SHIPS OF THE STAR FLEET Volume One: Cruiser

One hundred and ninetieth year of issue 2377-2378

The standard reference guide to the vessels of the Star Fleet

Ships of the Star Fleet

By Admiral Chris Wallace

Star Fleet Operations / Star Fleet Advanced Starship Design Bureau

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PREFACE

This one hundred and ninetieth edition of *Ships of the Star Fleet* continues the tradition of this publication in providing the most comprehensive data on the ships of the line of Star Fleet. This information has been organized to make it easy for the reader to locate the data desired. The individual vessel listings (which appear in chart form) display a ship's current navigational contract code number, the date the ship's keel was laid, the date the vessel was launched from dock to begin acceptance trials, and the date that ship was commissioned into the Star Fleet. Terran local calendar dates have been used for all entries, regardless of the shipyard's location. The illustrations accompanying most starship sections show the side, fore, aft, bottom, and top views of each starship. In addition, the Starship Development Project Logo (where known) for each class is on the first page of each entry. We have also included a picture of the ship in service.

As it has been since the 150th issue, *Ships of the Star Fleet* is broken up into six separate sections. The first three installments deal with the vessels that make up the Star Fleet: Volume One covering Cruisers, Volume Two covering Patrol Combatants (dreadnoughts, frigates, and destroyers), and Volume Three finishing up with Scouts and Escorts. The next two installments deal with the Star Fleet itself. Volume Four will provide coverage on Star Fleet organization, including TacFleet, the Rapid Deployment Force, and the Star Fleet Reserve Force. Volume Five showcases Star Fleet facilities such as starbases, spacedocks, shipyards, and repair facilities. And finally, Volume Six covers the specialized ground-combat forces of the Star Fleet, including the Star Fleet Marine Corps and the groups that make up the Star Fleet Special Operations Command. All of these are of major importance to the effectiveness of the Star Fleet.

The publishers of the 190th edition of *Ships of the Star Fleet* are indebted to the members of Team Kempo and Team Neko for their assistance in both the compilation of data and layout duties. The publishers also wish to thank Admiral Alex Rosenzweig of the Department of Technical Services for providing needed technical information. Commodore David Pipgras of the Office of Graphic Design lent his talents to the logos seen herein, while other members of this illustrious Office rendered the beautiful views of the ships themselves. And a final thank you to the members of the Star Fleet Press Corp who took the beautiful pictures of the ships seen within.

The publication schedule for Ships of the Star Fleet is as follows:

Volume One	-	January
Volume Two	-	February
Volume Three	-	March
Volume Four	-	April
Volume Five	-	May
Volume Six	-	June

Compilation of data for the 191st edition (2378-9) has already begun, and comments or additional data are welcome. Information or material should be directed to the Starfleet Spacecraft Design Advisory Commission, Publications Group, Utopia Planitia Spacedock, Mars.

Admiral Chris Wallace Chief of Star Fleet Operations March 2377

SHIPS OF THE STAR FLEET

STATE OF THE FLEET

It has been a little over a year since the defeat of the Dominion and their Breen and Cardassian Allies. Though the Federation Alliance proved victorious, the cost was staggering with Starfleet suffering almost two thousand ships and over a million men lost.

The charter of the Star Fleet has always been to defend and explore the Federation. Whilst the ideal is a balance of offensive, defensive, and exploratory capabilities, political and budgetary realities often make this ideal an impossible one to achieve. The Star Fleet has only so large a ship budget, and since the 2340's has pushed for the design and construction of "multi-mission" starship platforms that could perform all three roles, to various degrees. With the Federation-Klingon Alliance and the "disappearance" of the Romulans from everyday affairs, ships like the New Orleans class were developed more as explorers than combat vessels. When war broke out between the Federation and the Cardassian Union in 2355, the New Orleans class were unable to serve in combat missions due to their lack of photon torpedo launchers. While this problem was quickly rectified, the months that these vessels spent away from the fighting placed heavy demands on the Ambassador and Steamrunner class ships. Star Fleet learned from the Cardassian War, and by the mid-2360's the new Akira and Norway classes had entered service, greatly enhancing the force-projection capabilities of the Fleet.

The destruction of the Galaxy class cruiser U.S.S. Odyssey (CKE 71832) by Jem'Hadar forces in the Gamma Quadrant spurred the Federation into a war footing. Upon assuming the position of Chief of Fleet Operations in 2373, Rear Admiral Chris Wallace embarked on a program to increase the size and strength of TacFleet, primarily by increasing production of Akira and Intrepid class starships, as well as rushing the final three Galaxy (II) class starships into production and beginning full-scale construction of the Sovereign class. He also fought hard for additional

funding to modernize and re-equip the Star Fleet for extended combat operations.

The Federation entered the war with close to 3,500 Class One starships. At the signing of the Armistice, that number had fallen to below 1,800. In addition, the loss of Command-level officers and the experience they carried have been extremely damaging to the Fleet. Now-Admiral Wallace began the rebuilding of the Star Fleet. Plans call for the force to be up to 2100 ships by 2380 and 2500 ships by 2385. These new ships will need trained crews to man them, so a parallel program to enhance and expand Starfleet Academy has also been implemented, as well as accelerated training for Lieutenant Commanders and Commanders who have shown exceptional ability to advance them to Captain rank and starship command postings.

Currently, the Star Fleet is concentrating on the rapid introduction of vessels of the *Intrepid* and *Norway* classes to augment the Fleet, as both can be produced quickly and inexpensively. Construction of the larger *Sovereign* class has been increased from the current one to two per year (with those vessels already under construction continuing their accelerated build and fitting-out schedules). *Akira* class construction will remain at current levels for the time being, as sufficient numbers exist to meet slated patrol duties.

Construction of large explorers has been curtailed in favor of dedicating resources to the *Intrepid* and *Norway*. Construction funds for five additional *Nottingham* class vessels have been placed on hold, pending a thorough review of both the class and large explorers in general. As for the *Galaxy* class, the *Galaxy* (CKE 70637) is being uprated to *Galaxy* (*II*) specs during her extensive repair layover and is scheduled to return to Fleet service in six-to-nine months. Both *Challenger* and *Venture* are in need of a new warp-core installation after damage involved in

the Battle for Earth, and both will probably also undergo conversion to Galaxy (II) specifications as it is an all-around superior platform.

While Explorer construction is being curtailed, scout and escort construction will continue to be strong. The Aquila class of scouts has been approved, with six hulls being funded. The Defiant class, with seven ships currently in service, will also probably see additional units acquired.

For the moment, the older *Miranda* and Soyuz class ships will continue their tours of duty. However, losses in the Dominion War for these vessels was extensive, and designs for a replacement class of ships are currently being drawn up by the Starfleet Spacecraft Design Advisory Commission.

The current goals for the Star Fleet, then, are an increase from the current 1800 Class One starships in 2377 to 2100 vessels in 2380 and 2500 in 2385. While this represents a net reduction of 1000 ships from the 2375 levels entering the War, the net reduction to TacFleet will only be 250 and they will have far more of the latest and most advanced models at their disposal.

ACHIEVING A 2500-SHIP FLEET

The planned 2500-ship fleet is shown in the last column of Table 1-1. These numbers may be influenced by many factors. The deactivation of older, front-line vessels ahead of schedule (especially *Excelsior* and *Miranda*); the cancellation or cutback of some construction programs; and a changing in the "direction" of the Fleet's primary mission profile in the coming eight-year period are all possible occurrences that could affect Star Fleet's ability to maintain a "2500-ship" fleet.

TABLE 1-1. STAR FLEET STRENGTH (January 2378)

	2375	2376	2377	2380	2385
Active Ships	3384	1865	1954	2200	2500
TacFleet Ships	2046	1073	1112	1500	1750
Active Ships					
Cruisers					
СН	312	239	247	284	317
CS	00	00	00	00	00
CG	85	39	43	90	125
CD	00	00	00	00	00
CKE	09	10	11	14	16
CE	61	48	50	63	77
CA	151	91	95	115	155
CL	57	30	31	34	40
CP	21	03	03	10	20
CT	01	01	01	01	01
Frigates					
FH	47	24	25	30	35
FR	240	110	110	120	140
FF					
Destroyers					
DH	115	115	115	115	115
DD	100	107	107	116	126
Scouts					
SS	45	38	38	38	38
ST	340	190	195	232	262
Patrol Combatants					
DN	02	02	02	04	05
CO	05	06	04	05	05
ΡΚΑ/ΡΑ	110	75	85	100	125
Shuttlecarriers	01	01	01	01	01
Space Control Ships	03	03	03	03	03
Fleet Auxiliaries					
Transports	78	49	54	97	113
Transport/Tugs	375	281	304	328	357
Tenders	150	117	120	138	162
	150	81			

CRUISERS

The cruiser remains the focal point of the new Fleet strategy and shipbuilding program, including the 5 ships of the Sovereign class; the 2 Galaxy and 7 Galaxy (II) class; 23 Akira class; 10 Intrepid class; 24 Nebula Class; 22 Excelsior Class; 3 Niagara class; 4 Challenger class; 15 Ambassador Class; 2 Nottingham class and 2 Prometheus class.

In 2371, Star Fleet approved construction of a new class of large exploratory cruisers, known as the *Nottingham* class. Designed to slot in below the *Galaxy / Galaxy (II)* class in size and overall mission capabilities, they do carry the latest technology. Five vessels were approved, but with the onset of the Dominion War, only two vessels were laid down. Funding for the third vessel was authorized in 2377 and the final two are expected to receive funding during the next budget process.

The five vessels of the Sovereign class proved their worth during the war, and will soon be joined by a fifth. An additional ten vessels of this class have been approved, with construction moving to two a year.

The *Intrepid* class will quickly become the backbone of the new fleet, as they are quick and inexpensive to produce, and offer excellent multi-mission capabilities. Currently forty vessels are planned, at the rate of five a year. This class proved to be a popular and valuable diplomatic courier during the war, and one of the scheduled new builds, U.S.S. *Jaguar* (CE 74750), will be built as a template for a possible new series of Diplomatic Cruisers when she goes active in early 2380. It is hoped this will prove a more cost-effective platform then the single *Bradbury* class diplomatic cruiser.

The Prometheus class deep-space tactical cruiser, while proving to be a powerful design, is feared to be too expensive and complicated to build in large numbers and only the prototype is in service.

FRIGATES

Though ships of the New Orleans and Norway classes continue to serve well, it has been decided to begin preliminary work on a future replacement rather than restarting the production lines. *The Sullivans* class of tactical frigate now stands at ten vessels. The earlier Mk. I and Mk. II spec vessels are expected to be modified during general layover to the Mk. III spec of the last three.

DESTROYERS

No new destroyer-type construction is planned for the foreseeable future. The twenty planned Alaric (DD 77831) class heavy destroyers will serve as supplement to the earlier *Steamrunner* and *Freedom* classes when they start entering service in 2380. None of these vessels have a very effective scientific capability and additional examples are not being considered at this time.

SCOUTS

The only new scoutship currently under active production is the Aquila (ST 77453) class, six of which have been authorized to replace the six century-old Cygnus class of scouts. Most of the exploration fleet consists of older ships, but due to the narrowness of their mission parameters, they are still more than capable of fulfilling their intended role.

A handful of Yeager class scouts were built during the war from components of *Intrepid* and other classes, but their "Frankenstein" nature has proven to be of rather dubious value and all are planned for immediate retirement.

The Oberth class currently make up the bulk of the scout fleet, with the swift Cheyenne's being used on deep-range mapping missions for later follow-up by Sovereign, Galaxy, and Intrepid class vessels. The twelve vessels of the Nova class will help supplement the Oberth's in this role.

TABLE 1-2. STAR FLEET SHIPBUILDING PROGRAM

Number/ Type		2380	2381	2382	2383	2384	2385	
CKE 78505	Large Exploratory Cruiser/Nottingham class	01	00	01	00	00	00	
CH 73811	Heavy Cruiser/Sovereign class	02	02	02	02	02	02	
CL 60590	Light Cruiser/Nebula class	02	02	03	04	05	05	
CE 74655	Cruiser/Intrepid class	05	05	05	05	10	10	
CG 62497	Battlecruiser/Akira class	05	05	05	05	05	05	
DN 73820	Dreadnought/Entente class	01	00	00	00	00	00	
DD 77831	Destroyer/Alaric class	04	04	04	04	02	02	
ES 74205	Escort/Defiant class	05	05	05	10	10	10	
ST 77453	Scout/Aquila class	02	01	01	00	00	00	
FR 64381	Transport/MacPherson class	10	10	10	10	10	10	

PATROL COMBATANTS

Two of the four vessels of the *Entente* class dreadnought have completed their outfitting and are now on patrol duties. At this time, there are no plans for any additional dreadnought construction, nor is Star Fleet actively looking at any new designs.

The new Defiant class of escort is currently entering full production with a final build rate of five per year expected around 2380. At this time funding for twenty of these vessels has been approved, though that number is expected to at least double, if not triple, in the years ahead as these ships look to be an excellent value.

SHUTTLECARRIERS

At this time, no additional vessels of the Courageous class have been built and funding for the second through fourth vessels has been formally cancelled before construction could begin. As for Courageous herself, she is expected to remain close to Romulan space for the time being.

SPACE CONTROL SHIPS

Mistrusted and misunderstood since their inception in 2285, the Space Control ship's future remains with the three vessels of the *Griffon* class, which performed great service during the Dominion War. However, Star Fleet has yet to convince the Federation Council to fund additional vessels. Perhaps their heavy role in the rebuilding process might change this but, at this time, it is expected that these three ships will remain the limit.

COMMAND SHIPS

The large Fleet actions against the Dominion reinforced the need for Star Fleet to begin consideration of building more Command Cruisers. Though three vessels of the Sovereign-based Whitehall class have been constructed, they are far too expensive for additional production. A proposal has been drafted for a command ship based on the Intrepid class cruiser. It is currently under review by the ASDB and SSDAC.

FLEET AUXILLIARY VESSELS

With the massive movement of supplies, materials, and personnel needed to begin the task of rebuilding the Federation, a large number of auxiliary ships have been authorized for construction. The *MacPherson* (TR 64381) class will be more than doubled in size from the current forty ships to one hundred. In addition, the remaining vessels of the old *Doppler* and *Dollond* classes have been recalled from mothballs and pressed into service on the closer runs, where there slower speeds are not as much an issue.

SHIP CLASSIFICATIONS

Star Fleet ships and small craft are classified by type and by sequence within that type. The list of classifications (by approval of the Federation Commissioner for Star Fleet) is issued periodically, updating a system begun in 2208. Star Fleet's current list, based on a format developed in 2290, seeks to offer the most comprehensive definition of the types and missions undertaken by the ships of the Star Fleet.

The following classifications are contained on the current list.

Class One Vessels

Cruisers

- CH Heavy Cruiser
- CS Strike Cruiser
- CG Battlecruiser
- CD Through-Deck Cruiser
- CKE Large Exploratory Cruiser
- CE Exploratory Cruiser
- CA Cruiser
- CL Light Cruiser
- CT Tactical Cruiser
- CP Patrol Cruiser

Frigates FH

- FH Heavy Frigate FR Frigate
- FF Fast Frigate
- FS Small Frigate
- FT Strategic Frigate
- Destroyers DH
 - Heavy Destroyer
 - DD Destroyer
 - DF Fast Destroyer
 - DS Super Destroyer

Scouts

- SS Superscout
- ST Scout

Patrol Combatants

- DN Dreadnought
- DNF Dreadnought-Frigate
- BB Battleship
- CKV Large Carrier
- CVS Strike Carrier
- CV Carrier
- PKA Large Perimeter Action Ship
- PA Perimeter Action Ship
- ET Escort
- CV Corvette
- FT Fighter-Interceptor

Specialized

- CO Command Ship
- SC Shuttlecarrier
- SO Space Control Ship

Class One Auxilliaries

Support Ships

- TR Transport
- TT Transport-Tug
- TE Tender
- TU Tug
- SP Combat Support Ship
- SM Medical Ship
- CR Courier
- RB Runabout

A NOTE ABOUT REGISTRIES

Before 2315, Federation starship NCC numbers were assigned by class – i.e. the *Enterprise* class heavy cruiser was assigned numbers in the 1700 range. However, as class numbers were assigned, there either became a waste of numbers (when classes did not fill the range assigned to them) or shortages (where a class was built beyond the range reserved for it). An example of this is the *Belknap* class strike cruiser. Twenty vessels were originally envisioned for this class, and the numbers 2500-2519 were assigned to it. The *Ascension* class dreadnought, itself a variant of the *Belknap* class, was then assigned the numbers 2520-2536 to fill the sixteen vessels projected for procurement. However, the *Belknap* class proved so effective that an additional eight vessels were ordered in 2280. As 2520-2536 were already assigned to the *Ascensions*, these new *Belknap* vessels were assigned the registry numbers 2537-2444. However, shortly thereafter the dreadnoughts fell out of favor and the *Ascension* class was halted at ten (2530), leaving a gap of six unused numbers. This was later filled by the six vessels of the *Impervious* class (CA 2531), which were specifically assigned those NCC numbers for just that purpose.

In 2315, the Office of Starship Registry decided to assign registry numbers in blocks of 100 to the various starship construction facilities within the Federation. As a vessel was commissioned at each facility, it would be assigned the next available number in that block. When a block was expired, it would be assigned a new block of 100 registries. This policy was first instituted with the Deneva class of scoutships, the lead vessel being assigned the number 6200 from the pool 6200-6299 assigned to the San Francisco Fleet Yards where it was produced.

Highly controversial at the time, the new policy did eliminate the waste of NCC numbers. However, to the layman, NCC numbers are now strewn about with what appears to be no apparent rhyme or reason. In fact, while NCC numbers across classes have no definable pattern, within classes the registry numbers are in ascending order based on build date. So while the Galaxy (II) class vessel U.S.S. Bright Star (CKE 71875) was commissioned after the Intrepid class U.S.S. Voyager (74656), Bright Star's registry is higher than those Galaxy class vessels that preceded her from Utopia Planitia.

For large vessels like the Galaxy, Nebula, and Sovereign classes, vessels are generally ordered singly. Therefore, they usually have registries a few hundred numbers apart. Smaller vessels like the Saber and Norway classes are ordered in groups of four or five from the same shipyard, and as such these groups of vessels often have numbers falling one-after-the-other like the 23rd century days.

CRUISERS



CONSTELLATION CLASS EXPLORATORY CRUISER

5 EXPLORATORY CRUISERS: "CONSTELLATION" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-1974	Constellation	Port Copernicus Fleet Yards, Luna	March 2281	June 2284	November 2284	Active
NCC-2590	Valkyrie	Port Copernicus Fleet Yards, Luna	May 2281	July 2285	March 2286	Active
NCC-2593	Hathaway	Port Copernicus Fleet Yards, Luna	May 2281	September 2284	April 2285	Lost
NCC-2893	Stargazer	Port Copernicus Fleet Yards, Luna	March 2282	April 2285	February 2286	Active
NCC-3069	Magellan	Port Copernicus Fleet Yards, Luna	June 2286	September 2289	June 2290	Decommissioned
NCC-3890	Gettysburg	Port Copernicus Fleet Yards, Luna	December 2290	April 2293	October 2293	Decommissioned
NCC-9754	Victory	Port Copernicus Fleet Yards, Luna	June 2322	July 2325	March 2323	Active
NCC-9761	Gihlan	Port Copernicus Fleet Yards, Luna	August 2322	September 2325	April 2323	Active

In the mid 2270's, Star Fleet decided to commission a design for an Explorer-class vessel capable of missions of extreme duration on the outskirts of Federation space. While both the *Enterprise* and *Excelsior* class starships were designed for missions of up to five-years, they were also expected to be able to have access to Federation facilities. Star Fleet was looking for a vessel capable of mission duration's of at least twice that and without the need to replenish at a starbase. Neither the *Enterprise* or *Excelsior*, due to the complexity of their systems design, was considered a viable platform for such a mission. Therefore, an entirely new ship class had to be developed.

Class: The ASDB began initial design work in 2276. Though known to be extremely inefficient, it was felt that more than two warp nacelles would be critical for this design, both to reduce

stress on the entire warp system as well as to provide spares in case of an unrepairable system failure. It was decided that four nacelles, in a double-tandem configuration, made the most sense for the above reasons. The remaining design of the starship became dictated by the results of this decision. Mission requirements evolved to add long-range sensor analysis and intelligence gathering within Threat territories, communications, and deployment and retrieval of stealth shuttles. The Design Project was named Constellation in honor of the flag of the late Commodore Matthew Decker and Commodore Gihlan't'aehn of Port Copernicus Fleet Yards was named Director in May 2280. The registry 1974 was assigned to the lead ship at this time. **Classification:** Though classified as a cruiser, the Constellation class in hull design and layout actually shares more in common with a frigate.



Current Specifications for the Constellation class:		Embarked Craft:	1 Type SW-9 Intelligence Shuttle			
			3 Type SW-7 Personnel Shuttle			
Displacement:	325,000 mt		2 Type S-10 Shuttlepod			
Overall Length:	315 m		2 Type S-2A Bee Workpod			
Overall Draft:	86 m	Navigation:	"Hawkeye" Warp Celestial Guidance			
Overall Beam:	175 m		(System Contractor: Plessey Group, Essex, Earth)			
Propulsion:	Four LN-64B Mod 3 dilithium-energized antimatter linear warp drive units		NAVTAC Guidance Supplement			
	(System Contractor: Cochrane Warp Dynamics, Minos al Rijil, Alpha Centauri VII)		(System Contractor: Plessey Group, Essex, Earth)			
	Two RSM subatomic unified energy impulse units	Computers:	"Daystrom" Duotronic IV with Multitronic M-9 Supplement			
	(System Contractor: Scarbak Propulsion Systems, Earth)		(System Contractor: Erisaffe-Zynn Space Systems, Sebaldhasta, Deneb V)			
	QASR particle beam maneuvering thrusters	Phasers:	6 banks of 2 each – RIM-15A independent twin mount			
	(System Contractor: Scarbak Propulsion Systems, Earth)		(System Contractor: Agusta Ansadado, Inc, Fuzes, Venus)			
	"Trentis II" pulsed laser reaction control system	Phasers:	6 banks – RSM-20B single mount			
	(System Contractor: Orage ljek, Aksajak, Andor)		(System Contractor: Agusta Ansadado, Inc, Fuzes, Venus)			
Velocity:	Warp 6.0 Standard Cruising Speed	Missiles:	3 tubes – Mk 70 Mod 2			
	Warp 7.0 Maximum Cruising Speed		(System Contractor: Skat-Rar Weapon Systems, Ezuruk, Andor)			
	Warp 8.0 Maximum Attainable Velocity	Defense:	"Merlin" primary force field and deflector control system			
Duration:	10 years, standard		(System Contractor: Prentice-Schafer Inc., Marsport, Mars)			
Complement:	100 Officers	Life Support:	MC-3E artificial gravity generator			
	435 Enlisted Crew	••	(System Contractor: Cristobal SM/S, Manila, Earth)			
	0 Passengers (Normal – Up to 100 maximum)		"Rastis" radiation protection package			
	535 Total Crew (Standard)		(System Contractor: Tidjikja/Atar Associated Industries, Rastaribi, Regulus)			
			"Cerix" waste regeneration system			
			(System Contractor: Jullundur-Lahore Ltd., Bombay, Earth)			

Design: While sleek in appearance at a distance, upon closer inspection there are numerous bumps and protrusions for sensors and equipment, resulting in only average warp dynamics. A special extra-thick laminate hull was sandwiched between the top and bottom halves of an *Enterprise (II)* class cruiser saucer. This design allowed almost a tripling of the internal volume of the hull, while only doubling the mass. There were a total of seven hangar doors for cargo and the four shuttles (three impulse, one warp) carried. The *Constellation* was also the first vessel to have enveloping Structural Integrity Fields (SIF) that helped protect the ship during combat and high-stress maneuvering.

The additional internal space allows for cabins that are larger and more luxurious than those found on most current Federation starships, due to the nature and duration of the missions. Crew (100 officers and 435 enlisted) and cargo are 25 percent higher than that of an *Enterprise* class.

Engineering: Since the vessel would be operating so far from repair facilities, it was decided to use the Cochrane Warp Dynamics LN-64B warp drive. The four nacelles were placed on their sides, allowing a single intermix shaft to feed each set of two nacelles. As with the Federation (II) class dreadnought, the shaft ends in a "T", with a direct horizontal feed to each system. The entire system looks like a sideways "H". The original plan was to fit two independent warp cores, but this proved to be cost-and-space prohibitive. Therefore, an 18% larger warp swirl chamber was developed to handle the additional reactants, and a 60%-complete spare core was carried for in-field repairs. The core was placed within the juncture of the impulse block and pylons. Matter and anti-matter tankage filled the aft primary hull with twin hatches to allow the staggered ejection of the anti-matter storage pods. Dual and independent Scarbak Propulsion Systems RSM impulse drives were fitted for redundancy.

Tactical: Though designed as an Explorer, the Constellation mounted the most powerful tactical systems available at the time, including six RIM-15A dual phaser turrets and six RSM-20B single units, three Mk 70 photon torpedo launchers (two forward in pods at the juncture of the nacelles and one rearward in the impulse block), and the "Merlin" deflector shield system.

Computer Systems: It was necessary to fit the M-9 Duotronic IV computer system to adequately handle the balancing of four nacelles, as well as to ensure sufficient computing power for unseen needs. RAV/ISHAK Warp Celestial Guidance has been fitted, with a special expanded databank to allow the new mapping data these ships acquired to be stored for transmission back to Star Fleet. Sensor facilities were state-of-the-art, including a sensor "cannon" (a precursor to the subspace telescope) to map targets up to 3.5 light-years away with high resolution.

Builders: All Constellation class vessels were built at the Port Copernicus Fleet Yards, Luna, by Star Fleet engineers.

Development and Construction History: The design was finalized in 2280 and construction began on the Constellation, with two sisterships - Valkyrie and Hathaway – added six months later. A third vessel, Stargazer, was added six months after that. Constellation was launched on June 15, 2284 and immediately encountered severe problems in trying to balance all four nacelles. This was expected, and through extensive simulation and testing, the fields were balanced for both two-and four-nacelle operation. She began her speed trials, but another problem occurred. The ship was designed for speeds upwards of Warp 9, but stresses on the attachment points became so great that, above Warp 8, there was serious concern the ship might be destroyed. As such, top speed was limited to Warp 8, with Warp 7 the recommended maximum. This was a severe disappointment, as the ship was now no faster than an *Excelsior* class Battleship. However, the

ship was still capable of mission length's double the duration of an *Excelsior*. *Hathaway* entered service in August 2284, but *Valkyrie* suffered a partial anti-matter containment loss during testing. While the ship was not destroyed, the engineering section had to be cut out and a new one inserted. This delayed her commissioning until April 2286, after *Stargazer*, who was commissioned in February 2286.

Though not everything they had hoped for, Star Fleet commissioned an additional two vessels – *Magellan* and *Gettysburg* - over the next decade to perform deep-space mapping missions to the outer reaches of the Federation Treaty Zone. As the *Ambassador* class project developed, two more – *Victory* and *Gihlan* – were procured to perform initial surveying for later follow-up by the *Ambassadors*.

Nomenclature: Gihlan (CE 9761) was originally ordered as *Houbolt*, but was renamed in honor of Rear Admiral Gihlan't'aehn, who passed away from an illness shortly after the commissioning of U.S.S. Stargazer.







THE U.S.S. VICTORY (CE 9754) EXPLORING A TYPE VI GASEOUS CLOUD



THE U.S.S. STARGAZER (CE 2893) UNDERGOING REPAIR AND REFIT AT XENDI STARBASE 9 FOLLOWING HER RECOVERY IN 2364



EXCELSIOR CLASS HEAVY CRUISER

It is a rare vessel indeed that lasts one-hundred years, and no Star Fleet ship has remained on active-duty for such a length of time. Yet, in June of 2385, the U.S.S. *Excelsior* will celebrate her first century of active-duty service. Though decried as a "White Elephant" and a "Technical Failure" when she first entered service, the *Excelsior* and her hundreds of sisterships have gone on to become the most famous and effective starship class in Federation history.

Class: The Space Control Ship has been a part of Starfleet's vessel inventory since 2287. As developed, these vessels were to serve as task force flagships and as fire-support vessels (gunships) during Marine planetary assault operations.

In 2290 a new variation of the Excelsior class was submitted for consideration. With enhancements to cloaking technologies of both the Romulans and Klingons, detecting cloaked vessels became more and more difficult. It was decided to fit an advanced electronics suite to the ship to turn it into a "sensor picket" vessel which could patrol the Federation border. A set of high-powered side-scan sensor suites were installed in two large pods on the secondary hull to peer deep into Threat Teritory. The first vessel to be built to this standard was the next incarnation of the USS Enterprise, which entered service in 2293.

Classification: The Excelsior class started as a Battleship. As her military function became more and more subsumed by her explorer and other roles, she took on the standard designation for large Star Fleet multi-mission vessels and was re-classifed as a Heavy Cruiser.

Design: The Excelsior class was a radical design in her day, though many future starship classes, including the Ambassador and Sovereign, drew inspiration for their lines directly from her. Her shape was the result of extensive computer modelings of transwarp travel, though the design

adapted itself quite well to conventional warp, as well. As a battleship, *Excelsior* and her early sisters reflected the quarters design of the day with barracks for the enlisted and junior officers. Though considered spacious for the time, the senior officers and VIP quarters would be considered downright Spartan today. The *Excelsior* class was originally designed for combat, and carried an extensive hangar bay with the equivalent of a full Carrier Air Wing of shuttles and fighters.

Engineering: When first designed, the Excelsior was equipped with the experimental Koëller Uti K27 Transwarp drive system. However, this drive system never performed more than about 10% better than a conventional warp drive and cost close to 50% more to build. Though computer models and tests on small, unmanned test ships had shown great promise of offering extremely high speeds, when the process was scaled up to starship dimensions, it just did not work. About the same time, Shuvinaaljis had developed a new LN-72 warp drive to be used on a hypothetical super-carrier close to the displacement of the Excelsior. The drive was first tested on Excelsior's sister, the highly modified USS Ingram, and proved to be an excellent match. Returning transwarp to the design room, Excelsior was returned to Spacedock and her entire drive system was replaced.

Tactical: The Excelsior was easily the most powerful vessel of her day. She mounted the most powerful dual- and single-turret phaser banks as well as the latest photon torpedo system. Her "Merlin" primary force field was state of the art and was equipped with a cloaking device. Over the decades, the ball turrets were uprated to what is now Type VIII specifications. Phaser rings were considered, but the sheer cost of the conversion, as well as the amount of hull-rework that

22 HEAVY CRUISERS: "EXCELSIOR" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-2000	Excelsior	Spacedock, San Francisco, Earth	April 2280	May 2285	October 2287	Active
NCC-2544	Repulse	San Francisco Fleet Yards, Earth	January 2288	April 2292	August 2292	Active
NCC-2573	Roosevelt	Spacedock, San Francisco, Earth	March 2288	October 2292	November 2292	Lost
NCC-1701-B	Enterprise	San Francisco Fleet Yards, Earth	June 2297	January 2301	April 2301	Scrapped
NCC-4598	Fearless	San Francisco Fleet Yards, Earth	March 2305	April 2309	August 2309	Active
NCC-13958	Okinawa	Newport News Fleet Yards, Earth	October 2322	October 2326	January 2327	Active
NCC-14232	Berlin	Newport News Fleet Yards, Earth	January 2323	December 2326	February 2327	Active
NCC-14394	Tecumseh	San Francisco Fleet Yards, Earth	March 2323	May 2327	August 2327	Active
NCC-14427	Lexington	Spacedock, San Francisco, Earth	June 2323	June 2327	September 2327	Lost
NCC-18253	Potemkin	Saint Petersburg Fleet Yards, Earth	March 2325	April 2329	June 2329	Active
NCC-18317	Adelaide	New Aberdeen Fleet Yards, Aldeberan	November 2325	November 2329	February 2330	Active
NCC-18328	Yamato	New Aberdeen Fleet Yards, Aldeberan	November 2325	January 2330	March 2330	Active
NCC-18674	Bismark	Avondale Group, Ferrata Docks, Rigellium, Rigel II	January 2326	February 2330	April 2330	Active
NCC-19016	Indianapolis	Axaanivus Cesleco Starcraft, Bedii Plains, Alpha Centauri V	May 2326	April 2330	June 2330	Active
NCC-34098	Clark	Axaanivus Cesleco Starcraft, Bedii Plains, Alpha Centauri V	January 2335	January 2339	March 2339	Active
NCC-34099	Livingston	Spacedock, San Francisco, Earth	January 2335	February 2339	May 2339	Active
VCC-38907	Intrepid	Avondale Group, Ferrata Docks, Rigellium, Rigel II	September 2337	August 2341	November 2341	Lost
NCC-38955	Crockett	Seskon Trella, Chagala, Tellar	November 2337	September 2341	December 2341	Active
NCC-38997	Malinche	Fleet Yards at Starbase 12	December 2337	February 2342	April 2342	Active
NCC-40512	Gorkon	Seskon Trella, Chagala, Tellar	May 2338	July 2342	October 2342	Active
VCC-42136	Cairo	Cosmadyne Yards, Boston	July 2338	November 2342	January 2343	Lost
NCC-42285	Charleston	Cosmadyne Yards, Boston	August 2338	November 2342	January 2343	Active
NCC-42296	Hood	Seskon Trella, Chagala, Tellar	October 2338	November 2342	January 2343	Active
NCC-42768	Lakota	Fleet Yards at Starbase 12	January 2339	January 2343	March 2343	Active
VCC-42857	Grissom	Fleet Yards at Starbase 47	March 2339	April 2343	June 2343	Active
VCC-42995	Al-Batani	Fleet Yards at Starbase 47	June 2339	August 2343	October 2343	Active
NCC-43305	Valley Forge	Fleet Yards at Starbase 67	July 2339	August 2343	November 2343	Lost
NCC-50446	Crazy Horse	Fleet Yards at Starbase 84	February 2344	April 2349	June 2349	Active
NCC-52043	Melbourne	Fleet Yards at Starbase 84	December 2349	December 2354	February 2356	Lost

would need to be done, was considered impractical. The "Merlin" system has been continuously upgraded, and is now roughly three-times the strength of the original, though integrated cloaking was removed after the Treaty of Algeron was signed. Later-build vessels are equipped with Charlottes Shield's FSO system.

Computer Systems: As launched, the *Excelsior* was fitted with the Daystrom Duotronic IV computer system with M9 suppliment. Over the years the core and memory subsystems have been upgraded, but the ship is still based on duotronic circuits, as refit to Isolinear technology was considered impossible without rebuilding the ship from the keel up.

Builders: Excelsior class vessels have been built by most of the larger shipyards in the Federation.

Development and Construction History: Excelsior was laid down in 2280 and was formally launched in 2285. A sistership, USS *Ingram*, was laid down in 2284 and plans for three additional vessels were made. Three months into her trials, it was obvious that transwarp was not working, and work on *Ingram* was halted at the basic spaceframe stage while the engineers tried to determine and then solve the problems plaguing *Excelsior*. By this time, Operation Dixie and Project Grey Ghost had determined that both the Klingon and Romulan Empires had started construction of large battleships capable of taking and holding planetary systems. *Ingram*'s design was immediately modified to answer this threat, turning the vessel into a space-control ship and production was resumed.

The initial trials of the Excelsior were fraught with systems failures, which ballooned the final price

well beyond what the Federation Council had initially budgeted. Though it seemed the class might be doomed to consist of but a single ship, a number of fortuitous events occurred. First was the Klingon-Romulan Alliance — the technology trades between the two powers allowed each to significantly improve their vessels and create new series of powerful warships. Second, by 2290 the Federation and Ascension class dreadnoughts were reaching the ends of their design lifetimes and would need replacement. And third, while her trials had been fraught with difficulties, once commissioned, the Excelsior performed exceptionally well.

By 2286 transwarp was classified a failure and *Excelsior* was returned to the yards to be fitted with the LN-72 drive that had gone onto *Ingram*. Initial plans were to convert *Excelsior* to the Ingram's design, but the cost would have been so high that Fleet decided to keep her a battleship. As such, *Ingram* was designated her own class. At the suggestion of her new Commanding Officer, Captain Hikaru Sulu, the *Excelsior* was modified in the yard with an extensive exploration and scientific suite and then went on to complete a number of multi-year surveys. After the favorable modifications advanced and then tested by Captain Sulu, Star Fleet decided to build six more *Excelsior* and two more *Ingram* ships.

The specialized Surveilance version entered service in 2293 and approximately twenty of these vessels were built. In 2372 one of these vessels, the USS *Lakota*, was converted to an enhanced combat varient to try and make the vessel a more even match for the upcoming Dominion threat. However, while the new vessel did prove to be more powerful than her conventional sisters, she was still bested in combat by the USS *Defiant* during the aborted coup attempt and the expense and time needed to convert the rest of the Fleet was abandoned and the effort put into construction of new *Akira* class starships.

Conclusion: The lead vessel of this class is close to one-hundred years old, and even the latest vessel entered service thirty years ago. They are admittedly relics, but the basic soundness of their design has been proven over the decades. These vessels suffered truly terrible losses during the Dominion War, where they were hopelessly outclassed by the Dominion forces. However, the ships that remain in service will continue to serve in the vast middle of the Federation Treaty Zone until they are no longer serviceable. As for *Excelsior* herself, plans are to retire her to the Mars Museum of Spaceflight on her 100th birthday with a grand celebration.





Specifications for the Excelsior Class

Specifications for the Excelsior Class		Embarked Craft:	5 Type SW-7 Personnel Shuttle
			5 Type S-10 Shuttlepod
Displacement:	1,534,610 mt		5 Type S-2A Bee Workpod
Overall Length:	467 m		5 Victory Class Fighter
Overall Draft:	78 m		5 Vigilante Class Fighter
Overall Beam:	186 m	Navigation:	RAV / ISHAK Mod 1 Warp Celestial Guidance
Propulsion:	Two K-27 Mod 1 dilithium-energized antimatter linear warp drive units		(System Contractor: Tlixis Ramab RRB, Coridan III)
	(System Contractor: Koëller Uti, Stuttgart, Earth)	Computers:	"Daystrom" Duotronic IV with Multitronic M-9 Supplement
	Two LN-72 Mod 1 dilithium-energized antimatter linear warp drive units		(System Contractor: Daystrom Computer Systems, Lunaport, Luna
	(System Contractor: Shuvinaaljis Warp Technologies, Vulcan)	Phasers:	10 banks of 2 each – RIM-15A independent twin mount
	Two SANTH-H subatomic unified energy impulse units		(System Contractor: Agusta Ansadado, Inc, Fuzes, Venus)
	(System Contractor: Scarbak Propulsion Systems, Earth)	Phasers:	4 banks – RSM-20B single mount
	"QASR" particle beam maneuvering thrusters		(System Contractor: Agusta Ansadado, Inc, Fuzes, Venus)
	(System Contractor: Scarbak Propulsion Systems, Earth)	Missiles:	4 tubes – Mk 70 Mod 2 Direct
	"Trentis II" pulsed laser reaction control system		(System Contractor: Skat-Rar Weapon Systems, Ezuruk, Andor)
	(System Contractor: Orage Ijek, Aksajak, Andor)	Defense:	"Merlin" primary force field and deflector control system
Velocity:	Warp 8.0 Standard Cruising Speed		(System Contractor: Prentice-Schafer Inc., Marsport, Mars)
	Warp 9.0 Maximum Cruising Speed	Life Support:	MC-3E artificial gravity generator
	Warp 9.3 Maximum Attainable Velocity		(System Contractor: Cristobal SM/S, Manila, Earth)
Duration:	5 years, standard		"Rastis" radiation protection package
Complement:	100 Officers		(System Contractor: Tidjikja/Atar Associated Industries, Rastaribi, Regulus)
	450 Enlisted Crew		"Cerix" waste regeneration system
	0 Passengers (Normal – Up to 50 maximum)		(System Contractor: Jullundur-Lahore Ltd., Bombay, Earth)
	550 Total Crew (Standard)		









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THE U.S.S. EXCELSIOR (CH 2000) PREPARES TO LEAVE PORT ON HER NEXT MISSION



AMBASSADOR CLASS HEAVY CRUISER

The Ambassador was the first Star Fleet vessel to incorporate a number of new technologies in warp and impulse propulsion, tactical, life support, and computer systems. It was also the largest vessel to date the Star Fleet had ever constructed.

Class: As successful as the Excelsion class has been. Starfleet wanted an even larger vessel to allow for longer-duration missions. In 2310, Leeding Energies began development of the LF-10 warp drive, designed to provide much of the benefits transwarp was to have offered. Alas, the drive system was so large that it would not be able to be mounted on either the Excelsior or Ingram classes, which were the largest vessels of their time. Also, additional system advances had been discovered, none of which could be easily fitted to the Excelsior / Ingram.

The ASDB commissioned a new starship development project in 2315 to begin to bring all these new technologies together in a vessel that was expected to replace the Excelsior class. As it was expected to serve on the edge of Federation space and be at the forefront of first-contact missions, the new project was named "Ambassador".

Classification: Like her Enterprise and Excelsior class forebears, the Ambassador was classified as a heavy cruiser as she was expected to perform the same general missions.

Design: The Ambassador class draws heavily on the Enterprise and Excelsior classes in its design, and the family similarities are quite noticeable. The vessel is huge, massing almost three times that of the Excelsior. The Ambassador class sets new standards for luxury aboard a Federation starship. Cabin sizes are much larger than those on the Excelsior, and rack-berthing has been eliminated. The ship can comfortably fit its crew of 700, as well as up to 1200 passengers.

Engineering: The LF-10 drive system was the first in a new generation of high-performance drive

units from Leeding Energies. They allowed the Ambassador to obtain a top end of Warp 9.5 and a sustained maximum cruising speed of Warp 9.

Due to the massive displacement of the vessel, it was necessary for an entirely new impulse drive system to be created. Initial modeling showed that the necessary drive system would require significantly more power and space. Instead, Chiokis Drives added a space-time driver coil to its FIG-2 series of drives to create the FIG-3. The coil allows the entire mass of the ship to be lowered to a point within the capabilities of the FIG-2.

Tactical: In 2315, HiBeam Energies developed the first collimated phaser emitter unit. By 2316 they had linked them together to form the phaser strip. A quantum improvement over the turretbased systems before it in both power and flexibility, the Ambassador was the first class to be fitted with the new system. Twelve strips were fitted, offering the ship omni-directional fields of fire, along with one forward-firing and one rearward-firing Mk 75 photon torpedo launcher. The Ambassador class was the first installation for Charlottes Shields, Inc. FSP shield system, whose energy dissipation rates were a full 25% greater than their FSO system used in the latest Excelsior class ships.

Computer Systems: The first of the Duotronic IV computer systems was the Daystrom M-9, fitted on the Enterprise (II) and Excelsior classes in 2284. While Daystrom was hard at work on what would become the M-13 Isolinear 1 system, it was not yet available at the time of Ambassador's keellaying. Therefore, the M-12 Duotronic V was installed, as it could handle the new technologies incorporated in the Ambassador class. Later build vessels (CH 26133 onwards) incorporated the M-13 Isolinear I system, though earlier ships were not refitted.

14 HEAVY CRUISERS: "AMBASSADOR" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-10521	Ambassador	San Francisco Fleet Yards, Earth	April 2320	June 2324	December 2324	Active
NCC-1701-C	Enterprise	San Francisco Fleet Yards, Earth	January 2321	April 2325	August 2325	Lost
NCC-10794	Maat	Saint Petersburg Fleet Yards, Earth	March 2321	June 2325	November 2325	Active
NCC-12847	Nightshade	San Francisco Fleet Yards, Earth	June 2321	August 2325	February 2326	Active
NCC-12934	Horatio	San Francisco Fleet Yards, Earth	July 2325	September 2331	March 2332	Lost
NCC-13004	Starseeker	San Francisco Fleet Yards, Earth	July 2325	September 2331	March 2332	Active
NCC-13011	Highlander	San Francisco Fleet Yards, Earth	July 2325	September 2331	March 2332	Active
NCC-13519	Bonaventure	San Francisco Fleet Yards, Earth	September 2325	December 2331	June 2332	Active
NCC-26133	Winter Solstice	Saint Petersburg Fleet Yards, Earth	October 2330	May 2334	September 2335	Active
NCC-26136	Zhukov	Saint Petersburg Fleet Yards, Earth	November 2330	June 2334	December 2335	Active
NCC-26198	Valdemar	Pederson Spaceport, Copenhagen, Earth	February 2331	September 2334	December 2335	Active
NCC-26510	Yamaguchi	Puget Sound Fleet Yards, Earth	October 2332	April 2335	July 2335	Active
NCC-26513	Exeter	Alfras Fleet Yards, Deneb V	January 2332	October 2335	January 2336	Active
NCC-26517	Excalibur	Puget Sound Fleet Yards, Earth	November 2332	June 2336	August 2336	Active
NCC-26632	Gandhi	Alfras Fleet Yards, Deneb V	January 2333	October 2336	January 2337	Active
NCC-26849	Adelphi	New Aberdeen Fleet Yards, Aldeberan	March 2333	January 2337	May 2337	Active
NCC-28472	Niagara	San Francisco Fleet Yards, Earth	September 2334	November 2337	February 2338	Converted
NCC-28473	Wellington	San Francisco Fleet Yards, Earth	September 2334	December 2337	February 2338	Converted

Builders: The first eight ships were constructed at Starfleet's San Francisco Fleet Yards, as it was the only facility with the experience to build such a large vessel. During this time, personnel from the Puget Sound and Saint Petersburg Fleet Yards assisted to gain the necessary experience. When a second set of nine ships was approved in the 2330's, the New Aberdeen and Alfras Fleet Yards were awarded contracts. Both Earth Station McKinley and Pedersen Spaceport were awarded individual ship construction contracts as rewards for their work on other starship construction projects.

Development and Construction History: The Ambassador class SDP was finalized in 2318 and the keel of the first four vessels were laid in 2320. It was decided to retire the Excelsior class U.S.S. *Enterprise* in late 2320, and the second vessel of the class was assigned that most famous name and NCC number (now with a C suffix). Construction took four years, exceptional considering the new technologies incorporated. The USS Ambassador (CH 10521) was launched in December of 2330. The Ambassador underwent an extensive eight month testing program to validate the design as her sisters underwent their shakedowns. When that was successfully completed, funds for four more vessels were approved. Once the original eight were in service, Star Fleet made a number of minor, and a few major, changes to the design, including adding a third shuttle bay underneath the rear of the engineering hull, which itself was slightly widened. It was decided not to refer to these vessels as a new class or sub-class, and eight were ordered in 2332, starting with the U.S.S. *Winter Solstice* (CH 26133). Finally, three of the earlier-spec models were ordered in 2334 in an effort to save funds, but in the end only two complete vessels were built, the third having only the secondary hull completed before cancellation.





Current Specifications for the Ambassador class:		Embarked Craft:	2 Type 6 Personnel Shuttle
Displacement Overall Length	3,740,000 mt 526 m		 2 Type 7 Personnel Shuttle 1 Type 9A Cargo Shuttle 4 Type 16 Shuttlepod
Overall Draft Overall Beam	125 m 320 m	Navigation:	RAV / ISHAK Mod 3 Warp Celestial Guidance (System Contractor: Tlixis Ramab RRB, Coridan III)
Propulsion:	Two LF-10 Mod 1 energized-energized antimatter warp drive units (System Contractor: Leeding Energies, Earth) Two FIG-1 subatomic unified energy impulse units (System Contractor: Kloratis Drives, Tellar)	Computers:	M-12 Duotronic IV (System Contractor: Daystrom Computer Systems, Luna) M-13 Duotronic I (CH 26133 onwards) (System Contractor: Daystrom Computer Systems, Luna)
	QASR-2 particle beam maneuvering thrusters (System Contractor: Scarbak Propulsion Systems, Earth)	Phasers:	12 Type IX Collimated Phaser Array (System Contractor: HiBeam Energies, Earth)
	"Trentis III" pulsed laser reaction control system (System Contractor: Orage Ijek, Aksajak, Andor)	Missiles:	2 Mk 75 Photon Torpedo Launchers (System Contractor: Skat-Rar Weapon Systems, Andor)
Velocity:	Warp 6.0Standard Cruising SpeedWarp 8.5Maximum Cruising Speed	Defense:	FSP Primary Force Field (System Contractor: Charlottes Shields, Earth)
Duration: Complement:	Warp 9.0 Maximum Attainable Velocity 5 years, standard 115 Officers 585 Enlisted Crew	Life Support:	NAG2 Modular Gravity Unit (System Contractor: New Amsterdam Gravitics, New Amsterdam, Alpha III) AL2 Life Support System (System Contractor: A'Alakon Landiss, Divallax, Andor)
	0 Passengers (Normal – Up to 500 maximum) 700 Total Crew (Standard)		









THE U.S.S. MAAT (CH 10794) CATALOGING NEBULAE



THE U.S.S. EXCALIBUR (CH 26517) ENTERS EARTH ORBIT


NEBULA CLASS LIGHT CRUISER

Class: With the success of the New Orleans, and failure of the Challenger, Star Fleet returned to the drawing board in 2339. At the time, the Ambassador class starship was the largest vessel in Fleet service, but Star Fleet wanted the new vessel to be large enough to fulfill a variety of roles. Crew comfort and space flexibility also played an important role. When the call for designs went out, Shinohara Heavy Industries responded with a monster – the Nebula class.

Classification: Though such a moniker seems a misnomer on such a large vessel, the Nebula class was originally classified as a Light Cruiser as it is smaller than the specifications for the Galaxy class. Though Heavy Cruiser seems more fitting, for the time the CL designation remains.

Design: The Nebula class shares general design concepts with the New Orleans and Challenger classes, though the secondary hull has been extensively modified and the saucer is almost twice as large. The entire ship is quite compact for its size, presenting a smaller cross section. The rear of the secondary hull has undergone extensive modification to both mount the nacelles and to provide the hanger deck space.

The Nebula mounts much of the laboratory and sensor suite capability of the Galaxy class. The primary saucer has the same specifications as the Galaxy class, the exception being the bridge module which is unique to the Nebula class. The secondary hull is generally similar in layout to the Galaxy, though there are differences such as the location of main engineering. In addition, there is a single hangar bay, located at the base of the pod tower. It is roughly the same size as the primary hangar bay on the Galaxy, though total embarked craft is about 25% lower.

The ship's most distinguishing feature is a large pod that fits atop the tower. The pod is replaceable and numerous models exist in support of specific missions, including long range

S.W.A.C. (Spaceborne Warning and Control), exploration, tactical, volatile cargo, and others. **Engineering:** The Nebula class served as the test mule for the LF-41 series of warp drives. The mounting arrangement is different than that of the Galaxy in that the nacelles are attached to the pylons from the top, as opposed to the bottom. The FIG-5 impulse drive is also mounted. Though lighter, the pod restricts performance to that of the Galaxy class – Warp 6.0 cruise and Warp 9.6 maximum.

Tactical: The Nebula class mounts the same Type X phaser strips as the Galaxy, though she carries eight instead of twelve. Two Mk 85 photon torpedo launchers are fitted, one forward-firing and one rear-firing. The tactical pod mounts two additional Type X arrays as well as four more Mk 85 torpedo launchers. The Nebula carries the FSQ shield system.

Computer Systems: The Nebula was the first ship to mount the new M-15 Isolinear III with the LCARS supplement. The system proved to be the quantum leap forward in computing power that Daystrom Industries claimed. During testing, the Nebula was fed much of the code developed for the Galaxy class to test it in an operational capacity. This helped immensely when it came time for the U.S.S. Galaxy (CKE 70637) to begin systems programming.

Builders: The first vessels were built in the Utopia Planitia Fleet Yards in Mars orbit. Since then, the San Francisco Fleet Yards have also built vessels. Shinohara Heavy Industries is prime contractor, but Daimler-Chrysler Aerospace took over on later models as Shinohara was heavily involved in developing the *Galaxy* class.

Development and Construction History: Final design of the Nebula class was locked down in August of 2339 and the keel was laid the following year. It was decided that additional vessels

24 LIGHT CRUISERS: "NEBULA" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-60590	Nebula	Utopia Planitia Fleet Yards, Mars	December 2341	December 2346	July 2347	Active
NCC-60591	Farragut	Utopia Planitia Fleet Yards, Mars	December 2341	December 2346	July 2347	Lost
NCC-61826	Monitor	Utopia Planitia Fleet Yards, Mars	April 2342	June 2350	March 2351	Active
NCC-61827	Merrimac	Utopia Planitia Fleet Yards, Mars	April 2342	June 2350	March 2351	Active
NCC-61829	Ronald E. McNair	Utopia Planitia Fleet Yards, Mars	April 2342	June 2350	March 2351	Active
NCC-61832	Lexington	Utopia Planitia Fleet Yards, Mars	April 2342	July 2350	March 2351	Active
NCC-61896	Athena	Utopia Planitia Fleet Yards, Mars	May 2342	July 2350	March 2351	Active
NCC-61952	Proxima	Utopia Planitia Fleet Yards, Mars	June 2342	August 2350	March 2351	Lost
NCC-62005	Honshu	Chiokis Starship Construction, Thelavor, Andor	June 2342	August 2350	April 2351	Active
NCC-62006	Hera	Chiokis Starship Construction, Thelavor, Andor	June 2342	August 2350	April 2351	Lost
NCC-62048	Bellerephon	Chiokis Starship Construction, Thelavor, Andor	June 2342	August 2350	May 2351	Lost
NCC-65420	Phoenix	San Francisco Fleet Yards, Earth	August 2344	October 2352	April 2353	Active
NCC-65421	Intangible	Shor Ta'kel, Central Docks, 40 Eridani	August 2344	October 2352	April 2353	Active
NCC-65462	Lone Wolf	Shor Ta'kel, Central Docks, 40 Eridani	September 2344	November 2352	April 2353	Active
NCC-65826	Phantom	Avondale Group, Ferrata Docks, Rigel II	November 2344	January 2353	June 2353	Active
NCC-65897	Tripoli	Avondale Group, Ferrata Docks, Rigel II	December 2344	February 2353	July 2353	Active
NCC-66808	Ulysses	San Francisco Fleet Yards, Earth	November 2345	January 2354	May 2354	Active
NCC-70352	Leeds	San Francisco Fleet Yards, Earth	August 2348	October 2356	April 2357	Active
NCC-70915	T'Kumbra	Utopia Planitia Fleet Yards, Mars	February 2349	April 2357	November 2357	Active
NCC-71201	Prometherus	Cosmadyne Yards, Boston	June 2349	August 2357	March 2358	Lost
NCC-71805	Endeavour	Utopia Planitia Fleet Yards, Mars	December 2349	March 2358	September 2358	Active
NCC-71906	Khitomer	Puget Sound Fleet Yards, Earth	October 2356	December 2364	June 2365	Active
NCC-71968	Northstar	Puget Sound Fleet Yards, Earth	October 2357	January 2366	June 2365	Active
NCC-72015	Sutherland	San Francisco Fleet Yards, Earth	December 2359	March 2368	October 2368	Active

could help with system "debugging" on the new components, and a second ship, *Farragut* (CL 60591) was started at the same time. By this time, computer simulation showed that the ship would be an effective platform, and three more vessels were approved in 2345, with an additional ten added in 2350. *Nebula* and *Farragut* were completed in 2350. They immediately went into service testing the systems both ships shared in common. *Nebula* and *Farragut* were released from component testing in 2357 when *Galaxy* was commissioned and both vessels entered regular Star Fleet service at that time. The last *Nebula* class cruiser entered service in 2363, though funding for additional vessels has been authorized.





Current Specifications	for the Nebula class:	Embarked Craft:	 0 Danube Class Runabout 4 Type 6 Personnel Shuttle
Displacement Overall Length Overall Draft Overall Beam	3,309,000 mt 442.23 m 130.43 m 463.73 m		4 Type 7 Personnel Shuttle 4 Type 9A Cargo Shuttle 8 Type 16 Shuttlepod 8 Peregrine Class Fighter
Propulsion:	Two LF-41 Mod 1 energized-energized antimatter warp drive units (System Contractor: Leeding Energies, Earth) One FIG-5 subatomic unified energy impulse unit (System Contractor: Kloratis Drives, Tellar)	Navigation: Computers:	1 S-3 Sentry SWAC Shuttle RAV / ISHAK Mod 3 Warp Celestial Guidance (System Contractor: Tlixis Ramab RRB, Coridan III) M-15 Isolinear III with LCARS interface software
	QASR-2 particle beam maneuvering thrusters (System Contractor: Scarbak Propulsion Systems, Earth) "Trentis IV" pulsed laser reaction control system	Phasers:	(System Contractor: HiBeam Energies, Earth)
Velocity:	(System Contractor: Orage Ijek, Aksajak, Andor) Warp 6.0 Standard Cruising Speed	Missiles:	2 Mk 85 Photon Torpedo Launchers (System Contractor: Loraxial, Andor)
	Warp 9.2Maximum Cruising SpeedWarp 9.6Maximum Attainable Velocity	Defense:	FSQ Primary Force Field (System Contractor: Charlottes Shields, Earth)
Duration: Complement:	5 years, standard 173 Officers 400 Enlisted Crew 127 Passengers (Normal – Up to 500 Maximum) 700 Total Crew (Standard)	Life Support:	MM6 Modular Gravity Unit (System Contractor: Morris Magnatronics, Palyria, Mars) AL4 Life Support System (System Contractor: A'Alakon Landiss, Divallax, Andor)









THE U.S.S. SUTHERLAND (CL 72015) CONFIGURED WITH A DEEP SPACE SENSORDOME FOR TACTICAL CONTROL OF FIGHTERS



THE U.S.S. RONALD E. MCNAIR (CL 61829) ON PATROL



AN AFT VIEW OF THE U.S.S. SUTHERLAND (CL 72015), SHOWING HER HANGER DECK. NOTE THE TACTICAL POD CONFIGURATION.



NIAGARA CLASS FAST CRUISER

3 FAST CRUISERS: "NIAGARA" CLASS

Number	Name	Converted	Drydocked	Relaunched	Recommissioned	Status
NCC-28472	Niagara	San Francisco Fleet Yards, Earth	September 2341	September 2343	November 2343	Active
NCC-28473	Wellington	San Francisco Fleet Yards, Earth	November 2341	October 2343	November 2343	Lost
NCC-59804	Princeton	San Francisco Fleet Yards, Earth	August 2343	May 2346	July 2347	Active

Upon entering service in 2320, the Ambassador class took its place as the premiere starship class in Federation service. In 2341, Star Fleet Command began to worry about the Romulan "threat", them being in isolation for what was going on three decades. The Klingons also continued modernizing their forces, with Operation Dixie operatives reporting on the plans for what would become the *Vor'cha* class. With the last of the old dreadnoughts retired and scrapped, a call was made to strengthen the Ambassador. They also wanted a vessel that could sustain top speed for longer periods, as the Ambassador was an excellent multi-purpose platform. The answer to both problems was a familiar one – add a third nacelle.

Class: The Niagara Class Starship Refit Project was approved in 2341. The first issue they faced is that the last Ambassador Class starship had been completed in 2339 and restarting the production line, especially for a short run, would be incredibly expensive. By what could only somewhat be called "luck", the last two vessels built, Niagara and Wellington, had both suffered serious damage in a skirmish with a large Klingon force and were scheduled for refurbishment. It was decided to use both as the basis for the new vessels.

Classification: Arguably, three-nacelle heavy cruiser modifications have been classified as

dreadnoughts. However, the tactical systems remained essentially unchanged, so the decision was made to reclassify them as "fast cruisers" to reflect their higher sustained top speed. **Design:** Only the secondary hulls from the original ships remained intact. The saucer sections had suffered extensive damage and were re-built from the frame up, bearing only a general resemblance to the original form. The LF-41 warp drive was in development at this time, however

it was decided to add a third nacelle to the LF-10 drive. The nacelle mounting points were altered to better align the symmetry of the three nacelles.

Engineering: With the third nacelle, these vessels are capable of sustained speeds almost a full warp factor above the *Ambassador*. The routing of the intermix shafts were adjusted to fit the nacelle locations and the main reactor has been enlarged and strengthened for the additional power output.

Tactical: Tactical is the same as on the Ambassador class, with twelve Type IX phaser strips, two Mk 75 photon torpedo launchers, and type FSP shields. Shield strength is increased about 15% due to the additional power available.

Computer Systems: All three were equipped with the M-13 Isolinear I system, which was more

than capable for the job at hand.

Builders: All three vessels were converted at the San Francisco Fleet Yards.

Development and Construction History: Niagara and Wellington entered SFFY within a few months of each other in 2341. The conversion process took roughly twenty-four months for each vessel, and both were commissioned in 2343. About that time it was decided to build a third vessel, using the spare Ambassador class secondary hull available. She was named Princeton

and entered service in mid 2347. The three vessels were considered a modest success, however conversion of any of the remaining *Ambassador* class starships is not planned at this time. The *Princeton* was lost at the Battle of Wolf 359 and the other two continue in general service. **Nomenclature:** Niagara and Wellington maintained their original NCC numbers. *Princeton* was assigned a new number from the available pool.





Embarked Craft:

0

Danube Class Runabout

Current Specifications for the Niagara class:

-	-		2 Type 6 Personnel Shuttle
Displacement	4,185,000 mt		2 Type 7 Personnel Shuttle
Overall Length	565 m		2 Type 9A Cargo Shuttle
Overall Draft	179 m		2 Type 16 Shuttlepod
Overall Beam	505 m		0 Peregrine Class Fighter
Propulsion:	Three LF-10 Mod 1 energized-energized antimatter warp drive units		0 S-3 Sentry SWAC Shuttle
	(System Contractor: Leeding Energies, Earth)	Navigation:	RAV / ISHAK Mod 3 Warp Celestial Guidance
	Two FIG-2 subatomic unified energy impulse units		(System Contractor: Tlixis Ramab RRB, Coridan III)
	(System Contractor: Kloratis Drives, Tellar)	Computers:	M-12 Duotronic V / M-13 Isolinear I (CF 59804)
	QASR-2 particle beam maneuvering thrusters	Competent	(System Contractor: Daystrom Computer Systems, Luna)
	(System Contractor: Scarbak Propulsion Systems, Earth)	Phasers:	12 Type IX Collimated Phaser Array
	"Trentis III" pulsed laser reaction control system		(System Contractor: HiBeam Energies, Earth)
	(System Contractor: Orage ljek, Aksajak, Andor)	Missiles:	2 Mk 75 Photon Torpedo Launchers
Velocity:	Warp 7.0 Standard Cruising Speed	111001001	(System Contractor: Skat-Rar Weapon Systems, Andor)
volocity:	Warp 9.0 Maximum Cruising Speed	Defense:	FSP Primary Force Field
	Warp 9.4 Maximum Attainable Velocity	Derense.	(System Contractor: Charlottes Shields, Earth)
Duration:	5 years, standard	Life Support:	NAG1 Modular Gravity Unit
Complement:	90 Officers		(System Contractor: New Amsterdam Gravitics, New Amsterdam, Alpha III)
complement.	310 Enlisted Crew		AL2 Life Support System
	0 Passengers (Normal – Up to 300 maximum)		(System Contractor: A'Alakon Landiss, Divallax, Andor)
	400 Total Crew (Standard)		(3)31611 Connactor, A Alakon Lundiss, Divaliak, Analoh)







THE U.S.S. WELLINGTON (CF 28473) PASSES JUPITER IN THE SOL SYSTEM



GALAXY CLASS LARGE EXPLORATORY CRUISER

2 LARGE EXPLORATORY CRUISERS: "GALAXY" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-70637	Galaxy	Utopia Planitia Fleet Yards, Mars	November 2348	March 2357	November 2357	Converted
NCC-71099	Challenger	Utopia Planitia Fleet Yards, Mars	March 2349	September 2359	July 2360	Active
NCC-71807	Yamato	Utopia Planitia Fleet Yards, Mars	November 2350	February 2358	January 2362	Lost
NCC-1701-D	Enterprise	Utopia Planitia Fleet Yards, Mars	June 2351	June 2358	October 2363	Lost
NCC-71832	Odyssey	Utopia Planitia Fleet Yards, Mars	January 2352	February 2362	September 2362	Lost
NCC-71854	Venture	Utopia Planitia Fleet Yards, Mars	April 2353	April 2363	January 2364	Active

The Galaxy class was the manifestation of the dreams and desires of an entire generation of Federation citizens. Designed to be the largest explorer ever constructed, they were expected to serve as the Flagships of the Federation and to lead the charge in a new era of exploration. Quite simply, they were to be shining examples of the Federation's technical prowess and enlightenment. Though they no longer represent the state-of-the-art, the Galaxy class remains one of the most versatile and capable ships in the Star Fleet inventory.

Class: The Galaxy Class Starship Development Project began in 2343 as a replacement for the Ambassador and Excelsior Classes in the primary deep-space exploration role. The Galaxy was also the first starship designed from the outset to carry the dependents and families of the crew. As such, the vessel sports the most luxurious fittings of any Star Fleet ship, as well as wide and well-lit corridors. Original plans were for twelve vessels, but the sheer costs and timeframe involved ensured that the vessels were funded separately, which accounts for the wide spread in NCC

numbers.

Classification: Due to the variety of roles these vessels were expected to perform, initial consideration was given to calling them Heavy Cruisers. However, their primary role was to be that of an explorer, and when the project was approved, they were officially classified as a Large Exploratory Cruiser.

Design: The Galaxy class drew heavily from both the Ambassador and the New Orleans classes for design inspiration. The class remains the most complicated starship platform ever conceived and constructed by the Federation. Designed to operate far beyond explored Federation space for years at a time, they were over-thought and over-engineered in the extreme. When they were commissioned, they incorporated the state of the art in computer, propulsion, tactical, scientific, and personnel systems, most of which had been developed specifically for the class. Scientific and exploration suites were top-notch, rivaling many starbases and shore

facilities. As an Explorer, the Galaxy class is designed to perform every type of scientific study known and the interchangeability of modules gives it the flexibility to perform new roles as they are developed. The Galaxy class is by far the most luxurious starship in service in terms of crew appointments. At 110m², cabin space is larger even then the spacious Ambassador class and almost palatial compared to the cramped quarters of the Excelsior class. Living and sleeping quarters are separate, and multiple staterooms can be linked together for family use. The Galaxy class mounts the latest Holographic Environment Simulators, or holodecks. Using holographic and forcefield projections, these areas can be used to create almost any environment and are excellent recreational and training facilities.

The Galaxy class was the first starship to perform separated flight operations. While the primary saucer of Federation starships have been detachable since the early 2200's, they were not designed to operate as independent entities and then re-attach themselves in flight. The latching and structural systems were significant hurtles, but they were eventually overcome.

Engineering: Leeding Energies, who specialized in warp drives for multi-million metric ton starships, enhanced their LF-30 warp drive from the New Orleans class into the LF-41. Kloratis also developed the FIG-5 impulse drive system, of which two are fitted — one each in the saucer and stardrive sections. The Galaxy class is capable of a sustained cruising speed of Warp 6 and can achieve a maximum speed of Warp 9.6 for a period of up to twelve hours.

Tactical: Though classified as a Large Exploratory Cruiser, the Galaxy class was expected to operate in the frontier areas of Federation space and, like the Ambassador class, to serve as the primary Fleet Defender. As such, the Galaxy is extremely well armed with twelve Type X collimated phaser strips as well as two Mk 85 photon torpedo launchers. The ship is equipped with the FSQ shield system with additional generators to provide extended coverage.

Computers: Early on it was noted that the Galaxy class would need to carry the most advanced shipboard computer system ever in order to perform the missions being developed for it. Daystrom Industries began development on a successor to the M-14 Isolinear II computer. The result was a breakthrough in both processing power and storage capacity. The new M-15 Isolinear III computer system is almost twice as powerful as the M-14 and carries almost three times the storage. Another advantage of the M-15 is an enhanced LCARS (Library Computer Access and Retrieval System) supplement. This system is designed to make it easier for the crew to interface with the central computer system and improve crew-computer interoperation and performance. The Galaxy class carries three redundant M-15 computer cores. Two parallel each other in the Primary Hull and incorporate both clustering and fail-over capabilities. Either core can handle all primary ship's functions if necessary. The third core is located near Main Engineering and serves as both a "hot spare" should the two Primary Hull systems fail, as well as providing computer power for the Secondary Hull during Separated Flight Mode.

Builders: All six Galaxy class vessels were built in the Utopia Planitia Fleet Yards in Mars orbit due to the sheer size of the spaceframes. Shinohara Heavy Industries was the primary contractor on the Galaxy class, though such a large vessel involved thousands of subcontractors of various sizes.

Development and Construction History: Originally, six Galaxy class vessels were funded - Galaxy (CKE 70637), Challenger (CKE 71099) Yamato (CKE 71807), Enterprise (CKE 1701-D), Odyssey (CKE 71832), and Venture (CKE 71854). Six additional vessels were ordered and assigned names and NCC numbers, however they were only completed to the basic spaceframe stage. Of the original six, after continuous issues were encountered during early construction, it was

decided to complete three vessels and subject them to a three-year intensive testing and certification process to ensure that the ships were operating as expected and to allow the crews for all six ships to begin familiarization. As *Galaxy, Yamato,* and *Enterprise* were farthest along, they were chosen to be completed first.

The U.S.S. Galaxy was commissioned in 2357 and began a three-year shakedown and trial period. She was launched on her first operation deployment in 2361. The U.S.S. Yamato joined the Fleet in 2362 followed by the U.S.S. *Enterprise* in 2363. U.S.S. *Challenger* and U.S.S. *Odyssey* commissioned in early 2366 and U.S.S. *Venture* joined them about mid-year.





Current Specifications	for the Galaxy class:	Embarked Craft:	0 Danube Class Runabout4 Type 6 Personnel Shuttle
Displacement Overall Length Overall Draft Overall Beam	4,500,000 mt 642.51 m 195.26 m 463.73 m		 2 Type 7 Personnel Shuttle 2 Type 9A Cargo Shuttle 8 Type 16 Shuttlepod 8 Peregrine Class Fighter 1 S-3 Sentry SWAC Shuttle
Propulsion:	Two LF-41 Mod 1 energized-energized antimatter warp drive units (System Contractor: Leeding Energies, Earth)	Navigation:	RAV / ISHAK Mod 3 Warp Celestial Guidance (System Contractor: Tlixis Ramab RRB, Coridan III)
	Two FIG-5 subatomic unified energy impulse units (System Contractor: Kloratis Drives, Tellar)	Computers:	M-15 Isolinear III with LCARS interface software (System Contractor: Daystrom Computer Systems, Luna)
	QASR-2 particle beam maneuvering thrusters (System Contractor: Scarbak Propulsion Systems, Earth)	Phasers:	12 Type X Collimated Phaser Array (System Contractor: HiBeam Energies, Earth)
	"Trentis IV" pulsed laser reaction control system (System Contractor: Orage Ijek, Aksajak, Andor)	Missiles:	2 Mk 85 Photon Torpedo Launchers (System Contractor: Loraxial, Andor)
Velocity:	Warp 6 Standard Cruising Speed Warp 9.2 Maximum Cruising Speed	Defense:	FSQ Primary Force Field (System Contractor: Charlottes Shields, Earth)
Duration: Complement:	Warp 9.6 Maximum Attainable Velocity 5 years, standard 185 Officers 525 Enlisted Crew	Life Support:	MM6 Modular Gravity Unit (System Contractor: Morris Magnatronics, Palyria, Mars) AL4 Life Support System (System Contractor: Al Alakon Landis, Divallay, Ander)
	1000 Passengers (Normal – Up to 5000 Maximum) 1710 Total Crew (Standard)		(System Contractor: A'Alakon Landiss, Divallax, Andor)









THE U.S.S. VENTURE (CKE 71854) AND USS RUTLEDGE (ES 75516) ON PATROL



THE U,S,S, CHALLENGER (NCC 71099) ON A DEEP-SPACE SURVERY MISSION



CHALLENGER CLASS LIGHT CRUISER

4 LIGHT CRUISERS: "CHALLENGER" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-57528	Challenger	Utopia Planitia Fleet Yards, Mars	October 2340	December 2343	April 2344	Lost
NCC-57537	Armstrong	Utopia Planitia Fleet Yards, Mars	November 2340	January 2344	May 2344	Lost
NCC-57566	Kearsarge	Utopia Planitia Fleet Yards, Mars	December 2340	January 2344	June 2344	Active
NCC-57580	Buran	Utopia Planitia Fleet Yards, Mars	January 2341	March 2344	August 2344	Active

Class: The Challenger Class Starship Development Project was approved in 2338 and the vessel was intended, along with the New Orleans class frigate, to be "the backbone of the New Fleet". Unfortunately, the design suffered from a number of flaws that prevented the ship from being built in anywhere near the numbers originally planned.

Classification: Being larger and displacing more than the New Orleans, the Challenger is classified as a light cruiser.

Design: The saucer design of the *Challenger* Class is shared with the *New Orleans* class. The ships engines are mounted with alignment along the vertical axis, rather than the more traditional horizontal. The secondary hull extends directly backwards from the primary hull, with the engines mounting directly to the top and bottom of the structure on struts. The upper strut contains engineering facilities and is therefore larger then the lower strut, which serves just as an anchor point for the nacelle. At the back end of the secondary hull is a small hangar facility.

Engineering: The Challenger Class uses the same LF-30 engines as the New Orleans class and were expected to give the ship excellent top-end speeds. Due to the location of the nacelles,

a new intermix shaft system had to be developed. These run along the x-axis of the ship, rather than the more familiar y-axis. The antimatter storage unit is located along the back of the upper nacelle mounting structure, which allows for it to be safely ejected away from the ship. The deuterium tanks are located in the forward part of the strut itself. Both feed into the reaction chamber, which is oriented 90° to "normal". The intermix pipes to each engine then run directly above and below the reactor. The impulse engines are located at the back edge of the primary hull.

Tactical: Unlike the New Orleans, the Challenger was equipped with two forward-firing torpedo launchers from the outset and five type IX phasers provide additional protection. FSP shielding provides more than adequate protection.

Computer Systems: The M-14 Isolinear II computer is sufficient for the tasks given it.

Builders: All four vessels were built by Star Fleet at Utopia Planitia.

Development and Construction History: The Challenger design was finalized in 2340 and construction began that same year. The warp system proved the most difficult part and

construction was completed in 2344. Trials and testing of the prototype vessel showed numerous problems with balancing the warp field, as well as problems with the anti-matter containment ejection system. In fact, the lead vessel herself was lost with all hands when there were problems ejecting one of the modules. The system was re-engineered and tested extensively. While this ensured that the system could now be safely ejected, the "plumbing" required to route deuterium and anti-deuterium to the warp core was subject to failures. Again, additional work

was done to attempt to fix this, but the final results were never completely successful. The ship soon fell out of favor with both crews and Admirals at Star Fleet HQ, and procurement was severely curtailed from the original sixty ships to a token ten, of which only four were actually built. As newer vessels enter the inventory, it is expected the surviving *Challenger* class vessels will be retired from service by 2380.





Current Specifications for the Challenger class:

Current Specifications	for the Challenger class:	Embarked Craft:	0 Danube Class Runabout
Displacement	1,900,000 mt		2 Type 6 Personnel Shuttle 2 Type 7 Personnel Shuttle
Overall Length	394 m		2 Type 9A Cargo Shuttle
Overall Draft	214 m		2 Type 16 Shuttlepod
Overall Beam	273 m		0 Peregrine Class Fighter
Propulsion:	Two LF-30 Mod 1 energized-energized antimatter warp drive units	N I an sine addition of	0 S-3 Sentry SWAC Shuttle
	(System Contractor: Leeding Energies, Earth)	Navigation:	RAV / ISHAK Mod 3 Warp Celestial Guidance
	Two FIG-2 subatomic unified energy impulse units		(System Contractor: Tlixis Ramab RRB, Coridan III)
	(System Contractor: Kloratis Drives, Tellar)	Computers:	M-13 Isolinear I
	QASR-2 particle beam maneuvering thrusters		(System Contractor: Daystrom Computer Systems, Luna)
	(System Contractor: Scarbak Propulsion Systems, Earth)	Phasers:	3 Type IX Collimated Phaser Array
	"Trentis III" pulsed laser reaction control system		(System Contractor: HiBeam Energies, Earth)
	(System Contractor: Orage ljek, Aksajak, Andor)	Missiles:	2 Mk 75 Photon Torpedo Launchers
Velocity:	Warp 6.0 Standard Cruising Speed		(System Contractor: Skat-Rar Weapon Systems, Andor)
	Warp 8.0 Maximum Cruising Speed	Defense:	FSP Primary Force Field
	Warp 9.2 Maximum Attainable Velocity		(System Contractor: Charlottes Shields, Earth)
Duration:	5 years, standard	Life Support:	NAG1 Modular Gravity Unit
Complement:	50 Officers		(System Contractor: New Amsterdam Gravitics, New Amsterdam, Alpha III)
	250 Enlisted Crew		AL2 Life Support System
	0 Passengers (Normal – Up to 100 maximum)		(System Contractor: A'Alakon Landiss, Divallax, Andor)
	300 Total Crew (Standard)		



THE U.S.S. CHALLENGER (CL 57476) DURING HER SHAKEDOWN CRUISE



AKIRA CLASS BATTLECRUISER

The Battlecruiser has not been a common class within the Star Fleet structure. Such offensive vessels generally run counter to the tenets of the Federation, and none have been in service since the 2290's.

Class: As the 2340's dawned, relations with the Klingon Empire were souring. TacFleet knew that in the event of a serious incursion, they were ill equipped to engage them. While the Steamrunner class destroyer was in Fleet service at the time, it had been designed to free the Excelsior and Ambassador classes from being called upon to deal with smaller issues. The Ambassador's and the refit Niagara's still formed the backbone of the Fleet's response to serious military threats. **Classification:** The Akira class was originally designed to be a Through-Deck Cruiser, but as the weapons load out was developed, it was decided to change the designation to Battlecruiser. Design: The Star Fleet Spacecraft Design Advisory Commission started the Akira class Starship Development Project in 2340 to address the need of an extremely well armed ship with excellent survivability. Though this went against the general tenet of Star Fleet, with the vessels of the Galaxy class preparing to travel to unexplored parts of the Federation and beyond, Star Fleet worried about possible disastrous first-contacts like had happened with the Klingon and Romulan Empires. The Akira class utilizes a unique catamaran-style shape that allows both high-speed and a low sensor profile. A roll bar atop the rear houses most of the torpedo launchers. The bridge, as opposed to almost every other starship, is nestled between two raised areas on the upper squcer, protecting it from enemy fire. For her size, the Akira class carries a large crew of 500. Most of the ship's staterooms are of the dual-type, maximizing living space while still offering privacy. SSDAC learned from the mistakes in the Steamrunner class and fitted a much more advanced

scientific and diplomatic suite on the *Akira* class. Though not as advanced as those found on the *Galaxy*, it does give the *Akira* a multi-mission capability not found in the *Steamrunner* class. **Engineering:** Star Fleet wanted a drive capable of excellent power and speed with minimal maintenance. Leeding submitted the LF-41, but there had been "teething" issues with them. Shuvinaaljis had been working on a competing system, designated the LF-35, whose warp coils needed 25% less maintenance than the LF-41 while providing 80% of the power of the LF-41. The LF-35 was chosen and provides a sustained cruising speed of Warp 9 and a cruising speed of Warp 7.

Tactical: The Akira mounts six Type X phaser strips and a total of eight Mk 80 photon torpedo launchers. Two are mounted just above the sensor dish, one more just below it, and three are located in the upper roll bar, and an additional launcher is located port and starboard on the saucer. The Akira is capable of delivering a killing blow with a single salvo against all known Threat starships as well as inflicting damage to ships on either side as it passes through formations. The ship carries the FSQ shield system and the CETIS Mk III with Type 225 TACAR fire-control suite. The Akira class was designed to carry fighters, and has a through-deck hangar bay designed for this purpose. The forward bay is equipped with launching facilities, and the two rear-bays are equipped for retrieval. Standard compliment is twelve Peregrine class fighters, though more can be carried if necessary.

Computer Systems: The Akira carries the standard M-15 Isolinear III with LCARS found on most ships of the line at her time.

Builders: All Akira class vessels were built at Mars, with construction contracts spread evenly

23 BATTLECRUISERS: "AKIRA" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-62497	Akira	Utopia Planitia Fleet Yards, Mars	September 2342	December 2346	June 2346	Active
NCC-62498	Macross	Utopia Planitia Fleet Yards, Mars	September 2342	December 2346	June 2346	Active
NCC-62499	Gundam	Utopia Planitia Fleet Yards, Mars	September 2342	December 2346	June 2346	Active
NCC-63293	Rabin	Utopia Planitia Fleet Yards, Mars	March 2343	June 2347	February 2348	Lost
NCC-63352	Kaneda	Utopia Planitia Fleet Yards, Mars	March 2343	June 2347	February 2348	Active
NCC-63385	Timberwolf	Chandley Works, Caravalia, Mars	April 2343	July 2347	March 2348	Active
NCC-63542	Galahad	Chandley Works, Caravalia, Mars	May 2343	August 2347	March 2348	Active
NCC-63543	Panther City	Utopia Planitia Fleet Yards, Mars	May 2343	August 2347	March 2348	Active
NCC-63544	Arthur C. Clarke	Utopia Planitia Fleet Yards, Mars	May 2343	August 2347	April 2348	Active
NCC-63549	Thunderchild	Chandley Works, Caravalia, Mars	May 2343	September 2347	April 2348	Active
NCC-64550	Lodoss	Chandley Works, Caravalia, Mars	September 2343	December 2347	August 2348	Active
NCC-64551	Guyver	Chandley Works, Caravalia, Mars	September 2343	December 2347	August 2348	Lost
NCC-64552	Laputa	Chandley Works, Caravalia, Mars	September 2343	December 2347	August 2348	Active
NCC-64553	Urusei Yatsura	Chandley Works, Caravalia, Mars	September 2343	December 2347	August 2348	Active
NCC-64646	Appleseed	Utopia Planitia Fleet Yards, Mars	October 2343	January 2348	September 2348	Active
NCC-65549	Spector	Utopia Planitia Fleet Yards, Mars	October 2344	January 2349	September 2349	Active
NCC-66704	Nausicaä	Utopia Planitia Fleet Yards, Mars	October 2345	February 2350	September 2350	Active
NCC-66724	Dominion	Utopia Planitia Fleet Yards, Mars	November 2345	March 2350	October 2350	Lost
NCC-68322	Justy	Utopia Planitia Fleet Yards, Mars	October 2346	January 2351	July 2351	Active
NCC-68553	Buskirk	Utopia Planitia Fleet Yards, Mars	December 2346	March 2351	November 2351	Active
NCC-70054	lczer	Utopia Planitia Fleet Yards, Mars	May 2348	August 2352	April 2353	Active
NCC-72712	Orguss	Chandley Works, Caravalia, Mars	December 2363	March 2368	October 2368	Active
NCC-73518	Honneamise	Utopia Planitia Fleet Yards, Mars	August 2364	November 2369	June 2370	Active
NCC-74191	Dancougar	Utopia Planitia Fleet Yards, Mars	June 2366	September 2370	April 2371	Active
NCC-74315	Mylene	Utopia Planitia Fleet Yards, Mars	September 2366	December 2370	June 2371	Active

between the Utopia Planitia Fleet Yards and the Chandley Works Yards at Caravalia. Chandley has a long and distinguished history in building powerful starships for the Star Fleet and was a natural choice to help support UP.

Development and Construction History: The Akira class was approved for construction in 2342, with three hulls being laid down. Two more batches were ordered in 2343 and another set in mid-2344. Oddly enough, the Narendra III incident in 2346 significantly defused tensions between the Federation and Klingons, as the latter shifted their animosity towards the Romulans. Three additional vessels were added during the Cardassian War, with four more added after the battle of Wolf 359. The Akira class saw extensive service during the Dominion War, where they savaged Dominion fleets and facilities. Construction has been approved for additional vessels.





Current Specifications	for the Akira class:	Embarked Craft:	0 Danube Class Runabout
Displacement Overall Length	1,600,000 mt 455 m		4 Type 6 Personnel Shuttle 4 Type 7 Personnel Shuttle 2 Type 9A Cargo Shuttle (Type 9A Cargo Shuttle
Overall Draft Overall Beam	83 m 292 m		6 Type 16 Shuttlepod 12 Peregrine Class Fighter
Propulsion:	Two LF-35 Mod 1 energized-energized antimatter warp drive units		2 S-3 Sentry SWAC Shuttle
	(System Contractor: Shuvinaaljis Warp Technologies, Vulcan) Two FIG-4 subatomic unified energy impulse units	Navigation:	RAV / ISHAK Mod 3 Warp Celestial Guidance (System Contractor: Tlixis Ramab RRB, Coridan III)
	(System Contractor: Kloratis Drives, Tellar)	Computers:	M-15 Isolinear III with LCARS
	QASR-2 particle beam maneuvering thrusters (System Contractor: Scarbak Propulsion Systems, Earth)	Phasers:	(System Contractor: Daystrom Computer Systems, Luna) 6 Type X Collimated Phaser Array
	"Trentis IV" pulsed laser reaction control system	11103013.	(System Contractor: HiBeam Energies, Earth)
	(System Contractor: Orage Ijek, Aksajak, Andor)	Missiles:	8 Mk 80 Photon Torpedo Launchers
Velocity:	Warp 7Standard Cruising SpeedWarp 9.0Maximum Cruising Speed	Defense:	(System Contractor: Loraxial, Andor) FSQ Primary Force Field
	Warp 9.8 Maximum Attainable Velocity		(System Contractor: Charlottes Shields, Earth)
Duration: Complement:	5 years, standard 100 Officers 400 Enlisted Crew 0 Passengers (Normal – Up to 50 maximum) 500 Total Crew (Standard)	Life Support:	NAG2 Modular Gravity Unit (System Contractor: New Amsterdam Gravitics, New Amsterdam, Alpha III) AL3 Life Support System (System Contractor: A'Alakon Landiss, Divallax, Andor)









THE U.S.S. PANTHER CITY (CG 63543) EXPLORING THE BADLANDS NEAR DEEP SPACE NINE





GALAXY (II) CLASS LARGE EXPLORATORY CRUISER

7 LARGE EXPLORATORY CRUISERS: "GALAXY (II)" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-71867 NCC-71875 NCC-72069 NCC-72382 NCC-77983 NCC-78012	Trinculo Bright Star Werner von Braun Magellan Breedlove Cortez	Utopia Planitia Fleet Yards, Mars Utopia Planitia Fleet Yards, Mars San Francisco Fleet Yards, Earth Utopia Planitia Fleet Yards, Mars Utopia Planitia Fleet Yards, Mars Utopia Planitia Fleet Yards, Mars	August 2354 September 2355 February 2360 September 2361 March 2371 April 2371	December 2371 January 2370 August 2372 May 2373 April 2374 April 2374	June 2372 May 2370 March 2373 December 23 April 2378	Active Active Active Active Trials Lost
Number	Name	Converted	Drydocked	Relaunched	Recommissioned	Status
NCC-70637	Galaxy	Utopia Planitia Fleet Yards, Mars	July 2375	April 2377	November 2377	Active

Class: Events between the U.S.S. *Enterprise* (1701-D) and various Romulan, Klingon, and Ferengi vessels have shown a definite, and some say serious, weakness in the offensive and defensive systems of the *Galaxy* class. Proponents of the dreadnought program have used this to attempt to justify additional construction. The Advanced Starship Design Board was commissioned by the Military Staff Committee to prepare a proposal to improve the *Galaxy* class at a much lower cost then the *Entente* class. The Advanced Starship Design Bureau decided to concentrate on three major areas: propulsion, weapons, and shields.

With the loss of Yamato (CKE 71807) in 2365, it was decided to finish-out three of the six Galaxy class spaceframes that had been mothballed in 2360. The Galaxy (II) class was approved in March of 2367 and the *Bright Star* was chosen to undergo modification.

Classification: Like her Galaxy class sisters, the Galaxy (II) class is classified as a Large Exploratory Cruiser.

Design: Though externally identical to the Galaxy class, the six ships of the Galaxy (II) class incorporate significant improvements in tactical, propulsion, computers, and scientific suites.

The sensor suites on these vessels are the equal of those on the *Intrepid* and *Sovereign* Classes and make the *Galaxy* (*II*) the premiere explorer in the Fleet.

Engineering: The vessels of the Galaxy (II) class were the first to be equipped with the Leeding Energies LF-43 warp drive, which provides a 20% increase in peak power output over the LF-41 found on the Galaxy and Nebula Classes. This raises the top sustained speed to Warp 9.9 and *Bright Star* achieved a top sustained speed of Warp 9.93 during "Operation Return". The LF-43 also incorporates an improved warp-core ejection system that is far more resilient to system damage.

The *Bright Star* was uprated to a modified coil version of the Cochrane Warp Dynamics LF-44 series of warp drive used on the *Sovereign* class in 2376 to test its application in new platforms. The drive did prove more powerful and *Bright Star* achieved a Fleet Speed Record of Warp 9.991 in testing. However, conversion costs were too high to justify refitting the other ships with the drive.

Tactical: The core upgrades to the Galaxy (II) centered on tactical issues. A plan to install Type X+ megaphasers was shelved when suitable mounting points could not be engineered. Instead, the standard Type X collimator phaser arrays were greatly improved. The energy-release capabilities of the *fushigi-no-umi* crystals have been increased, delivering almost 50% more power than the standard Type X phasers installed on the Galaxy class. These new arrays are referred to as Type XII. An additional phaser strip was added along the top of each nacelle to correct a gunnery blind spot. The Mk 95 quantum torpedo system has replaced the standard Mk 85. More powerful and with a faster loading system, the Mk 95 is an excellent long-range weapon.

A Combat Information Center has been fitted to *Bright Star*, along with the Aegis Fleet Fire-Control system. This allows the *Bright Star* to command ships at the Task Force level via a Link 35 Communications Core. CETIS MK III with Type 225 TACAR II (Target Acquisition Center Accelerated Response) remain standard equipment, though the 42/ADA Countermeasures Support System has been added.

Two flights of *Peregrine* fightercraft were added to help provide a multi-role capability. A flight of SWACS (Spaceborne Warning and Control System) shuttles provide extended-range sensor capability and command and control functions. Provisions were made for the ship to carry up to a company of Marines, though they are normally not embarked as they are not part of the ship's general mission.

The uprated power system allowed the installation of the experimental FSS shield system. Designed originally for the *Griffon* class SCS-X, the FSS incorporates three shield layers to allow the ship to withstand more punishment. As the outer layer is breached, the inner layers take up the slack while the breached layer is replenished underneath. All total, shield strength is doubled. Though a marvel of technological innovation, the incredible complexity of the system and shield grid required extensive modification to be fitted to the *Galaxy* class spaceframe and prevent it from being retrofitted to other vessels. As the FSS system costs twice as much as the FSQ/2, and due to the complexity, only new-build *Galaxy* (*II*) vessels would use the FSS, with uprated ships using the FSQ/2 system.

A controversial addition is the FCE-2 cloaking device. As part of the FSS system, it will effectively cloak the vessel from sensors. Unfortunately, shield effectiveness is reduced by 60%, weapons cannot be fired without disrupting the field, and the energy costs, even with the second reactor, are excessive and a serious drain on the ship's power grid. The main hanger bay has undergone

the necessary modifications needed to launch and retrieve the fighters. Shuttlebays Two and Three remain unchanged.

Computer Systems: The new M-16 Isolinear III computer was installed aboard Bright Star to test its performance. A partially cybernetic system utilizing "bio-neural gel pack" processors in addition to standard isolinear ones, it is both faster and more powerful than the current M-15 used in the Griffon, Galaxy, and Olympus Classes. In addition, a highly advanced artificial-personality program called E.V.E. (Enhanced Visual interfacE) has been installed on top of the standard LCARS software, providing enhanced computer-human interactions. While all Galaxy (II) ships carry the M-16, only Bright Star has been fitted with the E.V.E. supplement.

Builders: As with all the vessels of the Galaxy class, most of the Galaxy (II) class vessels were built in the Utopia Planitia Fleet Yards in Mars orbit. The only exception was Werner Von Braun, which was built in San Francisco due to her new drive system. Shinohara Heavy Industries was the primary contractor on the Galaxy (II) class as it was on the original.

Development and Construction History: The developed changes were submitted to the Military Staff Committee in 2367. It was reviewed and approved within the month. The U.S.S. *Bright Star* (CKE 71875), tasked to become the eighth *Galaxy* class ship, had yet to have her propulsion, weapons, and shields systems installed. It was decided that this ship would receive the updates and the necessary changes were made in the construction plans. The ship was finished in January 2370 and PSA, shakedown, and trials were all completed and passed with excellent marks. The ship was commissioned on Stardate May 2370. Work on *Trinculo* was stopped while *Bright Star* was completed and tested. After the positive reports, *Trinculo* was modified in the yards to the new specification while the spaceframes of *Werner von Braun* and *Magellan* were sent to Utopia Planitia for completion. Two new-build ships of this class were authorized in 2371. All saw service in the later stages of the Dominion War, though the Cortez was lost. A replacement vessel is not planned.

Nomenclature: Trinculo (CKE 71867) was to be the seventh Galaxy class starship. Construction was halted pending the completion and testing of the *Bright Star*. Upon successful completion, the *Trinculo* was re-classified a Galaxy (II) and completed to those specifications.




Current Specifications for the Galaxy (II) class:		Embarked Craft:	 Danube Class Runabout Type 6 Personnel Shuttle
Displacement Overall Length Overall Draft Overall Beam Propulsion:	4,780,000 mt 642.51 m 195.26 m 463.73 m Two LF-43 Mod 1 energized-energized antimatter warp drive units (System Contractor: Leeding Energies, Earth) Two LF-44 Mod 1 energized-energized antimatter warp drive units (CKE 71875)	Navigation:	 2 Type 7 Personnel Shuttle 2 Type 9A Cargo Shuttle 8 Type 16 Shuttlepod 8 Peregrine Class Fighter 1 S-3 Sentry SWAC Shuttle RAV / ISHAK Mod 3 Warp Celestial Guidance (System Contractor: Tlixis Ramab RRB, Coridan III)
	(System Contractor: Cochrane Warp Dynamics, Alpha Centauri V) Two FIG-5 subatomic unified energy impulse units (System Contractor: Kloratis Drives, Tellar) QASR-2 particle beam maneuvering thrusters (System Contractor: Scarbak Propulsion Systems, Earth) "Trentis IV" pulsed laser reaction control system (System Contractor: Orage ljek, Aksajak, Andor)	Computers: Phasers: Missiles:	 M-16 Bio-Neural Gel Pack-Isolinear III with LCARS 2.5 / E.V.E. interface software (System Contractor: Daystrom Computer Systems, Luna) AEGIS Mk 7 Mod 1 Fleet Fire Control System (CKE 71875) (System Contractor: RCA, New York, Earth) 12 Type XII Collimated Phaser Array (System Contractor: HiBeam Energies, Earth) 2 Mk 95 Quantum Torpedo Launchers
Velocity: Duration:	Warp 7Standard Cruising SpeedWarp 9.5Maximum Cruising SpeedWarp 9.9+Maximum Attainable Velocity5 years, standard	Defense:	(System Contractor: Loraxial, Andor) FSS Primary Force Field (System Contractor: Sylvanesti Shields, Alkara XV) FCE-2 Integrated Cloaking Device
Complement:	 185 Officers 525 Enlisted Crew 1000 Passengers (Normal – Up to 5000 Maximum) 1710 Total Crew (Standard) 	Life Support:	(System Contractor: Sylvanesti Shields, Alkara XV) MM6 Modular Gravity Unit (System Contractor: Morris Magnatronics, Palyria, Mars) AL4 Life Support System (System Contractor: A'Alakon Landiss, Divallax, Andor)



THE U.S.S. BRIGHT STAR (CKE 71875) - THE FIRST GALAXY (II) CLASS LARGE EXPLORATORY CRUISER



THE U.S.S. WERNER VON BRAUN (CKE 72069) PERFORMING DEEP-SPACE MAPPING



THE U,S,S, BRIGHT STAR (CKE 71875) ENGAGES A CARDASSIAN GALOR CLASS CRUISER DURING "OPERATION RETURN"



CLASS CRUISER

The *Intrepid* class has become one of the more popular ships in the Star Fleet. Blindingly fast, and with an exploration suite superior to that carried on the original *Galaxy* class, the *Intrepid* has become an integral part of the post-Dominion war fleet.

Class: Development work on the *Intrepid* class began in 2363. The stated goal was to provide a high-speed exploration platform that could be constructed quickly and inexpensively. Around the same time, Leeding Engineering announced the successful completion of the LF-45 warp drive. The SSDAC and ASDB decided to marry the two and began construction in 2366.

Classification: Initially classified as an Exploratory Cruiser, the vessel's flexibility, as well as the varied missions it is expected to be performed, the class was rechristened Cruiser once the Development Project was formally approved.

Design: The Intrepid class is a mix of scout and explorer, designed to operate on the frontier of Federation territory. The Intrepid class is designed to operate throughout Federation space. The ship is considerably smaller than her Galaxy and Sovereign sisters, but also costs about a third of the Galaxy to maintain. The Intrepid shape was influenced by her LF-45 warp drive and uses an angular-curvilinear hull shape, which presents a sharply reduced Z-axis frontal area. The simplified cross sections make construction quicker and cheaper and the hull and frame itself is expected to require less rebuilding over the operational life of the ship.

The Intrepid class has benefited from the advances since the Galaxy class entered service. She therefore carries a sensor suite even more advanced than the Galaxy class. However, she does not have the scientific staff, or the breadth of lab areas, as a Galaxy class, making her better suited for "first study" of new phenomena, to be followed up later by a Galaxy or Oberth class.

It is expected that the *Intrepid* class will eventually take on some missions currently handled by the *Cheyenne* class superscout.

Engineering: As noted above, Leeding Energies completed the LF-45 variable-geometry warp drive about the same time as the *Intrepid* class was being developed. The LF-45 is optimized for continuous high-warp operation on vessels massing less than 1.5 million metric tons and boasts a 30% greater fuel efficiency then the LF-41 series of warp drives at Warp 8+. The nacelles themselves are mounted on movable pivots, which moves closer to the hull as the ship enters warp to reduce the warp envelope and cutting warp "drag" at high speeds. The nacelles adjust themselves as needed to maximize the warp field balance. The LF-45 also was the first drive to do-away with the harmful effects on local space. The *Intrepid* (CA 74655) attained a top sustained speed of Warp 9.975 and holds numerous speed and acceleration records.

Tactical: The Intrepid class was designed to take care of herself and mounts five Type X phaser strips and two Mk 95 quantum torpedo launchers. The choice of the FSQ shield system, designed for far larger vessels, allows the Intrepid class to take truly punishing hits and still maintain combat effective.

Computer Systems: The Galaxy (II) class vessel U.S.S. Bright Star was fitted with an experimental computer relay system based on "bio-neural gel packs" in addition to traditional isolinear chips. Classified as the M-16 Isolinear III, it utilized synthetic neurons based on the organization of neurons and synapses in the humanoid brain. The system essentially "grows" new computer circuits as needed. This allows the computer to take a "best guess" in cases where there is insufficient information to make a definitive statement in a logical manner, rather than having to spend the

10 CRUISERS: "INTREPID" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-74600	Intrepid	Earth Station McKinley, Earth	December 2366	February 2370	May 2371	Active
NCC-74656	Voyager	Earth Station McKinley, Earth	March 2367	May 2370	September 2371	Active *
NCC-74657	Bennu	Earth Station McKinley, Earth	April 2367	July 2370	January 2371	Active
NCC-74658	Valkyrie	Earth Station McKinley, Earth	April 2367	July 2370	February 2371	Active
NCC-74791	Destiny	Earth Station McKinley, Earth	May 2367	August 2370	March 2371	Active
NCC-74805	Bellerophon	Earth Station McKinley, Earth	May 2367	August 2370	March 2371	Active
NCC-75127	Morgan	Earth Station McKinley, Earth	September 2367	December 2370	July 2371	Active
NCC-75812	Traveller	Earth Station McKinley, Earth	March 2369	June 2371	November 2371	Active
NCC-76254	Tiger	Spacedock, San Francisco, Earth	August 2369	November 2371	April 2372	Active
NCC-76893	Raptor	Spacedock, San Francisco, Earth	March 2370	June 2373	December 2373	Active

* - USS Voyager reported missing in 2371 and listed as Lost in the 2373 edition. Contact was reestablished with the ship in the Delta Quadrant in 2374.

time attempting to calculate all possible actions. In essence, it uses a more intuitive process to arrive at a decision. Based on the system's success with the *Bright Star*, it was decided to implement this system on the *Intrepid* class.

Builders: The first set of vessels were built in Earth Station McKinley, with final fitting out being performed at the Utopia Planitia Fleet Yards in Mars orbit.

Development and Construction History: Intrepid and Voyager were laid down in 2366. Both vessels were completed in 2371 and entered trials. The Intrepid was stationed on the Federation-Cardassian border, and Voyager was lost in the Delta Quadrant while on an interdiction mission against Maquis raiders operating in the "Badlands" near the Bajoran star system. Contact was established in 2374 and has been intermittent since.





Current Specifications for the Intrepid class:

Current Specifications for the Intrepid class:	Embarked Craft:	1 Aerowing Type Runabout		
		2 Type 6 Personnel Shuttle		
Displacement 750,000 mt		0 Type 7 Personnel Shuttle		
Overall Length 343 m		0 Type 9A Cargo Shuttle		
Overall Draft 66 m		4 Type 16 Shuttlepod		
Overall Beam 133 m	Navigation:	RAV / ISHAK Mod 3 Warp Celestial Guidance		
Propulsion: Two LF-45 Mod 1 energized-energized antimatter warp drive units	C C	(System Contractor: Tlixis Ramab RRB, Coridan III)		
(System Contractor: Leeding Energies, Earth)	Computers:	M-16 Bio-Neural Gel Pack-Isolinear III with LCARS 2.5interface software		
One FIG-4 subatomic unified energy impulse unit		(System Contractor: Daystrom Computer Systems, Luna)		
(System Contractor: Kloratis Drives, Tellar)	Phasers:	5 Type X Collimated Phaser Array		
QASR-2 particle beam maneuvering thrusters		(System Contractor: HiBeam Energies, Earth)		
(System Contractor: Scarbak Propulsion Systems, Earth)	Missiles:	2 Mk 95 Quantum Torpedo Launchers		
"Trentis IV" pulsed laser reaction control system		(System Contractor: Loraxial, Andor)		
(System Contractor: Orage Ijek, Aksajak, Andor)	Defense:	FSQ Primary Force Field		
Velocity: Warp 9.0 Standard Cruising Speed		(System Contractor: Charlottes Shields, Earth)		
Warp 9.975 Maximum Cruising Speed	Life Support:	MM6 Modular Gravity Unit		
Warp 9.98 Maximum Attainable Velocity		(System Contractor: Morris Magnatronics, Palyria, Mars)		
Duration: 5 years, standard		AL4 Life Support System		
Complement: 41 Officers		(System Contractor: A'Alakon Landiss, Divallax, Andor)		
100 Enlisted Crew				
0 Passengers (Normal – Up to 50 Maximum)				
141 Total Crew (Standard)				









THE U.S.S. DESTINY (CR 74691) PAYS A VISIT TO ALPHA V



THE U.S.S. INTREPID (NCC 74655) TRACKING A CLASS B COMET



SOVEREIGN CLASS HEAVY CRUISER

Since the early days of the Constitution, through the Enterprise and Excelsior, and leading to the current Ambassador, the Heavy Cruiser has offered the best multimission platform and have been the mainstays of their eras. While the Excelsior and Ambassador remain in service, these vessels are now reaching the ends of the their design lifespan (especially the Excelsior).

Class: The Galaxy class, while an exceptional platform, has proven to not quite be the panacea expected. The Sovereign class was developed to provide a more modern heavy cruiser platform then the Ambassador or Excelsior Classes at a far lower acquisition and maintenance cost then the Galaxy / Nebula Classes. It was to incorporate the latest in all technologies and was designed with the maximum amount of mission flexibility.

Classification: The Sovereign class was envisioned as a Heavy Cruiser from the outset, and has been designed to that mission platform.

Design: Though derided when first launched and, due to problems with her Transwarp drive system, almost cancelled, the *Excelsior* class has proven to be the most successful starship design in Federation history. The *Ambassador* class borrowed heavily from the design, and the *Sovereign* even more so. The second longest ship in the Fleet (after the *Griffon* class), she is still dwarfed by her larger *Galaxy / Galaxy (II)* sisters. However, through maximization of space and smaller accommodations, the *Sovereign* can actually carry close to three times the number of passengers and over twice the cargo. The *Sovereign* class is an extremely sleek shape, the necessity of design for a high-sustained warp factor offering an unexpected benefit in graceful lines. Exploration is an important part of the Heavy Cruiser mission profile, and *Sovereign* carries essentially the same suite found on the *Galaxy (II)* and *Intrepid* classes. Laboratory space is

smaller than the Galaxy (II) but larger than the Intrepid, making it an excellent choice for midrange missions and allowing it to perform full analyses of any phenomena it may come across in the field.

Engineering: The Sovereign class uses the LF-44 series of warp drive, developed by Cochrane Warp Dynamics to combat the detrimental effect of earlier drives on local space. The Sovereign is capable of a sustained cruising speed of Warp 9.7 and a cruising speed of Warp 6.

Tactical: Heavy Cruisers have always carried the latest in tactical systems and the Sovereign is no exception, equipped with Type XII phasers and the FSS shield system. The Sovereign also mounts the improved Mk 95 Quantum torpedo launcher, which allows it to fire quantum torpedoes.

Computer Systems: The Sovereign class uses the M-16 Bio-Neural Gel Pack-Isolinear III computer system found in the Galaxy (II) and Intrepid Classes. The vessel was originally designed to use the M-15, so extensive systems rework was necessary to implement the system in Sovereign and Enterprise. However, all future ships will incorporate the design changes in the yard.

Builders: In the tradition of the Constitution, Enterprise, and Excelsior Classes, the Sovereign class is being built in the San Francisco Fleet yards. However, as production ramps up, it is expected Earth Station McKinley and Utopia Planitia will also be assigned construction contracts. Boeing-Mitsubishi was named primary contractor of the project, though they are being assisted by Cosmadyne and the Avondale Group from Rigel II.

Development and Construction History: The Sovereign class Starship Development Project was launched in 2358. Designs were finalized in 2363 and construction began the following year on two keels. Sovereign entered service in 2372, followed shortly thereafter by the newly christened

5 HEAVY CRUISERS: "SOVEREIGN" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-73811	Sovereign	San Francisco Fleet Yards, Mars	August 2364	November 2371	June 2372	Active
NCC-1701-E	Enterprise	San Francisco Fleet Yards, Mars	October 2364	March 2372	December 2372	Active
NCC-74016	Kensington	San Francisco Fleet Yards, Earth	March 2365	July 2372	May 2373	Active
NCC-74610	Reuben James	San Francisco Fleet Yards, Earth	January 2367	April 2374	December 2374	Active
NCC-75013	Atlas	Chiokis Starship Construction, Andor	August 2367	January 2375	August 2375	Active
NCC-76771	Cicero	San Francisco Fleet Yards, Earth	February 2370	September 2377	÷	Trials
NCC-77820	Cu'Chulainn	Chiokis Starship Construction, Andor	February 2371	·		Building
NCC-78382	Endurance	Puget Sound Fleet Yards, Earth	August 2371			Building

Enterprise. Five vessels are in service with a sixth undergoing trials. The transfer of three hulls to the Whitehall class project has impacted delivery forecasts, though two vessels are currently under construction with delivery dates through 2381.





Current Specifications for the Sovereign class:		Embarked Craft:	0 Danube Class Runabout		
			3 Type 6 Personnel Shuttle		
Displacement	3,205,000 mt		3 Type 7 Personnel Shuttle		
Overall Length	685 m		3 Type 9A Cargo Shuttle		
Overall Draft	88 m		6 Type 16 Shuttlepod		
Overall Beam	250 m	Navigation:	RAV / ISHAK Mod 3 Warp Celestial Guidance		
Propulsion:	Two LF-44 Mod 1 energized-energized antimatter warp drive units		(System Contractor: Tlixis Ramab RRB, Coridan III)		
	(System Contractor: Cochrane Warp Dynamics, Alpha Centauri V)	Computers:	M-16 Bio-Neural Gel Pack-Isolinear III with LCARS interface software		
	Two FIG-5 subatomic unified energy impulse units		(System Contractor: Daystrom Computer Systems, Luna)		
	(System Contractor: Kloratis Drives, Tellar)	Phasers:	9 Type XII Collimated Phaser Array		
	QASR-2 particle beam maneuvering thrusters		(System Contractor: HiBeam Energies, Earth)		
	(System Contractor: Scarbak Propulsion Systems, Earth)	Missiles:	3 Mk 95 Photon Torpedo Launchers		
	"Trentis IV" pulsed laser reaction control system		(System Contractor: Loraxial, Andor)		
	(System Contractor: Orage Ijek, Aksajak, Andor)	Defense:	FSS Primary Force Field		
Velocity:	Warp 6 Standard Cruising Speed		(System Contractor: Sylvanesti Shields, Alkara XV)		
	Warp 9.7 Maximum Cruising Speed	Life Support:	MM6 Modular Gravity Unit		
	Warp 9.9+ Maximum Attainable Velocity		(System Contractor: Morris Magnatronics, Palyria, Mars)		
Duration:	5 years, standard		AL4 Life Support System		
Complement:	130 Officers		(System Contractor: A'Alakon Landiss, Divallax, Andor)		
	725 Enlisted Crew				
	0 Passengers (Normal – Up to 12000 maximum)				
	855 Total Crow (Standard)				

855 Total Crew (Standard)









THE U.S.S. ENTERPRISE (CH 1701-E) - THE SIXTH VESSEL TO CARRY THIS MOST FAMOUS OF NAMES



THE SOVEREIGN CLASS HEAVY CRUISER U.S.S. KENSINGTON (CH 74016) ON PATROL NEAR STARBASE FIVE



PROMETHEUS CLASS TACTICAL CRUISER

1 TACTICAL CRUISER: "PROMETHEUS" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-74913	Prometheus	Fleet Yards at Deep Space 5	June 2367	April 2374	December 2376	Active

When the Odyssey was destroyed in late 2370, war with the Dominion looked inevitable. TacFleet took a frank assessment of their position and the results did not bring them comfort. Dominion polaron weapons had easily penetrated the Odyssey's shields and the few times the ship could target and hit a Jem'Hadar vessel, even the Type X phaser was surprisingly ineffective. TacFleet knew that the Federation needed a vessel designed for one purpose – to hunt down and destroy any known starship.

Class: TacFleet knew that such a vessel would seriously upset the balance of power within the Alpha Quadrant, as well as possibly threaten the embryonic alliance forming. It was decided to develop, construct, and test the vessel in secret. TacFleet provided funding to Star Fleet Intelligence, who could provide the secrecy needed. Boeing-Mitsubishi's Phantom Works was named prime contractor, as they had experience in building "black" projects for Star Fleet.

Classification: There was some debate about what to classify the ship. Battlecruiser was considered, but it was worried this might "tip the hand". Instead, the long-disused Tactical Cruiser nomenclature was assigned.

Design: There has yet to be a design as radical as the *Prometheus*, which introduces the concept of "Multi-Vectored Attack Mode" to starship design. The *Prometheus* can split into three separate warp-capable tactical platforms that can then attack a target from three separate angles.

Though the two classes look similar, the *Prometheus* and *Intrepid* classes share little similarities beyond dimensions. The *Prometheus* class employs the latest in Federation automation systems and therefore requires a markedly small crew for her size. The vessel incorporates a very small medical staff, assisted by a new Mk II version of the Emergency Medical Hologram first deployed on the *Intrepid* and *Sovereign* classes. Holoemitters located throughout the vessel allow these EMH's to travel anywhere they are needed. Facilities aboard allow for the embarkation and training of Marines and other ground forces, as such a vessel is a natural for assault and interdiction duties.

Engineering: The Prometheus is the first ship since the Peacekeeper class to mount four nacelles, and unique amongst vessels in mounting three separate warp cores. In normal flight mode, only the two directly feeding the upper and lower nacelle pairs are in operation. Only when the ship splits into MVAM does the third core, mounted between the two impulse engines, come on-line. The two cores and four nacelles result in the fastest speed ever attained by a Federation starship — a stupendous Warp 9.999. The ship is designed for a constant cruise speed of Warp 9.9, easily making it the fastest ship in the Fleet.

Tactical: The *Prometheus* mounts the latest in Federation weaponry. She literally bristles with thirteen Type XII phaser strips and six Mk. 90 torpedo launchers. This makes her the most powerful



Current Specifications	for the Prometheus class:	Embarked Craft:	0 Danube Class Runabout		
			2 Type 6 Personnel Shuttle		
Displacement	2,500,000 mt		0 Type 7 Personnel Shuttle		
Overall Length	415 m		0 Type 9A Cargo Shuttle		
Overall Draft	113 m		4 Type 16 Shuttlepod		
Overall Beam	170 m	Navigation:	RAV / ISHAK Mod 3 Warp Celestial Guidance (System Contractor: Tlixis Ramab RRB, Coridan III)		
Propulsion:	Two LF-44 Mod 1 energized-energized antimatter warp drive units				
	(System Contractor: Cochrane Warp Dynamics, Minos al Rijil, Alpha Centauri VII)	Computers:	M-16 Bio-Neural Gel Pack-Isolinear III with LCARS interface software		
	One LF-15 Mod 1 dillithium-energized antimatter warp drive units		(System Contractor: Daystrom Computer Systems, Luna)		
	(System Contractor: Cochrane Warp Dynamics, Minos al Rijil, Alpha Centauri VII)	Phasers:	13 Type XII Collimated Phaser Array (System Contractor: HiBeam Energies, Earth)		
	Two FIG-5 subatomic unified energy impulse units				
	(System Contractor: Kloratis Drives, Tellar)	Missiles:	3 Mk 95 Photon Torpedo Launchers		
	QASR-2 particle beam maneuvering thrusters		(System Contractor: Loraxial, Andor)		
	(System Contractor: Scarbak Propulsion Systems, Earth)	Defense:	FSS Primary Force Field		
	"Trentis IV" pulsed laser reaction control system		(System Contractor: Sylvanesti Shields, Alkara XV)		
	(System Contractor: Orage Ijek, Aksajak, Andor)	Life Support:	MM6 Modular Gravity Unit		
Velocity:	Warp 9.0 Standard Cruising Speed (Docked)		(System Contractor: Morris Magnatronics, Palyria, Mars)		
	Warp 9.8 Maximum Cruising Speed (Docked))		AL4 Life Support System		
	Warp 9.99 Maximum Attainable Velocity (Docked)		(System Contractor: A'Alakon Landiss, Divallax, Andor)		
Duration:	1 year, standard				
Complement:	41 Officers				
	100 Enlisted Crew				
	0 Passengers (Normal – Up to 50 maximum)				
	141 Total Crow (Standard)				

141 Total Crew (Standard)

vessel in known space, even when compared to the mighty Akira class battlecruiser. Shielding is provided by the FSS system with ablative hull armor though, remarkably, the FCE-2 cloak system has not yet been fitted. The Romulan Star Empire is still smarting over the inclusion of the system in the Galaxy (II) and Griffon classes and at this time Star Fleet does not wish to raise diplomatic hackles. However, space and infrastructure for the generators exists and they can be installed in a matter of days.

Computer Systems: Balancing the output of two cores into four nacelles is a highly complicated procedure. The *Prometheus* mounts the most powerful shipboard computer system, the M-16, which is also used on the Galaxy (II), Intrepid, and Sovereign classes.

Builders: Boeing-Mitsubishi's Phantom Works was contracted to build the vessel. Construction was done at a special sealed dock at Deep Space Five, which is located in a secluded spot of the Federation. All components were sent to Utopia Planitia, and then shipped on special freighters to Deep Space Five for assembly.

Development and Construction History: The U.S.S. Prometheus was laid down in January of 2371 and completed in November 2374. Though security regarding the project was tight, the Romulan Empire learned of her existence. Agents of the Tal Shiar hijacked her on her first test flight and attempted to return her to Romulan space. Incredibly, both the *Prometheus'* EMH and the EMH from the starship U.S.S. Voyager (at the time, thought lost with all hands) were able to incapacitate the hijackers and assist the Federation pursuit force against three Romulan *D'deridex* class warbirds. The vessel was heavily damaged in the engagement, and returned to Utopia Planitia for repairs and additional tests. The ship did not see service during the Dominion War, as her possible loss or capture was considered too much of a risk. The ship continued to be tested and developed, and was finally commissioned into service in 2376 and given the NCC of 74913. The Dominion War and other threats have warmed Star Fleet Command to such a class of vessels and funding for additional ships has been fought for by TacFleet. However, both the Klingons and Romulans have expressed serious issues with the idea of a fleet of such powerful ships in service, and so far only the prototype exists.













THE U.S.S. PROMETHEUS (CT 74913) TESTS HER MULTI-VECTOR ASSAULT MODE



THE U.S.S. PROMETHEUS (CT 74913) DURING HER LAUNCH FROM DEEP SPACE FIVE



NOTTINGHAM CLASS EXPLORATORY CRUISER

2 EXPLORATORY CRUISERS: "NOTTINGHAM" CLASS

Number	Name	Builder	Laid Down	Launched	Commissioned	Status
NCC-78505 NCC-78506 NCC-78913	Nottingham Marshal Martz Leah Corwin	Ganymede Fleet Yards, Jupiter Ganymede Fleet Yards, Jupiter M'Yengh Yards, Shzerensohr, Cait	December 2371 December 2371 March 2377	August 2375 September 2375	September 2376 October 2376	Active Active Building

Despite its flaws, the Galaxy class remains the most capable explorer in Starfleet's inventory. Unfortunately, only six of these vessels were built, with six more follow-on vessels conforming to the improved Galaxy (II) class specifications, which addressed most of the original's flaws.

However, these ships were designed in an earlier era, and much of the technology and systems that were integrated into them were for carrying hundreds of civilians, including families. With the more aggressive universe the Federation was discovering beyond their borders, it was decided that a large crew of civilian contractors and families was unwise in a vessel that would be operating years from local support. Star Fleet decided a new generation of smaller vessels might better fit the ultra-deep space explorer role.

Class: The Nottingham class owed its design elements to the earlier Nomad class deep-space explorer concept. The Nomad had been developed around the time of the Galaxy class, but was a much smaller vessel and mounted four warp nacelles. Considered too small to adequately perform in a deep-space exploration platform, it was shelved in favor of the Galaxy. Nevertheless, the design was sound and as had been done with the Griffon, scaling it up by a factor of 1.5 improved the storage space as well as allowing for the latest equipment. **Classification:** The Nottingham is classified as an exploratory cruiser, being smaller than the Galaxy / Galaxy (II) classes.

Design: The Nottingham class shares many of her facilities with the Galaxy class. Additional facilities have been included, such as an expanded cetacean operations section and facilities for a detachment of SFMC personnel, which have not been standard on previous exploration starships.

Engineering: Unlike the Nomad concept, the Nottingham uses two traditional nacelles, in this case, the Cochrane Warp Dynamics LF-46, which is currently the most efficient warp drive in service, important for such long-distance missions.

Tactical: Learning from the mistakes made with the original Galaxy, the Nottingham class is extremely well-armed. Nine Type XII phaser strips and two Type XV pulse phaser cannons provide enough punch to knock out an attacker long enough for the ship to escape. Two Mk 80 torpedo launchers provide photon and quantum torpedo capability equal to that of ships such as the Nomad and Intrepid classes. The FSQ/2 shield system has been fitted, as the design offers excellent energy dissipation.



Current Specifications for the Nottingham class:		Embarked Craft:	5 Danube Class Runabout		
content specification	s for the Honnightan class.		4 Type 6 Personnel Shuttle		
Displacement	4,500,000 mt		6 Type 7 Personnel Shuttle		
Overall Length	538.65 m		2 Type 9A Cargo Shuttle 8 Type 16 Shuttlepod		
Overall Draft	0		RAV / ISHAK Mod 3 Warp Celestial Guidance		
Overall Beam	419.25 m	Navigation:	(System Contractor: Tlixis Ramab RRB, Coridan III)		
Propulsion:	Two LF-46 Mod 1 energized-energized antimatter warp drive units (System Contractor: Cochrane Warp Dynamics, Minos al Rijil, Alpha Centauri VII)	Computers:	M-16 Bio-Neural Gel Pack-Isolinear III with LCARS 2.5interface software (System Contractor: Daystrom Computer Systems, Luna)		
	Two FIG-5 subatomic unified energy impulse units (System Contractor: Kloratis Drives, Tellar)	Phasers:	2 Type XV Pulse Phaser Canon (System Contractor: HiBeam Energies, Earth)		
	QASR-2 particle beam maneuvering thrusters (System Contractor: Scarbak Propulsion Systems, Earth)	Phasers:	9 Type XII Collimated Phaser Array (System Contractor: HiBeam Energies, Earth)		
	"Trentis IV" pulsed laser reaction control system (System Contractor: Orage ljek, Aksajak, Andor)	Missiles:	2 Mk 95 Photon Torpedo Launchers (System Contractor: Loraxial, Andor)		
Velocity:	Warp 8.0Standard Cruising SpeedWarp 9.2Maximum Cruising Speed	Defense: Life Support:	FSQ/2 Primary Force Field (System Contractor: Charlottes Shields, Earth) MM6 Modular Gravity Unit		
Duration:	Warp 9.75 Maximum Attainable Velocity 15 years, standard				
Complement:	157 Officers		(System Contractor: Morris Magnatronics, Palyria, Mars)		
complement.	 473 Enlisted Crew 50 Passengers (Normal – Up to 2000 Maximum) 50 Marines (Normal – Up to 500 Maximum) 1680 Total Crew (Standard) 		AL4 Life Support System (System Contractor: A'Alakon Landiss, Divallax, Andor)		

1680 Total Crew (Standard)

Computer Systems: The M-16 Bio-Neural Gel Pack-Isolinear III system first tested on the U.S.S. *Bright Star* and hence fitted on the Sovereign and *Intrepid* classes was chosen for the Nottingham. **Builders:** All vessels of the Nottingham class were expected to be built at Ganymede Fleet Yards, Jupiter, though M'Yengh Yards in Cait was given the contract for the third ship to give them experience in building larger vessels. They are being assisted by members from Ganymede.

Development and Construction History: Five Nottingham class starships have been proposed, with two currently constructed and in service. Of the three additional vessels requested, funding for one has been authorized and the ship is currently under construction.





APPENDICES

ABOUT THE PUBLISHING TEAM



Chief Editor and Publisher: Admiral Chris Wallace

The current Chief of Star Fleet Operations, Admiral Wallace also served as the Executive Director of the Galaxy and Galaxy (II) Class starship development projects and is a former Chairman of the Advanced Starship Design Bureau. He was the Commanding Officer of both the U.S.S. Bright Star and U.S.S. Galaxy.



Layout Consultant: Sakura Shinguji

Ms. Shinguji serves as the Director of Publications for Panda Press Interstellar.



Project Coordinator: Captain Belldandy Morisato

Captain Morisato has served as the Project Coordinator for most of DTS and ASDB's technical publications. She is the Executive Officer of the U.S.S. *Bright Star*.



Strategic Editor: Commander Natsumi Tsujimoto

Commander Tsujimoto serves as the Tactical Officer aboard the U.S.S. Bright Star and served on the battle planning and management staffs for most of the Dominion War's largest engagements.



Production Editor: Rear Admiral Kurt Roithinger

The former commander of the Space Station Nexus, Rear Admiral Roithinger has worked on a number of Star Fleet projects.



Systems Analyst: Rear Admiral Carsten Pedersen

Considered one of the premiere designers at Star Fleet R&D, Admiral Pedersen has lent his talents to most of the starship designs put into production over the past decade.



Technical Editor: Admiral Alex Rosenzweig

Admiral Rosenzweig is the current Director of the Star Fleet Department of Technical Services, as well as the Director of the Office of Technical Information. He has chaired numerous Star Fleet committees and panels, including the commission that oversaw the loss of the U.S.S. Enterprise at Veridian III.



Naval Liaison: Rear Admiral John Scharmen

Admiral Scharmen serves as the Naval Liaison between Star Fleet Operations and the Star Fleet Spacecraft Design Advisory Commission.



Engineering Consultant: Lieutenant Commander Skuld

The Chief Engineering Officer of the U.S.S. Bright Star, Commander Skuld served on the Galaxy (II) Class Starship Development Project and is considered one of the top field engineers in Star Fleet.



Graphics: Commodore David Pipgras

Commodore Piparas is the Director of the Region Five Office of Graphic Design.



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General Akers serves as the Chief Historian of Star Fleet and assisted with the background histories of each class.



Support Staff: Doctor Rick Sternbach

Doctor Sternbach serves on the Advanced Propulsion Unit of the Advanced Starship Design Bureau. He was a senior member of the Galaxy, Sovereign, Intrepid, and Defiant Class Starship Development Projects.



Support Staff: Doctor Michael Okuda

Doctor Okuda serves on the Advanced Propulsion Unit of the Advanced Starship Design Bureau. He was a senior member of the Galaxy, Sovereign, Intrepid, and Defiant Class Starship Development Projects.



Senior Consultant: Dr. Bernd Schneider, PhD.

Dr. Schneider is the Dean of the School of Astronautics at Annapoilis. He is considered an expert of Vulcan and other alien spacecraft and has written numerous articles for PPI.



Support Staff: Doctor Graham Kennedy A senior analyst with the Daystrom Technical Institute, Doctor

Kennedy provided technical data for this publication.

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Definition & Conception

Team Kempo is the designation for the Advanced Starship Design Bureau's Research and Development Testing Group, which is assigned to the Utopia Planitia Fleet Yards.

When he was named Chairman of the ASDB, then Rear Admiral Chris Wallace chose the first Galaxy (II) Class Large Exploratory Cruiser, the U.S.S. Bright Star (CKE 71875) to serve as the Test-Bed Vessel of the ASDB. The Galaxy (II) Class was the most advanced starship class in existence at the time, and the sheer size and volume makes it a good platform for testing new propulsion, computer, and tactical systems. In point of fact, the Galaxy (II) / Bright Star was the first installation of the LF-41B and LF-46 engines, Type XII phaser, and the M-16 Bio-Neural Gel Pack Isolinear III computer system.

As opposed to using the specialized prototype test crew (Cathedral Unit), the original test crew for the *Bright Star* were selected from various personnel who were chosen for their particular skills and experience aboard *Galaxy* and *Nebula* class starships. This was due to the significant changes that had been incorporated into the *Galaxy (II)* class as well as Admiral Wallace's desire to train an R&D testing crew who would also serve as the ship's Command Crew. It was thus composed of some of Starfleet's best officers in each discipline, and all are considered experts in their respective fields. Of *Bright Star*'s original Command Crew, five were members of the Federation Kempo Team for 2370, and they therefore chose "Team Kempo" as their

codename.

The Bright Star remains the primary "testbed" ship for the ASDB, and most of the new technologies developed for use within the Star Fleet are tested first on this vessel. In 2372, the Bright Star was joined by the U.S.S. Werner von Braun (CKE 72069), which was designated as ASDB's Engineering Testbed vessel to test advanced and theoretical propulsion systems and technologies along with Bright Star.

TEAM KEMPO





TEAM KEMPO • STARSHIP U.S.S. BRIGHT STAR LAUNCH CREW (2370)

AUTHOR'S NOTES

Welcome to the Second Edition of <u>Ships of the Star Fleet: 2377-78</u>. This project was first started in 1999 as a resource for fans on the ships of the Next Generation / Deep Space Nine / Voyager era. In 2003, I decided to do a major update and added some more of the "canon" ships, as additional information is available for them.

Since 1997, I have been publishing a journal titled <u>Dockyard Review</u>, which has showcased ships from 2290-2380. Being a fan of Mastercom Data Center's <u>Ships of the Star Fleet: 2290-91</u>, I decided to do something similar and chose 2377-78 for my first volume since that is the "current" *Star Trek* timeline for many of us.

As you can tell, I have not attempted (at least at this time) to include all the ships known to exist in the *Star Trek* universe of the late 2300's. This is primarily because when I first started, most of these vessels are little more than a class name, ship name, and NCC number. Therefore, I have insufficient information on them to really create an entry for them. Here in the United States I did not get the excellent <u>Star Trek Fact Files</u> which showcase so many of these designs (like the *Freedom* and *Apollo*, for example). Instead, I decided to settle on the more "popular" ones, at least within some fan circles. However, that does not mean what you see here is all that there will ever be. This is the third edition of this resource and I hope to continue revising it in the future. You will also notice there are very few "fan" designs. In general, those designs are showcased in <u>Starfleet Prototype</u> and <u>Dockyard Review</u>. Fortunately, <u>Star Trek: The Magazine</u> provided me with much of the data found in the <u>Fact Files</u>, as well as people starting to create CG artwork of some of the "missing" classes like the *Niagara*, *Freedom*, and *Challenger*, which allowed me to add them into the 2003 update.

I know that there were probably hundreds of vessels of the *Steamrunner*, *New Orleans*, *Saber*, and other classes. However, I did not want to fill the book with pages of names, so I limited the entries to a single page. For naming conventions, I started first with "canon" names and NCC numbers (those seen or referenced on screen). Next, I went with studio models and other printed sources from Paramount (like the Encyclopedia). Next, I choose names and NCC numbers from active chapters of STARFLEET: The International Star Trek Association (whom the publisher's

happen to belong to) that happened to be of that class. For the Freedom Class I used the listing from the Trekmania site (www.trekmania.net). The rest...I made up. *grin*

A(nother) note about Registry numbers. I subscribe to the theory that registry numbers are assigned sequentially, with higher-numbered vessels (in general) being constructed after lowernumbered ones. This really threw a wrench in things, since it looks like almost *every* ship class known predates the *Galaxy*, which we know did not enter service until 2357. However, I asked myself what if the *Galaxy* class was not a revolutionary design, but instead was based on an established design lineage? Perhaps the *New Orleans* was the revolutionary design, and the *Galaxy* and *Nebula* took their cues from her? Also, we know up until 2344 that relations with the Klingons had become stormy (if the *Enterprise* C had not been at Nerandra III, there would have eventually been war as "Yesterday's Enterprise" showed us) so very powerful vessels like the *Akira* might have been developed in response to the threat of war. When this threat evaporated, peaceful explorers like the *Galaxy* class could be built. I plotted out all the construction dates from the first edition and found they made no sense. So I spent three days re-doing them all. From 2364 onwards, it gets dicey, but I did the best I could do. :-)

The information contained within this volume is purely the conjecture of myself and is not meant to be deemed official or "canon" in any way. I have, where possible, used official Paramount sources for information. Where that has failed, I have gone to the web and other books. I am indebted to Rick Sternbach, Michael and Denise Okuda, and the rest of the Star Trek Art Department folks for providing information. Thanks also go to Alex Jaegar at ILM for his data on the Akira class battlecruiser and Alex Rosenzweig for providing a listing of many of the names and NCC numbers included herein. I'd also like to double (as opposed to single) out Graham Kennedy's Daystrom Technical Institute (http://www.ditl.org) and Bernd Schneider's Ex Astris Scientia (http://www.ex-astris-scientia.org) pages for the helpful technical information they provided. And a final *big* thank you to Mateen Greenway (http://mateengreenway.simplen et.com), Peter Savin and the gang at Scifi-Art.com (http://www.scifi-art.com) and the talented folks who contribute to SciFi-Meshes.com (http://www.scifi-meshes.com) for providing the high-quality graphics seen throughout this book.

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STARSHIP ART CREDITS - VOLUME ONE

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STARSHIP ART CREDITS - VOLUME TWO

THE ENTENTE CLASS DREADNOUGHT USS ENTENTE (DN 73280) ENTERS AN UNCHARTED STAR SYSTEM Eric Peterson (http://www.wolf359a-anet-stl.com) and GEO W. PROCTOR THE ENTENTE CLASS DREADNOUGHT USS MIR (DN 73281) AND THE NEBULA CLASS CRUISER USS ULYSSES (CL 66808) ON JOINT PATROL NEAR THE BREEN / FEDERATION BORDER Eric Peterson (http://www.wolf359a-anet-stl.com) THE COMMAND SHIP USS WHITEHALL (CO 75100) SETS COURSE TO TAKE COMMAND OF THE FLEET AT CHIN'TOKA Ralph (http://www.scfi-meshes.com) THE USS MAGNY-COURS (FR 65718) AND A BORG CUBE DURING THE SECOND BATTLE FOR EARTH Tom Bijl (http://www.scifi-art.com) THE NEW ORLEANS CLASS FRIGATE USS ARLEIGH BURKE (FR 57291) EXPLORING A NEW NEBULA Tom Bijl (http://www.scifi-art.com) A PAINTING OF THE NORWAY CLASS FRIGATE USS BUDAPEST (FR 64923) (STAR TREK ART DEPARTMENT) THE SULLIVANS CLASS TACTICAL FRIGATE Starship USS O'Banon (http://seatonmarine.tripod.com/index2.htm) THE FREEDOM CLASS STARSHIP The Red Admiral (http://www.trekmania.net/) THE STEAMRUNNER CLASS HEAVY DESTROYER USS RAINIER (DH 53278) IS BACKLIT BY A PULSAR Cyrille Lefevre and Mojoman (http://www.scifi-art.com) A DRAMTIC SHOT OF THE USS KILAMANJARO (DD 60045) CRASH-LANDING AFTER AN ENGAGEMENT WITH DOMINION FORCES Vaaceman (http://www.scifi-art.com)

STARSHIP ART CREDITS - VOLUME THREE

THE CHEYENNE CLASS SUPERSCOUTS USS CHEYENNE (SS 50000), APACHE (SS 51821), MOHICAN (SS 66679), AND CHEROKEE (SS 62292) PASS IN REVIEW DURING A STARFLEET SHOW Tom Bijl (http://www.scifi-art.com) THE CHEYENNE CLASS SUPERSCOUT USS BLACK HAWK (SS 50495) AND THE AKIRA CLASS BATTLECRUISER USS LAPUTA (CG 64552) ON JOINT MANUEVERS Tom Bijl, Cyrille Lefevre, Peter Savin and Mike Wright (http://www.scifi-art.com) THE USS KATANA ENGAGES A JEM'HADAR ATTACK SHIP DURING "OPERATION RETURN" Scifi-art.com (http://www.scifi-art.com) THE USS SCLAYMORE (ST 63250) ON DEFENSIVE PATROL Andrew Hodges (starfleet2000@hotmail.com) THE NOVA CLASS SURVEYOR NOVA (ST 72380) AT WARP Mike Wright (http://www.scifi-art.com) THE NOVA CLASS SURVEYOR PATHFINDER (ST 82135) IN ORBIT AROUND THE CLASS N PLANET PACFICIA Mike Wright (http://www.scifi-art.com) THE DEFIANT CLASS ESCORT USS STARLORD (ET 74225) INVESTIGATES A WOLF-RYAT STAR Nico and C_Doc (http://www.scifi-meshes.com) THE USS STORMBRINGER (ET 74851) ON PATROL Pic-A-Card and Ed Giddings (http://picproductions.cjb.net)

STARSHIP ART CREDITS - VOLUME FOUR

ON FINAL Andy Poulastides, Ralph Schoberth, Sarod, and Kristen (http://www.scfi-meshes.com) GALAXY AND NEBULA CLASS STARSHIPS Tom Bijl (http://www.scifi-art.com) PROMETEHUS CLASS STARSHIPS / TASK FORCE 74 Unknown (http://www.scifi-art.com)

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