STAR TREK - NELSON-CLASS SCOUT

DRAWN BY: Jim Botaitis

If printed 17 inches tall (from black-outlined edge to black-outlined edge) the scale of these drawings is 1/350.

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.

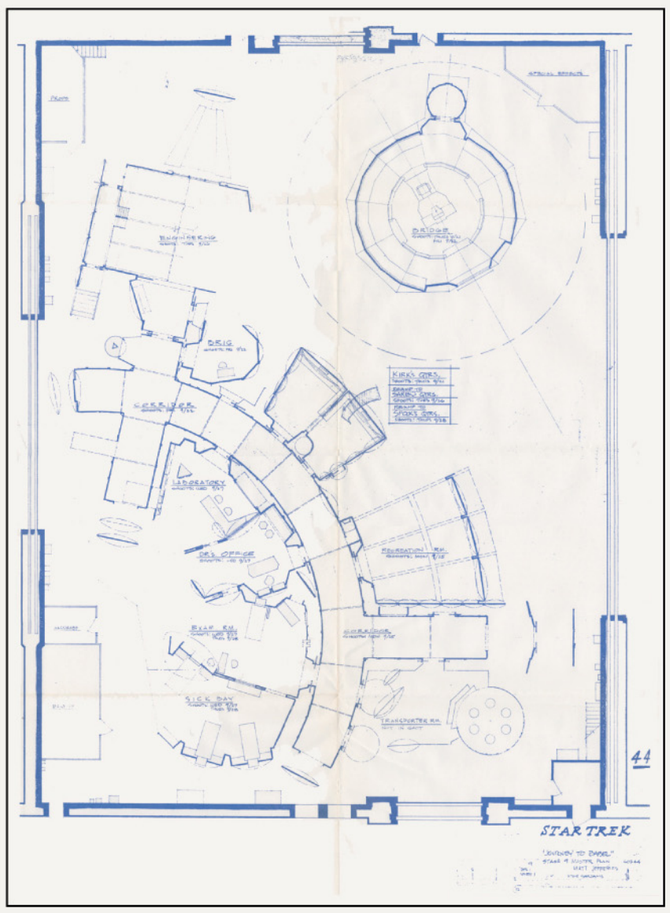
Regarding the antimatter:
CASE 1. Collect matter in the engine nacelle, send the matter to Engineering, mix it (in the habitable section of the ship) with antimatter (stored in the habitable section of the ship!), pass the energy through the Dilithium Crystals, then send the energy up to the engine nacelles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

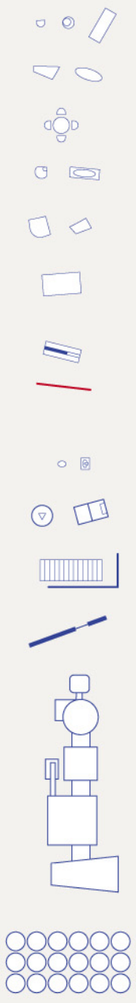
ABBREVIATIONS

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)