



**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
- EW - ELECTRONIC WARFARE
- 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
- OG - OBSERVATION GALLERY
- 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

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

**THE DESILU STAGE AT THE SAME SCALE**

