KFX-1

KHITOMER CLASS

EXPERIMENTAL STARSHIP

SYNERGETIC CONCEPT & DESIGN RETROSPECTIVE



The best way to predict our future is to create it.

Stephen R. Covey

EXTRAPOLATED AND COMPILED BY:

MICHAEL ALEXANDER

SOLARIS REPRESENTATIVE

STARSHIP DESIGN CONCEPT CONSULTANT

ORION ARM LIAISON FOR ALPHA & BETA QUADRANTS

SENTIENT EXECUTANT ID: M57A-SLRDSN.1A SOL III

The writer/illustrator would like to take this opportunity to acknowledge the creative individuals who have found fascinating ways to rationalize the majestic lines and functional capabilities of aweinspiring spacecraft (or who there along for the ride).

To Rick Sternbach and Michael Okuda for providing an enormous wealth of artistic and technical material for all Trekkers to enjoy. Also, a word of appreciation for the original influential concepts of Matt Jeffries and the new era Treknology of Andy Probert. Their driving artistic forces have helped to "make sure history will never forget the name...*Enterprise*."

One could not forget to mention Franz Joseph, who devised the first comprehensive *Star Trek* based technical drawings for worldwide distribution, and unwittingly galvanized this form of self-expression/escapism for the thin slice of humanity who continue to emulate him.

An emulator's age could range from 8 to 58. A dream starship could be scribbled and scrawled on dog-eared notebook paper or computer aided rendered, in a professionally printed, high priced, slick book. To all those known and unknown visionaries, who augment techno-esoterica for vessels of the spaceways; Scotty and LaForge will be proud of you, maintain course and speed! A special thanks to Trek-tech acquaintance Walt Atwood, whose talents helped to inspire this particular creative effort.

Direction and insight were influenced by the published Star Trek progenitors, whose writing laid the foundation upon which this project is based: Star Fleet Technical Manual, Star Trek: The Next Generation-Technical Manual, Star Trek Spaceflight Chronology, Star Trek Mr. Scott's Guide To The Enterprise, and Star Trek: The Next Generation Writers' Technical Manual and The Wounded Sky.

Some elements of real technical feasibility, were garnered from analyzing information from issues of Aviation Week & Space Technology, Design News, Flight International, NASA Tech Briefs, Machine Design and Aerospace Engineering.

Special recognition goes to soul-mates Dee Santos and Robert Falconer, who assisted in making quasi-sense of this spin-off of *Star Trek* technology. Heartfelt appreciation goes to Señora Alexander, who tolerated her husband's absence from the dinner table while he was trying to create new designs from the *Star Trek* universe. A thank you goes to Nicholas Alexander, who shares his father's sense of wonder.

Finally, a debt of gratitude goes to Gene Roddenberry, whose unique vision provided a enduring contribution to potential of the human spirit.

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KFX-1

My family and friends are still amazed at my continued fascination with *Star Trek*, and even more amazed with the longevity and popularity of the genre. Now, at the age of thirty-five, I am still able to enjoy as I did at age nine the derring-do of heroes who somehow get the job done in less than an hour. As a five-year-old in 1962, I watched the televised *Mercury* launches as well as animated and live-action science fiction programs. This combination of viewing was to create a lasting impression, one which would ultimately lead me to pursue a career in the aerospace industry, and a zeal for drawing futuristic vehicles of action/adventure in my spare time.

I enjoy designing new elements of *Star Trek*, but there are other '60s fantasy icons that perpetuate nostalgic romanticism. How many of us fondly remember the *Seaview, Flying Sub, Fireball XL-5, Jupiter 2, Stingray, Voyager,* and the *Mach 5*? In 1970, I read Stephen E. Whitfield's *The Making of Star Trek*, and it began to sink in that *all* these fantastic vehicles were designed for just one purpose—to facilitate the telling of a story within the constraints of a TV show or motion picture budget. But even after years of real-world comprehension, the *magic* of these creations still remains.

I learned that an artist's concept can be altered or deleted at the whim of studio executives. Reading behind-the-scene publications (e.g., *Cinefantastique, Cinefex, American Cinematographer, Starlog*) informed me that the destruction of the *Enterprise* in *Star Trek III* was partially attributable to a special effects supervisor's distaste for its design. On the other hand, we Treknology fans *try* to translate studio production glitches (dramatic license) into *Star Trek* sense. Using "bogus science and technobabble," one might be able to "explain" how an antimatter spread comes from a phaser array, or why a phaser beam emanates from a photon torpedo launcher tube.

Wherever possible, I have taken pains to extrapolate personal *Star Trek* interpretations from the work generated by the professionals. Designs such as the KFX-1 are my own extension of a particular scenario. I enjoy the challenge of drawing a ship with functional, flowing sylph lines or, conversely, sharp, jagged ones. The theme naturally dictates the design. A decade ago I created some hydraulic pump drawings for NASA's space shuttles. But, as an aerospace draftsman, my work is presently geared toward the "aero" portion of my profession. My visionary drawings are intended to fuel the imagination...and imagination is where all ideas begin, whether based in fantasy or in reality.

My first ideas for a Klingon/Federation hybrid vessel came about after watching *The Heart of Glory* episode. It wasn't until early 1990 that I laid down some lines for the KFX-1. When one actually takes into account *ST:TNG* politics between the Empire and the Federation, the KFX-1 would seem a remote notion which could, at best, be explained by a small, *highly* ideological faction within the alliance, collaborating for a great, but ill-timed, venture.

As with most of my *Star Trek* ship designs, I tried for either a different-yet-familiar vein or one-of-a-kind outrageous lines. I think I managed to do both on this go-round.

Michael Alexander December 1992

KFX-1 (KHITOMER CLASS) HISTORY AND RETROSPECTIVE

A bold new plan began at the onset of the United Federation of Planets' and the Imperial Klingon Empire's first ten years of alliance. The Primary Peacekeeping Coalition of the alliance did a study of technology-sharing between the two factions. The main focus was on investigating the concept of joint starship construction. It was hoped that a formal "go ahead" announcement would be made at the Ten Years of Alliance Conference on Organia.

The project was titled KFX-1, but the initial ship was to be named *Khitomer* in honor of where the foundation of the Alliance was forged. Two avant-garde teams were chosen to undertake the project. K'Tyzakt Starcraft Bureau represented the Klingon Empire and the Solaris Corporation, the Federation. The general configuration of the vessel would be Klingon but with new direction from Solaris. K'Tyzakt had been hard-pressed by the Empire to design a replacement for their aging *K'Vort* class. This precarious attempt to combine technologies would produce a proof-of-concept vehicle for similar future projects.

Compromises in design parameters were the most difficult to achieve. It also was an exercise in cross-cultural diplomacy. Selection of K'Tyzakt and Solaris showed good foresight. There was insistence on interfacing noncontroversial generic technology from the heads of the alliance. This was implemented to the fullest extent, but unknown intangibles created new discoveries in warp field dynamics from the combined teams.

The standard Klingon leading spheroid/boom design was mated to a new enclosed wing/body design from Solaris. The close pairing of the jointly designed LNX-89 warp engines during computer simulations showed great promise.

Espionage from unrecognized subfactions of the Federation and Klingon Empire (supposedly with no connection to high officials) plagued the KFX-1 project. Security self-imposed by the KFX-1 team, discovered spies from both sides. The scandal caused massive disruption of the project. Solaris and K'Tyzakt personnel were willing to continue working together and look beyond the incident, but the Primary Peacekeeping Coalition decided against it and canceled the project. The Treaty of Alliance was too frail to withstand any additional damage as a result of distrust and deceit.

Acknowledgement was given to the project for the courageous attempt to improve the status of the alliance. It was announced at the Ten Years of Alliance Conference that joint starship construction is a prophecy that can be fulfilled. More trust and cooperation, however, were required before a project of such magnitude would ever again be attempted. Due to the forged camaraderie, Solaris and K'Tyzakt personnel made a pact to collaborate again under better circumstances. Some design theorems of the KFX-1 were eventually used over a decade later in another joint venture: the KFX-2.

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SOLARIS CORPORATION
CO-DESIGNATED PRIME CONTRACTOR

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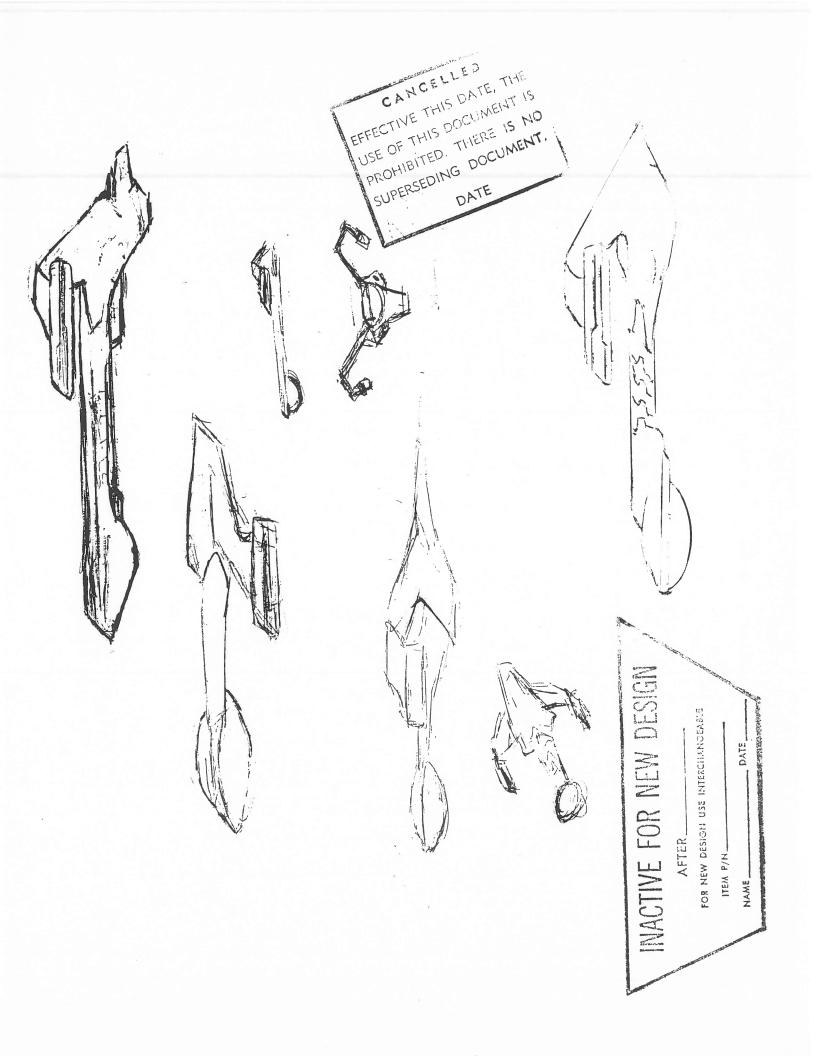
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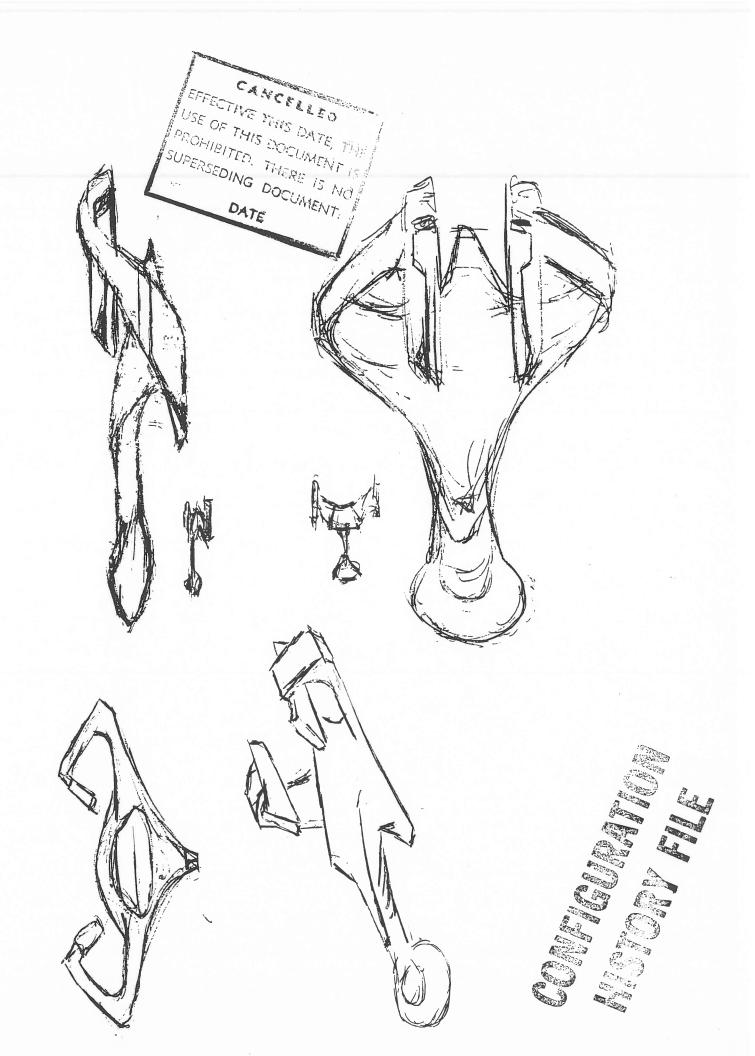
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STARFLIGHT SYNERGETICS
KFX-1: KHITOMER CLASS EXPERIMENTAL STARSHIP PROGRAM

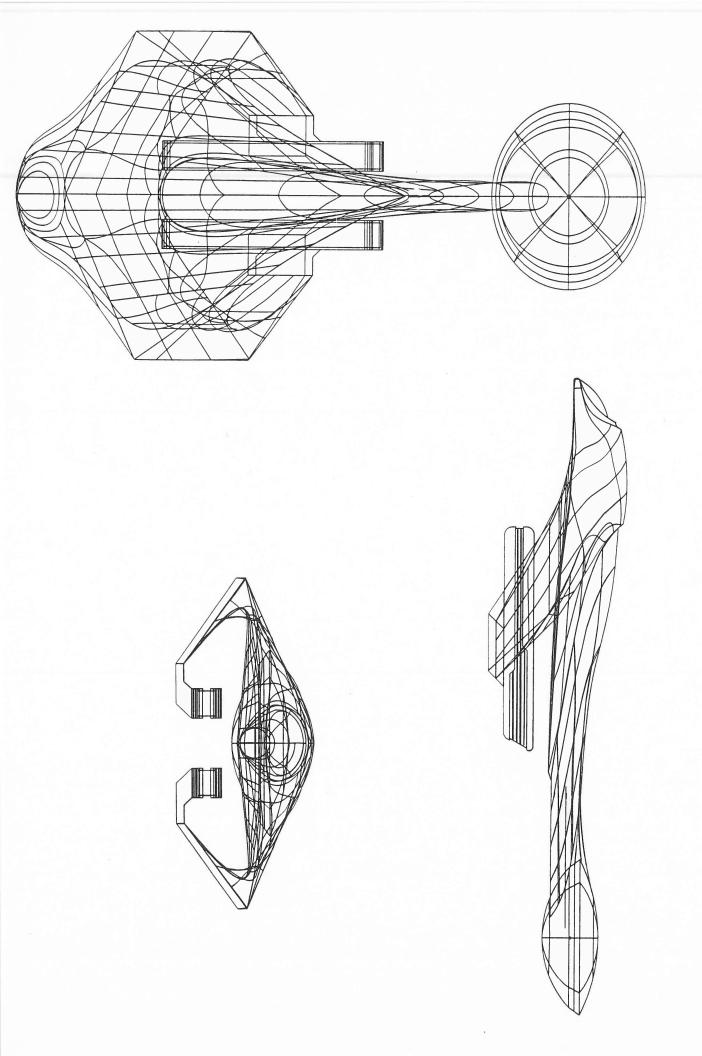
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STARFLIGHT SYNERGETICS SPECIFICATIONS AND TECHNICAL DATA

(PROPOSED) EXPERIMENTAL PROTOTYPE STARSHIP KFX-1

TYPE: Proof-Of-Concept Cruiser

CLASS: Khitomer

MODEL: Sui Generis

PRIME CONTRACTORS: K'Tyzakt Starcraft Bureau / Solaris Corporation

MAIN CONSTRUCTION SITE: CLASSIFIED

FRAME & HULL PARTICULARS:

Length: 408.8 m Draft: 203 m Beam: 89 m

Displacement: 275,000 mt Number of Decks: 14 Materials: Interwoven trititanium/duranium alloys

PROPULSION METHODS:

Star Drive: (2) LNX-79 Series, 6th generation Warp Drive Matter/Anti-matter reaction manipulation. Sublight Drive: (1) FCT-2 Series, Iton FusionLink Impulse Recation Coils. Maneuvering Control: VariSurge CL-75 series, reaction control thrusters

ANALYSIS & COMMUNICATION NETWORK:

Artificial Intelligence: Daystrom Data Concepts; M-7C-1 Duotronic Nanosponse Audio-Visual Range Transceiving: Hyperchannel EM TransLaser telemetry chambers, subspace radio coils.

TACTICAL RESPONSE:

Beam Emitters: (2)Type IX Phaser Arrays, (2) KD-8 Disruptor Mounts
Projectiles: (2) FP-9 Photon Torpedoes, (single launchers fore and aft)
Shielding: Triple-layer, multi-spectrum projected deflector network. Variable density electromagnetic/graviton matrix

COMPLEMENT & SECONDARY TRANSPORT:

Crew: 600

Passengers: 140

Total Emergency Capcity: 1800 Shuttlecraft: 10 man - (12)

4 man - (4)

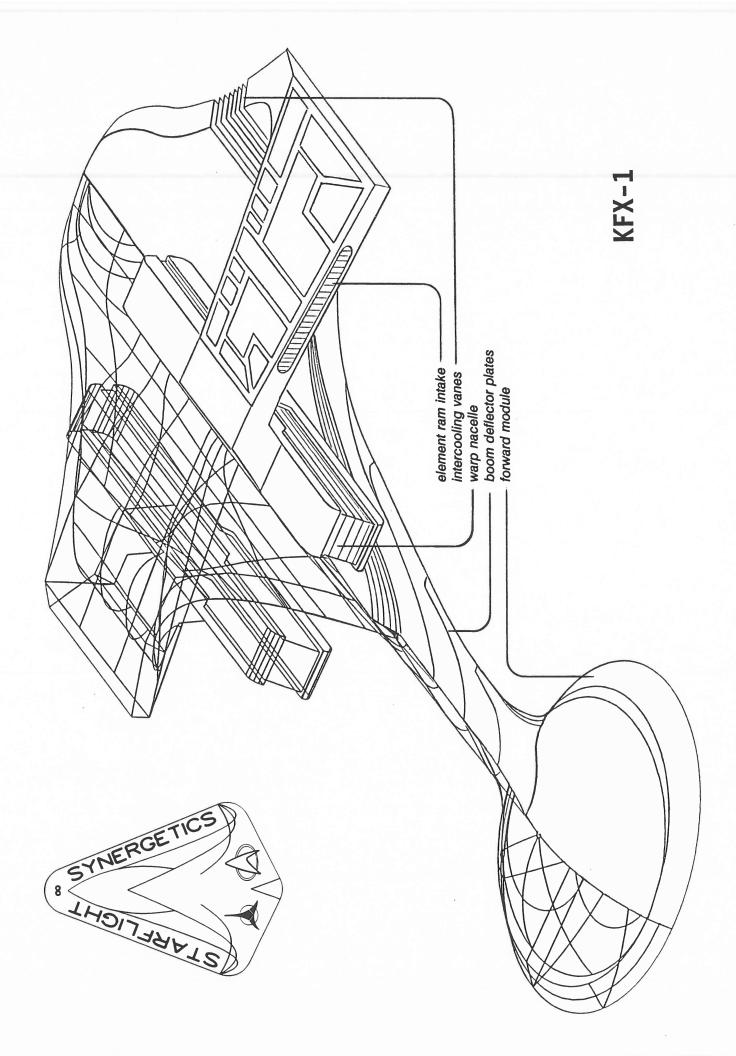
Sphinx workpod - (12)

Transporters: Personnel Units - (4)

Emergency Units - (6) Cargo Units - (4)

ESTIMATED PERFORMANCE & DURATION:

Normal Cruising Velocity: Warp 6
Maximum Cruising Velocity: Warp 8.7
Maximum Range: 19,000 Light-Years
Expected Lifetime: 60 years





CORPORATE MEMORANDUM

DATE:

July 27, 2357

TO:

ALL EMPLOYEES

FROM:

Nicholas Jerel

SUBJECT:

BEYOND THE KFX-1 PROJECT

By now you're all aware of the cancellation of the KFX-1. This major setback not only affects the Corporation but the Federation alliance with the Klingon Empire as well. After a thourough investigation by the Empire, it was found SOLARIS personnel had <u>no connection</u> with the failed espionage attempt on the KFX-1. Unlike co-prime contractor K'Tyzakt Starcraft Bureau, SOLARIS being privately owned and run is not a direct military arm. Nevertheless, Federation security found no wrong doing by K'Tyzakt personnel. It remains to be seen how extensively the Primary Peacekeeping Coalition's suggestion of a full internal investigation of each faction will be acted upon.

SOLARIS' mutual pledge with K'Tyzakt remains unchanged. The partnership is based on the premise to synergize each other's technologies for the common good and fulfill the Organian vision of the previous century. The progressive stance by SOLARIS and K'Tyzakt has paved the way for further attempts of joint starship construction. The pace has been slowed somewhat, but initial expediture may be granted for the design, procurement and operation of a Klingon attack cruiser laced with Federation technology. Involvement by SOLARIS will be a subcontractor role only. Although this project will not achieve the complete hybrid vision, it is becoming more feasable. In the aftermath of the KFX-1, a schedule is being developed for the next synergetic design study under a unofficial KFX-2 title. Nevertheless, the espionage fiasco has placed SOLARIS and K'Tyzakt under a non-contact alliance mandate over the next three years.

There are new challenges for all the corporate divisions. The Sylph Division has won a contract to develop a new courier shuttle class for Starfleet. It will replace the model SOLARIS designed over 60 years ago. Sylph's *Starwave* program is on target for a proof-of-concept flight slated for 2369. On September 19, 2357, the Pleiades Division will be officially renamed the Avanti Effects Division. Sylph will turnover the *Starwave* program to Avanti Effects effective December 31, 2360. The division's primary fields of expertise will still be propulsion design and computer sciences. The original "think tank" Breeze Division is upgrading its hull design and construction methods. The division will continue to serve as corporate liasion to Starfleet Command's Advanced Starship Design Bureau and the independent Galactic Engineers Concordance.

There is talk in starship contractor circles of a new *wonder design* to appear late this century. This tag was given to the highly touted *Galaxy* Class over a decade ago (now one month away from commissioning), and it is already becoming yesterdays' news. The SOLARIS visions from your contributions may generate that next wonder design. SOLARIS talent and ability has always been in our grasp, along with visions the future.

N. M. Jerel President

