

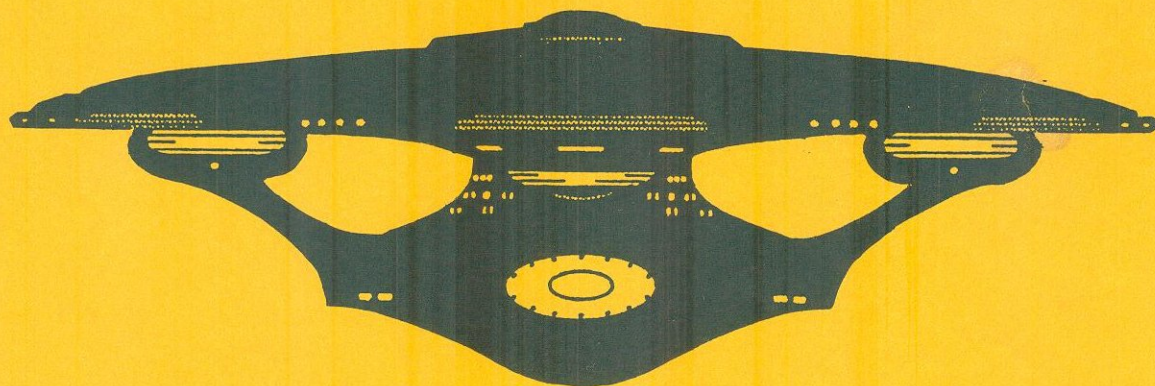
APRIL 1993



GALACTIC ENGINEERS
CONCORDANCE

LOGBOOK

SPECIAL EDITION



NUMBER 2

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CHIEF ADMINISTRATOR'S REPORT

Welcome, to the second Special Edition LOGBOOK. Many of you may remember our first special back in September of 1991, featuring the tremendous work of Andrew Downing. The five sheets of plans on the Ambassador Class U.S.S. POLARIS were an exceptional treat. I was pleased to be able to bring that issue to the Concordance, and personally felt it was a great achievement for the GEC. But then it occurred to me that it would be difficult to follow it up! However, Jeff Robb has made that task easy for me by providing us with this outstanding package on the U.S.S. VORIAH.

Jeff is a longtime member of the GEC. He has supplied numerous pieces of fine art and graphics for the LOGBOOK, most notably the Next Generation Corvette/Shuttlecraft from Volume 2 Number 3, and the Romulan L-85 Battlecruiser from Volume 3 Number 2. As a graphic arts student and Treknology aficionado its not too difficult to see why his work fits so well in the LOGBOOK. If you like this issue and would like to make any comments, feel free to write Jeff or me.

So even though this may yet make it even more difficult to follow with another Special Edition, I am pleased to present you with the U.S.S. VORIAH. Until Next at Avatar....WARP - SPEED - !

Roy J. Firestone, GEC Chief Administrator

Note: Special Edition Number One is still available for \$3.00, postpaid.....

FEDERATION DATABASE:

Data Update

THE VORIAH CLASS 15 BATTLESHIP

Report Dated Stardate 46277.9

Overview and History

04 The origin and service record of the *USS VORIAH* (NCC-30301) is as unique and exceptional as the ship itself. Initially drafted on Stardate 2/6805 (2322 AD) as a proposed successor to the *EXCELSIOR* line, the *VORIAH* has instead evolved into arguably the most powerful combat-ready starship ever fielded by Starfleet. Despite countless minor developmental delays, the multiple advance technologies that the *VORIAH* incorporates have since worked perfectly together, making the ship a prime example of efficiency. Ironically, these same technologies - and especially their application - are also the reason why the *VORIAH* has remained a single ship class for 28 years.

When the ships of the *EXCELSIOR* class were entering their fifth decade of service, a bevy of potential replacement starships were under consideration. However, none of these ships - including the less powerful *AMBASSADOR* and *VORIAH* prototypes - were yet capable of assuming the *EXCELSIOR*'s full mission capabilities, and the new ship projects were dismissed. The *VORIAH*, though, was kept in motion by a Terran-Andorian faction intent on turning it into a full-fledged battleship. 82% of the prototype *VORIAH* was therefore redesigned to its Version One specifications, incorporating unique hull and nacelle structures. What finally emerged was nothing less than the single most powerful and refined

starship yet. Assembled in a specialized shipyard near Andor, the *VORIAH* was subsequently commissioned into Starfleet as the NX-30301 on Stardate 2/8001 (2334 AD), in spite of its primarily offensive nature. Coincidentally, the *AMBASSADOR* class was itself in service as well, with one of its number already christened with the prolific *ENTERPRISE* name.

As intended, the *VORIAH* was designed and built to actively safeguard vital Federation interests either alone or alongside other starships, particularly in known hazardous areas. Passively, it provides a deterrent role and represents a readily available counterstrike capability whenever needed. In combat, the *VORIAH* is expected to defeat two Class 13 battlecruisers simultaneously. To this end, it is armed with the hardest hitting standard weaponry yet devised - the results of secretive, yet fully comprehensive, development programs. The FH-25 rapid pulse phasers - each with an emitter the size of an FH-15 bank - can deliver a full intensity shock out to 69% of its maximum range under certain adjustments. A total of thirteen emitters are placed in six banks across the primary hull; the upper forward bank on Deck 2 is strictly an auxiliary, whereas the other five banks along the perimeter of Deck 7 are the mains. The impressive simultaneous full-power discharge of the seven forward emitters has become one of the *VORIAH*'s signatures. With the Tancylar-3 fire

control system, any single phaser emitter can also vaporize an incoming enemy torpedo or other missile weapon, provided said weapon is over two seconds from impact. The FCS can also track a very large number of separate targets and direct up to thirteen independently vectored sequential phaser pulses at all of them. Extensive multiple filter networks serve to maintain phaser locks in hundreds of adverse conditions. Not to be outdone, the FP-18 photon torpedoes also boast of massive impact force, extensive range and accuracy, and an excellent arrangement. The torpedoes themselves are physically the largest ever carried on a starship and the first to successfully utilize a shaped-explosion ability, to which their "S" designation refers. Before launch, any of these photorps can be set to explode normally in a "sphere blast"; across a 60 degree arc, pre-set proximity "spread blast"; or focused entirely upon a 50m² "spot blast". When fired in concert with the phasers, the *VORIAH*'s torpedoes are capable of unprecedented levels of destruction. For this reason, treaty stipulations restrict all medium and heavy shaped-explosion torpedoes to the *VORIAH* class.

Traditionally, a true battleship is able to withstand heavy bombardments as well as it delivers them. The *VORIAH* employs several special approaches to shock absorption; the simplest of these is a vastly thickened superstructure. Internal trusses on this ship average 202 cm in thickness, and the ship's hull itself is 155 cm thick. Consequently, the numerous portholes seen across the lower hull - and most of the primary hull - are actually all sensor pallets and thruster ports, rather than windows. The few true viewports are mostly found in key panoramic locations, or adjacent to docking ports. This practice appropriately reduces the number of

potential rupture points aboard the ship. To safeguard against other ruptures, a dual layer FSV-A quinto-transducer is in effect, capable of deflecting the sphere-blast explosive force of two of the *VORIAH*'s own torpedoes without collapsing. These shields are also adapted to the ship's IDF system to provide improved reactive shock absorption for the crew. Relocating the main bridge to the core of Deck 5 defies Starfleet tradition, but removes the command crew from an obvious danger zone. And, in dire situations, the ship can utilize the power of its auxilliary battery network, which can (unless damaged) continually provide almost two-thirds of full impulse power. Apparently, these design qualities will allow the *VORIAH* enough endurance to outlast conventional opponents, or remain spaceworthy in case of disaster.

Of considerable note is the unique design of the engine nacelles and the specially modified FTWA-1v5 transwarp drives they contain. The nacelles are shaped to deliver maximum force output across a wide and low field to encompass the ship's particular profile. In fact, the entire warp drive system - from the reactant injectors to the aftmost tips of the nacelles - was customized from the beginning to exclusively suit the *VORIAH*, and is therefore not interchangeable with any starship. Nevertheless, the new shape permits four interreactive plasma distribution chambers per engine and channel augmentation of the dorsal projection strakes for ease in speed transitions. Internally, each engine receives power from not one, but two large-capacity transfer conduits, which both incorporate ram-flow accelerators for full-time instantaneous response. Through precise warp envelope manipulations and the extreme sturdiness of the entire hull, the *VORIAH*

is able to sustain extreme velocities well over Warp 14. With such capabilities, the new battleship eclipsed many previous speed records on its second voyage, and held the absolute records in four categories for the next nineteen years.

Aside from that highlight, the *VORIAH*'s service record was largely routine. In fact, the ship held its NX status for three years during its rather extensive shakedowns. In simulated and live-weaponry battle tests, however, the *VORIAH* was exemplary, performing precisely as its designers intended. In one particular exercise, the new battleship was pitted against two Class 13 Threat vessels represented by expertly-crewed *CONSTELLATION* cruisers. Using its advantages in range, durability, and so-called "brute force", the *VORIAH* and its rookie crew eventually defeated their opponents, thus achieving one of its design objectives. Later, as a "prize" to the crew, those same *CONSTELLATION*s - slated to be scrapped anyway - were relieved of crew and used in *VORIAH*'s live-weaponry tests, which were unsurprisingly short.

Long after *VORIAH*'s redesignation as NCC-30301, the U.S.S. *ENTERPRISE* (NCC-1701C) sacrificed itself battling hostile Romulans at Narendra 3. Discussions regarding a successor *ENTERPRISE* were tabled, and the newer *VORIAH* was suggested. Officially, though, a *VORIAH* Class *ENTERPRISE* was dismissed due to its limited versatility, production difficulties, and aggressive stance. Ironically, this "aggressive stance" would have allowed a *VORIAH* class battleship, as repeatedly speculated, to have triumphed at Narendra 3 where the 1701C was overwhelmed. Furthermore, the *VORIAH* was the most technically advanced operational starship at the

time, as past *ENTERPRISE*s were; indeed, the *VORIAH*'s hull configuration strikingly resembles the classic *ENTERPRISE* lines. Despite these arguments, Starfleet Command decided to bestow one of the upcoming *GALAXY* class multipurpose ships with the *ENTERPRISE* name. With no demand for more *VORIAH*s - and no suitable shipyard to build them - the lone battleship spent the next decade as a showboat, denied even regular duty in the Cardassian War. Secretly, however, development was initiated on equipment and weaponry aimed at securing the *VORIAH*'s competitive edge among such newer vessels. Private shipyards at Andor and Sol 5 were contracted to assemble four brand new Version Two *VORIAH*s for Starfleet evaluation. An official order for a Version Two refit of the *VORIAH* itself led to the full authorization of the V.2 program, particularly after recent Romulan hostilities were made evident. Now, a grand total of 31 *VORIAH* class battleships are expected to enter fleet service by Stardate 47701, finally replacing the last of the *EXCELSIOR*s. Given the durability of the original *VORIAH*, it would seem the heyday of the class is yet to begin.



U.S.S. VORIAH
NCC-30301

THE VORIAH CLASS 15 BATTLESHIP

ADDENDA

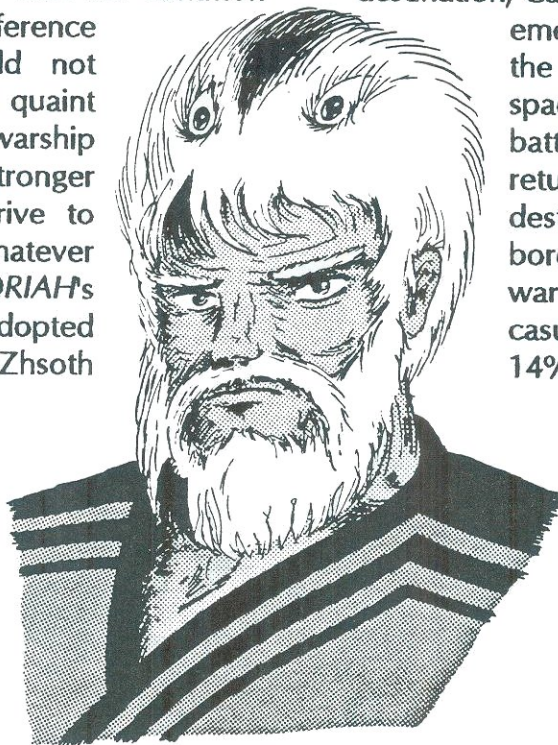
Dyarrin Zhsoth, so far, is the VORIAH's most illustrious captain. The gruff Andorian took command of the new battleship with some very clear ideas regarding its management - including his insistence that the ship be referred to in the masculine sense, if not in its true genderless proforms. Continually annoyed with the common Terran feminine reference to ships, he would not tolerate such quaint endearment on a warship with a distinctly stronger build and innate drive to dominate. For whatever reasons, the VORIAH's crews have since adopted the notion. Captain Zhsoth commanded the VORIAH from 2334 to 2341 A.D., and again from 2350 to 2361. The Terran Captain Sven Gawain mastered the ship in the interim, and Captain Avargo Santanos - Zhsoth's first officer for five years - now commands the refit V.2 U.S.S. VORIAH.

In the Cardassian War, the new battleship (in its V.1 configuration) was only once assigned front line duty, and then as part of a UFP strategic convoy

escort. Its single exposure to true combat, though, was all it took to make history. A fast-attack, 17 ship Cardassian ambush struck the convoy, inflicting 23% losses on cargo ships and 41% on escorts. In return, UFP ships downed nine enemies and damaged two. As soon as the convoy was safe at its destination, Captain Zhsoth acted under emergency orders and took the VORIAH into Cardassian space. Several days later, the battleship and his crew returned to report destruction of four enemy border outposts and eleven warships, sustaining only 5% casualties and damage to 14% of the ship in the process.

This operation involved the greatest recorded release of firepower by a single Federation starship in three decades. This, and other ramifications of VORIAH's "solo rampage", are among the factors that now prohibit an easy truce

with the Cardassians, who often refer to the ship as the "black butcher". Soon after VORIAH's debriefing, his already sinister reputation nearly reached infamy. (Continued)



Captain Dyarrin Zhsoth

ADDENDA, Continued

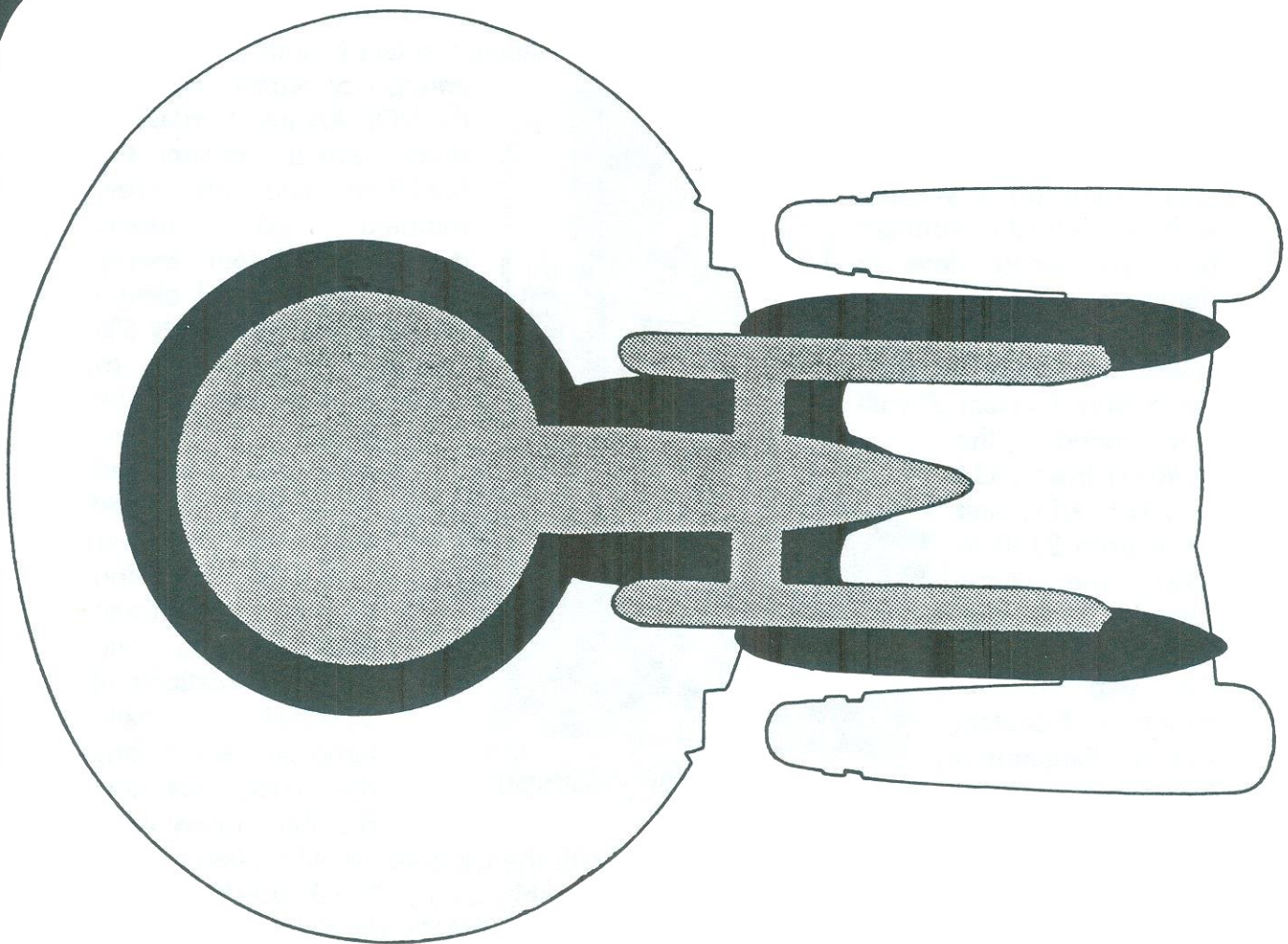
To the satisfaction of his captains, the *VORIAH*'s main control system was always intended to - and still does - speak in a masculine voice.

The main bridge of all *VORIAH* class ships is surprisingly small, with only six crew stations. Two tiers of three bodygrip seats face the main screen, with additional displays encircling the bridge. The six crewmembers consist of officers for communications, helm/engineering, navigation/scanning, defensive systems, offensive systems, and the captain, whose personal

controls include grip-style selectors with actual primary firing triggers for the ship's massive weaponry.

VORIAH's fitting namesake was found in an obscure 22nd century Terran poetic reference regarding an apocalyptic event. To further add to the ship's forboding mystique, the entire vessel was chromitized in black upon his tenth anniversary in 2344. Unlike adding a colored layer of thermacoat as in the past, the move adds no mass to the ship. Most Version Two *VORIAH*s will sport darkened hulls as well, thus becoming Starfleet's "black battleships". Exceptions at this time include (cont'd)

08



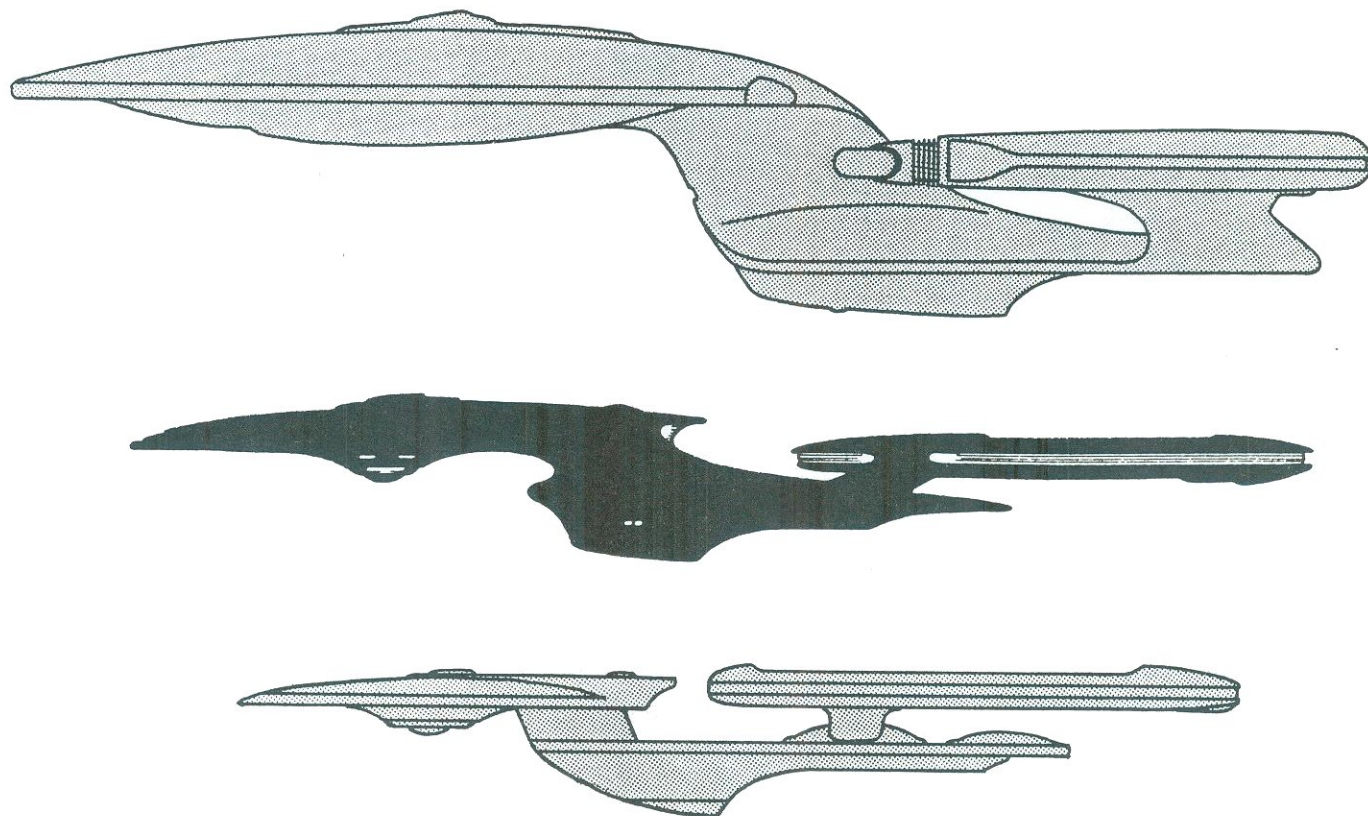
GALAXY, VORIAH and EXCELSIOR Class
Plan Comparison, Same Scale

VERMILLION, now seen in its namesake color; VIBRANCE, in electroluminescent white; and FIREBRAND, smoothly blended in warm hues.

Version Two VORIAHs are externally almost identical to the original V.1; even the new engines fit the old nacelles with minor adaptations. Visible differences include phaser track emplacements (which replace the individual banked emitters of the V.1), rearranged "window" patterns, and realigned hull plating seams.

A large portion of a VORIAH's crew is composed of security and damage control personnel, both of

whom are known for clever methodology and outstanding effectiveness. Indeed, the DC team of the U. S. S. VORIAH was rated highest in the Fleet following their performance in the "solo rampage". Some amongst the teams would state that the battleships themselves possess certain "secrets" that make their jobs much easier. The capabilities of these crews, as well as the heavily armed and armored nature of these special vessels, makes ships of the VORIAH class perhaps the most self-secure starships of the Fleet; an ideal choice for the transportation of very important persons or cargo.



GALAXY, VORIAH and EXCELSIOR Class
Profile Comparison, Same Scale

FEDERATION UPDATE :

Fleet Database :

THE VORIAH CLASS 15 BATTLESHIP

Specifications

	Version One	Version Two
Service Debut	2/8001	3/0802
NCC Series	30301+	
Number Built	1	26
Number Refit	0	1
Superstructure Rating	83	101
Damage Chart	C	C
Size		
Length-Width-Height	550-246-73M	550-246-73M
Tonnage	335,580MT	337,850MT
Cargo		
Units	600 SCU	550 SCU
Capacity	30,000MT	27,500MT
Decks	21	21
Computer	M-11	M-12
Transporters		
Standard 6	10	—
Standard 10	—	18
Combat 20	6	—
Large Cargo	3	3
Small Cargo	3	3
Standard Operational Crew	351	357
Supplemental Crew/Passengers	100	150
Shuttlecraft	16 S-19C2 Armored	16 S-19C3 Armored
Total Power	168	206
Movement Point Ratio	6/1	5/1
Warp Engine Type	FTWA-1v5	FUWA-1v2
Number, Power Each	2,60	2,78
Max. Safe Cruising Speed	Warp 15	Warp 9.91 (15)
Emergency Speed	Warp 16	Warp 9.93 (17)
Impulse Engine Type	FIK-3	FIM-1
Power	48	50
Phaser Type	FH-25	FH-29
Number	11 in 5 Banks	5 Tracks (11)
Firing Arcs	2a/p, 2f/p, 3f, 2f/s, 2a/s	—
Firing Chart	W-2	Y-2

SPECIFICATIONS, Continued

	Version One	Version Two
Phasers, continued		
Maximum Power	15 Per Emitter	60 Per Track
Damage Modifiers:		
+3	(1-16)	(1-21)
+2	(17-28)	(22-38)
+1	(29-40)	(39-48)
Photon Torpedo Type	FP-18-S	FP-18-S
Number	6 In 6 Tubes	12 In 6 Tubes
Firing Arcs	2f/p, 2f/s, 2a	4f/p, 4f/s, 4a
Firing Chart	S-2	S-2
Power to arm	1 Per Tube	1 Per Tube
Damage	30	30
Shipwide Arsenal	240	300
Shield Type	FSV-A	FSX-a
Point Ratio, Layers	1/5, 2	1/6, 2
Power Per Layer, Net	30, 60	36, 72
Combat Efficiency		
D	308.1	389.3
WDF	297.8	428.4

CLASS LISTINGV.1 Operational 2/8001; V.2 Operational 3/1110 (43309.6)

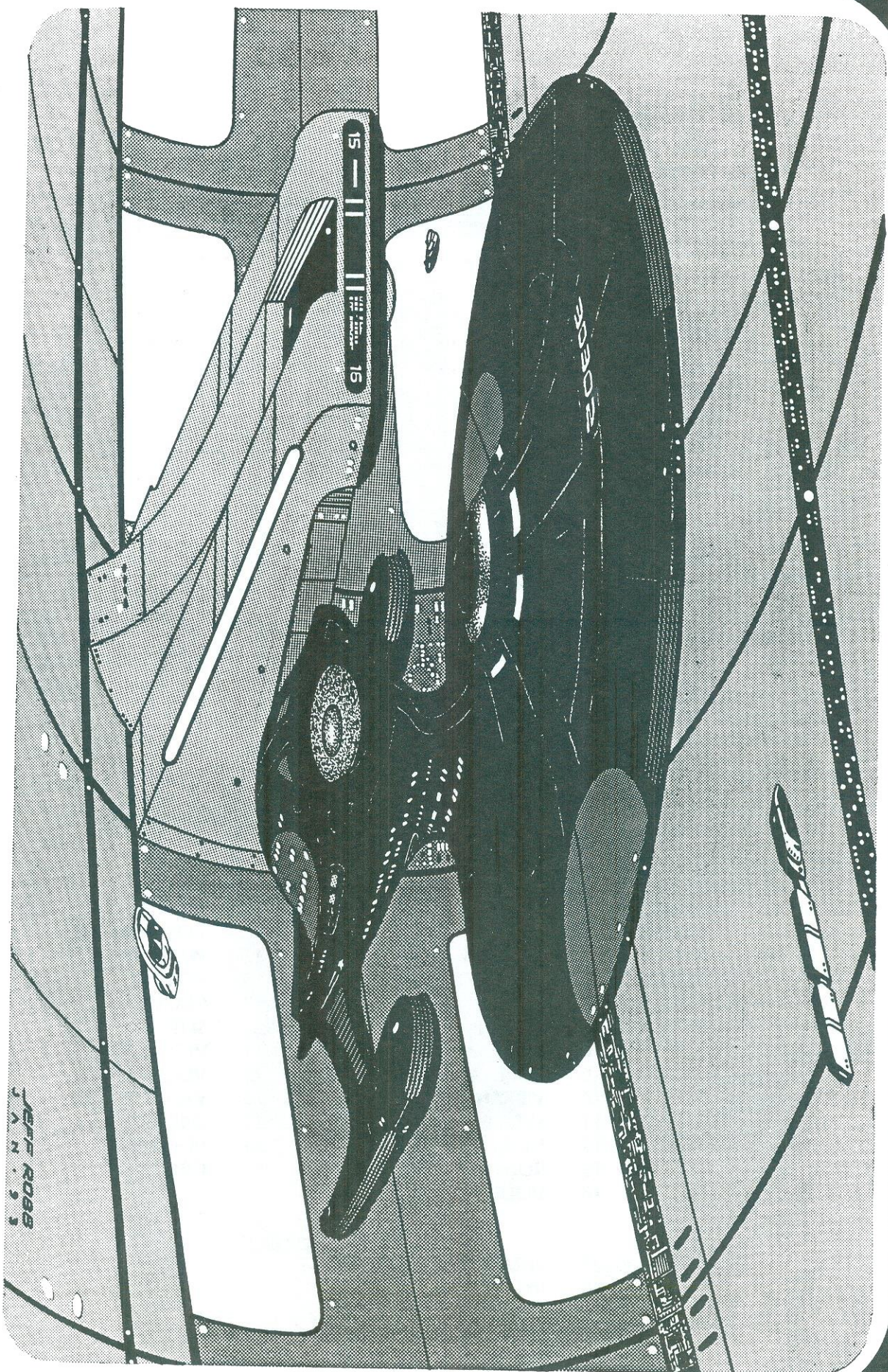
NCC 30301 VORIAH

V.2s In Service As Of 46277.9

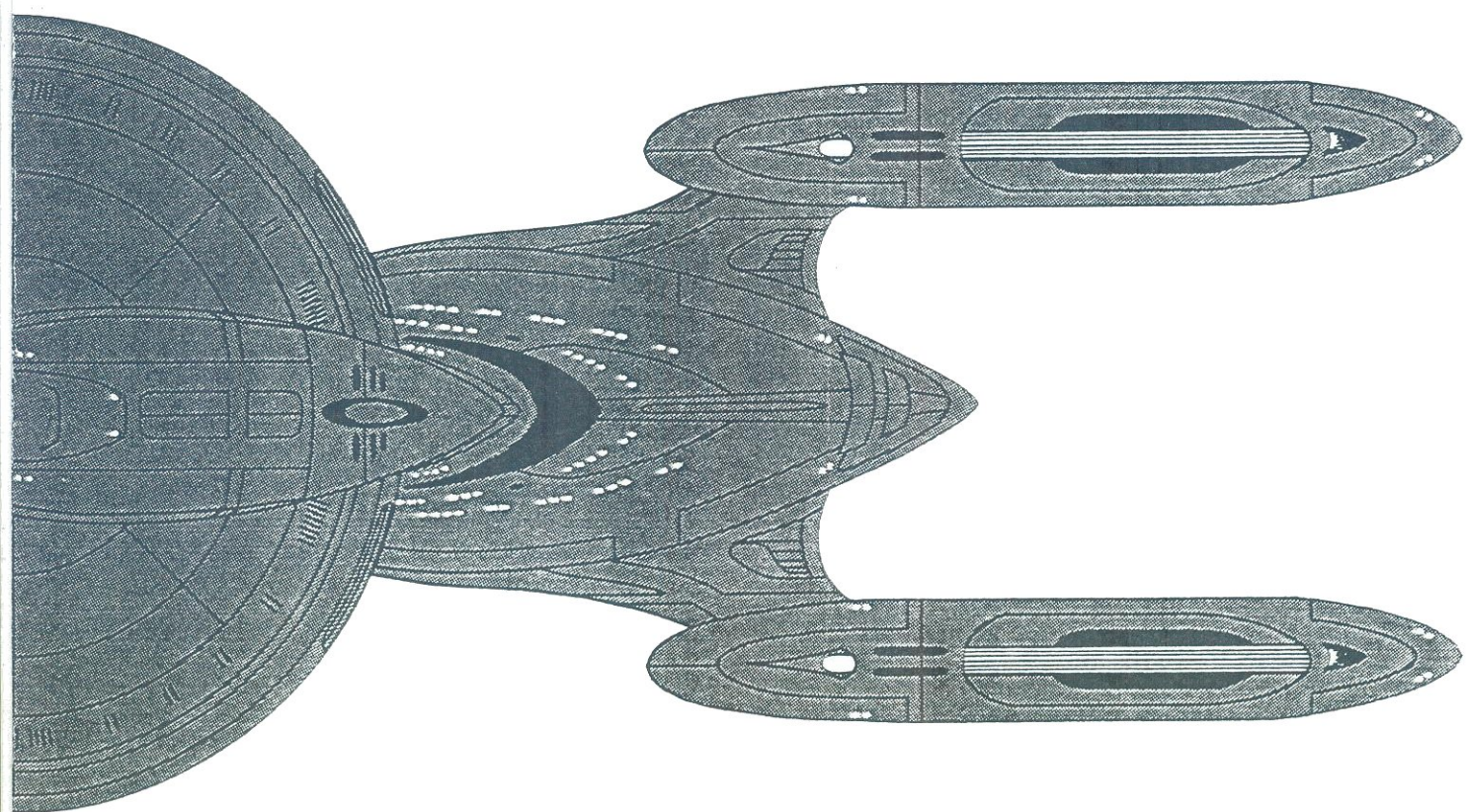
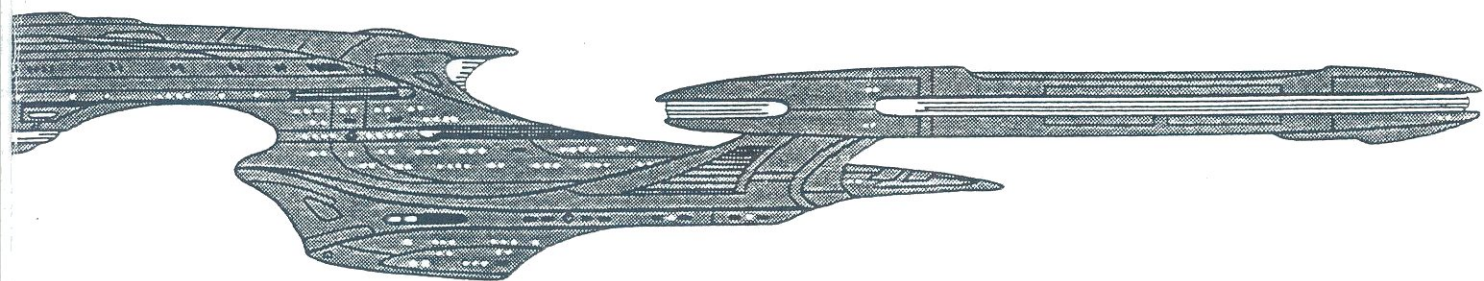
NCC 30302	SHIVA	NCC 30315	VIKING
3	VISHNU	16	VOX HUMANA
4	BRAHMA	17	PHAROAH
5	MUSASHI	18	VORPAL
6	VIPER	19	STAMINAR
7	KENSHIRO	30320	SPITFIRE
8	KACHAARA	21	VIGOROUS
9	EMBLAZON	22	VOLANT
30310	VIBRANCE	23	VALLEY FORGE
11	VERMILLION	24	DRETHAL
12	FIREBRAND	25	VULPINE
13	RULAMI	26	GROWLER
14	VOLCANO		

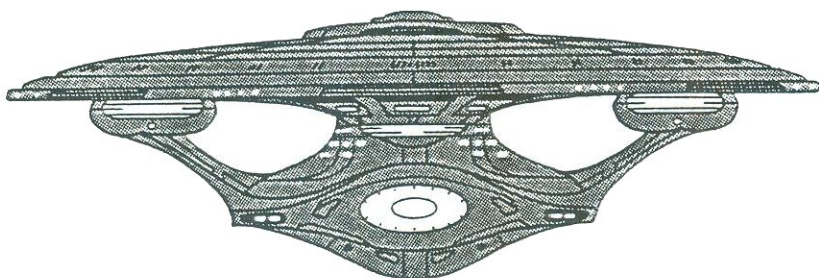
V.2s Under Construction

NCC 30327	WRAITH
28	INTEGRA
29	UBERKRIEGER
30330	VINCENNES
31	VENTURA



U.S.S. SHIVA in Terran Spacedock, Stardate 4410.7, after arriving a scant minute behind the self-destruction of the invading Borg ship. Six minutes behind SHIVA was his brother ship MUSASHI, both arriving from near-systems stations. No VORJAHS were near enough to Wolf 359 to join the battle; it remains unknown if even their combat prowess would have sufficed to halt the Borg's advance. Having come so close to such an attempt, SHIVA captain Noah Kahsmar personally regrets the lost opportunity.



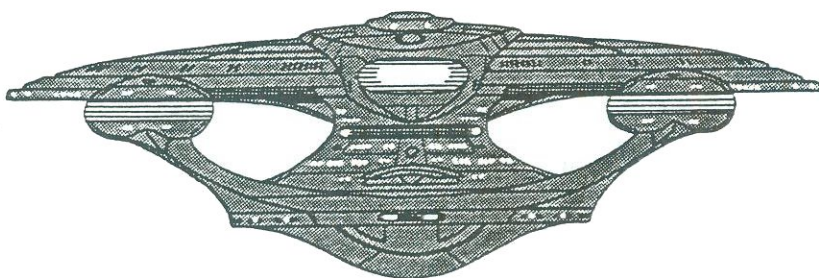


fore

portside

aft

dorsal



VORIAH CLASS 15 BATTLESHIP version two specifications

Prime Contractor: Undisclosed
Construction Yards: Andor SE18, Jupiter SI2

Tonnage, operational 337,850 metric tons

	Overall	Nacelle
Length	550 meters	240 meters
Beam	246 "	37 "
Draft	73 "	23 "

Officers, operational	107
Crew, operational	250

Standardized docking ports	7
----------------------------	---

Cruising velocity	Warp 9.91 (3375c)
Maximum velocity	Warp 9.93 (4910c)

Phasers	6 multibeam tracks (1 aux)
Photon torpedoes	6 double-warhead tubes