FIRST REVISED EDITION PRIME ONE TIMELINE (GRAHAM/MANDEL)



Federation Spaceflight Chronology

TERRAN ORIENTATION

TERRANGLO LANGUAGE EDITION



Original texts and manuscript concept copyright © 2007 by Richard E. Mandel

STAR TREK, its on-screen derivatives, and all associated materials are the property of Paramount Pictures Corporation. Multiple references in this document are given under the terms of fair use with regard to international copyright and trademark law. This is a scholarly reference work intended to explain the background and historical aspects of *STAR TREK* and its spacecraft technology and is not sponsored, approved, or authorized by Paramount Pictures and its affiliated licensees.

All visual materials included herein is protected by either implied or statutory copyright and are reproduced either with the permission of the copyright holder or under the terms of fair use as defined under current international copyright law.

All visual materials used in this work without clearance were obtained from public sources through public means and were believed to be in the public domain or available for inclusion via the fair use doctrine at the time of printing.

Cover art courtesy of the Filefront Star Trek: Armada II archives

This work is dedicated to Geoffery Mandel, who started it for all of us.

Memory Alpha and SFHQ/Mastercom cataloging data: UFP/SFD DTA HR:217622

PART ELEVEN

2251-2275: THE LINEAR WARP REVOLUTION OVERVIEW

TIMELINE OF EVENTS

STARFLEET STARSHIP CLASSES THE DREADNOUGHT PROGRAM (PART 1) *CORONADO* AND *ORI SKANY* CLASS CARRIERS *DERF* CLASS TENDER *RANGER* CLASS SCOUT *ENTERPRI SE* AND *TI KOPAI* CLASS CRUI SERS *GAGARI N* CLASS CORVETTE *BALSON* AND *CI TADEL* CLASS CRUI SERS *BELKNAP* CLASS STRIKE CRUI SER *ABBE* CLASS TORPEDO DESTROYER THE *AVENGER* AND *MI RANDA* PROGRAMS

SPECIAL SECTION: LINEAR WARP REFITS

OTHER FEDERATION STARSHIP CLASSES HOPI CLASS RESEARCH VESSEL ANTARES CLASS FREIGHTER LOTUS FLOWER CLASS FREIGHTER ALTAIR CLASS MERCHANTMAN HUNTINGTON CLASS DEUTERIUM TANKER WHORFIN CLASS TRANSPORT

ALIEN ENCOUNTERS THE ONLY SHIP IN THE QUADRANT THE KZINTI INCURSION OF 2272

TERRAN EXPLORATIONS THE DELTA TRIANGLE

HI STORICAL ARTICLES THE ROMULANS ARE BACK MEMORIAL HELD FOR *EXCALIBUR* NEW KLINGON CIVIL WAR RAGING ROMULAN CAPTURED BY STARFLEET TERRA TEN COLONY RELOCATED THE *WANDERER* WANDERS NO MORE *ENTERPRISE* SAVES EARTH *HORNET* HELPS LIBERATE TELLAR

ACKNOWLEDGEMENTS



The uprated heavy cruiser *Enterprise* (NCC-1701)



The uprated destroyer Larson (NCC-4300)



The uprated dreadnought *Star League* (NCC-2101)



2251-2275: The Linear Warp Revolution

I remember the first time I saw the *Enterprise* after she was rebuilt. We were rushed, we had a deadline, Vejur was on its way to Earth. Still, I have to hand it to Mr. Scott – Commander Scott, pardon – for taking one of those precious minutes to show her off. It was supposed to be a pre-launch inspection, but it was more than that. I hadn't yet seen the rebuilt Enterprise, except once before, when she was halfway through the process. I knew what she was going to look like based on that and the construction profiles. Still, to see her for real I just stood there with my mouth open as Mr. Scott made that single, slow pass around her, giving me a good look before we finally docked. She was so ... glorious. That wonderful old girl of mine, reborn into a beautiful young woman, sparkling in shining white under those drydock floodlights. It literally took my breath away. It's a sight I'll never forget for the rest of my life.

> James Tiberius Kirk former Starfleet starship commander (2229-2293)

The Class I Era officially came to its end in 2255 with the *Federation* class dreadnought. Even as the most powerful starship of its time was preparing to join the fleet, though, yet another revolution in starship design was already on the way. It was one that would remake the Class I fleet in its own image, outstripping even the mighty dreadnought's firepower and warp capability within twelve short years.

The use of trititanium in starship construction had removed the lone remaining bottleneck to starship construction. That had been the ability of the ship's frame to withstand stresses higher than the semimythical Warp 4 barrier. Once that bottleneck was removed, then the onus had passed back to warp engine design. The only things now limiting a starship were the power, speed, and range of its warp Circumferential warp engines, first engines. introduced in the early 2150s, had been the standby of Starfleet for years. They were powerful and fairly easy to both operate and maintain given proper starship design and control systems. Even so, a century later it was becoming evident that circumferential warp technology was fast approaching its limits. A plateau had been reached of a sustained emergency speed of Warp 8 for standard dual-nacelle starship designs (Warp 6 for single-nacelle and Warp 10 for triple-nacelle designs). To the common man this was of little concern; however, it was of considerable worry to Starfleet. Experiments with captured Klingon warp engine technology had shown that their S-Graph systems were inherently more flexible and easier to upgrade than their Federation counterparts. Klingon designs permitted change-outs of major components as improved technology came along. This process might take only a few weeks to a

few months. Common Starfleet practice was to change out the entire engine and its associated control programs. This required a space dock or freespace reassembly area and was a process that took months to complete. If the Klingons made any major advances in their warp technology within the decade (and all intelligence pointed to them doing just that) then their newly refitted starships would probably outclass their current Starfleet counterparts. To prevent this, Starfleet would have to adopt a new warp engine design and do it *now*, while they still had time to put a fleet-wide upgrade plan into effect.



The year 2262 saw a new kind of warp engine become available to Starfleet. It had been a joint development project of Cochrane Warp Dynamics and Leeding Industries designed to represent the next generation in warp technology. Development had begun in the late 2250s on the LN-40 linear warp engine. This was designed as a self-contained unit that could be fitted onto existing Class I starships. Its very appearance was markedly different from any of its precursors, betraying its revolutionary design. The old spooled-coil system of circumferential warp systems, which had reached their zenith with the legendary PB-series, gave way to the linear feed plasma systems of Leeding's new designs. Starfleet was understandably excited at the promise that this new technology held, which had the potential to double the power of its existing fleet of starships with a minimum of effort. To that end three starships, each representing one of the major base configurations of the Class I fleet, were withdrawn from service and turned over to Leeding for LN-40 testing and conversion. These were the heavy cruiser Endeavour (NCC-1716), representing the base Jeffries/Joseph design: the scout *Monoceros* (NCC-601), representing single-nacelled designs, and the transport *Keppler* (NCC-3816), representing both its own class and most of the frigate fleet as well.

The results of extensive testing conducted in 2262 with these three starships produced mixed results. Design limitations inherent with the LN-40 meant that it had to be fitted in pairs. Problems with adapting it to the single-nacelled Monceros required a redesign, with the paired LN-40s mounted on top of its hull in a configuration resembling a Kearsarge class light cruiser. The LN-40s themselves also did not prove to be as much of a revolution as Leeding had first promised. True, they were capable of delivering superwarp speeds in excess of warp factor 8 for extended durations. Unfortunately, they had the highest dilithium decay rate of any modern warp engine Starfleet had ever tested. Running a LN-40 equipped starship at superwarp speed would literally burn out its engines in a manner of minutes. This was a major factor that would have to be overcome if the promise that linear warp technology held were to be realized. The Procurements Division rejected LN-40 technology on this basis. Endeavour, Monoceros, and Keppler would be the only starships ever fitted with these engines, which they retained when they returned to fleet service. The LN-40 project was officially abandoned; however, the drive to produce a viable linear warp engine was not.

It took several more years and two more design iterations before Leeding was ready to submit a new linear warp engine to Starfleet for field testing. Their final solution to the LN-40's decay issues was quite radical; however, it worked. It removed the dilithium converter assemblies from the engines and made it a single, separate assembly within the hull of the starship itself. A massive matter/antimatter intermix chamber fed the converted energy into the warp enaine(s). This system was also linked into a redesigned impulse engine system, whereby each system could tap off of the other for power. The obvious advantage to this was that the impulse deck could be used to "cold start" the warp engines, a feature that had never been available on a Class I starship until now. Likewise, power from the warp drive could be used to jump-start the impulse deck. Both systems now worked together instead of

separately, and both could be operated from each other's control systems. Making the impulse deck part of the warp power assembly also had an added benefit, one that was vital to Leeding's new warp engine design. In the past, impulse power was not normally used during faster-than-light travel. The impulse engines were allowed to idle or power auxiliary systems in order to keep their reactors running. This was necessary but ultimately wasteful. Leeding's new design used this excess impulse power to reinforce the flux capacitors in the new unified dilithium converter assembly. This prevented the rapid dilithium decay of the LN-40 design by repeatedly reversing the polarity of the neutron flow, setting up a constant interference field to prevent decay from ever starting in the first place. It was an engineering kludge, admittedly, but it worked, and that was all that mattered. The final form of this design was termed the Leeding LN-64 linear warp engine. It would go on to become the namesake of a whole new generation of Federation starships.



Leeding got the chance to try out its new LN-64 with Starfleet's new strike cruiser program of the late 2260s. This was nothing more than a budget-sized version of the venerable *Constitution* class starship, falling halfway between a heavy and light cruiser in terms of tonnage and versatility. By default Cochrane Warp Dynamics, Leeding's parent company, already had the warp engine contract for this new class of starship, and a prototype was scheduled for construction based on the partially completed (but cancelled) transport/tug *Swift*. Leeding's engineers had the LN-64 ready in time for use with the strike cruiser prototype program. The Starship Design Bureau was leerv of the proposal at first for two reasons. First, it had not forgotten the unfulfilled promise of the LN-40 program. Second, it balked at the amount of reconstruction that would be required to convert the prototype, now named Decatur, for the use of LN-64 technology. In the end it was overruled by no less than a figure than Fleet Admiral Heihachiro Nogura, commander-in-chief of Starfleet.

Admiral Nogura was worried about reports that the Klingon Empire was not only modernizing its fleet but also building new starship classes that were better than the best Starfleet had to offer. Only linear warp technology offered the promise of matching (and ultimately besting) this new Klingon building effort. Admiral Nogura ordered that the *Decatur* be built using Leeding's new LN-64 linear warp engines and support systems. The rest, as they say, is history. Decatur showed it would work, the rebuilt heavy cruiser *Enterprise* validated the technology beyond all doubt during the Vejur Crisis of 2267, and linear warp technology went on to become the lynchpin in Starfleet's new conversion and building program. It is a technology that has proven itself over the past two decades and still continues strong today.



Despite its growing pains, despite its costs, and despite the shortcuts that had to be taken along the way, Starfleet's linear warp program of the 2270s was without doubt a great success. This allowed it to keep its fleet on a par with the new-build classes of the Klingons and Romulans at considerably less cost than it would have taken to build a whole new fleet. It ensured that these newly upgraded starships would remain viable fleet assets until a new generation came along to replace them. Finally, it gave Starfleet new prestige among the masses as a defensive force fully capable of delivering on its commitments. Starfleet had reached what was to be the zenith of its popularity since the founding of the Federation. The era that followed, though, the two decades between that zenith and today, would see Starfleet fall to an almost equal low in a web of politics and conspiracy that was, to be honest, largely of its own doing.

MAJOR EVENTS

2251-2275



2251

- Now that the Four Years War is over, Star Fleet begins to downsize again. Large quantities of older starships will be decommissioned in the next two decades, with the *Baton Rouge* generation being the last to go. For every two older ships that are decommissioned, though, one new Class I starship replaces them.
- Phaser and photon torpedo backfits begin for all starships that will remain in service. These will be performed on a ship-to-ship basis given yard space and duty schedule. This backfit will take almost a decade to complete.
- Plans are made to remove the bowling alleys from older Class I starships so fitted and replace them with extended shuttlecraft facilities. Star Fleet needs the extra room for a wide range of new types of shuttlecraft that will be entering service in the near future. This changeover will take place on a ship-toship basis over the next two decades.
- TacFleet is established as a rapid response force on the Klingon border in the event of future conflict.
- The Allen's Planet Massacre is one of the most unusual Kzinti "incidents" in Federation history in that Kzinti deal justice to fellow Kzinti for the needless slaughter of some 3,000 Federation colonists.



The only survivor, an infant named William S. Gerard, is taken in by the Kzinti official in charge of the border ("the Marquis") and raised as one of his own. Gerard's parents and other relatives were among those slain in the massacre. Gerard will grow to young adulthood as the only human ever reared by a Kzinti foster parent.

 Half of the crew of the heavy cruiser *Farragut* is killed on the planet Tycho IV by a vampire cloud creature. Among the survivors is a young lieutenant named James T. Kirk, who on his first deep space posting.

2252

- Star Fleet officially adopts the PB-47 "Titiac" circumferential warp engine for its use. It will be installed on all new build starships and backfitted onto existing compatible vessels as duty schedules and yard space permit.
- Dr. Richard Daystrom builds his first working prototype multitronic computer. It will be another ten years and four iterations later before the final design, the M-5 Multitronic



Unit, is ready for testing and evaluation. The M-5 will eventually fail during Star Fleet acceptance tests in 2262. Portions of it will form the basis of the Duotronic Mark III currently in use by Star Fleet.

2253

- 27 *Surya* class frigates are placed in the Reserve Force as part of Star Fleet's post-war reduction-inforce. They will remain there until 2264.
- Captain Christopher Pike of the starship *Enterprise* files an official report over the current status of Orion's slave trade. The information it contains is so shocking and outrageous that the Federation Council will eventually endorse a boycott of Orion and its colonies unless it renounces the slave trade. Orion will appear to concede; however, the underground market in "green animal women slaves" will remain strong for decades to come.
- The Lockheed T-4 "Work Bee" multipurpose utility vehicle enters service.
- Hikaru Sulu is accepted into the Star Fleet Academy Command School.
- Completion of a major naval base at Mastocal marks the return of the Klingons in force to its shared border with the Federation. A new war between the two seems inevitable in the not-too-distant future.



2254

- The *Bode* class scouts are retired from service.
- The *Detroyat* class heavy destroyers are reassigned as long-range scouts as part of Star Fleet's overall reduction-in-force. The real objective of this move is to keep these valuable starships on active duty status in the event of renewed hostilities with the Klingon Empire.
- The *Excalibur* (NCC-1705) is the first of the old *Constitution* class heavy cruisers to be fully upgraded to *Bonhomme Richard* specifications. The rest of the *Constitution* class starships will receive this upgrade over the next six years as yard space and duty schedule permits. The *Enterprise* (NCC-1701) is the last of the class to receive this upgrade in late 2260.



2255

- All *Detroyat* class heavy destroyers are reclassified as heavy scouts and refitted as such. The only exception is the *Resolution* (NCC-1101). It is stricken from the class to serve as the prototype for the *Avenger* class heavy frigate.
- PB-32 warp engine and phaser upgrades begin on the *Ptolemy* class transport/tugs. They are among the last "original" Class I starships so upgraded. The additional power from the new warp engines will now allow them to tow two transport containers at a time without difficulty.
- All Surya class frigates still on active duty status begin receiving phaser upgrades.
- Orion officially renounces its slave trade due to intense Federation diplomatic and political pressure.
- The *Federation* class dreadnought enters service.
- The Star's End colony convoy is the largest such to date, with 42 *Cochrane* class colonial transports ferrying over 100,000 colonists to their new home. This event marks the high point of the service career of the *Cochrane* class.

2256

- The *S.S. Beagle* (NCC-F1307) is lost somewhere near the UFC 892 (Magna Roma) system.
- Drs. Mornay and Perrin begin working on transwarp theory.

- Federation and Klingon forces clash over a wide expanse of border space. This is the first major conflict between the two since the end of the Four Years War.
- Lt. Cmdr. James T. Kirk is promoted to commander and named as executive officer of the destroyer *Alexander*. He is one of the youngest starship executive officers in Starfleet.

2257

- The *Avenger* class heavy frigate design is evaluated using the newly converted *U.S.S. Resolution* as a prototype ship.
- The Federation destroyer Xerxes is involved in a battle with the Kzinti over a newly discovered stasis box. This is the first



incident on record regarding Kzinti interest in lost Slaver technology. The *Xerxes* is successful in keeping the Kzinti from the stasis box ... this time.

- The heavy cruiser *Potemkin* (NCC-1711) is removed from fleet duty and reassigned to Star Fleet Academy as a training vessel.
- The heavy cruiser *Defiant* (NCC-1717) recovers a damaged 4-man Klingon shuttlecraft in deep space. The event is considered something of an intelligence coup due to the data retrieved from its computer databanks.

2258

- All contact is lost with the Omicron Ceti III colony.
- Star Fleet Command adopts a "unique ship, unique insignia" uniform policy.
- A new generation of portable phaser technology enters service, beginning with an improved phaser rifle (weapons), phaser bore (mining tool), and phaser torch (cutting/welding tool). These are issued immediately to all Star Fleet vessels at their first available port-of-call.
- The *Hopi* class research vessel enters service.
- The *Altair* class merchantman enters service.
- The *Coronado* class through-deck cruiser enters service. This is Star Fleet's first purpose-built shuttlecarrier class since the end of the Four Years War (2246-2250).
- Philanthropist Carter Winston is apparently lost in space while on one of his characteristic missions of charity. No spacecraft or body is ever recovered.



2259

- Captain Christopher Pike is promoted to fleet captain in charge of heavy cruiser operations. His successor is Commander James T. Kirk, executive officer of the destroyer *Alexander* and one of Star Fleet's most promising command candidates.
- James T. Kirk becomes the youngest starship captain in Star Fleet history when he is given command of the starship *Enterprise*. Kirk has to wait just over a month to accept his new command, though, due to the conflicting duty schedules of the *Enterprise* and *Alexander*.



- The *Enterprise* and *Alexander* meet for a mid-space rendezvous in order to transfer Kirk aboard for his new command. Pike helps Kirk become acquainted with his new command as the Enterprise travels back to Starbase 13 for the end of Pike's five-year mission. The *Enterprise* is the last starship remaining on the *Bonhomme Richard* refit schedule, which is scheduled to begin at Starbase 13 as soon as it arrives.
- The Enterprise has only just arrived at Starbase 13 when it is ordered back out on a special mission to the northern edge of the galaxy. There it



will encounter the Galactic Barrier, becoming the first starship known to have survived the encounter.

- The Enterprise returns to Starbase 13 for repairs. Its internal systems damage due to its encounter with the Galactic Barrier is found to be so great that it will be sent on ahead to Starbase 12 for a more extensive refurbishing than originally planned. The official start of Kirk's five-year mission is delayed by a full year while the Enterprise remains in drydock.
- Captain Kirk will honor a tradition among *Enterprise* commanders by familiarizing himself with his ship over the next year. He does so while the ship is being rebuilt and upgraded to *Bonhomme Richard* specifications. He and his new crew will have several adventures together during this time, either independently or on the few occasions that the *Enterprise* is allowed out of spacedock (for testing of various portions of its new upgrade).



2260-2265

The newly rebuilt Enterprise leaves Starbase 12 and undertakes its most famous five-year voyage under the command of Captain James T. Kirk. The *Enterprise* will surpass its sister ship *Constellation* as the most famous Class I starship of all time. Both Kirk and his bridge crew will become public celebrities due to the tales of their exploits during this five-year period.

NOTES: Some historians list 2259 as the start date for Captain Kirk's tenure aboard the *Enterprise*. This is due to his actually receiving command in this year and the *Enterprise*'s special mission to the galactic rim.

Some historians also list Kirk as having been 31 years old at the time he received command of the *Enterprise*. This date actually reflects the start of Kirk's first five-year mission in command of the *Enterprise*, which was delayed by a full year. This was due to the encounter with the Galactic Barrier and the ship's subsequent upgrade to *Bonhomme Richard* specifications.

Kirk's first five-year mission aboard the *Enterprise* was actually closer to six years. This was due to yard time for her *Bonhomme Richard* and later *Achernar* refits, as well as other times spent in drydock to repair damage sustained in various missions.

2260

In yet another change of official policy, Starfleet changes the form of its name from *Star Fleet* to *Starfleet* effective this year.

TOP SECRET For eyes of starfleet Command only

- The building of the *Epsilon* class monitor stations along the border with the Klingon Empire is approved.
- A new form of ablative armor is tested on the *Coventry* class frigate *Constant* (NCC-1236). This is the first use of ablative armor by Star Fleet since the Romulan War.

- There is a marked upsurge in Federation-Klingon border incidents beginning this year. Notable incidents include an attack on the transport/tug *Cassini* (NCC-3824) by a Klingon F-5 frigate and an assault on the old light cruiser *Texas* (NCC-900) by a Klingon D-7 battlecruiser while trying to rescue a stranded landing party.
- A Federation-wide survey reveals that the seven Star Fleet Academy campii currently have a student population of 85,397 and a permanent faculty of 14,038.
- New designs for Star Fleet dress and duty uniforms, as well as anti-exposure and radiation suits, are approved. The changeover is scheduled to take place within six months (2260) once the necessary replicator patterns have been oufficiently distributed throughout



sufficiently distributed throughout the fleet.

- The changeover to the new Star Fleet regular, dress, and special duty uniforms takes place during this year. The old-style uniforms will still remain in limited service for the next year until the changeover is complete.
- Star Fleet holds its largest war games exercises to date in the Wolf 359 system. These involved three full fleets in a simulated invasion of Federation space. The exercise convinces many Klingon officials that Star Fleet is arming for war against the Empire.
- Orion pirates destroy Deep Space Station K-4.
- The light-speed breakaway factor, aka "the slingshot effect" for traveling backwards and forwards in time, is successfully employed for the first time by the starship *Enterprise* (NCC-1701) while trying to escape the gravity well of the dying planet Psi 2000. The *Enterprise* succeeds in its escape but is thrown three days back in time as a result. This time travel side effect was not anticipated in the original intermix formula for "cold-start" of a starship's warp engines. It will prove to be one of the most important accidental discoveries in the history of Federation science.
- The *Alamo* class defense stations enter service.
- The *Derf* class fleet tender enters service.
- The Neutral Zone Incident of stardate 1709 marks the first time that the Romulans have engaged in direct hostile action against the Federation since the end of the Romulan War. Four Earth outpost stations are destroyed by a Romulan *Vas'Hatham* class P-1A War Eagle cruiser before it is tracked down and destroyed by the starship *Enterprise*. This also marks the first appearance of the Romulan cloaking device, the powerful Romulan plasma torpedo, and the first face-to-face encounter (via viewscreen) between humans and Romulans. The Vulcan ancestry of the Romulans is thus confirmed. This will be known to the Romulans

as the Battle of Icarus IV, so named for the comet that the commander of the Romulan ship used unsuccessfully in and effort to distract the Enterprise from its pursuit.

- Star Fleet begins rebuilding its destroyed Romulan outpost stations. All of the others will be significantly upgraded in order to withstand assault by Romulan plasma torpedoes.
- The Agronska Mark 30 handheld phaser enters service. This is a twopart weapon, consisting of a small, handheld portable unit (Type I) and a pistol-type



upgrade (Type II) assembly into which the smaller unit can fit for increased firepower. Both are issued immediately to all Star Fleet vessels at their first available port-of-call.

The Marfak "Sting" series of personal phaser weapons is developed. Types 1 and 2 are somewhat similar to the Agronska Mark 30 Types I and II but have a different color scheme and are more streamlined in design. When adopted, these will be known as the Type III and Type IV by Starfleet in order to lessen confusion with the Agronska units. Marfak will also develop the Type V, a rifle-based lock-on upgrade for the Type IV. The new Marfak units will not enter service with Starfleet until the late 2260s.

2261

- The automated tanker *Skageraak* (NCC-G504) is lost in the Delta Triangle.
- Starfleet General Order 7, the only one for which violation is punishable by death, is temporarily suspended so the starship *Enterprise* can transport Fleet Captain Christopher Pike to Talos IV as its new Federation representative. Captain Pike had



been severely handicapped due to recent and severe exposure to delta radiation during a training accident. In exchange for his presence among them, the Talosians help him escape the limits of his crippled body by means of their tremendous mental powers. Pike will eventually be granted ambassadorial status and remain with the Talosians until his death by natural causes.

- The Shore Leave Planet (Omicron Delta IV) is discovered.
- The Gorn Hegemony is encountered for the first time in the Cestus III Incident. The Federation colony on Cestus III is destroyed by the Gorn, who



misunderstood it as an attempt to invade their space.

The intervention of the Metrons in the affair heads off a potential interstellar war.

• The starship *Enterprise* makes its first and most famous trip into Earth's past when a near-encounter with a previously unknown "black star" hurtles it back in time to 1969 (Terran Old Calendar). The event, and the actions Captain Kirk and his crew take to return to their own time, are eventually ruled "a natural accidental occurrence in the sequential train of historical events."



- NOTE: This 1969 event is a well-known common point between the Prime One and Prime Two timelines (see Volume 01). It is also the first temporal event in DTI records in which Federation personnel had to deal with the ramifications of altering the timestream, thus affecting their own future existence. Midshipmen desiring more information on this event should consult the logs of the starship *Enterprise* (NCC-1701), stardates 3113.2 to 3114.1, as well as the official DTI summation of the event, via the Academy Intranet.
 - The Department of Temporal Investigations (DTI) is set up to deal with future events involving interferences with the known timestream.
 - The DY-100 class spaceship *Botany Bay* is recovered after almost two centuries adrift in space. Khan



Noonien Singh and his followers are almost immediately exiled to the remote world of Ceti Alpha V after their discovery for trying to take over the starship that rescued them from their enforced suspended animation.

- The "Four Days War" between the Federation and the Klingon Empire is stopped by the Organians, a powerful race of energy beings, who impose the terms of the Organian Peace Treaty on both sides. Some 22 star systems and almost a hundred starships (on both sides) are involved in the brief but fiercely fought conflict. Starfleet loses 17 starships; however, Klingon losses are much higher.
- The full power and import of the Time Planet is discovered by a landing party from the starship *Enterprise.* It will become one of the most carefully guarded secrets in the whole of the Federation, with only a few select personnel allowed on its surface in the decades that follow.
- The heavy cruiser *Hood* is ambushed by a lone Kzinti cruiser whose crew, tired of treaty constraints, is seeking glory in battle. The *Hood* manages to survive the encounter, thanks largely to the quick thinking of Ensign



Shiboline M'ress, a young Caitian communications officer. She will receive a promotion to full lieutenant as a reward for her bravery.

2262

- Sheridan's World is the first to be jointly developed by both the Federation and the Klingons under the terms of the Organian Peace Treaty.
- A new generation of Starfleet fighter (F-type) and attack (A-type) shuttles enters service. These include the F-types 14 and 15, as well as the A-type 10. These replace the older F-type 4 and A-type 6.
- The Treaty of S'marba marks the start of a tenuous but ultimately profitable military and trade alliance between the Klingons and Romulans that benefits both. The most portentous development from this treaty is a technology exchange: the Romulans get modern starship and warp engine technology (in the form of older Klingon starships) in exchange for the cloaking device and plasma weaponry. This alliance will last until the Battle of Klach D'Kel Brakt (the Briar Patch) in 2270.
- An automated intergalactic "berserker" destroys both the heavy scout *Mitannic* (NCC-1105) and the heavy cruiser *Constellation* (NCC-1017), the class prototype



and one of the most famous Class I starships in Starfleet, before it is successfully stopped by the heavy cruiser *Enterprise* (NCC-1701).

- Six *Cochrane* class transports and their escorts, manned by 1,250 Starfleet personnel and carrying 12,500 colonists to the world of New Demios, vanish without a trace.
- First contact with the "mirror universe" takes place at the planet Halka.



NOTE: First documented crossover point between the Prime One and Mirror One timelines.

> The date for this event varies by several years from the perspective of the specific Prime or Mirror timeline involved. This space-time phenomena is known as the *chroniton variance principle*, suggesting that time passes at different rates in different periods across the timestreams of the multiverse in order to eventually cancel out major variances among them. It is the multiverse analog of the Blitnovich Limitation Effect.

- Sherman's Planet is successfully claimed by the Federation after a Klingon plot is exposed to poison grain supplies to its colonists.
- This year's Babel Conference is almost disrupted by the Orions, who fail (both overtly and covertly) to keep the dilithiumrich planet of Coridan from joining the Federation.



• A war games exercise involving Dr. Richard Daystrom's new M-5 Multitronic computer system goes horribly wrong, resulting in the deaths of all hands aboard the heavy cruiser *Excalibur* (NCC-1705) and significant damage to the heavy cruisers *Hood* (NCC-1707) and *Lexington* (NCC-1703). The computer is successfully deactivated before it can do any more harm. Dr. Daystrom will suffer an almost total mental collapse because of this incident, from which it will take him years to recover.

 The heavy cruiser *Endeavour* (NCC-1716), the scout *Monoceros* (NCC-601), and the transport/tug *Keppler*

(NCC-3816) are all pulled from active duty status for use as test beds for linear warp technology. They are fitted with early, selfcontained LN-40 linear



warp engines for performance evaluations. These three starships are chosen because they are representative of the three dominant types of design that comprise most of the Class I fleet. The LN-40 will never see widespread fleet use because at best it represents only a marginal improvement over the tried and true PB-47 circumferential warp engine. Even so, data gleaned from the LN-40 test program will aid in the development of the LN-52, LN-60/64, and subsequent linear warp engine designs shortly thereafter. All three starships will be returned to fleet duty within two years. All will retaining their new LN-40s, thus giving the rest of Starfleet a preview of what awaits it in the near future.

2263

 The Baton Rouge class cruisers are officially removed from service effective this year. Many remain on station "unofficially" for the next three years until enough Class L starships option so



Class I starships enter service to replace them.

- The last of the *Anton* class cruisers are decommissioned.
- The *Achernar* class heavy cruiser enters service. These will be the last major Class I starships fitted with circumferential warp drive.
- The Melkotian system is barred from visitors at the insistence of its inhabitants.
- The existence of the Preservers is confirmed by the discovery of a working Preserver asteroid deflector on the planet Amerind (Miram III).
- The Klingons begin to deploy photon torpedo technology, presumably stolen from the Federation.

 Starfleet obtains an example of a Romulan cloaking device in the *Enterprise* Incident. An unexpected bonus is the capture of the Romulan fleet commander,

who had attempted to prevent the theft of the device from her new D-7 battlecruiser (a present from the Klingons). The commander spends several months in a Starfleet holding facility before being returned to the Romulans in a prisoner



exchange. Although she reveals no secrets, her voluntary discussions with Federation historian Tomak of Vulcan concerning the Romulan War will result in the book *Why We Fight The Federation*. It will be one of three key insights into Romulan history and culture in this era.

- The stars Minara and Beta Niobe go nova.
- The heavy cruiser *Defiant* (NCC-1717) is lost in a space-time interphase near Tholian space. It will not be learned until later that the mirror-Tholians were the ones responsible for creating the interphase in the first place.



- NOTE: According to Section 31, <u>this induced interphase</u> is the only known fixed crossover point across the <u>Prime One and Two timelines, with the Mirror</u> <u>timelines providing the conduit</u>.
 - Memory Alpha is attacked by a group of non-corporeal life forms looking for a host body. Its memory core is burned out and all of its personnel and visitors die from massive brain trauma. The threat is eventually negated and the rebuilding of Memory Alpha begins.
 - The 84-parsec-wide charged interstellar plasma mass known as the Badlands is encountered for the first time in a previously unexplored area near Romulan space. Subsequent explorations in and around the Badlands will eventually lead to first contact with the Cardassian Union in 2276.



- Achernar upgrades take place for many older Class I heavy cruisers in service. Most of these are a partial conversion, involving the installation of improved bridge facilities, an early holographic recreation room (predecessor to the holodeck), uprated weaponry, and a redesigned shuttlecraft bay and below-deck maintenance area.
- Enterprise receives new PB-47 warp engines as part of her Achernar upgrade. This was not planned since her current warp engines were only four years old at the time of this refit (having been installed in 2260). They are replaced anyway, due to extreme stresses placed upon them when they reached a speed of Warp 14.1 before being shut down, due to fused integrator controls near an abandoned Kalandian outpost. This will be the highest speed ever achieved by a PB-series circumferential warp engine under its own power.
- Experimental life-support belts are issued this year to all Starfleet personnel for extra-curricular use in hostile environments. They will last only one year in Starfleet use, eventually withdrawn in favor of cheaper (and proven), old-fashioned EVA suits.
- The research ship *S.S. Aliquippa* (NCC-1438) is lost in the Delta Triangle.
- The LN-64 linear warp engine is developed.



2264

- Klingon stasis field generators are observed in combat for the first time.
- The galactic core is visited by a Federation starship for the first time.
- The long-lost *Terra Ten* space colony is found on an unstable world, its descendants reduced in size due to spiroid epsilon radiation. They are eventually relocated to the Federation colony world of Verdanis.
- The secret of the Delta Triangle is revealed when the starship *Enterprise* is temporarily trapped within. *Enterprise* is successful in escaping (along with the Klingon battlecruiser *Klothos*) thanks to a plan drawn up by First Officer Spock.
- Argo becomes only the second pelagic planet ever discovered within Federation space.
- The Kzinti fail in their second effort to secure a Slaver stasis box, this time by attempting to steal one from a Federation warp shuttle lured into a trap at Beta

Lyrae. The intelligent Slaver weapon discovered inside the box eventually self-destructs to avoid capture, killing most of the Kzinti and crippling their ship. The Federation vessel and its crew escape unharmed.

- Ambassador Robert April takes his last trip aboard the starship *Enterprise*. He was its original commander when it first launched on 4 July 2223.
- The Phoenix Process of "resurrection" is discovered by Omnedon – and promptly banned throughout all of known space.
- The Korezima, a Klingon D-7 battlecruiser that had been abandoned due to an encounter with the Chatalia, is found and recovered intact by the cruiser Moscow. Its



self-destruct system had failed to activate. This is a major intelligence coup for Starfleet and a major embarrassment to the Klingons. The incident will cause the Klingons to accelerate production of the new D-8 *K't'inga* class battlecruisers, with the first thought to have entered service later this year. It is the *Moscow*'s last action prior to its decommissioning.

- It is believed that the Kzinti and the Mirak Star League enter into a joint trade agreement around this time. The Mirak, with help from the Orions, begin smuggling modern starship parts and technology to their Kzinti brethren. This will enable the Kzinti to build their first true space fleet since the end of the Earth-Kzin Wars.
- The experimental dreadnought *Star Empire* (NCC-2116) is destroyed following the events of the Rittenhouse Scandal.
- The *Ournal* class space stations, known to most Starfleet personnel as *Spacedocks*, enter service.
- The Klingons and Romulans renew their trade and military agreements.
- Starfleet comes up with its own improved cloaking device. It is superior to Klingon and Romulan versions in many respects, with the additional abilities of generating multiple sensor "echoes" with contradictory readings. The power requirements for this new cloaking device are so high that it can only be fitted in capital ships.
- The discovery of the Eridam Papers at an abandoned Romulan base provides the Federation's second key insight into Romulan history and culture in this era.
- The *Enterprise* undergoes its last major in-service overhaul at Starbase 23 prior to the end of its five-year mission under Captain Kirk.
- A Klingon prototype battleship is encountered in combat for the first time. The design is not much larger than a Federation dreadnought; even so, it is believed to be a predecessor of the rumored *Kar'harmer* class. Starfleet comes out the victor, although just barely. This incident will later be cited as

an example to justify Starfleet's linear warp upgrade program of the 2270s.

• The heavy cruiser *Constitution* is heavily damaged in battle in what is Starfleet's first encounter with an Klingon D-8 *K't'inga* class battlecruiser. The starship manages to limp back to Starbase 27 for repairs and is laid up for months. This prevents it from returning to the Sol System in time to be the first Class I heavy cruiser to receive a linear warp upgrade.



2265

- The long-lost L-5 traveling space city *Wanderer* is found in the vicinity of Polo's Bolos, a binary pair of black holes. The craft is successfully diverted from imminent destruction.
- Starfleet begins receiving intelligence that the Romulans are in the process of developing and deploying a whole new series of warp-capable starship classes, thanks largely to Klingon technology exchanges.
- The *Kiaga* and *Agilis* class perimeter action ships begin to be cycled in and out of the Starfleet Reserve at this time. They are still needed for duty despite rapidly approaching obsolescence.
- Fleet Admiral Heihachiro Nogura orders the inception of the Class I linear refit program. The first Class I starship to return to the Sol System will be the first to undergo a total conversion to linear warp technology. This move is in response to



the Klingon deployment of the improved D-8 K't'inga class battlecruiser. Coincidentally, this upgrade will be taking place at the same time that the early Class I starships are scheduled for their second ESLP refits. This will ensure that they remain in Starfleet service for at least two more decades.



- The starship *Enterprise* (NCC-1701) is the first Class I starship to return to Earth following the end of its current five-year mission. Per Fleet Admiral Nogura's orders, it is berthed in the spacedock at the San Francisco Navy Yards normally reserved for dreadnought construction in preparation for its linear warp conversion. The deconstruction process alone, in which the ship's individual components are separated and stripped to their trititanium frames, will take ten months. The actual rebuilding and conversion will take another eighteen (Terran) months.
- James T. Kirk is promoted to rear admiral and appointed as Starfleet Chief of Operations in honor for his exploits during his historic five-year mission aboard the *Enterprise*. It is a promotion that his best friends, Spock of Vulcan and Dr. Leonard McCoy, are against and both try unsuccessfully to get him to refuse it for his own good. Both will resign their Starfleet commissions and leave the service after he refuses their advice and accepts his new rank and posting.
- The *Ranger* class scout enters service.
- Commander Montgomery Scott, former chief engineer of the *Enterprise*, is placed in charge of the ship's linear warp upgrade. He immediately spots a number of shortcomings in the ship's new design and vociferously argues against them, finally appealing all the way up the chain of command to Fleet Admiral Nogura himself. Nogura will accept most, but not all, of Commander Scott's recommendations. This will change the final appearance of the *Enterprise* once her refit is complete. The original intended configuration later forms the basis for the *Tikopai* class heavy cruiser.
- Five additional Class I heavy cruisers are authorized for linear warp upgrades, in the same manner as *Enterprise*, as they return from their current missions. These will be known as the *Enterprise* class heavy cruisers, the first starship class in Starfleet's new linear warp technology program.
- A new warp factor scale is proposed due to the expected speed of linear warp starships. This will eventually replace the current linear scale by the turn of the century with an asymptotic table, with Warp 10 (infinity) as its maximum (and unachievable) speed.

- NOTE: Starfleet's linear warp program of the 2270s and 2280s is sometimes called the *Class lb Program* in certain reference works. This comes from one of Fleet Admiral Nogura's memos on the long-term development of the linear warp technology program. "Class la" were the original Class I starships. "Class lb" represented the new linear warp generation. "Class lc" was the generation that was to follow both (*Excelsior*, et al).
 - Tests begin on the new LN-64 linear warp engines intended for use with the linear warp program.
 - The "Tandem" series shuttlecraft, accessories, and warp booster sleds enter service.



- The *Pearl* class warp-powered mobile spacedock enters service.
- At this time Starfleet Command administers 28 starbases, 17 deep space stations, and 741 outpost/monitor/auxiliary stations with a total complement of about 800,000.

2266

- Following successful component deconstruction, the rebuilding of the *Enterprise* with linear warp technology begins.
- The Romulans obtain photon torpedo technology, most likely from the Klingons. They will make little use of it, though, maintaining their preference for plasma-based weaponry.
- The *Gagarin* class corvette enters service.
 - Starfleet once again changes uniform styles, this time in reflection of the impending changes coming to the fleet. Improved fabricators will be installed on all Starfleet Class I and Class II starships in the years



to come, allowing Starfleet personnel to have their clothing directly materialized on them. These fabricators will be integrated into new sonic showers in crew and personnel quarters in all Starfleet facilities and starships.

Starfleet reverts to a standardized division insignia badge for all uniforms. The design chosen is the arrowhead of the heavy cruiser *Enterprise* (NCC-1701), in honor of the fame and prestige its exploits under Rear Admiral James T. Kirk have brought Starfleet. The old-style, ship-specific emblems will be maintained on an unofficial basis by the Friends of Starfleet, the Starfleet Association, and civilian groups that support specific Starfleet vessels

- The "tribble ship" *S.S. Mundy* is found adrift and abandoned in the vicinity of Starbase 21.
- The heavy cruiser *Essex* is severely damaged while making a port call to the Rigel system. Explosives are placed at critical points on the outer hull by Orion pirates disguised as dockyard workers and then detonated by remote control. The structural damage to her primary hull, shuttlecraft bay, and warp engine support pylons is so great that she has to be towed to the nearest Starfleet facility for repairs. *Essex* will never rejoin the fleet in a frontline capacity. Instead, she will be repaired sufficiently for use as a fleet auxiliary training ship, providing relief for the *Potemkin* as needed.
- The Klingons and Romulans engage in a major battle within the Triangle region of space. It is later declared "a misunderstanding;"



however, it is the first indication that all is not going well with their shaky alliance against the Federation. Long range scans of this encounter provide Starfleet its first glimpses of the new Romulan fleet in action, plus several Klingon starship classes previously undocumented.

 Rear Admiral Kirk enters into a one-year marriage contract with Vice Admiral Lori Ciana, a close friend and confidant since his promotion to the Admiralty. She will be, in a real sense, his surrogate *Enterprise* during this time. The marriage will not survive the expiration of the contract.



• Linear warp upgrades are authorized for all Class I starships in service as they return for their next scheduled ESLP refit. Those Class I starships that have already had a recent ESLP refit will be removed from service and upgraded during their next periodic service overhaul in between missions. This stepping-up of the linear warp program is in response to data gleaned on the new Klingon and Romulan starship classes observed in action in the Triangle.

2267

 Starfleet Command places an unusual request with the Starship Design Bureau. It asks for two different groups of shuttlecarrier



designs, one based on upgraded Class I components and the other comprised of new builds. Two specifications are laid down. First, all designs must be able to support current Starfleet shuttlecarrier operational procedures. Second, all designs must be able to support Starfleet Marine ground assault operations. This program marks the inception of the "modern" shuttlecarrier programs of today.

- A new interstellar coordinate system goes into effect within Federation space.
- Operation Dixie takes place. This intelligence gathering effort into Klingon space yields little data beyond confirming the existence of the Klingon's B-1 battleship program. All intelligence operatives and starships involved in the operation are lost, with the fate of their crews unknown. Starfleet will officially disavow the operation in later years.
- The heavy cruiser *Kongo* (NCC-1710) is converted into a command cruiser as part of Project Citadel. This experimental conversion will later form the basis for the *Citadel* and *Balson* class command cruisers. The Bezwell Incident, provoked by the Klingons near the Treaty Zone, provides the first test for the converted *Kongo*'s new capabilities.
- Project Grey Ghost is initiated by Starfleet Intelligence in order to gain as much information on new Romulan starships, technology, and fleet deployment and capabilities as possible.



- The Vejur Crisis represents the greatest threat to known space in the recent history of all major spacefaring cultures. It is put to an end only by the premature launch of the upgraded starship *Enterprise*. Rear Admiral James T. Kirk is returned to command of the *Enterprise* following the disappearance of Captain Willard Decker. Returning with him is most of his old command staff (including both Spock of Vulcan and Dr. Leonard McCoy) and many of his former crewmen, all by their own request. Following in the footsteps of his predecessor, Christopher Pike, Kirk will command the rebuilt *Enterprise* on back-to-back five-year missions.
- Megaphaser cannon technology is perfected and quickly accepted for Starfleet use.

NOTE: Admiral Kirk temporarily demoted Captain Decker to the rank of commander when he assumed command of the *Enterprise* during the Vejur Crisis. The rank was posthumously restored by Admiral Kirk in honor of Decker's sacrifice.

2268

- The *Lotus Flower* class freighter enters service.
- The Gibraltar Accord brings about an understanding of sorts between the Federation and the Romulans. For the first time in Federation history a Romulan ambassador is dispatched to represent his people's interests within Federation-controlled border space.



- At the same time that the Gibraltar Accord is being formalized, the Romulans sell the Klingons several of their new S-11 "Bird of Prey" patrol ships. The Klingons are so impressed by the capabilities of the "Bird of Prey" that they quickly adapt it for their own use. They will produce both patrol ship and cruiser sized versions of it in the years to come, much to the irritation of the Romulans. The D-11/D-12 "Bird of Prey" will eventually become so associated with the Klingon Empire that most will either forget or be unaware of its Romulan origins.
- The *Pershing* class automated transport enters service.
- The command cruiser *Balson* enters service.
- The *Enterprise* sets an unofficial space speed record when it achieves warp factor 17.863 (old scale) while testing the maximum capabilities of its new engines.
- The projected high cost of the linear warp upgrade program across 104 starship classes and 1,907 vessels



causes Starfleet Command to begin looking for less expensive alternatives to speed up the process. Two solutions are eventually devised: a straightforward, engines-only upgrade utilizing the self-contained LN-52 warp engine, and a partial conversion built around the LN-60, a close cousin to the LN-64. These two additional upgrade programs will proceed in parallel to the original refit program until all Starfleet vessels are upgraded with linear warp technology.

- NOTE: This three-track parallel upgrade process is the reason why not all Class I starships of the linear warp generation have common components. Starfleet was under pressure to upgrade all of its starship classes in order to counter the new shipbuilding programs of the Klingons and Romulans. This was the only way it could finish upgrading its entire fleet in time.
 - Representatives of the Federation, the Klingons, and the Romulans agree to jointly develop the Neutral Zone world of Nimbus III "in the interests of galactic peace."
 - The *Star League* design represents the first proposed configuration for upgrading the *Federation* class dreadnoughts with linear warp technology. It will be rejected at this time in favor of a simplified, less costly, and more militaristic design. It will resurface again near the end of the century and be used for the last three conversions due to Federation Council pressure.

2269

- By this point in time all Starfleet starship classes are in the process of undergoing linear warp upgrades. The speed at which they rejoin the fleet is dependent on which of the three upgrade tracks they have been selected to follow.
- Starfleet Intelligence learns of the existence of the Romulan V-11 *Stormbird*, a rebuilt Klingon D-7 battlecruiser equipped with new engines



and plasma weaponry. In theory it is more powerful that a Klingon D-8 *K't'inga*, although it will prove to be more fragile in combat.

- In response to the increasing number of incidents on the Klingon and Romulan borders, Starfleet is granted permission to commence a new perimeter action ship program to replace the obsolete *Kiaga* and *Agilis* classes. These are the first new build starships authorized under Starfleet's linear warp program, although actual construction will be delayed for years.
- Rear Admiral Kirk receives a promotion to full admiral. At the same time, Spock of Vulcan receives a promotion to the rank of captain. He declines an offer of his own command, instead electing to remain with Admiral Kirk as First Officer of the *Enterprise*.

- The Rita's Planet Massacre serves to incite growing hostilities between the Klingons and the Federation. A Klingon occupation force takes over the planet and massacres its entire population, with no intervention by the Organians.
- A new series of Starfleet uniforms (the current "redjacket" series) is authorized to replace the unisex uniforms ordered into service by Fleet Admiral Nogura only three years before. The older uniforms had proven to be extremely



unpopular with Starfleet personnel due to their drab colors and unibeing nature. The wrist communicators and personal bioscan monitors that were also introduced at that time are likewise withdrawn, replaced by newer "retro" designs.

- The *Oberth* class research ship enters service.
- The *Antares* class freighter enters service.

2270

- The *Hippocrates* class medical frigate enters service.
- The *Al Rashid* and *Moncrief* class transport/tugs enter service.
- The *Huntington* class deuterium tanker enters service.
- The *Orca* class gunboat and *Jester* class corvette enter service.
- The Oriskany class through-deck cruiser enters service.
- The *Whorfin* class transport enters service.

problems with warp

field instabilities above

 The *Jenghiz* is the first uprated Class I single-nacelle starship to return to service. Its prior



Warp 6 have disappeared thanks to the power of its new LN-64 linear warp engine. Identical results will be reported from linear warp upgrades of other singlenacelle designs, such as the *Siva* and *Ares* classes.

- Political maneuvering within the Federation Council puts Starfleet's planned perimeter action ship program on indefinite hold.
- The uprated heavy cruiser *Excalibur* breaks the warp velocity record set by its sister ship *Enterprise* during its shakedown cruise. Its achievement of and ability to maintain a speed of warp 18.74 will remain the official Federation warp speed record for years.
- The Romulans begin construction of a second wave of allnew starship designs. These are the "Hawk" series



(*Sparrowhawk, Skyhawk, Firehawk*, etc.) and are among the most powerful starships of their time.

2271

- The keel of the first Ariel class shuttlecarrier, Starfleet's second modern shuttlecarrier class and one of the largest starship designs ever built by the Federation, is laid down in a specially constructed spacedock at the San Francisco Navy Yards at Terra.
- The *Constitution* (II) class heavy cruiser, an alternate upgrade to the *Enterprise* class utilizing LN-60 based technology, enters service.
- The *Citadel* class command cruiser enters service.
- Starfleet Intelligence notes the deployment of new shuttlecarriers by the Klingons.
- Operation Cambria Bay takes place.
- A new type of hard-cased photon torpedo is approved for Starfleet use.
- The command cruiser *Kongo* clips a cosmic string near the Perseus system, resulting in a containment breach. Fully one-fourth of the aft quarter of the ship is lost (along with one of her warp engines) and 143 personnel are killed as a result. The *Kongo* manages to return to Terra under its own power, where it is immediately put into spacedock for conversion to *Constitution* (II) specifications.

2272

- Starfleet tests several prototypes of the *Cheetah* class fast cruiser. Although it will never enter service, the *Cheetah*'s unusual four-nacelle configuration will directly inspire the design of the *Constellation* class star cruiser of the 2290s.
- Persistent lobbying manages to end the political stalemate that is holding up Starfleet's new perimeter action ship program. Three one-third scale prototypes are authorized for construction.
- The Hornet class experimental carrier enters service.
 - The Kzinti Incursion (also known as the Fifth Earth-Kzin War and the Six Week War) manages to catch Starfleet by



complete surprise. Considerable resources have to be pulled from other fronts in order to put it down. A Starfleet task force under the command of Admiral James T. Kirk is ultimately successful in defeating the Kzinti through the use of the "Zetarian Squeeze," forcing the Kzinti fleet into the gravity well of a black sun. Starfleet losses total at 11 Class I starships, several dozen ground facilities, and hundreds of lives (a figure that does not include thousands of civilian casualties). Kzinti losses are far greater, with almost all of their ships destroyed or captured, along with the current Kzinti Patriarch. This event will go down in Kzinti history as "The-Last-Stand-of-the-Heroes."

 Dr. Carol Marcus is granted funding for work on what will become the Genesis Project. • The Regula I space station is built near an uninhabited planetoid near the Mutara Nebula as part of Project Genesis.

2273

- The *Surya* class frigate *Avenger* is removed from service for conversion to linear warp technology along the lines of the successful *Miranda* class cruiser. A number of improvements to the base *Miranda* design during the upgrading process will result in the *Avenger* class heavy frigate.
- The three perimeter action ship prototypes fail to perform up to design specs and the program is temporarily shelved once again.
- The *Cahuya* class survey cruisers are retired.
- The *Endeavour* class uprated heavy cruiser enters service. It represents the third and simplest approach to upgrading Class I starships, utilizing self-contained LN-52 linear warp engines and a minimum of conversions to the rest of the ship.
- The uprated heavy cruiser *Truxtun*, a starship of the *Endeavour* class, is laid down inside a spacedock at the



orbital spaceyards of Cosmadyne Corporation, Terra. It is the first new build Class I heavy cruiser of the linear warp generation.

- NOTE: The *Truxtun* and her three sister ships (*Confiance, Bunker Hill,* and *La Vengeance*) are widely considered to be the last "original" Class I starships ever built despite their LN-52 linear warp engines. This is because their primary and secondary hulls were built in accordance with original (albeit modernized) Class I design specifications.
 - An official request by the Starfleet Marines for a dedicated starship class to replace its aged *Texas* class converted commando cruisers is flatly rejected



by Starfleet Command. The major design obstacle is how to produce a Class I starship capable of a planetary landing, something that Starfleet is unwilling to do at this time given its other priorities. Major General K'tanga, the Marine Corps Commandant, resigns in protest. Starfleet will eventually convert a number of *Miranda* class cruisers for the exclusive use of the Starfleet Marines as a compromise measure, although the "commando cruisers" remain in service.

- The *Abbe* class torpedo destroyer enters service.
- The Cammel IV revelations expose Starfleet covert activities against the Kzinti dating back to 2270, actions that almost certainly brought about the Kzinti Incursion in response. As punishment the Federation Council cuts Starfleet's procurement budget in half and a public investigation is conducted. Several ranking Starfleet flag officers are forced to resign or take early retirements. Starfleet's linear warp upgrade program is frozen at current fleet levels for the time being.

2274

- The *Belknap* class strike cruisers enter service. These are immediately pressed into service as patrol units along the Klingon and Romulan borders, assisting frigates and other fleet units to cover for the lack of modern perimeter action ships.
- The *Kearsarge* class light cruisers are removed from service.
- The Daedalus class starship Carolina is discovered intact in the Xii system. It had been welded to an asteroid and used as



a habitat module for colonists whose ancestors had purchased the decommissioned starship decades before. The Starfleet Association arranges to purchase the *Carolina* and provide adequate compensation for the colonists, including a new habitat module as a replacement. The restored *Carolina* is eventually donated to the Starfleet Museum at Memory Alpha, which had no *Daedalus* class starships in its museum fleet.

- Project Genesis yields its first success under controlled laboratory conditions.
- A storm of controversy erupts when Sarek of Vulcan sponsors the half-Romulan, half-Vulcan Saavik for entrance into Starfleet Academy. Many still see her as an enemy alien and she has to bear with constant prejudice as a result. Nevertheless, her half-Romulan background will provide the Federation with its third key in understanding Romulan culture.
- Work begins on converting the Federation class dreadnoughts to linear warp technology. The original Star League proposal is set aside in favor of a simpler conversion along Enterprise class lines. This conversion program



shares components with the *Tikopai* class heavy cruisers, which are under construction at this time.

2275

- The Avenger class heavy frigate enters service.
- Authorization is given for construction of the *Excelsior* class space control ship as the Federation Council begins to loosen the reins on Starfleet funding.
- The *Tikopai* class heavy cruiser enters service.
- Starfleet authorizes the first of its limited sales of older, unconverted *Baton Rouge*, Class I, and Class II starships and starship components (pre-2245) to local sector fleets and the private sector. This initiates one of the greatest and most memorable starship auctions in history, providing Starfleet with additional (and badly needed) funding for its various linear warp programs. The fact that agents from many of the Federation's enemies are present at the auction, both major and minor, is quietly ignored by Starfleet so long as they attempt no purchases.
- The *Soyuz* class attack frigate enters service.



An older Class I heavy cruiser approaches Starbase One



Dreadnoughts in action during the Four Days War (2262)



A starship bowling alley. These were removed in the 2260s to make room for additional shuttle maintenance facilities. It was common practice to still refer to the area as "the bowling alley."



The upgraded *Enterprise* in spacedock, shortly before her emergency launch in 2267 to deal with the Vejur Crisis



Border clash between Klingon and Federation starships



EVA outside of an uprated Class I heavy cruiser

STARFLEET STARSHIPS

THE DREADNOUGHT PROGRAM (Pt. 1)

SERVICE ENTRY DATES (OLD CALENDAR): *Federation* class – 2255 Uprated*Federation* class – 2276 *Star League* class – 2291



The idea of a triple-nacelled "super starship" had been kicking around the Starship Design Bureau ever since the Baton Rouge era. Arbing and Lidde, one of the lead contractors of both the Baton Rouge and Class I programs, were the champions of this concept. They had come within an ace of getting their Baton Rouge era Invincible prototype built when it was cancelled, like so many other *Baton Rouge* era starship classes, once the Class I Program was established. It took the hard lessons taught by the Klingon's B-1 Jul'Kar class battleship during the Four Years War to convince Starfleet Command that a dreadnought was a needed fleet asset. Surprisingly, the Federation Council took less convincing than had the Procurements Board, approving the post-war construction program without debate on the first pass. The fight for funding of all 20 ships in the planned class was another matter, though, and fiercely debated within the Military Staff Committee until in the end only 12 were built.

The *Federation* class dreadnoughts were the epitome of the Class I era. They were the first to field Cochrane's new PB-47 "Titiac" warp engines, capable of driving such a massive starship as if it were a light cruiser. They had many other features pioneered with the early Class I starships: multiple beam weapon banks (*Federation* had extra phaser banks on the belly of her secondary hull), a spacious shuttle bay (which could hold almost as many shuttlecraft as a *Surya* class frigate), and extensive sensor suites (the equivalent of a *Hermes* class scout). A slightly redesigned primary hull saucer also housed a centrally located command bridge, as opposed to the topside mount of normal Class I designs. This was done to protect the

bridge from being targeted during combat, which had been a favorite battle tactic of the Klingons during the Four Years War.

There was still doubt within certain parts of Starfleet Command as to the workability of a triple nacelle design. Problems with such a configuration dated all the way back to the UESF's Verne class starships of the mid-22nd century and, more recently, in the ignominious Tritium. Arbing and Lidde's solution was to follow the warp field flow of the basic Jeffries design in the placement of its engines. The third warp engine was mounted ahead of the other two and on top of the primary hull, as opposed to the symmetrical, in-line triangular configurations of earlier designs. This allowed the forward engine to act as a spearhead of sorts for the other two, thus reducing the tendency to wormhole. This configuration also had an obvious combat advantage: in an emergency saucer separation, the primary hull of a Federation class dreadnought would remain warp capable. This configuration would be duplicated in all subsequent Federation dreadnought designs.

The only chance these ships got for the kind of combat for which they were designed was during the brief Four Days War of 2261. By the time the Organians intervened and enforced peace on both sides, a battle fleet led by the dreadnoughts *Federation* (NCC-2100) and *Affiliation* (NCC-2108) had already penetrated the Klingon border and fought their way to its outer industrial zones. The Klingons were understandably impressed by the demonstrated abilities of Starfleet's new combat vessels, and would copy aspects of their design into the later C-series *K'herr* class dreadnoughts.

All *Federation* class starships were scheduled to receive linear warp technology during their first ESLP refits in the late 2270s. This move was made with the events of the Kzinti Incursion of 2272 still fresh in everyone's minds. Only nine of the conversions were carried through, though, due to political fallout over the Cammel IV revelations in 2273. The final straw was the development of the Space Control Ship program, which made the dreadnoughts obsolete in their own lifetime. The three non-upgraded *Federations* were eventually rebuilt to a different configuration.

The *Star League* conversion program was the original proposed linear warp conversion for the *Federation* class. It retains both the lines and layout of the original secondary hull configuration while adding linear warp technology. The *Star League* program is credited with saving the dreadnought class from being eliminated altogether under the terms of the recent Starfleet Reorganization Order. Completion of the first conversion, which was a rather lengthy process, was accomplished in 2291. The last *Star League* conversion is on track for scheduled completion later this year. There is some discussion within Starfleet Command of converting the other *Federation* class dreadnoughts to the *Star League* configuration for greater mission flexibility. This would take place, if at all, during their second ESLP refits sometime around 2310. Nothing has come of this proposal as of yet.

SPECIFICATIONS (UPRATED *FEDERATION*):

Length:	307.6 m
Beam:	141.7 m
Draft:	83.7 m
Mass:	275,000 DWT
Crew	500
Range:	years at L.Y.V.
Cruising speed:	warp 11
Maximum speed:	warp 15
Armament: 20 phasers (7 banks of 2, 6	single mounts)
2 photon	torpedo tubes

NOTE: Star League specifications are almost identical.

Innovations:

• First successful Class I starship design to have more than two warp nacelles

VISUALS:



Federation class dreadnought (c.2260)



Upgraded Federation class dreadnought (c.2280)



Star League dreadnought conversion (c.2295)

SCHEMATICS:



Arbing and Lidde's original Invincible dreadnought proposal



Federation class dreadnought (c.2260)



Upgraded Federation class dreadnought (c.2280)



Star League class dreadnought (c.2295)

DREADNOUGHT CONCEPT AND DESIGN BY FRANZ JOSEPH SCHNAUBELT FEDERATION UPGRADE BY TODD GUENTHER (*STARSHIP DESIGN STAR LEAGUE* UPGRADE BY ERIC KRISTIANSEN (JACKILL'S) FEDERATION VISUALS COURTESY OF FILEFRONT *STAR LEAGUE* VISUAL COURTESY OF RICK KNOX SCHEMATICS COURTESY OF NEALE DAVIDSON AND ERIC KRISTIANSEN

CORONADO AND *Oriskany* class shuttlecarriers

SERVICE ENTRY DATES (OLD CALENDAR): 2258, 2270



The six vessels of the *Coronado* class came about as the result of lessons learned with shuttlecarrier operations during the Four Years War (2246-2250). The design influence of the *Santee* class, Starfleet's first purpose-built Class I shuttlecarrier, is obvious. Major changes were made for the *Coronado*'s purposebuilt secondary hull, though. This design was originally called a *through-deck cruiser* due to the through-deck design of its main hangar, with shuttle bays on each end instead of stacked (*Santee*) or side-by-side (*Anton/Surya/Coventry/Miranda*). This was unique to the class and gave the *Coronado* the ability for through-flight shuttle operations.

Changes in Starfleet operational practices over the years since their commissioning also lead to changes in the mission profile for the *Coronado* class. They were originally intended to serve as convoy escorts as had their ancestors, the *Santee* class. Peacetime found them filling in for cruisers for those missions for which a large number of shuttles were required, such as second-pass planetary surveys and search-and-rescue. Their limited interior spaces prevented their use in support of Marine operations (to which the *Coventry* and *Miranda* classes were more suited); however, they often flew as escort on such operations.

All six ships of the *Coronado* class received linear warp upgrades to the *Oriskany* configuration in the 2270s. Plans to build 29 more were authorized, but cancelled shortly thereafter in favor of the *Jenshahan* class heavy carrier. They began leaving active fleet service in 2286, with the last retired to the Starfleet Reserve in 2293.

SPECIFICATIONS (*ORISKANY* **CONFIGURATION):**

Length:
Beam:
Draft:
Mass:
Crew
Range:
Cruising speed:
Maximum speed:
Armament:14 phasers (6 banks of 2, 4 banks of 1)

VISUALS:



Oriskany class - Coronado's linear warp upgrade (c.2275)



CORONADO DESIGN BY TODD GUENTHER (STARSTATION AURORA) ORISKANYCONVERSION BY ERIC KRISTIANSEN (JACKILL'S) VISUALS COURTESY OF MAETEEN GREENWAY AND STARFORCE PRODUCTIONS SCHEMATICS COURTESY OF RICHARD MANDEL AND NEALE DAVIDSON

DERF CLASS TENDER SERVICE ENTRY DATE (OLD CALENDAR): 2260

The *Derf* class was designed to act as fleet tenders, providing support for Starfleet operations in combat zones and also maintenance of the Federation's marker buoy system during times of peace. It was an odd role for an odd ship, yet *Derf* filled it admirably. It mounted a customized extended primary hull full of repair and maintenance facilities, shops, spare parts storage, and other items that always seemed heaven-sent to duty-pressed starship engineers. A single *Derf's* onboard facilities could usually handle all but the most severe of starship damage. The *Pearl* class mobile spacedock would be created during the linear warp era to fill this gap, assisting the *Derf* in its role of keeping the Class I fleet in full operational trim.

SPECIFICATIONS:

Length: Beam:	
Draft:	
Mass:	
Crew	
Range:	6 years at L.Y.V.
Cruising speed:	warp 6
Maximum speed:	
Armament: 8	6 phaser banks (3 banks of 2)

SCHEMATICS



DERFCONCEPT BY DANA KNUTSON (FASA CORPORATION) SCHEMATICS BY NEALE DAVIDSON (PIXEL SAGAS)

RANGER CLASS SCOUT Service Entry Date (old Calendar): 2265



The *Ranger* class scout was named for the versatile survey vessel class of the Baton Rouge era. Its unusual hull form was an experiment in producing a multi-mission hull suitable for use as a Class II starship. While the *Ranger* prototype itself failed in that respect, nevertheless data from the program would be used to develop its successor, the *Gagarin* class corvette. Starfleet found a niche for the Ranger, though, as a fast fleet scout on the Klingon border and ordered six more vessels to be built. These were built with linear warp technology; Ranger and the other original six vessels were converted as soon as the new builds were finished. All plans for additional orders were cancelled due to the success of the Gagarin program. This would cause *Ranger* to have the shortest lifespan of any linear warp generation Starfleet vessel, with all removed from Starfleet service by 2290. The entire class was transferred to the Federation Bureau of Sciences and renamed as the *Qnhartchi* class survey ships. It is in this manner that they continue to operation within Federation space today.

SPECIFICATIONS:

Length:	
Beam:	57 m
Draft:	21 m
Mass:	59,000 DWT
Crew	
Range:	3 years at L.Y.V.
Cruising speed:	warp 6
Maximum speed:	warp 8
Armament:6	phaser banks (3 banks of 2)

SCHEMATIC:



RANGER CONCEPT AND SCHEMATIC BY DANA KNUTSON (FASA CORPORATION) VISUAL BY RICK KNOX

ENDEAVOUR CLASS HEAVY CRUISER

SERVICE ENTRY DATES (OLD CALENDAR): 2262, 2273



The story of the *Endeavour* class is the story of linear warp technology itself: how it almost came about a decade early, was passed on, and yet still managed to find its way into Starfleet service a decade after its lead ship had already joined the fleet.

Endeavour (NCC-1716) was one of a trio of ships converted for use as LN-40 linear warp prototypes in 2262. When that upgrade program was passed over in favor of LN-64 based technology, *Endeavour*'s days as a technology prototype were over. She and the other two ships, the scout *Monoceros* and the transport/tug *Keppler*, were soon returned to service. All three retained their new LN-40 warp engines. *Endeavour* would remain the lone heavy cruiser of its type until the 2270s.

Delays in Starfleet's linear warp program caused Starfleet Command to revisit the concepts behind the LN-40 program. A revamped program with improved tecnhnology could serve as a quick, cost-effective means of upgrading the rest of the Class I fleet without the bother of a full linear warp upgrade. Twelve other heavy cruisers were converted to a slightly modified *Endeavour* configuration, utilizing the improved LN-52, starting in 2273. These were joined by four all-new builds in 2275. These last four (*Truxtun, Confiance, Bunker Hill, La Vengeance*) were the last "old-style" Class I starships ever built, and their date of entry into service is widely held as marking the end of the Class I era.

The biggest advantage of the LN-40 as opposed to the other design in development at the time (the LN-60) was its selfcontained nature. It was specifically designed to be fitted to existing Class I starship frames and warp pylon mounts, replacing their older PB-series circumferential warp engines with a minimum of yard time and internal system reconfiguration. There was one significant drawback to the LN-40, though. Its dilithium decay rate proved to be the highest of any linear warp engine design. In practical terms, this meant that starships equipped with LN-40s could not maintain superwarp speeds (above Warp 8) for extended periods. This problem was partially resolved by the use of the improved LN-52 in the later *Endeavour* conversions and new builds. While its dilithium decay rate was still excessive compared to other linear warp engines, it was not as pronounced as the older LN-40 and thus permitted longer cruising durations while maintaining superwarp speed. *Endeavour*'s LN-40s were removed and replaced with LN-52s in 2272 at the same time other starships were being converted or built to the *Endeavour* configuration.

Two *Endeavour* class starships have been lost in the line of duty. *Excelsior* (NCC-1718) disappeared while on a long-range mission outside of Federation territory in 2277 and has never been seen since. The new space control ship *Excelsior* (NCC-2000) was named in her honor. The *Saratoga* (NCC-1724) was ambushed and damaged beyond repair by four unknown starships, two of which are believed to be of Klingon origin. 373 crewmembers were lost and the unsalvageable hull had to be scrapped. The name has since been reassigned to a new-build *Miranda* class cruiser.

SPECIFICATIONS:

•	
	126.2 m
Draft:	73.8 m
Mass:	190,000 DWT
Crew	
Range:	
Cruising speed:	warp 8
Maximum speed:	warp 10
Armament:	8 phasers (4 banks of 2 each)
	2 photon torpedo tubes

Innovations:

- Pioneered the use of self-contained linear warp engine technology as a means of quickly upgrading an existing starship with minimum yard time
- Last of the "original" Class I starships

SCHEMATIC:



ENDEAVOUR DESIGN BY WALTER M. JEFFRIES AND MIKE MINOR VISUAL COURTESY OF FILEFRONT SCHEMATIC BY GEOFFERY MANDEL ABD DOUG DREXELER

ENTERPRISE AND *TIKOPAI* CLASS HEAVY CRUISERS

SERVICE ENTRY DATES (OLD CALENDAR): 2267, 2275



On 7 March 2265 the Starfleet heavy cruiser Enterprise returned to the Sol System after completing its historic fiveyear mission under the command of Captain James Tiberius Kirk. Both Captain Kirk and his officers were public celebrities due to their exploits; the Enterprise herself had long since surpassed her lost sister *Constellation* as an icon in the public eve. The Enterprise, to them, was Starfleet realized, the very essence of all that the Federation was supposed to be. There was only one problem with this picture. Enterprise was an old ship. She had been the second ship of the Class I Program back during its inception, launched in 2223 amid great fanfare and hope for the future. *Enterprise* had helped not only to realize that future but to also defend it under the commands of such captains as Robert April, Christopher Pike, and Captain Kirk. Even so, the Enterprise was aging, and not even a major overhaul and two major upgrades (plus many minor ones) over the past five decades could hide that fact. The time had come for her second ESLP refit, one designed to extend her life by another 20-25 vears. It just so happened that *Enterprise* was in the right place and at the right time, as it had been so many times before during its storied career. Its next ESLP refit would like no other performed before on a starship of its class.

The *Enterprise* that re-entered service prematurely in 2267, the only ship available at the time capable of dealing with the Vejur Crisis, was like no other in Starfleet. Two months after its return to Terra back in 2265, after all crew had disembarked, the ship's logs downloaded and all systems shut down, it had been towed into the spacedock normally reserved for dreadnought construction. This was on the direct orders of Fleet Admiral Heihachiro Nogura, Commander-in-Chief of Starfleet. The next ten months were spent stripping the ship down to its base frame and stress-testing every deck, bulkhead, and frame member along the way. *Enterprise*'s PB-47 circumferential warp engines, which were practically brand new and had been in use for less than a year, were removed along with their support pylons. The rebuilding process began in

2266, initially to the *Tikopai* specification that had been originally drawn up on the orders of Fleet Admiral Nogura. Vociferous objections were raised on certain aspects by Commander Montgomery Scott, former chief engineer of the Enterprise and now head of the conversion project. This caused the design to be changed in mid-conversion. These changes mainly affected weapons and sensor capability (as well as a modified internal layout for the secondary hull) and were quickly incorporated into the refit. The old dish-style navigational deflector was replaced by a hull-mounted recessed one, and a new split-level hanger bay (considerably larger than the previous one, courtesy of Commander Scott) was also included. The fitting of Starfleet's new small craft docking system at strategic points on the hull was also a first for an active duty vessel. The primary hull saucer retained its classic lines; obvious changes included the new impulse deck and additional phaser banks. The most telling visual difference of all, though were Enterprise's new LN-64 linear warp engines. They had been successfully tested on the prototype strike cruiser *Decatur* only a short time before. Enterprise was the first operational starship to receive them.

Enterprise did not get a proper shakedown cruise until after the Vejur Crisis was over. Once again resuming the con was Rear Admiral James T. Kirk, who had resumed the captaincy (with the blessing of Fleet Admiral Nogura) after the untimely disappearance of Captain Willard Decker. Extensive testing during Enterprise's shakedown cruise revealed her to be the most powerful ship in Starfleet (and possibly known space) at the time. She outclassed a dreadnought with her 12 phaser banks and dual photon torpedo tubes. Her new engines were rated for warp 8 cruising speeds and warp 12 emergency speeds, although *Enterprise* hit an unofficial speed of warp 17.8 during subsequent testing. With impressive numbers such as these Starfleet wasted little time in seeking Federation Council approval for more funding for its linear warp program. With such a spokesman as the legendary *Enterprise* showcasing the results, how could the Council refuse? They did not, of course, resulting in the Starfleet that we have today. All of Starfleet's surviving Class I starships were immediately put on schedule to receive linear warp upgrades as fast as yard space, duty schedules, and funding allowed.

In 2272 Starfleet began construction of its first all new-build heavy cruiser class since the *Achernar* class of the 2260s. These were not built to the proven *Enterprise* design, however. 43 ships were authorized for the cheaper and less versatile *Tikopai* design, the same that had been rejected when *Enterprise* was first pulled into drydock in 2265. This was the doing of the Starfleet Admiralty, who insisted on the *Tikopai* design in order to increase class size given available funding. They insisted that it would far easier to upgrade the less versatile *Tikopai* to *Enterprise* specifications as necessary in the future than to continue rebuilding older heavy cruisers to the expensive *Enterprise* spec, much less order expensive new builds. Their argument bore weight, considering that Starfleet Command had to cut short its plans to upgrade all existing Class I starships due to costs. Many had to be refitted with LN-60 linear warp technology (instead of LN-64 as preferred) in order to meet production timetables. By the end of the 2270s all of the remaining starships awaiting conversion had to be fitted with the cheaper, less versatile, but completely self-contained LN-52. Both the Starship Design Bureau and experienced Starfleet veterans argued against the proposal but in the end the Admiralty got its way; however, the number of the ships in the class was reduced to 33 for fiscal reasons. *Tikopai*, the class ship, was launched on 11 October 2275. She and her sister ships are scheduled to be uprated to full *Enterprise* specifications during their first ESLP refits, which are scheduled to take place just after the turn of the century.

Tikopai might have been remembered as little more than a cheaper Enterprise variant save for one thing. As the first newbuild starship class of the linear warp generation,* Tikopai was able to take advantage of the latest advances in starship construction techniques. The original Class I heavy cruisers (Constitution, Bonhomme Richard, Achernar) had 75-year expected service durations, with a potential service lifetime of 100 years given proper care and maintenance. The *Tikopai* class were the first Class I starships with planned service durations of 100 years (150 potential, including post-duty fleet reserve storage). It was an almost Klingon approach to starship construction, giving them such long service lives; however, Starfleet was already looking ahead to its own future. It did not want to be caught again with an aging and inadequate fleet as it had been in the decades following the Romulan War. The *Tikopai*, along with its new-build cousins in other classes, would ensure that Starfleet would be able to both defend the Federation and expand its borders in the decades to come.

(*) Technically this was the *U.S.S. Truxtun* (NCC-1728), a new-build *Endeavour* class uprated heavy cruiser. The *Endeavour* class is widely considered to be the last of the original Class I generation of starships due to its use of the original style primary and secondary hulls.

SPECIFICATIONS:

Length:
Draft:
Mass:
Crew
Range: 22 years at L.Y.V.
Cruising speed: warp 8
Maximum speed:warp 12
Armament: 18 phasers (7 banks of 2, 6 single mounts) 2 photon torpedo tubes

Innovations:

- First official starship class in Starfleet's new Class I linear warp program
- First fitted with Starfleet's docking port system
- *Tikopai* was the first class of all new-build Class I starships since the start of the linear warp program

VISUALS:



U.S.S. Enterprise (NCC-1701) in fleet service immediately after her rebuilding in 2268. The original was lost in action in 2287. The upgraded heavy cruiser *Yorktown* (NCC-1704) would be renamed as a new *Enterprise* (NCC-1701-A) later that same year. This was in honor of James Kirk's extraordinary efforts to end the Whalesong Crisis and save Terra from destruction.



U.S.S. Tikopai (NCC-1800) nearing completion (2275)

SCHEMATIC:



The inset illustrates the main visual difference (lower sensor suites) between the *Enterprise* and *Tikopai* classes. Many *Tikopai* class starships are also missing the arboretum (and its telltale windows) in the lower part of their secondary hulls.

ENTERPRISE AND TIKOPAI DESIGNS BY WALTER M. JEFFRIES, MIKE MINOR, RICHARD TAYLOR, ANDREW PROBERT, AND JOE JENNINGS VISUALS COURTESY OF PARAMOUNT PICTURES AND WILLIAM S. CULLARS SCHEMATICS COURTESY OF NEALE DAVIDSON

GAGARIN CLASS CORVETTE

SERVICE ENTRY DATE (OLD CALENDAR): 2266



The *Gagarin* class corvette was to the Class II Program what the *Enterprise* was to the Class I Program. It provided an all-new, modern technology frame on which to base a variety of new linear warp derived starship designs. In the case of the *Gagarin*, however, the ship involved was a brand new design, meant to serve as a base for the many different kinds of low-profile missions for which a true starship was not required. Various attempts at this had been tried over the years, but in the *Gagarin* they found what many consider to be their ultimate and most successful expression.

The stock *Gagarin* prototype, *U.S.S. Greer* (NCC-472) was little more than a small form factor hull with minimal crew and command facilities slung between two Kloratis FWB linear warp engines. Three hard points were mounted under the ship, two directly under the engines and one centerline for different kinds of attachments. The first variation of the *Gagarin*, the *Oberth* class research ship, has since become the most famous. It features an underslung sensor and survey pod, with power provided through support pylons attached directly to a *Gagarin*'s powered outer hard points. The following year saw the introduction of the *Jester* class light corvette (almost identical to *Oberth* but with a photon torpedo rack instead of the sensor pod) and the Orca class gunboat (an triple-engined Gagarin with megaphaser cannon). Many more variations followed in the years to come. For example, the *Clarke* class clipper was a Gagarin with a third underslung warp engine and internal modifications for diplomatic accommodations. Another wellknown example was the *Fisher* class light tug, which is a *Gagarin* fitted with a Class I transport container tow pad.

A total of 226 *Gagarin* hulls have been built since the class first entered service in 2266, with more on the way. For almost every Class I starship class there is a corresponding Class II *Gagarin* derivative to match. This has given Starfleet the most versatile "light" mission capability it has had since its inception. This has proven to be of great benefit in current times, what with the cutbacks and restrictions in Class I starships imposed by the Starfleet Reorganization Order of 2295. The availability of the *Gagarin* has enabled Starfleet to better cover gaps imposed by the Federation Council under this order. The versatile *Gagarin* and its derivatives can be expected to serve Starfleet in an expanded capacity in the future given these circumstances. The fact that all of these are new builds, with 100-year expected service lifetimes, almost guarantees it.

SPECIFICATIONS (BASE *GAGARIN* **CONFIGURATION):**

0	
Draft:	40 m
Mass:	22,500 DWT in base configuration
Crew	between 24 and 60
Range:	10 years at L.Y.V.
Cruising speed:	warp 6.0
Maximum speed:	
Armament:	1 forward phaser bank

All specifications are subject to variance depending on specific sub-class. For specifications concerning a specific sub-class, midshipmen should consult the Academy Intranet. Civilians should consult the *Jackill's* series of Starfleet reference works, in particular Volumes 2 and 3.

Innovations:

- First multimission design for Starfleet's Class II starship program
- Versatility of basic design has spawned numerous derivative and sub-classes since its initial launch.

VISUALS:



GAGARIN DESIGN BY DAVID CARSON (INDUSTRIAL LIGHT AND MAGIC) VISUAL COURTESY OF PARAMOUNT PICTURES SCHEMATICS COURTESY OF DAVID SCHMIDT (*STARFLEET PROTOTYPE*) ADDITIONAL DATA COURTESY OF DAVID SCHMIDT AND ERIC KRISTIANSEN

BALSON AND *CITADEL* CLASS COMMAND CRUISERS

SERVICE ENTRY DATE (OLD CALENDAR): 2268, 2271



The premature end of the *Federation* building program had left Starfleet with a major shortage in starships with the C3 capability needed to coordinate fleet actions. In the past ships from other classes, such as *Constitution, Bonhomme Richard*, and *Miranda* class cruisers had been pressed into the role, but none were really up to the task. All of them lacked the dedicated equipment and communications facilities so necessary in a purpose-built, C3-capable starship. Starfleet Command found its answer in the pre-dreadnought program Project Citadel, which had looked at producing a command cruiser based on or modified from existing Class I components. The program was revived, and soon became known unofficially as Starfleet's "thirteenth dreadnought."^{*}

The *U.S.S. Balson* (NCC-2105) was originally built out of leftover Class I Program components. She was given the primary hull intended for the cancelled destroyer *Jugurtha* (NCC-527), the PB-47 warp engines that had originally belonged to *Enterprise* (NCC-1701), and a secondary hull left over from the cancelled *Alliance* (NCC-2113) – the real unbuilt thirteenth *Federation* class dreadnought. This represented the quickest way to field a command cruiser, since the dreadnought secondary hull already had provisions for full C3 facilities. *Balson* was, in essence, a dreadnought without the third engine; a cruiser with dreadnought-class C3 capabilities for the coordination of fleet activities on a large scale. Three more *Balson* class starships were planned but never built due to the impact of the linear warp upgrades on Starfleet's already tight budget.

The proof for *Balson*'s existence came during the Kzinti Incursion of 2272. All but one of the dreadnoughts had been deployed to outer starbases, and the combat capabilities of the *Directorate* (NCC-2110) were needed in defense of remaining Local Group systems. *Balson* was used to coordinate fleet strategic and Marine landing activities in the liberation of the Galen, Jourett, and Tellar systems. *Balson* distinguished herself when she came under fire from Kzinti forces in the Jourett operation, destroying one Kzinti cruiser and crippling another before system space was secured by Starfleet forces. Even after Admiral Kirk arrived on the scene and took command, having been delayed by Kzinti forces at Mimit, *Balson* still served as his fleet command and coordination vessel. *Balson* was present at Admiral Kirk's final victory and was credited with another kill during the battle, this time a Kzinti destroyer.

In 2283 the *Balson* received a full linear warp upgrade in order to keep her current with Starfleet technology and operations. The only major change was the inclusion of an end-to-end photon torpedo array, similar in concept to that being used for the *Miranda* refits. This gave *Balson* four photon torpedo tubes, two forward and two aft. It is in this configuration that *Balson* continues to operate today. Its unique photon torpedo arrangement has since been copied for other Class I conversions and upgrades.

Project Citadel had proven itself with the Balson. Even so, the Federation Council was still unwilling to authorize yet another Class I starship program given the already high costs of linear warp upgrades. To resolve this guandary, the Starship Design Bureau came up with a command cruiser variation of existing heavy cruisers as a cost-savings measure. This neatly sidestepped the issue of authorizing new builds. For this purpose a custom-built, specialized secondary hull with full C3 capabilities was produced in limited numbers. Heavy cruisers that were selected for command cruiser conversion were subsequently docked and their secondary hulls swapped out in a process that took approximately two to three months, depending on the base or spacedock involved. The quickest way to tell a converted command cruiser apart from a normal heavy cruiser was the replacement of the standard shuttle bay with one that lacked the keel "scoop", being smaller and more utilitarian. The space gained was necessary for the inclusion of the full C3 suite. Another less obvious but important difference was the double-ended phototorp deck, identical to that first used with *Balson*.

Kongo was the first such conversion, made during the pre-linear days as part of Project Citadel to test the concept. Because of this Kongo did not get a double-ended phototorp deck until her 2273 LN-60 linear warp refit. Kongo was subsequently lost in the Kargon Incident of 2283, becoming the only Starfleet command cruiser ever to be destroyed in combat. Four other uprated heavy cruisers were subsequently converted to command cruisers after Kongo. These were the Lexington, Farragut, Excalibur, and Bonhomme Richard. The conversion of several Tikopai class heavy cruisers as replacements is being discussed once these four end their service lives, but nothing has come of this as yet.

(*) Astute midshipmen will be quick to point out that there were in fact 13 *Federation* class dreadnoughts built. *Star Empire* (NCC-2116) was a prototype ship built to a modified configuration and never officially existed; hence it is usually not included in class service listings. Underclassmen are not to be held accountable for this exception during their professional development training.

VISUALS:



Aft view of the *Balson* (NCC-2105) after her linear warp refit. Clearly visible in this image is her double-ended phototorp deck. Her likeness to the uprated *Federation* is also evident.



Excalibur (NCC-1705) after command cruiser conversion in 2281. In this port profile one can clearly make out the "chopped" shuttlecraft hangar bay indicative of a C3 secondary hull. *Excalibur* did not receive the dual-ended phototorp refit until 2286 due to operational needs.

SCHEMATICS:



U.S.S. Balson (NCC-2105) command cruiser



SPECIFICATIONS (*Balson*):

305 m
141.7 m
71.3 m
full load
440
s at L.Y.V.
warp 8
warp 12
e mounts)
do tubes

Innovations:

- First dedicated Starfleet command cruisers since the modified *Caracal* class starships of the 2180s
- Project cost of additional hulls resulted in command cruiser conversion program for existing upgraded Class I heavy cruisers

SPECIFICATIONS (*CITADEL* HEAVY CRUISER CONVERSION):

Length:
Beam:
Draft:
Mass:
Crew
Range:
Cruising speed:
Maximum speed:
Armament: 18 phasers (7 banks of 2, 6 single mounts)
2 photon torpedo tubes

BALSON DESIGN BY TODD GUENTHER (STARSTATION AURORA) CITADEL DESIGN BY DAVID SCHMIDT (STARFLEET DYNAMICS) VISUALS COURTESY OF FILEFRONT SCHEMATICS BY NEALE DAVIDSON AND RICHARD E. MANDEL

Belknap class strike cruiser

SERVICE ENTRY DATES (OLD CALENDAR): 2274



Belknap, to put it simply, was Starfleet's attempt to build a Class I heavy cruiser on a budget. Cost overruns with the Achernar program had caused the Procurements Division to begin seeking out alternative designs to the increasingly expensive Class I heavy cruiser. They found their answer, oddly enough, in the aging Baton Rouge. Many corners had been cut in order to launch the *Baton Rouge* program on time and under budget. One of those corners had been the relocation of the warp engines from the preferred "high mount" of the original Jeffries specifications to positions almost parallel with the secondary hull. This configuration had by necessity limited the top speed of Baton Rogue, however, in actual operations this Of more importance was the limitation was negligible. maneuverability gained, something that had caught the eye of TacFleet specialists when that organization was first founded. When their ranking officers learned that the Starship Design Bureau was considering building a modernized *Baton Rouge* they immediately threw their support behind the program. The reason was obvious: the more maneuverable a starship they could get, the better the chances of their commanders against the well-known agility of Klingon and Romulan designs. Components for a prototype were secured, with a primary hull obtained from the uncompleted transport/tug *Swift* (NCC-3894) and spare PB-32 warp engines from storage. The Starship Design Bureau dubbed the new ship a strike cruiser to emphasize its intended role: that of long-range, independent tactical operations on contested Federation borders.

Two major changes were made to the design of the Decatur (NCC-2500), the class prototype, before construction commenced. The first was to implement a new type of warp Termed "routine-detachable," this support pylon design. mounted the warp engines at the bottom of the secondary hull in a sled-like arrangement instead of the traditional side positions. This allowed for the removal of both engines at the same time in the event of emergency with a single separation event, a feature that traditional Class I cruiser designs had lacked. This "warp sled" was designed to be routinely detachable (hence the term), allowing it to be removed and reattached with relative ease. Upgrading the warp engines on a strike cruiser would be a simple matter of swapping out its routine-detachable engine assembly. Second. Leeding Technologies had just been given approval by Starfleet Command to procure its new LN-64 linear warp engines for fleet testing

and evaluation. The Decatur was one of two starships that would be available to test and evaluate these new engines. The other would be *Constitution* (NCC-1700) once it returned from its five-year mission. The routine-detachable feature of the *Decatur* design made installing linear warp engines appealing; furthermore, the planned connection point happened to dovetail nicely with the intermix shaft conduit design required to support the new engines. The procured PB-32s were discarded in favor of the first LN-64 linear warp engines ever delivered to Construction of the *Decatur* began almost Starfleet. immediately after the new engines arrived at the Cosmadyne orbital yards. Cosmadyne had come a long way since the Tritium Debacle of the 2180s, and much was expected of it with the strike cruiser program. They would not fail to deliver. The prototype strike cruiser *Decatur* launched on 17 February 2267, officially making her the first starship of the linear warp generation.

Decatur was one of only a handful of starships available to deal with the Vejur Crisis just six months after her launch. She had just returned to the Sol System from an initial shakedown cruise for additional stress testing and hull integrity evaluation. Unfortunately, *Decatur's* origins as a converted tug left it with little weaponry to face such a challenge. Such a crisis had not been foreseen during *Decatur*'s construction, since she was a prototype vessel, so the only weapons she had were the four phasers that had already been installed in *Swift*'s primary hull prior to its cancellation and reuse with *Decatur*. Because of this *Decatur* had to sit on the sidelines while the starship *Enterprise* (NCC-1701), the first real starship of the linear warp generation, rose to the challenge. Be that as it may, the ultimately successful performance of *Enterprise* during the Vejur Crisis owed a lot to the new technology it carried, technology that had first been installed and tested on the *Decatur* months Decatur was soon refitted to full strike cruiser before. specifications, though, and not long after production began on her new-build stablemates. Her differences would remain with her despite the upgrade, though, and in the end she was relegated to the status of fleet training vessel for the starship classes she had helped to bring about.



The final design of the *Belknap* class strike cruiser incorporated a few minor changes from lessons learned with the *Decatur* during testing, as well as equipment (such as photon torpedoes) that had not originally been installed on the prototype. Starfleet's new docking ring system was incorporated, as well as an

Enterprise-style enlarged primary hull saucer and redesigned phaser power systems. An elliptical recessed navigational deflector, similar to the one used on *Enterprise*, replace the circular mount used on *Decatur*. The shuttlecraft bay was also enlarged a bit, although it was still noticeably smaller than the one used for *Enterprise*. As soon as each *Belknap* was finished it was immediately rushed to the border for its "shakedown cruise," which amounted to little more than filling in for retiring *Kiaga* and *Agilis* class perimeter action ships. They would remain on the border for the rest of their service lives.

All of the *Belknap* class strike cruisers are scheduled to be retired as a group to the Starfleet Reserve in 2296. This was forced by the imposition of the Starfleet Reorganization Order in 2295 by the Federation Council despite vociferous objections from TacFleet, which is losing one of the most powerful starships in its inventory. The *Belknap* class will cease active duty status just short of its first ESLP refit, with none planned in the immediate future. *Belknap* was sacrificed so that larger numbers of *Tikopai* and new-build *Miranda* class starships could remain in service. The entire class will soon sit idly in storage depots, a still-young group of vessels whose service life was cut short by nothing more than the expedience of politics.

SPECIFICATIONS:

Length:	141.7 m
Draft:6	
Mass:	300 DWT
Crew	395
Range:	at L.Y.V.
Cruising speed:v	varp 8
Maximum speed:v	varp 12
Armament: 15 phasers (7 banks of 2, 1 single 2 photon torped	

Innovations:

- First Class I starship equipped with linear warp technology (*Decatur* prototype)
- First starship design fitted with a routine-detachable warp engine assembly



BELKNAP DESIGN BY TODD GUENTHER VISUAL COURTESY OF RICK KNOX SCHEMATIC COURTESY OF NEALE DAVIDSON



The newly refitted *Enterprise* (NCC-1701) passes her sister ship *Constitution* (NCC-1700) as the latter returns to the Sol System for her own linear warp upgrade



Constitution (NCC-1700) on final approach to the San Francisco Navy Yards, Starfleet Division, for linear warp conversion



An uprated *Enterprise* class heavy cruiser fires on a fleeing Klingon battlecruiser at warp speed ...



... while another *Enterprise* class cruiser encounters two ships from the Romulan Star Empire's new fleet

ABBE CLASS TORPEDO DESTROYER

SERVICE ENTRY DATES (OLD CALENDAR): 2273



Starfleet has always tried to maintain a starship class dedicated to the heavy firepower forward concept ever since the *Marshall* class destroyer of the Romulan War. The *Abbe* is the contemporary version of that concept, a starship class who can count in its ancestry such storied starship classes as the *Marklin* class heavy destroyer of the Four Years War and the *Sigma* battlecruiser prototype of the *Pax Federationis*. It brings the heavy firepower forward concept into the linear warp generation of starships.

Lessons learned from the Marklin were applied to the Abbe's design. The weapons-heavy secondary hull was replaced by a topside weapons pod mounted over a minimal engineering hull. This configuration, suggested by the Baton Rouge era Ranger class survey cruiser, allows Abbe to maintain the Marklin's ability to remain a combat-capable starship, vis-à-vis multiple phaser mounts on its primary hull, in the event it has to jettison its weapons pod. The top-mounted, routine-detachable weapons pod also gives Abbe more multi-mission potential than it might have otherwise had. Reconfiguring Abbe for a special mission is just a simple matter of changing out its standard weapons pod for one of a design more befitting the mission it had been It was this multi-mission potential that finally assigned. convinced the Federation Council to fund Abbe, although it has yet to realize its full potential.

There are at present only two versions of the *Abbe* routinedetachable pod. The first is the standard heavy weapons version, consisting of no less than eight photon torpedo tubes (four each forward and aft) complete with support systems and magazines. The second is the scout pod, somewhat larger than the heavy weapons pod. It retains only two photon torpedo tubes but adds a sophisticated sensor/scanner suite that is the equivalent of that found on an uprated *Hermes* or *Nelson* class scout. The photon tubes are used primarily for the launching of sensor probes; even so, a limited number of photon torpedoes are carried for defensive purposes. Other *Abbe* pod types have been discussed; however, none as yet have been implemented in fleet service.

The primary mission of the *Abbe* is that of first response. It is designed to be sent into a contested area of space with minimal

support (more frequently none at all) and hold it until other fleet units arrive. This also applies to an *Abbe* reconfigured for the scout role: it stays on station for as long as possible gathering as much information as possible until it is either forced to withdraw or additional Starfleet units arrive on the scene.

While the Abbe class has yet to see fleet action in a major battle, it has not stopped it from proving its worth on a smaller scale. In 2274 the class lead ship U.S.S. Abbe (NCC-5300) surprised 4 Orion pirate vessels while they were enroute to a secret supply base. One of these was a decommissioned Klingon D-7 battlecruiser that had been bought by the Orions and converted for their own use. The Abbe engaged all four vessels at once, and with its first photon torpedo salvo so badly mauled the D-7 that it was forced to withdraw. As the other three ships circled around and attempted to attack from the rear, the Abbe then let loose with a full aft photon salvo. A second Orion vessel caught the full brunt of the spread and was destroyed instantly, while Captain Mordan of Andor brought the Abbe about and immediately attacked the two remaining Orion vessels. Skillful phaser fire combined with a third photon salvo forced the last two Orion vessels to withdraw after suffering significant damage. The Abbe herself received only minimal damage during the encounter, and shortly thereafter located and destroyed the Orion supply base.

Starfleet proposed 39 *Abbe* class heavy destroyers in its 2270 appropriations request. The Federation Council cut that number down to 20. All but one remain in service. The sole exception is the Xe (NCC-5309), which was lost in the line of duty.

SPECIFICATIONS:

Length:
Draft:53.5 m
Mass:
Crew
Range:
Cruising speed:
Maximum speed:
Armament: 12 phasers (6 banks of 2 on primary hull)
8 photon torpedo tubes (heavy weapons pod)
2 photon torpedo tubes (scout pod)

SCHEMATIC:



ABBE DESIGN COURTESY OF ERIC KRISTIANSEN (JACKILL'S) VISUAL COURTESY OF THE "DUCT TAPE WONDER" SCHEMATICS COURTESY OF NEALE DAVIDSON (PIXEL SAGAS)

THE *Avenger* class heavy frigate and the *miranda* refit program

SERVICE ENTRY DATES (OLD CALENDAR): 2275



Starfleet Command resurrected Project Avenger in the late 2260s. This time around, its goal was to find some way of modernizing the numerous yet obsolete *Kearsarge* class light cruisers still in service. The final result, like the *Enterprise* class heavy cruisers, would have transformed the *Kearsarge* into a new class altogether. The old PB-32S "shorty" drive systems would be replaced with a pair of full-sized LN-64 linear warp engines. Its photon torpedo banks would also be removed and relocated to *Miranda*-style mounts mounted on the underside of the hull. This would have given the refitted *Kearsarge* the extra warp speed, range, and durability that had so limited its operational effectiveness before.

At the same time, however, a completely different Starfleet Command design study was underway. This was intended to refit the versatile Miranda class cruisers and its frigate counterparts (*Surva* and *Coventry*) with linear warp technology. Upgrading the Miranda was especially attractive due to its proven performance and versatility. The limiting factors in this case were operational necessities and lack of funding. Miranda class cruisers were in as great a demand as Constitution class heavy cruisers, and Starfleet could ill afford to spare large numbers of them from fleet duty. In the end, it was decided to take the Surva, the "least versatile" of the lot (in other words, the one with the smallest modular hull and requiring the most work) and use it as the basis for the upgraded Miranda program. Surva would be the first converted to upgraded Miranda specifications, while Miranda and Coventry would receive the conversion once the *Surva* refits were complete.

What happened next is has since passed into Starfleet legend. The final specifications for both *Avenger* and the *Miranda* refit programs were given to Fleet Admiral Heihachiro Nogura for his final approval. He looked at them for a few minutes, then took the hardcopy schematic of *Avenger's* port profile and deliberately turned it upside-down. "I don't see why you couldn't do the same thing with *Miranda*," he is reported to have said. "These proposals are almost identical. I think Starfleet would be best served by upgrading *Miranda* like *Avenger* here," he said, holding up the inverted schematic, "than what was originally planned. Might work for some of the other frigates, too. Make the appropriate changes and bring it back. Dismissed." With Nogura's order all hope was lost for the *Kearsarge* to become part of the linear warp generation. The class was quickly retired to auxiliary duties and their roles taken over by newer Starfleet vessels. 22 *Surya* class frigates, among the oldest in Starfleet, were scheduled for conversion per Admiral Nogura's order. The first of these just so happened to be named *Avenger* (NCC-1860), which was upgraded and returned to service in 2275. It is the only time in Starfleet history where the lead vessel in a starship upgrade program shared the same name as the project title under which it was being upgraded.

The Miranda refit wound up becoming a more powerful starship than had been originally planned, thanks to the adaptation of the Avenger standard. The reconfigurable multi-mission hull was retained but modernized, and the combined hangar bay (with dual bay ports) first tested with the *Coventry* class frigate *Indus* now became design standard. Additions from the *Enterprise* conversions were extensive, with the most obvious being the new LN-64 linear warp engines and the six dual heavy phaser banks both top and bottom of the hull. A second pair of singlemount phasers were mounted aft to provide extra protection due to the *Miranda* hull configuration. *Miranda's* trademark quadruple hull "hard points" were retained instead of being removed, with the two uppermost ones added for the Surva conversion program. This would enable the fitting of the various Miranda "roll bar" options and all of the mission versatility that they brought with them.



There was one last addition made to the design spec before the Avenger conversion process began. The megaphaser cannon had entered Starfleet service in the 2260s, producing beam power equivalent to a high-yield modern photon torpedo. The power requirements had until now prevented them from being mounted on anything except starbases and selected defensive platforms. The modular hull and warp-power equipped hard points of the Avenger design coupled with LN-64 linear warp capabilities practically begged for megaphaser fitting. The Avenger thus became the first Federation starship class equipped with megaphaser cannon. In operational practice they were akin to the old-style phaser cannon of the Four Years War, vielding impressive results at a high cost in available warp power. The subsequent success of megaphaser operations in the field would cause the technology to be fitted on other Starfleet starship classes of the linear warp generation. The inclusion of dual

megaphaser cannons, one on each side of the classic *Miranda* roll bar, would also cause the *Avenger* to be reclassified as a heavy frigate instead of a cruiser. Frigates were the traditional combat gun platforms of Starfleet and *Avenger* was now too overgunned for the standard cruiser designation.

40 of 42 *Miranda* class cruisers and 22 *Surya* class frigates were eventually upgraded to the *Avenger* specification, with the *Surya* conversions coming first. The *Surya* upgrade program was eventually cancelled before completion due to conversion difficulties, spacedock delays, and lack of funding. The funding issue also resulted in the cancellation of the planned *Coventry* LN-64 upgrade program. Instead, *Coventy* received a low-level LN-52 upgrade beginning in 2289. The reason for the lack of funding was the authorization for an alternate "upgunning" of 20 *Miranda* class cruisers in 2273 to a variant specification.



The *Soyuz* class attack frigate was the first *Miranda* variant to use the edge-mounted hardpoints instead of the traditional topside roll bar. The reason for this was because its megaphaser cannon were mounted in adjustable turret-style mounts (an idea borrowed from Klingon "Bird-of-Prey" heavy disruptors), with two more mounted top and bottom on a special modular hull extension. An enhanced sensor suite provided independent tracking capabilities for each megaphaser turret. Only 6 of the authorized 20 were ever built, as the *Soyuz* configuration soon proved too expensive and too unwieldy to effectively operate in combat. The remaining 16 *Soyuz* conversion candidates received the standard *Avenger* upgrade instead.

The *Avenger* program proved an immediate success. It has since inspired several sub-classes (*Endurance, Cyane, Hippocrates, Comanche, Nimitz*) and several derivative frigate-class designs (*Knox, Daran, Bragg, Lancer*). *Avenger*-derived modular hulls have been the subject of much experimentation by the Starship Design Bureau and can be seen in both "long" and "short" forms on several prototype starships – most notably the *Athabaska* strike carrier and the *Belasarius* prototype dreadnought. It was also the inspiration for the *Dollond* class transport/tug. 38 new build *Avengers* were authorized in 2282, with the first entering Starfleet service in 2285.

All *Avenger* class heavy frigates were reclassified as *Miranda* class cruisers, regardless of origin, following the Federation Council's Starfleet Reorganization Order of 2295. This was a purely political move meant to de-emphasize their once-military nature. Most have since been reconfigured for the long-range exploration role save for the derivative *Soyuz*. The entire class (save the *Bozeman*, which was lost in the Typhon Expanse in 2278) had already been removed from service by 2289, never living up to the potential that had been expected of its unique design. An additional order for 112 new-build *Miranda* class cruisers (*Avenger* configuration) is currently pending review by the Federation Council.

SPECIFICATIONS (STANDARD CONFIGURATION):

Length: Beam:	
Draft:	
Mass:	180,000 DWT
Crew	395
Range:	20 years at L.Y.V.
Cruising speed:	warp 8
Maximum speed:	warp 12
Armament: 14 phasers (6 banks of additional weaponry varies with	

NOTE: Standard specifications do not include "roll bar" options and hard point option packages. *Soyuz* class variant displaces 212,400 DWT due to megaphaser turrets and extended hull.

Innovations:

• First Class I starship to mount megaphaser cannon

SCHEMATIC:



Avenger (uprated Miranda) in standard configuration



Avenger (uprated Miranda) with standard roll bar package



Soyuz class attack frigate

Avenger (Miranda) design by Visuals Courtesy of Battleclinic.com and Scifi Meshes Schematics by Neale Davidson (Pixel Sagas)

OTHER FEDERATION STARSHIPS

HOPI CLASS RESEARCH VESSEL Service Entry Dates (old calendar): 2258

Although it was the spiritual descendant of the *Cahuya*, the Class II *Hopi* differed in many aspects. It was fitted with modern PB-47 circumferential warp engines, for starters. It also lacked the *Cahuya*'s limited ability for a planetary landing. What made it unique was its sectioned triple hull. Its center hull had control and crew spaces on one end, with both secondary propulsion and an oversized shuttle bay on the other. Everything in the middle, though, was removable. This permitted the fitting of specialty packages, such as extended sensor suites or a deep space telescope for stellar cartography mapping. The side sections were 100% reconfigurable according to mission need and duration. This made the *Hopi* class among the most flexible and popular research craft of their time.

SPECIFICATIONS:

Length:	203.8 m
Beam:	138.2 m
Draft:	.92.1 m
Mass:	,800 DWT
Crew	325
Range:	s at L.Y.V.
Cruising speed:	.warp 6
Maximum speed:	. warp 8
Armament: 4 phasers (1 bank of 2 both for	e and aft)

SCHEMATIC:



HOP/ CONCEPT BY DON CHRISTANSON SCHEMATIC AND BACKSTORY BY FEDERATION FRONTIERS

ANTARES CLASS FREIGHTER

SERVICE ENTRY DATES (OLD CALENDAR): 2269



The *Antares* class freighter is a common sight at all points in Federation space. It is popular with both corporate and independent operators alike due to the ruggedness of its design. It is capable of planetary landings for loading and off-loading of its cargoes. It has six individual general-purpose cargo holds, any of which can be sealed off and separated via explosive bolts in the event of an emergency. Its warp engine design is somewhat old-fashioned but adequate for the task. *Antares* owners are known to "soup up" their ships to suit their own tastes, resulting in thousands of individual variations.

SPECIFICATIONS:

Beam:	
Draft:	51 m
Mass:	53,200 DWT empty
	up to 115,000 DWT full load
Crew	
Range:	3 years at L.Y.V.
	warp 5 (unloaded)
	warp 3 (full load)
Maximum speed:	warp 7 (unloaded)
	warp 6 (full load)
Armament:	varies with owner

SCHEMATIC:



ANTARES CONCEPT BY GREG JEIN VISUAL COURTESY OF RANDY ASPLUND SCHEMATIC COURTESY OF THE STARSHIP SCHEMATIC DATABASE
LOTUS FLOWER CLASS TRANSPORT

SERVICE ENTRY DATES (OLD CALENDAR): 2268



This was the first civilian transport craft of the linear warp era. 218 of these were ordered by the Federation Merchant Marine for various purposes to meet its ever-expanding transport requirements. At least twice that number have been sold to a variety of Federation businesses and private citizens. It has dual detachable holds that can be configured for a variety of cargo. In their place it can carry a single standard Starfleet transport container or one or more containers of other various systems in use, such as the older and still popular *Watt*-era cargo pods.

SPECIFICATIONS:

Beam:	
Mass:	
	up to 245,000 DWT full load
Crew	
Range:	2 years at L.Y.V.
Cruising speed:	warp 7 (unloaded)
	warp 3 (full load)
Maximum speed:	warp 9 (unloaded)
	warp 6 (full load)
Armament:	none



Lotus Flower Concept by Dan Knutson (FASA Corporation) Visual by Rick Knox Schematic by Dana Knutson (FASA Corporation)

ALTAIR CLASS MERCHANTMAN

SERVICE ENTRY DATE (OLD CALENDAR): 2258



These Class B trading vessels are most commonly seen in the Rigel sector or operating near border worlds along the Treaty Zone. They are small but surprisingly maneuverable. Hundreds of these are owned by Federation merchants and free traders, shipping firms, and the like. Hundreds more are owned and operated by "independents," caring little for Federation law and only for the profits that await them at the end of their often illicit trading runs.

SPECIFICATIONS:

Beam:	
Mass:	
	up to 34,500 DWT full load
Crew	
Range:	1 years at L.Y.V.
Cruising speed:	warp 4 (unloaded)
	warp 2 (full load)
Maximum speed:	warp 6 (unloaded)
	warp 4 (full load)
Armament:	2 phasers (1 bank)

VISUALS:



MERCHANTMAN CONCEPT BY NILO RODIS (INDUSTRIAL LIGHT AND MAGIC) VISUAL COURTESY OF FILEFRONT SCHEMATIC COURTESY OF THE STARSHIP SCHEMATIC DATABASE

HUNTINGTON CLASS DEUTERIUM TANKER

SERVICE ENTRY DATES (OLD CALENDAR): 2270



Deuterium ("heavy water") is the optimum fuel source for modern fusion reactors and impulse engines systems. The only requirements for making it are a plentiful water supply and a refining station. Most Starfleet vessels are capable of producing their own deuterium while civilian vessels are usually not so fitted. For this reason, deuterium tankers have plied the space lanes almost from the moment they were opened for use, transporting large quantities of refined deuterium to distant colonies and in-transit refueling stations. These slow, lumbering vessels are easy prey for raiders and pirates, so they are always armed and travel either with a Starfleet escort or with a squad of fighter craft in its hangar bay. The *Huntington* is the linear warp generation's deuterium tanker, derived from Starfleet Class I starship components and with many of the same features. These are rapidly replacing the older *Ishinomaki* class for use by the Merchant Marine and civilian shipping sectors.

SPECIFICATIONS:

Beam:	
	70.3 m
Mass:	189,250 DWT empty
	up to 211,250 DWT full load
Crew	52
Range:	
Maximum speed:	
Maximum speed:	warp 7.5
Armament: 4 phas	ers (2 banks of 2 top & bottom)

BACKGROUND AND STATISTICS PROVIDED BY ERIC KRISTIANSEN (JACKILL'S) VISUAL BY TERRADYHNE

WHORFIN CLASS TRANSPORT SERVICE ENTRY DATES (OLD CALENDAR): 2270



These were originally developed for use as diplomatic vessels and priority personnel transports. All were named for famous Federation ambassadors of both past and present. They served Starfleet in this role for almost two decades before they were replaced by more modern designs. Many *Whorfin* class starships were purchased by the civilian sector following their decommissioning from Starfleet, but several still remain in fleet reserves as a fallback measure.

SPECIFICATIONS:

Beam: Draft:	
	up to 129,300 DWT full load
Crew	
Range:	3 years at L.Y.V.
Maximum speed:	warp 5.0
•	warp 7.5 1 phaser bank

VISUALS:



WHORFIN CONCEPT BY INDUSTRIAL LIGHT & MAGIC, CGFX DIVISION SCHEMATIC COURTESY OF THE STARSHIP SCHEMATIC DATABASE

SPECIAL SECTION

STARFLEET'S LINEAR WARP UPGRADE AND BUILDING PROGRAM

The linear warp program of the 2270s and 2280s was one of the most ambitious programs in Starfleet history. It affected every major starship type in both the Class I and Class II Programs. Many older designs were uprated and several new classes were introduced as well.

To attempt to deal in depth with the linear warp program is beyond the scope of this training document. Instead, what is provided in this section is a series of visuals. These show many of the major Class I and Class II starships that were either upgraded or built as part of the linear warp program. Midshipmen are required to familiarize themselves with every vessel listed in this section. They must be able to identify them either by picture, port profile or silhouette on sight. Cadets should also be able to identify to which of the three linear warp engine technology paths (LN-52/LN-60/LN-64) a given class belongs.

A full listing and illustrations of the various starship classes involved in the linear warp programs of the 2270s can be found in the civilian publication *Jaynz' Ships of the Linear Warp Era*, which is available through the Academy Intranet. The information it contains is not required knowledge but may prove helpful to midshipmen in the course of their studies.

VISUALS BY MICHAEL KURT BARTEL (<u>THE TREKKER'S GALACTOPEDIA</u>), DON KARNAGE, THE DAYSTROM TECHNICAL INSTITUTE, STARFORCE PRODUCTIONS, TERRADHYNE, AND MANY OTHER TALENTED ARTISTS

DREADNOUGHTS:



Federation class as built with original PB-47 warp engines



U.S.S. Star Empire (NCC-2116) uprated *Federation* prototype vessel PB-49 program (experimental)



Federation (uprated) class dreadnought LN-64 program



Star League (uprated alternate Federation) class dreadnought LN-64 program



Oriskany (uprated Coronado) class shuttlecarrier LN-64 program



Command cruiser *U.S.S. Balson* (NCC-2105) LN-64 program



Citadel class command cruiser (*Enterprise* conversion) conversion of existing LN-60/LN-64 program heavy cruisers



Belknap class strike cruiser new build



uprated *Miranda* class cruiser (stock configuration without "roll bar") new build



CRUISERS:

Enterprise (uprated *Constitution*) class heavy cruiser LN-64 program



Constitution II (uprated Constitution) class heavy cruiser LN-60 program



Endeavour (uprated Bonhomme Richard) class heavy cruiser LN-52 program



Tikopai class heavy cruiser new build

DESTROYERS AND SCOUTS:



Monoceros (uprated *Hermes*) class scout LN-52 program (dual nacelle prototype)



Siva (uprated *Saladin*) class destroyer LN-64 program



Ares (uprated Hermes) class scout LN-64 program



Akula class (uprated) heavy destroyer LN-64 program



Ranger class scout new build



Abbe class torpedo destroyer new build

FRIGATES:



Phobos (uprated Loknar) class heavy frigate variant LN-64 program



Avenger (uprated Surya) class heavy frigate LN-64 program



Soyuz class (uprated *Miranda*)attack frigate LN-64 program

TRANSPORTS (CLASS I AND II):



Uprated *Keppler* class transport/tug LN-52 program



Al Rashid (uprated Ptolemy) class transport/tug LN-64 program



Lotus Flower class transport new build



Huntington class deuterium tanker new build

CORVETTES AND VARIANTS



Gagarin (Greer) class corvette new build



Oberth class research ship (*Gagarin* variant) new build



Jester class light corvette new build



Orka class gunboat new build



Clarke class clipper new build



Fisher class light tug new build

ALIEN ENCOUNTERS

THE ONLY SHIP IN THE QUADRANT

AN ABRIDGED AND EDITED EXTRACT FROM *The Vejur Crisis* By Carlton Xavier (Vega IX: New Frontier Publishing, 2280)



This extract describes how the newly rebuilt heavy cruiser <u>Enterprise</u> (NCC-1701) wound up being the starship that intercepted Vejur on its approach to Earth in 2267.

Starfleet had over 1900 Class I combat-capable starships at its disposal throughout the Federation, yet only one had any prayer of intercepting the Intruder as it rolled across the Klingon border on a direct bearing for Earth. Without waiting for orders the dreadnought *Entente* (NCC-2120) had made an emergency launch from Starbase 27, leaving behind its escorts Tamerlane (NCC-510) and Revere (NCC-595) and was tearing across Federation Quadrant 2 at top warp speed. The distance that the Entente had to cross, though, weighed in favor of the Intruder. Despite its status as one of the fastest and most powerful starships in the fleet, *Entente* could not close the gap Fleet Captain Michael Bradbury was betting on in time. Starfleet being able to somehow slow it down before it reached Earthspace. His was a losing race, though, with the Intruder getting closer and closer to Earth with each passing hour. All Bradbury could do was relay reports and curse his luck as *Entente* tried in vain to close the gap between it and its goal.

Between the Intruder and the Sol System were 15 Class I starships. None of these were as powerful as the K't'inga class battlecruisers that the Intruder had wiped out of existence with so little effort. *Entente* might have had a chance but it would never get to Earth in time. There was talk within Starfleet Command of massing these 15 starships, mostly frigates, between the Intruder and Earth. This action was promptly overruled by Fleet Admiral Heihachiro Nogura. Commander-in-Chief of Starfleet. He had no desire to see Starfleet personnel die needlessly. Nogura was not about to throw away the lives of 15 starship crews on what he knew would be a useless gesture. If the Intruder had so easily batted away a trio of the Klingon Empire's newest starships, along with the Epsilon 9 monitor outpost, then nothing available in the field (save perhaps the distant *Entente*) stood a chance. This left two starships, both in Earth orbit, with any hope at all of dealing with the Intruder.

The possibility of using the strike cruiser prototype *Decatur* (NCC-2500) was abandoned almost immediately. It was a Class I prototype vessel fitted with new LN-64 linear warp engines. These were by far more powerful than anything Starfleet had in service, outrating even the triple PB-47 circumferential warp engines of the mighty *Entente. Decatur* might have been a viable choice had she the weapons to match. The fact that *Decatur* had been converted from an unfinished tug, though, meant that it didn't have photon torpedoes and only four phaser banks for armament. "That ship won't last five minutes against that thing, let alone five seconds," said Chief of Security Androvar Drake. "We need something with dreadnought firepower, and we need it now."

"What about the *Enterprise?*"

It was Chief of Operations James T. Kirk who spoke those fateful words, relayed via secured comline. He had been vacationing at Gibraltar when the Intruder first appeared, and was speaking to his fellow members of the Admiralty from a private compartment inside a Starfleet airtram. Kirk was on his way back to Starfleet Headquarters in San Francisco as fast as the tram could take him; however, it would be another twelve minutes before he got there. Kirk was already a legend, being not only the most famous starship captain in Starfleet history but one of the youngest officers to earn his admiral's stripes. *Enterprise* had been the ship that had brought him his fame. As the first Class I heavy cruiser to return to Earth after completing its five-year mission, it had been the first chosen for conversion to linear warp technology. It too had new LN-64 warp engines; however, it also had the weaponry to match.

"What about it?" Drake said.

"She's faster and more powerful than anything in the fleet," Kirk replied. "We might have a chance with her."

"Jim, she's still in drydock," countered Chief of Staff William Paris. "She hasn't even undergone her space trials yet, and you know as well as I what that means."

"Can you name me another ship in range with the power to stop that thing in time?"

"We don't even know if she can, provided she can launch!"

"She *will* launch," Kirk replied. "I know Mr. Scott. If anybody can get her out of that dock in time, he can."

"Admiral Kirk," said Nogura, speaking quietly. "I have no doubt about Commander Scott's abilities. Are you sure Captain Decker can handle this?"

"It's what he was trained for, sir. Still, I'd like to talk to you about that when I get there."

"Agreed." Nogura nodded to Kirk as the screen winked out, then turned to face the rest of his staff. "I concur with Admiral Kirk's recommendation. The only starship with any hope of stopping the Intruder in time is *Enterprise*. Inform Captain Decker and Commander Scott to begin immediate preparations for an emergency launch. Dismissed."

THE KZINTI STRIKE BACK

AN ABRIDGED AND EDITED EXTRACT FROM *The NZINTI Incursion of 2272* by Hanson Briggs (Terra: Cambridge Press, 2292)



Beginning in 2270 the Federation Starfleet began conducting a series of covert "hemming-in" operations against the Kzinti. These was in blatant violation of the terms of the Treaty of Sirius. Starfleet justified its actions on the grounds that the Kzinti were "up to something." What it was they didn't know and their best intelligence amounted to little more than educated guesses. There were certain indications, though, that something was stirring within the Patriarchy. Starfleet vessels began violating Kzinti space on a regular basis, searching with their long-range sensors, trying to find out what it was. The Kzinti, to Starfleet's surprise, did nothing to stop them save verbal warnings. Not that the Kzinti could have resisted, anyway. Even in groups, antiquated Kzinti police cruisers (the largest ship class they were allowed under treaty terms) were no match for a single Federation starship. The suspicions of Starfleet Intelligence were in fact correct, but far beyond their worst nightmares.

The Kzinti had not been idle since their humiliation at Starfleet's hands in the Beta Lyrae Incident of 2264. The loss of the Trader's Claw, a reportedly stolen Kzinti police vessel whose real mission was to steal a recently discovered Slaver stasis box, might not have been learned had not two of the ship's crewmen survived. They had been on the far side of the ship when a Slaver weapon inside the box self-destructed to prevent capture, and thus escaped the instant death that was served to their fellows. The Kzinti Patriarch is said to have exploded in rage upon hearing the news of their failure and that of Chuft-Captain, their late commander. It is said that he swore war against the Federation on that day in payment for the constant humiliations his people had been made to suffer under the Treaty of Sirius. Whether his vow was justified or not is a question for the historians to argue. The fact remains that war was waged within the decade, and a very costly one at that.

Ever since the late 2250s the Kzinti had been surreptitiously building a small but powerful modern space navy

right under the noses of Starfleet. The new ships were built in deep underground caverns on asteroids and small planets within the Patriarchy, well shielded and hidden from prving Federation eyes. In this they were helped by two of their former vassal states, the Mirak Star Empire and the M'dok. The Tzenkethi, who had once been servitors to the Kzinti, refused aid but allowed Mirak and Kzinti trading ships to pass through their territory unchallenged. This was of great help to the Patriarch's war effort, for it gave him back-door contact with his third and most unlikely ally: the Klingon Empire, which provided considerable technical assistance. The Klingons and Kzinti had set aside the traditional bad blood between them for the chance to strike a blow at Starfleet from deep within the Federation itself. The alliance with the Mirak was just as important. The Mirak Star Empire was centered on the Omega Sagittarii star system and thus lay well out of the Federation Treaty Exploration Territory. Kzinti and Mirak agents used the circuitous Tzenkethi-Klingon-Rigel trade corridor to travel back and forth, as well as to smuggle arms and technology. The Orion trade cartels were hip deep into this operation, as one might have expected, and did their part to aid the Mirak and Klingons in rearming the Kzinti with modern ships and weaponry - all the while making a handsome profit along the way.

To the ruling Kzinti Patriarch, none of this mattered. He did not care how his prides rearmed for war, so long as it was accomplished. His gift to his people would be one last chance at glory in the warlike ways of the past before the old ways of Kzin died forever. Only a knowing few were aware of the real reasons behind his actions. No others would learn of the threat that was bringing Kzin to the brink of extinction until after the Heroes'-Last-Stand had gone down in history as the last great military campaign of the Kzinti.

On 07 August 2272 the frigate *Norma Ra Den* (NCC-2779) was on routine assignment patrolling the border sectors of the Kzinti Patriarchy closest to the Local Group systems. Its counterpart on the other side of the Patriarchy was the cruiser *Encounter* (NCC-2632), patrolling the coreward border sectors. All had been quiet on the border since Starfleet's last "hemming-in" action only months before. Nothing unusual was expected and the day was expected to be fairly routine.

The destroyer *Hashishiyun* (NCC-516) was enroute to the Patriarchy for its turn at border patrol when it received a badly garbled distress signal from the *Ra Den*. What little that could be discerned was the *Ra Den* was under attack by multiple Kzinti spacecraft. Captain Thomas Hooker immediately ordered the *Hashishiyun* to proceed to Kzinti space at warp 8 at red alert and full battle readiness. He also sent a message to Starfleet Command apprising them of the situation and that the Kzinti appeared to be "causing another incident." It would be the last message ever received from the *Hashishiyun*.

Approximately 13.4 hours after receiving Captain Hooker's message from the *Hashishiyun*, Regional Space Station Omega-12 was attacked and destroyed by "more than 30 starships of unknown configuration." The following day, the Fomalhaut system fell to the enemy force, along with three more Starfleet combat vessels. By this time the identity of the attackers was known to Starfleet - or to be more precise, was confirmed. Starfleet had pushed the Kzinti too far in three years of almost constant "hemming-in" operations and now the Kzinti were striking back. Two centuries of resentment against losing the Earth-Kzin Wars, losing their Empire, the Patriarch's ancestor made to grovel before the boots of Starfleet in order to save the prides, the ever-present and always-chafing restrictions of the Treaty of Sirius, and the "unceasing" poking and prodding by Starfleet patrol vessels had finally taken their toll. The new Kzinti space fleet, fitted with ships of Mirak design, weapons and engines of Klingon origin, and shielding technology stolen right out from under the very nose of Starfleet itself, cut a bloody swath of death and destruction through the Ophiucus sector that would have done their ancestors proud. Their goal was obvious to anyone who could read a star map: the Federation Local Group systems and Terra in particular.

What was not realized at the time was that not one but two Kzinti fleets had simultaneously burst out of the Patriarchy. The first, the larger of the two and the one bound for Local Group space, was the one that had destroyed the *Ra Den* and Hashishiyun. The second, smaller fleet had destroyed the *Encounter*. It was making a beeline for the border, where the freedom and protection of Mirak space awaited them. They pointedly avoided combat with the few Starfleet vessels they encountered. By the time Starfleet Command realized what was happening it was too late. A fleet of fourteen Starfleet vessels. hastily assembled to stop the Kzinti at the border, was mauled by a Mirak fleet that came over the border to assist the fleeing Kzinti. Five Starfleet vessels were destroyed and four more badly damaged before the battle was over. Thus did the mates and heirs of the Patriarch escape capture, and soon found new homes with the Mirak ruling prides. The Mirak, on the other hand, gained legitimacy as the "true heirs" of the Kzinti legacy. It was a status they had long sought and, to them, well worth the price they paid for it.

The main Kzinti thrust made it as far as Tellar, conquering the planet for the second time in its history. This conquest cost them dearly, as did their occupations of Galen and Jourett. Starfleet and local forces put up stiff resistance, destroying a number of Kzinti starships and inflicting heavy casualties on Kzinti ground assault teams. In return the Kzinti killed all prisoners taken in combat and subjected the surviving population to torture, deprivation, starvation, and slavery. All Kzinti forces were under orders to impose the old ways on their new conquests, in order to remind the Federation of just how terrible the Kzinti scourge could be. Once again, the Sea of Stars served as the Kzinti dinner table ... if only for a brief time.

It was at the Battle of Tau Ceti that the tide finally turned in favor of Starfleet. The tactical importance of the system was not lost on the Patriarch. Capturing Tay Ceti would buy his fleet the time and resources it needed to counter the inevitable Starfleet response-in-force. To this end Kzinti forces launched a massed-wave attack on the Starfleet base at Tau Ceti IX with the intent of capturing it intact. It was here, though, that their luck ran out. Waiting for them in anticipation of such an attack was the heavy cruiser Xanthii (NCC-1743), along with two destroyers, three frigates, and a hastily assembled force of a dozen Kearsarge class light cruisers. The last had been guickly reactivated from a nearby Starfleet storage depot and sent into the fight. They were undermanned but crewed sufficiently for combat operations. What happened next was the fiercest battle within Federation space in living memory. Tau Ceti was saved from the Kzinti claw-swipe at the cost of three Starfleet vessels destroyed, seven crippled, three badly damaged, and a total of 1,762 Starfleet personnel dead and 4,657 injured. The three ships lost were the light cruisers Littorio (NCC-1513), Piorun (NCC-1547), and the destroyer *Samson* (NCC-543). These would be the last Starfleet vessels destroyed during the Kzinti Incursion. The heavy cruiser Xanthii was the most heavily damaged of the surviving Star Fleet vessels, with well over half of her crew and Captain Julius Long killed in action. All but a dozen Kzinti vessels in the attacking force were destroyed, with the survivors fleeing back to Tellar as fast as they could.

There were two things key to Starfleet's victory at Tau Ceti. The first was the presence of the Kearsarges. These ships had been designed for close-in combat with Klingon vessels during the Four Years War. The fact that they were three decades old made little difference: their agility almost matched that of the more numerous Kzinti vessels and they had superior firepower. Second, and most important, was the quick thinking of a team of junior officers at the Starfleet base on Tau Ceti. During the battle, as the Patriarch's flagship made a strafing run at the Starfleet base, Lt. Trayce Donvoan used a subspace tachyon pulse to create a temporary hole in the attacking ship's shields. It was small and lasted only for a few seconds, but was enough for a squad of Starfleet Marines led by Lt. Allan "Custer" Donovan to beam aboard the Kzinti vessel. They attacked the ship's C3 command center and destroyed it, then made their escape in one of the ship's own attack shuttles while fighting off enraged Kzinti warriors all the way to the hangar deck. Most of Donovan's Marines were lost in the raid: however, the attack disrupted Kzinti fleet coordination activities, thus giving Starfleet its chance to turn and pounce on its prey.

Admiral James T. Kirk arrived at Tau Ceti shortly thereafter, having been delayed by Kzinti forces at Mimit. He took personal command of all Starfleet forces in the area. Under his leadership, Task Force Zulu was formed to drive the Kzinti from Federation space. Its success under his leadership is evident by the shortness of his campaign, with the whole of the Kzinti Incursion lasting only six weeks (as opposed to six years).



Typical shuttlecraft retrieval operations (c.2260)



Starfleet task force enroute to Organia during the brief "Four Days War" of 2261



The upgraded U.S.S. Yorktown (2271)



The last known image of the *U.S.S. Bozeman* (NCC-1941) prior to the ship's disappearance in the Typhon Expanse (2278)



A Tikopai class heavy cruiser on patrol



U.S.S. Phobos (NCC-2788), a variation on the standard *Loknar* linear warp upgrade



Enterprise and Avenger class starships on joint patrol



U.S.S. Enterprise (NCC-1701)

TERRAN EXPLORATIONS

THE DELTA TRIANGLE



The Delta Triangle of space is located near the far border of Federation space in Quadrant 2 south. It lies between the Romulan and Klingon empires and in front of another region of space known as "the Triangle" (no connection other than the name). Its claim to fame is as a region of space where starships and other spacecraft have mysteriously disappeared for as long as beings have roamed the Sea of Stars in that region.

Records of known disappearances within the Delta Triangle go as far back as the old Kzinti Empire. Its first mention is in one of the few tales that have come out of the legendary Kzinti-Klingon War of ages past. Both the Kzinti and Klingons lost ships in the area and soon learned to give it a wide birth, skirting it only at need or whenever they could use it to their tactical advantage.

The Federation's first encounter with the Delta Triangle came during the Romulan War (2158-2162). The main force of the Romulan flank fleet, under the leadership of Commander Xerius, cut across the Delta Triangle in pursuit of harried Star Fleet forces. Romulan forces were thrown into confusion when the flagship of Commander Xerius suddenly disappeared without a trace. The resulting confusion within the Romulan fleet gave Star Fleet the time it needed to escape and regroup at Rigel, where it was able to finally able to stem the Romulan tide.

The Delta Triangle has claimed its own share of Federation starships as well, despite it being a known navigational hazard. It lies across the most direct route to certain border systems. Daring civilian ship captains have been known to cut across the Delta Triangle in order to shorten their journeys, betting that they will not become its latest victim. Not all of them win this bet with fate. In addition, a number of Starfleet and civilian science research vessels have disappeared while trying to probe the Delta Triangle's secrets. These include the rebuilt UESPA survey cruiser *Bonaventure*, the first human starship ever fitted with warp drive, and more recently the survey ship *Hopi*. Only two starships are known to have ever fallen victim to the Delta Triangle and escaped to tell their tale. Their respective reports unlocked the secret behind one of the great mysteries of recorded space flight.

In 2264 the Starfleet heavy cruiser Enterprise (NCC-1701) was ambushed by a trio of Klingon D-7 battlecruisers. Captain Kor, the Klingon fleet commander, was using the known sensor anomalies of the Delta Triangle to hide his fleet until the Enterprise was within range. Enterprise responded in kind, and the burst of weapons fire within the Delta Triangle apparently triggered a temporary interphasic portal. Both the Enterprise and the lead Klingon ship, Kor's Klothos, were thrown into an alternate space-time continuum. There they found not only all of the ships that had ever been lost within the Delta Triangle but their crews as well, all alive and healthy. They had named their "pocket universe" Elysia, and quickly brought the Enterprise and Klothos crews up to speed on their situation. The abnormal physics within Elysia gave its inhabitants immortality, but it also had a deteriorating effect on dilithium-based energy-producing systems. Captains Kirk and Kor had three days to effect an escape before their ship's warp engines deteriorated to the point where they could no longer achieve warp factor 8 and thus re-open the interphasic portal. The two eventually set aside their differences long enough to temporarily combine their ships into one vessel, providing enough with both power to escape the Elysian time trap. All of the inhabitants of Elysia elected to remain behind, content to live within their new home.

There have been two Federation-sponsored expeditions back into the pocket universe of Elysia despite the severe risks involved. Both made it back safely. A third is being planned with the sponsorship of the Star Fleet Association. Its goal is to retrieve the *Bonaventure* and return it to our universe as a museum ship. Some question the wisdom of such a venture, pointing out that it would be better preserved within the Elysian time trap than subjected to the whims of fate in normal space and time. The Federation Council has as yet to rule on the matter.

HISTORICAL ARTICLES

THE ROMULANS ARE BACK

UFP INFONET - 30 NOVEMBER 2260



The Romulans have apparently awakened from their decadeslong slumber and attacked the Federation. Four Neutral Zone outpost stations were destroyed and the starship *Enterprise* damaged by a sole Romulan vessel before the attacking ship was disabled. The commander of the Romulan ship destroyed his own vessel to prevent capture. At today's press briefing Starfleet reported that the Romulans were fielding two new types of equipment: a cloaking device that could render a ship practically invisible and a plasma torpedo weapon of incredible power. Additional Starfleet units have been dispatched to the border to discourage the Romulans from attempting any more such raids. The names of the casualties aboard the *Enterprise* and from the outpost stations is being withheld pending notification of next-of-kin.

MEMORIAL HELD FOR *EXCALIBUR IBC WORLD NEWS* – 18 DECEMBER 2262



It was a simple yet elegant service, held within the aged walls of Glastonbury Cathedral. Not far from here is Glastonbury Abbey, where according to legend King Authur is said to be buried. A place connected by the same legend both to the sword of King Arthur and the starship that bears its name. The entire crew of the starship *Excalibur*, along with Captain Neville Harris, was killed in a vicious attack by the experimental M-5 computer during Starfleet war games exercises held last month. It has taken this long to gather all of the remains and bring them back home, here to Earth, for proper burial.

Retired Fleet Admiral William Shepherd, former commander of all Starfleet forces, spoke at today's ceremony.

Tragedy knows no bounds, no limits. It is no discerner of persons, beings, or creeds. They died at their posts, not knowing or understanding what was happening to them, but doing all that they could to save their ship from certain doom.

Representatives of the families of the victims were in full attendance at today's ceremony. It is the only joint memorial that will be held; with each family claiming the body of their late loved ones for local burial. In the meantime, Starfleet has already announced plans to rebuild the wrecked *Excalibur*. A memorial plaque will be placed on the bridge of the restored vessel, along with that for the ship's dedication, in honor of Captain Harris and his gallant crew.

NEW KLINGON CIVIL WAR WAGING

UFP INFONET - 19 AUGUST 2262



Recent reports from the Rigel Sector seem to indicate that the Klingons have become embroiled in a new civil war. This comes in the wake of the imposition of the Organian Peace Treaty on both the Federation and the Klingons as well as the ritual suicide of Chancellor Kassa shortly thereafter. The Klingons appear to be taking out on themselves their own frustration at not being able to go to war with the Federation, since the Organians have both the will and power to prevent them. No one can predict how the Empire will behave once the civil war is over, new leaders come to power, and it sorts out its various internal affairs. One thing is for certain, however. Klingon belligerency against the Federation will not end in the foreseeable future.

ROMULAN CAPTURED BY STARFLEET

UFP INFONET - 20 MARCH 2263



In a special briefing held for reporters earlier this afternoon, Starfleet confirmed that it had captured the commander of a Romulan starship as had been previously reported. Commander Nek'thea is the first Romulan to have ever been captured alive in recorded Federation history. She was not only the commander of a Romulan starship but also the commander of one of several Romulan fleets that patrol the Neutral Zone. Starfleet has so far refused comment on the circumstances surrounding Commander Nek'thea's capture and is also refusing to grant any access by the press. They have released a number of images of Commander Nek'thea along with hardcopy of her initial debriefing by Commander Spock of the starship *Enterprise* (NCC-1701). They have also confirmed that Commander Nek'thea is being held "in comfortable guest quarters" at Starbase 23 pending a decision regarding her ultimate fate.

The Vulcans have already expressed interest in assuming custody of Commander Nek'thea for the time being, due no doubt to the historical ties between their culture and that of the Romulans. They have made it clear that they will take action against any attempts to interrogate Commander Nek'thea for important information that might be useful to Starfleet. A special envoy, Tovak of Vulcan, has already been dispatched to Starbase 23, where Commander Nek'thea is being held, to look after her personal needs and ensure that planet Vulcan's wishes with regard to her health and welfare are enforced.

The Romulans have as yet said nothing nor communicated anything with regards to Commander Nek'thea's return. UFP Infonet has learned through Orion channels that they are watching Commander Nek'thea's treatment with keen interest. Local traders on the border have also noted an upsurge in Romulan starship sightings which Starfleet will neither confirm nor deny. Most military experts believe that Commander Nek'thea will be eventually returned to the Romulans, either as a gesture of goodwill or when Starfleet has no further use for her.

TERRA TEN COLONY RELOCATED

UBC WORLD NEWS – 16 FEBRUARY 2264



Nina Blakely, UBC News. Today I am standing in a small, wellprotected valley about a hundred meters from the main scientific research station on Verdanis. It is an area that is off-limits to the general public for research purposes. Sitting about a dozen meters or so from my feet inside a specially prepared protective area is what appears to be a model city. Elegant spires and domes rise up from a metroplex that would measure several kilometers across in normal scale. This was built by human hands, but not the same as yours and mine. It was built by miniaturized humans, shrunken in size due to constant bombardment of spiroid epsilon radiation from the star Cepheus. The people that built this fantastic city are the descendants of the long-lost Terra Ten space colony, one of only two of the Space Ark program of the 21st century known to have survived. The Mendant of the Terratins, leader of his people, explained their situation to us

We — they were too small to ever be found again unless someone came upon us by chance. They were too small even to use the small craft that the space ark had carried. They had no choice but to come to terms with their new size and build new things and a new place to live on a harsh and hostile planet. Only by doing this could they survive.

The city is built from materials salvaged from the wreck of that craft, which crashed on the only habitable satellite of Cepheus. They were recently rescued by the starship Enterprise and transplanted here to Verdanis, where they can live in peace, free from the constant volcanic eruptions that plaqued their former home. There is no chance of reversing the mutations that generation of exposure to spiroid epsilon radiation have brought about in the humans of Terratin. It is possible, though, for normal humans to be temporarily downsized to Terratin scale via exposure to Terratin's defensive beam network, which is based on spiroid epsilon bombardment, after which the process can be reversed via previously stored transporter patterns. Both Verdantis and Terratin scientists are working on a project to restore the Terratins to normal size by artificially creating pattern maps of the Terratins in regular human scale. The process is quite complex and is expected to take years to complete.

THE WANDERER WANDERS NO MORE

UFP INFONET - 9 FEBRUARY 2265



In a breaking story, the starship *Enterprise* has discovered the long-lost Terran L-5 space city Wanderer near the Klingon border. It was adrift in space, more than 20 years out at space normal speed from the nearest Federation colony, and headed straight for Polo's Bolos, a binary black hole pair also known as the Galactic Maelstrom. Starfleet spokesmen report that conditions aboard the Wanderer over the past two centuries had deteriorated to the point that large portions of it were no longer functional and the descendants of the original inhabitants were locked in a deadly civil war. Captain Kirk and his crew, who are already famous for their many other exploits, managed to do the impossible in both stopping the civil war and re-igniting the Wanderer's fusion engines. It is now on course to slingshot around Polo's Bolos and back into Federation space, where it will be guided into a safe orbit around the first available Class M planet on its new trajectory.

ENTERPRISE SAVES EARTH

UFP INFONET "FROM OUR READERS" SECTION - 24 AUGUST 2267



The following was submitted by UFP Infonet reader Kylie Jones with regards to the successful conclusion of the Vejur Incident of 23 August 2267.

He did it again. Admiral Kirk and the *Enterprise* saved the Federation's butt again, this time from that cloud thing that looked like it was going to destroy Earth. I don't know how the man does it, or why he keeps on doing it, but I'm glad he does. I known I speak for a lot of people in saying that I'm glad Starfleet had sense enough to give Kirk his ship back after making him fly a desk for the past couple of years. It's starship captains like him that protect us from such dangers, not paper-pushing admirals and politicians. We need more starship captains like Kirk, and I'd give a lot just to be part of his crew for a day. They broke the mold when they made him, because he's the best that there's ever been and there'll never be another better. I know I'll be able to sleep better at night knowing Admiral Kirk is back out there again.

HORNET HELPS LIBERATE TELLAR

JAYNZ DEFENCE WEEKLY – 29 AUGUST 2272



One of the oddest-looking starships of Starfleet's new linear warp fleet was put to the test this past week. The U.S.S. Hornet (NCC-9700), an experimental escort shuttlecarrier, supported landing and ground strike operations during Operation Talon, the successful effort to liberate the Tellar star system from Kzinti occupation forces.

The *Hornet* was designed as a reduced-hull cruiser but was converted for use as a patrol craft in the Rigel sector. It was designed from the onset to deploy combat shuttlecraft, carrying ten K-type "Killer Bee" attack craft in addition to standard cruiser armament. Hornet had just launched and was on her shakedown cruise when the Kzinti Incursion broke out. She was immediately redeployed to the area and became one of only three operational shuttlecarriers assigned to Task Force Zulu under the command of Admiral James T. Kirk. Hornet's fighters escorted Marine starships and assault craft during landing operations on Tellar, shooting down numerous Kzinti drones and fighter shuttles sent to intercept them. The Hornet herself took part in the space battle high overhead, destroying one Kzinti spacecraft and damaging three others before her own damage became too great to continue flight deck operations. She was forced to withdraw from the battle and effect repairs while other Starfleet units finished off the Kzinti orbital defense forces. Hornet's repairs were effected in time to land all of her own craft and then return to Starbase 1 for further repairs.

Starfleet Command is reportedly pleased with the *Hornet's* performance at Tellar. This will all but guarantee the approval of the other nine ships planned in the *Hornet* class. The *Hornet's* better-than-expected performance during the battle in orbit is also said to be of considerable interest in certain quarters. Unconfirmed sources report that backers of Starfleet's long-stalled perimeter action ship program are already evaluating the *Hornet* combat data. This is supposed to be in anticipation of a new perimeter action ship design that will replace the rapidly aging and nearly obsolete *Kiaga* and *Agilis* classes.

to be continued ...

ACKNOWLEDGEMENTS

VOLUME 11: 2251-2275

AUTHOR'S COMMENTS:

Perceptive readers will note that I differ with Dixon (Prime Zero) as to the number of and dates for the "early" adventures of Captain Kirk and the crew of the starship Enterprise. This is largely a matter of interpretation. I do not accept the proposal of a number of pre-"Where No Man" adventures as posited in some of the more recent *TREK* novels. I instead fall back to the premise of the original Graham-Mandel timeline, that which we old-school fans always understood, that the five-year mission of the Enterprise (save for "Where No Man") took place from mid-2260 to early 2265. This allows time for both the Bonhomme Richard (TOS) and Achernar (TAS) refits, and on that point at least Dixon and I are somewhat in tune. "Where No Man." the second series pilot, is an obvious exception due to the set and uniform styles, which are closer to the Pike era ("The Cage" and "The Menagerie"). It has always been my belief based on the on-screen evidence that this episode took place not long after Kirk took command, which would place it somewhere in early to mid-2259. Gary Mitchell's reference to a prior adventure with Kirk on Dimorus in no way implies that it took place after he signed on as *Enterprise* executive officer. That is *TREK* novel/comic retconning. As a matter of fact "Where No Man" makes clear that he and Kirk had been friends ever since their Academy days, so the visit to Dimorus could have taken place at any time between those two bookends. The only time for such pre-TOS "early adventures" of the *Enterprise*, in my opinion, is between "Where No Man" and the first production TOS episode, "The Corbomite Maneuver." Unfortunately, since the Enterprise was in drvdock most of this time getting its Bonhomme Richard upgrade then the scope of such tales is by default severely limited. I'm afraid this is some more of that insidious retconning that the *TREK* novel writers are especially guilty of taking upon themselves - even more so with the incorrect suppositions of the Church of Okuda and the encouragement of the Official Franchise Heirs to back them up. It's the only real problem I have with Dixon's work regarding this era in TREK history, but as I said it's a matter of interpretation. I know a lot of you have your own ideas on the topic and you're welcome to them.

The debate concerning the use of *Starfleet* as opposed to *Star Fleet* is as old as *STAR TREK* itself. *Star Fleet* is the form used by old-school *TREK* tech fans and is derived directly from Franz Joseph Schnaubelt's *Star Fleet Technical Manual (SFTM)*, the standard by which all *TREK* technical publications are judged. Unfortunately this form of the word was but one of several errors that found their way into the *SFTM*. The only time we ever see the term on screen in classic *TREK* is in the TOS episode "The Menagerie." It is printed on the cover of the top secret report that Commodore Mendez hands Captain Kirk on Talos IV. It is very clearly written as *Starfleet* on the cover of that folder ("FOR THE EYES OF STARFLEET COMMAND ONLY"). Geoffery Mandel "corrected" this to *Starfleet* in his classic fanon reference work *U.S.S. Enterprise Officer's Manual*, thus perpetuating the error. It was finally returned to its true form, *Starfleet*, in the "Headquarters scene" near the beginning of *STAR TREK: The Motion Picture.* Still, who am I to try to swim against the current of years of classic *TREK* fanon? That's why I have the term changed in 2260, so the use will be somewhat consistent both with what's on screen ("Tommorow Is Yesterday," "The Menagerie") and with the beloved *SFTM.* It's a compromise, yes, but a necessary one.

The photoshopped picture of Vice Admiral Lori Ciana is my little gift to "canon" *TREK*, in the same vein Okuda's "Captain April." Mine is more accurate, though. It's a picture of Susan Sullivan, the actress who actually played Admiral Ciana in *Star Trek: The Motion Picture.* You never saw her face because she died along with Commander Sonak in a horrible transporter malfunction. Now that we know what she looks like, it's easy to see why Kirk was attracted to her. I photoshopped my pic because I don't know of any photos from the *ST:TMP* set of Ms. Sullivan in costume. If anybody has one and could send it to me, I'd be happy to include it in place of my own.

The *Citadel* class command cruiser is my attempt to combine three somewhat different concepts into one design. Those are the Federation CC of *Starfleet Battles* (Stephen V. Cole), the *Citadel* class command cruiser from *Starfleet Line Officer Requirements* (David Schmidt), and the "*Enterprise* upgrade" from the old FASA RPG (Dana Knutson). I've tried to describe it as a fallback measure, something Starfleet had to do when the Council refused to fund the rest of the *Balson* class. Not every *Enterprise*-type heavy cruiser would get such an upgrade, though – just the bare minimum needed for fleet operations. That's why I've limited the number of Class I heavy cruisers that got a CC-type upgrade. Oh, by the way, *C3* is Navy slang for "command, control, and communications." Those are the three things you *want* in a ship of this type.

I described megaphaser cannon the way I do for a reason. I see them as an evolutionary step in developing more powerful phasers, the kind we see in the 24th century, just as the original phaser cannon of the *Kiaga* helped usher in phaser technology in the first place during the Four Years War. This is how most canon and fanon tech sources treat what would otherwise be a technological anomaly within the *TREK* franchise, and it makes sense to me.



My side reference to the *Ishinomaki* class deuterium fuel tanker is a nod to the "alternate" *Kobayashi Maru* design by Roger Sorensen. I'll admit that I've always had a preference for the original proposal by Aridas Sofia ever since I first saw it back in the 1990s. Having said that, I feel that Roger's design is also quite innovative and deserves mention in this work. Space limitations prevented me from doing a full writeup; hence the aside of it being the *Huntington*'s contractual ancestor. According to Sorensen's blueprints the *Ishinomaki* entered service in 2252.

It was Todd Guenther who first mentioned the Kzinti Incursion in various publications, most notably Ships of the Star Fleet Volume 1 and the Federation Reference Series - thus vexing ^ ^ TREK Kzinti fans for years. Others have since elaborated on his brief comments, Lawrence Miller in particular (U.S.S. Hornet General Plans). Also, interestingly enough, Larry Niven's second Kzinti story for the STAR TREK franchise, "The Wristwatch Plantation" from the old TMP-era daily comic strip. just happens to take place around the same time as the Kzinti Incursion. What I've done is try to tie this and other materials gleaned from other sources into a new version of how the Kzinti Incursion started. It is an account entirely of my own devising based on my interpretation of the various source materials I used.

To be honest, I had enough of an outline to write up a whole FSC supplement on the Kzinti Incursion alone, just as I did earlier for the Earth-Kzin Wars. Having said that, I didn't want to take any more away from whatever Todd Guenther had planned to do with the concept. That's why I stopped where I did, halfway through, with Admiral Kirk assuming command of the Starfleet task force that will eventually defeat the Kzinti. Todd and Aridas have already outlined the ending in their works: where it goes from here is up to them and you. The only liberty I took with the various sources was to add the tale of the second Kzinti fleet, the one that escaped into Mirak space. This not only legitimizes the Mirak as the "Kzinti" of the SFB/SFC gaming franchise but also hopefully helps explain why "the Patriarchy" in Geoffery Mandel's STAR TREK Star Charts is no longer inside the Federation as it's supposed to be per the older STAR TREK *Maps.* This hopefully gives the Franchise even more wiggle room should they ever bring back the Kzinti on-screen.

Yes, I am guilty of somewhat retconning events in David Gerrold's novel *The Galactic Whirlpool* in order to better fit with the FSC. Its backstory may not be strictly canon anymore, but it's still one of the best *TREK* novels you'll ever read.

No, the TNG-derived *Antares* class freighter is not the same as the ship that was mentioned in the TOS episode "Charlie X." Everybody seems to have a different opinion regarding *that* one, so I left it alone.

Regards,

- Richard E. Mandel

CONTACT INFO:

Want to contribute to the *Federation Spaceflight Chronology*? You can find me on the FRS Online or Starfleet Network forums. If you prefer direct contact then you can reach me at:

rtrodude@yahoo.com

SPECIAL THANKS TO:

Amarillo Design Bureau (selected timeline data) Jason Bogguess (Star Fleet Network) Manny Coto Neale Davidson (Pixel Sagas) Sharmon Divond and Ron Harris James Dixon FASA Corporation (selected timeline data) Todd Guenther Bernard Guigand (Treknografix) Shane Johnson Court Jones Jan Hendrik Kolbarg (The Andorian's Office at K7) Memory Alpha and Memory Beta Larry Niven Timo Saloniemi Bernd Schnieder (Ex Astris Scienta) Aridas Sofia (Federation Reference Series Online)

VISUAL SOURCES:

Activision Games Randy Asplund Atolm Atrahasis (Outlance Shipyards) Michael Kurt Bartel (The Trekker's Galactopedia) W. J. Casmir William S. Cullars (The IDIC Page) Neale Davidson (Pixel Sagas) Demon Renegade Studios The "Duct Tape Wonder" Filefront Ted W. Giebel (SFB Nexus) **Glitchwerk Studios** Maeteen Greenway Andrew J. Hodges Don Karnage Rick Knox (aka "Pneumonic81") The Light Works Chris Martin (aka "EG180") McDaniels Models The Mego Museum Masao Ozazaki "The Red Admiral" (<u>http://www.trekmania.net/</u>) Paramount Pictures Sony Tristar Pictures Star Trek Communicator magazine Starforce Productions Starship Modeler The Stress Puppy TallGuy Productions Thomas Models Adam Turner Warped9 ZambieZan



coming soon



also available