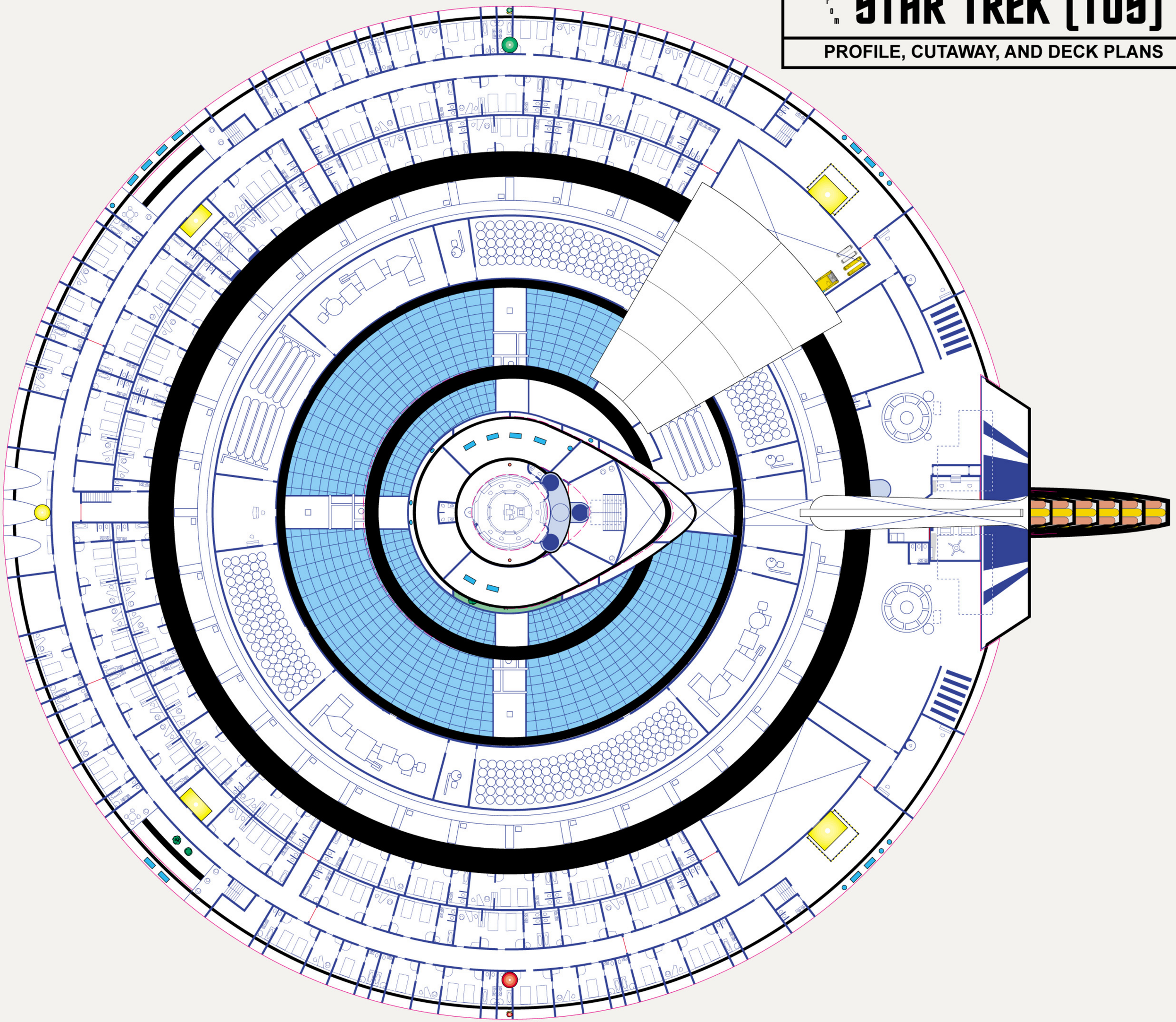
HERMES SCOUT

from STAR TREK [TOS]

PROFILE, CUTAWAY, AND DECK PLANS



DRAWN BY: Jim Botaitis

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: PORT PROFILE PAGE 1 of 18

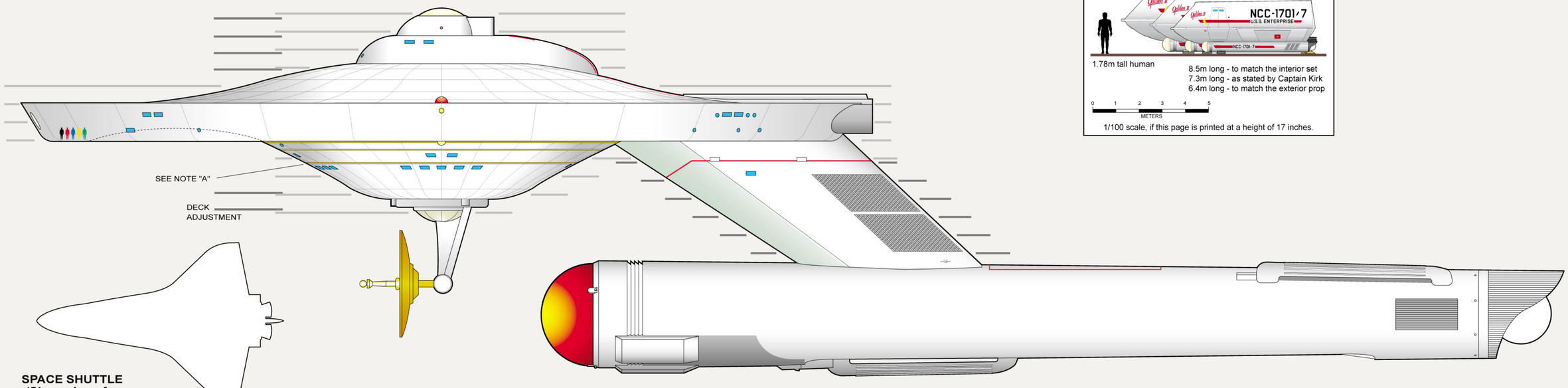
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1 2 3 4 5 6 7 8 9 10 11 12 13



SPACE SHUTTLE (Shown here for size reference)

1.78m tall human

8.5m long - to match the interior set
7.3m long - as stated by Captain Kirk
6.4m long - to match the exterior prop

1/100 scale, if this page is printed at a height of 17 inches.

BACKGROUND HISTORY

This project is an extrapolation of the U.S.S. ENTERPRISE drawings developed in the year 2020. Those drawings were governed by 3 criteria:
(1) The 11-foot-2.08-inch (3.4-meter) studio model,
(2) The Writer's Guide, and
(3) The 79 episodes plus the original pilot.
There are no such criteria to guide these drawings, but the basic design philosophy is to complete the ships Franz Joseph (FJ) developed for his Technical Manual in the same style as his Heavy Cruiser blueprints. The goal is to try and fit all the components inside the hull. But what are "all the components"? What are the roles of "Scouts" in the STAR TREK universe?

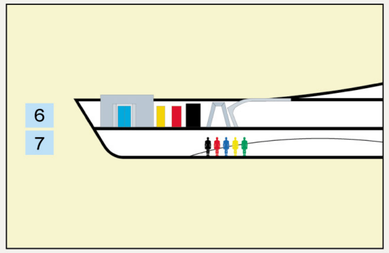
A "Scout Cruiser" was a type of ship used on Earth. It was more lightly armed and armored than a "Protected Cruiser" or a "Light Cruiser", but larger than a "Destroyer". It was intended for fleet scouting duties and acting as a flotilla leader. As roles changed, the need for flotilla leaders decreased; their functions were adopted by all destroyers.
In the Royal Navy, such leaders could be identified by colored bands painted on their funnels.
Italian "Scout Cruisers" were also given secondary capabilities as fast mine layers.
The USA "Scout Cruisers" were characterized by high speed and little armor or armament.
A USA "Scout Cruiser" was the first ship to launch an airplane.

According to the Star Fleet Technical Manual, the only differences between Hermes-class Scouts and Saladin-class Destroyers is their armament. Where the Saladin-class has three Phaser Banks and two Photon Torpedo Banks, the Hermes-class Scout only has one Phaser Bank.
Therefore, Hermes-class Scouts are lightly armed, and are equipped with science stations for gathering data.
Saladin-class Destroyers are more heavily armed, with fewer science stations. They each have one Hangar Bay.

This layout retains the lines as established by Franz Joseph. It could be argued that the Hangar Bay doors are not visible in the FJ drawings because their outlines follow the Deflector Grid lines. This FJ design appeared in the movies on various displays on the Bridge of the U.S.S. ENTERPRISE.

CONSTRUCTION NOTES

As with my Heavy Cruiser plans, I started at the edge of the primary hull (see image below), where the height of 2 decks, the thickness of 1 floor, and the thickness of 2 hulls have to fit in this part of the saucer.



In CHARLIE X we saw how thick the walls are and also what is in the walls. The DESILU plans show walls that are 1 foot (0.3 meters) thick and sometimes even thicker. I decided to make all walls, decks, and hulls 1 foot thick, never thinner. In a few places, the walls are even thicker.

This leaves a ceiling height of 8 feet (2.44 meters) for each level.

The one set piece (reminiscent of a ship's rib - often seen in the Briefing Room) does not quite fit. However, all the other details (doors, openings, etc) do fit (see image at left). I consider the trapezoidal openings to be Isolation Doors ... in case of hull breaches, damage control, intruder alerts, etc.

In the profile drawing (at the top of this page) the light grey horizontal lines show the initial deck locations. They represent a constant 8 foot ceiling throughout the entire ship.

I built them upwards and downwards from my starting point, Deck 6 and 7. However, this makes the Bridge too high, and Deck 11 too low. The dark grey horizontal lines show the adjusted deck locations. The resultant space between Dorsal Deck 8 and Dorsal Deck 9 becomes the "Separation Plane". On Constitution-Class ships this space is where I placed the Rear Landing Leg. The two triangular patterns on the underside of the Primary Hull are the Front Landing Legs, but on this class of ship, they were removed and egress hatches were installed.

Since disconnection equipment is located on Dorsal Deck 8 and Dorsal Deck 9, it makes sense to keep this area clear of crew and difficult to access except by authorized personnel. Also, all the dorsal decks below Deck 9 are devoted to Warp Engineering. They have the same roles as the inspection stations in the warp engine pylons of the Constitution-Class ships. Because of radiation and the sensitivity of the equipment, this area is also difficult to access except by authorized personnel.
Therefore, the entire dorsal section is accessible only by ladders. Furthermore, the bottom level is heavily shielded and normally sealed.

GENERAL NOTES

Are the wide steps in Engineering considered to be "stairs"? Are the steps on the Bridge considered to be "stairs"?
Perhaps stairs do not appear in any episodes, but that does not mean they do not exist in Starfleet ships. Therefore:
1. After engine nacelle disconnection and an emergency landing, stairs on Decks 4, 3, and 2 lead up to the hatch, thus allowing the crew to leave the ship quickly.
2. Each of the 2 Recreation Rooms on Deck 7 have balconies on Deck 6. Those balconies have stairs that lead down to their respective Recreation Rooms.
3. The two Cargo Operations areas on Deck 7 have wide stairs as well as cargo lifts.
4. Stairs connect the two levels of the Deflector Equipment at the front of the hull.

Aside from these stairs, the rectangular ladders (within rectangular alcoves) and the triangular ladders (within circular alcoves) supplement the turbo-elevator system. If that system fails, or in some other emergency, ladders alone would not be very efficient; it is easier to carry something up stairs than up a ladder.

There are external features that do not need to be marked: hatches for the Phasers, hatches for the Photon Torpedo Launchers, and the Primary Hull / Warp Engine disconnection line, to name a few.
These drawings attempt to make sense of the markings that ARE visible on the studio model of the ENTERPRISE, all of which are then extrapolated onto this ship.

More notes relevant to each deck appear on the following pages.

Contradictions and errors exist within the episodes. I am sure 100% continuity is not possible.

I hope these pages provide you with some pleasure, information, and ideas for contemplation / consideration.

If I missed something, please let me know.

Jim Botaitis
jbot@rogers.com
July 2020

STAR TREK - HERMES-CLASS SCOUT

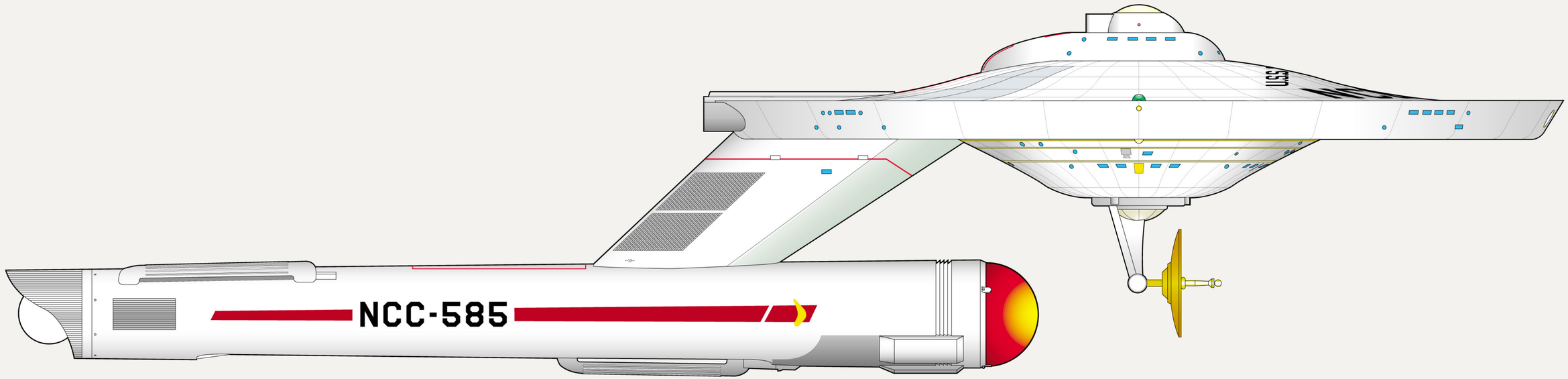
LAYOUT: STARBOARD PROFILE PAGE 2 of 18

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STAR TREK - HERMES-CLASS SCOUT

LAYOUT: TOP PAGE 3 of 18

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STAR TREK - HERMES-CLASS SCOUT

LAYOUT: BOTTOM PAGE 4 of 18

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NOTES

The landing legs have been deleted and replaced by hatches, as shown on Deck 7.

The undercut of Deck 7 is shown here with the grey shading.

The Tractor Beam Emitter is built into the Main Sensor Dish.

STAR TREK - HERMES-CLASS SCOUT

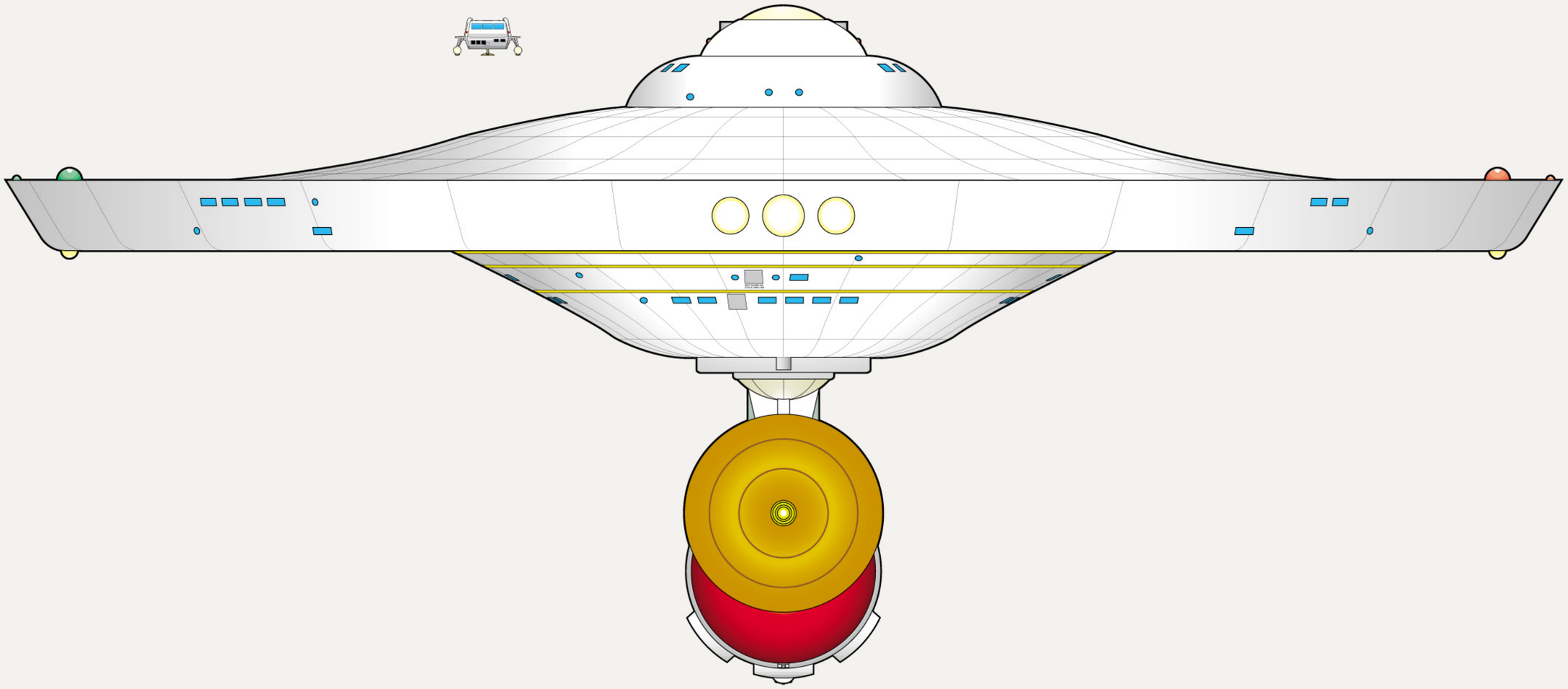
LAYOUT: FRONT and REAR **PAGE 5 of 18**

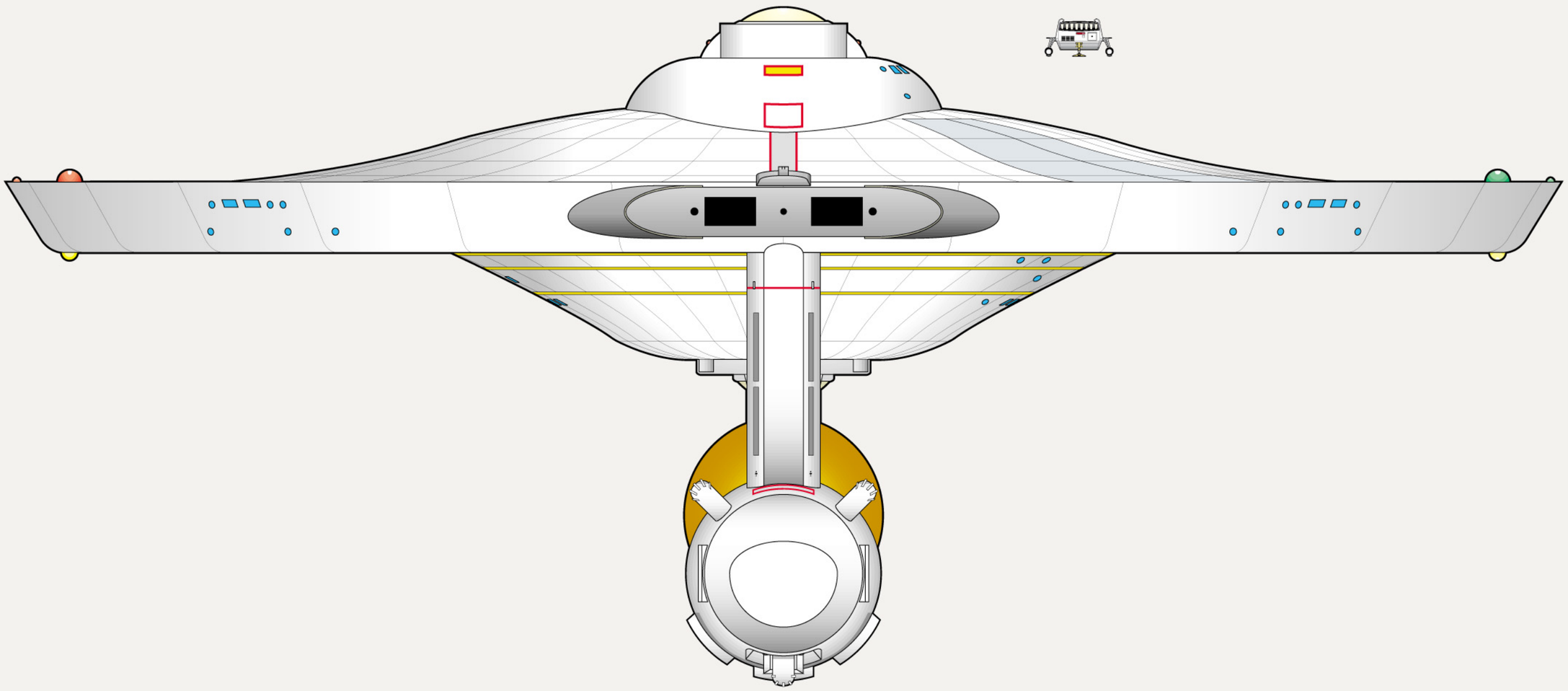
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0 5 10 15 20
METERS





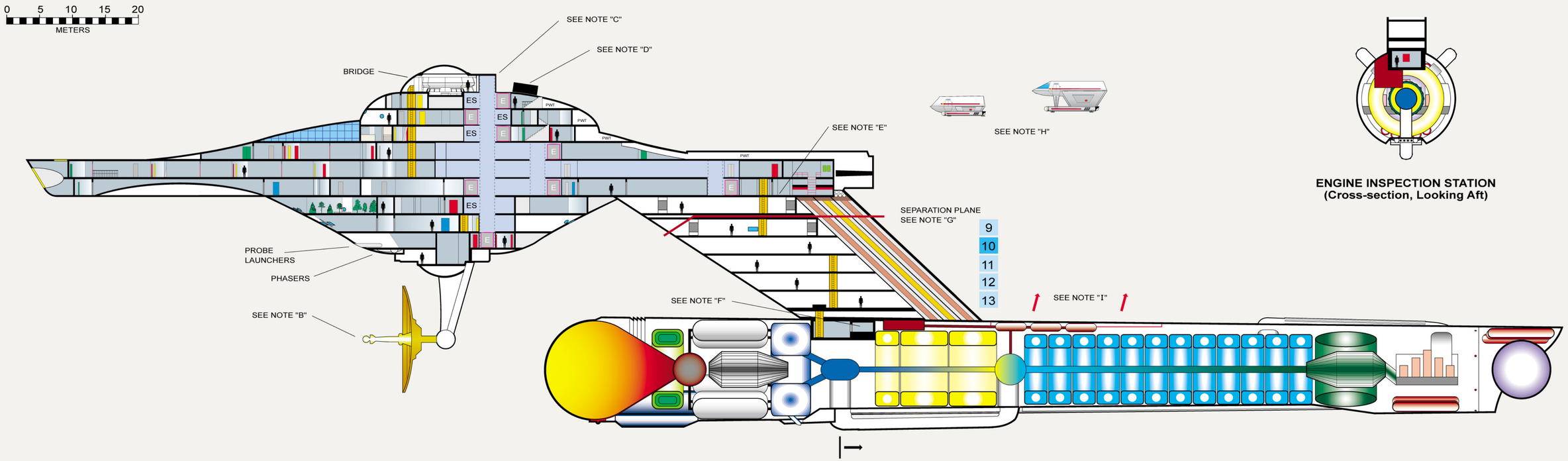
STAR TREK - HERMES-CLASS SCOUT

LAYOUT: PORT CUTAWAY PAGE 6 of 18

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ENGINE INSPECTION STATION
(Cross-section, Looking Aft)

ENGINE INSPECTION STATION
(Cross-section, Looking Aft)

NOTES

A SEE PAGE 1

These 3 pale gold-coloured recessed rings are part of the Tractor Beam system. See Page 16 for more information.

B

The Tractor Beam Emitter is built into the Main Sensor Dish.

C

The height of the bump behind the Bridge has been increased to allow a turbo-elevator to fit. See Page 7 for more information.

D

This is the "Emergency Crew Escape" hatch, to be used after the Primary Hull has detached from the Warp Engine and made an emergency landing.

E

The undercut on the Primary Hull affects Deck 7. However, the connection to the dorsal decks allows Deck 7 to be flat at this location. Therefore the floor in Warp Engineering will be flat, except along the left and right edge. This is shown on Deck 7 and discussed on Page 11.

F

The Matter-Antimatter Reaction Chamber is heavily shielded and recessed within the Warp Engine nacelle.

G

The location of the "Separation Plane" was determined by the spacing and thickness of the decks.

H

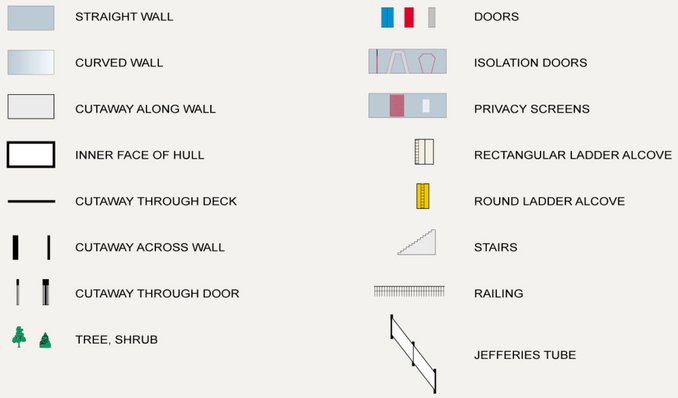
The Shuttlecraft used here measure 28 feet (8.5 meters) in length, as suggested by the size of the interior set. The studio prop was 21 feet (6.4 meters) which was about 3/4 of the intended size. In one episode of STAR TREK, Captain Kirk mentioned the Shuttlecraft is 24 feet (7.3 meters) long.

Special thanks to Dana E. Lubich for permission to display the Cargo Shuttle design which Dana developed 30 years ago.

I

Antimatter is created / stored in the engine nacelle. In an emergency, the red-outlined panel swings open and the antimatter is ejected up and to the rear. This particular configuration / orientation required the Antimatter Storage Containers to be shifted 54 feet (about 16 meters) toward the rear. The red-outlined panel was also shifted by that same amount.

CUTAWAY SYMBOLS



STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECK 1 (BRIDGE)

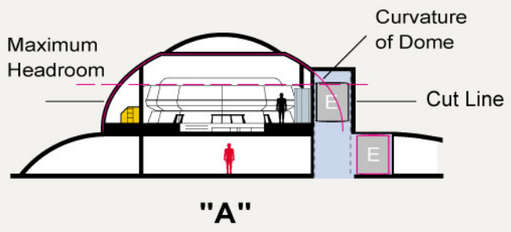
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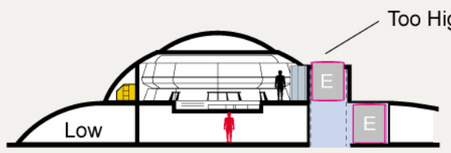


ORIGINAL BRIDGE



"A"

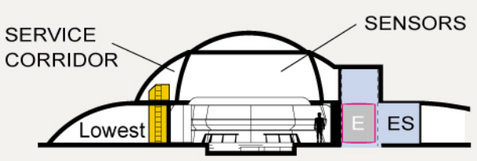
REVISED BRIDGE (3 possibilities)



"C"



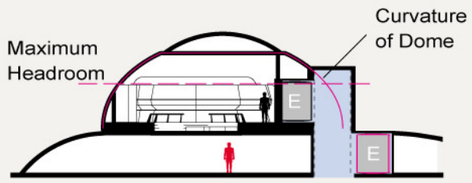
"D"

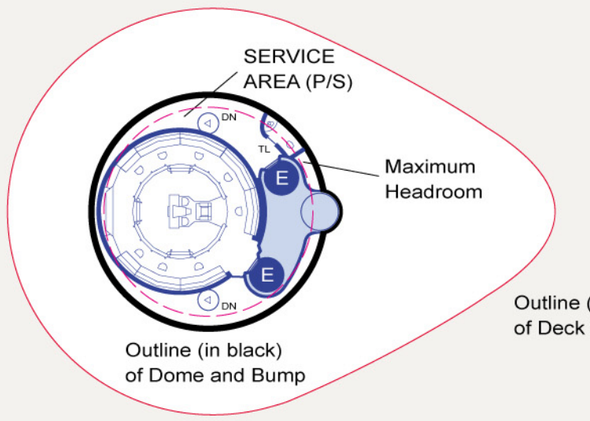


"E"

NOTES

ORIGINAL BRIDGE
The Bridge of the U.S.S. ENTERPRISE was intended to be under the dome on the studio model, as per the special effect in the first scene of THE CAGE. The original dome was taller. The bump aft of the dome

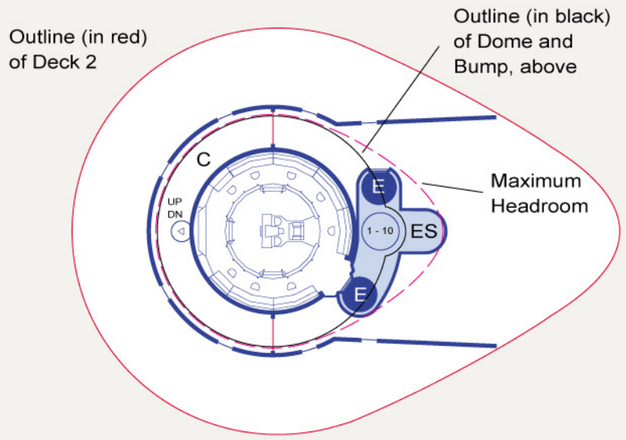




DECK 1: ORIGINAL BRIDGE ("B")

ORIGINAL BRIDGE (continued)
was also taller. A turbo-elevator car easily fits inside the bump even if the recessed floor of the Bridge is above the ceiling of Deck 2 (see "A"). However, the curvature of the dome does not allow a lateral turbo-elevator tube to fit behind the Bridge; the car has to remain inside the bump. Therefore, the Bridge has to be rotated 36° counter-clockwise.

A forward-facing Bridge CAN fit (see "B") but it has to be shifted toward the front. It is the only way a turbo-elevator car can fit under the curvature of the dome. This shift allows a lateral turbo-elevator tube and even a spare turbo-elevator car to fit behind the Bridge.



DECK 1: REVISED BRIDGE ("E")

REVISED BRIDGE (Low)
When the shape of the Bridge on the model was modified, material was removed from the bottom of the dome and the bump. The lower curvature of the dome's ceiling means the Bridge cannot be shifted forward. Placing it back in the middle means there is no space for a lateral turbo-elevator tube behind the Bridge, so the Bridge has to be rotated 36° to ensure the turbo-elevator car remains inside the bump. However, the material that was removed reduced the height of the bump too much. A turbo-elevator car no longer fit even if the recessed floor of the Bridge is dropped below the ceiling of Deck 2 (see "C").

REVISED BRIDGE (Lower)
If the main floor of the Bridge is also dropped below the ceiling of Deck 2, the turbo-elevator car does finally fit inside the bump. But, this makes the ceiling for most of Deck 2 too low. The Bridge is still rotated 36° but now the turbo-elevator car waiting inside the bump (to serve the Bridge) is too low, obstructing the shaft and preventing service to Deck 2 (see "D").

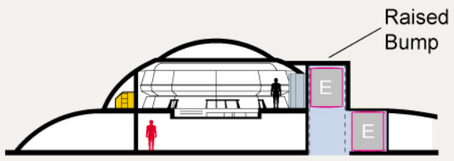
REVISED BRIDGE (Lowest)
If the Bridge is lowered all the way to Deck 2 a lateral turbo-elevator tube and even a spare turbo-elevator car fits (see "E"). But what of the dome? It could contain sensors and a service corridor . . . and now the Bridge is not as vulnerable, so all this might be a good thing.

In at least one episode, a character left the Bridge and a moment later a turbo-elevator car was available for another character to leave. Spare turbo-elevator cars must be stored somewhere close, very close.

The Bridge shown in "E" is used only in the U.S.S. ENTERPRISE Heavy Cruiser plans.

ALTERNATE BRIDGE CONFIGURATIONS
A simpler, more practical solution is to raise the bump slightly (see "F"). This is a good start. Extending the bump to the port side, or to both sides, is even better. Now a lateral turbo-elevator tube fits behind the Bridge.

The "Auxiliary Door" is optional, added here to satisfy what we see in the Animated Series. Think of it as being hidden behind the display panel to port of the main viewing screen.



MODIFIED BUMP ("F")

Such changes allow for smoother turbo-elevator operations, turbo-elevator storage spaces closer to the Bridge, and other (better, more logical) Bridge configurations. To the right are three such designs.
One of these is used in each of my starship blueprint sets.

v1.
A storage space for spare turbo-elevators exists to starboard. The bump is much bigger but is symmetrical.

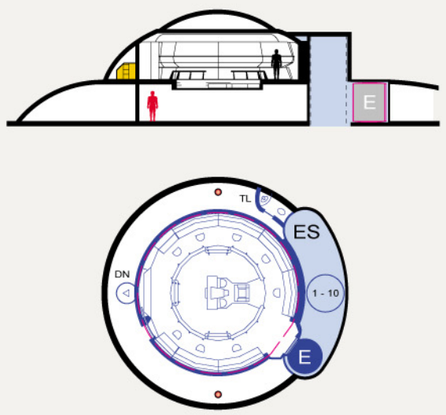
v2.
This second design minimizes the change to the size and shape of the bump but it is now asymmetrical.

v3.
The turbo-elevator storage space has been replaced by a second access

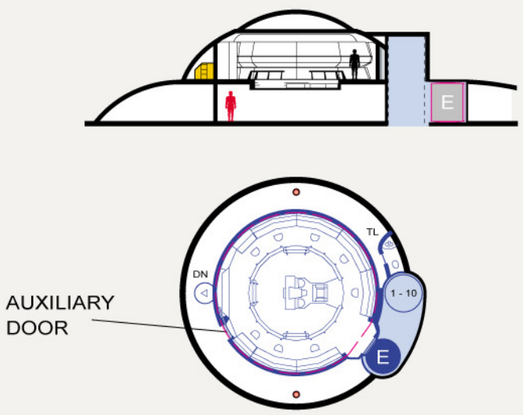
v3. (continued)
point for the Bridge. The stations have been re-arranged around the Bridge, but overall, one station has to be deleted.

In all these Bridge designs, access to the Service Corridor is via removable panels, or the auxiliary door, or the ladder.

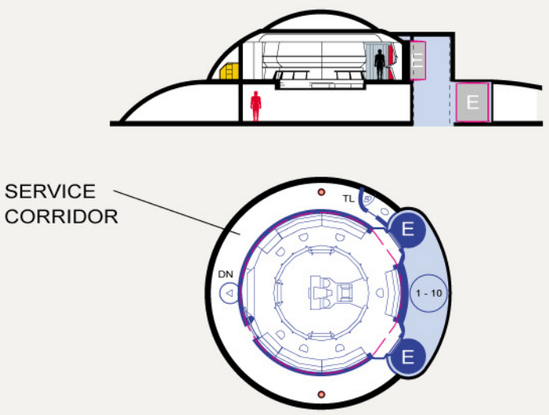
In all these alternate versions, the Bridge faces forward ... as it was always meant to be (in my humble opinion).



DECK 1: BRIDGE (v1)



DECK 1: BRIDGE (v2)



DECK 1: BRIDGE (v3)

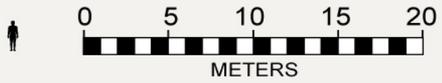
STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECKS 2 and 3

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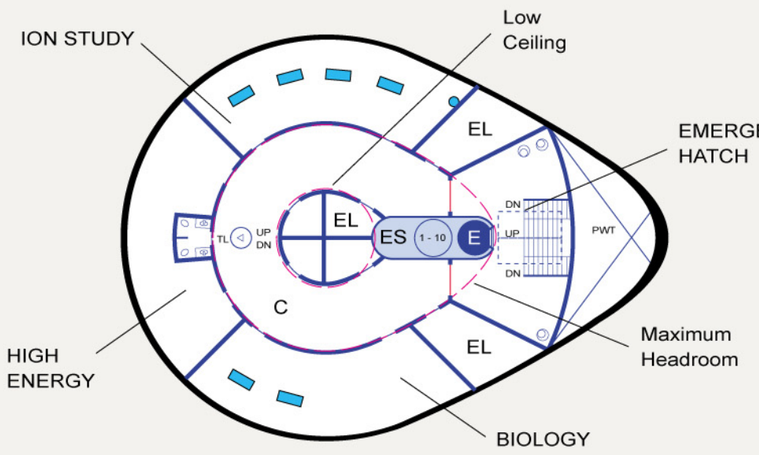
NOTES

DECK 2
Even after adjusting the spacing of the top 4 decks, the recess in the center of the Bridge still affects the ceiling of Deck 2. The ceiling in the center of Deck 2 is so low that it can only be used for storage. That area is labeled EL (Environmental Lockers) and contains full spacesuits, partial suits, air-testing kits, etc ... useful if exiting via the hatch.

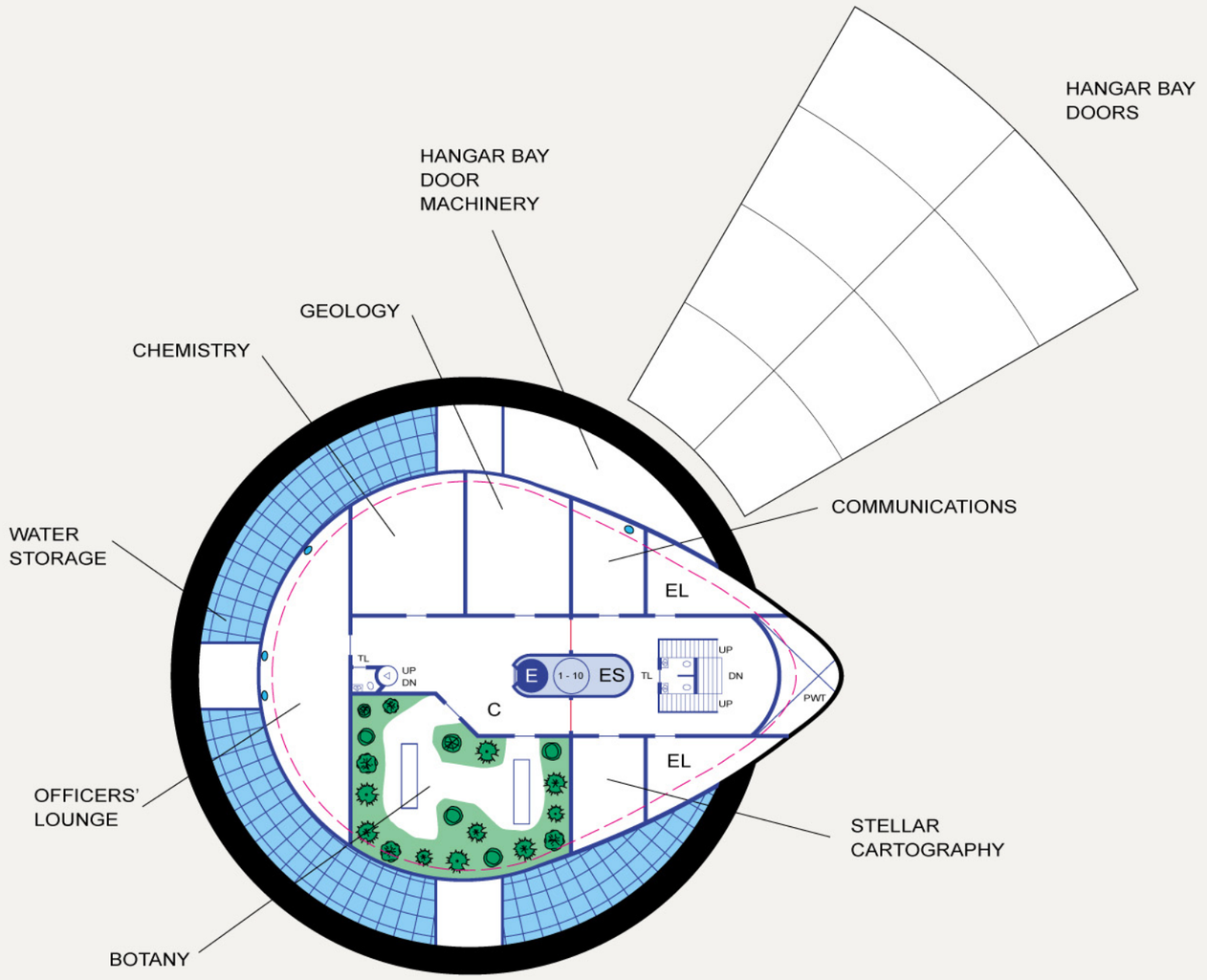
In at least one episode, a character left the Bridge and a second later a turbo-elevator was available for another character to leave the Bridge. Spare turbo-elevators must be stored somewhere nearby, so one such storage spot is on Deck 2.

The Science Labs can be reconfigured, as needed.

Stairs allow many people to exit the ship quickly. I can't imagine people trying to exit a ship (especially in an emergency situation) by using ladders. We never saw stairs but that does not mean stairs do not exist. The location of the hatch for these stairs coincides with an external marking on the studio model of the U.S.S ENTERPRISE.



DECK 2: SCIENCE LABORATORIES



DECK 3: SCIENCES / LOUNGE

DECK 3
Stairs for the emergency exit on Deck 2 start on Deck 4 and continue up from there past this level. On either side are storage spaces (labeled EL) and contains full spacesuits, partial suits, air-testing kits, etc ... useful if exiting via the hatch on Deck 2.

An Officers' Lounge occupies the forward part of this deck.

Some Science Labs will exist regardless of the exact role or class of the ship. They could be reconfigured depending on the mission requirements.

Water storage at the rear (as is typical on Constitution-class ships) has been replaced with machinery for the Hangar Bay Doors. The doors are flush with the hull. To open, they move up and then slide to either side. The doors are wider than the actual space set aside for the Hangar Bay.

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECK 4

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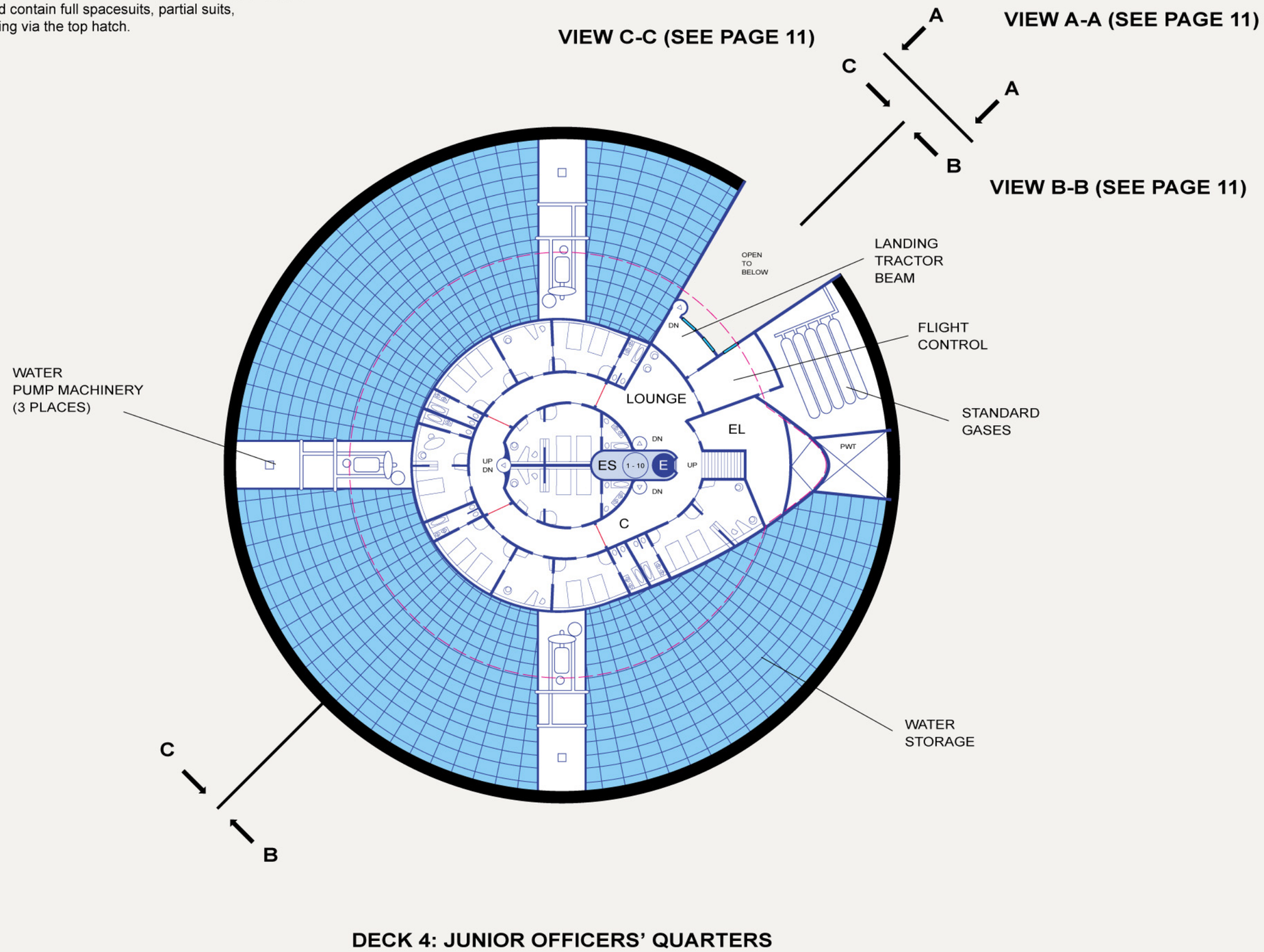
NOTES

DECK 4
The Hangar Bay extends from Deck 4 down to Deck 6.

Flight Control and the Landing Tractor Beam are located at the front of the Hangar Bay. A Ladder leads down to the Hangar Deck / Flight Deck.

The Standard Gases located here store air while the Hangar Bay doors are open to vacuum.

Stairs for mass exodus via the hatch on Deck 2 start on this deck. On each side is a storage space (EL). These could contain full spacesuits, partial suits, air-testing kits, etc ... useful if exiting via the top hatch.



DECK 4: JUNIOR OFFICERS' QUARTERS

All the Crew's Quarters in the Primary Hull are laid out in rings. The rings are labeled from the center outwards, starting with A, then B, then C, and so on.

Junior Officers' quarters are on Deck 4. The ship's complement is such that they don't have to share quarters with anyone else.

The ship could help with rescue missions, diplomatic missions, or help evacuate / transport colonists if such a need should ever arise.

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECK 5 **PAGE 10 of 18**

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0 5 10 15 20
METERS

NOTES

DECK 5
The layout of this deck is very similar to the FJ design for the Constitution-class ship. I adjusted the turbo-elevator shafts so that they are now exactly 120° apart. There is also one turbo-elevator storage space.

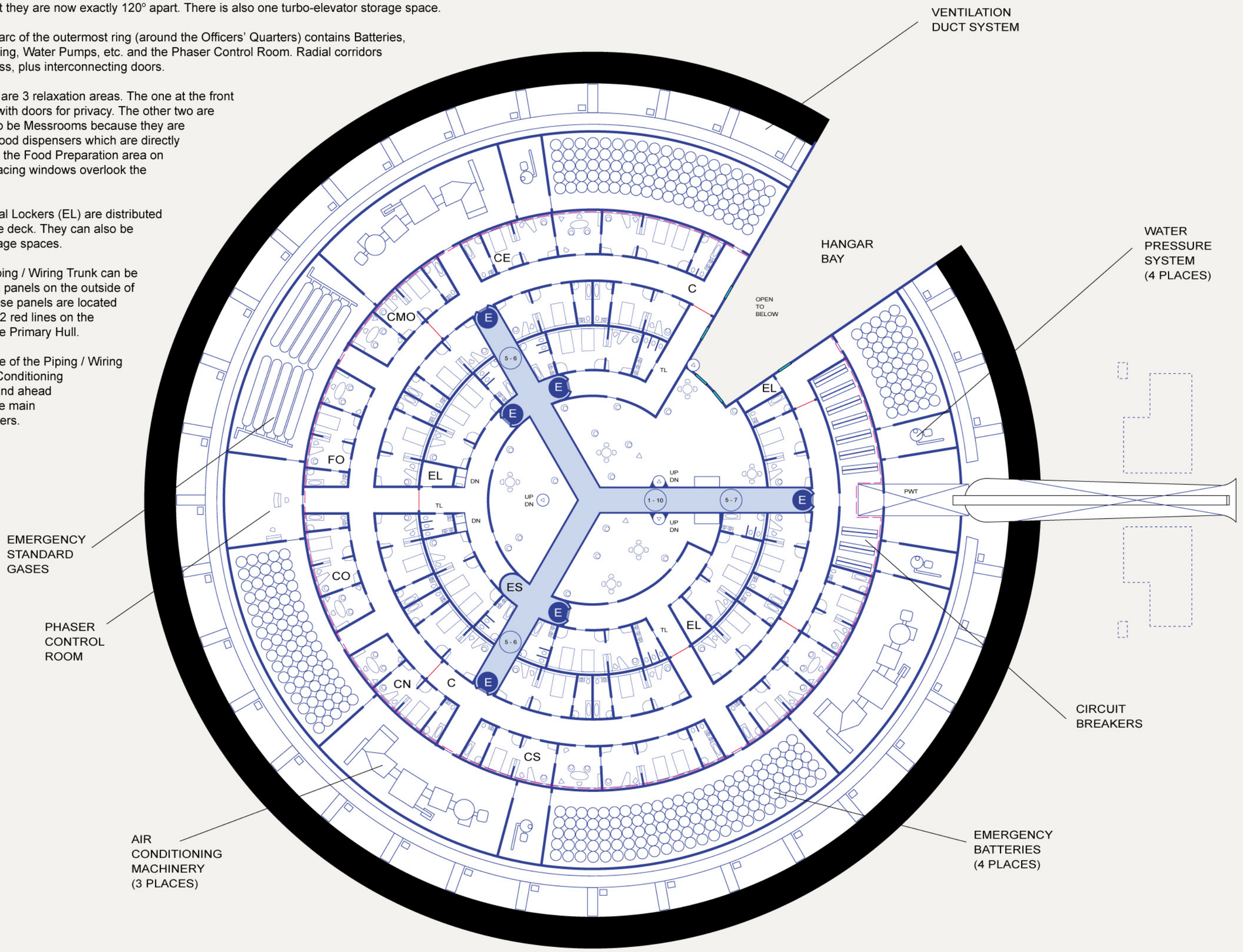
The forward arc of the outermost ring (around the Officers' Quarters) contains Batteries, Air Conditioning, Water Pumps, etc. and the Phaser Control Room. Radial corridors provide access, plus interconnecting doors.

In the center are 3 relaxation areas. The one at the front is a Lounge with doors for privacy. The other two are considered to be Messrooms because they are serviced by food dispensers which are directly connected to the Food Preparation area on Deck 8. Aft-facing windows overlook the Hangar Bay.

Environmental Lockers (EL) are distributed all around the deck. They can also be used as storage spaces.

The main Piping / Wiring Trunk can be accessed via panels on the outside of the ship. Those panels are located between the 2 red lines on the top rear of the Primary Hull.

On either side of the Piping / Wiring Trunk is Air Conditioning equipment, and ahead of that are the main Circuit Breakers.



DECK 5: SENIOR OFFICERS' QUARTERS

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: HANGAR BAYS

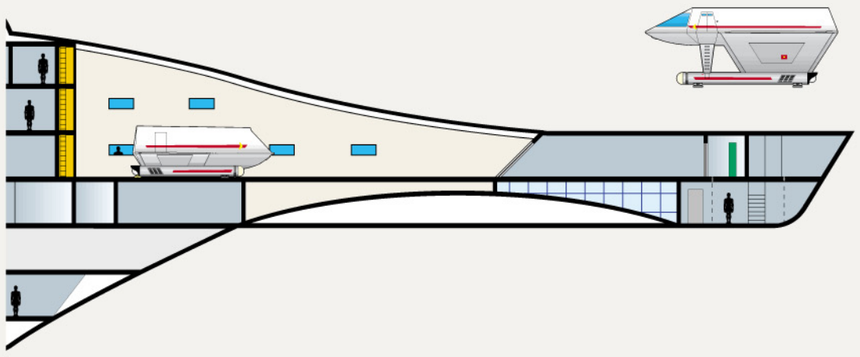
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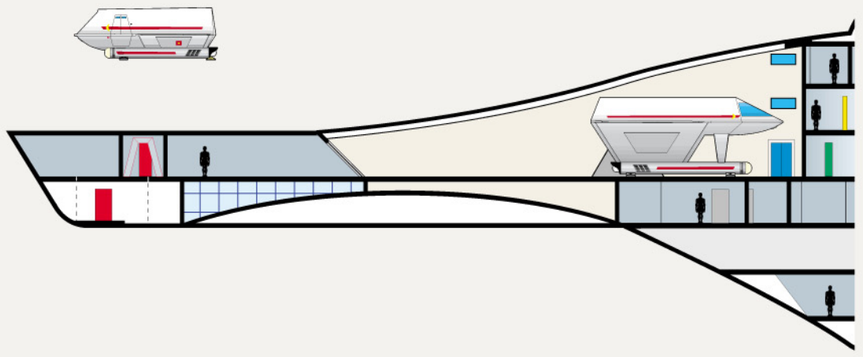
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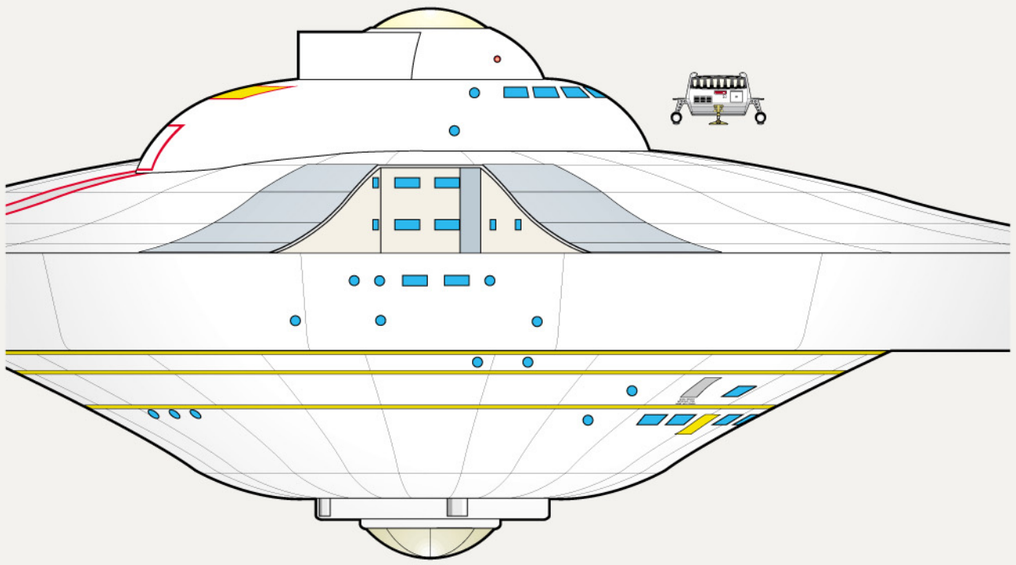
B-B



C-C



A-A



The Main Sensor Dish and its mounting have been deleted for clarity.

NOTES

Shuttlecraft maintenance occurs on the Flight Deck. Fuel and parts are stored in the cargo hold aft of the Hangar Bay.

There is no elevator platform for the shuttlecraft; the markings on the Flight Deck are for targeting / landing.

CARGO OPERATIONS

Cargo Operations is closely linked to Hangar Bay activities. Supplies can be unloaded in the Hangar Bay, taken to the Cargo Lift, then distributed to the Cargo Holds around the rim of Deck 7.
Cargo can also arrive via the Cargo Transporter on Deck 7.

NOTES

DECK 6
The layout of this deck is similar to the FJ design for the Constitution-class ship. I like the tri-radial symmetry.
As on Deck 5, the turbo-elevator shafts are separated by 120°. I also added 4 more turbo-elevator storage spaces.
This network is not as extensive as the FJ design; walking a few hundred feet or meters should not be an issue.
Also, this network does not need to reach outward as much because it does not then drop down to Deck 7.

Over half of this deck is devoted to Crew Quarters. Most of the remaining space is filled by a Hangar Bay.

The windows around the edge of the Primary Hull governed the location of the two Recreation Rooms / Lounges. They have balconies (on Deck 6) which overlook the main level (on Deck 7). Stairs lead down from the balconies to each Lounge.
There are also stairs at the bow, behind the Deflector Equipment.

A Cargo Lift is located at the two aft window locations. Ahead of the starboard Cargo Lift / Cargo Hold is the Hangar Bay. Stairs are also located beside each Cargo Lift.

In the center are 3 relaxation areas. The one at the front is a Lounge. The other two are Messrooms because they are serviced by food dispensers which are directly connected to the Food Preparation area on Deck 8.

Aft of the starboard Messroom is a Foyer leading to the Hangar Bay. To port of the Foyer is the main turbo-elevator shaft which continues to the rear. Machine shops are to port. Environmental Engineering and turbo-elevator maintenance are to starboard. The Engineering Computers are to port and starboard of Main Engineering.

Environmental Lockers (EL) or storage spaces are distributed all around the deck, mostly concentrated near the 4 large rectangular escape hatches in the ceiling (shown here in yellow).

DECK 7
The windows around the edge of the Primary Hull governed the location of the two Recreation Rooms / Lounges. They have balconies (on Deck 6) which overlook the main level (on Deck 7). Stairs lead up from each Lounge to the balconies.
There are also stairs at the bow, behind the Deflector Equipment.

Cargo Transporters and Cargo Lifts are located at the two aft window locations. Stairs are also located beside each Cargo Lift.

The grey area represents the concave cutout on the underside of the Primary Hull. This area could be used to store water, or fuel, or air, or more general cargo. I leave the area grey (for the most part) so as to clearly set it apart from the rest of the deck.

The center of this Deck contains the ship's Main Computers. The ring around the Computers contains Sickbay. Sickbay includes various labs, offices, and a post-surgery recovery area. Aft of the Main Computers is the machinery for the Food Conveyors.

The ring around Sickbay contains the Armory, Briefing Room, Chapel, Brig, The Chief Engineer's Office, the Dilithium Energizer Station, a storage areas for Medical Supplies, a few other offices, and airlocks where the 2 Main Landing Legs used to be. Those were replaced with hatches for extra-vehicular activities. The ring also contains four Transporters (for 6 people) as well as two Emergency Transporters (for 22 people).

At the rear is Main Engineering. The port ladder ahead of Main Engineering leads up to the Emergency Manual Monitor. The starboard ladder provides access to the disconnection equipment on Decks 8 and 9.

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECK 6 **PAGE 12 of 18**

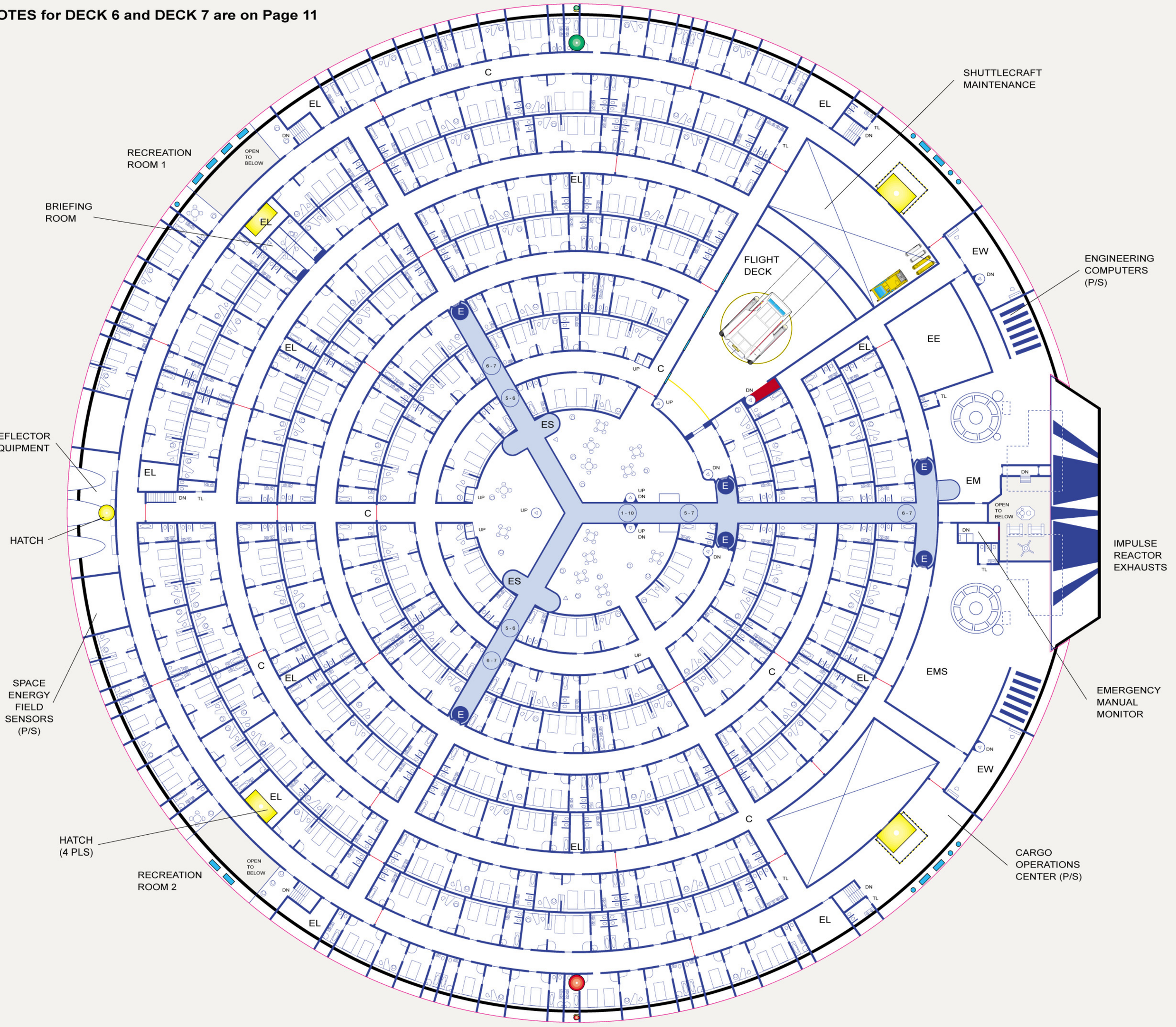
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0 5 10 15 20
METERS

NOTES for DECK 6 and DECK 7 are on Page 11



DECK 6: CREW'S QUARTERS / ENGINEERING

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECK 7 **PAGE 13 of 18**

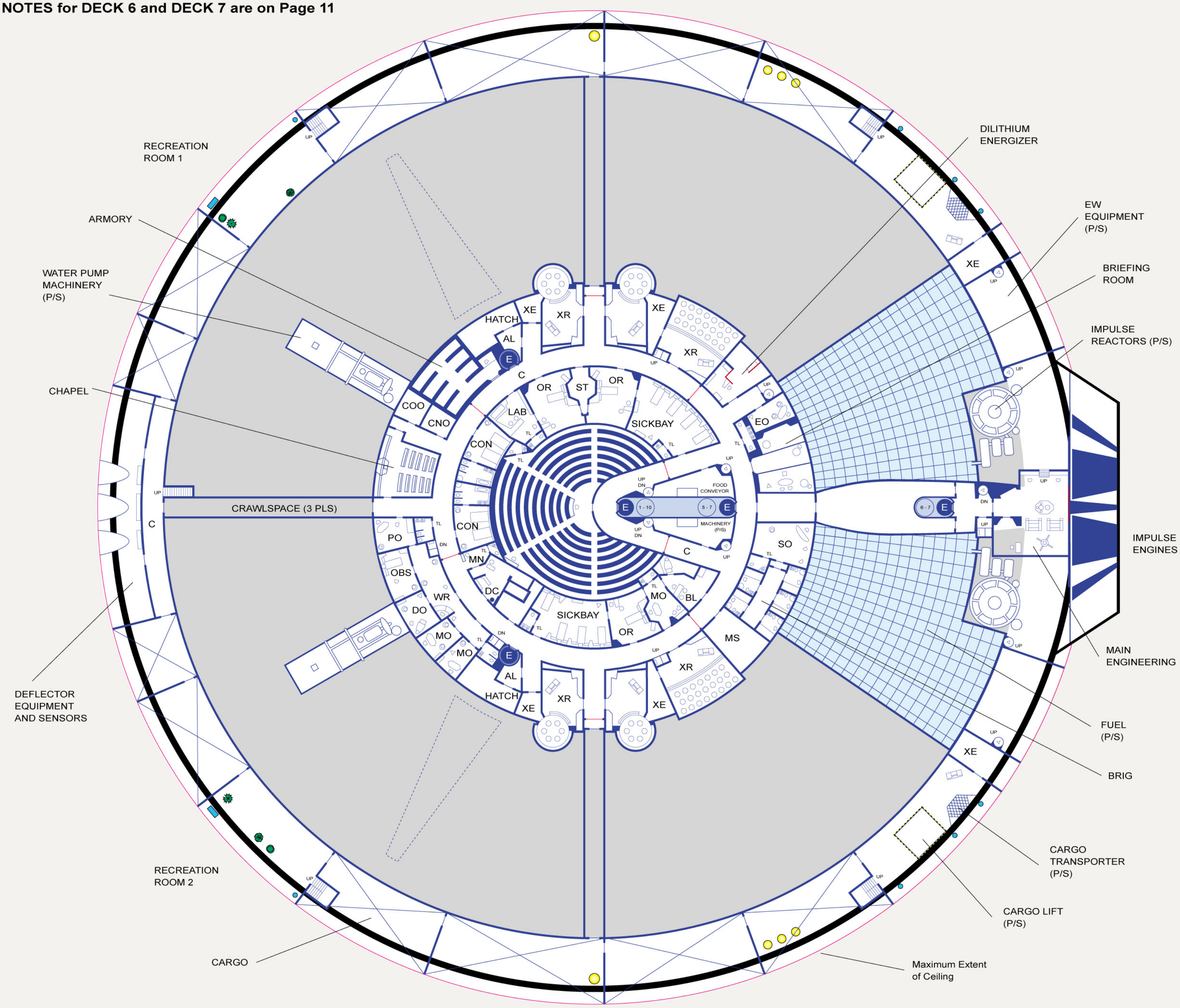
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0 5 10 15 20
METERS

NOTES for DECK 6 and DECK 7 are on Page 11



DECK 7: SICKBAY / ENGINEERING

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECK 8 **PAGE 14 of 18**

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NOTES

DECK 8
Most of this deck is unchanged from the configuration of the Constitution-class ship. Laundry, Food Preparation, Main Recreation and Entertainment areas are here.

The Auxiliary Control is surrounded by the ship's Main Computers which continue here from the center of Deck 7.

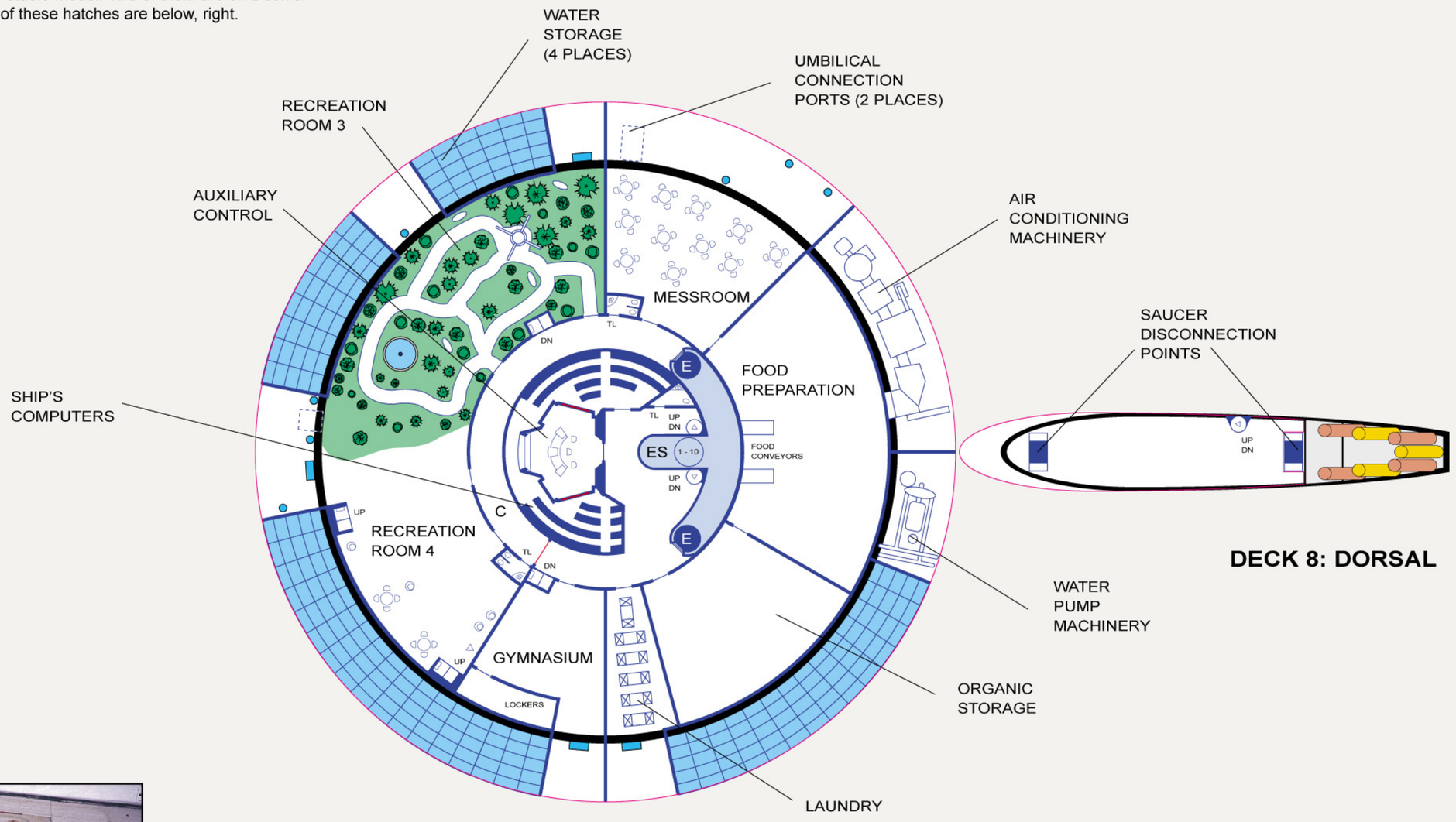
The Water Storage found here is an extension of the Water Storage on Deck 7.

The Food Preparation area has two "conveyors" which distribute food upwards into the Messrooms located on Deck 6 and Deck 5.

There are four hatches or ports on the studio model. Two of them are on Deck 8.
The other two are on Deck 9. Images of these hatches are below, right.

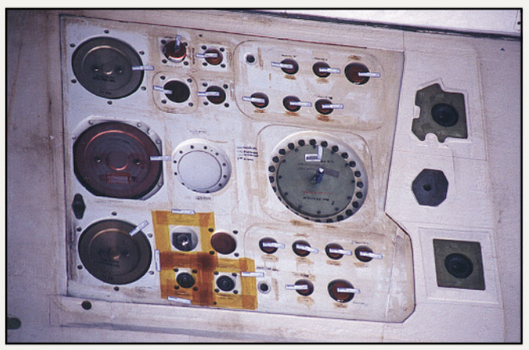
DECK 8 (continued)
Their distribution on the studio model is asymmetric, as are the windows around them. The hull is at such an extreme angle that even the longest hatch results in an opening only 4 feet (1.2 meters) tall. A crew member in a spacesuit can not fit through any of these hatches. Instead, these 2 hatches probably have a function similar to the Umbilical Connection Panels as on the Space Shuttle (below, left).

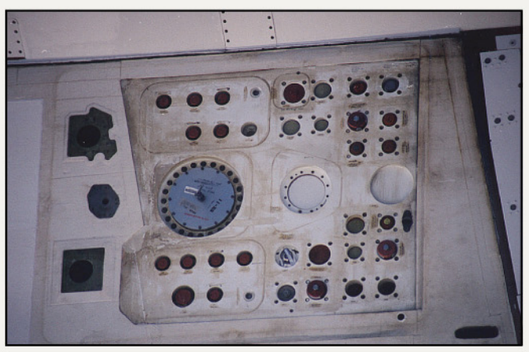
DECK 8 DORSAL
The disconnection equipment is located on this deck. This area is kept clear and is difficult to enter except by authorized personnel. It is accessible only by ladders.

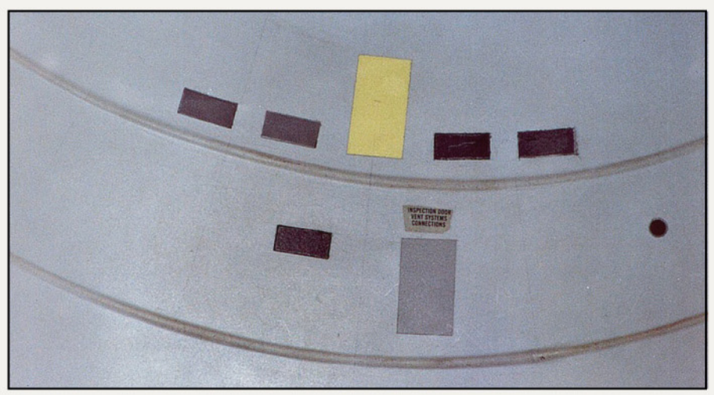


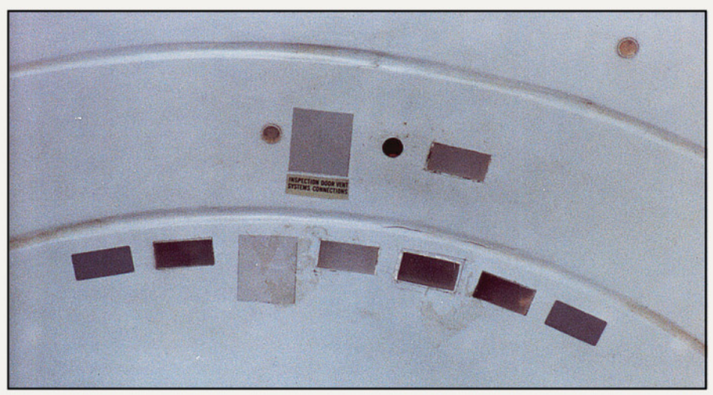
DECK 8: ENTERTAINMENT / RECREATION FACILITIES

DECK 8: DORSAL









STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECK 9 **PAGE 15 of 18**

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NOTES

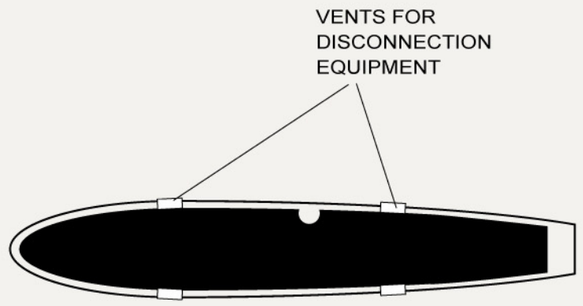
SEPARATION PLANE
This is located between Deck 8 Dorsal and Deck 9 Dorsal.

DECK 9
Most of this deck is unchanged from the original configuration of the Constitution-class ship. Material Reclamation and Fabrication is probably not a 100% efficient process. Therefore, these 2 hatches could allow for transfer of rare elements required in various manufacturing processes.

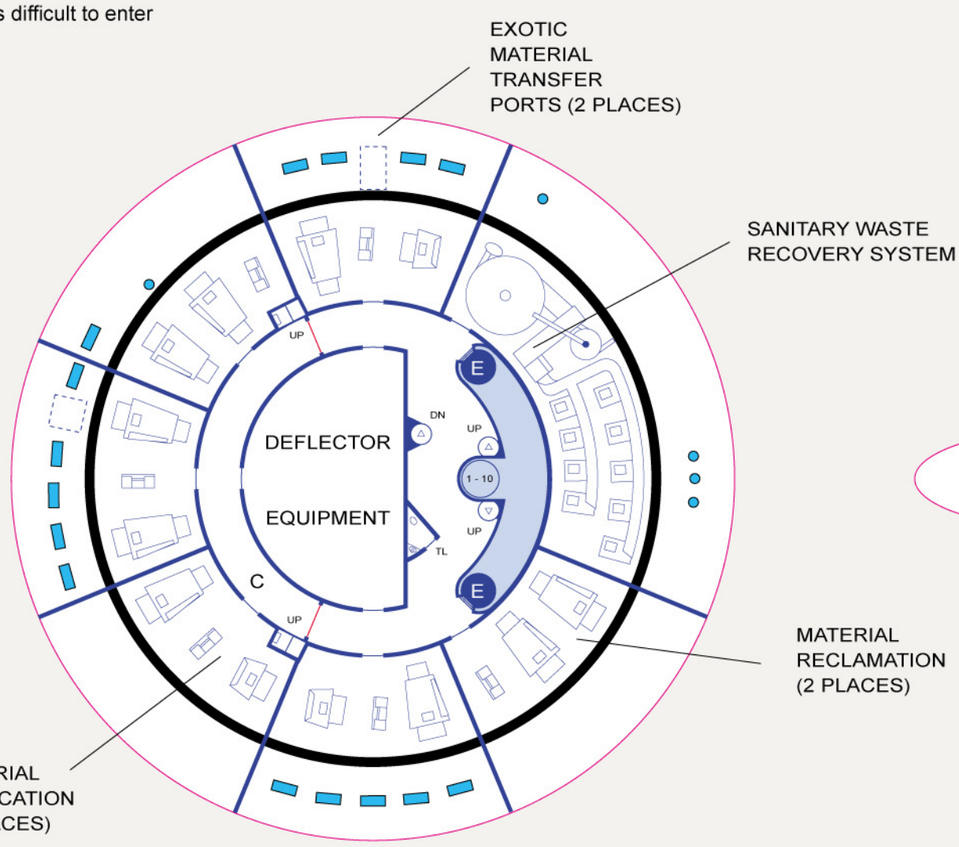
Deflector Equipment is located in the center of the deck.

The Main Sensor Dish was not installed on later versions because the Deflector System and Sensors in the bow of the Primary Hull were found to be adequate. On those later versions, the Deflector Equipment on Deck 9 was replaced with Material Reclamation equipment.

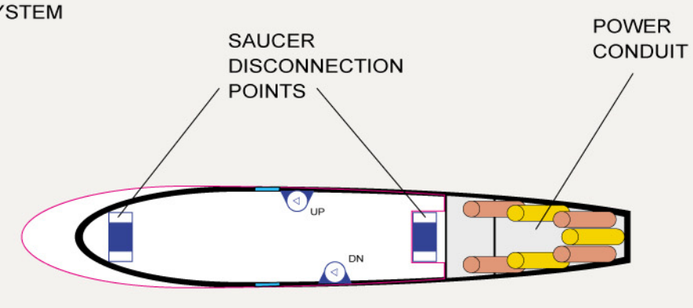
DECK 9 DORSAL
The disconnection equipment is located on this deck. This area is kept clear and is difficult to enter except by authorized personnel. It is accessible only by ladders.



SEPARATION PLANE



DECK 9: FABRICATION FACILITIES



DECK 9: DORSAL

ACCOMMODATIONS

DECK 4 -	Ring A -	4
	Ring B -	9
DECK 5 -	Ring A -	8
	Ring B -	8
	Ring C -	10
DECK 6 -	Ring A -	8
	Ring B -	12
	Ring C -	20
	Ring D -	28
	Ring E -	32
	Ring F -	38
	Ring G -	38
	Ring H -	32
TOTAL:		247

SHIP'S COMPLEMENT (SCOUT)

OFFICERS	20
ENLISTED	175
TOTAL	195

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECKS 10 and 11

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NOTES

DECK 10
The Deflector Equipment located in the center of the deck work with the Deflector Equipment and the Space Energy Field Sensors located in the bow of Deck 6 and Deck 7 and with the Main Sensor Dish.

The Main Sensor Dish was not installed on later versions because the Deflector System and Sensors in the bow of the Primary Hull were found to be adequate.
On those later versions, the Deflector Equipment on Deck 10 was replaced with Cargo Holds.

TMoST mentions Photon Torpedoes but not their location. Photon Torpedoes were shown in various episodes of STAR TREK to emanate from the underside of the Primary Hull, approximately the same place as the Phasers. Since TMoST states Phaser Banks are on Deck 11, the logical spot for Photon Torpedoes and their launch system is on Deck 10.

Scouts do not carry Photon Torpedoes, but they do carry Probes. Both employ the same launch system and tracking / control system. Therefore, Probe Launch Control and Probe Storage are located on Deck 10.

TMoST states that miscellaneous activities and cargo spaces are on Deck 10.

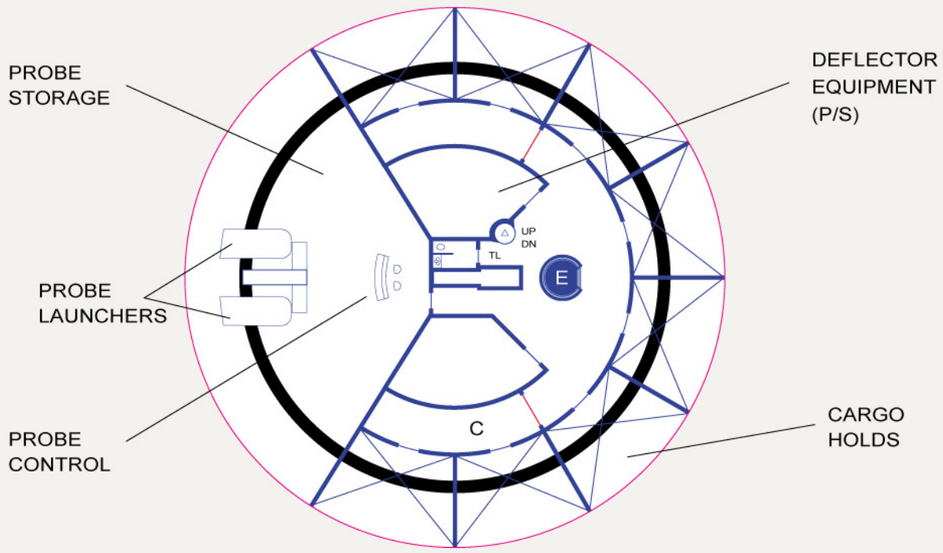
DECK 10 DORSAL
Engineering Monitoring Stations are located here.

DECK 11
Phasers are located on this deck.

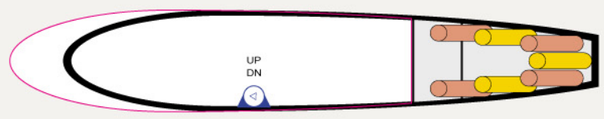
The equipment around the perimeter is for the Tractor Beam. The 3 Tractor Beam Controllers direct the Emitter so that the beam can locate and lock onto the object being towed.

The 3 pale gold-coloured recessed rings on the underside of the Primary Hull absorb and re-direct any back-scatter created by the Tractor Beam.

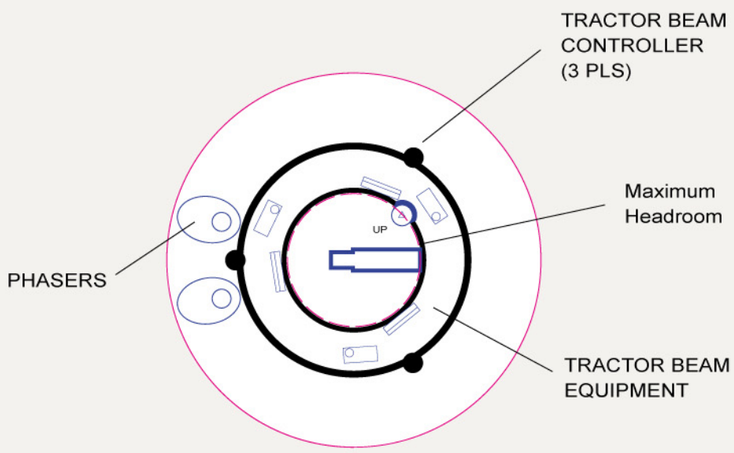
DECK 11 DORSAL
Engineering Monitoring Stations are located here.



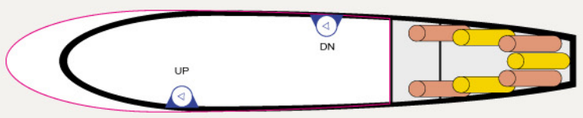
DECK 10: PROBE LAUNCHERS / CARGO



DECK 10: DORSAL



DECK 11: PHASERS / TRACTOR BEAM



DECK 11: DORSAL

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: DECKS 12, 13, and 14

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NOTES

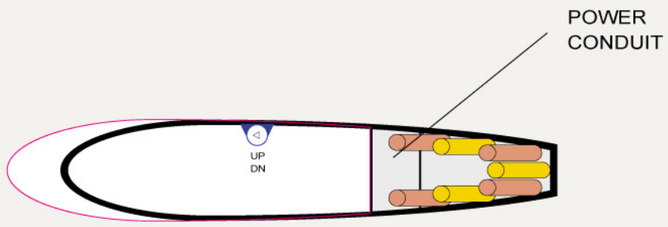
DECK 12
The Lower Sensor Dome is located here.
The Main Sensor Dish is mounted on the bottom of the Lower Sensor Dome.

DECK 12 DORSAL
More Engineering Monitoring Stations are located here.

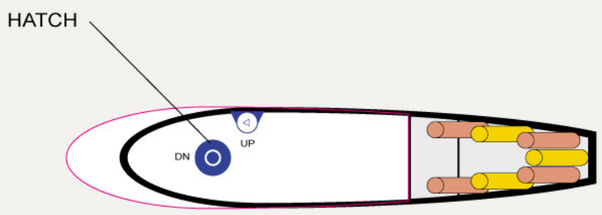
DECK 13 DORSAL
Even more Engineering Monitoring Stations are located here.
The hatch for accessing the Matter-Antimatter Reaction Chamber is located here.
This hatch is usually closed and is heavily shielded, as is the entirety of the Matter-Antimatter Reaction Chamber.



DECK 12: SENSORS



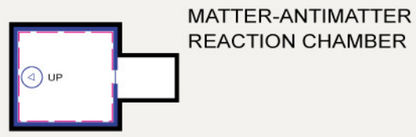
DECK 12: DORSAL



DECK 13: DORSAL

SHIP DATA

LENGTH:	233 m
WIDTH:	127 m
HEIGHT:	56 m
TRANSPORTERS	
6-person:	4
22-person:	2
cargo:	2
SHUTTLECRAFT:	2
PHASERS	
banks of 2:	1
PROBE LAUNCHERS:	2



ENGINE INSPECTION STATION

STAR TREK - HERMES-CLASS SCOUT

LAYOUT: NOTES, SYMBOLS, etc. **PAGE 18 of 18**

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GENERAL NOTES

When Matt Jefferies designed the U.S.S. ENTERPRISE, he wanted a smooth hull. He reasoned that if anything needed to be accessed, it would be done so from inside the ship. But if red rectangles and yellow circles exist on the hull, they must be there for emergency situations, quick identification, or some aspect of ship's operations.

Matt Jefferies understood that incredible energies would be required to propel a ship faster than light. If this is accomplished with antimatter, why store it in the habitable section of the ship? He and Gene Roddenberry both loved airplanes; they understood and agreed on the importance of isolating dangerous components, yet still making them accessible if required. Yes, Dilithium Crystals are stored in or near Engineering and help modify / channel the energy, but why does the antimatter need to be stored in or near Engineering?

The idea of a Bussard Ramjet was developed in 1960. This label was applied to the U.S.S. ENTERPRISE engines retroactively, after the series ended. A Bussard Ramjet compresses matter for fusion. The grey area on the engine nacelle could indicate where that matter is stored. But on the U.S.S. ENTERPRISE the matter is then mixed with antimatter. Therefore, the red rectangle on the engine nacelle could indicate where the antimatter is stored.

The red rectangle on the engine nacelle could be an access hatch, or an "Emergency Jettison" hatch. Dialogue in various episodes of STAR TREK corroborates the idea of disengaging, discarding, or jettisoning the warp engine nacelles. Dialogue also mentions ejecting the antimatter pod.

The idea of a "Warp Core" came along much later, when the ENTERPRISE was refit for the movies. Will Decker told Kirk, "This is an almost totally new ENTERPRISE." The idea of "ejecting a Warp Core" was introduced in STAR TREK THE NEXT GENERATION. These drawings make no attempt to "retcon" such concepts.

The huge pipes / conduits (visible through the grille behind Engineering) was a set built with forced perspective to suggest immense size and power. The angle on the conduits suggests they continue up the pylons of the U.S.S. ENTERPRISE.

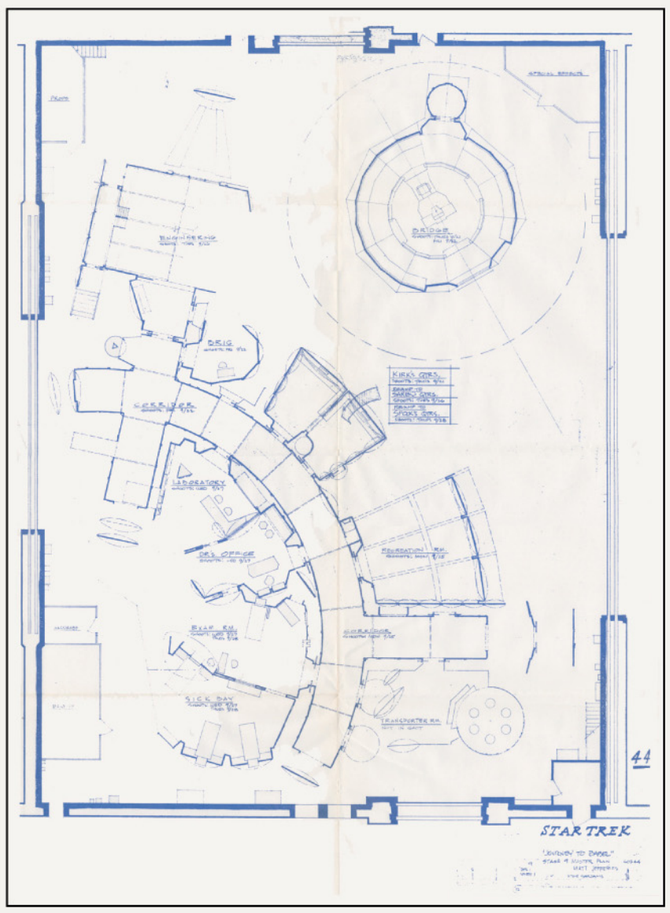
Regarding the antimatter:
CASE 1. Collect matter in the engine nacelle, send the matter to Engineering, mix it (in the habitable section of the ship) with antimatter (stored in the habitable section of the ship!), pass the energy through the Dilithium Crystals, then send the energy up to the engine nacelles to create the warp field.
CASE 2. Collect matter in the engine nacelles, mix it (in the engine nacelles) with antimatter (stored in the engine nacelles), send the energy to Engineering, pass the energy through the Dilithium Crystals, then send the energy up to the engine nacelles to create the warp field.

In both cases, energy is being transmitted. There is no need to move the fuel too (as in Case 1).
Case 1 is unnecessarily complicated.
Case 2 is simpler, and as a bonus, the antimatter is kept away from the habitable section of the ship.

ABBREVIATIONS

AL	-	AIRLOCK
BL	-	BIO LAB
C	-	CORRIDOR
CE	-	CHIEF ENGINEER
CMO	-	CHIEF MEDICAL OFFICER
CN	-	CHIEF NURSE
CNO	-	CHIEF NAVIGATOR'S OFFICE
CO	-	COMMANDING OFFICER
COO	-	COMMUNICATIONS OFFICER'S OFFICE
CON	-	CONVALESCENT WARD
CS	-	CHIEF OF SECURITY
DC	-	DECOMPRESSION CHAMBER
DN	-	DOWN
DO	-	DENTIST'S OFFICE
E	-	TURBO-ELEVATOR CAR
EE	-	ENVIRONMENTAL ENGINEERING
EL	-	ENVIRONMENTAL SUIT LOCKER
EM	-	TURBO-ELEVATOR MAINTENANCE
EMS	-	ENGINEERING MACHINE SHOPS
EO	-	CHIEF ENGINEER'S OFFICE
ES	-	ELEVATOR STANDBY / STORAGE
FO	-	FIRST OFFICER
IC	-	INSPECTION CORRIDOR
LAB	-	LABORATORY
LL	-	LANDING LEG
LLM	-	LANDING LEG MACHINERY
MN	-	DUTY NURSE
MO	-	DOCTOR'S OFFICE
MS	-	MEDICAL SUPPLIES
OBS	-	OBSTETRICS
OR	-	OPERATING ROOM
P	-	PORT (LEFT)
PLS	-	PLACES
PO	-	PSYCHIATRIST'S OFFICE
PWT	-	PIPING / WIRING TRUNK
S	-	STARBOARD (RIGHT)
SO	-	SECURITY OFFICE
SCO	-	SECURITY CHIEF'S OFFICE
ST	-	STORAGE
TL	-	TOILET
WR	-	WAITING ROOM
XE	-	TRANSPORTER EQUIPMENT
XR	-	TRANSPORTER ROOM

THE DESILU STAGE AT THE SAME SCALE



PLAN SYMBOLS


CHAIRS

TABLES


DINING TABLE

SHOWER, TUB


DRESSERS


BED

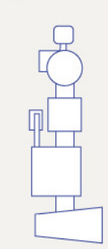

ROOM PARTITIONS
- White circular grille
- Red hexagonal grille

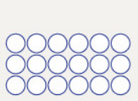
TOILET, SINK


LADDERS


STAIRS, RAILING


WALL and DOOR


AIR CONDITIONING EQUIPMENT


BATTERIES


MEDICAL DIAGNOSTIC BED


CONTROL CONSOLES

ISOLATION DOOR


CIRCUIT BREAKERS


COMPUTERS


WATER PRESSURE SYSTEM

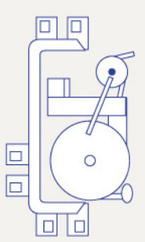

LAUNDRY UNIT

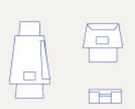

WATER PUMP MACHINERY

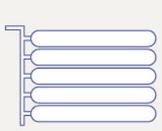

HULL THICKNESS AT FLOOR LEVEL
(Varies depending on hull curvature)

TREE, SHRUB


FOUNTAIN


SANITARY WASTE RECOVERY SYSTEM


MATERIAL FABRICATION / RECLAMATION MACHINERY


STANDARD GASES


INNER FACE OF HULL
(Used to show the undercut on Deck 7)

STAR TREK - and the Kzinti From TAS

LAYOUT: SILHOUETTES **PAGE BONUS**

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If printed 17 inches tall (from black-outlined edge to black-outlined edge) the scale of these drawings is 1/1000.

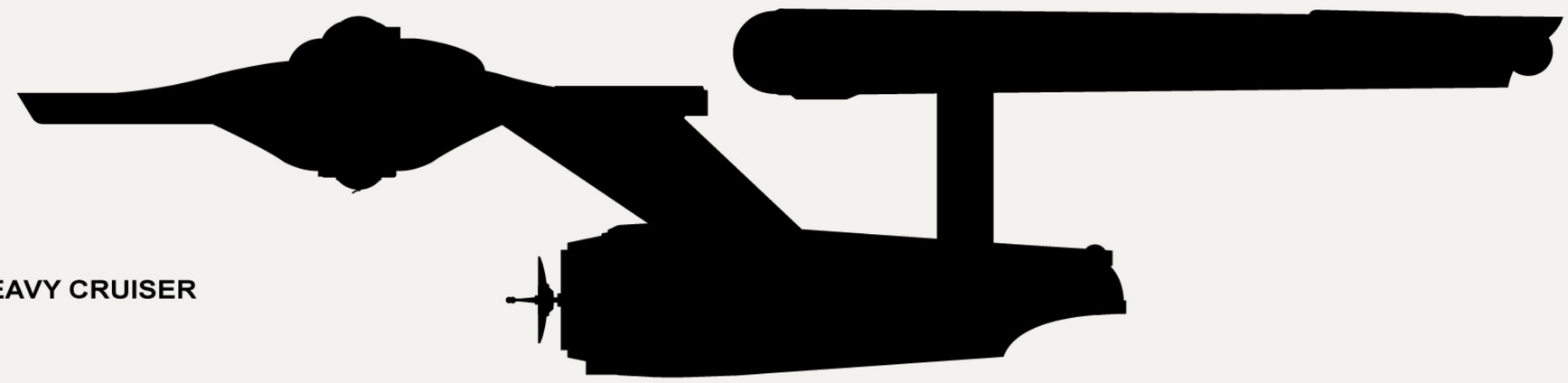




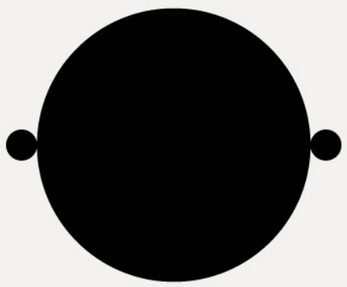
DREADNOUGHT



SPACE SHUTTLE



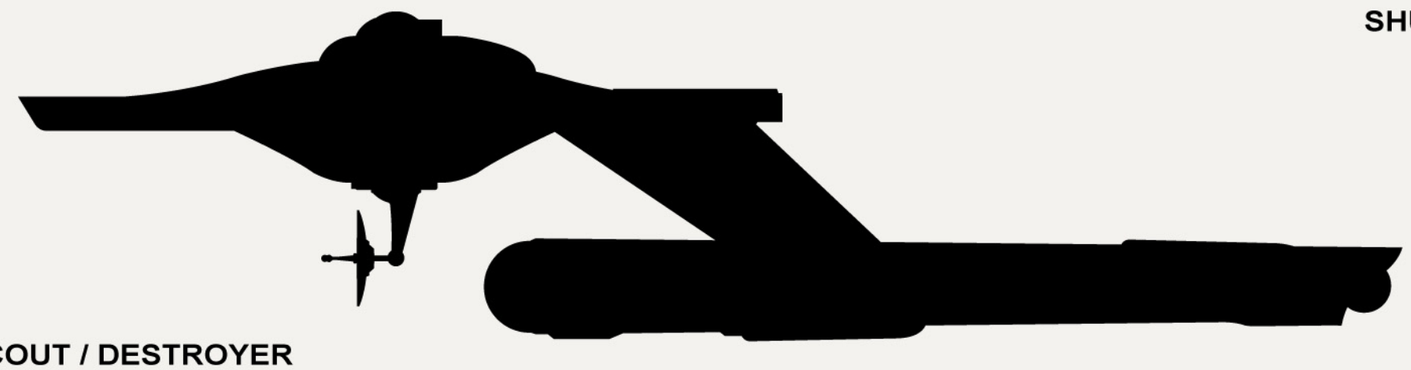
HEAVY CRUISER



KZINTI PIRATE SHIP



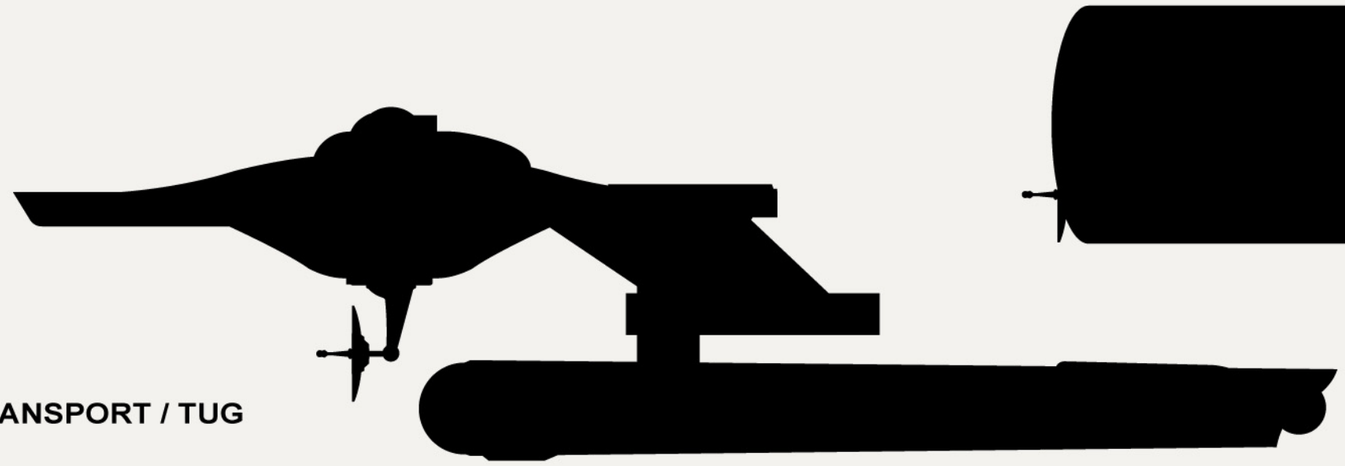
SHUTTLECRAFT



SCOUT / DESTROYER



CARGO SHUTTLE



TRANSPORT / TUG



CARGO CONTAINER