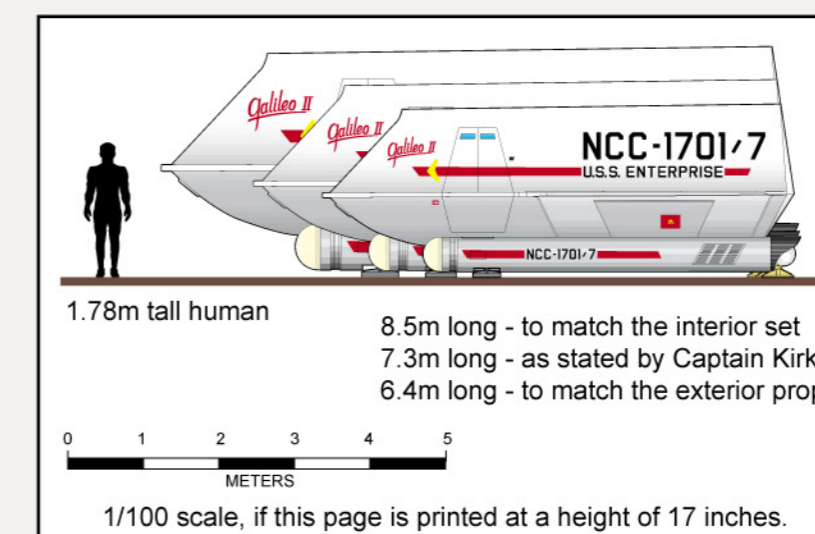
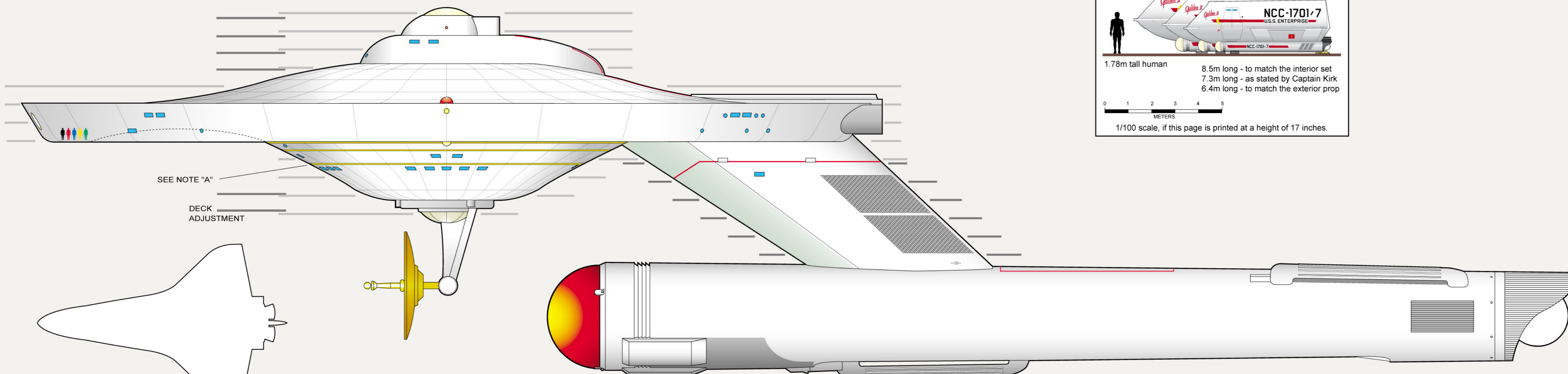




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SPACE SHUTTLE
(Shown here for size reference)

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.

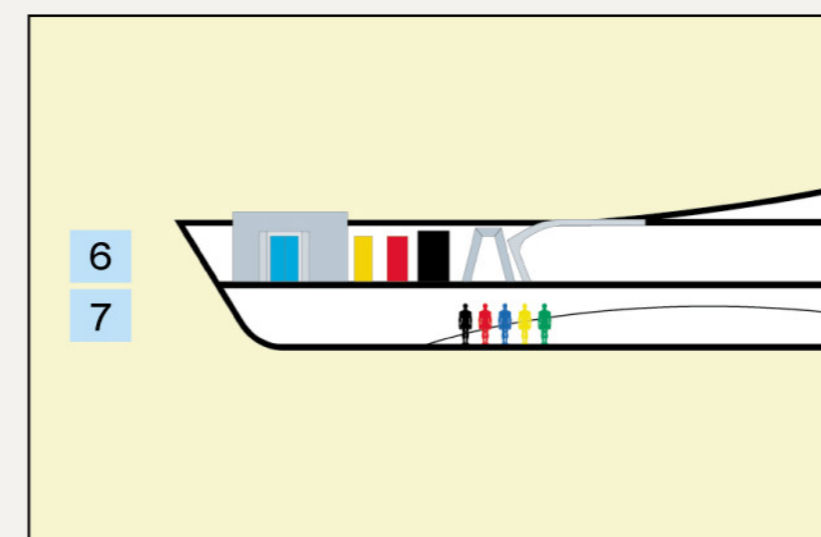
Therefore, Hermes-class Scouts are lightly armed, and are equipped with science stations for gathering data.

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.



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.

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.

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.