CONSTITUTION

PROTOTYPE NX-1700

EXTERNAL VIEWS SHEET 1/15
SPECIFICATIONS
DESIGN HISTORY

DESIGN TEAM:
David Schmidt — Designer / Layout Designer / Technical Editor
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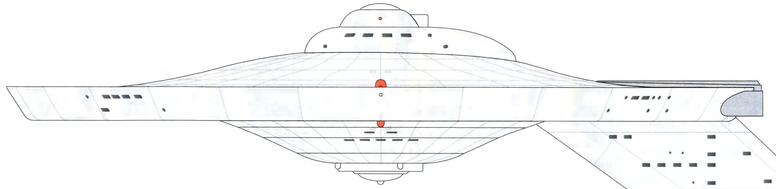
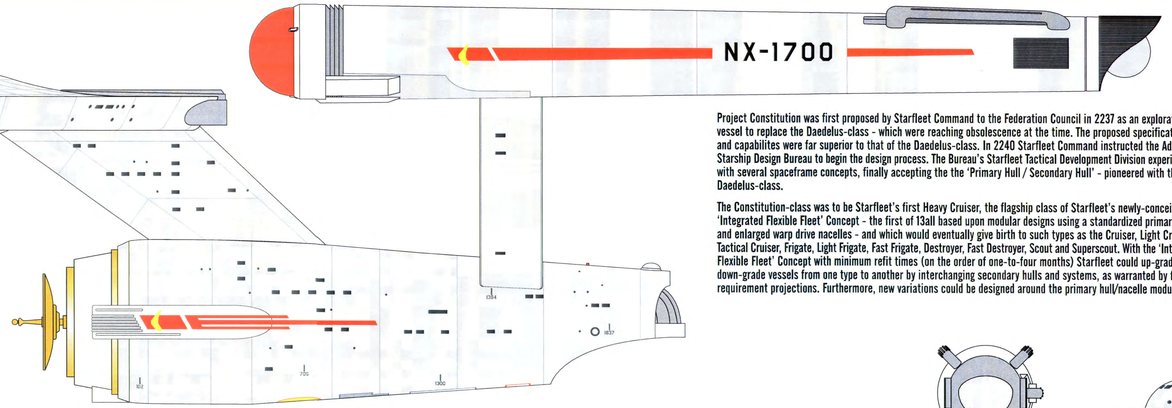
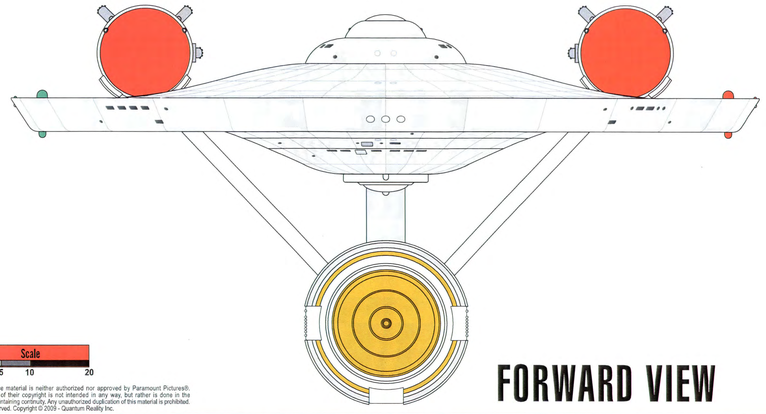


PORT VIEW





FORWARD VIEW

Scale
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SPECIFICATIONS

PARTICULARS

Vessel Class	Constitution
Identification	NX-1700
Type	Heavy Cruiser

SPACEFRAME

Overall Length	289 meters
Overall Beam	144 meters
Overall Draft	67.6 meters
Decks	21
Displacement	8.2×10^5 tons

WARP SYSTEMS

Power	Matter / Antimatter Reactor (2.3×10^8 terawatt)
Cruising Speed	wf 5.0
Flank Speed	wf 6.0 (Sustainable for 12 hours)
Burst Speed	wf 6.5 (Sustainable for 1 hour)

CREW & AUXILLARY SYSTEMS

Complement	42 Officers 388 Enlisted
Transporters	4 6-personnel 3 22-personnel Emergency 4 Cargo

INFORMATION SYSTEMS

Computer Core	2 (1 Primary / 1 Secondary) Duotronic Microprocessors

IMPULSE SYSTEMS

Power	Primary - feed from warp core (4.9×10^{10} megawatt) Secondary - 4 deuterium fusion reactor (3.7×10^{10} megawatt)
Vector Nozzle	2
Cruising Speed	0.19 c
Flank Speed	0.79 c

TACTICAL SYSTEMS

Phaser	12 - Type VII retractable turret
Torpedo Tube	2 Fore / 1 Aft - Type 2
Magazine	32 Mark IV Photon Torpedoes 10 Probes
Grid	5 Deflector Shield Generator (rated 6.7×10^2 mw - standby / 2.01×10^3 mw - alert / 3.52×10^6 mw - 0.0038 Sec.) 10 Structural Integrity Field Generator (rated 1.15×10^3 mw)
Deflector	1 - Forward (1.01×10^2 megawatt - 187 millicochrane)
Tractor Beam	Main - 1 Aft (6 megawatt - 225 millicochrane) 1 Shuttlebay (internal)

DESIGN HISTORY

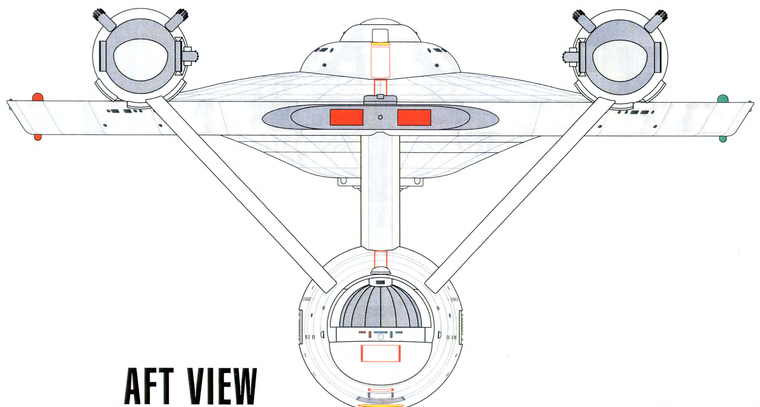
Project Constitution was first proposed by Starfleet Command to the Federation Council in 2237 as an exploration vessel to replace the Daedelus-class - which were reaching obsolescence at the time. The proposed specifications and capabilites were far superior to that of the Daedelus-class. In 2240 Starfleet Command instructed the Advanced Starship Design Bureau to begin the design process. The Bureau's Starfleet Tactical Development Division experimented with several spaceframe concepts, finally accepting the the 'Primary Hull / Secondary Hull' - pioneered with the Daedelus-class.

The Constitution-class was to be Starfleet's first Heavy Cruiser, the flagship class of Starfleet's newly-conceived 'Integrated Flexible Fleet' Concept - the first of 13all based upon modular designs using a standardized primary hull and enlarged warp drive nacelles - and which would eventually give birth to such types as the Cruiser, Light Cruiser, Tactical Cruiser, Frigate, Light Frigate, Fast Frigate, Destroyer, Fast Destroyer, Scout and Superscout. With the 'Integrated Flexible Fleet' Concept with minimum refit times (on the order of one-to-four months) Starfleet could up-grade or down-grade vessels from one type to another by interchanging secondary hulls and systems, as warranted by fleet requirement projections. Furthermore, new variations could be designed around the primary hull/nacelle modules.

The first spaceframe components of the class' lead ship were gamma-welded at the Utopia Planitia Fleet Yards in 2242. On 15 March 2245, U.S.S. Constitution (NX-1700) was launched from Utopia Planitia. She immediately began shakedown trials in the home sectors, being formally commissioned on 31 October 2245.

First launched in 2245, by 2269 most of the Constitution-class Heavy Cruisers had undergone 4 upgrades:

- Upgrade 1.1
  - Post-shakedown - Standard Outfitting
- Upgrade 1.2
  - Replacement of Bridge Module
  - Removal of Bussard Collector Spikes
- Upgrade 1.3
  - Replacement of Bridge Module
  - Upgrading of Sickbay
- Upgrade 1.4
  - Upgrading of Main Engineering
  - Upgrading of Main Deflector Generator
  - Upgrading of Life-Support Systems
  - Upgrading of Structural Integrity Field Generators
  - Upgrading of Nacelle Aft End Caps



AFT VIEW

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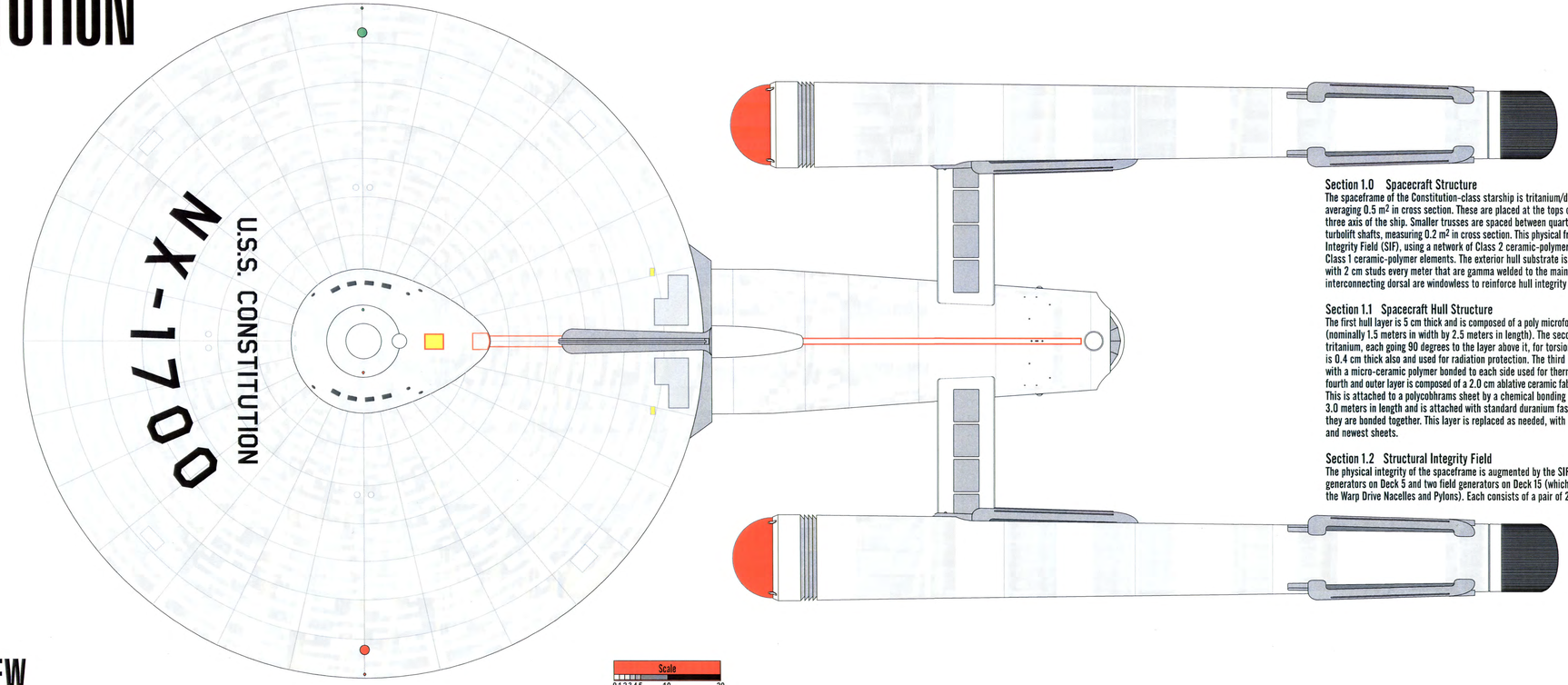
CONSTITUTION

PROTOTYPE NX-1700

EXTERNAL VIEWS SHEET 3/15

INTERNAL SYSTEMS



DORSAL VIEW

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INTERNAL SYSTEMS

Section 1.0 Spacecraft Structure

The spaceframe of the Constitution-class starship is tritanium/duranium macrofilament truss frames, averaging 0.5 m^2 in cross section. These are placed at the tops of Decks 2,4,6,8,10, 12 and 14 for all three axis of the ship. Smaller trusses are spaced between quarters, at corridor junctions, and at the turbolift shafts, measuring 0.2 m^2 in cross section. This physical framework is reinforced by the Structural Integrity Field (SIF), using a network of Class 2 ceramic-polymer wave guides to distribute energy to Class 1 ceramic-polymer elements. The exterior hull substrate is poly bonded to 4 cm by 0.5 cm bands with 2 cm studs every meter that are gamma welded to the main frame. Decks 8 and 14 in the interconnecting dorsal are windowless to reinforce hull integrity at those possible weak points.

Section 1.1 Spacecraft Hull Structure

The first hull layer is 5 cm thick and is composed of a poly microfoam with interwoven tritanium filaments (nominally 1.5 meters in width by 2.5 meters in length). The second layer is four sheets of 0.4 cm thick tritanium, each going 90 degrees to the layer above it, for torsion strength, a fifth sheet of Aledium foil is 0.4 cm thick also and used for radiation protection. The third layer is a honeycombed duranium alloy with a micro-ceramic polymer bonded to each side used for thermal insulation and SIF conductivity. The fourth and outer layer is composed of a 2.0 cm ablative ceramic fabric with interwoven tritanium filaments. This is attached to a polycobhrams sheet by a chemical bonding process. This layer 3.0 meters wide by 3.0 meters in length and is attached with standard duranium fasteners to the first three layers after they are bonded together. This layer is replaced as needed, with no more than 8 years between oldest and newest sheets.

Section 1.2 Structural Integrity Field

The physical integrity of the spaceframe is augmented by the SIF. The SIF is created by eight field generators on Deck 5 and two field generators on Deck 15 (which reinforce both the Secondary Hull and the Warp Drive Nacelles and Pylons). Each consists of a pair of 2 megawatt graviton polarity sources. These feed a pair of 100 millicochrane subspace field distortion amplifiers. Any two units are capable of supporting the entire SIF grid at 100% for 40 hours before gaussing causes a critical shut down. The SIF system creates a subspace distortion field that is guided along all trusses and hull plates, reinforcing these by a factor of 100,000% of their usual tensile, compressive and torsion strength.

Section 1.3 Inertial Damping Field & Synthetic Gravity Generators

The Inertial Damping Field (IDF) operates in parallel with the ship's artificial gravity generators, maintaining a series of variable-symmetry force fields that absorb external inertial forces. The force fields are maintained according to SFRA-standard 352.12, averaging 75 millicochranes with field differential of 5.26 nanocochranes/meter. Flux generation for IDF and gravity are provided by generators within the crawl space under each deck, in a hexagonal grid with nodes spaced 0.3 meters apart.

Section 1.4 Security & Containment Force Field Generators

There are secondary force-field generators mounted within the vessel, filling a variety of roles. Main Engineering has a series responsible for maintaining containment for the Warp Core - with standby units for emergency containment in the event of coolant leakage and other hazards endemic to Antimatter and Fusion reactions. Others scattered throughout the ship are non-dedicated, and using waveguides and sophisticated forming software can be routed to perform various tasks - including corridor security barriers, brig security barriers, and bulkhead life-support barriers (in the event of localized hull breaches), these units have a set of four 1 megawatt polarity sources feeding a pair of 50 millicochrane field generators.

Section 1.51 Ordnance: Phasers

As in earlier designs, phaser cannon turrets are normally retracted within the hull behind sliding armor panels, and when required the emitter heads are extended beyond the hull on telescoping supports. Unlike previous designs, the Constitution-class features redundant pairing of turret/emmiters at all positions, with both members of a pair locked to synchonous parallax. Turrets are located on Decks 5 and 8.

Section 1.52 Ordnance: Photon Torpedoes

Twin photon torpedo launchers are located on Deck 3, as well as twin magazines. The aft launcher is mounted in the engineering hull fantail.

Section 1.53 Ordnance: Force-field / Deflector Screen Generators

Three generators are located on Deck 6, and two more on Deck 16. These units have a set of four 4 megawatt polarity sources feeding a pair of 200 millicochrane field generators.

Section 2.0 Computer Systems

The Main Computer Core (MCC) is located on Decks 2 through 9 in the Primary hull. Although there are access catwalks every 2.5 m, the entire 20 m core is one integral unit. The MCC consists of 400 dedicated modules of 144 duotronic chips, which, under LCARS control provide dynamic access at a rate of 4,800 kiloquads/sec. The total storage capacity for each module is 16,000 to 64,000 kiloquads, depending on software configuration and data compression rates. The Secondary Computer Core (SCC) is located on Deck 16 in the Engineering hull, and can take over from the Main Computer Core with the loss of non-critical functions. The SCC consist of 50 dedicated modules of 144 duotronic chips, with the same characteristics as the MCC modules. Both the MCC and SCC are joined to the Optical Data Network (ODN) by triple redundant Micron Junction Links (MJL) on each module. The final layer to the computer systems is a dedicated short range Radio Frequency (RF) system that all cores and SPNs use to communicate with the control panels, access points, and PADDs.

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CONSTITUTION

PROTOTYPE NX-1700

EXTERNAL VIEWS SHEET 5/15
INTERNAL SYSTEMS

SYMBOL CHART

EMBARKED CRAFT

Work Bee

Type 2 Shuttle

ESCAPE SYSTEMS

Escape Pod

Escape Pod Niche

EXTERNAL MARKINGS

Hazardous Material Intake

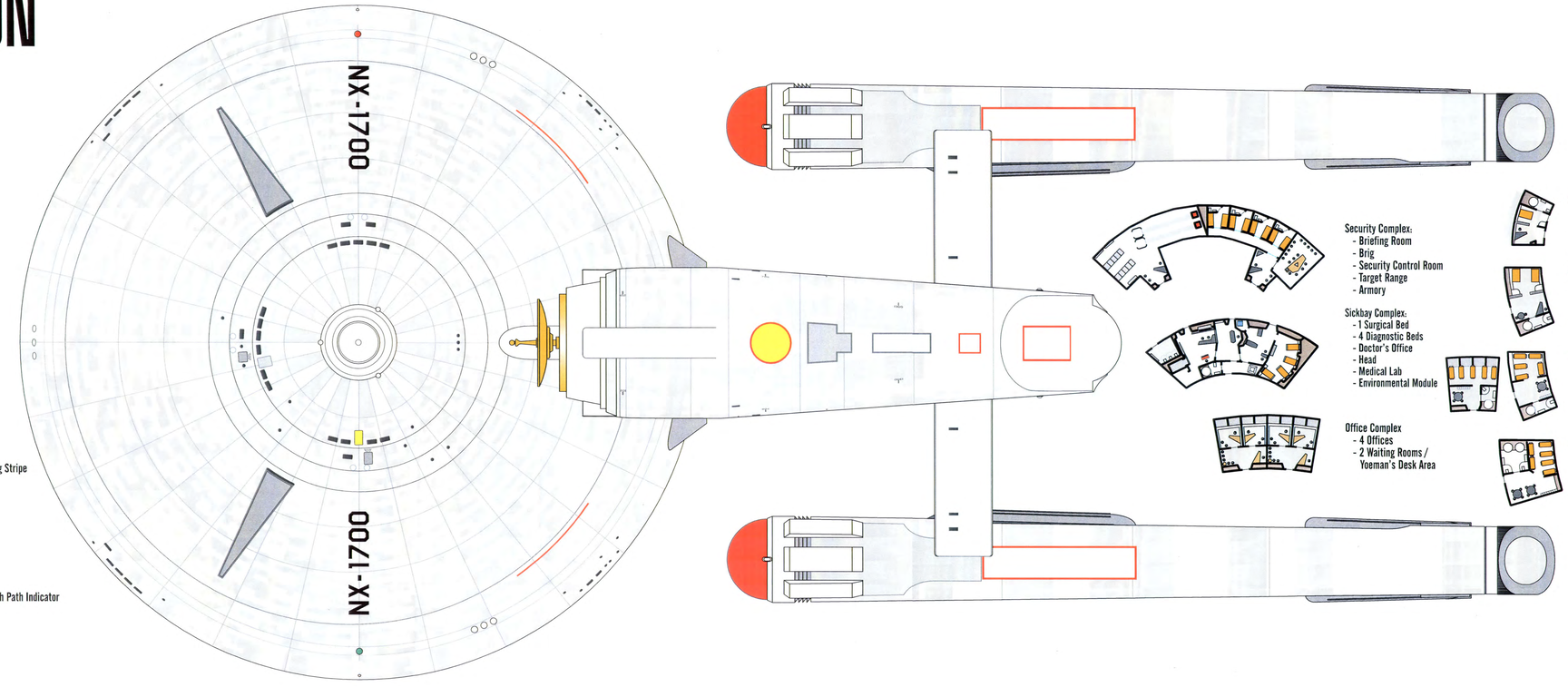
Warp Engine Proximity EVA Warning Stripe

Fleet Formation Target

Starbase Y-axis Docking Target

Shuttlecraft Approach Path Indicator

VENTRAL VIEW



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PROTOTYPE NX-1700
SHEET 6/15

SYMBOL CHART

Security Complex:
- Briefing Room
- Brig
- Security Control Room
- Target Range
- Armory

Sickbay Complex:
- 1 Surgical Bed
- 4 Diagnostic Beds
- Doctor's Office
- Head
- Medical Lab
- Environmental Module

Office Complex
- 4 Offices
- 2 Waiting Rooms / Yoeman's Desk Area

Senior Officer's Quarters:
- Sleeping Area
- Office Area
- Closet
- Head & Sonic Shower

Junior Officer's Quarters:
- Sleeping Area
- Office Area
- Closet
- Head & Sonic Shower

Enlisted Quarters:
- Sleeping Area (5 3-tiered bunks)
- Dining Area
- Lockers
- Head & Sonic Shower

Enlisted Quarters:
- Sleeping Area (6 3-tiered bunks)
- Dining Area
- Lockers
- Head & Sonic Shower

AUXILLARY ENGINEERING - COMPARTMENTS

VIP Observation Lounge

Chapel

JAG Courtroom / Multipurpose Room

Briefing Room

VIP Dining Room

Head

Auxiliary Control Center

Science Lab - Type 1
- Research Area
- Operators' Stations

Science Lab - Type 2
- Research Area
- Operators' Stations

Science Lab - Type 3
- Research Area
- Operators' Stations
- Storage Area

6-Personnel Transporter Room
- Buffer Alcove
- Stage
- Operators' Station

22-Personnel Emergency Transporter Room
- Buffer Alcove
- Stage
-Operator's Station

Scale
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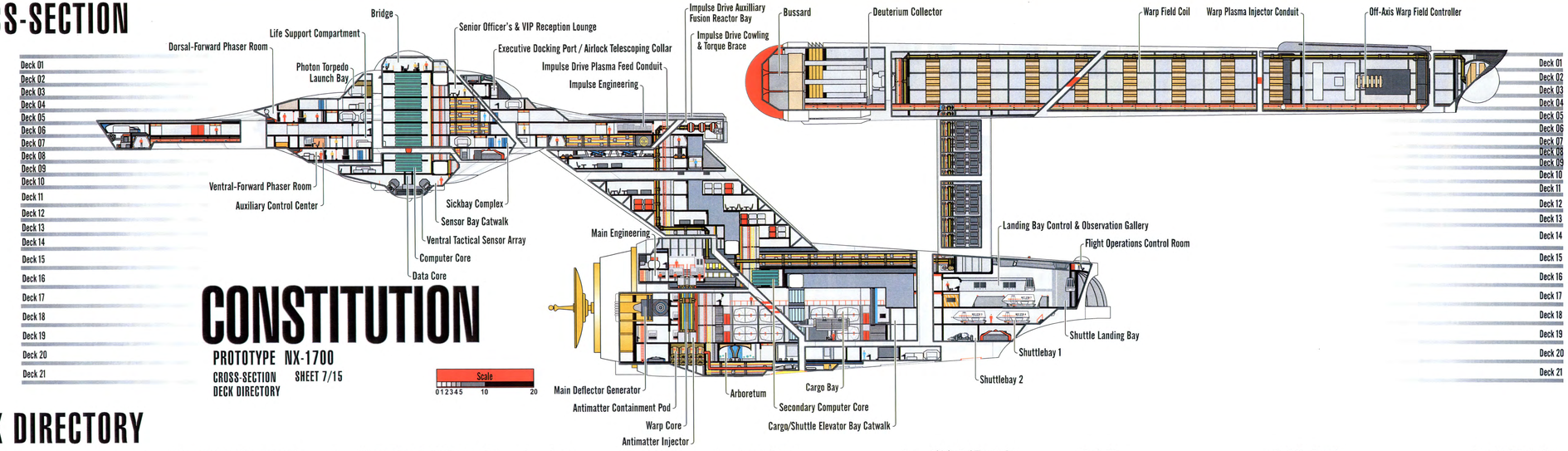
CROSS-SECTION



CONSTITUTION

PROTOTYPE NX-1700

CROSS-SECTION SHEET 7/15

DECK DIRECTORY

PROTOTYPE NX-1700

SHEET 8/15

DECK DIRECTORY

Deck 01
- 1 Main Bridge
- 1 Dorsal Tactical Scanner / Sensor Suite

Deck 02
- 1 Communications Control
- 1 Combat Information Center
- 1 Computer Core
- 1 Subspace / Radio Transceiver Bay

Deck 03
- 1 Computer Core
- 2 Photon Torpedo Launch Bay
- 1 Photon Torpedo Magazine A
- 1 Photon Torpedo Magazine B
- 1 Senior Officer's & VIP Reception Lounge
- 1 Environmental Suit Locker
- 1 Docking Port / Airlock Telescoping Collar

Deck 04
- 10 Officer's Quarters
- 2 VIP Quarters
- 3 Dorsal Phaser System Turret Compartment - Upper Level
- 1 Computer Core
- 2 Battery Room
- 1 Docking Port / Airlock Machinery Room

Deck 05
- 8 Officer's Quarters
- 3 Dorsal Phaser System Turret Compartment - Main Level
- 6 Organic Synthesis
- 2 Inorganic Synthesis
- 8 Structural Integrity Field Generator Bay
- 2 Amino Acid / Raw Carbohydrate / Stasis Tankage
- 2 Umbilical Connection Bay
- 80 Escape Pod
- 1 Computer Core
- 1 Waste Reccycling

Deck 06
- 8 Officer's Quarters
- 16 Junior Officer Quarters
- 24 Enlisted Bunkrooms (390 bunks total)
- 13 Science Lab
- 2 Office Complex
- 1 Galley & Food Synthesizer Programming
- 1 Main Food Synthesis
- 3 Defense Field Generator Room
- 2 Crew Mess/Lounge
- 1 Lounge
- 2 Briefing Room
- 1 Chapel
- 1 JAG Courtroom / Multipurpose Room
- 2 Main Gangway & Retractable Sleeve
- 1 Bowling Alley
- 1 Recreation Lounge - Upper Level
- 1 Gymnasium
- 1 Impulse Engineering Complex
- 1 Computer Core
- 1 Cryogenic Cooling System / EPS Relay Compartment
- 2 Landing Pad Armature

Deck 07
- 1 Auxiliary Control Center
- 1 Navigational Sensor Array
- 1 Security Complex
  - Briefing Room
  - 4 2-man Brigs
  - Security Control Room
  - Firing Range
  - Locker Room & Armory
- 1 Sickbay Complex
  - Containment Area
  - 1 Surgical Bed
  - 4 Diagnostic Beds
  - Doctor's Office
  - Head
  - Medical Lab
  - Environmental Module
- 93 Escape Pod
- 2 Cryogenic Gas / Water Tankage Bay
- 1 Recreation Lounge - Main Level
- 4 Transporter Room
- 2 RCS Control Thruster Bay
- 1 Computer Core
- 1 Life Support Compartment
- 2 Landing Pad & Armature

Deck 08
- 3 Ventral Phaser System Turret Compartment
- 2 Emergency Transporter Room
- 2 Transporter Transceiver / Plasma Relay Bay
- 2 Transporter Buffer
- 1 Computer Core

Deck 08 - Dorsal
- 1 Landing Pad & Armature
- 1 Explosive Bolts Bay

Deck 09
- 2 Observation Lounge
- 1 Laundry Bay
- 1 Computer Core
- 1 Umbilical Connection Bay
- 1 Docking Port / Airlock

Deck 09 - Dorsal
- 1 Observation Lounge

Deck 10
- 1 Ventral Tactical Scanner / Sensor Suite

Deck 10 - Dorsal
- 1 Damage Control Locker

Deck 11 - Dorsal
- 1 Observation Lounge

Deck 12 - Dorsal
- 1 Damage Control Locker

Deck 13 - Dorsal
- 1 Observation Lounge

Deck 14
- 3 Vertical Jeffries Tube
- 1 Horizontal Jeffries Tube

Nacelles & Pylons
- 1 Bussard Ionizing Beam Emitter Bay
- 1 Bussard Magnetic Field Generator/Collector Bay
- 1 Continuous Cycle Fractionator & Deuterium Chiller Bay
- 1 Warp Coil & Plasma Injector Bay
- 1 Off-Axis Field Coil Bay

Deck 15
- 1 Main Engineering - Propulsion & Warp Core - Upper Level
- 1 Matter/Antimatter Intermix Valve Chamber
- 1 Warp Core Coolant Compartment
- 2 Structural Integrity Field Generator Bay
- 1 Emergency Manual Monitor
- 1 Shuttle Traffic Control Room

Deck 16
- 1 Main Engineering - Propulsion & Warp Core - Main Level
- 1 Deuterium Processing Room
- 1 Chief Engineer's Office
- 1 Diagnostic Workshop
- 1 Dilithium Control Room
- 1 Inorganic Synthesis
- 1 Computer Core
- 2 Defense Field Generator Compartment
- 2 Landing Bay Atmospheric Processing & Storage
- 1 Landing Bay Control / Observation Gallery
- 1 Landing Bay - Upper Level
- 1 Turbolift Repair

Deck 17
- 1 Main Engineering - Warp Core
- 1 Deflector Generator Bay - Upper Level
- 2 Long Range Sensor Bay - Upper Level
- 2 Deuterium Tankage - Upper Level
- 2 Escape Pod
- 1 Briefing Room
- 1 Quartermaster's Office
- 2 Docking Port / Airlock
- 1 Lounge
- 1 Cargo Bay - Upper Level & Catwalk
- 1 Shuttle Elevator Bay - Upper Level
- 1 Landing Bay - Main Level
- 6 Personal Lift Room

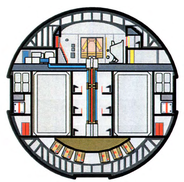
Deck 18
- 1 Main Engineering - Warp Core
- 1 Deflector Generator Bay - Main Level
- 2 Long Range Sensor Bay - Main Level
- 2 Deuterium Tankage - Mid Level
- 14 Escape Pod
- 1 Cargo Bay - Mid Level
- 1 Shuttle Elevator Bay - Main Level
- 1 Shuttle Parking Bay
- 1 Photon Torpedo Launch Bay
- 2 Photon Torpedo Magazine
- 2 Ion Pod Station

Deck 19
- 1 Main Engineering - Antimatter Injector
- 1 Deuterium Tankage - Main Level
- 2 Cargo Transporter Bay
- 1 Cargo Bay - Main Level
- 1 Shuttle Elevator Bay - Sub Level
- 1 Workbee Parking Bay
- 1 Transporter Buffer / Transciever Bay

Deck 20
- 1 Antimatter Processor
- 1 Insulating Force Field Generator Room
- 1 Arboretum
- 1 Emergency Life Support
- 1 Battery Room
- 1 Emergency Transporter Room
- 1 Ship's Theatre
- 1 Tractor Beam Emitter

Deck 21
- 1 Long Range Sensor Bay
- 2 Plasma Relay Room
- 1 Antimatter Loading Port
- 1 Subspace / Radio Transceiver Bay
- 1 Umbilical Connection Bay

Cross-Section Through Shuttlebay
Forward Aspect



Cross-Section Through Main Engineering
Aft Aspect

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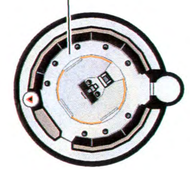
CONSTITUTION

PROTOTYPE NX-1700

INTERNAL VIEWS SHEET 9/15
INTERNAL SYSTEMS

DECK 1



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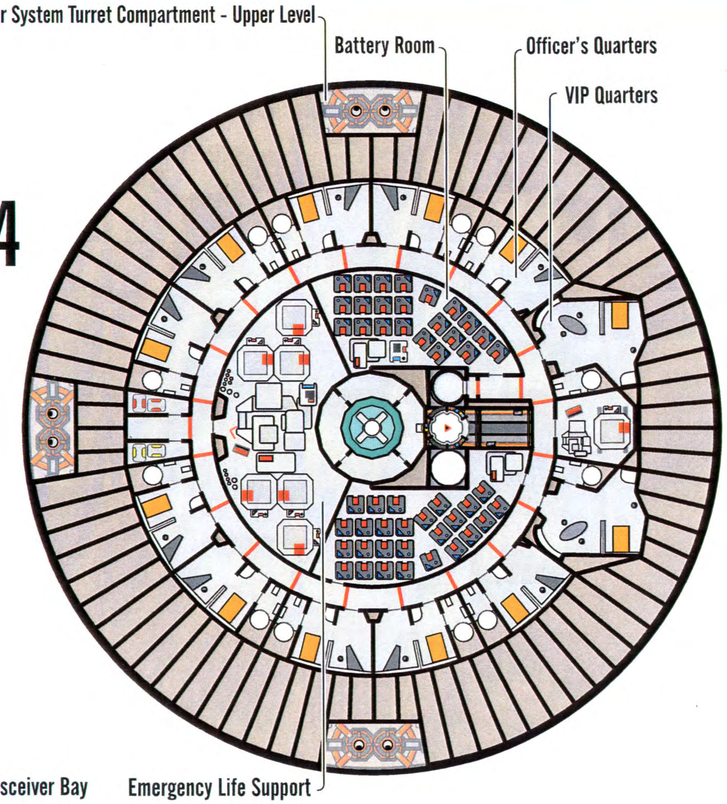

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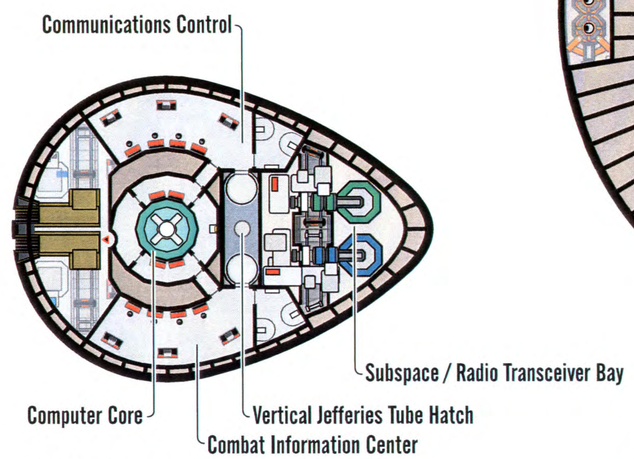

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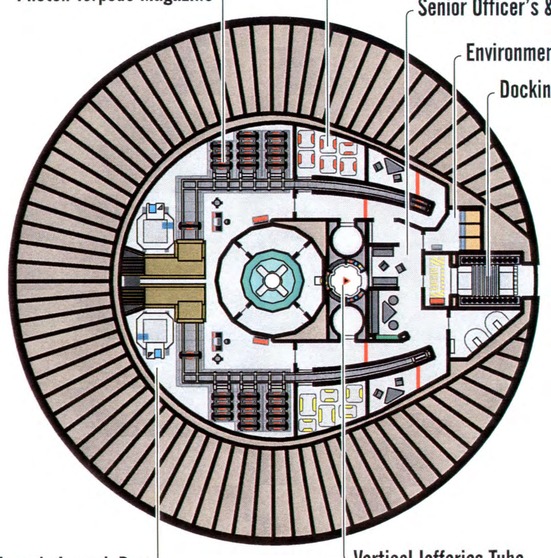

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INTERNAL SYSTEMS

Section 2.1 Information Gathering Systems

Information gathering systems are divided into sensors (passive energy/field detecting/analyzing systems) and scanners (active energy/field emitting-reflection detecting/analyzing systems). Each of these is further subdivided into long-range (faster-than-light) and short-range (lightspeed). Omni-directional packages are generally mounted at the vessel's dorsal and ventral Z-axis poles. Directional packages (including tactical scanners) are mounted along the vessel's forward x-axis.

Section 3.01 Crew Facilities - Quarters

Crew quarters are relatively unchanged since the Daedelus-class, and are modular. Enlisted quarters consist of 2 compartments, a sleeping area (5 3-tiered bunks) plus a dining/relaxation area (containing table and chairs, lockers and head). Petty Officer quarters consist of 2 compartments, a sleeping area (2 3-tiered bunks) plus a dining/relaxation area (containing table and chairs, lockers and head). Officer quarters consist of 2 compartments, a sleeping area (single bunk) plus a dining/office/relaxation area (containing desk and chairs, computer system, closet and head).

Section 3.02 Crew Facilities - Recreation

Recreation facilities set a new benchmark for Starfleet personnel enjoyment. The enormous two-story Recreation Deck taking up Decks 6 and 7 as well as the Gymnasium on Deck 6 are the primary features. Others include the Bowling Alley, Ship's Theatre, and Arboretum as well as various lounges throughout the vessel. The VIP Observation Lounge is located on the forward portside of Deck 6 to provide visiting dignitaries the best view of the orbited planet during diplomatic missions.

Section 3.03 Crew Facilities - Dining

Dining facilities feature an Officer's Dining Room and two Enlisted Mess Halls as well as smaller lounges throughout the ship. Food and Beverages are prepared by protein/carbohydrate synthesizers on Deck 6, and delivered to terminals via a miniature turbolift network. Terminals are also located in the lounges, Security Office and Transporter Rooms. For ceremonial and VIP banquets (the menus for which may not be recorded in the computer), there is a Galley on Deck 6.

Section 3.04 Crew Facilities - Arboretum

The Arboretum concept is tri-functional by design. The primary purpose is as a specimen-repository/display for the Botanical Lab. The secondary purpose is as a recreational venue for off-duty personnel - and as such various benches are placed for relaxation. The final purpose is as an emergency back-up to the vessel's life-support system. Provided light, heat, air and water can be supplied, there is sufficient photosynthetic life within the Arboretum to maintain an Oxygen-Carbon Dioxide ecology/economy indefinitely.

Section 3.05 Crew Facilities - Laundry

Laundry facilities are located on Deck 9. Laundry drop-off terminals are located on all decks with quarters.

Section 3.1 Science Facilities

The Constitution-class starships are outfitted with Science Labs on Deck 6 - a milestone in scientific resources, and represent Starfleet's commitment to exploration. Each consists of a quarantine field, tandem operator's stations/LCARS terminals, and instrument/specimen storage locker. The labs are dedicated to their various disciplines (Exobiology, Astrophysics, etc.) and cannot be transferred without refitting.

Section 3.2 Life Support

Due to the size of the vessel and crew complement, there are several main Life Support systems, which contain the vessel's atmosphere conditioning systems (Air refresh/recycle, temperature/humidity/ionization control), plus controls for gravitational and inertial damping generators. Additionally, most decks have or share a smaller emergency life support room, which will handle that deck(s) needs should the main system go down.

Section 4.0 Shuttle Facilities

The aft third of the Secondary Hull is dedicated to a Landing Bay, two Shuttle Elevators, and two Parking Bays for embarked craft. The Landing Bay is wide enough to facilitate landing two shuttles side-by-side via tractor beam, and has a mid-bay turntable. A Control Gallery and Viewing Galleries are located on the upper level.

Section 5.0 Cargo Facilities

The mid third of the Secondary Hull is dedicated to a cavernous, three-deck high Cargo Bay. The bays bulkhead-mounted niches can accommodate 96 standard cargo pods in quads. Workbee cargo trains can proceed from the Landing Bay through one of the two shuttlecraft elevators and fly directly to the Cargo Bay to land their consist. As well, should extra shuttle parking be required, up to 8 Class 1 shuttles (or corresponding civilian craft) can be parked on the Cargo Bay deck. Recessed tie-downs and tractor-pressor tethers are built into the Cargo Bay decking - similar to those in the Landing and Parking Bays - as well as the Elevators.

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CONSTITUTION

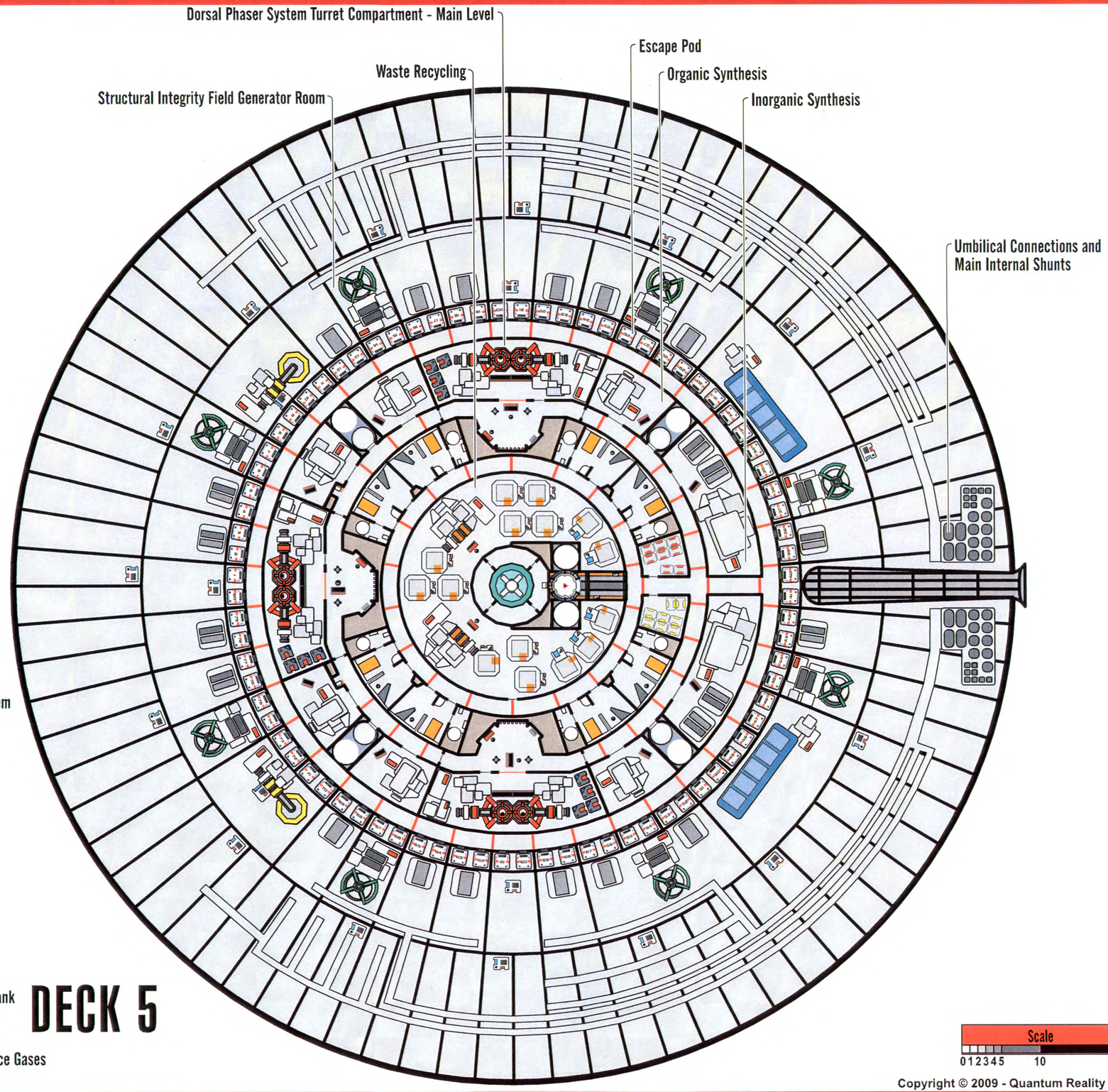
PROTOTYPE NX-1700

INTERNAL VIEWS SHEET 10/15
SYMBOL CHART

SYMBOL CHART

LIFE SUPPORT & FLUID/GAS TANKAGE

- Food Synthesizer
- Food Synthesizer Raw Material Storage Tank (Organic)
- Inorganic Synthesizer
- Synthesizer Raw Material Storage Tank (Inorganic)
- Organic Stasis Containment
- Organic Waste Recycler
- Atmospheric Recycler
- Umbilical Connections and Main Internal Shunts
  - Deuterium Intake/Outflow (Main Tanks)
  - Shuttlebay Consumables Intake/Outflow
  - Cryogenic Liquids Intake/Outflow
  - Atmospheric External Support Bypass
  - Warp Core Coolant Intake/Outflow
  - EPS External Supply Conduit
  - Replicator Raw Stock Intake/Outflow
  - ODN External Connection
  - Fresh Water Intake/Outflow
- Cryogenic Cooling System
- Cryogenic Tank (900 Cubic Meters)
- Cryogenic Tank (250 Cubic Meters)
- Water Tank (100 Cubic Meters)
- Cryogenic Tank (20 Cubic Meters)
- Organic Waste Slurry Tank (20 Cubic Meters)
- Cryogenic Tank Oxygen / Nitrogen / Trace Gases (100 Cubic Meters)



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PROTOTYPE NX-1700

INTERNAL VIEWS SHEET 11/15

SYMBOL CHART

SYMBOL CHART

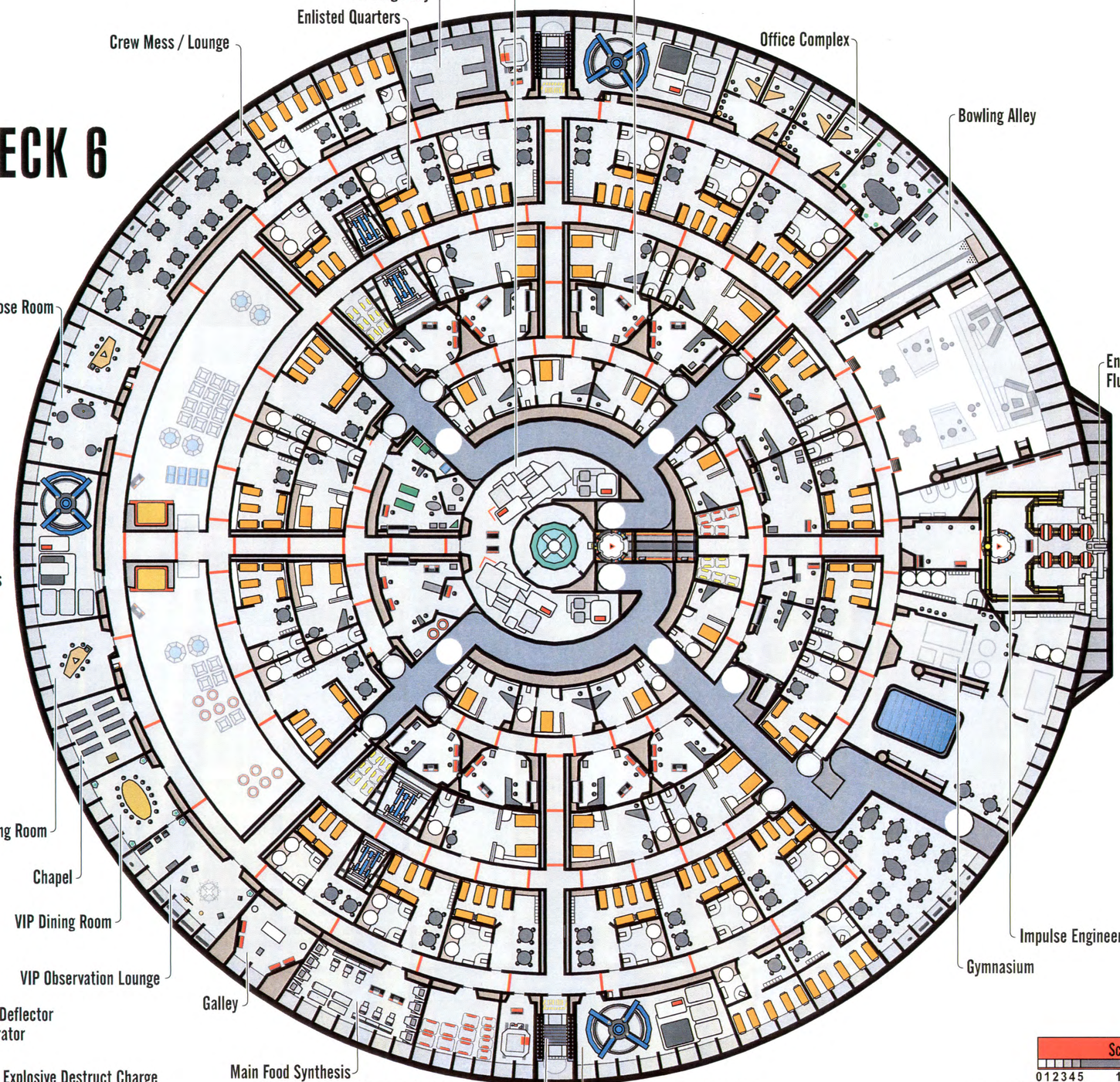
AUXILLIARY ENGINEERING - MISC. SYSTEMS

- Jeffries Tube (Horizontal)
- Jeffries Tube (Vertical)
- Jeffries Tube (Diagonal - Nacelle Pylon)
- Hull-to-Hull Explosive Bolt Connection
- Vertical Turboshaft
- Horizontal Turboshaft
- Turbolift Station
- Damage-Control Containers
- Emergency Supply Containers
- Misc. Shipwide ODN Distribution Areas
- Landing Pad & Armature (Retracted)
- Gravity Gradient Plane
- Structural Support
- One Person Ladder
- Shuttle Elevator
- Three Person Ladder
- One Person Lift

DEFENSE SYSTEMS

- Phaser Emitter Turrets Covers
- Phaser Firing Chambers
- Photon Torpedo Transverse Conveyor
- Photon Torpedo Launch Tube
- Photon Torpedo/Probe Magazines
- Photon Torpedo & Probe Casing
- Force-field / Deflector Screen Generator
- Conventional Explosive Destruct Charge

DECK 6



Scale

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INTERNAL VIEWS SHEET 12/15
SYMBOL CHART

SYMBOL CHART

COMMUNICATIONS & TRANSPORTER SYSTEMS

- Subspace Radio Transceiver
- EM Radio Transceiver
- Transporter Transceiver
- Transporter Buffer
- Transporter Pad (6-personnel)
- Transporter Pad (Emergency 22-personnel)
- Transporter Pad (Cargo)

INFORMATION SYSTEMS

- Computer Core
- Navigation Sensor Array
- Ventral Tactical Sensor Array
- Long Range Sensor Array

EXTERNAL MARKINGS

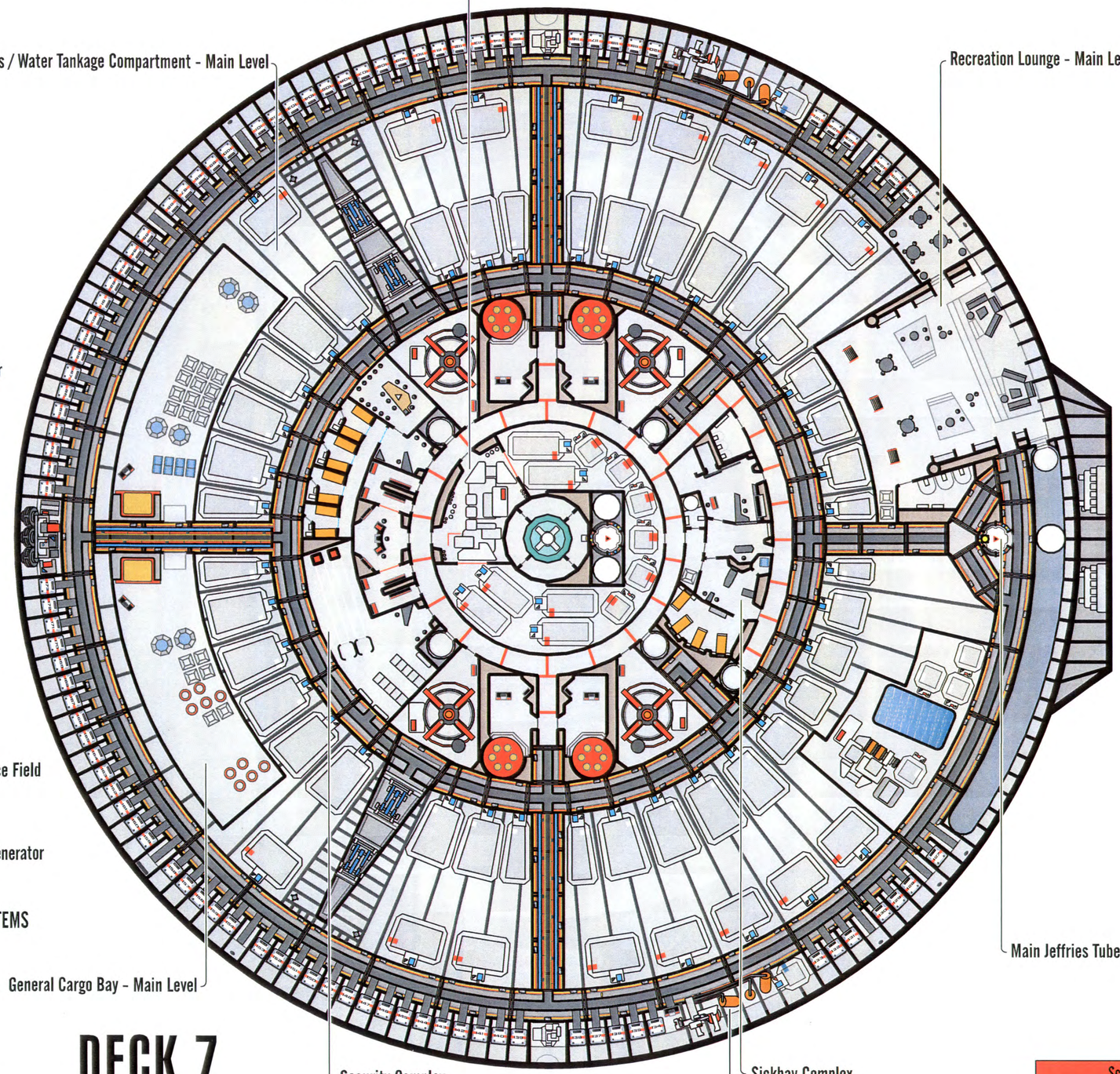
- Tractor Beam Emitter Cover
- Umbilical Connections Access

GRAVITONIC SYSTEMS

- Deflector Generator
- Engineering Insulating Force Field Generator
- Structural Integrity Field Generator

MAIN ENGINEERING - ELECTRO-PLASMA SYSTEMS

- EPS Relay
- EPS Distribution Node
- Cold Fusion Battery Bank



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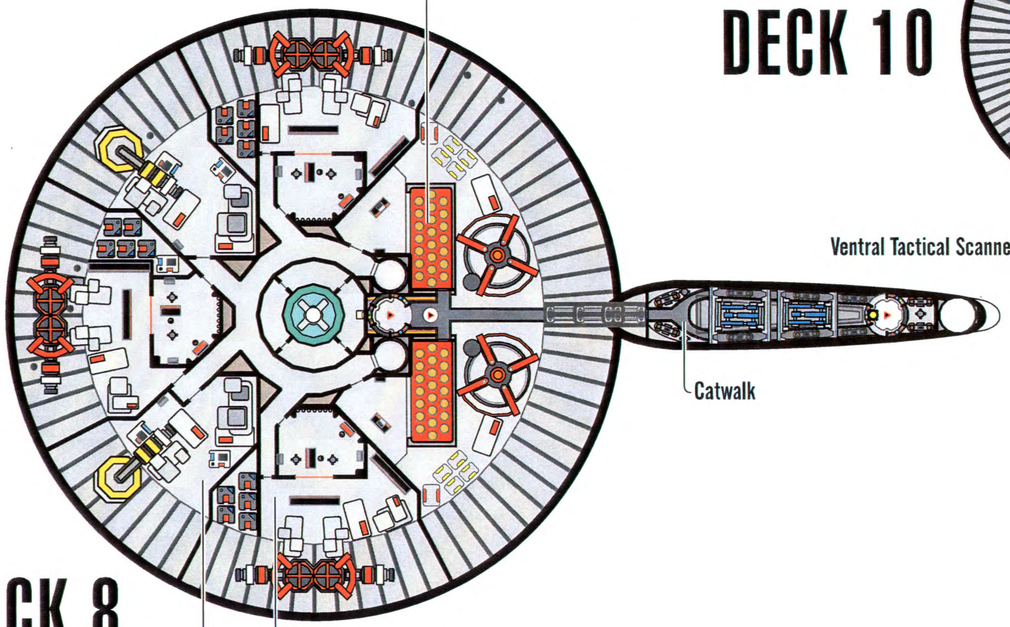
INTERNAL VIEWS SHEET 13/15

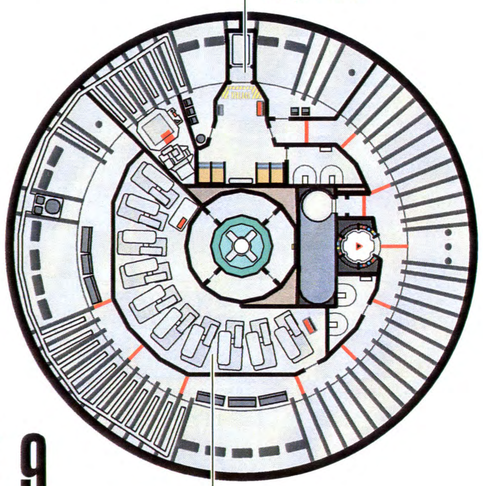
DECK 8



Plasma Relay / Transporter Transceiver Bay

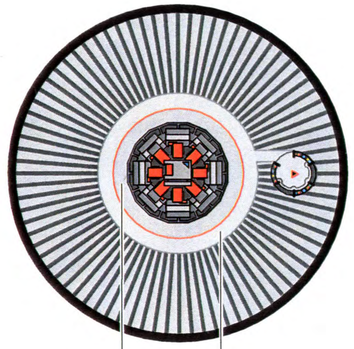
Ventral Phaser System Turret Compartment

DECK 9



Laundry Bay

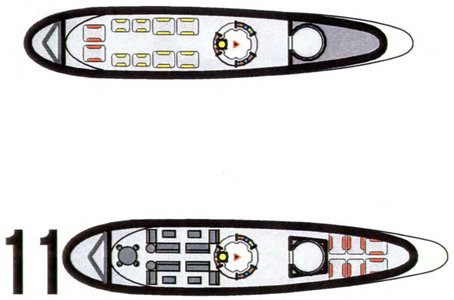
DECK 10



Ventral Tactical Scanner Suite

Catwalk

DECK 11



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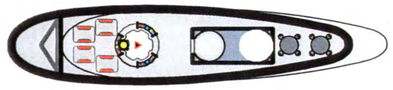

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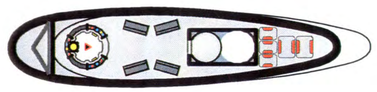
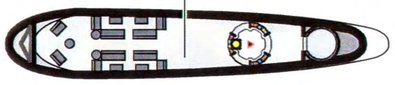


Pylon Observation Lounge



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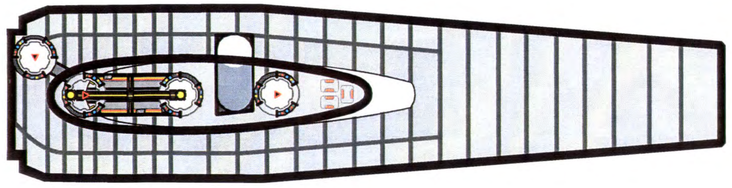

Scale

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PROTOTYPE NX-1700

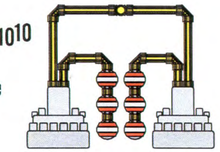
INTERNAL VIEWS SHEET 14/15
SYMBOL CHART

SYMBOL CHART

MAIN ENGINEERING - REACTION CONTROL THRUSTER SYSTEMS

Fusion Generator (6.1 X 10^{10} Mw)
Vectored Exhaust Nozzle
Plenum
Deuterium Tanks

MAIN ENGINEERING - IMPULSE DRIVE SYSTEMS

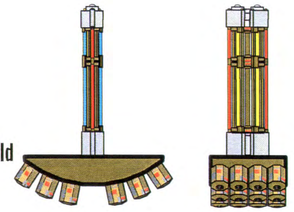


Warp Plasma Conduit

Auxillary Fusion Generators

Impulse Exhaust Manifold

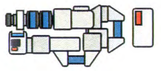
MAIN ENGINEERING - WARP CORE SYSTEMS



Deuterium Injector

Warp Core Cross-section

Antimatter Injector
Antimatter Processor
Antimatter Containment Pod



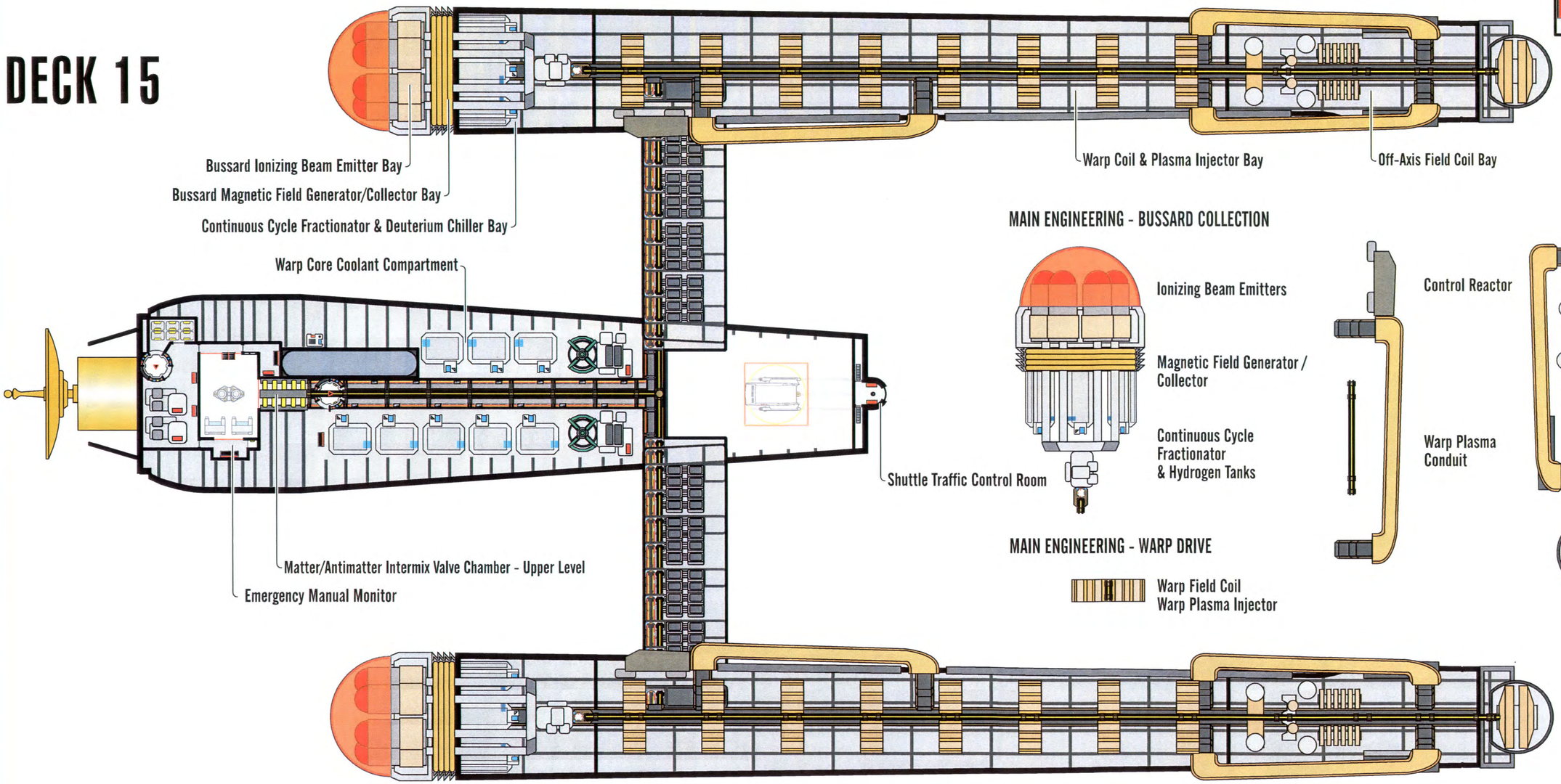
Deuterium Processor

Warp Plasma Conduit

Converter

Engineering Warp Core Control Station

DECK 15



MAIN ENGINEERING - BUSSARD COLLECTION

Ionizing Beam Emitters

Magnetic Field Generator / Collector

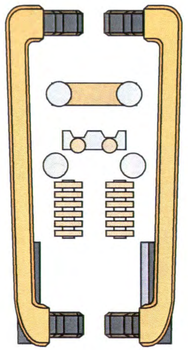
Continuous Cycle Fractionator & Hydrogen Tanks

MAIN ENGINEERING - WARP DRIVE

Warp Field Coil
Warp Plasma Injector

Control Reactor

Warp Plasma Conduit



Intercooler

Off-Axis Field Generator

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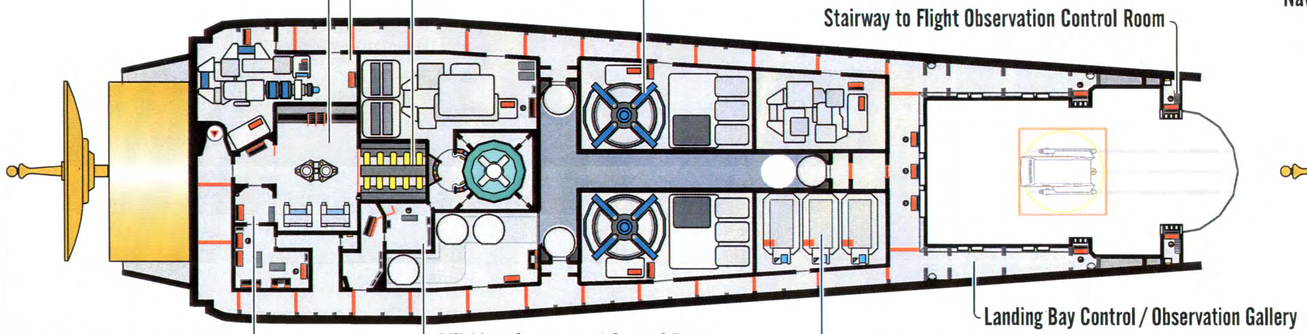

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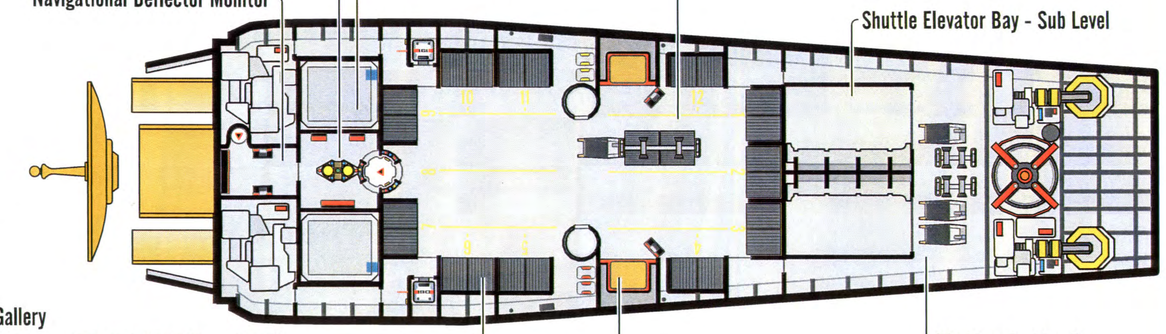

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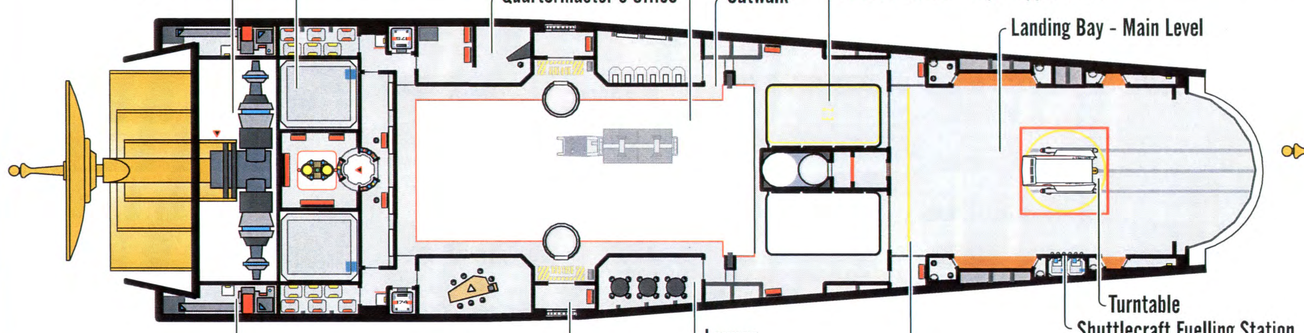

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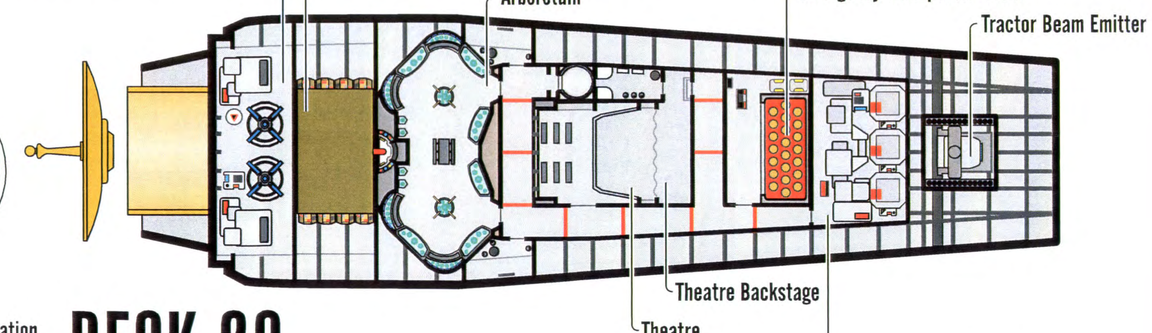

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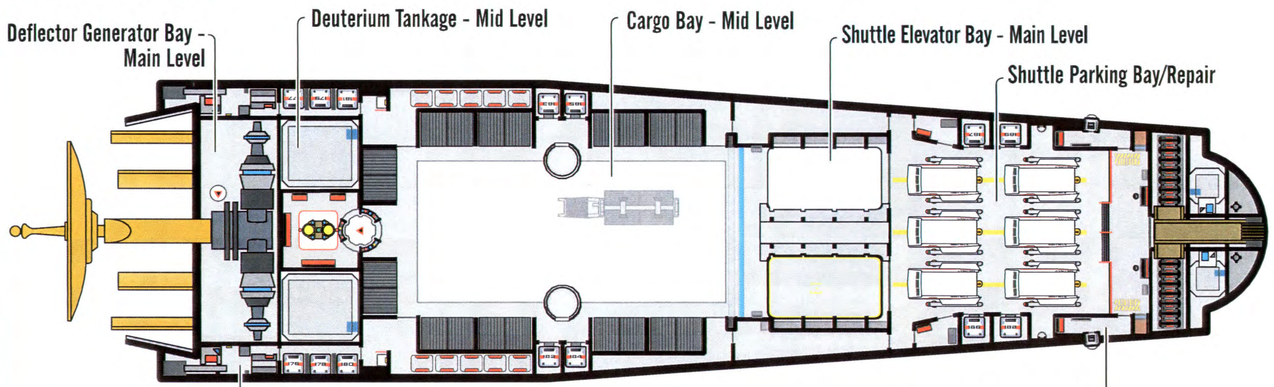

DECK 18

Scale
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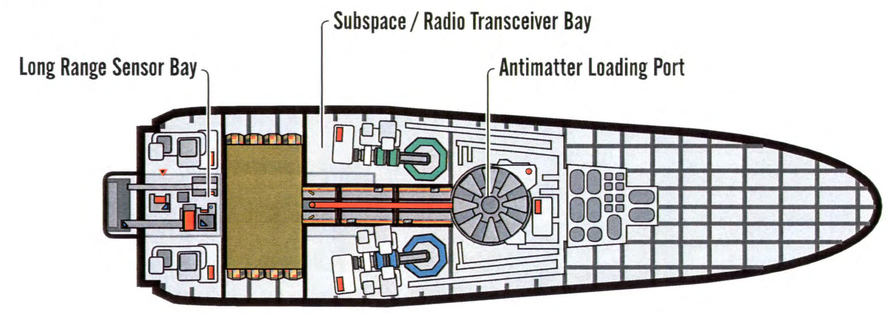

DECK 21

PROTOTYPE NX-1700

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INTERNAL VIEWS SHEET 15/15