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### Introduction ◀ 1.0

This solo campaign diary is a follow up to my previous attempt as a VBAM: Starmada campaign. In that campaign, as in this one, the player (me) begins in control of our solar system – Sol – and proceeds to begin exploring into the dark and mysterious depths of unknown space.

In the last campaign, the Solar League was unfortunate enough to find a psychotic alien species native to the Altair star system. These "Altairians" proceeded to move in and destroy or capture humanity's fledgling interstellar holdings, leading inevitably to a situation in which not even Earth herself could hold back the brutal alien tide.

With the writing on the wall, I am starting this second campaign. This time it is the *Solar Federation*, not the Solar League, which will attempt to eke out an existence for itself among the stars. Hopefully their fate will be less cruel than that of the League, but only time will tell.

### New Rules and Rule Modifications < 2.0

With it comes to any given game system, I'm a *tweaker*. I like to modify things to fit my style of play and provide me the game experience that I desire. If I don't like a rule, I change it. Sometimes the changes work, sometimes they don't, but I can't help myself – I still have to give it a try.

This section of the diary provides lists of rules that are in effect

### 

The following is a list of the VBAM campaign rules that I am using in this campaign. It is not all inclusive, as I tend to be fairly eclectic during play, but it should give you an idea of what rules the campaign is operating under.

- CG 4.1 Wartime Economies
- CG 4.2 Optional Jump Lane Movement
- CG 4.3 Extended Supply Routes
- CG 4.4 Ship Security Detachments
- CG 4.7 Carrying over Bombardment Damage
- CG 4.8 Quick Expansion Colony Fleet Rules
- CG 4.9 Black Markets
- CG 4.10 Extended Construction Time

- CG 4.13 Random Events
- CG 4.16 CSCR Attrition Alternative
- CG 4.17 CSCR Skirmish Rules
- CG 4.19 Blockade Maintenance
- CG 4.21 Ballistics Packages
- CG 4.22 Stealth and Concealed Movement
- CC 2.1 Advanced System Generation Rules (Commodore Level)
- CC 2.2 Exploration Campaigns
- CC 2.3 Star System Surveys
- CC 2.4 Terrain Features
- CC 2.5 Special Resources (FTL & Trade Bonuses)
- CC 2.6 Ancient Ruins
- CC 2.7 Ancient Derelicts
- CC 3.1 Unimportant Jump Lane
- CC 3.6 Simplified Jump Gate and Jump Lane Rules
- CC 3.8 Restricted Lane Escort
- CC 4.1 Retreating from Combat
- CC 4.2 Ramming
- CC 4.3 Advanced Dedicated Missions
- CC 4.4 Bombardment Point Alternatives
- CC 4.5 Immediate Orbital Bombardment
- CC 4.6 Advanced Orbital Bombardment Missions
- CC 5.2 Guerilla Warfare
- CC 5.3 Special Forces
- CC 5.4 Variable Quality Militias
- CC 6.1 Non-Player Entities
- CC 6.2 New Diplomatic States
- CC 6.3 Underworld Empires (CM Only)
- CC 6.4 Enslavement and Genocide
- CC 7.1 Unit Special Abilities
- CC 7.2 Planetary Facilities and Installations
- CC 7.3 Heavy Basing Capacity
- CC 7.5 Personnel Recruitment
- CC 7.6 Extended Base Construction Rules
- CC 7.7 Prototyping
- CC 7.8 Unit Refits
- CC 7.10 Overpopulation
- CC 7.11 Strip Mining

CC 7.13 Emergency Production

CC 7.14 Extended Trade Routes

CC 7.15 Terraforming

CC 8.1 Accelerated Tech Advancement

CC 8.2 Tech Levels
(Starmada Tech Level)

CC 8.3 Directed Research Projects

CC 9.1 Rebellion

CC 9.2 Elevated Rebel Threat

CC 10.1 Elite Officer System

CC 10.2 Personnel Grade Levels

### VBAM Rules Changes ◀ 2.1.1

As is typical, I have made modifications to some of the VBAM rules for this campaign. There are a few changes to these VBAM rules that are necessitated by the use of Starmada craft and technologies. This section includes overviews of all such changes.

I am also including notes with certain rules to describe how they will be used in the campaign.

### CG 4.2 Optional Jump Lane Movement ◀ 2.1.1.1

I am using a modified version of this rule wherein I use the benefits for major lanes but exclude the other rules. I have played with the two-turn restricted route movement, but in an exploration campaign this can become annoying, so it is ignored.

### CG 4.9 Black Markets ◀ 2.1.1.2

I have not used this rule very often, and I doubt I will in this campaign, but if raiders steal any goods I will be placing it into a black market pool for raiders and foreign governments to purchase.

Anytime an object comes up for sale, all players will be allowed to bid on the item and the high bidder will receive the object. This gives everyone a chance to purchase items from the black market, but represent that the owners are going to try their hardest to get the best price for their often illegal contraband.

#### CG 4.13 Random Events **◄** 2.1.1.3

The random events rules are always fun to include, though I often forget to roll for them if I get too engrossed in a single aspect of a campaign.

I intend to make one random event roll during the end of each campaign year until I find another

faction, at which point I will make it a biannual roll, with one random event rolled on the sixth turn and another on the twelfth of each campaign year.

### 

This campaign will be using terrentium, the special resource that is required to build jump gates and jump engines in the Escalation Wars setting. This resource is providing the FTL and Trade advantages as outlined in the Companion.

In order to make the FTL advantage work in relation to Starmada, the cost of all units with a jump engine (hyperdrive) will have their cost increased by +1 EP. I think the main VBAM: Starmada book calls for this, but I don't believe my spreadsheet is figuring that right.

#### 

It is usually a pain to go in and calculate bombardment points, so I am basing the bombardment points for this campaign on the VBAM combat capabilities of the ships.

Ship units will receive half their AS (rounded down) in bombardment points each turn, or their full value if they are classified as Gunships. Flight units (fighters, shuttles, etc.) receive half their combined AS/AF (rounded up) per flight wing (e.g., four flights).

### Modifications to VBAM: Starmada Edition ◀ 2.2

I said I was a tweaker, didn't I? I have made some changes to the base rules found in VBAM: Starmada Edition for purposes of this campaign.

### 

The cost of all ship and base units has been modified. The cost is now equal to the average of the normal cost, as given in the VBAM: Starmada Edition, and the unit's Hull. Round fractions up. This provides a better "feel" to the costs.

### Flight Units ◀ 2.2.2

I am adjusting the values of flight units to be based partially on the tech level of the power at the time of their development. Thus an Interceptor fighter designed by a -8 TL power would not have the capabilities of a fighter designed by a -6 TL fighter.

The particulars of these changes are not yet set in stone, but it is a good bet that each of the tech areas will ultimately have an impact on which statistic is improved. So a Weapons TL upgrade would improve AS or AF, Defense TL would affect DV, Engines TL would affect AF, and Equipment TL might have an effect on all of them, or allow them to carry special fighter weapon packages.

### Maintenance Costs ◀ 2.2.3

#### 

Coming from my VBAM versions, the maintenance bracketing system found in the book just doesn't jive with what I am used to. Therefore I have adjusted the brackets to be more along the lines of what I am looking for.

Below are the new maintenance brackets, from lowest to highest. Some of them carry extra economic cost penalties instead of higher maintenance values, as this has seemed fairer given my past experiences with VBAM campaigns.

Maintenance Br	ackets
1/12	
1/8	
1/6	
1/4	
1/2	
2/2	
2/2	+1 EP Cost
3/2	
3/2	+1 EP Cost
4/2	
4/2	+1 EP Cost
5/2	
5/2	+1 EP Cost
6/2	

In addition to the aforementioned changes, this campaign is also using a prototype *variable maintenance system* that I have been playtesting.

Based partially on discussion on the VBAM Yahoo Group, this system has maintenance values change depending on two sets of criteria.

First, the economic cost of a maintaining a class (the maintenance numerator) will increase over time. As a class gets older, and barring expensive refits, the availability of replacement parts combined with general obsolescence will simply make ships more costly to maintain.

For every 10 years that have passed since a class enters service, it's maintenance numerator will be

increased by 1. This means that it will take +1 EP to maintain the listed number of units.

Secondly is the adoption of another maintenance mechanic that integrates an economies of scale component into play. What this means is that the more members of a class you have, the cheaper it will be to maintain them. This encourages large production runs while discouraging one-off designs.

To do this, find the square root of the number of units divided by the maintenance denominator and round all fractions down.

Integrated Example: The Solar Federation has built 17 Pegasus Light Cruisers. The class was first commissioned in 2205 and has a normal maintenance cost of 1/2. The current year is 2218.

2218 minus 2205 equals a difference of 13 years. This is one increment of 10 years, so the maintenance cost of the class is now equal to 2/2.

Now we determine the maintenance denominator modifier (if any). 17 is divided by 2, resulting in 8.5. The square root of 8.5 is 2.9, which round down to 2. The Pegasus' maintenance denominator is increased by two.

In the end, the Pegasus Light Cruiser has a modified maintenance cost of 2/4.

### 

ROUNDUP((Engines / 2) + (Defense / 2) + ((Drat)/100),0)

Anti-Ship Factors ◀ 2.2.4.2

ROUND(Orat/100,0)

This has not been changed.

Command Rating **◄** 2.2.4.4

This has not been changed.

Command Cost ◀ 2.2.4.5

I modified the Command Cost formula to provide higher CC values for ships. I wasn't happy that so many of the ships had CC values "off" from what I was used to with my traditional VBAM materials.

### ROUNDDOWN(E5^(0.6),0)

### Special Equipment and Ability Modifications < 2.2.5

### Command **4** 2.2.5.1

I did not change the Command Rating formula itself, but I am using the incorrectly setup rules that have the Command special equipment take up a percentage of space and provide a more limited benefit. Each additional Command equipment after the first will provide an additional +1 CR benefit to the equipped craft.

### Diplomatic ◀ 2.2.5.2

As with the Command special equipment, the version of the VBAM:SX spreadsheet I have here has the diplomacy being figured differently than what the copy of the rules I have indicate. I like this method better, so I am keeping it.

### 

I am used to military supply ships have fractional Supply values, so I am using the following system to determine what Supply rating these ships shall receive. I will however still use the economic penalties given in the main book, as they are still appropriate. After all, if I have to pay for and build 8 Supply (1/8) ships to get Supply (1) capabilities, I am going to be at enough of a disadvantage as it is.

Military Supply Sh	nips Supply Levels
2 Military Cargo Bays	Supply (1/8)
3-4 Military Cargo Bays	Supply (1/4)
5-9 Military Cargo Bays	Supply (1/2)
10 Military Cargo Bays	Supply (1)
20 Military Cargo Bays	Supply (2)
30 Military Cargo Bays	Supply (3)

### 

Call me bitter, but the point defense system seems a bit over powered when combined with Defense values of 4 or more. The chance to get through without the Ignores Shields weapon enhancement just is pathetic, especially if you have bad rolls.

The point defense systems equipment is still in use, but I am appending a home rule that the first Equipment hit to affect the ship will automatically be scored against the unit's point defense.

### Research and Development Modifications ◀ 2.2.6

### 

Some of the more primitive races will be given tech levels below the normal -2 in each field. For example, Industrial-2 races will start with -3 in most of the fields. This will make it quite clear just how bad off some of these power really are.

#### 

I believe that the costs for Macro tech advances is currently too low. A player could conceivably rush through Macro tech development in only a few campaign years given adequate investment and luck on the tech advancement checks. Refer below for the new Macro tech investment costs.

Modified Relative Ma	icro Tech Advance Costs	
TL -3 to TL -2	Cost x 2	
TL -2 to TL -1	Cost x 5	
TL -1 to TL 0	Cost x 10	
TL 0 to TL +1	Cost x 15	
TL +1 to TL +2	Cost x 20	

### 

I have had some problems with this in the last campaign thematically. I know that some of the costs of new weapon development is already included in the prototyping of new vessels, but I still have a problem with a race completely dumping one avenue of technology for another on a whim (even if it was in my best interests!).

As a result, all powers will have to research their new weapon systems prior to deploying them on new craft, even prototypes. The research cost of a weapon is equal to the square root of its SU cost times 5, rounding fractions down. For example, a 44.1 SU Ion Torpedo would have a research cost of 33 tech investment points. In contrast, an 8.8 SU Autocannon would have a research cost of 14 tech investment points.

If a player wishes to add a new weapon enhancement to a weapon, change its Range, To-Hit, PEN, or DMG, they will have to design and successfully research the weapon. The ROF of a weapon *can* be changed however because it can be explained away by more or fewer weapons of the same type being mounted in the same weapon battery.

A weapon system developed at one tech level will automatically "advance" as new technologies are

developed. It does not have to be researched a second time.

Weapons development is handled differently from other Micro or Macro tech development in that they are *directed research projects* and can be pursued concurrently with other normal Micro or Macro tech investment.

Instead of the process delineated in the VBAM: Starmada Edition, a separate process will be used in this campaign for determining the success or failure of reverse engineering attempts on alien technologies.

When a ship or salvage is recovered, there is a chance that it might result in valuable technical data. Starships, bases, and flights will possibly to be able to unlock both Macro and Micro advances, while salvaged weapons or other systems will only be able to betray Micro advances.

Reverse engineering a ship or base unit requires 1 turn per remaining Hull point to complete. A ship must be taken to a shipyard and occupy one dock space while the reverse engineering is taking place. Bases must be reverse engineered on-site; they obviously cannot be moved.

The reverse engineering process requires an investment of tech investment points equal to the construction cost of the unit (round up). This payment must be made before reverse engineering can begin.

Once reverse engineering is completed, a roll is made to determine if tech has been gained or not. The attempt is made with a percentile die. The base chance is 0%. This is increased by 5% per TL the ship is higher than your empire's own TL. Multiply this value by the unit's remaining Hull.

At this juncture, the researching player has the option of either attempting a Macro advance or a Micro advance.

If a Macro advance is desired, the chance calculated above is divided by the desired Macro level multiplier (rounding down) and a die roll made. If equal to or less than the target, then a Macro advance is made.

If a Micro advance is desired, the chance calculated previously is left unmodified and rolled against. If less than or equal to this number, then a Micro advance is made. If a Micro advance is earned, the player should array five of the unit's intact weapon enhancements or special equipment objects in a grid as is done normally during research. A destroyed piece of equipment or weapon obviously cannot provide the chance for discovery, so only those enhancements and equipment still extent on the ship can be attempted. Once the array is made, roll d6 normally.

In the case that the ship does not have five enhancements or equipment types available, leave open spaces blank. A roll on these locations will result in nothing being learned from the wreck.

A player may only reverse engineer a unit once. After the reverse engineering attempt is over, the unit is considered scrapped and the owning power will receive 25% (not 50%) of its base construction cost in economic points as a result of the scrapping.

Reverse engineering a flight unit (fighter, shuttle, etc.) requires 2 turns per point of DV to complete. Flights must be taken back to a world with a Census and Productivity of 3 or more or a shipyard to be reverse engineered.

The reverse engineering process requires an investment of tech investment points equal to the flight's construction cost times ten, reducing fractions and rounding up. This payment must be made before reverse engineering can begin.

Reverse Engineering Systems and Equipment ◀ 2.2.6.4.2

There are times when the development of a specific weapon enhancement or special equipment type is critical to the survival of an empire. As a result, an empire has the option of devoting itself towards a specific technical goal.

This crash research and development allows a power to forego the normal random tech selection in the Micro tech advancement process and select a specific Micro advance upon the successful achievement of the advance. However, crash R&D increases the cost of the tech advance by twice the normal cost!

Example: An empire with a total domestic product of 93 has decided that it must have the redundant shielding special equipment in order to survive. The empire's normal tech advancement goal is 47 points, so it will cost this empire 94 points of tech investment to perform this crash development to secure redundant shielding.

### Starmada Fighters and VBAM Statistics < 2.2.7

The values in the Starmada Edition are passable for translating Starmada fighters into VBAM statistics, but coming from VBAM to Starmada the values just don't seem right to me. There is too little variation in the statistics for my tastes, nothing like is possible in the VBAM system.

Standard Fighter: 2/2/2
DV: TL -3 to -2 = 1
TL -1 to 0 = 2
TL 1 to +2

Fighter Modifications and Effects							
Unit Type	Cost	Maint	DV	AS	AF		
Light	-1	-1	-1	-	-		
Standard	-	-	-	-	-		
Heavy	+1	+1	+1	-	-		
Bomber	+1	-	-	+1	-1		
Assault	-	+1	-	+1	-		
Extended Range	+1	-	+1*	-	+1*		
Interceptor	-	-	-	-	+1		
Fast	-	-	+1*	-	+1*		
Assault	+1	+1	-	-	-		
Non-Atmospheric	-	-1	-	+1*	+1*		
Jump Capable	+1	+1	-	-	-		
Shadow	+1	+1	-	-	-		
Slow	-1	-	-1*	-	-1*		
Small	-1	-	-1*	-1*	-1*		
Large	+1	-	+1*	+1*	+1*		

\* = Can choose one or the other, not both.

Light: -1 DV Heavy: +1 DV

Bomber: +1 AS, -1 AF

Assault: +1 AS or +2 AS, -1 AF Extended Range: +1 AF or +1 DV

Interceptor: +1 AF Fast: +1 AF or +1 DV

Basic (Standard) Fighters at Each Level Unit Type Cost Maint DV AS AF

Ultralight	1/5	1/20	1	0*	0*
Light	1/4	1/16	1	0	0
Medium	1/3	1/12	2	1*	1*
Heavy	1/2	1/8	3	1	1
Super-Heavy	1/1	1/6	4	2	1

Each TL above TL -3 allows a flight design to receive +1 design points of alterations. It costs a number of points equal to the new DV value to increase DV by 1 (i.e., 3 points to get to DV 3), and 1 point to adjust AS or AF up by one bracket. The AS and AF brackets run as follows: 0\*, 0, 1\*, 1, 2\*, 2, 3\*, 3, and so on.

These TL bonuses can only be applied to specific areas, however. Defense can be applied to improve DV; Engines can be used to improve DV or AF; Weapons can be used to improve AS or AF; and Equipment can be used to improve all three.

All flights are considered Atmospheric unless otherwise noted. Atmospheric capabilities can be removed, giving the design 2 extra design points.

Each bracket adjustment of cost or maintenance returns 1 design point (if moving down) or gives the design 1 design point (if moving up). Cost brackets go from 1/10, 1/9, 1/8, 1/7, 1/6, 1/5, 1/4, 1/3, 1/2, 1/1, 2/2, 3/2 and so on. Maintenance brackets are similar, but jump by denominator increments of two.

Example 1: A power with Weapons –1, Engines –1, Defense –2, and Equipment –2 is designing a new medium fighter. The basic medium fighter chassis has stats 2/1\*/1\* and cost 1/3 and maint 1/12.

The player decides to use his free design points from tech to improve the design. This fighter needs to be hardy, so we are going to use the +1 from Defense and +2 from Engines to get us to DV 3. The +2 from Weapons will be applied to AS, punching us up two brackets to 2\*. Our Equipment point we will bank roll into AF, getting that to 1. Our fighter is now cost 1/3, maint 1/2, DV 3, AS 2, AF 1. Not a bad fighter. Fairly survivable, definitely, but not a runaway success, either.

Example 2: A power with Weapons +1, Engines -1, Defense +2, and Equipment 0 is designing a new light fighter. The basic light fighter chassis has stats 1/0/0 and cost 1/4 and maint 1/16.

This design is going to emphasize capabilities over survivability. To that end, we are going to put all of the points into AS and AF that we can. We put a total of +5 into AF and +4 into AS. The +5 from Defense all has to go to DV.

Our light fighter now is cost 1/4, maint 1/16, DV 3, AS 2\*, AF 2. Not bad, considering that we weren't necessarily interested in the ship being survivable. Our defense tech is just good enough to make it possible for us to design some pretty neat stuff like this.

### Communications < 2.3

Normally, I don't pay much attention to communications ranges and the like in a campaign. However, in this campaign, I've decided to give it a go. It won't have much impact on the fundamental rules of the campaign, but it will have thematic repercussions.

In this setting, tachyon communications piggyback along the hyperspace beaconing system. If a steady, consistent jump beacon route has not been laid to a system, then there is little chance for communications to be maintained. The more developed the jump beacon route, the more bandwidth is available for all types of broadcasts, from interplanetary news and entertainment channels to secure military communiqués.

The result is that fractured communication networks often mean that ships often have to act as physical couriers, moving messages and information around back and forth.

### Communication Ranges **₹** 2.3.1

Each planet has a base communication range equal to the square root of its Productivity statistic, rounding fractions down.

A system's maximum communication range is roughly equal to the range of a basic supply route. As with supply, this range is influenced by the communication signals' ability to trace across jump lanes of varying qualities:

**Restricted Lane:** No communications possible.

Unimportant Lane: 1 Jump (6 CC). Minor Lane: 2 Jumps (3 CC). Major Lane: 3 Jumps (2 CC).

For cases where communications will cross a path with lanes of multiple types, a communication cost (CC) is given in parentheses above for each lane type. The maximum range communications can traverse is 6 CC of lanes.

Fleets have a communications range of one jump regardless of lane type. However communications over restricted lanes is still impossible.

Jump capable flights have a communications range of 0

Chains of interconnecting communication ranges will allow for instantaneous transmission of communications throughout the network.

If a fleet or colony is outside of communications range, it must continue making decisions based on previously held information. This has many implications for play, especially if used in a campaign with an aggressive CM. Empires may not know the fate of their fleets if they lose a battle out of communications range; it will look like they just disappeared. Similarly, a planet that is cutoff from the enemy will never know if a friendly force will be riding to its aid anytime soon and will operate accordingly.

### Communications and Diplomacy ◀ 2.3.2

Communications plays a major roll in diplomacy. If a communications network cannot be drawn between two empire's Capital systems, then they cannot conduct normal diplomacy. Some exceptions exist to his rule, however.

First, if either side has established an embassy at either the other's Capital system or a Capital system of a shared third party, then they may still conduct diplomacy.

Second, if one side or another dispatches a ship with the Diplomatic special ability they will also be allowed to continue their diplomatic dealings.

In either of these cases, new treaties or diplomatic states will not go into effect until communication is possible with the empire's Capital system. For example, a Diplomatic courier sent to parlay and sign an Armistice would have to move into communications range of the foreign Capital system, negotiate the treaty, and then return to communications range of its own empire's Capital system before the treaty would go into effect on their end.

NPE Diplomacy ◀ 2.3.2.1

NPEs will continue to conduct all of their normal diplomacy roll, including the one for offering chance,

even if not in communication with the opposing power.

Should an offering chance be triggered, the NPE will still not be able to automatically ask for a treaty. Instead, the NPE will desire to load up a ship (preferably one with the Diplomatic ability) and head out to ask their neighbors for the indicated treaty indicated as part of the offering chance roll. If the NPE cannot fulfill this requirement, they will shrug and go back to doing whatever it was they are doing.

Declarations of hostilities or war do *NOT* need to be communicated to an opposing power. If such a declaration is made and the NPE and its new adversary are not within communications range of each other, the declaration will remain secret until the NPE enters communications range and lets them know about it. If the declaration is a secret one, then the NPE won't even tell them then! Instead they will make their sneak attack as planned.

### New Facilities **₹** 2.4

### Command Information Center (CIC) < 2.4.1

A Command Information Center (CIC) is a special planetary facility that acts as a hub for government communications. These relay posts help to ensure that information can be disseminate throughout an empire in a timely manner, preventing missed or delayed reception of time-sensitive materials.

In order to represent this benefit to an empire's communication infrastructure, a CIC increases its colony's communications range by 1 jump. Additionally, a CIC can be built on an uninhabited planet and still provide its listed benefit, providing a 1 jump communications range from its location.

Only one CIC will ever have any effect, but purchasing multiple facilities of this type will provide redundancy in times of crisis.

A CIC is purchased and placed like a Military Institute. It has a construction cost of 25 economic points and a maintenance cost of 2/1. Once built it may not be moved, though it may be scrapped.

### 

This section details how to convert the NPE tech levels includes in the Campaign Moderator's Companion into a workable Starmada format.

As described in the Companion, alien technical prowess at contact can vary from primitive Stone Age savages all the way up to vast and timeless interstellar empires. Most new contacts though are younger interstellar powers, likely at about the same stage of development as the player powers.

### 

Pre-Industrial powers have no technology to speak of. Depending on how much pre-contact tech research the race has done, the IND-P power might be as advanced as the late Iron Age, or they might still be poking each other with Grogg's sharp, pointy stick.

IND-P powers have access to the Ground Level 1 Militia ground unit, but that is the limit of their technology. It sucks to be them.

### 

The Industrial Revolution has began, but that is about the limit of the technical competency of these Early Industrial civilizations.

As with IND-P powers, IND-1 powers have access to the Ground Level 1 Militia ground unit, but that is the limit of their technology. It sucks a little less to be them, but not much.

### 

The space race has begun! IND-2 powers have finally developed some rudimentary space technologies. This level of sophistication runs from about 1960s-era technology up to sometime in the unknown future, by human reckoning. They can build ships and go into space, but their abilities are not particularly good.

Beginning with this stage, there are breakpoints at each level that describe what is available depending on the level of technological research the preinterstellar power has made towards its tech advancement goal for that tech level.

Just to give people an idea how to interpret these:

**Tech Levels:** This is the number of Tech Levels of each kind the empire would have at that level of sophistication. For example, "2 @ TL -2" indicates that the empire begins with two of its Tech Levels at -2. Which Tech Levels start at elevated levels is determined at random.

# of Designs: This is the number of designs that the empire has available to it at the beginning of the campaign. This value is based on the race's Homeworld Productivity statistic.

# of Enh/Eqp: This stands for "number of weapon enhancements or special equipment." It takes time to create all of those neat gadgets, and a race will only have developed a certain number dependent on its relative tech advancement. Note that all of the basic tech items found in the VBAM Starmada Edition are always available. Most of them are bad for you, so it doesn't hurt to give Captain Space Monkey Doubled Range Modifiers when he can barely fly his orbiter around the planet (luckily missing that wormhole that could shoot him across the galaxy...).

The one exception of course if Hyperdrive, which is the ultimate goal of the final pre-interstellar tech advance.

**Ground LvI:** This is the ground tech level of the empire. In parenthesis following it is a declaration as to the types of units currently available from that field, if applicable.

#### Tech Investment:: 0 - 149

Tech Levels: 4 @ TL -31

**# of Designs:** Homeworld Productivity x .5 (round down)

# of Enh/Eqp: 0 Ground LvI: 1 (Militia)

#### Tech Investment :: 150 - 299

Tech Levels: 3 @ TL -3

1 @ TL -2

# of Designs: Homeworld Productivity x .5 (round down)

# of Enh/Eqp: 0

Ground LvI: 1 (Militia, Regulars)

#### Tech Investment:: 300 - 449

Tech Levels: 2 @ TL -3

2 @ TL -2

**# of Designs:** Homeworld Productivity x .5 (round down)

# of Enh/Eqp: 0

Ground LvI: 1 (Militia, Regulars)

#### Tech Investment :: 450 - 499

Tech Levels: 1 @ TL -3

#### 3 @ TL -2

**# of Designs:** Homeworld Productivity x .75 (round down)

# of Enh/Eqp: 1

Ground LvI: 1 (Militia, Regulars)

### Interplanetary (IND-3) < 2.5.4

Space travel is commonplace, and moving from planet to planet in one's own solar system is second nature. The only thing missing right now is the ability to travel to other stars. IND-3 powers haven't developed the Hyperdrive yet.

#### Tech Investment :: 0 - 199

Tech Levels: 4 @ TL-2

# of Designs: Homeworld Productivity x .75 (round up)

# of Enh/Eqp: 1

Ground LvI: 1 (Militia, Regulars)

#### Tech Investment:: 200 - 249

Tech Levels: 4 @ TL-2

# of Designs: Homeworld Productivity x 1

# of Enh/Eqp: 2

Ground LvI: 1 (Militia, Regulars)

#### Tech Investment:: 200 - 249

Tech Levels: 3 @ TL -2 1 @ TL -1

# of Designs: Homeworld Productivity x 1

# of Enh/Eap: 3

Ground LvI: 1 (Militia, Regulars)

After completing the IND-3 tech advancement goal, an IND-3 power will receive Hyperdrive tech.

### Emerging Interstellar (INT-1) ◀ 2.5.5

With the secrets of Hyperdrive unlocked, INT-1 powers have begun taking their first steps beyond their solar system. None control large empires (yet), but they are expanding into surrounding territories.

#### Starting Tech

Tech Levels: 2 @ TL -2

2 @ TL -1

# of Designs: Homeworld Productivity x 1

# of Enh/Eqp: 4

Ground LvI: 1 (Militia, Regulars, +1 Random)

### 

INT-2 empires control small but flourishing empires. They are not all powerful (yet), but they are developing at a rapid pace.

#### Starting Tech

Tech Levels: 3 @ TL-1

<sup>&</sup>lt;sup>1</sup> Yes, that's right. IND-2 uses a TL –3, which can easily be input into the standard Starmada X design sheet if you alter the validation on the appropriate fields of the sheet. The use of this TL makes IND-2 ships depressingly crappy, as they should be.

## The Saga of the Solar Federation

1 @ TL 0

# of Designs: Homeworld Productivity x 1.5 (round up)

# of Enh/Eqp: 8

Ground LvI: 2 (Militia, Regulars, +1 Random)

### 

These largish empires are powers to be reckoned with. Their fleets are large, and their empires are powerful.

Starting Tech

Tech Levels: 2 @ TL-1

2 @ TL 0

# of Designs: Homeworld Productivity x 2 (round up)

# of Enh/Eqp: 12

Ground LvI: 3 (Militia, Regulars, +1 Random)

### Expansive Interstellar (INT-4) ◀ 2.5.8

Few great empires exist in this galaxy, but this is one of them. An INT-4 power has the capability of crushing almost all opposition with little risk to itself. Subjugation of lesser races is not a problem.

Starting Tech

Tech Levels: 3 @ TL 0 1 @ TL+1

# of Designs: Homeworld Productivity x 3 (round up)

# of Enh/Eqp: 16

Ground LvI: 4 (Militia, Regulars, +1 Random)

### 

Few empires grow to this size, and any empire of its type encountered should send make you fearful.

Starting Tech

Tech Levels: 1 @ TL 0

2 @ TL+1 1 @ TL +2

# of Designs: Homeworld Productivity x 4 (round up)

# of Enh/Eqp: 20

Ground LvI: 4 (Militia, Regulars, +2 Random)

### Ancient Interstellar (INT-6) < 2.5.10

If your empire meets one of these guys, I recommend crying. Very loud. Like a girl. Come on, your race is dead. Even the Ghostbusters aren't going to be able to save you now.

Starting Tech

Tech Levels: 2 @ TL+1

2 @ TL +2

**# of Designs:** Homeworld Productivity x 5 (round up)

# of Enh/Eqp: 24

Ground LvI: 5 (Militia, Regulars, +2 Random)

### 

Want a random method of choosing technologies to give to a new race? Roll d100 and consult the chart below. It is separated into Special Equipment, Weapon Enhancements, and Other for ease of use.

	Special Equipment
1	Anti-Fighter Batteries
2	Armored Gun Batteries
3	Battle Satellites
4	Cloaking Device
5	Decoy
6	Drones
7	Electronic Countermeasures
8	Electronic Warfare System
9	Ionic Shielding
10	Mines
11	Minesweeper Array
12	Organic Hull
13	Overthrusters
14	PDS
15	Redundant Shielding
16	Shockwave
17	Spinal Mount (Kinetic)
18	Spinal Mount (Energy)
19	Spinal Mount (Ballistic)
20	Stealth Generator
21	Stutterdrive
22	Sunbursts
23	Tachyon Detection
24	Armored Engine Systems
25-49	Reserved for Future Development
	Weapon Enhancements
50	Continuing Damage
51	Extra Crew Casualties
52	Extra Hull Damage
53	Halves Shields
54	Ignores Shields
55	Increased DMG
56	Increased PEN
57	Inverted Range Mod
58	No Range Modifiers
59	Range-Based DMG

60	Range-Based PEN
61	Range-Based ROF
62	Repeating
63	Re-Rolls Penetration Dice
64	Re-Rolls To-Hit Dice
65	Shield Resonant
66	Variable DMG
67	Variable PEN
68	Variable ROF
69	Fighter: Assault
70	Fighter: Bomber
71	Fighter: Extended Range
72	Fighter: Fast
73	Fighter: Heavy
74	Fighter: Interceptor
75	Fighter: Shadow
76	Fighter: Jump Capable
77	Ignores Point Defense System
78-89	Reserved for Future Development
	0ther
90	Starmada Defense (Shielding)
91	Screens (vs Shields)
92	Anime Spinal Mount (Energy only)
93	Ground Level Increase
94	Scout Level Increase
95	Atmospheric
96-100	Reserved for Future Development

### Campaign Diary **◄** 3.0

### January, 2200

Captain's Log, January 1, 2200, 18:32 EST SFS Cassandra – Security Encryption Level Gamma

Begin recording. This is Captain Marcus Stiles, the first commander of the *SFS Cassandra*, the fleet's first jump-capable starship. I am not sure why I was selected to captain this vessel, but it is really an honor to serve as her campaign. The *'sandra* and I are already on a first name basis, and I hope to keep it that way. Those engineers know how to build a damn fine ship.

Today has been a long day. A *long* day. The president and Federation Naval Military Commission wanted to make a big deal out of the *Cassandra's* launch, so they waited to formally commission her until the stroke of midnight on December 31, 2199. It was a huge gala affair, with VIPs and statesmen everywhere.

I hated it. I really, really hated it. The crew and I have been onboard spinning our wheels for six excruciating weeks. Six weeks of sitting in the captain's chair without hearing the steady and reassuring thrum of the engines beneath my feat. Six weeks of filling out paperwork and reading technical journals when I could have been leading my ship into the unknown. Of course, until this morning – or last night, or whatever – the *Cassandra* still wasn't officially my ship. That happened at the ceremony. They are *really* playing this up for all its worth. You can tell that 2200 is an election year.

Now that the hubbub is over with and President Mukafe has his photo-op out of the way, it is time for me and my crew to get down to business and do the jobs that we signed up for when the joined the Federation Navy. To see the unknown, to venture to that farthest star and back again. That is why we are here. Now that they've turned the engines on I can feel my girl, and she's ready to go, too.

I just got done having a small, informal dinner with my command crew to get things squared away and ready for our departure from Olympus Station and out towards Pluto. You know, with all of the food at the banquets today none of us got a good meal? It is hard to eat when you have a wall of dignitaries that want to shake your hand and get a sound-byte. Where was I? Oh yeah, dinner. Anyway, everybody by doc' Taylor was there. Vincent was off-ship, said he was visiting his daughter and new grandchild before we ship out. I can't blame him. But Ira, Alyson, Benson, and Shen were all there. We were beat, but we still had a good time.

It looks like this should be a good crew. I am looking forward to serving with them. True, Ira, Alyson, and I have been here for over a month, but Benson and Shen came onboard less than a week ago.

Commander Ira Petrovski is my executive officer. He's a grizzled old veteran, and the best friend that I've made since coming onboard *Cassandra*. In his youth he was a pilot in the Russian space forces and fought in the Intra-Solar War. It's been good to be able to pull Ira aside and get his views on things. The way he can get the crew acting together is really extraordinary. I think he is going to be a good resource on this mission, if only for my own morale.

Commander Alyson Corveda is my chief engineer. The last year she has practically lived in this ship's engines. I actually think she does know where every bolt and rivet is back there! I can't believe the number of times that I would be walking the decks late at night and find the redhead, her face covered in black oily grunge, crawling in and out of access tubes. She has been onboard the *Cassandra* longer than any of us, and the ship's jump drive is her baby. She might not have been one of the theoretical physicists that imagined the thing, but she knows how it works and how to make it run.

Colonel Benson Mallory is our security chief. A Marine, he wasn't very talkative last night. But, then again, he never really is. He's in charge of the ship's security detail. Hopefully we won't need them, but the Commission forced his presence upon us. They said we wouldn't leave dock without an armed contingent onboard as a contingency should we find something we weren't expecting.

Finally, Shen Itusekumi is the head of the ship's sciences department. He's a civilian, one of many that are onboard for this mission. I am not sure why Lieutenant Commander Sokolov was overlooked for the position; that ice queen had been onboard for three weeks before being she was reassigned. Now, I am not complaining in the least; Shen is a much more affable person, and I think that he'll fit in fine.

Well, there you have it. That's my crew and this is my ship. If the Cassandra's willing, in a week we will be far enough out to engage our hyperdrive and

escape the sun's gravitational field. Then we can get this show on the road.

### February, 2200

Ship's Log, February 13, 2200, 06:31 EST SFS Cassandra – Bridge Camera Footage

"We've made jump into the Proxima system," Lieutenant Aykara dutifully reported. She didn't have to say it; everyone felt it. The sudden transition from hyperspace back to normal space was disorienting to say the least.

Captain Stiles looked back and forth between his crew stations, panning his gaze to take in all of their reactions. He grinned for a moment, taking it all in. Their reactions, their movements, even their whispered words of awe. This was it; this was the moment that he knew he would relish most of all.

"Helm," Stiles said, "Move us into the system. Give us a better look at what we've got here."

"Aye, aye, Captain," Aykara responded.

Stiles hit a communication stud on his command chair, activating it.

"Dr. Itusekumi..."

"...standing by, Captain," the doctor interrupted midstream.

Unphased, he continued, "...how long until our long range sensors provide us with a cursory system survey?"

There was a pause and a sound like the rustling of papers, then came the response, "Captain, I believe we should have some initial data within the hour. I will forward on continuous reports as information becomes available."

"That sounds fine, just fine," Stiles replied as he switched off the channel. Looking around the bridge, he added, "It looks like we have some time to kill here before the tech tell us what we've got to look forward to."

"It feels strange to be making history, doesn't it sir?" Commander Petrovski spoke as he sidled up next to the captain's chair, putting his left arm on the chair's high back. From the inflection in his voice, Stiles knew this was a private conversation, and so did the

crew. They went back to their duties, leaving the captain and his XO to talk

Stiles replied, "It is at that, but I have to say that I am enjoying it." He looked around, watching his crew still. The grin had faded, but he will loved absorbing their excitement, that light in their eyes. *Like kids in a candy store*, he thought to himself.

Petrovski chortled, looked down at his feet quick before returning his gaze to the captain. "You know, Marc, the next three *Cassandra*-class scouts are almost half finished back at the yards. We are alone out here for now, but before too long there will be four ships like this – four crews like this – plying the space lanes. We really need to enjoy this while we can. Right now we are adventurers... pioneers. I pity the day that finding a new star system is going to be routine... mundane."

Stiles nodded, but deep down in his gut he knew his XO was right. One of these days mapping a new star would be just another mission, no more exciting for most of the crew as performing convoy duty on the Mars/Jupiter run.

"I hope that it takes a long time before that happens," he finally replied, patting Ira on the back vigorously.

Suddenly the comm chirped. Stiles instinctively flipped it on and answered, "Captain Styles, go."

The voice on the other end of the comms was a very irate engineer by the name of Alyson Corveda.

"Captain, I just thought you would like to know that, yes, the engines are doing just fine. Thank you for asking."

Marcus and Ira looked knowingly at each other and smiled.

"Commander, you know that I have full confidence in both your abilities and your engines," the captain began, "and I didn't think there was going to be any problems with either of them."

"I just thought I would check in nonetheless, sir." With that the comm channel died and the two bridge officers were left to look at each other and share in the moment.

Marcus knew that his engineer had been stressing herself out about this moment, hoping that her engines were calibrated correctly in relation to the

ship's nav computers. She had been burning the midnight oil, visiting the good Doctor for stimulants to keep her going. Now she was just burning off that excess stress and anxiety. Perfectly understandable, but Marcus knew he would have to have a talk with his engineer.

### March, 2200

Captain's Log, March 23, 2200, 09:30 EST SFS Cassandra – Security Encryption Level Gamma

Preliminary surveys in Proxima Centauri provided the following data. This system is of minimal value, with one hostile planet, one barren planet, two gas giants, and an asteroid belt.

The system's middle zone seems the most promising, so we have spent the last month performing more detailed planetological surveys on the worlds there.

The third planet from the sun is a barren planet, and unfortunately the mostly likely candidate for colonization in the system. It is not really Earthstandard in climate, but it isn't insufferable, either. The planet is hot, and most of our colonies would have to be underground, but otherwise it is a good prospect. The planet is definitely not mineral rich with a RAW of 2, but it has a lot of land between it and its single moon (Capacity 8).

Proxima IV, a gas giant, is even less interesting than the third planet. A detailed survey found that the one Europa-sized moon in orbit of the giant is completely without merit. I saw pictures of the surface, and with its heavily pockmarked surface it looks more like an asteroid than a moon. Shen was quick to tell me that it is most likely a recent addition to the lunar system, a rogue asteroid ejected from the outer system. Yes, yes, I understand that, I said to him, but it still doesn't make me any more interested in it.

We have another month and a half of surveys to perform here, and then we will have to head back to Earth for resupply. Our stores are already fairly low, and Engineer Calveda has been on my case about equipment shortages. Evidently some of the life support systems on the lower decks have failed and we are out of parts to keep them running. Luckily those decks are adjacent to the secondary shuttle bay, which is open to vacuum most of the time, anyway. So we just had to evacuate some personnel and seal off the section for now. However I can see how this is could be a major problem later on. We just don't have a logistics network in place.

I forwarded Commander Calveda's report to fleet command. We shall see what their reaction is. I am not expecting much but the subject needs to be broached.

### April, 2200

Captain's Log, April 30, 2200, 11:49 EST SFS Cassandra – Security Encryption Level Gamma

The Proxima system is getting even more pathetic with each passing week. We surveyed the systems other two, inner planets. The hostile world looks a lot like Mercury in our own solar system, but it is far enough away from the star to give us a little more room for expansion. Which would be great if not for the fact that there are no heavy elements to be found. The innermost gas giant is just as bad.

That just leaves the asteroid belt left to analyze, and then our full survey of Proxima will be done. We are due back in Sol sometime in mid-May, so here's wishing us luck.

### May, 2200

Captain's Log, May 16, 2200, 07:06 EST SFS Cassandra – Security Encryption Level Gamma

Two surprises in one month – and both while we were surveying the asteroid belt!

The first surprise came after we retrieved our first set of geological probes from the belt. Shen called me up shouting hysterically in Japanese. It took about five minutes to finally calm him down enough so that he could tell me what had got him so excited. That's when it told me the asteroid belt contained terrentium, the material required in hyperdrive construction! At once I understood his reaction. Proxima might not be quite as bad as we previously had imagined.

The second surprise followed five days later when our long-range sensors detected a familiar jump signature on the outskirts of the system. Another Federation ship had made the jump and joined us in the system. It was the *Atlantis*, one of the new *Cassandra*-class explorer ships. I knew the ships were nearing completion, but I didn't know that they were finished.

I also didn't know how had been honored with the captaincies of the ships until the *Atlantis* arrived. I

was really surprised to see Rachel in the captain's chair when the video feed came online. I went to the academy with Rachel Devereaux. She was a year behind me in school and we had been friends all throughout those years. She was the only Ganymedian in her class, so she had felt some pangs of homesickness. My friends and I had taken her in, made her a part of our clique. I remember he being a good student and a fine officer, but I really didn't expect to see her out on the frontier.

The last week I have got to relive a lot of those old days with Rachel. She came over to *Cassandra* soon after her arrival, and I have been to *Atlantis* a few times, too.

Atlantis' arrival was more than a courtesy call. She came bearing new instructions for me and my crew. The *Cassandra* is to jump out for Sol within the hour. Upon arrival we will be met by the *HMS Ganges*, a Commonwealth military freighter that will perform resupply and get our stocks replenished. Afterwards, we are ordered to assist *Atlantis* in laying a jump beacon trail from Sol to Proxima. It seems that the Federation Assembly has hired a fleet of personnel liners and they are intent on colonizing Proxima. The decision to do so was made before the discovery of terrentium in the system, so that is icing on the cake.

While Cassandra and Atlantis are busying building a stable route between systems, their sister ships Columbia and Daedalus will be exploring other possible hyperspace routes out of Sol. We have detected four of them thus far, but only one has been mapped.

### July, 2200

Data File, July 4, 2200, 08:31 EST Olympus Station, Earth Orbit – Security Encryption Level Epsilon

The stars moved lazily across Captain Marcus Stiles vision as he stood in front of the full-size window that occupied the side wall of Admiral Hansen's office onboard Olympus Station. Even though the admiral wasn't here yet, Stiles stood straight with his hands clasped tightly behind his back. He rocked gently back and forth on his heels as he gazed out at the stars.

He *hated* waiting.

The wait to leave spacedock and get the Cassandra's exploration mission underway was bad enough, but waiting in an admiral's office – the

admiral's office – was even worse. It has been about twenty minutes, but the ache to get back into action seemed like any of the weeks he spent at Vancouver station waiting for the New Year's launch of the *Cassandra*.

Several minutes later, the office's automatic door whooshed open. Admiral Bennett Hansen walked in, recognized Stiles' presence with a nod of his head, and moved to his desk, take his seat behind it. With a gesture he offered a seat opposite it to Stiles. Stiles dutifully took his seat.

Admiral Hansen cleared his throat with a load cough and greeted Marcus. The admiral's voice was deep, hoarse, and raspy, the voice of a man who had seen too much and smoked plenty.

Marcus returned the prerequisite pleasantries and continued, "Admiral, you requested to see me?"

Admiral Hansen nodded his head emphatically and answered, "Yes, yes. Captain Stiles, as you know the *Cassandra's* three sister ships are now completed."

"I am aware of that," Stiles answered.

"Columbia and Daedalus have formed the 2<sup>nd</sup> Exploration Command, under the command of Captain Victoria Muldoon. She is currently on a mission of exploration at we speak... about... yes, here it is, three weeks out of Sol." The admiral shuffled his papers to find the report on his desk, referenced the date, and then returned it to the clutter.

"As you know, Captain, the Atlantis is currently operating solo in the Proxima system, awaiting your assistance to upgrade the route between those svstems." Admiral Hansen paused before continuing, "I wanted to be the one to inform you in person that the Cassandra will be heading up the 1st Exploration Command. You will be in charge of the mission; Captain Devereaux has been relayed a copy of these new ordered via a tachyon courier buoy. Together the Cassandra and Atlantis will perform hyperspace probing missions in Proxima. That leaves Muldoon and the 2<sup>nd</sup> Fleet to look for routes out of Sol."

The admiral smirked at Stiles.

"Is there anything you would like to say, Captain?" the admiral asked, his smirk deepening.

"Yes, Admiral," Marcus began. He leaned slightly forward, enough to get the admiral's attention without seeming confrontational. "I am concerned that the flight decks on the Atlantis, Daedalus, and Columbia are all empty. Wouldn't it be wise to assign some flight crews and Falcon fighters to them, just in case?"

The admiral shook his head gravely. "I wish we could, Captain, but my hands are tied. The Naval Commission has spent most of its available funds on other projects. There just isn't any money left in the budget for such provisions... but I will check with the Joint Chiefs and see if they can free up some funding to get another run out of Bethesda. Is there anything else?"

Stiles shook his head. "Not that I can think of at this time."

"Good, good..." the admiral said, "Then I will be seeing you later. Godspeed, Captain." The admiral saluted.

Stiles returned the salute, "Thank you, sir."

With that he turned on his heels and left the admiral's office.

### August, 2200

Captain's Log, August 22, 2200 SFS Cassandra – Security Encryption Level Gamma

It has been a busy last few months. The jump lane to Proxima Centauri has been upgraded to unimportant status from restricted, and the first human colonists to leave the confines of the solar system have made the trek to Proxima III where they have established Earth's first extra-solar colony.

Since we are in the system and Proxima III is being used as a drop-off for the 1<sup>st</sup> Fleet's supplies, I invited the planetary governor, Burt Calahan, up to the Cassandra for a visit and dinner. Rachel was there, too, since I thought it would be nice to have all of us there for the unofficial meeting.

The Proxima colony is a civilian operation, so Burt is not a military governor. He is just the colony leader placed in charge by the Proxima Corporation to oversee the fledgling colony's develop and act as a liaison with the folks back home. He's a portly gent with a large, almost comical handlebar mustache. He's quite a character, and we all had a good time last night. I broke out my favorite scotch and we

spent the time drinking and sharing war stories. I paid for it the next day, but it was worth it. It's good to know the locals.

Burt said that the colonists were still trying to decide on a name for the Proxima colony. The corporate big wigs insist on just colony it "Proxima 3", but what kind of a name is *that*? They are evidently going to have a straw poll in the next month to pick a name for the colony, but there doesn't seem to be much of a consensus among them. Burt's partial to the name Selene, for sentimental reasons he said, but the name isn't all that popular.

Oh well, we all have our problems.

### January, 2201

Captain's Log, January 1, 2201 SFS Cassandra – Security Encryption Level Gamma

It's been months and still no sign of any new star systems. 2<sup>nd</sup> Fleet's luck hasn't been any better. After Proxima I thought we would be charting new systems left, right, and center; but we are just spinning our wheels in hyperspace. Sigh. I guess it could be worse. I could be back at Olympus flying a desk.

It has been a year since we left dock, and we held a little ship-wide party down on the flight deck to celebrate. Spirits were high, though not as high as they were nine months ago.

The Proxima Corporation is prepping another colonization mission for Proxima III... I mean *Ariane*. That is what the colonists decided to name the colony. I hope that the new colonists like the name, because they are going to be hearing it a lot.

### April, 2201

Captain's Log, April 10, 2201 SFS Cassandra – Security Encryption Level Gamma

We've done it again! It was music to my ears when Lt. Miliana Aykara reported that we had found the telltale signature of a solar gravity well. I had Shen check, and the *Atlantis* double check him. The reports were consistent: we had found a new star system!

We entered Ross 154 and are now going to proceed with a full system scan. There are only two planets here, and of those only one of them is a rocky world.

The outermost of the two is a gas giant, but this gas giant looks like it might have two exploitable moons. Only time will tell.

### May, 2201

Captain's Log, May 5, 2201 SFS Cassandra – Security Encryption Level Gamma

The news is in on Ross 154, and it isn't good. The eggheads report that the system is almost a total wash. The inner planet is the right temperature for human life, but that is about it. The planet's thin atmosphere and lack of exploitable water (on the surface or below it either one) is going to make it hard for anyone to live there. The mineralogical survey was upbeat, but still RAW 2 isn't great.

The second planet, the gas giant, is even worse. There is room on the moons to live, but they are so mineral poor that I am not sure why anyone would want to live there. I sure wouldn't put down my life savings for a retirement home on those rocks.

### August, 2201

Captain's Private Office, August 1, 2201 SFS Cassandra – Security Encryption Level Beta

Captain Marcus Stiles leaned back in his chair as he scrutinized the document in his hand. The sheet was a flimsy transparency, and he had to keep adjusting his hand so that the writing would be legible. Making it even worse is that every so often he found himself squinting to see. Doctor Taylor would force him down to sickbay he if saw him right now.

As he squinted a bit more to read a small caption on the page, his office's door chime sounded.

"Enter," Marcus said, his eyes still trained on the page.

The door snapped open and in walked his XO, Commander Petrovski. Marcus looked up and smiled, nodding his head as Ira took a seat across the desk from him.

Marcus laid the transparency back on the desk and asked inquisitively, "What's up, Ira?"

Petrovski reclined in his chair and elevated his legs, using the nearby ledge that ran along the base of the wall as a footrest.

"Marc," Ira began, "I just wanted to check in with you and see how things were going... with this, I mean?" He motioned towards the piles of paperwork on his desk. Transparencies every one, each nearly identical (except for content) as the one he just had in his hands.

Stiles moaned. "Ira, this bureaucratic crap is really getting to me. It is almost like they *want* to smother me with paperwork. You didn't have a hand in this, eh? Gunning for a promotion, perhaps?"

The two men shared laughter. Ira hated paperwork as much as Marc, and the captain knew that.

"Better you than me, Captain," Ira countered. "I would never want to be the captain. I have enough paperwork as it is. Seriously, though, how are things?"

The voice of honest concern shot through the XO's still jolly demeanor. He is concerned about me, Marcus thought to himself.

Drawing himself up a bit, and with a tug at the bottom of his uniform, "I'm doing fine. Just routine material, at least most of it is. Though I do have some interesting items here that just came in from Olympus base a few days ago..."

Stiles shuffled through papers, throwing them here and there as he hunted for one in particular. It was obvious to Ira that the captain's filing system was "unorthodox", to say the least.

"Ah, here it is," Marcus said, drawing one transparency out of the pile on his desk. To Ira it seemed like any other sheet on the dark metal surface. "The Federation Design Bureau has requested the transfer of Engineer Corveda from Cassandra back to the shipyards back home. It seems that Alyson has been spending her "spare time" submitting engineering design concepts to the techs back home. The FDB seems to think that she would be a bigger asset back home than out here."

A wash of mixed emotions was evident on Petrovski's face. "I'm sure that Corveda would be happier back home playing around in her workshop," he began, "but I really don't think there is a better engineer in the fleet that could keep the Cassandra's systems online. It isn't like we are going to be able to get a new chief engineer anytime soon, either. We've been out here on patrol for... what has it been? A year?"

Marcus nodded, "Yeah, it is going to be a year next Thursday. We've been out here for awhile."

"...and now we have the Barnard system to survey before 1<sup>st</sup> Fleet can even think about heading home." Ira shook his head. "So what do you think, Marc? Are you going to authorize the transfer?"

Stiles sighed. "I don't see that I have any real choice. I've known Alyson for awhile now. Not very well, mind you – she has been keeping mostly to her department for the last two missions. I think that she is homesick for one, and just not really field officer material. She's in her element in the R&D engines back home, not the literal working engines of a starship out on the rim of known space."

"So what project is she going to be attached to if she gets recalled?" Ira asked, extending his hand. Marcus handed him the transparency so he could see for himself.

Ira whistled. "They want her to head up the Akagi project? I've heard of that. Pretty high profile."

Marcus nodded, "Yeah, they've finally decided that the frontier is going to be expanding enough to deserve some sort of a military presence and they've decided that a mid-size patrol carrier design would be the best way of addressing local defense issues."

After taking time to skim the text, Ira handed the sheet back to the captain.

"Impressive," Petrovski declared. "It looks like Alyson would be getting a promotion upon getting back there, too. It would be a greater career move for her."

"I agree. I am inclined to let her have the transfer and wish her on her way. I am sure we can find someone else that can take care of 'sandra."

"True, but not with as much of a loving touch as Cordeva has. She oversaw the design and installation of the drive system after all."

"Definitely, she knows this ship's schematics by heart," Marcus agreed. "I just don't think she signed up for a long term assignment here, emotionally I mean. And that has been a problem for her."

"I won't disagree with you, Captain. So, anything else that I should be aware of?"

Stiles nodded his head. "2<sup>nd</sup> Fleet has mapped a jump route that leads from Sol to Lalande 21185. Their crews are jubilant over their first success and the fleet will be mapping that system while we map Barnard's Star."

Ira raised an eyebrow, "After that?"

"I really don't know, Ira. We could be dispatched back to Ross 154 to do some additional mapping in that sector, or 1<sup>st</sup> Fleet might be moved into a secondary role again to help upgrade jump beacon routes out to the frontier."

"Weren't they going to build a dedicated construction fleet for that purpose at one point?"

"Yep, it was in the budget, and then President-elect Jennings and his administration dipped their fingers into the pie and diverted funding from that project over to financing Proxima Corporation and other private extra-solar colonization projects. So something tells me we won't be seeing any dedicated construction gangs for some time."

Petrovski scowled. "Jennings holds major ownership in Proxima Corporation's parent company, doesn't he."

"Yes, yes he does."

### October, 2201

Captain's Log, October 7, 2201 SFS Cassandra – Security Encryption Level Gamma

Our mission to Barnard's Star is over. *Cassandra* and *Atlantis* are returning to Proxima and from there on to Sol, as ordered. Once there we will drop off *Captain* Alyson Corveda at the orbital yards, then ship out to help 2<sup>nd</sup> Fleet upgrade the jump lane to Lalande. It turns out that Lalande 21185 is a rich star system, and there is a terrestrial world there that should be habitable. The atmosphere is thin and colonists will have to wear rebreather units, but otherwise it looks like a perfect home for future generations of humanity.

I wish I could say the same for Barnard. It is a mostly worthless system with several gas giants and few rocky worlds of any use. The innermost planet is passable, but something tells me colonization activities are going to be focused into Lalande for the foreseeable future.

Doc Taylor was in here this morning and dropped off his retirement papers. He has three months left, which he will be spending at Federation Medical on Earth, and then he will be officially in retirement. It's sad to see him go, but it wasn't unexpected. He's got family back there in Ontario, and he wants to spend more time with them. He's going to be missed.

That makes it two good crew we are going to be losing when we back get to Earth. I am sure there will be more crew rotations and reassignments once we pull in for resupply, but those two will have a major impact on the ship and her crew.

### November, 2201

Cassandra returned to Earth on November 14, 2201 without fanfare. The ship on which the Solar Federation had pinned all of its hopes was now more or less a ubiquitous element of the Federation fleet. The fleet had grown to include four such ships and the first extra-solar colony had been formed. The construction of a jump gate in the Proxima system allowed on-demand access to those military and private craft with that lacked hyperdrive capabilities of their own, and who had the credits to pay the fees for using the gate. These fees still restricted traffic to mostly military or sponsored craft, but that would soon change.

# # #

Data File, November 18, 2201 Olympus Station, Earth Orbit

Captain Stiles once again found himself in Admiral Hansen's office onboard Olympus Station. This time however he was not alone. The admiral had summoned both Captain Stiles and his executive officer, Commander Petrovski, to the meeting. As usual, Admiral Hansen was late. They waited for twenty minutes before he finally arrived.

After exchanging pleasantries, the admiral wasted no time getting down to business. "Captain Stiles, your service onboard the Cassandra has been exemplary and had set the standard for Federation naval exploration. You are to be commended."

"...but," Stiles followed, anticipating the direction in which the conversion was headed.

"But..." the admiral continued, "We believe that your talents are being wasted on the frontier. There is a position – and promotion – available for you here if

you are interested. We are looking for an officer with your level of experience to work with Vice-Admiral al-Rashud as part of the Solar Defense Initiative, of which the new Akagi Carrier project is a part. In this position you would be responsible for coordinating projects and reporting their status to the vice-admiral and making sure that we are on track. Are you interested."

"No," Stiles responded bluntly. The admiral's mouth was agape.

"You... you aren't going to accept the position?" Hansen stuttered as he tried to regain his composure.

"No, sir." Stiles answered, stressing the last word.

"Well," Hansen replied, his face looking like he had just been slapped, "I guess you can remain where you're at, if that is your preference."

"That is my preference, sir."

"All right, fine... yes, the Cassandra will remain under your excellent care for another tour of duty." Admiral Hansen was not amused in the slightest. "The ft Fleet will be assigned to construction duties, assisting 2<sup>nd</sup> Fleet in its exploration and upgrading jump routes as needed. For the next six months you and your crew can expect to remain in and around Sol."

He paused, and then changed his gaze to Petrovski, "The SFS Akagi is going to need a captain when she launches here in a few months. We've been pouring over the prospects, and to this point your name, Commander, has been appearing at the top of several of our short lists. I don't need an answer today, but we would like you to consider throwing your hat in the ring. The Akagi could use a good captain."

Marcus could see the shock on Ira's face, but that is only because he had known him for two years and could read the signs on his XO's face.

Ira replied, "Thank you, admiral. I will take the assignment under advisement and give it my full consideration. I will let you know one way or another if I am interested or not, but as you said I will need some time to think about this before committing, sir."

The admiral nodded his head in agreement. "Fine, fine, take all of the time you need."

# # #

At this point I think I am going to switch over from the Cassandra narrative to being a more "overview" oriented update approach, with interludes here and there as something happens that would make it interesting to tell from the perspective of characters in the setting.

### January, 2202

The Cassandra and the 1<sup>st</sup> Fleet arrive in the GJ 1111 system from Sol. Feeling that the system name is too confusing, Captain Stiles orders the system renamed Selene.

### February, 2202

Surveys in Selene determine that the terrestrial world in the system, Selene II, is capable of supporting human life. The planet's temperature is higher than Earth normal, producing a high desert environment. However the steppe world is extremely inviting, as much so as the world in the Lalande system.

# # #

The lead ship of the *Akagi*-class of carriers is launched from the Sol shipyards under the command of Captain Ira Petrovski. Yards design specialist Captain Alyson Cordeva oversaw the final construction of the *Akagi*.

Following the completion of the *Akagi*, the Federation Assembly agreed to free up funds within the next six months for the construction of at least three more *Akagi* carriers.

### March, 2202

With Federation debts rising, the Assembly orders the Navy to mothball both of its *Hermes* supply ships and *Apollo* light cruisers. This force reduction will cut the Federation's maintenance requirement by 12.5%, from 32 BC to 28 BC.

### April, 2202

The 1<sup>st</sup> Exploration Fleet makes humanity's first contact with alien life. Captain Marcus Stiles of the Cassandra had the following to say in his report:

We just got done meeting with the alien ambassador. Her name was Urthanuesthe, at least that is how it translated across from their language into our own.

What I find most amazing in this entire situation is how human these aliens look! Dr. Martin and Dr. Itusekumi have assured me that genetic samples show that they are extremely alien lifeforms, but they have the same physical features as us: bilateral symmetry, bipedal stance, about the same proportions. Their faces are different, definitely, but not all *that* different.

Another thing that I find amazing is that these aliens – these *Kaluest* – have fairly primitive space technologies, yet some of their other technologies are far superior to our own. Take their universal translator for one. It integrated easily with our systems and allowed us to start talking with one another in weeks instead of years. Amazing.

From our initial meetings the Kaluest seem to be friendly enough. They provided us with information on their star system, freeing us from having to perform a survey of their own. They also provided up with a databank of limited historical information for our review. In return, I had Shen prepare something similar for them.

After reviewing the alien tapes, I am stunned at the seeming contradictions in the Kaluest psyche. On the one hand they are extremely attractive, or at least I think so. Not like a human woman of course (Rachel shouldn't get jealous), but still you have to admire their physical qualities. On the other hand, though, the Kaluest are all warriors. Their entire society is built around the concepts of honor through personal combat.

It also seems like the Kaluest all share the same faith, the worship of a god they call Thulma. The Speakers of Thulma, a priesthood of sorts, administers the Kaluest empire, but it in this warrior culture it is the aged and venerable soldiers that control all other aspects of government. Urthanuesthe herself claims to have served in her military for 18 years and "fought in seven military campaigns." Given the state of the planet, we can only conclude there is factionalism and conflict on the local level that does not translate to the upper echelons of power.

### May - August, 2202

Following establishment of normal relations with the Kaluest Theocracy, the 1<sup>st</sup> Fleet began its return to Selene. Atlantis was ordered back to Sol and together the Cassandra and Atlantis upgraded the Sol/Selene jump route. This would allow for future growth into this system and, eventually, continued contact with the Kaluest.

### September, 2202

The 2<sup>nd</sup> Exploration Fleet makes jump into Wolf 359 from Lalande. The system shows some promise, with both a terrestrial and adaptable planet present, but otherwise is devoid of much of interest.

# # #

With the beginnings of economic recovery evident, the Federation Assembly ordered production to begin on the second *Akagi*-class carrier, the *SFS Hornet*.

### October, 2202

The third *Akagi* carrier, *SFS Majestic*, is laid down in the yards beside the *Hornet*. The Majestic will eventually be joined with a fourth and final ordered carrier, yet to be named.

Together, these three carriers will join the *Akagi* in providing military patrol duties in the ever-expanding Terran frontier.

### December, 2202

The *Hornet* launches to much fanfare. After a short shakedown cruise, the new carrier will be dispatched to the Proxima system to assist in patrolling that system. The arrival of the *Hornet* in Proxima will be followed by that of merchants from Sol. The presence of the Hornet and its fighter wing is expected to be adequate deterrent against pirates, and trade with Proxima is looked on as highly desirable.

# # #

After three years of intense study, scientists at the Clarke Propulsion Labs demonstrate a new series of fusion drives that will revolutionize the fleet. These new drives are smaller and more efficient, allowing

future human starships to be built faster than ever before.

The team stresses that retrofitting this technology onto existing ship classes would be expensive and time consuming and likely not worth the effort. It would be better to completely redesign the craft and go through the entire prototyping process again to get the technology adapted.

The development of this engine technology is likely not to be adapted to the new *Akagi* carrier family, since it would increase the per ship construction cost of the class by 29%. However a separate fleet carrier design concept is now a real possibility.

This proposed *Alderson*-class fleet carrier, named for the late naval hero of the Intra-Solar War, would be capable of basing 8 flights of fighters, 50% more than an *Akagi*. The *Alderson* would also feature exceptional point-defense capabilities thanks to its autocannons.

The only factor keeping the class from the docks is its price tag. It would take 22 BC to prototype the class, and an additional 4 BC per month to maintain her after she completed the process. At the moment Earth and the colonies cannot shoulder this economic burden. So, for now, the Federation will continue to rely on its fleet of mid-sized carriers.

### January, 2203

Mid-term elections result in a major defeat for former President Mukafe's Olive Branch Party in the Assembly. For the first time in eighteen years the post-War party was unable to maintain its voting bloc in the federal Assembly.

As a result of this loss of favor, President Jenning's New Hope Party was able to craft a new minority voting bloc. This will allow them to dramatically shift the focus of the Federation's dealings away from social and humanitarian issues and towards interstellar colonization and commerce.

# # #

SFS Cassandra makes first contact with a second intelligent species, the Secrona, upon entering the Procyon star system. These cephalopod-like aliens greet them with only passing interest. After coming to a basic understanding, Cassandra and Atlantis prepare to return to Selene to communicate their find back to Naval Command.

#### # # #

The third Akagi, SFS Majestic, launches.

### February, 2203

Word of the 1<sup>st</sup> Exploration Fleet's discovery of the Secrona at LP 731-58 arrives at Earth. The government doesn't know quite what to make of this second contact. On the one hand, it means that Earth's efforts towards Lalande and that direction would be the best course of action for the foreseeable future. On the other hand, it also means that Selene will need to be fortified to keep the aliens from being one jump away from Sol.

Upon receiving this news, Captain Marcus Stiles of the *Cassandra* is recalled to Earth to await futher orders. Commander Rebeka Tomlinson, his XO, will assume command of the ship until a new captain can be dispatched. In the meantime, the fleet flag will transfer to Captain Devereaux and the *Atlantis*.

#### # # #

Tonight was one of those nights. Marcus Stiles tossed and turned in his bed, the blue sheets shifting as he tried to find a comfortable position. It felt like he could feel every wrinkle underneath him, every imperfection in the fabric.

Beside him, Rachel Devereaux's skin glowed softly by the light of the room's ambient lighting. Her arm moved out and she grabbed Marcus' hand with hers, gripping it.

"What's wrong, Marc?" she asked.

Marcus rolled over, turning his face to meet hers. As he made the motion he rested his gaze on Rachel's. Her eyes were bright, alert.

"I was just thinking, trying to get comfortable," he replied.

"Those two don't usually go together," she remarked.

Marcus smiled and pulled her hand to his mouth, kissing it gently. "I know," he answered.

She saw it in his eyes, everything Marcus couldn't, or wouldn't, put to words.

"How long do you expect to be back at Olympus?" she asked.

He sighed. "I am not really sure. Admiral Hansen didn't give me any specific orders. I am starting to feel that this is some sort of a political game, and they are dicking me around."

Rachel raised her eyebrow and asked, "Why would you say that?"

- "I don't like Hansen... fact of the matter is that I don't trust him. He's got too many connections... outside the Navy, I mean. You remember the Robeson scandal?"
- "I remember that Hansen was cleared of all wrongdoing," Rachel quickly replied. She propped herself up with her elbow to get a better view of Marcus.
- "Yeah, he was cleared. But I've heard things since then, things from people that were at the periphery of the investigation." He sighed loudly. "I don't know, Rachel. I am probably just being paranoid, but ever since the second string of explorers launched I got the feeling that someone was looking to sabotage my command. And now I am being recalled? It is almost like someone higher up doesn't like us getting all of the actions."

"That is pretty paranoid," she agreed.

"Yeah... yeah, you're right. I just don't want to leave the Cassandra. But, even in that, how many of the original crew are still onboard? I mean, my helm officer..."

"Aykara?" Rachel interrupted.

Marcus nodded. "Yeah, Aykara. She and Shen are the only old crew left onboard. Corveda left a long time ago, and Ira took the posting to *Akagi.*"

Rachel cocked her head and asked, "Whatever happened to Colonel Mallory? I haven't seen him around for quite some time, but I remember him from a few of our meetings."

"Luckily we got rid of him in the first year... or was it the second year?" Marcus stopped and considered the question. To Rachel it looked like he was

counting invisible fingers in the air. "Yeah, second year. Has to be second year."

"I take it there was no love lost between the two of you?"

Marcus laughed. "Yeah, that would be a diplomatic way of putting it. That bastard was a huge pain in the neck. I was relieved when he transferred off my ship. Not to draw you back into my paranoid delusions, but I really think Mallory was here for a reason other than a simple ground forces liaison."

Rachel started to open her mouth, but Marcus stopped her with the soft touch of his hand on her lips.

"I don't know what he might have been doing, Rachel, but I just... I just felt it. Down in my gut, you know? One of those feeling. You know, like with Duncan back at the Academy?"

Rachel nodded. "You were right with Duncan. That sick... what he did to Tina..." A pained expression crossed her face for a second and she averted her eyes, but it was only momentary and like a lightning flash she returned her gaze to Marcus'. "But, Marcus, I just can't see it. What motive would they have? Why would they try to sabotage your command, sabotage this mission?"

"That is what I can't figure out. But I have a feeling that I will find out once I get back home."

He reached over and pulled Rachel closer to him. She moved over closer, too, and laid her head on his shoulder.

They sat there in quiet reflection for the rest of the night. In four more hours both of them would have to get ready to leave the Cassandra. Captain Rachel Devereaux would have to return to her ship and her new fleet command, while Captain Marcus Stiles was headed off the ship. His things were packed and ready to go. The Greek star liner *SS Constantinople* would be meeting the fleet in Selene tomorrow morning. It would then take him back to Earth.

For once in his life, Marcus Stiles did not wish to go back home. He didn't want to leave this very moment. He basked in the quiet serenity that was the next four hours. In reflecting upon his life years later, he would say that this was the best moment of

his life, despite the bittersweet tinge upon those memories that the future brought with them.

### March, 2203

The trip back to Olympus Station was uneventful for Captain Stiles. The *Constantinople* was not the best passage home, but it was not unbearable either. It had taken the slow liner nearly two weeks to make the trip from Selene to Sol via the unimportant jump route that connected the two. Twice the ship had to jump out of hyperspace so that the ship's navigation, a skittish Scotsman, could recheck his calculations and make sure that the ship was still on course towards its destination.

After that voyage, Stiles had been given the luxury of several days' leave. He had used them wisely, taking one day to clean up, rest and relax and enjoy the idle moments that command robs of a man. The next two he took a shuttle down to Aukland to visit relatives. His aunt was in poor health, he had known that from her pre-recorded video messages, but she was doing better.

During his time at Aukland Marcus looked up several old friends he remembered from his academy days. They enjoyed themselves, but not to excess, and on the fourth day he gathered up all of his courage and readied himself for his meeting with the admiral.

On the fifth day home, Captain Stiles arrived for his meeting with Admiral Hansen. His assistant waved him on in, saying that the admiral was waiting for him. For once in his life, Admiral Hansen was on time for a meeting.

More surprising, though, was who else was in Admiral's Hansen awaiting Stiles' presence.

The automated door whisked open, and as Marcus walked through the door he raised his gaze towards where he knew the admiral's desk should be and he stopped dead in his tracks. Right in front of him was two people he had not seen for a long time.

The two guests of the admiral sat opposite Hansen's desk, and they turned and smiled as Stiles walked in.

Captain Ira Petrovski was the first to speak. "Hey, old boy!" he shouted, a wide toothy grin on his face. "It is good to see you again."

"Likewise, Captain," Captain Alyson Corveda added, nodding her head in agreement.

Admiral Hansen was eating this up. "It looks like you are a little bit surprised, Captain Stiles. Why do you join us?" The admiral motioned to the third, empty chair in the room. Marcus regained his composure and walked over, taking the chair only after shaking the hands of his old acquaintances.

Ira opened his mouth as if to speak, but he was silenced by Admiral Hansen clearing his throat. Everyone in the room knew that was a sign that reminiscing would have to wait until later.

Hansen steepled his short, pudgy fingers and began, "Captain Stiles, Petrovski, and Corveda, you have been assembled here today to address a very urgent matter. My orders come straight from the Joint Chiefs." Hansen put extra emphasis on the last two words, as if to impress them importance on his subordinates. "Now, as you all know, the recent contacts with the Kaluest and Secrona downspin of Sol has caused a bit of a furor in the Assembly. A lot of people here at home and the colonies are afraid that these aliens may prove to be hostile towards humanity..."

Stiles interrupted, "I wouldn't go that far, Admiral. As the ranking officer that initiated both of humanity's first contact situations thus far, I have to say that neither species seemed particularly aggressive towards us."

"Captain," Hansen growled – he didn't like being interrupted – "I am well aware of your involvement in these contact situations. I do not need to be lectured on them. Is that clear?"

"Yes, sir," Stiles replied.

"As I was saying, there are those of us that believe that our Federation needs to prepare itself in case a current of future alien contact turns out to be hostile. We have looked at our strategic position and as it stands the solar system's defenses are fairly weak, not to mention that of the colonies."

Admiral Hansen looked back and forth into the faces of his officers. His eyes shot back and forth, as if looking for any signs of weakness or reservation. He saw nothing of the sort in their faces.

"As a result of this developing threat to planetary security, the Assembly Naval Appropriations Committee has released funds which we can use to begin actively researching and developing next-generation military defenses. The intent is that the Federation Navy remain the preeminent in known space, and that all of our colonies be secured against all threats, both foreign and domestic. We do not want our citizens living fear of alien attack or rampaging pirates."

"That's all well and good, Admiral," Captain Petrovski agreed, "but what does that have to do with us?"

Admiral Hansen answered, "Petrovski, as captain of the *Akagi* you are the de facto commander of our carrier forces. You have the most experience with command of these new vessels."

Without missing a beat, Hansen changed his focus to Cordeva and continued, "...and you have the most experience with the design and construction, of our most advanced starships."

Finally, the admiral turned to Stiles and said, "As for you, Stiles, you're the closest thing to a hero we've got, and you have reached that apex by being an excellent commander capable of making snap decisions in the field.

"If the Federation Navy is to succeed in its mission to react and revolutionize, we are going to have to draw on the experience of men and women such as yourself. After looking through the officer files, the Joint Chiefs selected the three of you to receive new assignments."

"What kind of 'assignments'?" Marcus inquired.

Hansen grimaced as he answered, "They want to promote you. All of you." He motioned his hands across the room, but his eyes remained glued on Stiles. It could have been a trick of the light, Marcus thought, but it looked like the admiral's smirk deepened as he uttered those words.

Ira leaned back in his chair and whistled. Alyson looked entirely beside herself. But Stiles was calm, collected. He had walked in expecting an ambush. This was still an ambush of sorts, but one he felt reasonably sure he could walk away from intact.

Admiral Hansen opened the bottom drawer of his desk and took out three data pads. Each grey and silver handheld computer bore the Federation Navy standard. At the top, an orange strip with white lettering indicated the name to whom each belonged. The admiral checked the names and handed them out to the captains in front of him.

As Marcus took his and studied it carefully. The metal was cold to the touch and the screens were dim, an electronic copy of the Navy standard glowing weakly on the display.

"These pads include a full background on your new duties and responsibilities," Hansen explained. "They will provide you with the information you need to know to get up to speed up on your new positions."

"...and what would those be, Admiral?" Captain Corveda asked. A faint hint of fear was carried in her question.

Good, Marcus thought, she knows that sometimes you do have to look a gift horse in the mouth, otherwise it might just turn around and bite you on the ass.

Admiral Hansen calmly replied, "I guess you are as good a starting point as any. Captain Corveda, with the power invested by my by the Joint Chiefs of Staff, I have been hereby ordered to authorize you for a promotion to the rank of Commodore. You will be the senior military liaison to all major Terran ship contractors and in addition to this duty will be in charge of future vehicle procurements for the Federation Navy."

Alyson's mouth fell open as she looked at the admiral, then at the data pad in her hand, and then back at the admiral.

As Commodore Corveda tried to come to grips with her newfound place in the chain of command, Hansen addressed Ira Petrovski.

"Captain Petrovski, as captain of the Akagi you have done an excellent job. As part of the military restructuring, however, your position is going to get a bit more important. You have also received a promotion to the rank of Commodore, effective immediately, and you are hereby transferred into the newly formed position of Fleet Carrier

Operations Commander. You will be responsible for making sure that our carrier forces are up to snuff and ready for combat."

Ira nodded. The shock of Alyson's promotion dulled the amazement with his own. "Thank you, admiral."

Hansen waved him off. "Think nothing of it, Petrovski."

Again, Stiles was left for last. Marcus was sure that he could still see the frown lines on the admiral's face becoming more prominent.

"Captain Stiles, your work on the frontier has been commendable and you have show a natural affinity for the work you were doing out there on the fringe. But the Federation needs someone that can get this ball rolling and make sure that we are ready for anything that might come my way. The Joint Chiefs think that man is you."

Yeah, the Joint Chiefs do, but you don't, Marcus thought to himself.

The admiral continued on, "As a result, I have been authorized by the power invested in me by the Joint Chiefs of Staff of the Solar Federation Navy to confer upon you the rank of *Rear-Admiral*. You will be put directly in charge of fleet construction and procurement. You will still be answerable to Vice-Admiral al-Rashud in that position, but otherwise you will have autonomy to make decisions as you see fit. All spending will of course have to be okayed by the Assembly, but otherwise you will be quite literally the architect of our Navy's future."

Marcus was dumbstruck. No, that isn't quite right. That word doesn't capture the gravity of just how floored Marcus Stiles was at this very moment. He had walked in resigned to a fate worse than death, and now he was being promoted into the admiralty.

So it was a fate only slightly worse than death: a desk job.

"Tha.. thank you, sir," Marcus stammered. He thumbed his pad nervously, thinking of what to say next.

Admiral Hansen looked at his officers and said, "Now that you all have an idea of where you are going to end up in his reorganization, I recommend that you

go read up on the information on your pads and get yourself acclimated. The contact information for your respective staffs can be found in the contact databases of each pad. I don't need to remind any of you that the information on those pads is highly classified."

"Yes, sir," they replied in unison.

"Then you're dismissed. Get out of here and get to work," Hansen barked, and then waved the three out of his office. There would be no small talk. As far as he was concerned, the meeting was over.

As the three walked out of the office, the admiral pulled out an old wooden box and removed an aged cigar. Marcus saw him light it – again station policy of course, being a smoke-free station – as he stepped out the door.

#### # # #

The three retired to the living room of Stiles quarters to recuperate from their draining meeting. Petrovski stopped over at the station mall and picked up some liquor, saying that, "He thought they would all need some tonight." Marcus agreed.

So it was that they sat there, their feet on the glass in table and dull grey furniture alike, studying their data pads in between lively conversations on the current state of the Federation and their sudden career changes.

"I still can't believe you stair-stepped up to Rear-Admiral," Ira said. He took another swig of the whiskey bottle in his left hand as his right manipulated a pad.

Marcus nodded. "Yeah, Ira, that was a complete shock to me. I just assumed that the Chiefs were just throwing out three-bars until that point. I still don't know what to think about it."

"Be glad," Alyson interjected, her eyes still glued to her pad where they had been for the last half-hour. "It will be good working with you again, sir."

Marcus was kind of taken aback, remembering a conversation he and Ira had had years ago. Neither of the men had to be especially close to Alyson during her time on the *Cassandra*. Now the three of them were working together. Drawn back together.

After an awkward pause, Marcus answered, "It will be good working with you again, too. Both of you." He gestured at the walls around him. "This isn't the Cassandra, but I think we will settle in alright. You going back to the *Akagi?*" He motioned at Ira to clarify the target of his question.

Ira shrugged his shoulders. "I guess I will have to go back to gather up my personal belongings, get the next captain up to speed. The usual stuff, you know. But I have a feeling that Olympus is going to be my home for awhile, too, until we have a better place for me to hang my hat in between carrier inspections."

Sitting his drink down on the table, Ira turned himself around on the overstuffed love seat to look down at Alyson. She was sitting on a cushion on the floor. They had offered her one of the chairs, but she said she would rather sit down 'so she wouldn't fall as far if she passed out.' She was an odd duck, Ira had thought to himself.

"So, Alyson..." Ira began. "You've been here the longest of the three of us. Do you have any idea what might be going on around here?"

She shook her head back and forth. "Sorry, Ira, I really don't have any idea what goes on over here. I was working over in the yards overseeing construction project. I would have had my ear to the ground and all, if I thought I would have had a chance at a promotion, but I was too wrapped up in getting *Hornet*, *Majestic*, and *Lexington* out of their moorings."

"Are those the other three Akagi carriers?" Marcus asked

"Yep," Alyson replied. "Great little ships, if I do say so myself."

She turned to Ira and looked at him funny.

"What's wrong?" Ira asked, quite beside himself.

"Oh, it's just something that the admiral said. He made you the fleet carrier operations officer. And we have both been moved into positions where we would be in charge of different elements of ship production. Do you think the Navy is looking to build itself some carriers. Some *big* carriers, I mean?"

Ira nodded his head, hesitantly at first, but then with more surety. "Yes... yes, that kind of makes sense. I remember seeing some early scuttlebutt a year or so ago that some designers wanted to commission a true supercarrier design. Something bigger than any other carrier currently in the fleet. Maybe finding an alien race that could match us in tech has got the members of the Assembly scared enough to light a fire beneath the project?"

Marcus answered, "I hadn't really heard anything about that until now, but I think Alyson is onto something. They put us in this position to help the Navy develop a major carrier force. But why? Why carriers? Why not battleships or heavy cruisers and that branch of warfare? Just carriers?"

"Carriers are the most cost-effective alternative at the moment for force projection into nearby territories," Alyson dutifully offered.

"That makes sense," Ira said, his voice picking up as the gears started turning. "The Federation wants to be able to project power. They aren't worried about defenses, at least not in the fixed installation sense of the word."

"Do you think they want to use them for offensive operations?" Marcus asked.

Alyson and Ira both seemed reserved and looked at each other, searching each other's faces to see where the other stood.

It was Ira that broke the silence. "Marc, you have to understand that people are scared. We had a nice little bubble of humanity – a mother's blanket, protecting us from reality. That bubble is broken, Pandora's box is open... all those cliches rolled up into one big earth-shattering event.

"I am not sure what the higher-ups' intentions are, but I would doubt that they want us to build a war fleet to go out and start conquering anyone, if that is what you are thinking."

Marcus sighed. "The thought had crossed my mind."

### April, 2203

Under the oversight of Rear-Admiral Stiles, and with the input of Commodore Corveda, the Federation Navy decides on what its next major military construction project will be. The Navy seems intent on fielding a supercarrier, so that is selected as the first project that the new administration will tackle.

Plans for the Alderson supercarrier are considered but ultimately rejected. The proposed Alderson is a good all around carrier, but Admiral Stiles believes that the design will benefit from further revisions and integration of new technologies as they become available.

Instead, the Navy accepts a contract for the construction of a single Shinano supercarrier prototype. The Shinano is the same tonnage as the Alderson, but can base nearly twice as many fighters. This comes at the cost of a major, integrated defense network, however. The tradeoff though is seen as worth the risk.

### September, 2203

After initiating a review of Navy practices, Rear-Admiral Stiles pushes through a recommendation to being prototyping work on a next-generation heavy cruiser design to replace the aging Buran Star Cruisers.

The proposed replacement design has been classified as the Cuirassier Heavy Cruiser and is being assembled by European contractor BAE Vickers/Airbus Strategic Systems. The Cuirassier will be equipped with six laser cannons, six railguns, and a cadre of light, secondary dual autocannon mounts.

### December, 2203

Captain Rachel Devereaux and the ft Exploration Command stop over at Earth, allowing Rear-Admiral Stiles some time to catch up on missed time.

The 1<sup>st</sup> Exploration Command's exploration mission to the downspin rim territories has been suspended. It will now explore the last gravitational anomaly in Sol to discover its destination.

# # #

Federation R&D unveils the Phalanx AFB-716X, a revolutionary new anti-fighter weapon system. A distributed system, the Phalanx-716X is at its heart a flak cannon weapon capable of laying down heavy kinetic suppression fire. The weapon's ammunition is light enough to minimize damage to the firing ship

(e.g., it can't break the armor belt of a warship), but is still potent enough to destroy assaulting fighters.

After reviewing the trial models, Stiles is quite impressed. The issue of retrofitting existing ships with the new technology is raised, but the techs don't think that such a conversion would be economical or practical in the long run. Despite this, the admiral believes that such weaponry would be a major advantage to the next generation of warships that are in the pipeline.

### January, 2204

Miraculously, the crew of the Atlantis and Cassandra make transit in a single month across the previously enigmatic Solar jump lane. It would seem that years of experience do matter when it comes to interstellar exploration!

# # #

Work begins on the development of a weapon to replace the aging Vulcan Railgun. A new weapon design, the Atlas Railgun, is to be its successor. This more destructive railgun will not be able to mounted as freely, but it will be much more destructive than its predecessor. Federation R&D hopes to have a working model available in the next six months.

### February, 2204

The new system that the 1<sup>st</sup> Fleet found last month, Mu Cassiopeia, does not appear to be particularly interesting. In fact, all of the planets are fairly hostile to human life and are lacking in heavy elements.

Cassiopeia becomes another of the unfortunate systems that Sol will have to secure for its own defense, but that will yield few short-term gains if colonized.

### March, 2204

The Shinano suffers a catastrophic drive failure during its launch ceremony. The entire aft section of the ship is ripped apart, damaging its berth in the yards and killing over a thousand crew, yard workers, and spectators.

Following this disaster, the Shinano is towed out from its berth and maneuvered into another nearby docking slip. The accident will set the Shinano project back another four months and over six billion credits.

# # #

The crew of the Daedalus detects the tell-tale traces of civilization in the newly explored Camulus system, off of Ross 128. Early scans indicate that the alien race has not achieved space flight, but more will not be known until the 2<sup>nd</sup> Exploration Command makes a more detailed survey of the planet.

All told, the Camulus system is an amazing find. Two terrestrial and two adaptable planets are in the system, and if our surveys provide favorable it might become a major Solar Federation system, despite its distance from Sol.

### April, 2204

More detailed reports from Camulus report that the indigenous population on Camulus II is nearly a late-industrial period. They are industrialized, but they are in a current state of technology equivalent to the late 19<sup>th</sup> Century on Earth. Rail networks crisscross the lazy island archipelagoes of this watery world, connecting the various nation states together. There is very little else that we could determine without making personal contact with the natives. The Federation Assembly decided not to interfere in the development of this alien species, at least not directly. The potential for development in the system still remains, but we just won't be talking to the locals.

### May, 2204

The Camulus system is proving less and less inviting with every month. Reports from Daedalus and Columbia indicate that the inner worlds in the system are less than inviting, with poor mineral concentrations. Their climates are hospitable, for the most part, but that isn't enough to get the corporations abuzz with activity to be the first ones to settle there.

# # #

Author's Note: Slipping back into some first person stuff here!

In other news, the SFS Cuirassier, a new heavy cruiser, has just left space dock on its maiden voyage. The ship will proceed on shakedown for a few months, at which point it will be dispatched to

Lalande, where it will participate in a war game exercise with Commodore Petrovski's carrier force in the system. The *Cuirassier's* commander, Captain Benjamin Allard, assures me that his ship will be able to best the carriers. It will be interesting to see if that is true.

I initiated the project with an interest in seeing which doctrine is currently superior: the carrier or cruiser. My predecessors have championed the carrier as the end-all, beat-all ship. However, with the recent Shinano disaster, I am really starting to doubt whether a pure carrier force can be relied upon, either. It is easier to "modernize" a carrier by updating the craft it carries, but by the same token I am not entirely sure that they can stand up in a fight against a true fighting ship. We shall see.

Given the high cost of operating the Cuirassier class, I am considering designing a new stopgap warship design to fill the void between heavy cruiser and destroyer. Some sort of light cruiser or heavy destroyer would do the trick. I have two designs that have been put on the table before me, but I have to wait until after the construction of our next colony fleet to get one of them started.

The Heracles light cruiser looks promising as a ship with some firepower, and designed to take advantage of the Atlas heavy railgun when that weapon becomes available, but the cost of the class if higher than I would like.

The other design, the Perseus missile destroyer, is a large destroyer designed around off-the-rack missile technologies. It would be easier to get this ship produced and it uses enough existing technology that it would be cheaper to build and maintain. It is also easier to destroy, and lacks a wider variety of weapons. The old Titan missiles might be good, but even with deep magazines the Perseus won't be able to outgun a Heracles.

### June, 2204

The Columbia and Daedalus have made an interesting find in the Camulus system. While surveying the outermost adaptable world in the system, one of the Columbia's survey shuttles detected a faint but noticeable energy signature emitting from the heart of a deep canyon system, much like Valles Marineris on Mars. The shuttle was dispatched to investigate the find further and what they found is nothing short of astonishing.

On the canyon floor the shuttle found an abandoned landing pad and a series of metal habitats. These buildings were well preserved, as our exploration crews learned, and connected into a subterranean cavern system that had been used as a protected cargo storage facility.

We can't tell who (or what) built the facility. It was definitely not the Camulans, or at least not the present Camulans. No, it would appear that these facilities were built by some unknown alien race sometime in the not too distant past. Dating indicates that the facility has not been used for over two hundred years. It is believed that the site might have been a secret pirate base.

The retrieval of this cargo will provide Sol with a small amount of extra income for the month.

# # #

Final testing has finalized on the Atlas Heavy Railgun. This new weapon model is bulky and will have limited applications in the fleet, but I think that it will be a major advance over previous heavy ship weaponry.

### July, 2204

The *Cuirassier* and *Akagi* participated in war game activities in the Lalande system. The *Cuirassier* posed as an unknown aggressor cruiser attempting to attack the Phoenix colony. The *Akagi* and its fighter wings moved attack the ship short of the defense point. Both ships were equipped with electronic simulation equipment. Only simulated weapon rounds were exchanged in the grueling hour-long battle between the ships.

The results of the simulation were... interesting, to say the least. The anti-capital ship capabilities of the Falcon Medium Fighter were put to the test and had a good initial showing. In the first fifteen minutes of battle, the *Cuirassier* was stripped of the majority of its Vulcan railguns by the attacking fighters. My advisors were quick to point out, however, that a ship equipped with Phalanx defense flak would have destroyed about 10% of those attacking fighters outright in their first attack run. I found that interesting, and have made a note to seriously pursuing a model of the *Cuirassier* with integrated defenses like the Phalanx.

The Falcons were able to quickly knock out the Cuirassier's drives, much to the consternation of

Captain Allard. However, after the initial shock wore off, the Cuirassier's remaining weapons made good on the ship's defense, destroying all remaining fighters. The frazzled surviving Falcon pilots simply were unable to get anymore really good shots at the *Cuirassier*.

With the fighter threat eliminated, it became a sparring match between the derelict *Cuirassier* at the *Akagi*. *Akagi* was ordered to destroy the ship, in case the "aggressor" would send a communication back to base. The battle ended in a virtually stalemate by the time the simulation was ordered concluded, but it did not look favorable for the *Akagi*. Without its fighter cover to project power, the *Akagi* was largely defenseless.

This simulation has provided some interesting feedback, namely that a carrier and its fighters is an even match for a heavy cruiser. The heavy cruiser has better staying power, but takes longer to produce. The economics of projecting power in either case are the same as far as maintenance concerned, but replenishment favors carriers.

I do feel that this turn of events reflects poorly on the future of *Shinano* and other supercarriers like her. The *Shinano* lacks integral anti-capital ship weaponry in the same way that the *Akagi* does. This means that the carrier must flee an engagement if its fighter complement is eliminated because it can't hope to take on an enemy cruiser, even a damaged one, and win.

I have to give Allard and his crew credit, though; they turned a bad situation into one where they could have survived. The initial flurry of fighter fire disabled the mighty cruiser, but their remaining gunnery stations eliminated the fighter threat, taking down a total of 30 fighters – which, when we look at the bottom line, is actually a cost of equipment and personnel greater than a heavy cruiser! The fact that the *Cuirassier* then took on a pristine *Akagi* in its crippled state and very nearly destroyed it is a sign that I think the heavy cruiser is going to be a vital part of the Federation battle line. Carriers are excellent weapons of war, don't get me wrong, but you need heavy cruisers to provide the firepower necessary to take down enemy ships.

After discussing the issue with Commodores Petrovski and Corveda, as well as Captain Allard and his XO, I have decided that a "combat" Akagi might be a practical idea as an Akagi replacement in the next year or two. Such a ship could be equipped with a few laser cannons for long-range attack

capabilities, maybe a few railguns, Phalanx AFBs, and about four flights of fighters.

On the flip side, I am even more committed to developing a good mid-sized cruiser vessel that balances the firepower of a *Cuirassier* with the economy of an *Akagi*. I don't think a destroyer hull will be able to do it, either, so I think the Perseus is going to get shelved for awhile and the Heracles is likely to get the green light once Federation economy recovers.

We have hit a bit of a recession with the introduction of so many expensive, new warships. A colony mission is ready to head out to Selene to get that system colonized. The second planet is gorgeous. I hope that the ol' governor at Ariane appreciates that one of Earth's next major colonies has his favorite name ascribed to it.

Once that colony is established, we are going to begin looking at reorganizing our military a bit to move some of the lesser used ships into mothballs and streamlining operations a bit.

Rachel and the Atlantis are currently en route back to Kaxul to check in on the Kaluests. If good enough relations can be established with them, I really hope to create a military surplus market there. The Kaluest seem to be good people, but their technology is backwards. I hope to get the Assembly to authorize some spending at some point to help them out technologically, if nothing else, so that they can become possible trading partners and friends of the Solar Federation.

### August, 2204

### Races of the Campaign ◀ 4.0

Throughout the galaxy, planets teeming with diverse forms of life lazily orbit their suns. Over time this life grows and changes – evolves. Given enough time and the right conditions, many of these worlds comes to support intelligent life capable of reaching their hands (or tentacles) to the stars. Among these alien civilizations, some burn bright for a time only to flare out and disappear forever. Others grow and burn on like undying embers, leaving their marks on the stars even after their final twilight has passed.

### Historical Summary

Early Years and the Intra-Solar War

The Solar Federation was formed in 2173 following the brief Intra-Solar War that pitted the major space powers of the era against one another.

Fought principally in the outer star system over national colonial assets at Mars, Jupiter, and Saturn, the war was humanity's first major space conflict. The brutality of the conflict would not soon be lost on the people of Earth or her colonies.

The war ended with Terran imperialism dead. The small Japanese, Korean, and Iranian settlements at Uranus were destroyed in the fighting, but the majority of the remaining solar colonies survived.

At the climax of the conflict, the colonies banded together, meeting clandestinely at Ganymede and Titan to devise a strategy for dealing with the Earthbased conflict that threatened their lives and livelihood. Backed by wealthy Martian financiers, the colonies began discussing insurrection.

It was the declaration of Martian independence in 2168 that provided the catalyst for the Colonial Rebellion. Terran military forces quickly put down the freedom movement on Mars, but it provided the morale effect necessary to get the outer colonies to step in line and join the rebellion as brothers and sisters of Mars.

The war lasted only two more years before the Earth-based governments, weary from war and with colonies that no longer supported them, agreed to parlay. The Olympus Treaty ended the rebellion and granted the colonies the right to choose by popular vote whether to remain free or else seek annexation by another government.

The Old Guard on Earth believed the latter clause would send many of their former possessions back into their hands. It was not to be. Instead, the colonies banded together forming minor nations in their own right, nations that held the vital natural resources that Earth demanded to maintain the status quo.

The Solar Federation was formed as a supranational committee that could attend to the needs of Earth and the colonies while being controlled by neither. In theory it provided both sides an equal voice in and control over solar matters. In practice



neither side was willing to give the other equal control. Which side holds the most influence has constantly wrestled back and forth since.

Of the colonies to win freedom, Mars is by far the most influential and powerful. The Free Mars Association is one of the leading proponents of pro-Colonial policies in the Federation and were instrumental in drafting the Federation Charter and bringing Terran interests onboard to support the formation of such a compromise.

#### Reconstruction and a New Tomorrow

It has now been 27 years since the formation of the Solar Federation, 32 years since the end of the Intra-Solar War. The nations of Earth and her former colonies have rebuilt and both have largely outgrown the animosity from that conflict.

Three years ago, the Federation Assembly ratified legislation that has formed the first unified Federation star fleet. This decision came fast on the heels of an announcement by a group of scientists from the Russian Federation's Kovalevskaya Institute of Mathematics that they had discovered a method by which to open a portal to a parallel dimension that could allow ships to move quickly between the stars. They had discovered the secrets of hyperspace travel. With this knowledge in hand, humanity could at long last leave its celestial cradle and journey outwards in the unknown.

Though the secret of interstellar travel was a godsend for humanity, it also brought with it some very real problems. None of the nations could hope to individually undertake the burden of building their own jump-capable starships. The cost of the equipment involved was simply too much. Thus the burden fell on the shoulders of the Solar Federation to organize and fund the design and construction of Earth's first interstellar craft.

So it was that the FSV Cassandra was designed and built by a multinational coalition of powers, some of them old enemies from the days of the War. The ship would be the first explorer ship of a new and interesting age for Earth, an age that history would remember with awe and reverence.

It was a new day for us all.

### VBAM Statistics

#### Government

Trade Representative

#### Racial Traits

Expansionist (+2)

#### NPE Stats

AG	50
IN	50
VE	50

Starmada Tech Levels	Eng	Wpn	Def	Eqp
2200 - 222	-2	-2	-2	-1

Ground Units	ISD	Cost	Maint	ATT	DEF	D VAL	ATR	Notes
Militia	N/A	N/A	N/A	1	1	0	1	Planetary Militia
Regulars	Χ	1	1/3	1	2	D2	2	

Ground: Micro Level 1

Weapon Systems	ISD	Range	To-Hit	ROF	PEN	DMG	Type	Notes
Plasma Cannon	Χ	9	4+	1	2	1	Energy	Doubled Range Modifiers
Laser Cannon	Χ	12	4+	1	1	2	Energy	
Vulcan Railgun	Х	12	5+	1	2	1	Kinetic	
Autocannon	Χ	6	4+	1	1	1	Kinetic	
Atlas Heavy Railgun	2204	12	4+	1	2	2	Kinetic	
Scatter Pack Missile	Х	9	5+	3	1	1	Ballistic	
Titan Long Range Missile	Χ	15	3+	1	1	1	Ballistic	Doubled Range Modifiers

Fighter Types	ISD	Type	Abilities	
Falcon Medium Fighter	2195	Kinetic	Standard	

## Technical Proficiencies Scouting Level 1

Special Equipment	
Anti-Fighter Batteries	2203.12
Armor Plating	
Cargo Bay	
Command Center	
Construction Bay	
Diplomatic Center	
Fighter Bay	
Jump Engine (Hyperdrive)	
Launch Bay	
Long Range Sensors	
Marine Squads	
Medical Bay	

Military Cargo Bay Passengers (100) Repair Bay Science Lab Security Teams Troops (250) Vehicle Bay

Weapon Enhancements Doubled Range Modifiers Must Re-Roll Penetration Dice Must Re-Roll To-Hit Dice

No Hull Damage

Fighter Enhancements

Fighter: Large

Fighter: Small Fighter: Standard Fighter: Slow

### 

Plasma Cannon

### 

### Akagi Carrier

The Akagi carriers were designed as a replacement for the carrier portion of the Essex's mission profile. The Akagis were designed to operate as jump-capable craft capable of patrolling over long distances. The Solar Federation found this trait highly desirable, as it would allow the Akagi fleet to act as patrol carriers, policing human-controlled space.

### Cassandra Scout Cruiser

The first Terran interstellar ship class, the *Cassandra*-class Scout Cruiser is a large ship designed for solitary operations in uncharted space. As such, these scouts were equipped with all of the systems needed to see to their defense in the case of any unexpected encounters.

### Eisenhower Heavy Cruiser

This variant of the *Roosevelt*-class was introduced long after the war as a cost-cutting measure by the North American Confederacy. Lacking the resources to maintain their previous naval strength they built a version of stripped down *Roosevelt* cruisers that lacked the sturdy armor and arsenal of that class.

In the mid-2190s, the Solar Federation purchased one of these aging ships to add to its own growing fleet.

### Essex Heavy Carrier

The *Essex* carriers were the largest carrier units in service in the Federation fleet prior to the discovery of hyperdrive. These large carriers are capable of basing six flights of fighters. In addition, the ships are bristling with rows of dual-mounted autocannons in large, wide-arc turrets.

In addition to their carrier duties, the *Essex* carriers are capable of supporting and deploying armed

ground troops. An entire division of armed marines can be housed onboard a single *Essex*.

The Navy at one point considered the *Essex* for conversion into a jump-capable starship, but ultimately the idea was scrapped when it was determined that such a ship would cost the same as one of the theoretical supercarriers on the drawing boards at Fleet R&D.

### Kakaze Destroyers

When the war came, the Japanese were originally hesitant to get involved. After the destruction of New Edo, one of their colonies at Uranus, they were forced into the conflict, fighting as nominal allies of North American Confederacy and the British Commonwealth.

Meaning "fire wind", the *Kakazes* were converted explorer ships. They lacked the defenses of other, dedicated warships, but they were nevertheless useful during the war.

### Kyushu Explorer

The *Kyushu* Explorers were the primary ships of the Japanese fleet prior to the war. Built in cooperation with several friendly Asian nations as well as the British Commonwealth, this class was used to explore and study the outer solar system. At the start of the Intra-Solar War, the ships were converted into *Kakaze* Destroyers.

### Nelson Light Cruiser

Once classed a heavy cruiser, the *Nelson* Light Cruiser was the largest warship in His Majesty's Service. This "Grand Warship of the Commonwealth" relied on a mix of kinetic and ballistic weapons, primarily its numerous batteries of short-range autocannons.

After the end of the War, the *Nelson* cruisers were refitted several times in an attempt to keep pace with the cruisers fielded by other Terran nations. Ultimately they were mothballed due to their expense.

### Roosevelt Heavy Cruiser

The premier fighting ship of the old North American Confederacy, the *Roosevelt* Heavy Cruiser was used heavily during the late fighting of the Intra-Solar War. Despite its age, the *Roosevelt* soldiers on into the modern era. Originally meant for the striking block, the Federation Navy Appropriations

Committee saved them from being scrapped and now they make up a valuable part of the Federation Naval Defense Forces.

The Roosevelt is known for its characteristic "hammerhead" design and large, exposed engines. It is armed primarily with short-ranged plasma cannons, though late-generation improvements to the hull integrated a single laser cannon for longerrange fire support.

Fighters and Small Craft

Falcon Fighter

Bases and Fixed Defenses

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Class	ISD	Туре	Cost	Maint	DV	AS	AF	CR	CC	ВС	Jump?	Atmo?	Abilities
Cuirassier Heavy Cruiser	2204	CA	9	3/2	7	5	4	6	3	0	Υ	N	Gunship
Roosevelt Heavy Cruiser (R2)	2180	CA	7	2/2	5	5	4	5	3	2	N	N	Gunship
Roosevelt Heavy Cruiser (R1)	2154	CA	6	2/2	5	5	4	5	3	2	N	N	Gunship

### Carriers

Janner													
Class	ISD	Туре	Cost	Maint	DV	AS	AF	CR	CC	ВС	Jump?	Atmo?	Abilities
Shinano Fleet Carrier	(P)	CVF	11	4/2	8	2	1	9	4	14	Υ	N	Command
Alderson Fleet Carrier	(P)	CVF	11	4/2	9	3	4	7	4	8	Υ	N	
Essex Heavy Carrier (R2)	(P)	CVA	11	3/2	7	2	3	6	3	8	N	N	Assault
Akagi Carrier	2202	CV	7	2/2	5	2	2	7	3	5	Υ	N	Command
Essex Heavy Carrier (R1)	2180	CVA	9	3/2	7	2	3	6	3	6	N	N	Assault

### Scouts and Auxiliaries

Class	ISD	Туре	Cost	Maint	DV	AS	AF	CR	CC	ВС	Jump?	Atmo?	Abilities
Cassandra Scout Cruiser	2200	ECL	7	2/2	6	2	2	6	3	2	Υ	N	Explorer (1)
Kvushu Explorer	2144	EX	4	1/4	4	1	1	4	2	0	N	Υ	Explorer (1)

Roosevelt Heavy Cruiser Mk-I ISD: 2154

VBAM Abilities Cost Maint DV AS AF CR CC BC
Gunship 6 2/2 5 5 4 5 3 2

 Roosevelt Heavy Cruiser Mk-II
 ISD: 2180

 VBAM Abilities
 Cost
 Maint
 DV
 AS
 AF
 CR
 CC
 BC

 Gunship
 7
 2/2
 5
 5
 4
 5
 3
 2

Gunsnip / 2/2 5 5 4 5 3 2

 Nelson Light Cruiser Mk-I
 ISD: 2147

 VBAM Abilities
 Cost
 Maint
 DV
 AS
 AF
 CR
 CC
 BC

 None
 6
 1/2
 4
 3
 4
 5
 2
 0

 Nelson Light Cruiser Mk-II
 ISD: 2162

 VBAM Abilities
 Cost
 Maint
 DV
 AS
 AF
 CR
 CC
 BC

 None
 6
 1/2
 5
 2
 4
 5
 2
 0

 Eisenhower Heavy Cruiser
 ISD: 2186

 VBAM Abilities
 Cost
 Maint
 DV
 AS
 AF
 CR
 CC
 BC

 None
 5
 1/2
 5
 3
 2
 5
 3
 2

 Kakaze Destroyer
 ISD: 2164

 VBAM Abilities
 Cost
 Maint
 DV
 AS
 AF
 CR
 CC
 BC

 Gunship
 6
 2/2
 5
 5
 4
 5
 3
 2

#### Introduction

The Secrona National Authority was the first major alien species that humanity made contact with. The prior contact with the Kaluest Theocracy in the previous year prepared the Federation for the realities of alien contact.

### Physiology

The Secrona resemble Terran cuttlefish, a form of cephalopod. As with the cuttlefish, the Secrona are an aquatic species with an internal bone structure that protects the body and internal organs. Eight tentacles allow the Secrona to grasp, while four additional forward tentacles are capable of fine manipulation and tool use.

This species lacks the chameleon abilities of Terran cuttlefish, but otherwise they appear to be extremely similar from a visual perspective.

As with Terran whales, the Secrona use sonar to communicate. This mode of communication allows Secrona to communicate over fast distances, but it does make communications with this species impossible without the aid of mechanical translation.

### Government

At contact, the Secrona were governed by a single authoritarian state, the Secrona National Authority. A single Secrona, the *dumache*, controls this government, rendering all important national decisions. The position of dumache is for life, and only after the death of the previous dumache is a new one selected. The selection of a new dumache is a truly democratic process, with the entire population voting to elect their new supreme ruler.

#### Historical Summary

First Contact

The Solar Federation starship *Cassandra* made first contact with the Secrona on January 29, 2203.



Secrona starships were detected upon entry into the LP 731-58 star system.

Using a translation matrix provided to the Federation by the Kaluest, the *Cassandra* and her captain, Marcus Stiles, was able to open up a meaningful dialogue with the Secrona soon after contact. After communicating that the 1<sup>st</sup> Exploration Fleet was not a threat, the Secrona stood down and initial diplomatic exchanges began.

VBAM Statistics

#### Government

Social Autocracy

#### Racial Traits

Aquatic Inferior Military Instruction Guerillas

### NPE Stats

AG 50 IN 9 XE 28

Starmada Tech Levels	Eng	Wpn	Def	Eqp
2203 - ????	-2	-1	-2	-1

Ground Units	ISD	Cost	Maint	ATT	DEF	D VAL	ATR	Notes
Militia	N/A	N/A	N/A	1	1	0	1	Planetary Militia
Regulars	Χ	1	1/3	1	2	D2	2	

Ground: Micro Level 1

Weapon Systems	ISD	Range	To-Hit	ROF	PEN	DMG	Type	Notes
<b>Humboldt Radiation Cannon</b>	Χ	12	4+	1	2	1	Energy	Extra Crew Casualties
Neutron Cannon	Χ	9	5+	1	1	2	Energy	Extra Crew Casualties
Gemini Blaster	Χ	9	3+	2	1	1	Energy	
Energy Mine	Χ	18	3+	1	1	2	Ballistic	No Range Modifiers
Electron Flayer	Χ	9	4+	2	1	1	Energy	Ignores Shields

Fighter Types	ISD	Туре	Abilities	
Falcon Medium Fighter	2195	Kinetic	Standard	

## Technical Proficiencies

Scouting Level 1

Special Equipment

Armor Plating Cargo Bay

Command Center

Construction Bay

Diplomatic Center

Fighter Bay

Jump Engine (Hyperdrive)

Launch Bay

Long Range Sensors

Marine Squads

Medical Bay

Military Cargo Bay

Passengers (100)

Repair Bay

Science Lab

Security Teams

Troops (250)

Vehicle Bay

### Weapon Enhancements

**Doubled Range Modifiers** 

Extra Crew Casualties

Ianores Shields

Must Re-Roll Penetration Dice

Must Re-Roll To-Hit Dice

No Hull Damage

No Range Modifiers

#### Fighter Enhancements

Fighter: Large Fighter: Small

Fighter: Standard

Fighter: Slow

Fighter: Jump Capable

Fighter: Assault

### Energy Mine

2203.6

This ballistic weapon is a special energy torpedo that encases a packet of antimatter in a time-delayed electromagnetic containment field. Upon reaching the predetermined location, the energy mine's containment releases and the antimatter

strikes the ship's hull with a massive blast shockwave.

The Secrona Authority has adopted the energy mine as best they can within their own military forces, but at present the systems are bulky and expensive. As a result, most Secrona ships are forced to mount only limited supplies of these ballistic weapons, making them expendable.

#### Gemini Blaster

The gemini blaster is a weapon type recovered from two ancient derelict destroyers. This fast firing defense weapon has a long range and high accuracy. It provides most of the AF protection on the Secrona's pair of *Cambrian* destroyers.

### Humboldt Radiation Cannon

The ancient Yiidian starships made use of a hardradiation cannon on their small destroyer craft, of the type that the Secrona recovered and refitted into their *Cambrian* class of destroyers.

These long-range beam weapon specialize in killing enemy crews.

#### Neutron Cannon

The Secrona neutron cannon is a reverse engineered version of the Yiidian radiation cannon. The neutron cannon fires a more concentrated burst, though it has a difficult time overcoming enemy armor belts due to a lack of penetration capabilities.

## 

The Naval Arm of the Authority (NAA) is responsible for all of the Secrona's naval interests. The NAA doctrine prior to first contact stressed survivability over combat effectiveness. This focus created a precontact fleet of starships designed for quick lightning strikes intended to cripple or destroy the enemy in a single flurry of fire.

To counter the effectiveness of this strategy against their own ships, the Secrona adapted a strong armor plating style for defense. All Secrona ships are equipped with this armor plating as a matter of course.

### Ammonite Destroyer < 2183

The Ammonite destroyer is a small warship commonly encountered in Secrona space. This ship is small and shaped somewhat like a shell. It is equipped with only four gun emplacements, but is still a competent foe thanks to its above-average speed and heavy armor plating.

### Cambrian Destroyer **◄** 2180

The Cambrian class of destroyers is not actually of Secrona manufacture. These ships are actually ancient derelicts discovered by the Secrona during their years of spaceflight. The first Cambrian was discovered in their home system. This ship provided the Secrona with the knowledge of hyperspace that gave them access to the stars. The second Cambrian was found in the Coleoidea system.

Both of these starships demonstrate a level of technology that the Secrona themselves do not possess. Rather than rip them apart to try and learn some of their secrets, the Secrona instead opted to refit them and keep them in service.

### Devilfish Warship **<** 2189

The Devilfish Warship is a light cruiser in the Secrona fleet. Not as large or powerful as a Nautilis, the Devilfish is still a competent opponent.

### Nautilus Heavy Cruiser ◀2194

The Nautilus Heavy Cruiser was the largest warship in the Secrona fleet at the time of its construction. This immense warship received the name following Terran visual identification with the vessel, which looks very much like the creature of the same name.

The ship is conical in shape with numerous missile and gun ports bristling along its hull. The ship is designed for combat along the forward 240°, and lacks much armament in the aft quadrants. In the forward zone, however, the Nautilus can present massive amounts of firepower.

It appears that Secrona designers intended the Nautilus Heavy Cruiser as a fast-strike ship capable of knocking out an opponent in a single pass. The class' staying power in battle is limited once its array of energy mines is depleted.

### Octopus Construction Ship **◄**2191

An oddity, the Secrona National Authority has been known to build and maintain a small fleet of large construction vessels. The Octopus construction ship dwarfs most other vessels. Within its gaping maw is the facilities to produce ships as large as a small destroyer.

Federation intelligence believes that these ships were intended as mobile construction bases that could construct ships on-site in newly colonized star systems.

### 

A rare and expensive Octopus variant, the Ringed Octopus is a wholesale conversion of that hull that replaces heavy industrial equipment with fighter decks. Each Ringed Octopus supercarrier can dock 13 flights of fighters.

### 

The Swordfish is the standard Secrona exploration vehicle. Well armed and sheathed in thick armor, as are all Secrona ships, the Swordfish is well equipped for missions into dangerous, unexplored territories.

## Flights of the Secrona Authority ◀ 4.1.2

### 

The Jet heavy jump fighter was the Secrona's most advanced fighter at contact. These large fighters are special in that they are capable of solo-jumps. These frees them from the necessity of carriers, allowing them to make short-range strikes against enemy targets at other locations.

### Ink Light "Skip" Fighter ◀ 2187

The Secrona Ink fighter is classified within the NAA as a "skipfighter", a term referring to a fast interceptor design. The Ink is not particularly good, but its fast-firing linked autocannons are effective against other fighters.

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Class	ISD	Туре	Cost	Maint	DV	AS	AF	CR	CC	ВС	Jump?	Atmo?	Abilities
Squid Battleship	2204	BB	16	4/2	11	10	7	10	5	0	Υ	N	Command

# Cruisers

Class	ISD	Туре	Cost	Maint	DV	AS	AF	CR	CC	ВС	Jump?	Atmo?	Abilities
Nautilus Heavy Cruiser	2194	CA	11	3/2	7	5	3	8	3	0	Υ	N	Command
Devilfish Warship	2189	CL	6	2/2	5	4	2	5	2	0	Ν	N	Ballistic Gunship

# Carriers

Class	ISD	Туре	Cost	Maint	DV	AS	AF	CR	CC	ВС	Jump?	Atmo?	Abilities
Ringed Octopus Supercarrier	2199	CVF	19	4/2	8	4	5	7	4	13	Υ	N	

# Destroyers & Frigates

Class	ISD	Type	Cost	Maint	DV	AS	AF	CR	CC	ВС	Jump?	Atmo?	Abilities
Ammonite Destroyer	2183	DD	4	1/4	3	2	1	3	1	0	N	Υ	Gunship
Cambrian Destroyer	2180	DD	7	1/2	5	5	3	5	2	0	Υ	N	Gunship

# Scouts & Auxiliaries

Class	ISD	Туре	Cost	Maint	DV	AS	AF	CR	CC	ВС	Jump?	Atmo?	Abilities
Spirula Supply Ship	2204	AOE	8	3/2	7	3	2	6	3	2	N	N	Supply (1)
Octopus Construction Vessel	2191	AC	15	5/2	8	3	5	7	4	0	Υ	N	Mobile Construction (3)
													Field Repair (1)
Swordfish Explorer	2184	EX	7	2/2	5	2	1	5	2	0	Υ	N	Explorer (1)

# Fighters & Shuttles

Class	ISD	Туре	Cost	Maint	DV	AS	AF	CR	CC	ВС	Jump?	Atmo?	Abilities
Jet Heavy Jump Fighter	2201	HF	1/1	1/6	2	2*	1	N/A	N/A	N/A	Υ	N	Ballistic
Ink Light "Skip" Fighter	2287	LF	1/4	1/16	1	0	2*	N/A	N/A	N/A	N	Υ	Kinetic

Minor Powers ◀ 4.X

This section contains information on the various miscellany species encountered during the campaign that do not warrant their own entries in the previous sections. These powers are either too small or not directly involved in the campaign.

### Kaluest Theocracy

## Camulan Kingdoms

The primitive industrial Camulans were first encountered by Terran explorers in 2204. Contact was delayed until XXXX as a result of the Federation Assembly's adoption of a non-interference directive in regards to pre-spaceflight alien species.

## Yiidians

Very little is known about the Yiidian species. What little information that is available on them comes from the two ancient Yiidian derelicts that the Secrona converted into the Cambrian class of destroyers.

The Yiidians appear to have been a major interstellar power sometime in the last five hundred years, but they later abandoned their holdings downspin of Sol in what is now Secrona space. The discovery of a Cambrian in the Secrona star system itself indicates that the Yiidians once controlled that system, though the Secrona have no direct knowledge of any alien contact.

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# Appendix A: Warship Classifications

Author's Note: The following is taken from the Wikipedia entry on this subject.

### Aircraft Carrier Type

All ships designed primarily for the purpose of conducting combat operations by aircraft which engage in attacks against airborne, surface, subsurface and shore targets. "CV" is from the original description, "Cruiser, Aviation" -- CA was already in use for "Cruiser, Armored". By the 1930s, CV was a single symbol, meaning Aircraft Carrier.

AVG	Auxiliary	Aircraft	Ferry	(Escort	carrier)
	(1941-2)				

ACV Auxiliary Aircraft Carrier (Escort carrier) (1942)

**CV** Multi-purpose Aircraft Carrier

CVA Attack Aircraft Carrier (retired)

CVB Large Aircraft Carrier (category merged into CVA, 1952)

**CVE** Escort aircraft carrier (retired) (1943-retirement of type)

**CVHA** Assault Helicopter Aircraft Carrier (retired in favor of various L-series amphibious assault ship hull codes)

**CVHE** Escort Helicopter Aircraft Carrier (retired)

**CVL** Light aircraft carrier (retired)

**CVN** Multi-purpose Aircraft Carrier (Nuclear-Propulsion)

**CVS** Antisubmarine Aircraft Carrier (retired)

CVT Training Aircraft Carrier (changed to AVT (Auxiliary))

**CVU** Utility Aircraft Carrier (retired)

#### Surface Combatant Type

Large, heavily armed, surface ships which are designed primarily to engage enemy forces on the high seas. The primary surface combatants are battleships, cruisers and destroyers. Before 1920, ships were called "<type> no. X," with the type fully pronounced. The types were commonly abbreviated in ship lists to "B-X," "C-X," "D-X" et cetera - for example, before 1920, USS Minnesota (BB-22) would have been called "USS Minnesota, Battleship number 22" verbally and "USS Minnesota, B-22" in writing. After 1920, the ship's name would have been both written and pronounced "USS Minnesota (BB-22)"

B Battleship (pre-1920)

BB Battleship

BM Monitor (retired)

ACR Armored Cruiser (pre-1920)

C Cruiser (pre-1920 Protected Cruisers and Peace Cruisers)

CA (first series) Cruiser (retired, composed all surviving pre-1920 Protected and Peace Cruisers)

CA (second series) Heavy Cruiser, category later renamed Gun Cruiser (retired)

CAG Guided Missile Heavy Cruiser (retired)

CB Large Cruiser (retired)

CBC Large Command Cruiser (retired)

CC Battlecruiser (retired, never used operationally)

CC (second usage) Command Cruiser (retired)

CG Guided Missile Cruiser

CGN Guided Missile Cruiser (Nuclear-Propulsion)

CL Light Cruiser (retired)

CLAA Anti-Aircraft Cruiser (retired)

CLG Guided Missile Light Cruiser (retired)

CLGN Guided Missile Light Cruiser (Nuclear-Propulsion) (retired)

CLK Hunter-Killer Cruiser (abolished 1951)

CS Scout Cruiser (retired)

CSGN Strike Cruiser

D Destroyer (pre-1920)

DD Destroyer

DDE Escort Destroyer (not to be confused with Destroyer Escort, DE - an Escort Destroyer, DDE, was a Destroyer, DD, converted for antisubmarine warfare) (category abolished 1962)

DDG Guided Missile Destroyer

DDK Hunter-Killer Destroyer (category merged into DDE 4 March 1950)

into DDE, 4 March 1950)

DDR Radar Picket Destroyer (retired)

DE<sup>2</sup> Destroyer Escort (abolished 30 June 1975)

<sup>&</sup>lt;sup>2</sup> A word about the DE type symbol is in order here. There were two distinct breeds of DE, the World War II Destroyer Escorts (some of which were converted to DERs) and the postwar DE/DEG classes, which were known as Ocean Escorts despite carrying the same type symbol as the

	DE.	Ocean Escort (abolished 30 June 1975)	SSGN	Guided	Missile	Submarine	(Nuclear-		
DEG <sup>1</sup>		Guided Missile Ocean Escort (abolished 30		Powered)					
		June 1975)	SSO	Submarine Oiler (retired)					
	DER <sup>1</sup> Radar Picket Destroyer Escort (abolished 30		SSP	Submarine Transport (retired)					
		June 1975)	SSR	Radar Picket Submarine (retired)					
	$DL^3$	Destroyer Leader (later Frigate) (retired)	SSRN	Radar Pid	Radar Picket Submarine (Nuclear-Powered)				
	DLG <sup>2</sup>	Guided Missile Frigate (abolished 30 June		(retired)		,	·		
		1975)	SST	Training S	Submarine				
	DLGN <sup>2</sup>	Guided Missile Frigate (Nuclear-Propulsion)							
		(abolished 30 June 1975)							

There have several other submarine been designations which did not begin with SS, included here for completeness:

11616 10	nere for completeness.					
AGSS	Auxiliary Submarine					
AOSS	Submarine Oiler					
ASSP	Transport Submarine					
APSS	Transport Submarine					

LPSS Amphibious Transport Submarine

(Note: SSP, ASSP, APSS, and LPSS were all the same type, redesignated over the years.) IXSS Unclassified Miscellaneous Submarine

# Patrol Combatant Type

(Nuclear-

Combatants whose mission may extend beyond coastal duties and whose characteristics include adequate endurance and sea keeping providing a capability for operations exceeding 48 hours on the high seas without support.

PG Gunboat, later Patrol combatant PHM Patrol, Hydrofoil Missile

## Amphibious Warfare Type

All ships having organic capability for amphibious assault and which have characteristics enabling long duration operations on the high seas.

LCIL	Large Infantry Landing Craft (became LSIL)							
LOIL								
LCSL	Landing Craft Support (Large) (became LSSL)							
LHA	Amphibious Assault Ship (General Purpose)							
LHD	Amphibious Assault Ship (Multi-Purpose)							
LPD	Amphibious Transport Dock							
LPH	Amphibious Assault Ship (Helicopter)							
LKA	Amphibious Cargo Ship							
LSD	Dock Landing Ship							

(abolished 30 June 1975)

DM Destroyer Minelayer (retired)

 $FF^4$ Frigate (retired)

FFG<sup>3</sup> Guided Missile Frigate

FFR<sup>3</sup> Radar Picket Frigate (retired)

FFT<sup>3</sup> Frigate (Reserve Training) (retired)

### Submarine Type

All self-propelled submersible types regardless of whether employed as combatant, auxiliary, or research and development vehicles which have at least a residual combat capability.

SC Cruiser Submarine SF Fleet Submarine (retired) SM Submarine Minelayer

SS Submarine

SSG

SSA Cargo Submarine

SSK Hunter-Killer Submarine (retired)

Attack Submarine (Nuclear-Powered) SSN

SSBN Ballistic Missile Submarine (Nuclear-Powered)

Guided Missile Submarine (retired)

WWII Destroyer Escorts. All DEs, DEGs, and DERs were reclassified as FFs, FFGs, or FFRs, 30 June 1975.

<sup>&</sup>lt;sup>3</sup> The DL category was established in 1951 with the abolition of the CLK category. CLK 1 became DL 1 and DD 927-930 became DL 2-5. By the mid-1950s the term Destroyer Leader had been dropped in favor of Frigate. Most DLGs and DLGNs were reclassified as CGs and CGNs, 30 June 1975. However, DLG 6-15 became DDG 37-46. The old DLs were already gone by that time.

<sup>&</sup>lt;sup>4</sup> The FF, FFG, and FFR designations were established 30 June 1975 as new type symbols for ex-DEs, DEGs, and DERs. The first new-build ships to carry the FF/FFG designation were the Oliver Hazard Perry (FFG-7) class frigates.

LSIL	Large Inf	antry L	anding Shi	p (forme	rly LCIL)
LSSL	Landing	Ship	Support,	Large	(formerly

LCSL)

LSM Medium Landing ship

LST Tank Landing Ship

LCC Amphibious Command Ship LPA Landing Platform Amphibious

LCH Landing Craft Heavy

LCM Landing Craft Mechanised

LSH Landing Ship Heavy
LSL Landing Ship Logistic

LCVP Landing Craft Vehicle and Personnel

### Combat Logistics Type

Ships which have the capability to provide underway replenishment to fleet units.

AC Collier

AE Ammunition Ship
AFS Combat Stores Ship

AO Fleet Oiler

AOE Fast Combat Support Ship

AOR Replenishment Oiler

AW Distilling Ship

#### Mine Warfare Type

All ships whose primary function is mine warfare on the high seas.

AM Minesweeper

AMb Harbor Minesweeper
AMc Coastal Minesweeper

AMCU Underwater Mine Locater

MSO Minesweeper - Ocean

MCM Mine Countermeasures Ship

MCS Mine Countermeasures Support Ship

MHC Minehunter, Coastal

MHI Mine Hunter Inshore

CM Minelayer

CMc Coastal Minelayer
DM Destroyer Minelayer

### Coastal Defense Type

All ships whose primary function is coastal patrol and interdiction.

FS Corvette
PB Patrol boat
PC Patrol, Coastal
PCE Patrol Escort
PF Patrol Frigate

Shore Patrol

SP

## Mobile Logistics Type

Ships which have the capability to provide direct material support to other deployed units operating far from home base.

AD Destroyer Tender

AGP Patrol Craft Tender

AR Repair Ship

AS Submarine tender AVP Seaplane Tender

Auxiliary

AN Net Laying Ship

### Support Ships

Support ships are not designed to participate in combat, and are generally not armed.

#### Support Type Craft

A grouping of ships designed to operate in the open ocean in a variety of sea states to provide general support to either combatant forces or shore based establishments. (Includes smaller auxiliaries which by the nature of their duties, leave inshore waters).

ACS Auxiliary Crane Ship
AG Miscellaneous Auxiliary

AGDE Testing Ocean Escort

AGDS Deep Submergence Support Ship AGER Environmental Research Ship

AGF Miscellaneous Command Ship

AGFF Testing Frigate

AGM Missile Range Instrumentation Ship

AGOR	Oceanographic Research Ship	YCV	Aircraft Transportation Lighter
AGOS	Ocean Surveillance Ship	YD	Floating Crane
AGS	Surveying Ship	YDT	Diving Tender
AGSS	Auxiliary Research Submarine	YF	Covered Lighter
AH	Hospital ship	YFB	Ferry Boat or Launch
AK	Cargo Ship	YFD	Yard Floating Dry Dock
AKA	Attack Cargo Ship	YFN	Covered Lighter
AKR	Vehicle Cargo Ship	YFNB	Large Covered Lighter
AKS	Store Issue Ship	YFND	Dry Dock Companion Craft
AOG	Gasoline Tanker	YFNX	Lighter (Special purpose)
AOT	Transport Oiler	YFP	Floating Power Barge
AP	Transport	YFR	Refrigerated Cover Lighter
APA	Attack Transport	YFRN	Refrigerated Covered Lighter
APD	High Speed Transport	YFRT	Range Tender
ARC	Cable Repair Ship	YFU	Harbor Utility Craft
ARL	Small Repair Ship	YG	Garbage Lighter
ARS	Salvage Ship	YGN	Garbage Lighter
ASR	Submarine Rescue Ship	YLC	Salvage Lift Craft
AT	Ocean Going Tug	ΥM	Dredge
ATA	Auxiliary Ocean Tug	YMN	Dredge
ATF	Fleet Ocean Tug	YNG	Gate Craft
ATS	Salvage and Rescue Ship	YNT	Net Tender
AVB	Aviation Logistics Support Ship	YO	Fuel Oil Barge
AVT	Auxiliary Aircraft Landing Training Ship	YOG	Gasoline Barge
		YOGN	Gasoline Barge
	Service Type Craft	YON	Fuel Oil Barge
A arou	ping of navy-subordinated craft (including	YOS	Oil Storage Barge
	f-propelled) designed to provide general	YP	Patrol Craft, Training
	to either combatant forces or shore-based	YPD	Floating Pile Driver
establis	hments.	YR	Floating Workshop
4.5	0. 01:	YRB	Repair and Berthing Barge
AB	Crane Ship	YRBM	Repair, Berthing and Messing Barge
AFDB	Large Auxiliary Floating Dry Dock	YRDH	Floating Dry Dock Workshop (Hull)
AFDL	Small Auxiliary Floating Dry Dock	YRDM	Floating Dry Dock Workshop (Machine)
AFDM	Medium Auxiliary Floating Dry Dock	YRR	Radiological Repair Barge
APB	Self-Propelled Barracks Ship	YRST	Salvage Craft Tender
APL	Barracks Craft	YSD	Seaplane Wrecking Derrick
ARD	Auxiliary Repair Dry Dock	YSR	Sludge Removal Barge
ARDM ATA	Medium Auxiliary Repair Dry Dock Auxiliary Ocean Tug	ΥT	Harbor Tug (craft later assigned YTB, YTM, or YTM classifications)
DSRV	Deep Submergence Rescue Vehicle	YTB	Large Harbor Tug
DSV	Deep Submergence Vehicle	YTL	Small Harbor Tug
NR	Submersible Research Vehicle	YTM	Medium Harbor Tug
YC	Open Lighter	YTT	Torpedo Trials Craft
YCF	Car Float	YW	Water Barge

YWN Water Barge

IX Unclassified Miscellaneous Unit

X Submersible Craft