
Atm 2-3, A,B,C	DM-4
Atm G	Hyd=A

Temp

Hot	-2
Roasting	-6
Plutonian	+4

Population: 2d6-2

Size 0–2	DM-1
Size A–B	DM-1
Atm not 4–9 & Not MW	DM-2
Atm not 4–9, mainorld	DM-1
Atm 5,6,8	DM+2
Temp P	DM-3
Temp F,R	DM-2
Temp C,H	DM-1
Not Mainworld	DM-2, Max=MainPop

Pop Multiple: 1d9

Gov't, Primary: 2d6-7+Pop

Pop 0	Gov = 0

Factions: 1d3

Gov't 0, 7	DM+1
Gov't A+	DM-1
Pop 0	None
Pop 1-3	DM-1

Faction Strengths: 2d6

Roll	Result
2–3	Obscure
4–5	Fringe
6–7	Minor
8–9	Notable
10–11	Significant
12	Overwhelming

If Gov't 7, see special notes

Faction Gov'ts: 2d6-7+Pop
If Gov't 7, see special notes

Law Level: 2d6-7+Gov't

Starport: 2d6-7+Pop

Not Mainworld & Roll 4+	DM-2

Roll	Starport Class
≤2	X
3–4	E
5–6	D
7–8	C
9–10	B
11+	A

Tech Level: 1d6

SP A	DM+6
B	DM+4
C	DM+2
X	DM-4
Size S,0,1	DM+2
Size 2–4	DM+1

Atm

0–1	DM+1, Min 8
2–3, D,E	DM+1, Min5
4,7,9	DM+0, Min 3
A, F	DM+1, Min 8
B	DM+1, Min 9
C	DM+1, Min A
Hydro 0,9	DM+1
Hydro A	DM+2

Pop

1–5,9	DM+1
A	DM+2
B	DM+3
C	DM+4

Gov't

0, 5	DM+1
7	DM+2
D,E	DM-2
Temp R,F	min 5
Temp P	min 8

Moons, Number:

Size 0,1	1d6-5
Size 2-A	1d6-3
Size B	1d6-2
SGG	2d6-4
LGG	2d6
BD	3d6

Moon Size

World Size 2-C: 1d6-2
SGG: 2d6-6
LGG: 2d6-4
BD: 2d6-3
If size Rolled = 0, size=R
if size Rolled <0, size=0

Moon Orbits

Size R:	1d6/2 diameters
moons: 1d6, check table	
1–4 Close	2d6 Diameters
5–6 Far	5*(2d6) Diameters

if duplicate, add distance equal to number of worlds placed in that category so far.

Gas Giants, Belts, and Empty Orbits

Presence of GG: 2d6 for 5+
Presence of Belts: 2d6 for 8+
Empty Orbits: 2d6 for 10+

If present, how many?			
2d6	**GG**	**PB**	**EO**
2–3	1	1	1
4–5	2	1	1
6–7	3	1	2
8–9	4	2	2
10–11	5	2	3
12	6	3	4

GG Sizes:

Number of...			
2d6:	**2–7**	**8-11**	**12**
Size	SGG	LGG	BD

Bases 2d6 each

SP	N	S	R	H	C	P
A	8+	10+	8+	4+	6+	—
B	8+	8+	10+	6+	8+	12+
C	—	8+	10+	10+	10+	10+
D	—	7+	—	—	—	12+
E	—	—	—	—	—	12+
X	—	—	—	—	—	—

Trade Codes

	S	A	H	P	G&L	TL	Tmp
Ag		4–9	4–8	5–7			
As	P	0	0				
Ba				0	0 0		
De		2+	0				
Fl		A-C,F	1+				
Ga	3+	4-9	4-8				CTH
Hi				9+			
Ic		0-1	1+				PFCT
In		12,479		9+			
Lo				1-3			
Lt				1+		3-	
Na		0-3	0-3	6+			
Ni				4-6			
Po		2-5	0-3				
Ri		68		6-8			
Va		0					
Wa			A				

Extending Generation to System
System Type

Number of...			
2d6:	**1–7**	**8-11**	**12**
Type	Unary	Binary	Trinary

Far Companion Type DM -1

Stellar Types 2d6 Size, 2d6 Class

Roll	Stellar Size	Color Mod	Color code	Color label
2	I	DM±0	B	Blue
3	II	DM±0	A	Light Blue
4	III	DM±0		
5	III	DM±0	F	White
6-7	IV	DM–3	G	Yellow
8	IV	DM–3	K	Orange
9	V	DM+3		
10–11	V	DM+3		
12+	D	DM+3	M	Red

Companion	DM+2
2nd Companion	DM+4

Decimal Subdivision 1d10-1 (0-9)
Dwarves don't need one.

Companion Orbits: 2d6

Roll	Orbit #
2–3	0
4–6	1d6
7–9	1d6+4
10–11	Orbit # 1d6+8
12	Far; 1d6x1000AU

DM -1 if far companion's companion
Far Companions roll for system type as well.

Maximum Orbit #: 2d6

Type I,II	DM+8
Type III	DM+4
Type D	DM-2
Color K	DM-2
Color M	DM-4

Available Orbit numbers
Bn= Companion's Orbit Number

Orbiting A inside B	≤ Half Bn
Orbiting A outside B	≥ Bn+2
Orbiting B	≤ half Bn

Orbit Zones
V: Orbit numbers ≤ listed are empty
H: Listed orbit numbers are Habitable

	I		II		III		IV		V		D
SC	V	H	V	H	V	H	V	H	V	H	H
B0	7	13	6	12	6	12	6	12	6	12	0
B2	7	13	6	12	5	12	5	11	5	11	0
B4	6	12	5	12	4	11	4	10	4	10	0
B6	6	11	4	11	3	11	3	9	3	9	0
B8	6	11	3	10	2	10	2	8	2	8	0
A0	6	11	2	9	1	9	1	7	1	7	-1
A2	6	11	2	9	0	8	0	7	0	7	-1
A6	5	10	1	8	0	7	—	6	—	6	-1
F0	5	10	1	8	0	6	—	6	—	5	—
F5	6	10	1	8	0	6	—	5	—	4	—
G0	6	10	1	8	0	6	—	5	—	3	—
G5	6	10	1	8	0	7	—	5	—	2	—
K0	6	10	1	9	0	7	—	4	—	2	—
K5	6	11	2	9	0	8	—	4	—	1	—
M0	6	11	3	10	1	8	—	5	—	0	—
M3	6	11	3	10	2	8	—	5	—	0	—
M6	7	12	4	11	3	9	—	5	—	-1	—
M9	7	12	5	11	4	9	—	5	—	-1	—

Placing Stuff
Mainworld placed first.

Gas Giants next, preference for outside H zone. If not enough for GG's an PB's, world may orbit a GG in the H zone.

Next, Belts, preference for last available orbit between primary and companion, then one orbit inside a GG. empty orbits, preference for 1 outside giant, then 1 outside belt, then random orbits.
fill in rest of orbits with rolled worlds.

Handling Government 7

Instead of normal factions process!

1d3+1 Governments. Each has Pop of MW Pop+1 -1d3.

Roll pop multiples for all factions.

If total pop multiples would exceed that of the world, Reduce pop code of each faction by 1.

Generate government codes for each faction based upon its own pop code, rather than the world's.

If a given government is a type 7, it adds another 1d3 factions of one pop code less than itself, but is itself deleted.

Law details are generated normally.

Panthalassic Atmosphere (G)

An atmosphere of Water miles deep. Above the water is a Type A atmosphere of water vapor, CO_2, and possibly Nitrogen. May be substituted for type F atmospheres on Size A+ worlds. Always has 100% water coverage; the actual crust is miles below.

Semi-habitable worlds

Worlds one orbit away from the habitable orbit number may use the ±4 on the temperature chart.

Worlds around M5V-M9V stars and DA stars in orbit 0 are always such worlds.

Worlds 2 orbits or more from the habitable zone as listed are either inner or outer zone, as appropriate.

Minimum Port Services by Code

SP	FR	FU	SY	RY	Bk
A	Yes	N	All	Full	Y
B	Yes	Yes	Space	Std	Y
C	Poss	Yes	Small	Std	Y
D	No	Yes	No	Ltd.	10+
E	No	Poss.	No	No	No
X	No	No	No	No	No

FR Refined Fuel
FU Unrefined Fuel
SY Shipyard
RY Repair Yards
Bk Banking

Standard UWPs

X-SAHPGL-T F ZMBĠ Trade Codes

X	Starport
S	Size
A	Atmosphere
H	Hydrographics
P	Popuation Code (Exponent)
G	Government Code
L	Law Level Code
T	Tech Level
F	Single Letter for bases
Z	Travel Zones
M	Population Multiplier
B	Planetoid Belts
Ġ	Gas Giants

Wil's Format for UWP

X-SAHPGL-T FFFFFF MµBĠþ Trade Codes
As above except:
þ Thermal Code (F,C,T,H,R)
F Each facility type gets it's letter.
µ Moons

Trade Code Readings

Ag	Agricultural
As	Asteroid
Ba	Barren (no Pop)
De	Desert
Fl	Fluid Oceans
Ga	Garden (Shirtsleve if temperate!)
Hi	High Population
Ic	Ice Capped
In	Industrial
Lo	Low Population
Lt	Low Technology (pre-industrial)
Na	Non-Agricultural
Ni	Non-Industrial
Po	Poor
Ri	Rich
Va	Vacuum
Wa	Water World

The 2d6-7+Stat Table

2d	2	3	4	5	6	7	8	9	10	11	12	#	Cd
	Extant Stat											UPP	
-5	-10	-9	-8	-7	-6	0	0	0	0	0	0	0	0
-4	-9	-8	-7	-6	-5	0	0	0	0	0	1	1	1
-3	-8	-7	-6	-5	-4	0	0	0	0	1	2	2	2
-2	-7	-6	-5	-4	-3	0	0	0	1	2	3	3	3
-1	-6	-5	-4	-3	-2	0	0	1	2	3	4	4	4
0	-5	-4	-3	-2	-1	0	1	2	3	4	5	5	5
1	-4	-3	-2	-1	0	1	2	3	4	5	6	6	6
2	-3	-2	-1	0	1	2	3	4	5	6	7	7	7
3	-2	-1	0	1	2	3	4	5	6	7	8	8	8
4	-1	0	1	2	3	4	5	6	7	8	9	9	9
5	0	1	2	3	4	5	6	7	8	9	10	10	A
6	1	2	3	4	5	6	7	8	9	10	11	11	B
7	2	3	4	5	6	7	8	9	10	11	12	12	C
8	3	4	5	6	7	8	9	10	11	12	13	13	D
9	4	5	6	7	8	9	10	11	12	13	14	14	E
10	5	6	7	8	9	10	11	12	13	14	15	15	F
11	6	7	8	9	10	11	12	13	14	15	16	16	G
12	7	8	9	10	11	12	13	14	15	16	17	17	H
13	8	9	10	11	12	13	14	15	16	17	18	18	J
14	9	10	11	12	13	14	15	16	17	18	19	19	K
15	10	11	12	13	14	15	16	17	18	19	20	20	L
16	11	12	13	14	15	16	17	18	19	20	21	21	M
17	12	13	14	15	16	17	18	19	20	21	22	22	N
18	13	14	15	16	17	18	19	20	21	22	23	23	P

Die Conversions Table d6 to...

Die	1	2	3	4	5	6
d2	1	1	1	2	2	2
d3	1	1	2	2	3	3
dF	-1	-1	0	0	+1	+1

d9 (d6xd6)

	1–2	3–4	5–6
1–2	1	2	3
3–4	4	5	6
5–6	7	8	9

Size - Median diameter

Digit	Diameter	Examples	Gs
0	800 km		
1	1,600 km		0.05
2	3,200 km	Luna, Europa	0.15
3	4,800 km	Mercury, Ganymede	0.25
4	6,400 km	Mars	0.35
5	8,000 km		0.45
6	9,600 km		0.7
7	11,200 km		0.9
8	12,800 km	Earth, Venus	1.0
9	14,400 km		1.25
A	16,000 km		1.4
B	17,600 km		2

Digit	**Atmosphere**	
0	None	≤0.0099
1	Trace	≤0.1
2	Very Thin,Tainted	0.1-0.4
3	Very Thin	0.1-0.4
4	Thin, Tainted	0.4-0.75
5	Thin	0.4-0.75
6	Standard	0.75-1.5
7	Standard,Tainted	0.75-1.5
8	Dense	1.5-2.5
9	Dense, Tainted	1.5-2.5
A	Exotic	var
B	Corrosive	var
C	Insidious	var
D	Dense, High	≥2.5
E	Thin, Low	≤0.5
F	Unusual	var
G	Panthalassic	10+

Hydrographics

Digit   x10 ±5% water

Population

People = Multiple * 10^{Code}

Temperature

Cd.	Median Temperature	
P	Colder than -100°	Plutonian
F	-100° to -51°	Frozen
C	-50° to 0°	Cold
T	0° to 30°	Temperate
H	31° to 80°	Hot
R	81° and up	Roasting

Government

0	None
1	Company/Corpration
2	Participating Democracy
3	Self-Perpetuating Oligarchy
4	Representative Democracy
5	Feudal Technocracy
6	Captive Government
7	Balkanization (Multiple Gov'ts)
8	Civil Service Bureaucracy
9	Impersonal Bureaucracy
A	Charismatic Dictator
B	Non-Charismatic Leader
C	Charismatic Oligarchy
D	Religious Dictatorship

Law

0	None	
1	Low	Poison gas, explosives, undetectable weapons, WMD
2	Low	Portable energy weapons
3	Low	Heavy weapons
4	Mod	Light assault weapons, submachine guns
5	Mod	Personal concealable weapons
6	Mod	All firearms except shotguns and stunners; carrying weapons discouraged
7	Mod	Shotguns
8	High	All bladed weapons, Stunners
9	High	Any weapon outside home
10+	Extreme	Any weapon at all
14+	Extreme	Full Fledged Police State

Tech Level

TL0: (Primitive)	Stone Age.
TL1: (Primitive)	Bronze or Iron age
TL 2: (Primitive)	Renaissance technology.
TL 3: (Primitive)	Steam Power, early 19th
TL 4: (Industrial)	late 19th/early 20th C
TL 5: (Industrial)	mid–20th century.
TL 6: (Industrial)	fission power, Rockets
TL 7: (Pre-St)	Satellites, Internet
TL 8: (Pre-St)	Fusion power
TL 9: (Pre-St)	Gravitic MD, Jump 1
TL 10: (Early St)	AG/IC, Orbital habitats
TL 11: (Early St)	Terraforming, AI, Jump 2
TL 12: (Avg St)	PGMP, Jump–3
TL 13: (Avg St)	Jump–4, Battledress
TL 14: (Avg St)	Skycities, Jump–5, FGMP
TL 15: (High St)	Black globe, Jump–6

11 Sexist – one gender is considered subservient or inferior to the other.

12 Religious – culture is heavily influenced by a religion or belief system, possibly one unique to this world.

13 Artistic – art and culture are highly prized. Aesthetic design is important in all artifacts produced on-world.

14 Ritualised – social interaction and trade is highly formalised. Politeness and adherence to traditional forms is considered very important.

15 Conservative – the culture resists change and outside influences.

16 Xenophobic – the culture distrusts outsiders and alien influences. Off-worlders will face considerable prejudice.

21 Taboo – a particular topic is forbidden and cannot be discussed. Characters who unwittingly mention this topic will be ostracized.

22 Deceptive – trickery and equivocation are considered acceptable. Honesty is a sign of weakness.

23 Liberal – the culture welcomes change and off-world influence. Characters who bring new and strange ideas will be welcomed.

24 Honorable – one's word is one's bond in the culture. Lying is both rare and despised.

25 Influenced – the culture is heavily influenced by another, neighboring world. If you have the details for the neighboring world, choose a cultural quirk that this world has adopted. If not, roll for one.

26 Fusion – the culture is a merger of two distinct cultures. Roll again twice to determine the quirks inherited from these cultures. If the quirks are incompatible then the culture is likely divided.

31 Barbaric – physical strength and combat prowess are highly valued in the culture. Characters may be challenged to a fight, or dismissed if they seem incapable of defending themselves. Sports tend towards the bloody and violent.

32 Remnant – the culture is a surviving remnant of a once-great and vibrant civilization, clinging to its former glory. The world is filled with crumbling ruins, and every story revolves around the good old days.

33 Degenerate – the culture is falling apart and is on the brink of war or economic collapse. Violent protests are common and the social order is decaying.

34 Progressive – the culture is expanding and vibrant. Fortunes are being made in trade; science is forging bravely ahead.

35 Recovering – a recent trauma, such as a plague, war, disaster or despotic regime has left scars on the culture.

36 Nexus – members of many different cultures and species visit here.

41 Tourist Attraction – some aspect of the culture or the planet draws visitors from all over charted space.

42 Violent – physical conflict is common, taking the form of duels, brawls or other contests. Trial by combat is a part of their judicial system.

43 Peaceful – physical conflict is almost unheard-of. The culture produces few soldiers and diplomacy reigns supreme. Forceful characters will be ostracised.

44 Obsessed – everyone is obsessed with or addicted to a substance, personality, act or item. This monomania pervades every aspect of the culture.

45 Fashion – fine clothing and decoration are considered vitally important in the culture. Underdressed characters have no standing here.

46 At war – the culture is at war, either with another planet or polity, or is troubled by terrorists or rebels.

51 Unusual Custom: Off-worlders – space travellers hold a unique position in the culture's mythology or beliefs, and travellers will be expected to live up to these myths.

52 Unusual Custom: Starport – the planet's starport is more than a commercial centre; it might be a religious temple, or be seen as highly controversial and surrounded by protestors.

53 Unusual Custom: Media – news agencies and telecommunications channels are especially strange here. Getting accurate information may be difficult.

54 Unusual Customs: Technology – the culture interacts with technology in an unusual way. Telecommunications might be banned, robots might have civil rights, cyborgs might be property.

55 Unusual Customs: Lifecycle – there might be a mandatory age of termination, or anagathics might be widely used. Family units might be different, with children being raised by the state or banned in favour of cloning.

56 Unusual Customs: Social Standings – the culture has a distinct caste system. Characters of a low social standing who do not behave appropriately will face punishment.

61 Unusual Customs: Trade – the culture has an odd attitude towards some aspect of commerce, which may interfere with trade at the spaceport. For example, merchants might expect a gift as part of a deal, or some goods may only be handled by certain families.

62 Unusual Customs: Nobility – those of high social standing have a strange custom associated with them; perhaps nobles are blinded, or must live in gilded cages, or only serve for a single year before being exiled.

63 Unusual Customs: Sex – the culture has an unusual attitude towards intercourse and reproduction. Perhaps cloning is used instead, or sex is used to seal commercial deals.

64 Unusual Customs: Eating – food and drink occupies an unusual place in the culture. Perhaps eating is a private affair, or banquets and formal dinners are seen as the highest form of politeness.

65 Unusual Customs: Travel – travellers may be distrusted or feted, or perhaps the culture frowns on those who leave their homes.

66 Unusual Custom: Conspiracy – something strange is going on. The government is being subverted by another group or agency.

SP:	A	B	C	D	E	F
F	1.43	1.36	1.29	1.21	1.14	0.00
E	1.36	1.29	1.21	1.14	1.07	0.00
D	1.29	1.21	1.14	1.07	1.00	0.00
C	1.21	1.14	1.07	1.00	0.93	0.00
B	1.14	1.07	1.00	0.93	0.86	0.71
A	1.07	1.00	0.93	0.86	0.79	0.64
9	1.00	0.93	0.86	0.79	0.71	0.57
8	0.93	0.86	0.79	0.71	0.64	0.50
7	0.86	0.79	0.71	0.64	0.57	0.43
6	0.00	0.71	0.64	0.57	0.50	0.29
5	0.00	0.64	0.57	0.50	0.43	0.14
4	0.00	0.50	0.43	0.36	0.29	0.00
3	0.00	0.00	0.29	0.14	0.14	0.00
2	0.00	0.00	0.14	0.07	0.00	0.00
1	0.00	0.00	0.00	0.01	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00

A variation of ±0.05 from table is allowed.

Some currencies are multiplied before conversion.

								SP	S	A	H	P	G	L	TL		PM	MN	TMP
5	4	1	6	3	4	Or TD M	-8	X	2	0	0	0	0	0	0		-		F
1	5	2	6	4	6	MW?	N	1	-1	-4					0				
6	6	5	2	5	6		0	-2	2	0	0	0	0	0	0		-2	0	F
								7	9	7	6	8	10	12	5				7

SP:	A	B	C	D	E	F
F	1.43	1.36	1.29	1.21	1.14	0.00
E	1.36	1.29	1.21	1.14	1.07	0.00
D	1.29	1.21	1.14	1.07	1.00	0.00
C	1.21	1.14	1.07	1.00	0.93	0.00
B	1.14	1.07	1.00	0.93	0.86	0.71
A	1.07	1.00	0.93	0.86	0.79	0.64
9	1.00	0.93	0.86	0.79	0.71	0.57
8	0.93	0.86	0.79	0.71	0.64	0.50
7	0.86	0.79	0.71	0.64	0.57	0.43
6	0.00	0.71	0.64	0.57	0.50	0.29
5	0.00	0.64	0.57	0.50	0.43	0.14
4	0.00	0.50	0.43	0.36	0.29	0.00
3	0.00	0.00	0.29	0.14	0.14	0.00
2	0.00	0.00	0.14	0.07	0.00	0.00
1	0.00	0.00	0.00	0.01	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00

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