



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 this ship in the same style that Franz Joseph (FJ) developed for his Technical Manual and 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 "Frigates" in the STAR TREK universe?

A "Frigate" was a type of ship used on Earth. They were a type of warship of various sizes and roles throughout history. They were originally built for speed and maneuverability with all their weapons on one or two decks.

After several hundred years, they settled into the role of protecting other ships (military or not). Specific titles include Guided Missile Carrier, Anti-submarine Hunter, and Air Defense Support. A final iteration involved high-speed deployment of small craft rather than direct combat with other ships.

In Starfleet, a "Frigate" is a fast, medium-sized ship intended to protect other vessels. That protection is provided by the ship-mounted phasers and photon torpedoes, but it can also be provided by the many small craft stored in the hangar bays.

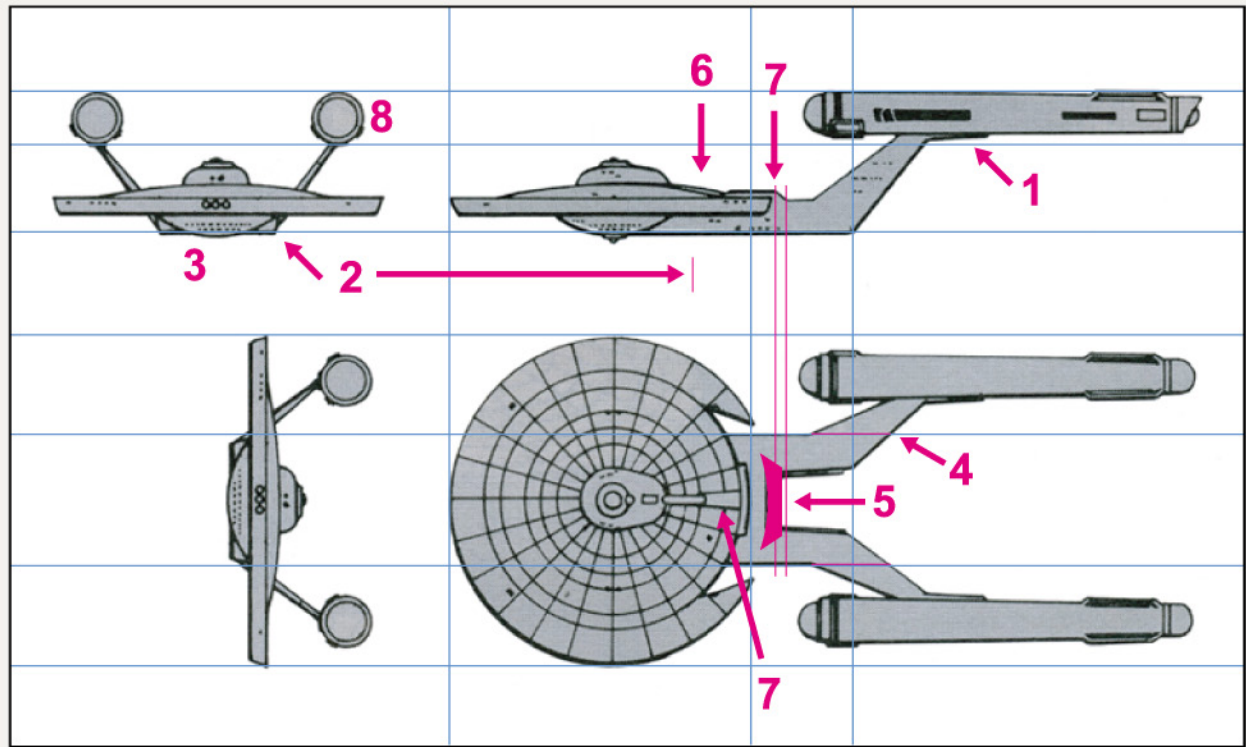
This layout retains the lines as established by FASA, but there were some problems which had to be resolved, and some modifications that had to be made to ensure the details on the 3-view drawings are consistent.

CONSTRUCTION NOTES

There have been many interpretations of this design. Starting with the original FASA drawing (see image at right) we can see some problems:
(1) The aft extension of the pylon conflicts with the Antimatter Ejection Panel,
(2) The leading face of the pontoon is missing in the side view (is it vertical or angled?),
(3) The Lower Sensor Dome is missing, and there is no Main Sensor Dish,
(4) Boundary (edge) lines between the pontoons and the pylons are missing,
(5) The cutout in the Primary Hull leaves the location of the Impulse Engine poorly defined,
(6) There is a bulge shown behind the B-C decks,
(7) There is another bulge which is not visible in the top view,
(8) The engines are bigger in the front view, which makes the pylons too tall in the side view.

Here are the solutions:
(1) Modified Derf-class pylons are used,
(2) A modified Derf-class Primary Hull is used, with the pontoons attached on each side,
(3) The Lower Sensor Dome was not deleted, but the Main Sensor Dish was deleted,
(4) The pontoons are adjusted to match the different views,
(5) The Impulse Engine is in the same position as on the Derf-class Primary Hull,
(6) This bulge raises the Piping / Wiring Trunk, which allows better access from Deck 5,
(7) This bulge is a new configuration for the Impulse Engine Linear Support Structure / PWT,
(8) The engines and pylons were lowered to match their positions as visible in the front view.

Can the engine nacelles be disconnected in an emergency? Can the Primary Hull make an emergency landing? Why is there no Main Sensor Dish? The FASA manual explains this ship has 2 shuttlecraft; is there a Hangar Bay in the lower rear center of the hull? Are there Hangar Bays in one or both pontoons below each pylon? The FASA manual also states this class of ship only has a crew of 76 to 84. If the extra crew quarters are removed what should be installed in their place?



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. Stairs connect the two levels of the Deflector Equipment at the front of the hull.
4. Stairs near the Hangar Bay entrances help connect the outer ring of Deck 7 to Deck 6.

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.

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SPACE SHUTTLE
(Shown here for
size reference)

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