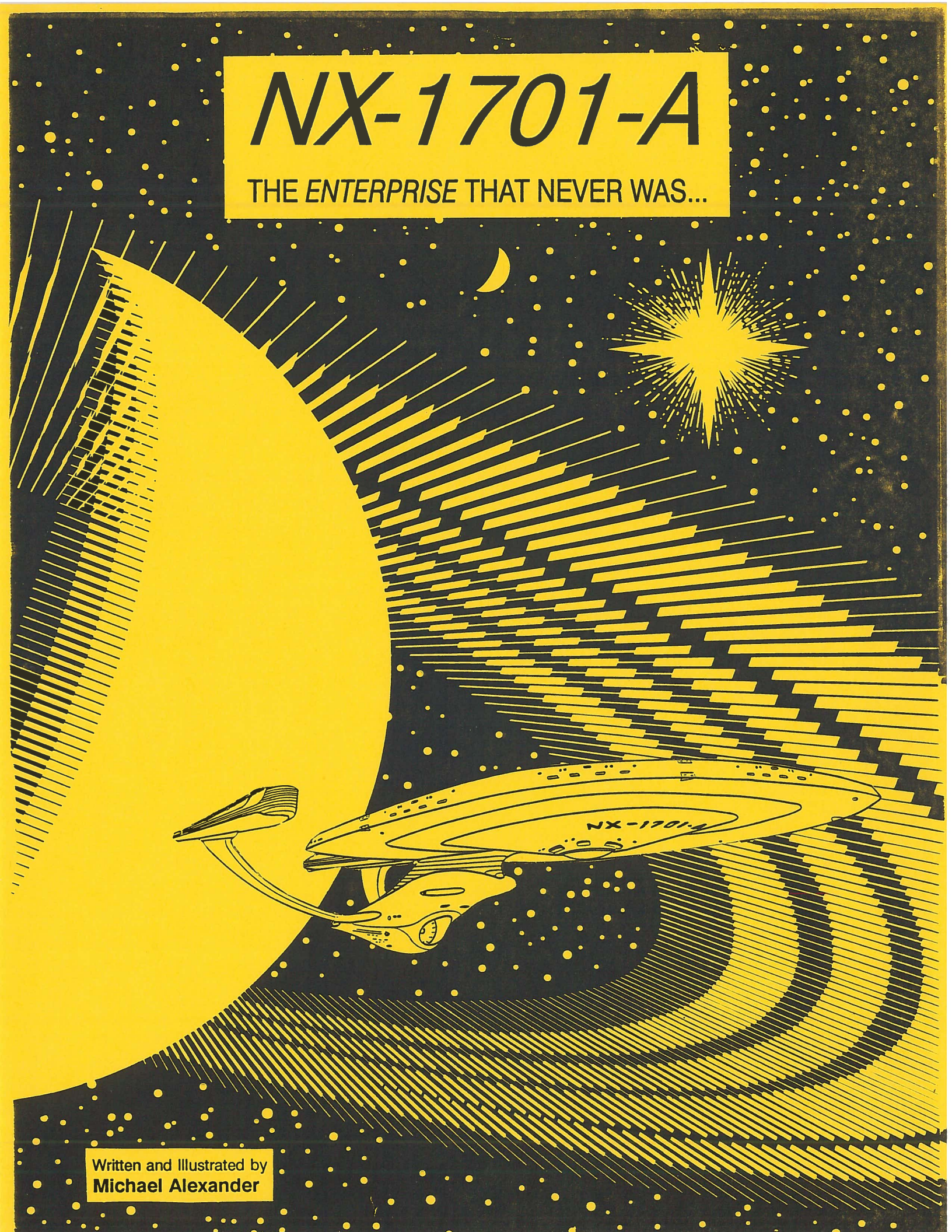
NX-1701-A

THE *ENTERPRISE* THAT NEVER WAS...



Written and Illustrated by
Michael Alexander

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 awe-inspiring 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.

 Solaris Designs, P.O. Box 84 - Oxnard, CA 93032 U.S.A.

NX-1701-A

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 techno-babble," 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 NX-1701-A 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.

Right after the *Enterprise* went down in flames in *Star Trek III*, some of my aerospace co-workers came to me in sniggering overtones about it. "Well Mike, we like to offer our condolences." "You're probably taking it harder, than the death of ol' whatis' name with the pointy ears." I would go along with the ribbing by feigning mock sorrow and hysteria. But right after our laughter, I began working on *my* verison of next the *Enterprise.*

The general configuration was completed in November 1984. I was a bit surprised that the next *Enterprise* was not an *Excelsior* class vessel. But, from a economic and marketing standpoint, I can understand why Paramount carried over the movie design in *Star Trek IV*. Another reason was, the *Next Generation*, with its NCC-1701-D, was a year away from the first airing. In 1988, when *Starlog* magazine began to showcase various ideas and opinions on how revision "A" should look, I refined my variation and submitted it to *Starlog*, where it was published in the July 1989 (No. 144) issue.

As with most of my drawings in this retrospective, these designs were generated on personal time at work. With access to a large drafting board and a CAD setup, it was the *logical* thing to do.

Michael Alexander
December 1992

UNITED FEDERATION OF PLANETS
STARFLEET COMMAND HEADQUARTERS

SOLARIS CORPORATION
DESIGNATED PRIME CONTRACTOR

FEDERATION DECLASSIFIED
PRIORITY ONE: NON-DISCLOSURE

GENERAL STAFF HEADQUARTERS
System - Sol/Earth
San Francisco, North America

UNITED FEDERATION OF PLANETS
STARFLEET HEADQUARTERS

STARFLEET SUPPORT SERVICES
HISTORICAL RECORDS DIVISION

SOLARIS DATA MANAGEMENT DEPARTMENT
ARCHIVES AND RECORDS DIVISION

FEDERATION DECLASSIFIED REPORT
NX-1701-A: ENTERPRISE CLASS EXPERIMENTAL STARSHIP PROGRAM

DECLASSIFIED FILE HRD 44106 E107
PRIORITY ONE EPSILON: NON-DISCLOSIVE
INTELLIGENCE RATING: **DELTA**

DATABANK PRINTED EXTRACT
(HARDCOPY)

A RETROSPECTIVE OF THE NX-1701-A PROGRAM

The *USS Enterprise* and other similarly configured vessels are based on the Jefferies starship design theorem. This theorem was formulated on Earth during the mid-Twentieth Century. Accumulating a vast list of heroic and scientific achievement over forty years, the *Enterprise* became a symbol of Starfleet and the Federation. During it's final year of service, the ship was regulated from first-line duty to Academy Training Vessel.

To keep the *Enterprise* name on the leading edge of Federation technology, Starfleet had devised two plans: First, evaluate the trial runs of the *USS Excelsior* NX-2000 (The Great Experiment). At the time, this newest ship was equipped with the latest experimental propulsion technology. Once the *Excelsior* lived up to envisioned capabilities, the next similar vessel built would be the next *Enterprise.* Second, should results of *Excelsior* prove unsatisfactory, salvage proven components into a newly designed cruiser hull.

For Starfleet's second plan, the Solaris Corporation was selected over eighteen other prime contract proposals. The yet-to-be-built vessel, was the NX-1701-A (official *Enterprise* Class designation was pending on the *Excelsior*). The NX-1701-A and NX-2000 principal similarity was the saucer section. Starfleet Command's Advanced Starship Design Bureau was attracted to Solaris' sophisticated use of variable trititanium dynamic-matrix (VTDX™) flowing constructs. The transwarp drive on the *Excelsior*, encountered severe propulsion difficulties, so an advanced form (fifth generation; designed to operate at greater efficiency) of the standard warp drive was slated for the NX-1701-A.

The untimely destruction of the *Enterprise* began to unravel both of Starfleet's plans. With so many malfunctioning systems aboard the *Excelsior*, the process of her was slow during trial acceptance runs. The NX-1701-A (still on the drawing screens) had only seven months of mission simulations, and one-third of the theoretical work completed.

Barring any additional unforseen delays, it would have been at least a decade, before either *Enterprise* replacement plan reached fruition. At that particular crucial era, it was decided, the Federation would not operate without it's strongest icons, no longer than necessary. To honor the ongoing interstellar exploits of Captain James Kirk and his crew: the Federation Council gave Starfleet the "go-ahead" to rechristen the newly built *USS Yorktown*; the *Enterprise*, NCC-1701-A. This new *Enterprise* was virtually identical to it's predecessor with some internal technical and cosmetic exceptions.

The Transwarp Development Project proved unsuccessful, but the *Excelsior* was eventually commissioned and became a durable frontline class. The NX-1701-A was kept in research and development status for over thirty years. Even the renowned Chief Engineer, Commander Montgomery Scott speculated the time will come when most future starship configurations (become curvilinear and sweeping majestic cohesive units), may eventually adopt some of the Solaris design theorems. This long envisioned era of when aesthetics surpass technical criterions, would take place sometime in the 24th Century.

ADVANCED STARSHIP DESIGN BUREAU
SPECIFICATIONS AND TECHNICAL DATA

(PROPOSED) EXPERIMENTAL PROTOTYPE STARSHIP **NX-1701-A**

TYPE: Proof-Of-Concept Galactic Cruiser CLASS: *Enterprise* MODEL: MK-IX-B

PRIME CONTRACTOR: Solaris Corporation

SCHEDULED MAIN CONSTRUCTION SITE: Earthrise Assembly Facility-Luna

FRAME & HULL PARTICULARS:

Length: 375 m
Draft: 71.7 m
Beam: 186.6 m
Displacement: 245,000 mt
Number of Decks: 18
Materials: Variable trititanium-dynamic matrix/duranium alloys with poly-composites

ANALYSIS & COMMUNICATION NETWORK:

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

COMPLEMENT & SECONDARY TRANSPORT:

Crew: 470
Passengers: 80
Total Emergency Capcity: 1200
Shuttlecraft: 10 man - (3)
warpsled - (1)
4 man - (4)
1 man workbee - (6)
Transporters: Personnel Units - (4)
Emergency Units - (5)
Cargo Units - (2)

PROPULSION METHODS:

Star Drive: (2) LN-74 Series, 5th generation Warp Drive nacelles Matter/Anti-matter reaction manipulation.
Sublight Drive: (1) JW-A Series, unified fusion impulse recation chamber.
Maneuvering Control: Multi-VariSurge CL-71 Series, reaction control thrusters

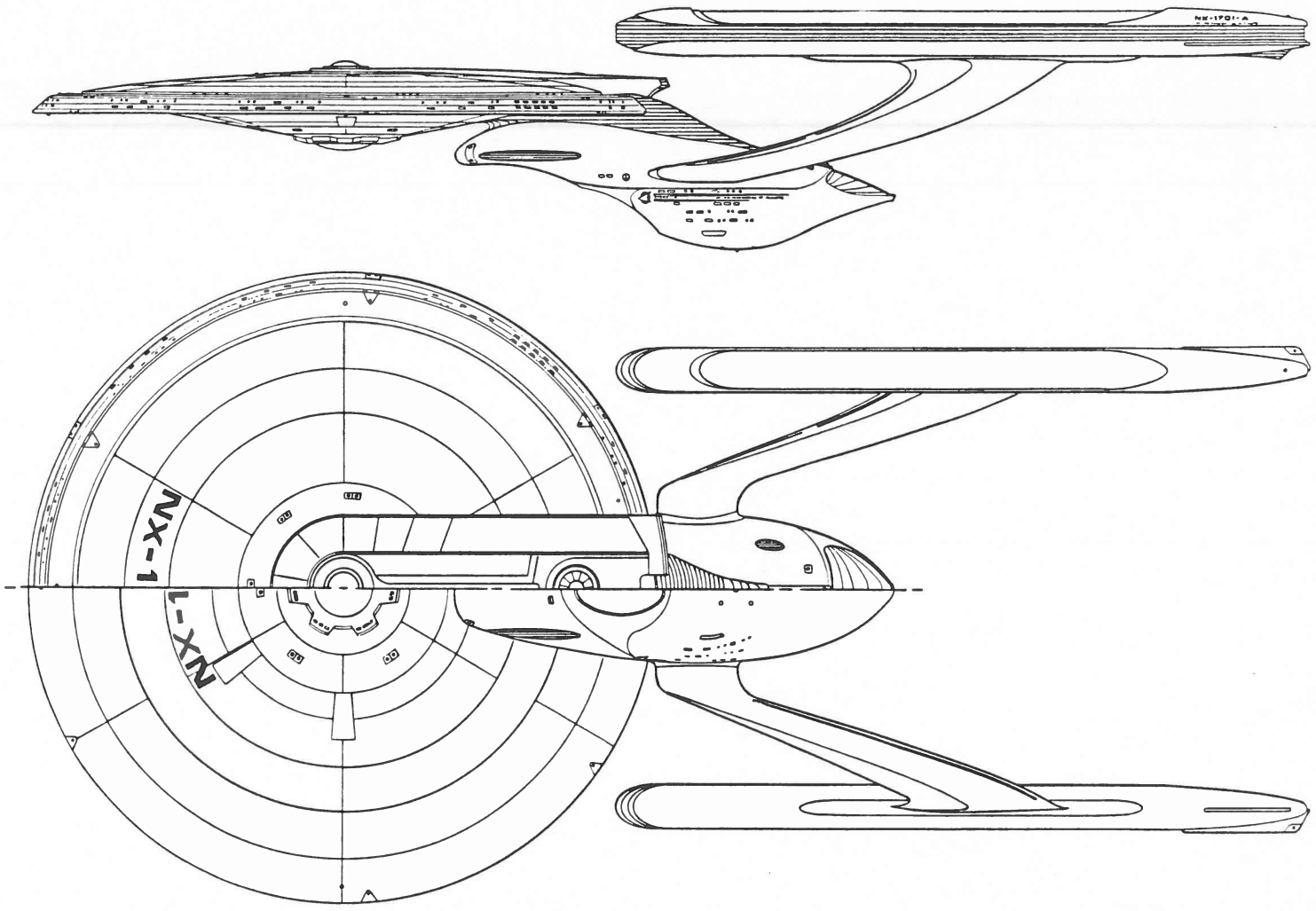
TACTICAL RESPONSE:

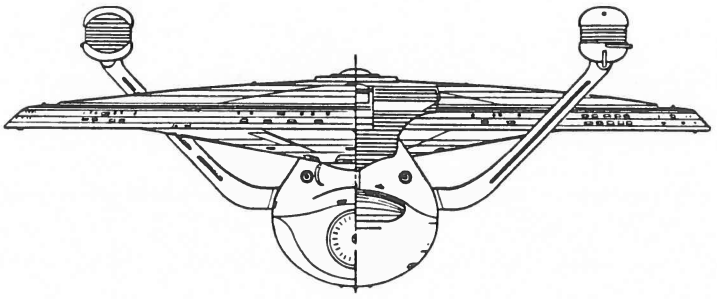
Beam Emitters: (26)Type FH-14 Phaser hard points in banks of 20
Projectiles: FP-7 Photon Torpedoes (launchers, two forward two aft)
Shielding: multi-faceted projected deflector network. Variable density electromagnetic/stasis field matrix

ESTIMATED PERFORMANCE & DURATION:

Normal Cruising Velocity: Warp 9*
Maximum Cruising Velocity: Warp 13*
Maximum Range: 18,000 Light-Years
Expected Lifetime: 60+ years

*23RD CENTURY WARP FACTOR CALIBRATION





NX-1701-A

SOLARIS

CORPORATE MEMORANDUM

DATE: November 30, 2285

TO: **ALL EMPLOYEES**

FROM: Shayla D'Velaway

SUBJECT: THE NX-1701-A PROGRAM AND OUR VISIONS BEYOND

It has been four days since the shocking destruction of the *USS Enterprise.* A communications blackout is in effect on events leading up to the loss of Starfleet's crown jewel. The *Enterprise* was to continue active service for at least two more years. It was projected our awarded NX-1701-A successor design would be ready for commissioning by 2297; however the recent events have altered the 1701 replacement plans. Starfleet has imposed a 85% funding cutback and spending freeze on our new *Enterprise* class design. A diversion of funds toward the *Excelsior* Development Program will accelerate its procurement schedule.

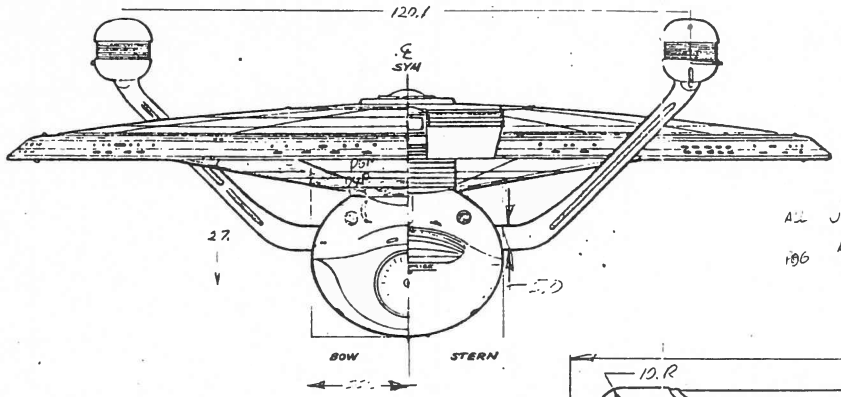
Effective December 1, 2285, the NX-1701-A design will not advance beyond mission simulator status without Starfleet approval. Fabrication of materials be will be limited to laboratory static and dynamic testing only. Vehicle frame, engine systems and hull will advance no than further Design Review 1. All other components and systems will not exceed Design Review 0. Ongoing research and development will generate information to be used for future programs. Marketing and Engineering from our Breeze and Pleiades Divisions are developing a series of plans to offset the loss in potential revenue with the cutbacks in funding.

The corporation's prestige and viability were elevated after SOLARIS was awarded the honor of continuing the *Enterprise* legacy. Now, the sudden possibility a of NX-1701-A cancellation has brought mock sympathy from some of our competitors. Our chief rival, Shuvinaaljis, has offered no public comment to date. Their normally boisterous design team of Dana Koeller and T'Sai Uti has been silent due to major problems of their own "Great Experiment" the *Excelsior.* Nevertheless Starfleet has come to the conclusion a *Excelsior* class vessel will eventually bare the name *Enterprise.* It is widely speculated, a newly built recommissioned *Constitution* class ship will probably carry the *Enterprise* name toward the end of this century.

Our NX-1701-A development schedule can no longer conform to Starfleet's revised procurement timetable. *Lightspeed TechNews* reacted swiftly to the change of events. Yesterday's issue looks like they wanted to retract their "Solaris: The little company that could" article from a year ago. Despite this major setback, I believe SOLARIS will still benefit in the short term. Starfleet ships will incorporate our newly licensed NX concepts over the next two decades. This will help increase our net profit margins by no less than a 11% net gain. Other than wounded corporate pride, even a complete NX cancellation would not be a total loss.

With the *Excelsior* barely completed, Starfleet is creating new excitement with proposals of two larger and multi-mission capable classes slated for star-travel around 2320-2340. Whether as a prime contractor or subcontractor, SOLARIS can continue to play a role in Starfleet's grand designs with your talents and drive.

S. J. D'Velaway
President



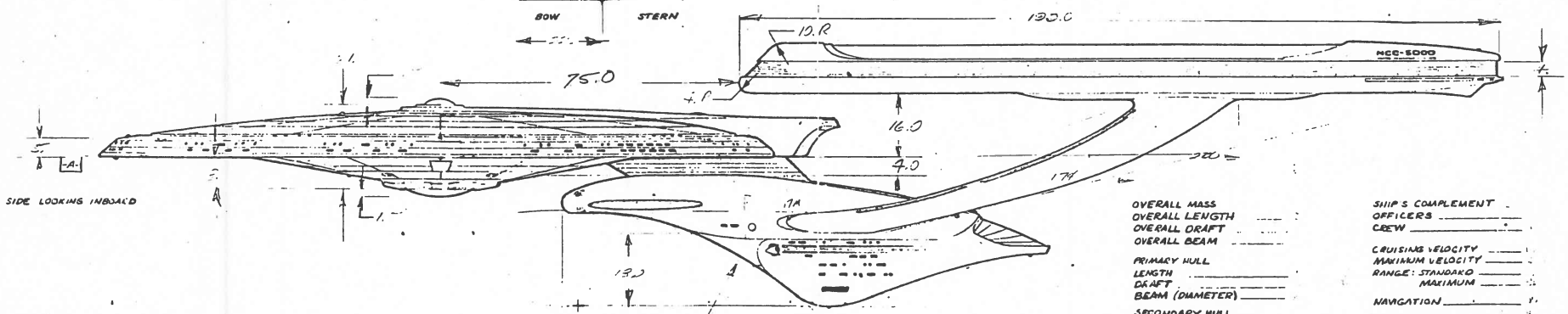
UNITED FEDERATION OF PLANETS • STAR FLEET DIVISION

FEDERATION STARSHIP

MODEL: MK-IX-B TYPE: HEAVY CRUISER CLASS: ENTERPRISE-STARSHIP III

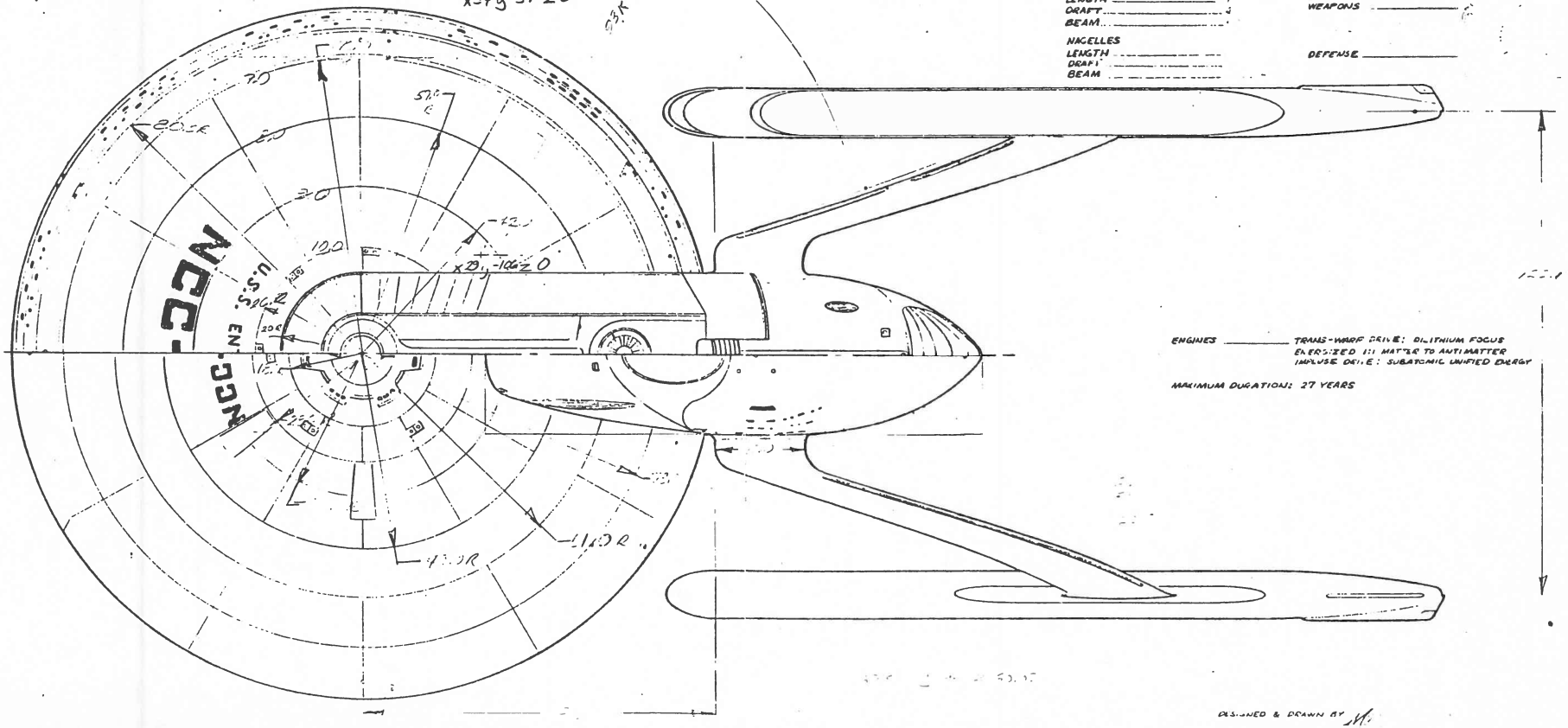
PRIME CONTRACTOR: SOLARIS CORPORATION - FEDERATION NAVAL YARDS

SYSTEM: SOL \ EARTH - SAN FRANCISCO, NORTH AMERICA



OVERALL MASS	
OVERALL LENGTH	
OVERALL DRAFT	
OVERALL BEAM	
PRIMARY HULL	
LENGTH	
DRAFT	
BEAM (DIAMETER)	
SECONDARY HULL	
LENGTH	
DRAFT	
BEAM	
NACELLES	
LENGTH	
DRAFT	
BEAM	

SHIP'S COMPLEMENT	
OFFICERS	
CREW	
CRUISING VELOCITY	
MAXIMUM VELOCITY	
RANGE: STANDARD	
MAXIMUM	
NAVIGATION	
COMPUTERS	
WEAPONS	
DEFENSE	

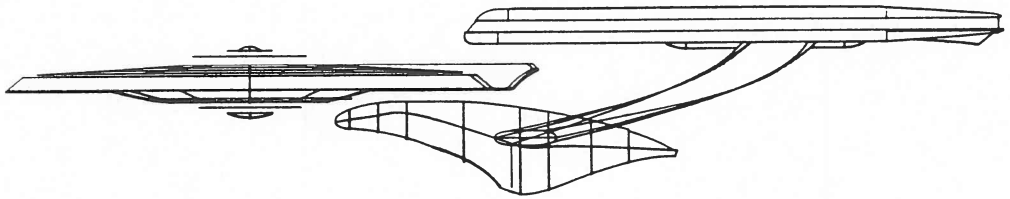


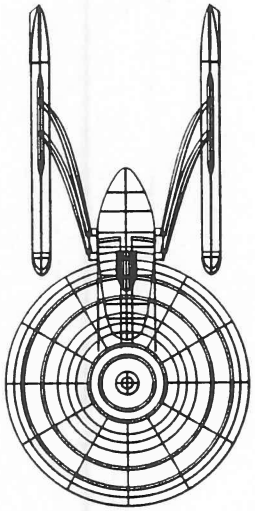
ENGINES — TRANS-WARP DRIVE: DILITHIUM FOCUS ENERGIZED !!! MATTER TO ANTIMATTER
IMPULSE DRIVE: SUBATOMIC UNIFIED ENERGY

MAXIMUM DURATION: 27 YEARS

DESIGNED & DRAWN BY

ADVANCE COPY





M-7 COMPUTER ENHANCED
FIFTH GENERATION WARP DYNAMICS
STRUCTURAL INTEGRITY SIMULATION ANALYSIS

CHANGE PENDING-REV A

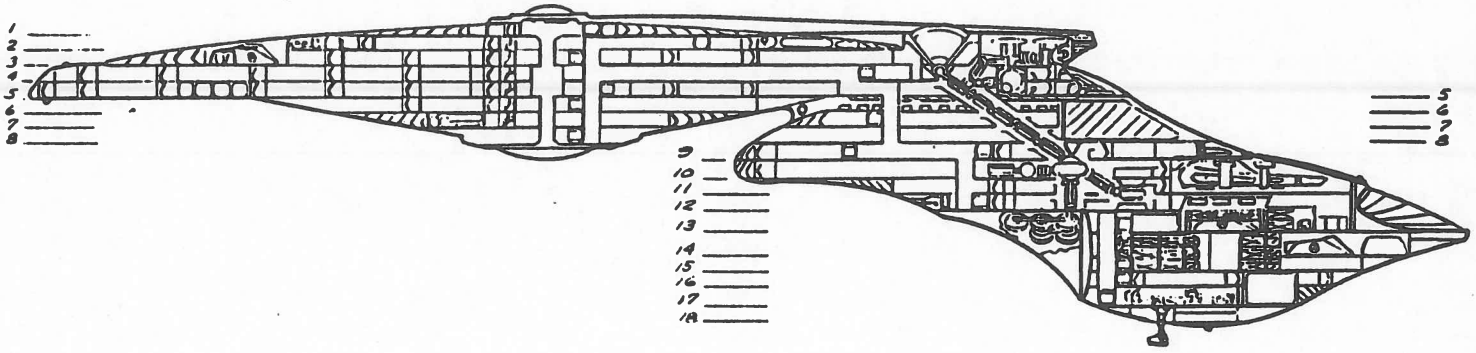
PRELIMINARY
FOR INFORMATION ONLY

SCHEDULED FOR
CHANGE REVIEW BOARD
ACTION

UNCLASSIFIED

SOLARIS CORPORATION \ BREEZE DIVISION – FEDERATION NAVAL RESEARCH COMPLEX
SYSTEM: SOL \ EARTH – VENTURA, NORTH AMERICA

INTERNAL CROSS SECTION



PRIMARY HULL (SAUCER SECTION)

DECK 1: BRIDGE, ESCAPE PODS, UPPER PHASER SYSTEM ACCESS, EMERGENCY DEUTERIUM FUEL STORAGE
DECK 2: SCIENCE LABS, BRIEFING ROOMS, OFFICERS' LOUNGE, ESCAPE PODS IMPULSE ENGINES
DECK 3: SCIENCE LABS, OFFICERS'/VIP QUARTERS, TRANSPORTER ROOMS (4) SMALL LANDING BAYS (2) HOLODECKS (2), LIFE SUPPORT, EMERGENCY BREAKAWAY SAUCER ENGINE
DECK 4: CREW/CIVILIAN QUARTERS, GYMNASIUM, CREWS' LOUNGES (4)
DECK 5: CREW/CIVILIAN QUARTERS, MAIN SICKBAY, ESCAPE PODS, SAUCER ENGINEERING, COMPUTER CORE MAIN ACCESS
DECK 6: EMERGENCY BRIDGE, SIX-FORWARD, SECURITY, SICKBAY, LIFE SUPPORT, EMERGENCY TRANSPORTERS (3)
DECK 7: LOWER PHASER SYSTEM ACCESS, MAINTENANCE AREAS, MATTER RECONVERSION, DOCKING PORTS, CARGO TRANSPORTER
DECK 8: SCIENCE LABS

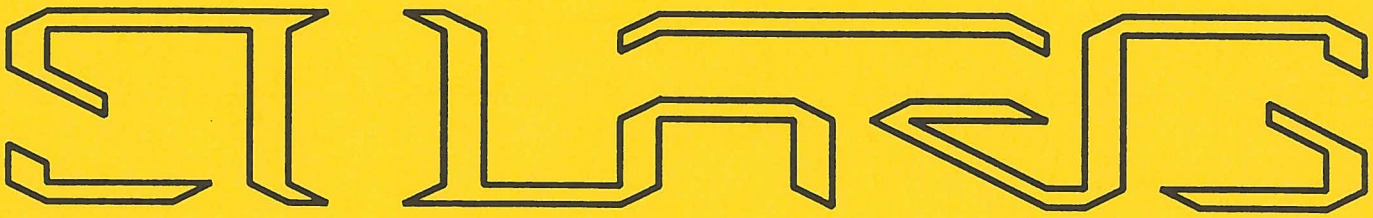
SECONDARY HULL (ENGINEERING SECTION)

DECK 5: SAUCER BREAKAWAY MECHANISM
DECK 6: SHIP SEPARATION FACILITIES, DEUTERIUM FUEL STORAGE
DECK 7: BRIDGE, DEUTERIUM FUEL STORAGE, TRANSPORTER ROOM
DECK 8: CREW/CIVILIAN QUARTERS, SCIENCE LABS, LIFE SUPPORT, SICKBAY, DEUTERIUM FUEL STORAGE
DECK 9: CREW/CIVILIAN QUARTERS, MATTER RECONVERSION, ESCAPE PODS, AFT THRUSTERS
DECK 10: MAIN ENGINEERING, PHOTON TORPEDO STAGING/LAUNCHING AREA, MATTER RECONVERSION, WARP SLED STOWAGE,
DECK 11: MAIN ENGINEERING, MAINTENANCE/WORK SHOPS, DOCKING PORTS WARP SLED SERVICE BAY, AFT PHASER SYSTEM ACCESS
DECK 12: MAIN ENGINEERING, MATTER RECONVERSION, WASTE MANAGEMENT, MAIN LANDING BAY/CARGO CONTROL, FORWARD THRUSTERS
DECK 13: ANTI-MATTER FUEL CONTAINMENT PODS, MAIN LANDING DECK, SHUTTLECARFT/CARGO STOWAGE, EMERGENCY TRANSPORTERS (2)
DECK 14: ANTI-MATTER FUEL CONTAINMENT PODS, HOLODECK, CARGO STORAGE, SHUTTLECRAFT STOWAGE/SERVICE BAY
DECK 15: MAIN CARGO DECK, MAINTENANCE/WORK SHOPS, CARGO TRANSPORTER
DECK 16: SECONDARY COMPUTER, LIFE SUPPORT, CREW/CIVILIAN QUARTERS, MATTER RECONVERSION, ESCAPE PODS, SCIENCE LABS
DECK 17: BOTANICAL GARDENS, POOL, CREW'S LOUNGE, HOLODECK
DECK 18: TRACTOR BEAM MECHANISM, CARGO BAY, UNDERSIDE PHASER SYSTEM ACCESS

CONTRACTOR'S SKETCH

SOLARIS
CORPORATION

BREEZE DIVISION



CORPORATION