

UNITED STAR SHIP AVENTINE NCC-82602 REFIT DOCUMENT

Location: Utopia Planitia Shipyards, Mars

Stardate: 59703.958 ???

Document version: 1.1

Author: Mark Rademaker

LOG ENTRY:

This refit is planned to convert the Aventine NCC-82602 from a "McKinley" (NX) pattern to a "DeSilvo" pattern (NCC). While labeled as an "NCC" the Aventine currently is identical to NX-82600. (U.S.S. Vesta) with exception of the added experimental quantum slipstream conversion.

NCC-82602 is subject to refit earlier as expected because of the destruction of NX-82600 during the war against the Borg. The refit is scheduled to start at stardate 58969.656 and will take up to 4 months. Currently the Aventine is docked in drydock 18 here at Utopia Planitia. Drydock 18 is an enclosed dock that requires a higher security clearance and is off limits to all normal personal, including medical staff.

Major Systems List

GENERAL SPECIFICATIONS:

United Starship Aventine
Starfleet registry: NCC-82602
Class: Vesta
Category: Multifission explorer
Commissioned: 1/1/2380
Yard: Utopia Planitia Fleet Yards, Mars
Length: 672 M
Width: 195 M
Height: 88 M
Mass: 321,630 MT
Cargo Capacity: 24000 MT
Number of Decks: 23
Officer crew: 175
Enlisted crew: 570
Families: unknown to date
Total Emergency capacity: 3500
Expected lifetime: 80 years
Time between refit: 7-15 years

BASIC CONSTRUCTION:

Tritanium lattice framework
Hard duranium shelled hull
Tetraburnium ablative armor plating (stacked/fused)

STRUCTURAL INTEGRITY SYSTEMS:

Embedded structural integrity field
1x Fall off strength controller
1x Flex limiter module
1x Baryon collector

COMPUTER SYSTEMS:

Crew interface software: Lcars I+II
Computing base: Quantum/A-Neural
Storage capacity: 1,500000 kiloquads
1x Engineering computer core
1x Main computer core
1x Redundant core
2250x Dedicated Module
Distribution nodes: shielded bio-neural gel packs

THRUSTER PROPULSION SYSTEMS:

Modes: continous/pulse/blast
Max. continous firing time: 8 Hours
Max. pulse firing time: 12 Hours
Max. blast firing time: 60 Seconds
8x Low profile vectoring thruster
4x Low profile vectoring thruster (Backup)
2x Thruster gyrobalance scanner

IMPULSE PROPULSION SYSTEMS:

IPS fuel : Deuterium (solid/liquid)
Reaction chambers per drive: 2
A/G per drive: 2
Vectoring exhaust/nozzle
Trail Scatter System (main only)
2x Main impulse engines
2x Auxiliary impulse engines
4x Deuterium dump/fill hatch

WARP PROPULSION SYSTEMS:

Warp Reactor: Matter/Anti Matter
Fuel M injection: Bose-Einstein condensate Deuterium
Fuel AM injection: Antihydrogen
M/A reaction element: Dilithium
Normal Cruising speed: Warp 8
Maximum Cruising speed: Warp 9.99
1x Stealth Trail Device (Warp 8 or lower)

QUANTUM SLIPSTREAM PROPULSION SYSTEMS:

Warp reactor conversion module: X-1/deSilvo
Max. speed in warp scale: Warp 14 (surface subspace domain)
M/A reaction element: Benamite
2x Deflector point focus module
8x Multi layer Subspace analyzer
2x Chroniton integrator system
1x Sympathetic Fermion transceiver (QS controller system)

MAIN NACELLE SYSTEMS:

2x High Warp capable nacelle casing
2x Primary plasma flow regulator
2x Secondary plasma flow regulator
2x Primary plasma conduit
2x Secondary plasma conduit
2x Over pressure blow off valve
1x Primary plasma transport regulator
1x Secondary plasma regulator
Each nacelle contains:

3x Bussard Ramscoop collector
2x particle aperture/raster
2x Warpengine field grille
2x Primary plasma injector
2x Secondary plasma injector
1x Control room
1x Cycle fractionator
2x Matter Processor
1x Magnetic field generator
1x Magnetic field collector
1x off Axis field controller
32x Warp Coil set
1x Heat dissipation module
3X Plasma acceleration centrifuge
4x Maintenance hatch
1x Off axis field controller/
1x Plasma venting hatch
1x Plasma fill nozzle
1x Quantum Slipstream field sensors
1x Quantum Slipstream to Warp inertia reducer
1x Emergency nacelle release

TRANSPORTER SYSTEMS:

10x Quantum resolution personnel transporters
10x FIFO based emergency transporters
12x Non lifeform cargo Transporters
1x Lower transport emission grid
1x Upper transport emission grid

COMMUNICATION SYSTEMS:

Intraship transmission types: voice/data/holo
Personal communicators range: 1200km
Ship to Surface communication range: 50,000-70,000 KM
Data transfer rate Ship to Ship, 37 kiloquads/second
Data transfer rate Ship to Surface 25 kiloquads/second
Subspace comm speed: 9.9998
1x Primary subspace radio array
1x Auxilary subspace radio array
1x Experimental zero latency quantum mirror array
2x Dedicated comm buoy launcher

NAVIGATION SYSTEMS:

Deflector grid type: Hull grid
1x Primary navigational deflector
1x Auxilary deflector
1x Primary navigational sensor bundle
1x Secondary navigational sensor bundle
3x Center top nav. light
3x Center bottom nav. light
4x Port nav. light
4x Starboard nav. light
8x Dual inertia damper
1x Manual control system
8x Shuttle landing approach light
2x Shuttle bay tractor beam emitter

SCIENCE SYSTEMS:

2x Forward generic probe launcher
2x Rear generic probe launcher
2x Dedicated light domes
1x Multidimensional wave-function analysis module
1x Secondary sensors
3x Sensor ring array, each containing;

Long Range sensor array:
High resolution full spectrum max.range: 10 light years
Low resolution full spectrum max. range: 24 light years

Proximity sensor array:
Range: 20.000 KM
Maximum scan density: $1P/M^3$

Dedicated Starchart sensor:
Scanning range: 8 lightyears
Minimum precision: 100 cm

1x Cross node combiner
1x Frequency neutralizer
3x Autonomous controller

BOARDING SYSTEMS:

2x Docking port primary hull
2x Docking port secondary hull
1x Main shuttlebay door
1x Secondary shuttlebay door
4x Cargo bay doors
2x External surface hatch
6x Airlock

EMERGENCY/RESCUE SYSTEMS:

Saucer separation: emergency only
1x Forward tractor beam emitter (dynamic push/pull/roll)
1x Rear tractor beam emitter (push/pull)
134x 6-7 person escape pod
1x warpcore ejection system
1x warpcore ejection hatch

1x coredump sensors
1x antimatter containment ejection system
1x hardwired ringfield stabilizer
1x dedicated location/sos buoy launcher

MAIN FACILITY AND COMMAND SYSTEMS:

1x Main Bridge
1x Auxilary/Battle Bridge
1x Runabout/Platform elevator
1x Primary shuttle bay
1x Secondary shuttle bay
1x Captains ready room
4x Cargo bay
1x Arboretum
1x Main medical bay
2x Conference room
2x Forward observation lounge
1x Primary observation lounge
1x Education center
20x Multi purpose laboratory
2x Starchart/Astrometrics bay
6x Holodeck
5x Personnel transporter room
1x Mission command centre

LIFE SUPPORT SYSTEMS:

Emergency forcefield type: Bulkhead containment web distribution
Oxygen production: dedicated energy to Oxygen system
Radiation protection: hard duranium saturation/shields
Primary food processing: Replication units
Secondary food processing: Galley
H2O Storage: 100000L
Max. H2O Cycles: 14500
1x H2O Recycler system
1x External Oxygen intake
1x External H2O intake
1x Waste processing plant

COOLANT SYSTEMS

Main cooling method: heat dissipation
Secondary cooling method: radiative coating
1x Pylon heat dissipation vents
1x Primary hull heat dissipation vents
1x Secondary hull heat dissipation vents
12x Core thermal absorber module

DEFENSIVE SYSTEMS:

Type XII Phaser output power: 8.3 MW
Type XII Phaser revision: 2
Max. shield energy output: classified
Max. simultaneous torpedo spread: 14
Mark XII Phaser cannon modes: Automatic/Burst/lockstream
Mark XII Phaser cannon max. output power: 55GW (0,3/60 seconds)
2x Mark XII phaser cannon energy storage/loading system
2x Mark XII Phaser cannon (Forward mounted)
4x Forward generic torpedo bay
4x Forward dedicated targeting sensors
4x Rear generic torpedo bay
4x Rear dedicated targeting sensors
4x Type XII Phaserbank
4x Type XII Phaser strip
4x Primary Phaser energy distribution node
4x Secondary Phaser energy distribution node
2x Redundant Phaser multi targeting sensor
1x Primary shield generator
1x Secondary shield generator
1x Experimental shield regenerator module

AUXILIARY CRAFT:

1x Danube class runabout
1x New Atlantic class runabout (cpt. yacht version)
4x Type 11 Shuttle
2x Type 9 shuttle
6x Workbee
2x Sphinx

