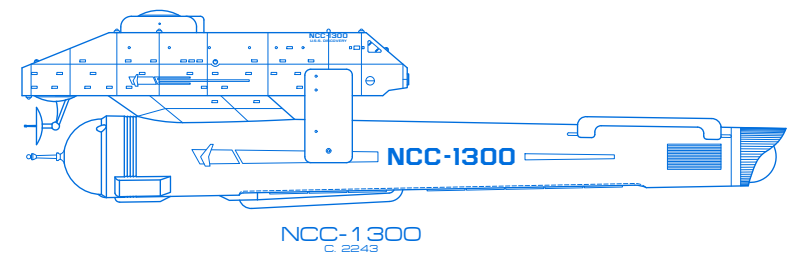
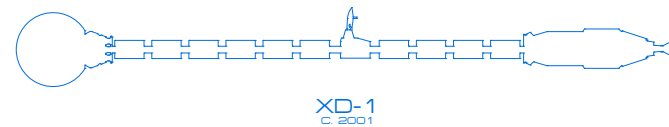
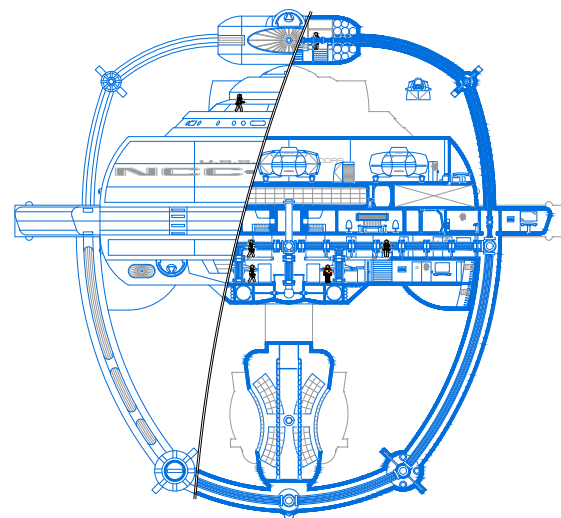
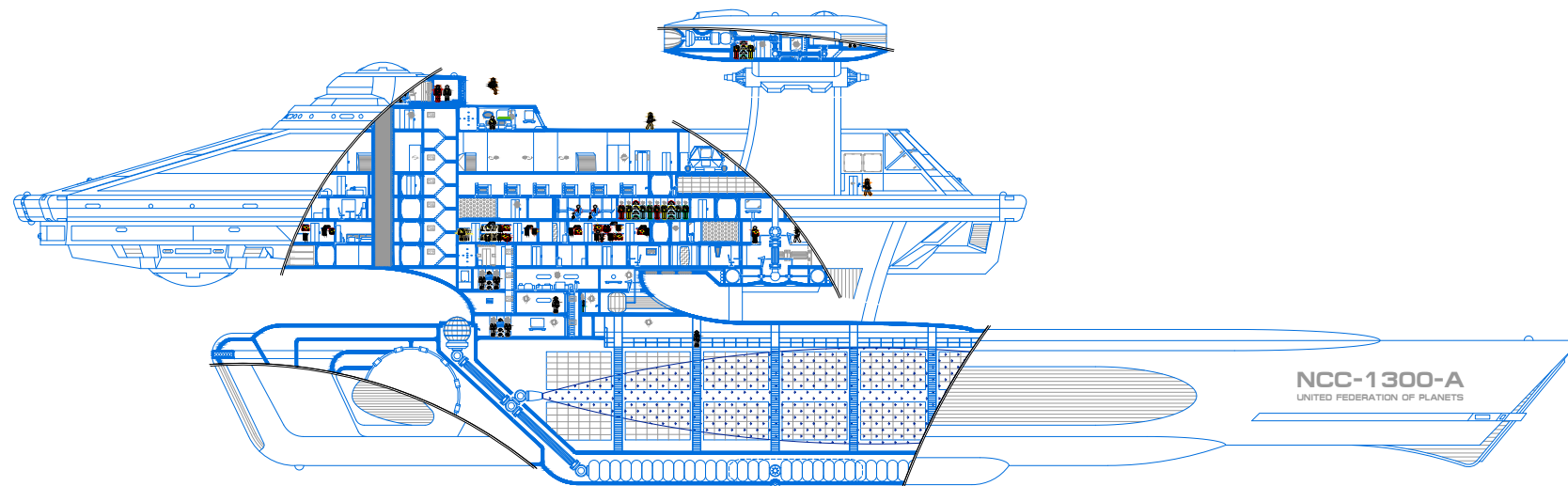
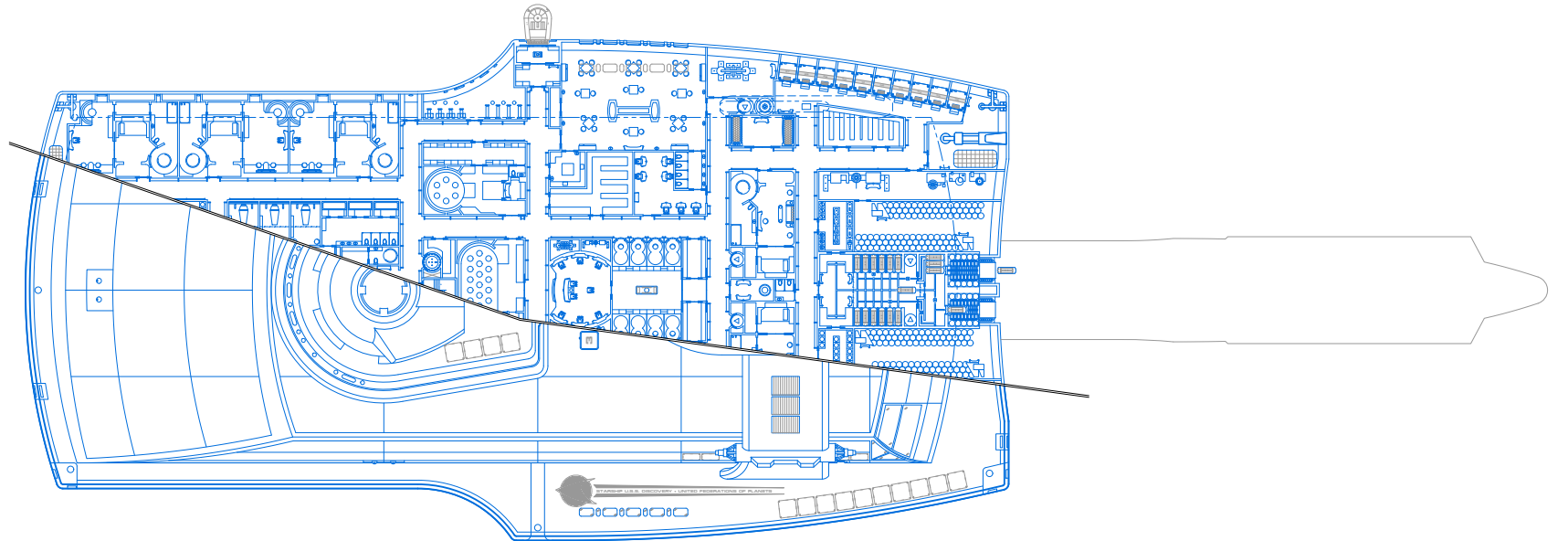


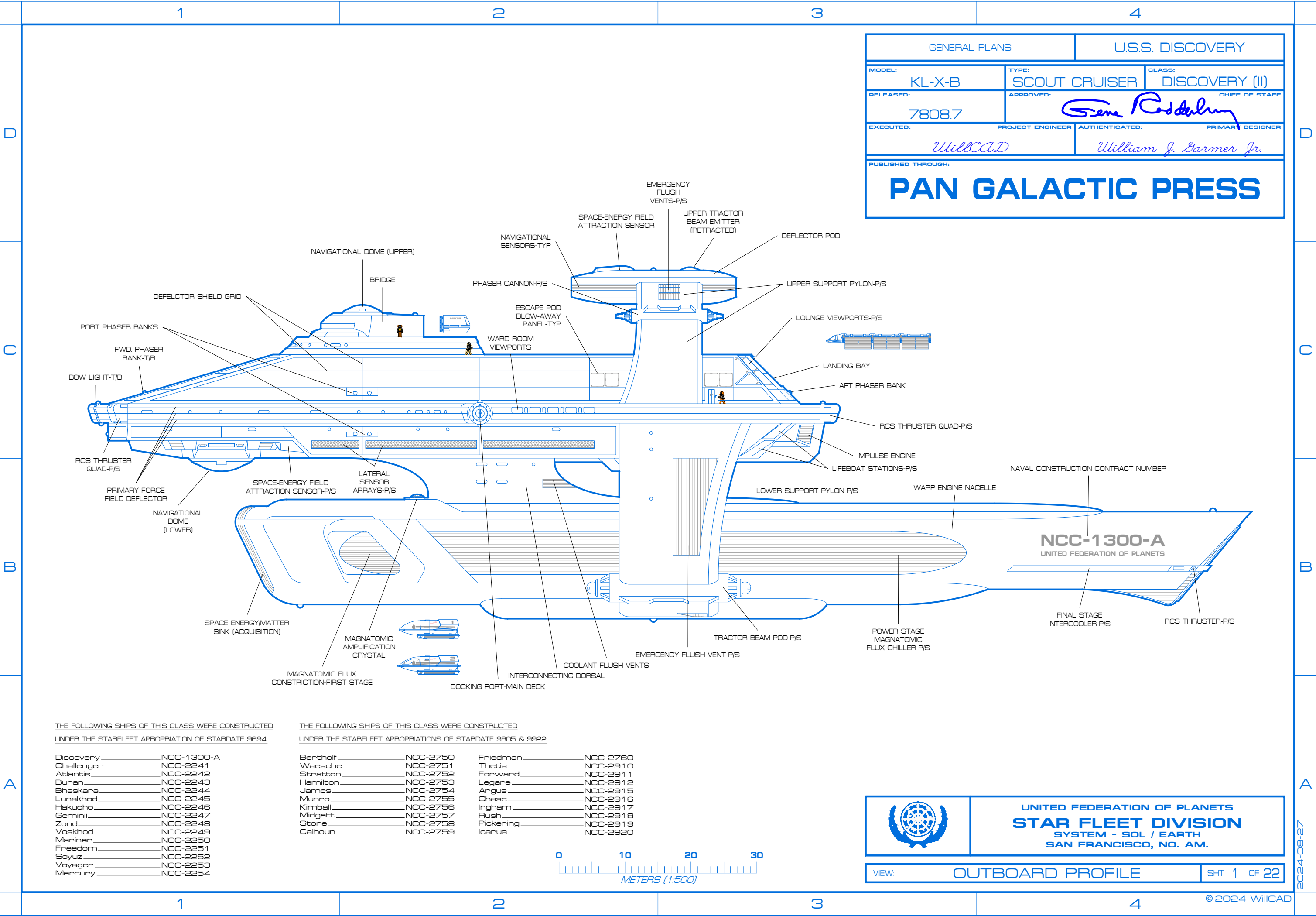


U.S.S. DISCOVERY CLASS NCC-1300-A

No man ever made a great Discovery without the
exercise of the imagination

- George Henry Lewes





GENERAL PLANS		U.S.S. DISCOVERY	
MODEL:	KL-X-B	TYPE:	SCOUT CRUISER
RELEASED:	7808.7	CLASS:	DISCOVERY (II)
EXECUTED:		APPROVED:	CHIEF OF STAFF
PROJECT ENGINEER		AUTHENTICATED:	
PRIMARY DESIGNER		PUBLISHED THROUGH:	
UllCAD		William J. Garner Jr.	
PAN GALACTIC PRESS			

THE FOLLOWING SHIPS OF THIS CLASS WERE CONSTRUCTED
UNDER THE STARFLEET APPROPRIATION OF STARDATE 9694:

Discovery	NCC-1300-A
Challenger	NCC-2241
Atlantis	NCC-2242
Buran	NCC-2243
Bhaskara	NCC-2244
Lunakhod	NCC-2245
Hakucho	NCC-2246
Geminii	NCC-2247
Zond	NCC-2248
Voskhod	NCC-2249
Mariner	NCC-2250
Freedom	NCC-2251
Soyuz	NCC-2252
Voyager	NCC-2253
Mercury	NCC-2254

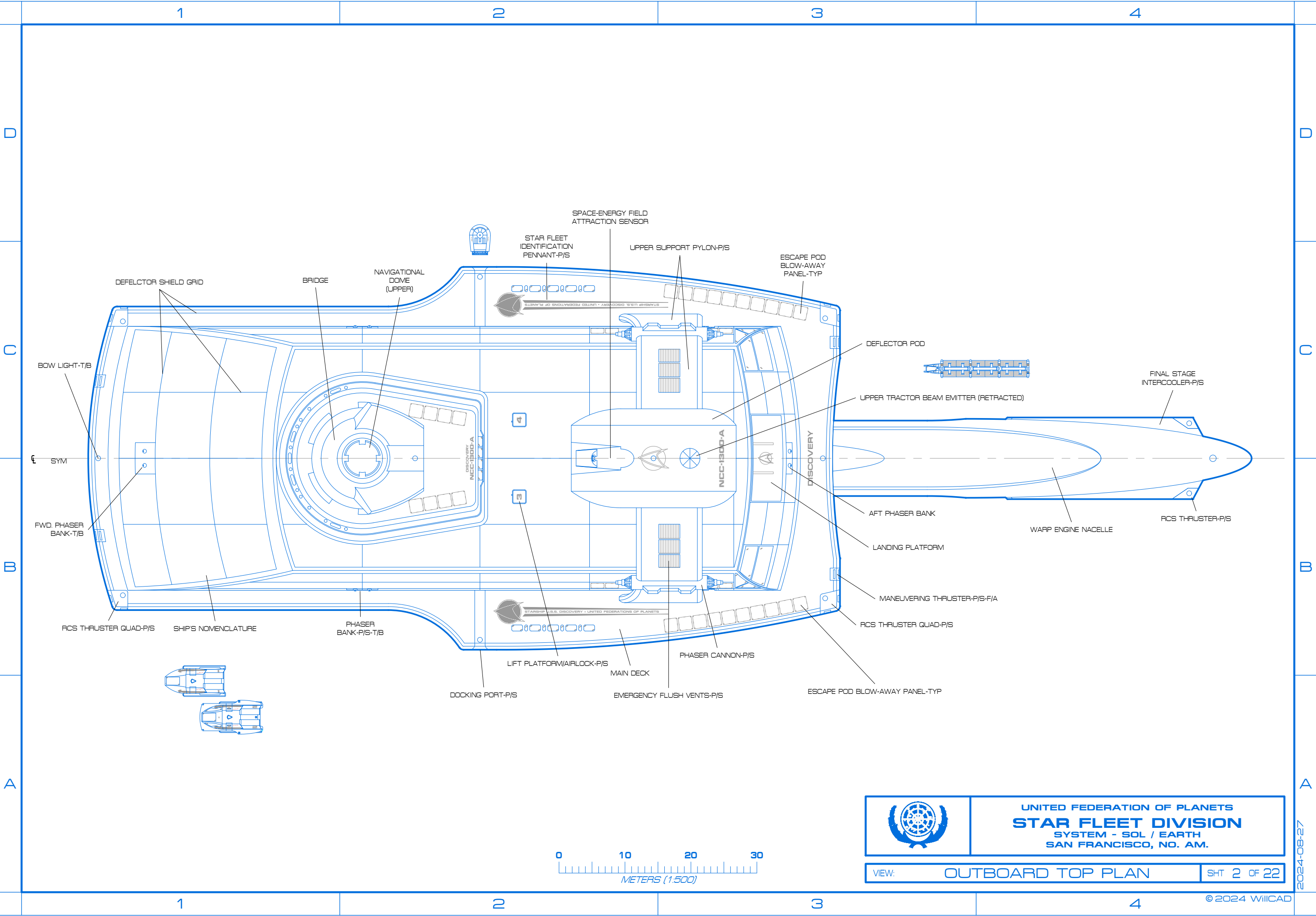
THE FOLLOWING SHIPS OF THIS CLASS WERE CONSTRUCTED
UNDER THE STARFLEET APPROPRIATIONS OF STARDATE 9805 & 9922:

Bertholf	NCC-2750	Friedman	NCC-2760
Waesche	NCC-2751	Thetis	NCC-2910
Stratton	NCC-2752	Forward	NCC-2911
Hamilton	NCC-2753	Legare	NCC-2912
James	NCC-2754	Argus	NCC-2915
Munro	NCC-2755	Chase	NCC-2916
Kimball	NCC-2756	Ingham	NCC-2917
Midgett	NCC-2757	Rush	NCC-2918
Stone	NCC-2758	Pickering	NCC-2919
Calhoun	NCC-2759	Icarus	NCC-2920



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VIEW:	OUTBOARD PROFILE	SHT 1 OF 22

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SINCE THE DISCOVERY REFIT PROJECT HAD AT THAT POINT ALREADY MODELED THE PROPOSED REDESIGN NEARLY TO THE ONE HUNDRED PERCENT DESIGN PHASE, IT WAS DECIDED TO CONSTRUCT THE DISCOVERY CLASS'S REPLACEMENTS FROM SCRATCH, USING THAT REFIT DESIGN. THE NEW CLASS WAS OFFICIALLY DESIGNATED THE DISCOVERY II CLASS, BUT IS MORE COMMONLY REFERRED TO AS THE DISCOVERY REFIT CLASS.

BECAUSE USS DISCOVERY (NCC-1300) HAD BEEN LOST IN THE LINE OF DUTY IN LATE 2280 DURING THE HEROIC RESCUE OF STRANDED FEDERATION COLONISTS CAUGHT IN A SPATIAL RIFT, THE FIRST SHIP OF THE CLASS WAS COMMISSIONED AS USS DISCOVERY (NCC-1300-A) IN 2281.

SUBSEQUENT NEW DISCOVERY REFFITS WERE COMMISSIONED AS ONE-TO-ONE REPLACEMENTS AS THE ORIGINAL FIFTEEN DISCOVERY CLASS SHIPS WERE DECOMMISSIONED OVER THE NEXT FIVE YEARS, AND ANOTHER TWENTY WERE CONSTRUCTED THROUGH THE NEXT DECADE, BRINGING THE CLASS TO AN EVENTUAL TOTAL OF THIRTY-FIVE SHIPS.



BECAUSE THE DISCOVERY II CLASS WAS ORIGINALLY ENVISIONED AS A REFIT OF THE ORIGINAL DISCOVERY CLASS SHIPS RATHER THAN ENTIRELY NEW SHIPS, THE SIMILARITY BETWEEN THE TWO DESIGNS IS UNMISTAKABLE. THE OVERALL CONFIGURATION OF A BOXY HULL ATTACHED TO A SINGLE LARGE WARP NACELLE BY A DORSAL AND TWO SUPPORT PYLONS IS SHARED, AND OVERALL DIMENSIONS ARE SIMILAR.

HOWEVER, DISCOVERY II IS A SIGNIFICANT IMPROVEMENT OVER THE ORIGINAL DESIGN IN EVERY WAY, UTILIZING MANY OF THE COMPONENTS DEVELOPED FOR THE CONSTITUTION CLASS REFIT, SUCH AS THE WARP NACELLE, WARP REACTOR CORE, IMPULSE ENGINES, AND A NUMBER OF INTERNAL SYSTEMS. MAXIMUM SPEEDS ARE SIGNIFICANTLY HIGHER IN BOTH WARP AND IMPULSE DRIVE, AND MANEUVERABILITY HAS BEEN IMPROVED TO SUPPORT THE NEW DRIVE SYSTEMS. DISCOVERY II IS EQUIPPED WITH SIGNIFICANTLY MORE POWERFUL SENSING AND DATA PROCESSING SYSTEMS THAN THE ORIGINAL DESIGN.

TO SUPPORT THE IMPROVED SYSTEMS ABOARD SHIP. DISCOVERY II HAS AN EXPANDED CREW COMPLEMENT OF 94 PERSONS, MORE DOUBLE THE ORIGINAL DESIGNS 42 PERSONS, AND IS CAPABLE OF TRANSPORTING UP TO SIX VISITORS AND TEN TRANSIENTS UNDER NORMAL CONDITIONS. UNDER EMERGENCY CONDITIONS, NEARLY TRIPLE THE STANDARD COMPLEMENT CAN BE ACCOMMODATED FOR SHORT PERIODS BY CONVERTING THE CARGO FACILITIES INTO TEMPORARY DORMITORIES, TO SUPPORT EMERGENCY EVACUATIONS AND DISASTER RELIEF MISSIONS.

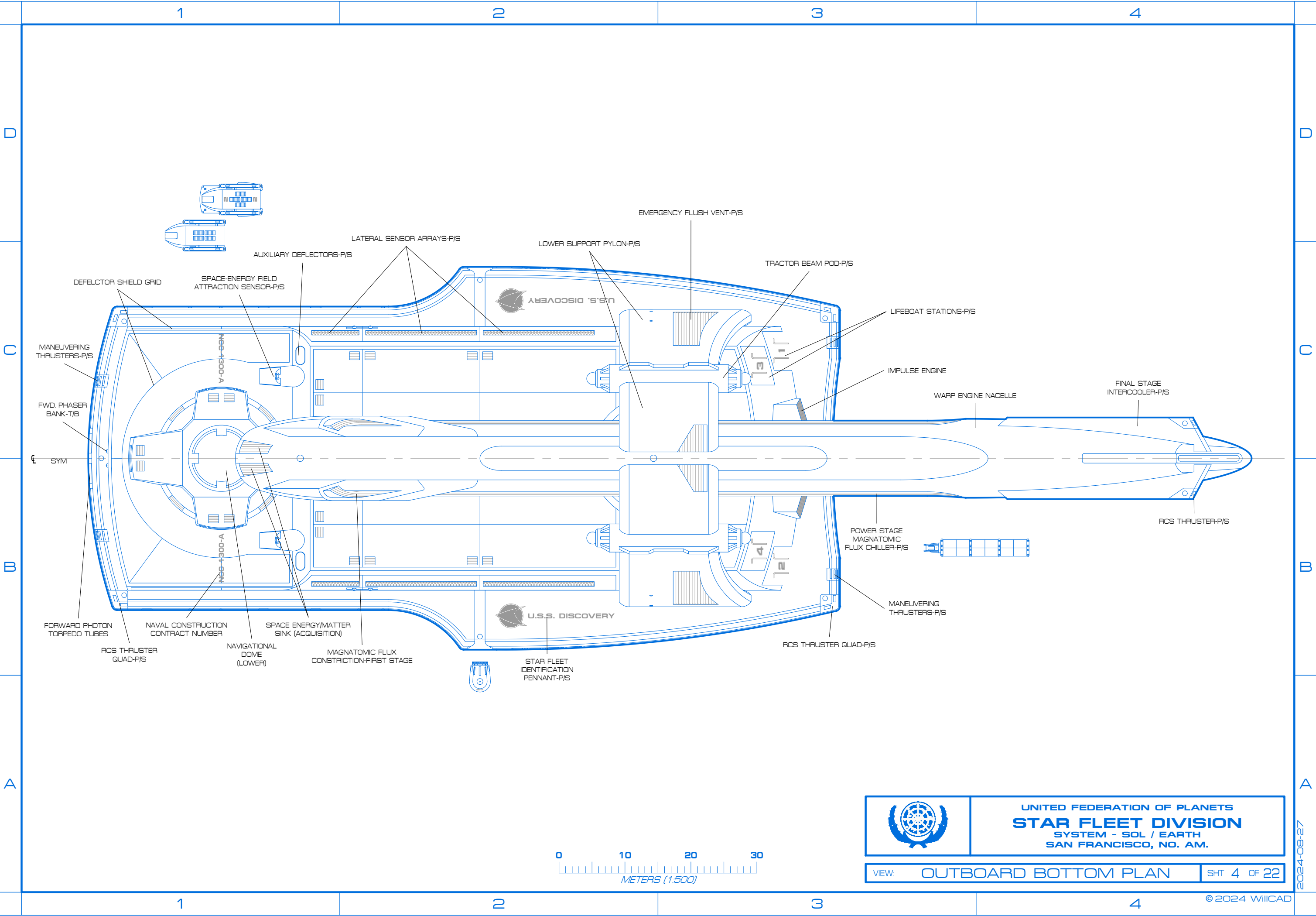


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VIEW:

OUTBOARD TOP PLAN 2

SHT 3 OF 22



1

2

3

4

EXTERIOR ARRANGEMENT:

THE EXTERIOR OF THE DISCOVERY II CLASS HULL HAS BEEN STRETCHED IN ALL THREE DIMENSIONS - IT IS LONGER, TALLER AND WIDER THAN THE ORIGINAL DESIGN - AND IT HAS BEEN RESHAPED WITH MORE CURVES TO IMPROVE DEFLECTOR SHIELD AND STRUCTURAL INTEGRITY FIELD PERFORMANCE. A FORWARD SECTION WAS CARVED OUT TO ALLOW PLACEMENT OF A SENSORY SUPERSTRUCTURE, SIMILAR TO THOSE FOUND ON THE BOTTOMS OF CONSTITUTION CLASS SAUCERS, AND A SUPERSTRUCTURE WAS ADDED TO RAISE THE BRIDGE MODULE FARTHER ABOVE THE MAIN HULL.

THE MOST STRIKING NEW FEATURE OF THE MAIN HULL IS THE MAIN DECK STRUCTURE, WHICH FORMS A PSEUDO 'WING' AROUND THE SHIP AT THE WATERLINE, SOMEWHAT REMINISCENT OF THE MAIN DECKS OF A LARGER SHIPS SAUCER, PROVIDING MOUNTING POINTS FOR DOCKING PORTS, AND FORE/AFT TORPEDO/PROBE LAUNCH APERTURES.

UPPER SUPPORT PYLONS, PROTRUDING UP FROM THE MAIN DECK, CROSS OVER THE MAIN HULL AFT OF THE SUPERSTRUCTURE TO FORM A SPOILER OR WING STRUCTURE, COMMONLY REFERRED TO AS A 'ROLL BAR'.

MEGA-PHASER PODS, MOUNTED AT THE JUNCTIONS OF THE ROLL BAR, PROVIDE FORWARD AND AFT FIRING PHASER CANON EMPLACEMENTS.

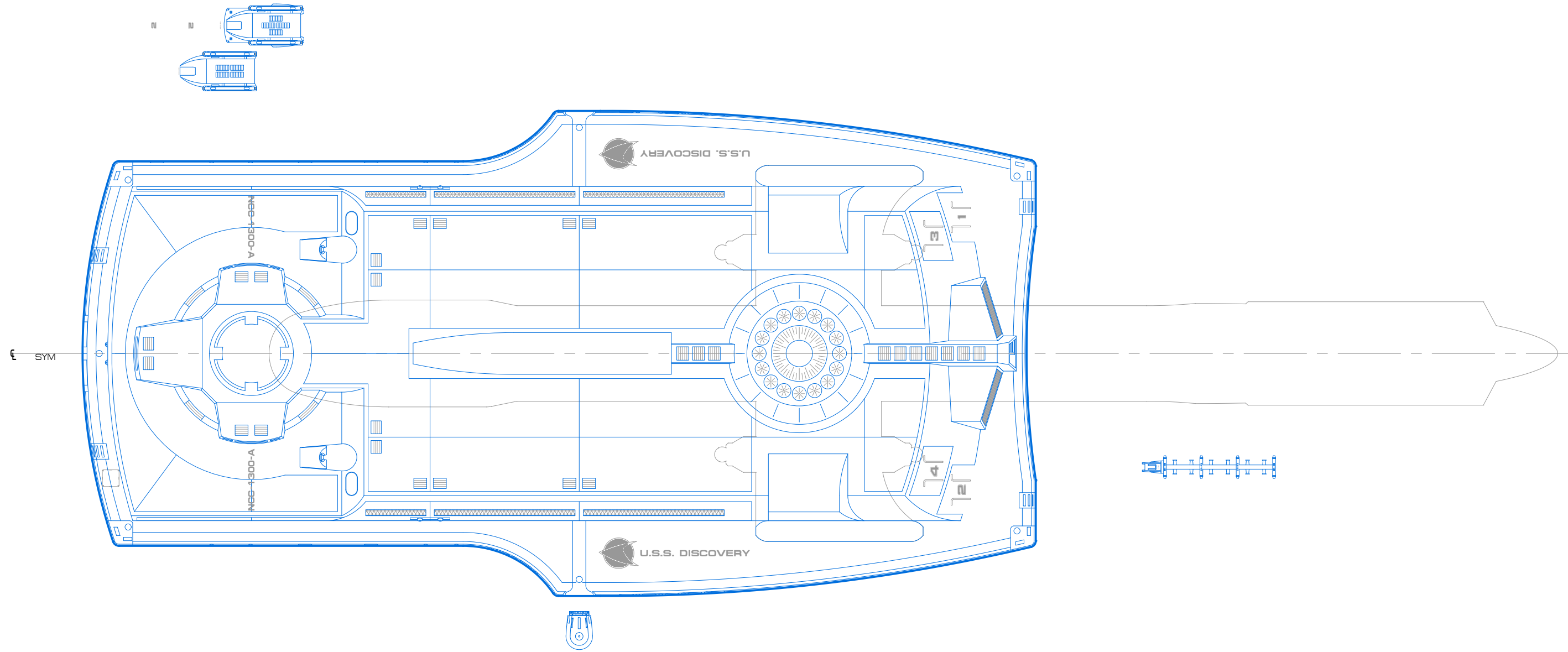
A SEPARATE DEFLECTOR POD, CONTAINING THE SHIP'S MAIN DEFLECTOR DISH AND NUMEROUS SENSOR AND COMMUNICATIONS EMPLACEMENTS, IS MOUNTED AT THE CENTER OF THE ROLL BAR.

TWIN TRACTOR BEAM PODS, MOUNTED AT THE JUNCTIONS OF THE LOWER SUPPORT PYLONS, EACH MOUNT POWERFUL TRACTOR BEAM EMITTERS FACING BOTH FORWARD AND AFT. THESE EMITTERS, DRAWING POWER DIRECTLY FROM THE WARP CORE, ALLOW THE SHIP TO PULL LOADS MULTIPLE TIMES ITS OWN MASS IN EITHER DIRECTION, AT BOTH SUBLIGHT AND WARP SPEEDS.

INTERIOR ARRANGEMENT:

INTERNALLY, THE DISCOVERY II CLASS IS TWO DECKS TALLER THAN THE ORIGINAL DESIGN. EACH DECK HAS A SPECIFIC FOCUS, VERY SIMILAR TO THE ORIGINAL DESIGN.

- DECK 0. UPPER NAV DOME/DEFLECTOR POD
- DECK 1. BRIDGE
- DECK 2. OFFICE LEVEL
- DECK 3. CARGO / SHUTTLECRAFT DECK
- DECK 4. SUPPORT DECK
- DECK 5. MAIN DECK
- DECK 6. CREW DECK
- DECK 7. SCIENCE / ENGINEERING DECK
- DECK 8. CONNECTING DECK
- DECK 9. CONNECTING DECK



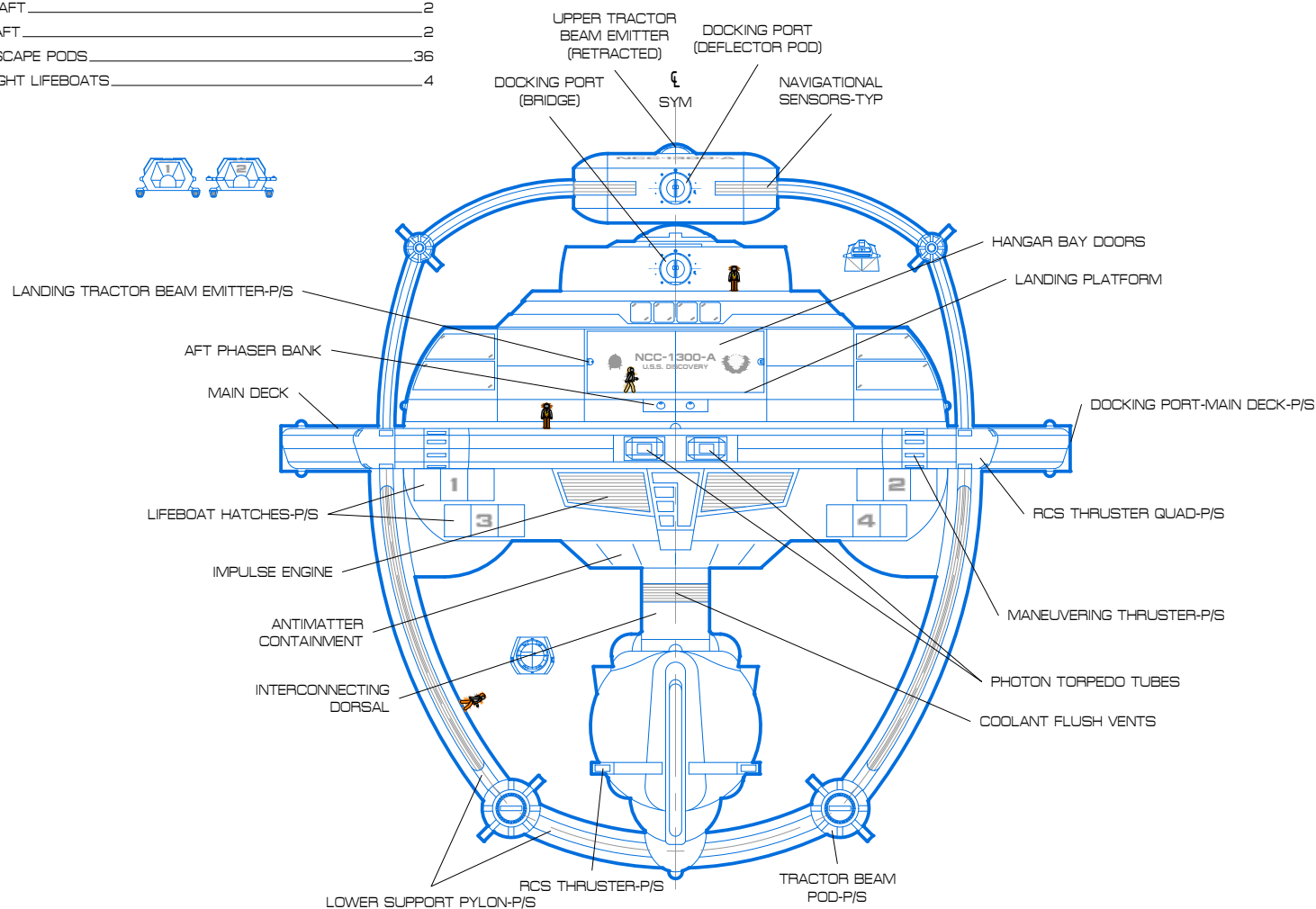
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VIEW: OUTBOARD BOTTOM PLAN 2 SHT 5 OF 22

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LENGTH OVERALL _____	176.423 M
BEAM OVERALL _____	58.005 M
DRAFT OVERALL _____	53.763 M
MAIN HULL LENGTH OVERALL _____	114.000 M
MAIN HULL BEAM OVERALL _____	58.005 M
MAIN HULL DRAFT OVERALL _____	25.220 M
WARP PROPULSION UNIT LENGTH OVERALL _____	154.800 M
WARP PROPULSION UNIT BEAM OVERALL _____	12.6 M
WARP PROPULSION UNIT DRAFT OVERALL _____	18.3 M
STANDARD CEILING HEIGHT OVER DECK _____	2.35 M
STANDARD COMPLEMENT OF CLASS A WORK BEES _____	4
STANDARD COMPLEMENT OF CLASS C TRAVEL PODS _____	2
STANDARD COMPLEMENT OF CLASS F SHUTTLECRAFT _____	2
STANDARD COMPLEMENT OF CLASS I SHUTTLECRAFT _____	2
STANDARD COMPLEMENT OF SINGLE-OCCUPANT ESCAPE PODS _____	36
STANDARD COMPLEMENT OF 22-OCCUPANT SUBLIGHT LIFEBOATS _____	2

**STERN**

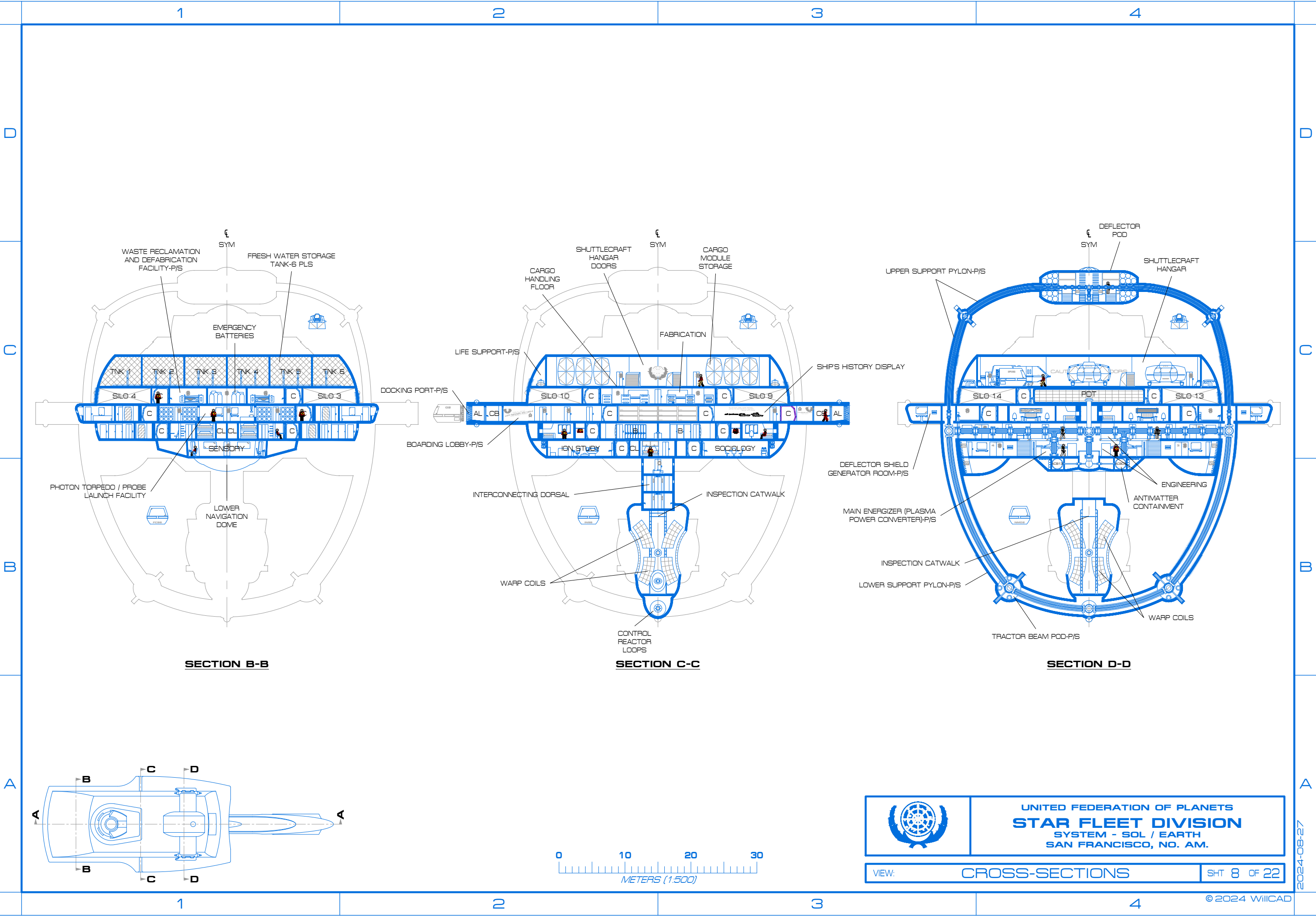
GROSS DEADWEIGHT METRIC TONNAGE	176260
NUMBER OF MAIN PROPULSION UNITS	1
NUMBER OF DUAL IMPULSE POWER UNITS	1
NUMBER OF 2 PAD INTRASHIP TRANSPORTERS	2
NUMBER OF 6 PAD STANDARD TRANSPORTERS	2
NUMBER OF 22 PAD EMERGENCY TRANSPORTERS	2
NUMBER OF CARGO TRANSPORTERS W/ 3 BIO PADS	2
ENDURANCE IN YEARS AT LIGHT-YEAR VELOCITY	15
MAXIMUM SAFE CRUISING SPEED	W/F 10 (1,000C)
EMERGENCY SPEED	W/F 125 (1,953C)



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VIEW: OUTBOARD BOW AND STERN ELEVATIONS



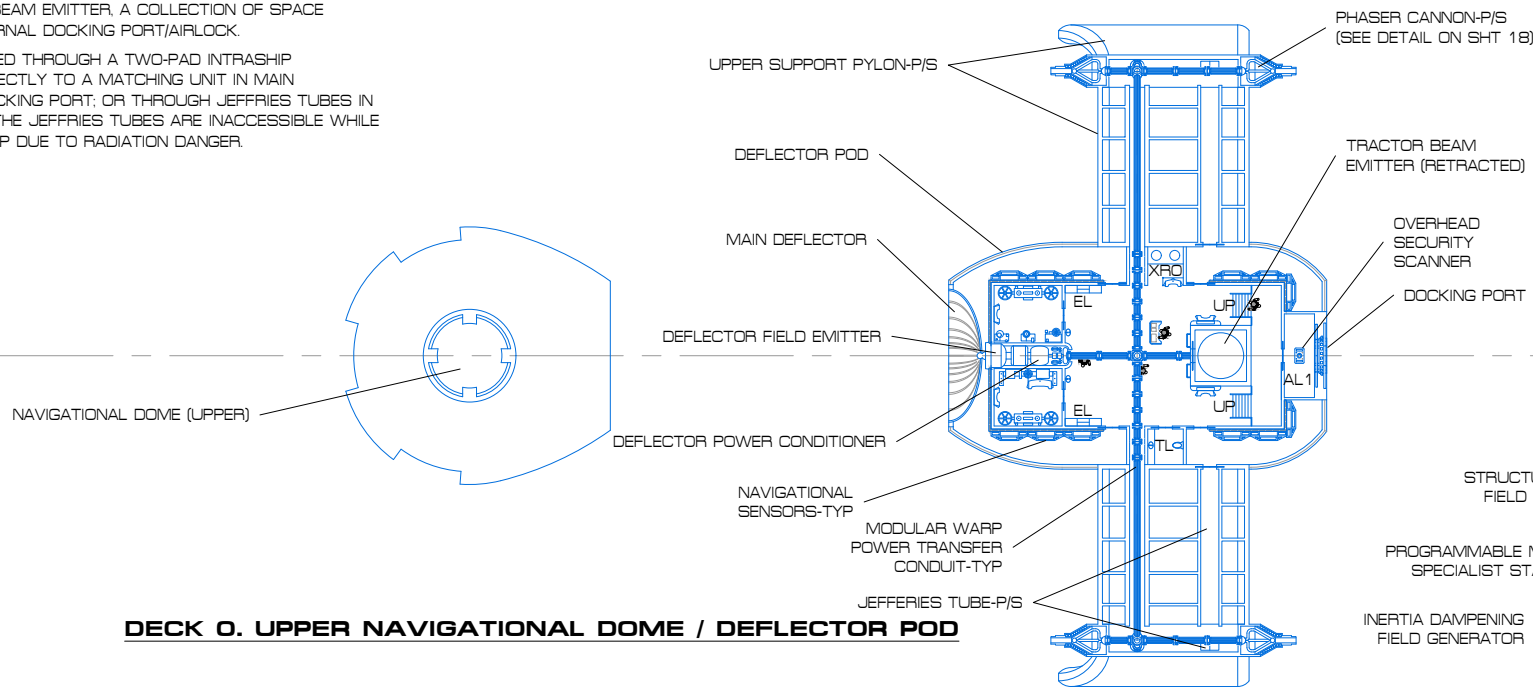


DECK 0. UPPER NAVIGATION DOME/DEFLECTOR POD

THE UPPER NAVIGATION DOME CONTAINS SENSORS AND RECEIVERS NECESSARY FOR SUBLIGHT NAVIGATION, CONNECTED DIRECTLY TO THE HELM/NAVIGATION CONSOLE ON THE BRIDGE VIA A PLASMA DATA STREAM.

THE DEFLECTOR POD CONTAINS THE MAIN NAVIGATIONAL DEFLECTOR, THE EXTENDABLE UPPER TRACTOR BEAM EMITTER, A COLLECTION OF SPACE SENSOR ARRAYS, AND AN EXTERNAL DOCKING PORT/AIRLOCK.

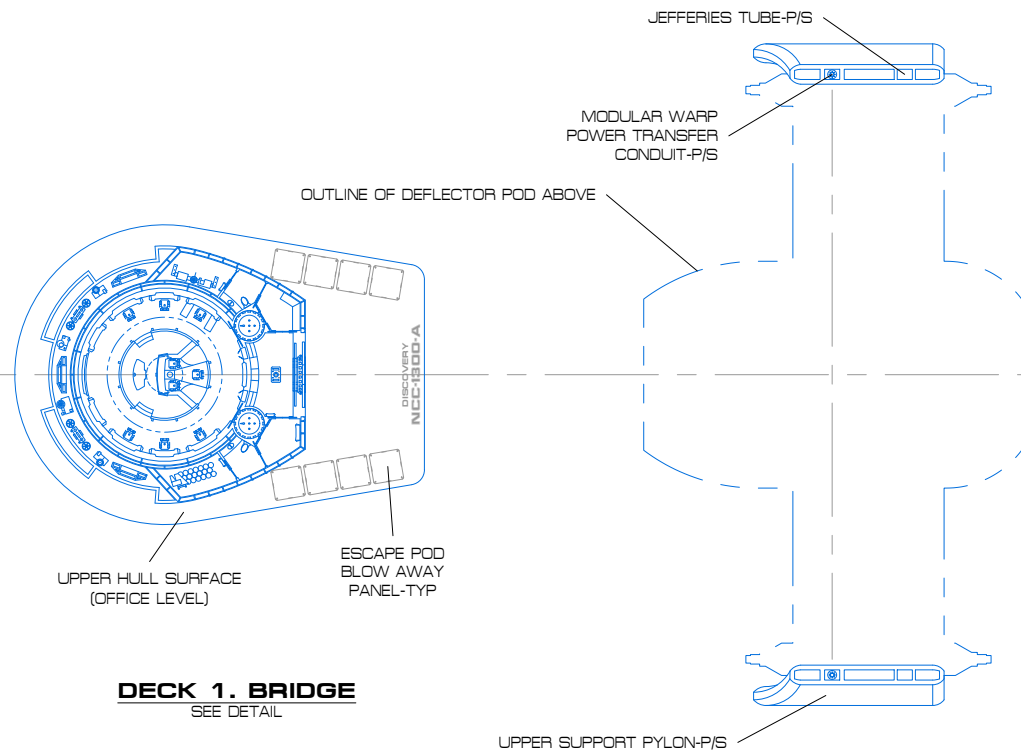
THE POD IS TYPICALLY ACCESSED THROUGH A TWO-PAD INTRASHIP TRANSPORTER, CONNECTED DIRECTLY TO A MATCHING UNIT IN MAIN ENGINEERING, THROUGH THE DOCKING PORT; OR THROUGH JEFFRIES TUBES IN THE UPPER SUPPORT PYLONS. THE JEFFRIES TUBES ARE INACCESSIBLE WHILE THE SHIP IS TRAVELING AT WARP DUE TO RADIATION DANGER.



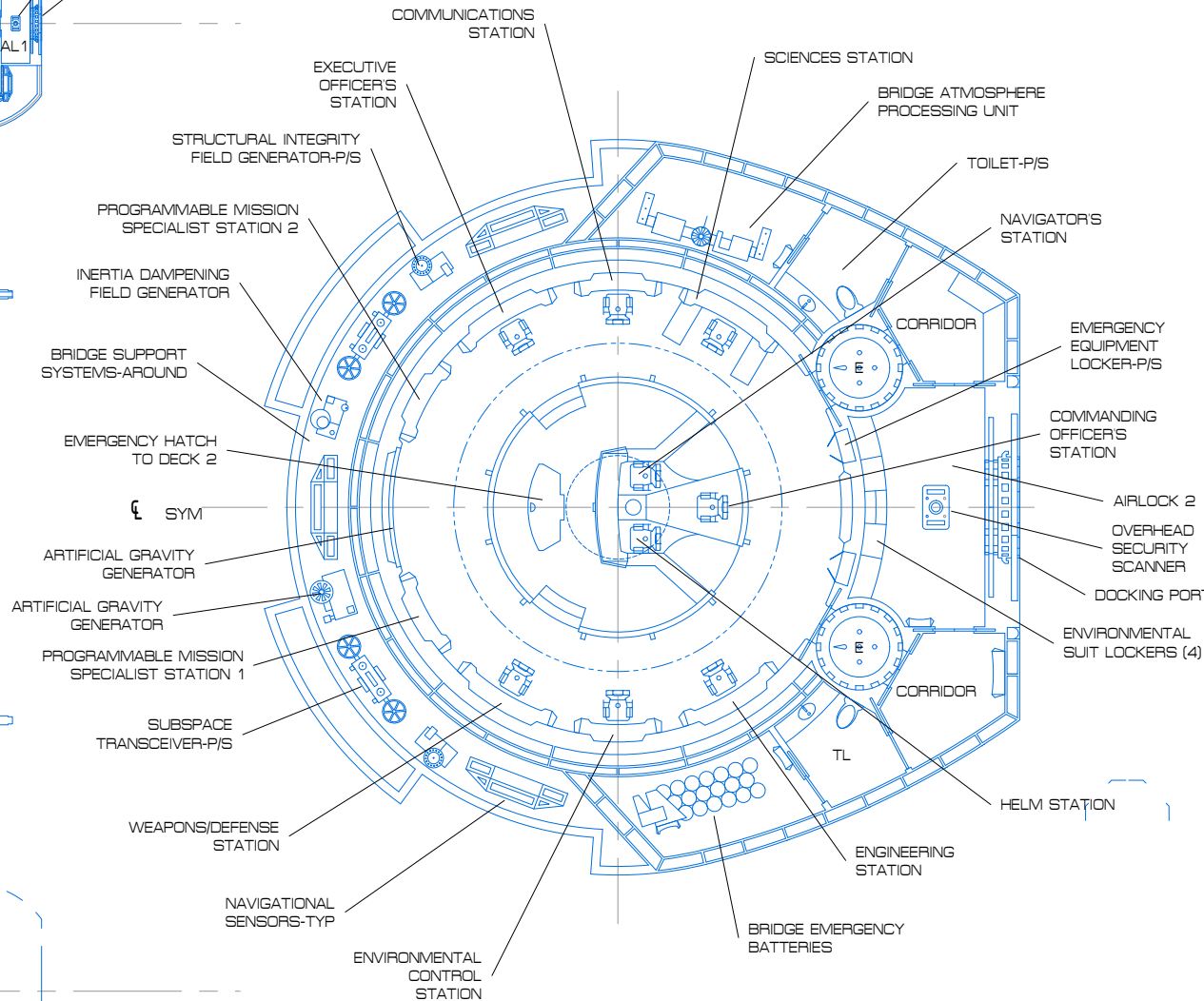
DECK 0. UPPER NAVIGATIONAL DOME / DEFLECTOR POD

DECK 1. BRIDGE

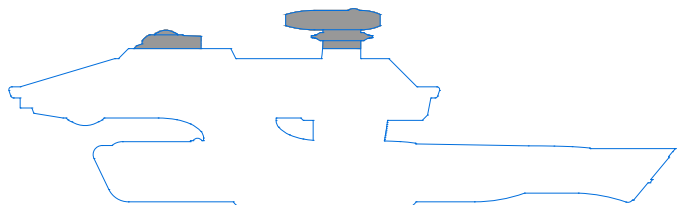
THE ENTIRETY OF DECK 1 IS COMPRISED OF THE MAIN BRIDGE, A REPLACEABLE MODULE CONTAINING COMMAND AND CONTROL INTERFACES FOR ALL SHIPS SYSTEMS, AN AUXILIARY LIFE SUPPORT SYSTEM, SUBSPACE COMMUNICATION EQUIPMENT, AND AN EXTERNAL DOCKING PORT/AIRLOCK.



DECK 1. BRIDGE
SEE DETAIL



BRIDGE DETAIL (3x ENLARGED)



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VIEW:

DECK PLANS 0-1

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DECK 2. OFFICE LEVEL

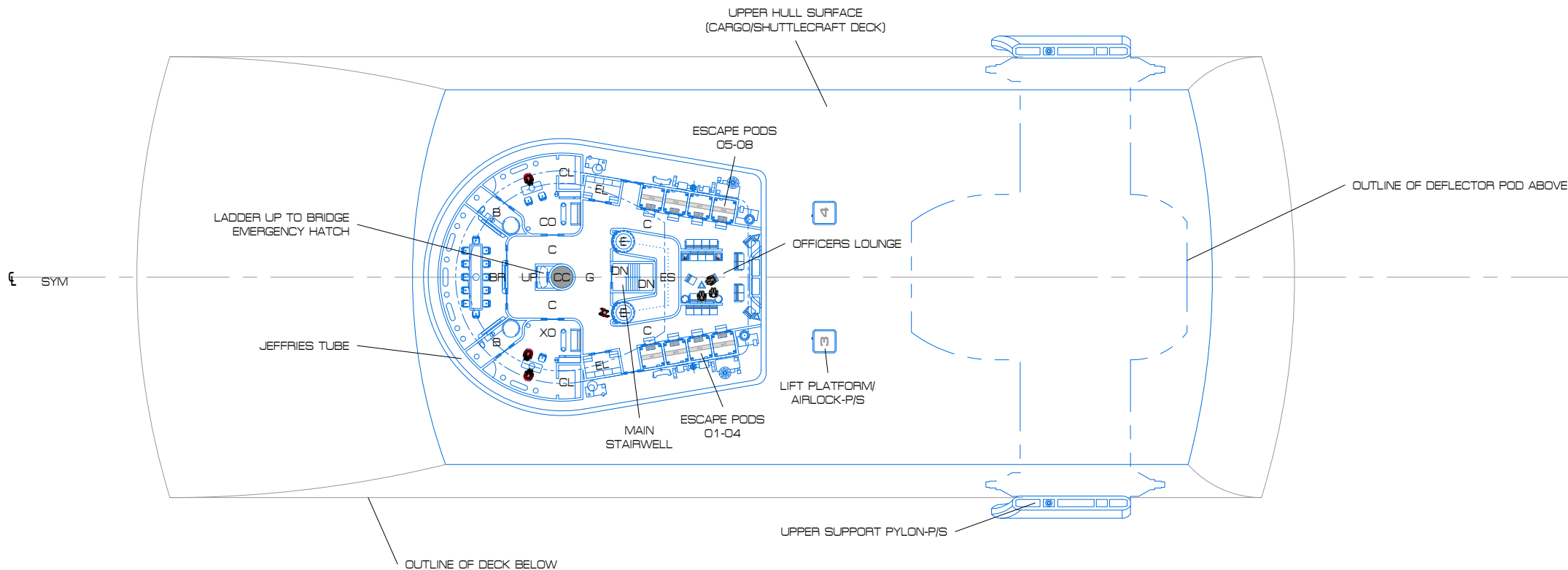
THE OFFICE LEVEL IS A SUPERSTRUCTURE THAT RISES ABOVE THE MAIN HULL, CONTAINING THE READY ROOMS FOR THE CAPTAIN AND EXECUTIVE OFFICER, COMPLETE WITH HEADS AND CLOSETS, AND A BRIEFING ROOM FOR USE BY THE SHIP'S SENIOR STAFF.

ON EITHER SIDE OF THE DECK ARE TWO ROWS OF FOUR SINGLE-PERSON ESCAPE PODS. AT THE AFT END OF THE DECK IS AN OFFICERS LOUNGE WITH LARGE EXTERIOR VIEWPORTS.

IN THE ANGLED OUTBOARD AREAS ARE LIFE SUPPORT MACHINERY FOR DECKS 1 AND 2.

THE SHIP'S MAIN STAIRWELL, BEGINS HERE, WITH A HORIZONTAL TURBOLIFT SHAFT WRAPPING AROUND TO BOTH CONNECT THE VERTICAL SHAFTS AND PROVIDE ELEVATOR STAGING JUST BELOW THE BRIDGE.

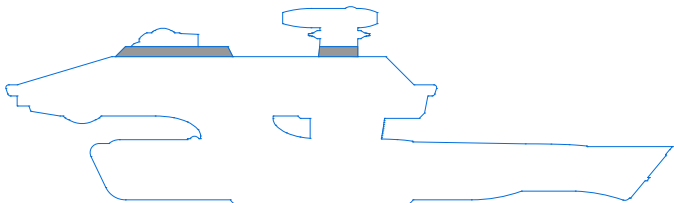
THE TOP OF THE SHIP'S COMPUTER CORE CAN ALSO BE FOUND HERE, TYING INTO THE MAIN BRIDGE SYSTEMS DIRECTLY ABOVE. A LADDER RUNS UP THE COMPUTER CORE TO AN ESCAPE HATCH IN THE BRIDGE FLOOR, JUST FORWARD OF THE HELM/NAVIGATION CONSOLE.



DECK 2. OFFICE LEVEL

DECK 2 PARTICULARS

ESCAPE PODS: 8





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DECK 3 IS THE TOP DECK OF THE MAIN HULL.

THE FORWARDMOST FIFTEEN METERS IS ANGLED TO FOLLOW THE SLOPE OF THE BOW, AND CONTAINS THE SHIP'S FRESH WATER TANKAGE, WITH TREATMENT UNITS TO KEEP THE WATER CLEAN AND STERILE.

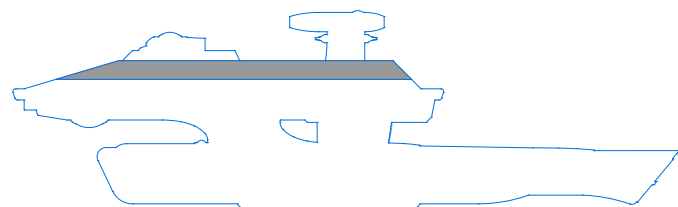
THE REMAINDER OF THE DECK HAS AN ATYPICAL CEILING HEIGHT OF 4.5M, TO ACCOMMODATE CARGO AND SHUTTLECRAFT OPERATIONS.

AMIDSHIPS IS THE MAIN CARGO FACILITY, COMPRISED OF FOUR GENERAL CARGO HOLDS FOR LOOSE, LIQUID, OR BULK DRY LOADS UNDER ISOLATED ENVIRONMENTAL CONDITIONS, TOTALING 2,232M³; SECURE STORAGE FOR 72 STANDARD CARGO MODULES; AND A PAIR OF CARGO TRANSPORTERS, EACH CAPABLE OF BEAMING UP TO FOUR MODULES AND THREE PERSONS SIMULTANEOUSLY.

THE AFT PORTION OF THE DECK IS SEPARATED FROM THE CARGO FACILITY BY AIRTIGHT DOORS. THIS AREA CONTAINS THE SHUTTLECRAFT HANGAR, MAINTENANCE SHOPS, AND LOUNGES FOR PILOTS AND THE DECK'S OPERATIONS AND MAINTENANCE CREW. ROWS OF ESCAPE PODS ARE AVAILABLE TO PORT AND STARBOARD.



CARGO MODULES (72x4.45M ³):	320.4M ³
CARGO HOLDS (4):	2,232M ³
FRESH WATER (6 TANKS):	1,378M ³
ESCAPE PODS:	8

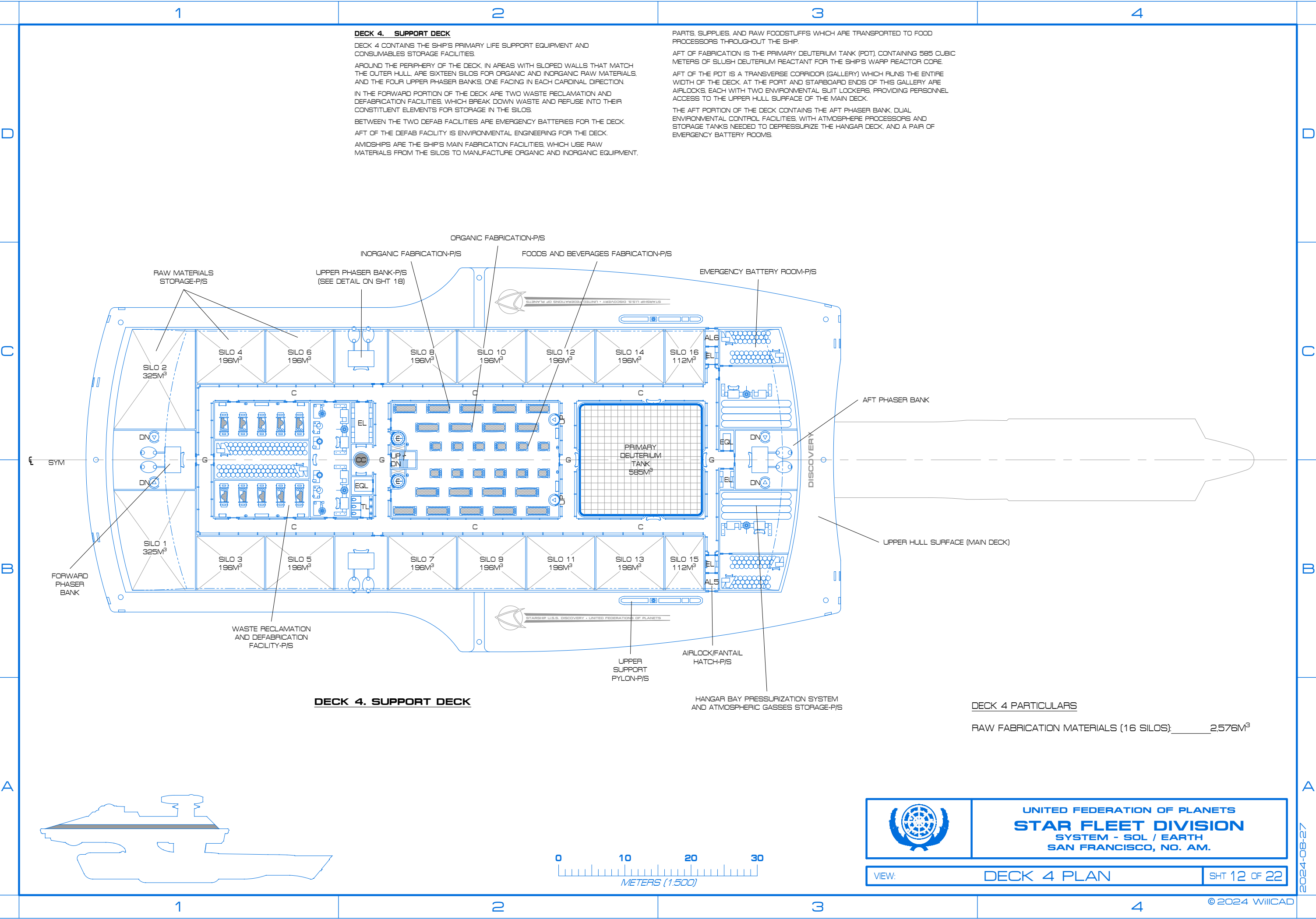


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VIEW:

DECK 3 PLAN

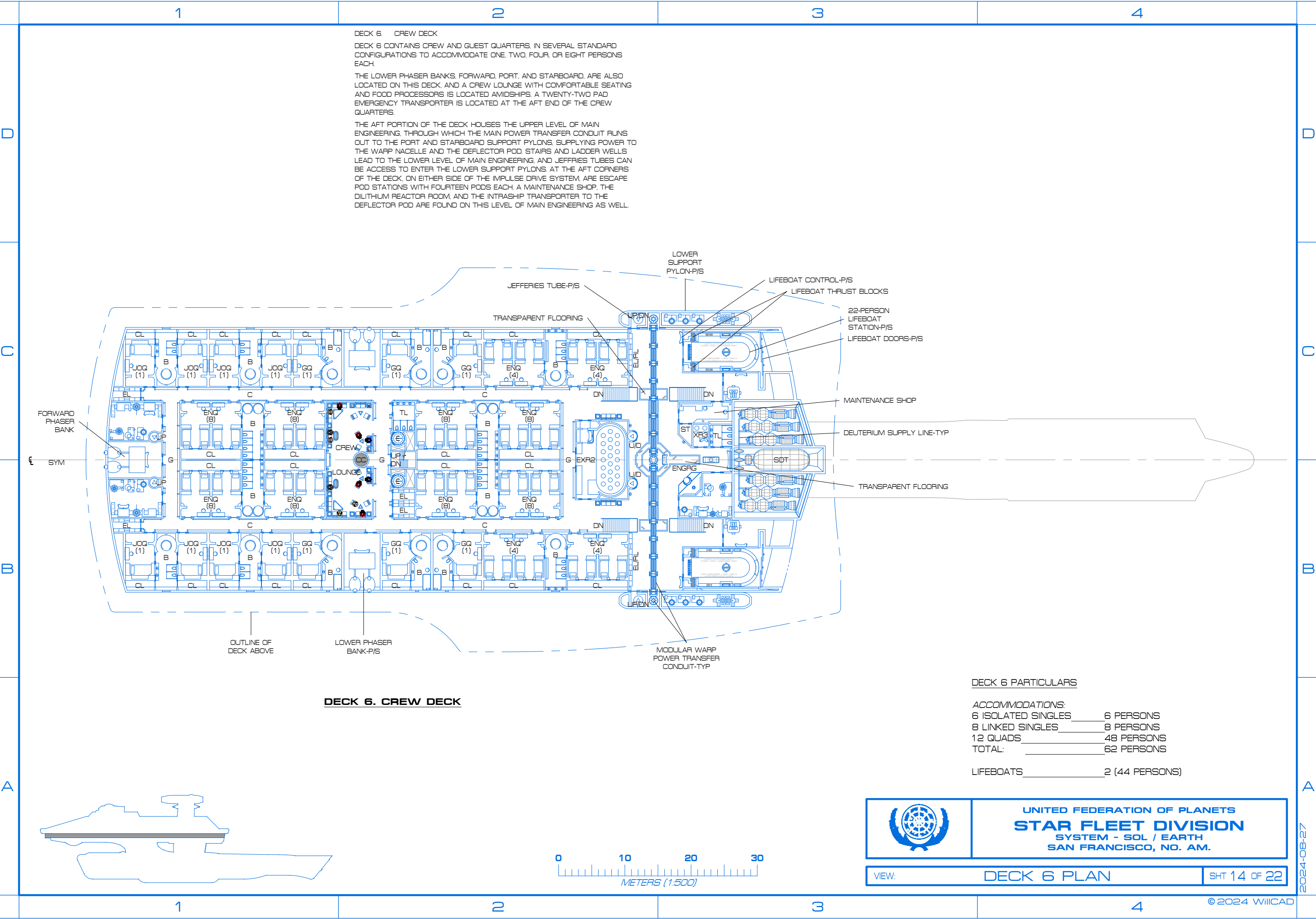
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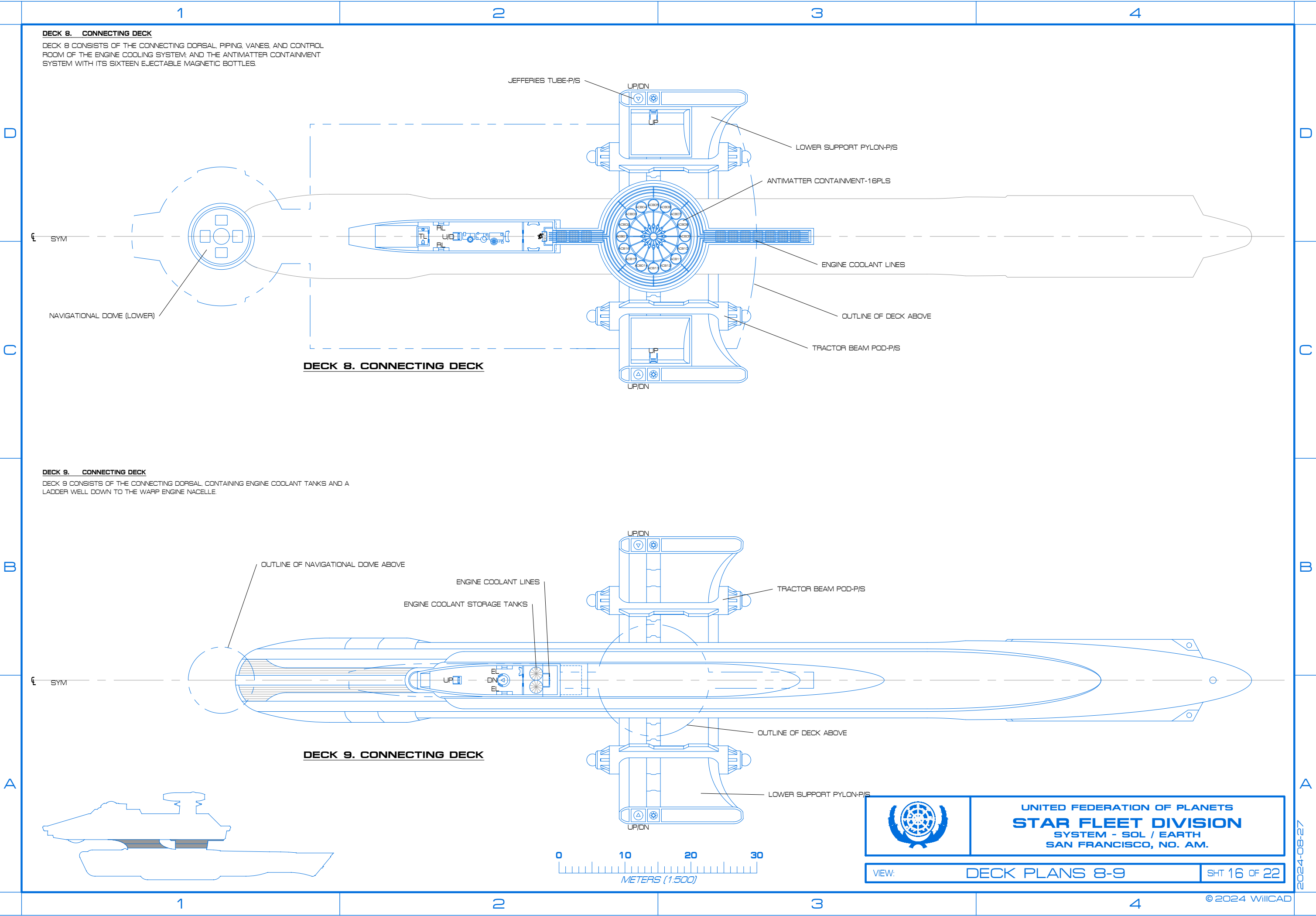


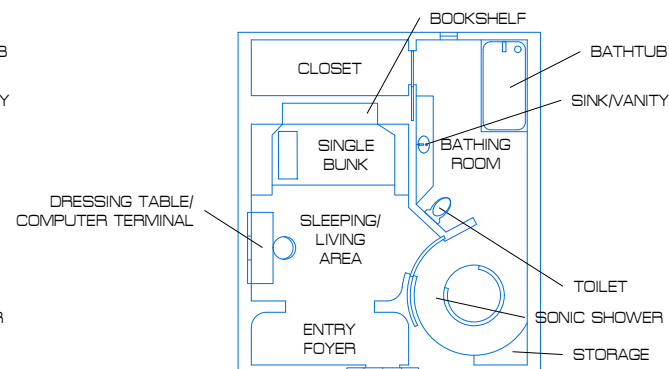
DECK 5 FILLS THE WING-LIKE STRUCTURE WHICH PROTRUDES FROM THE MAIN HULL IN ALL DIRECTIONS, AND CONTAINS PERSONNEL SUPPORT AND OPERATIONAL SYSTEMS VITAL TO SHIPBOARD OPERATIONS.

IN THE FORWARD CORNERS OF THE DECK ARE SENIOR OFFICERS' QUARTERS.

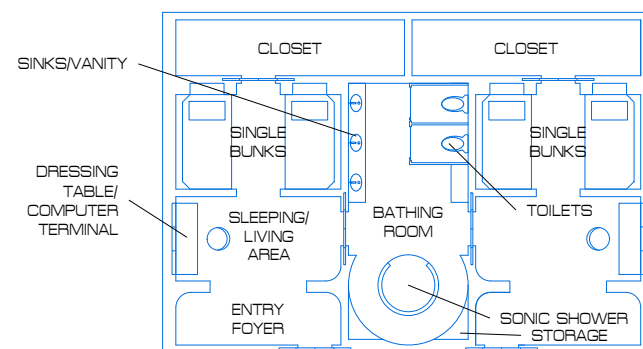
AMIDSHIPS ARE TWO SIX-PAD STANDARD TRANSPORTERS, AND A TWENTY-TWO PAD EMERGENCY TRANSPORTER. FITNESS ROOMS FLANK THE TRANSPORTER COMPLEX AT THE OUTER EDGES OF THE DECK.



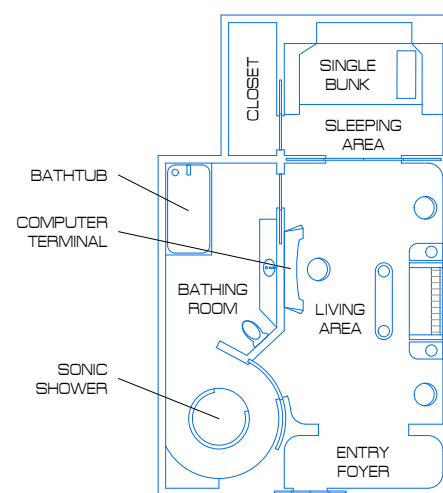




ISOLATED SINGLE - GUEST
6x, DECK 6



LINKED DOUBLES - TRANSIENT
2x. DECK 7



ISOLATED SINGLE - VIP
2x, DECK 5



LIVING ACCOMMODATIONS SUMMARY:

DECK 5 - MAIN DECK
6 ISOLATED SINGLES, SENIOR OFFICER QUARTERS - 6 OFC
2 ISOLATED SINGLES, VIP QUARTERS - 2 PAX
TOTAL 6 OFC, 0 ENL, 2 PAX: 8 PERSONS

DECK 6 - CREW DECK
8 LINKED SINGLES, OFFICER QUARTERS - 8 OFC
4 LINKED QUADS, JUNIOR OFFICER QUARTERS - 16 OFC
8 LINKED OCTOS, ENLISTED QUARTERS - 64 ENL
6 ISOLATED SINGLES, GUEST QUARTERS - 6PAX
TOTAL 24 OFC, 64 ENL, 6 PAX: 94 PERSONS

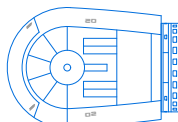
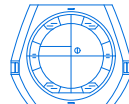
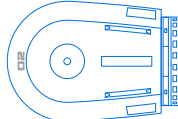
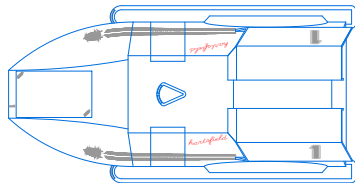
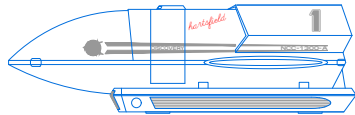
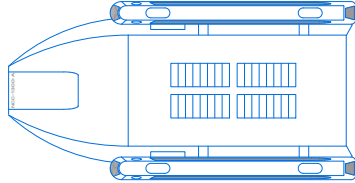
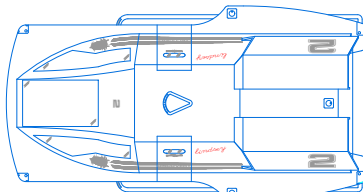
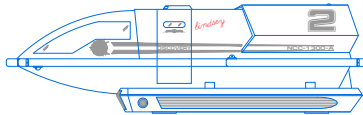
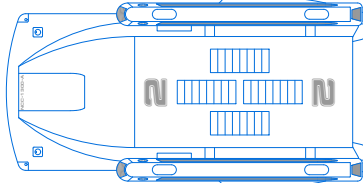
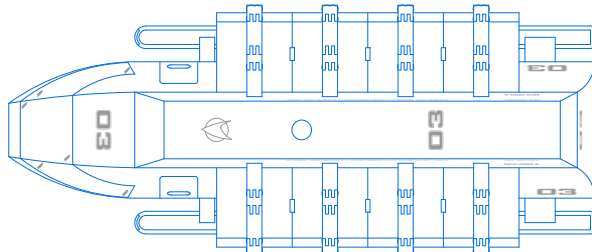
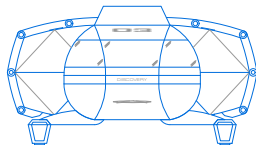
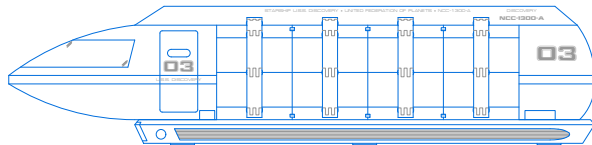
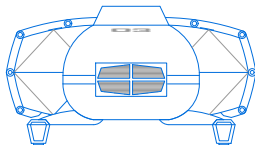
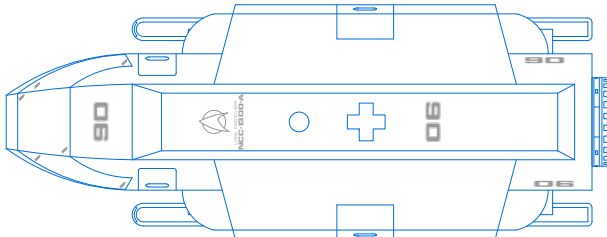
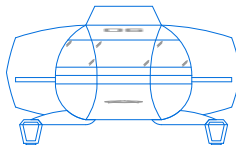
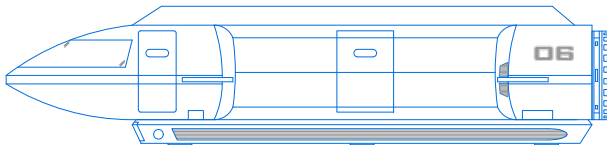
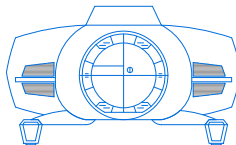
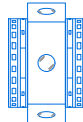
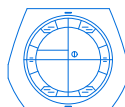
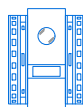
DECK 7 - SCIENCE/ENGINEERING DECK
4 LINKED DOUBLES, TRANSIENT QUARTERS - 8 PAX
TOTAL O OFC, O ENL, 8 PAX: 8 PERSONS

TOTAL: 30 OFC, 64 ENL, 16 PAX: 110 PERSONS



UNITED FEDERATION OF PLANETS
STAR FLEET DIVISION
SYSTEM - SOL / EARTH
SAN FRANCISCO, NO. AM.

VIEW: CREW / GUEST ACCOMMODATIONS SHT 17 OF 22

	1	2	3	4	
D	 BOW  SIDE  STERN  BOTTOM WORK BEE  TOP  BOW  SIDE  STERN  BOTTOM TRAVEL POD  TOP  SIDE  BOTTOM TYPE 4 SHUTTLECRAFT  TOP  SIDE  BOTTOM TYPE 4D SHUTTLECRAFT <td>D</td>				D
C	 TOP  BOW  SIDE  STERN CLASS H CARGO SHUTTLECRAFT  TOP  BOW  SIDE  STERN CLASS K MEDICAL / EVAC SHUTTLECRAFT <td>C</td>				C
B	 TOP  BOW  SIDE  STERN DOCKING COLLAR ADAPTER STAR FLEET'S STANDARDIZED DOCKING SYSTEM, INTRODUCED IN 2211, HAS BECOME UBIQUITOUS ON MAJOR FEDERATION VESSELS, SHUTTLES, AND AUXILIARY CRAFT. HOWEVER, THE SYSTEM'S PORT/COLLAR CONFIGURATION PRESENTS A PROBLEM - FOR TWO VESSELS TO SUCCESSFULLY DOCK, ONE MUST BE EQUIPPED WITH A PORT AND THE OTHER MUST BE EQUIPPED WITH A COLLAR. TWO VESSELS EQUIPPED WITH THE SAME COMPONENT CANNOT DOCK WITH EACH OTHER SUCCESSFULLY. DISCOVERY'S DESIGNERS ADDRESSED THIS ISSUE BY EQUIPPING THE SHIP WITH A DUAL DOCKING COLLAR ADAPTER. CONSISTING OF A SMALL AIRLOCK SANDWICHED BETWEEN TWO DOCKING COLLARS, THE ADAPTER ACTS AS A GO-BETWEEN, ALLOWING DISCOVERY TO LINK UP ONE OF HER DOCKING PORTS WITH ANOTHER VESSEL'S DOCKING PORT.  UNITED FEDERATION OF PLANETS STAR FLEET DIVISION SYSTEM - SOL / EARTH SAN FRANCISCO, NO. AM. VIEW: AUXILIARY CRAFT SHT 19 OF 22 <td>B</td>				B
A	 0510 METERS (1:200) <td>A</td>				A
	1	2	3	4	



