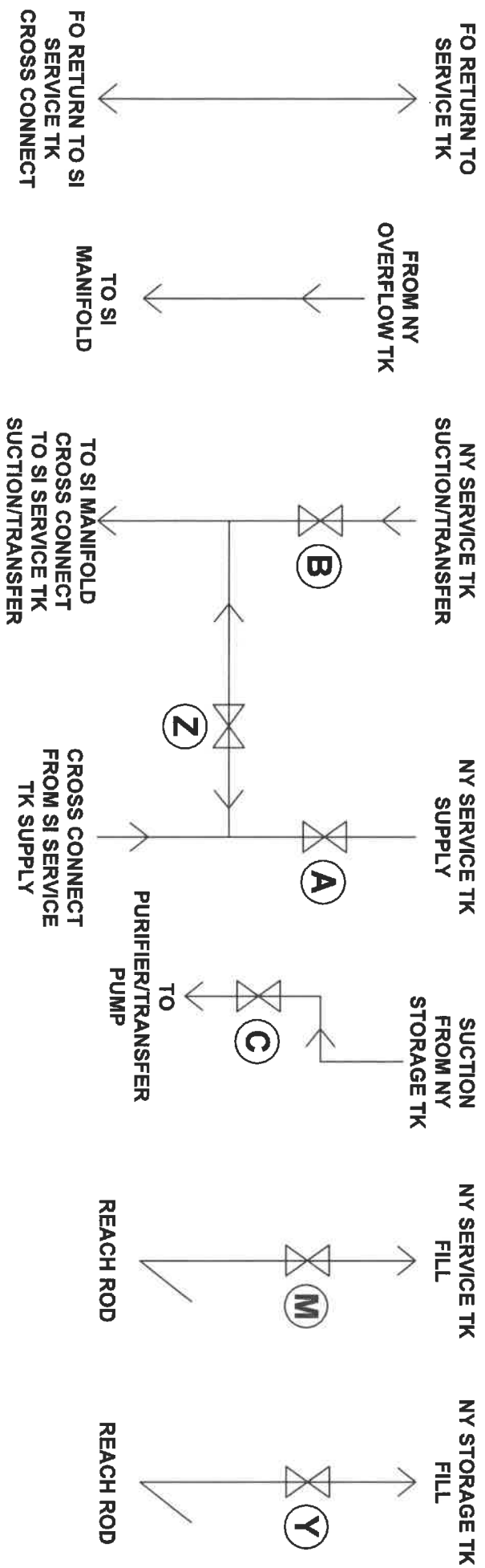


FUEL OIL MANIFOLD NY (STBD)



- * Valve A - Service Tk supply to Main Engines/SSDGs/Boilers
- * Valve Y - open when fuelling (Valves W & Y on the 'FUEL OIL MANIFOLD SI (PORT)' drawing need to be opened also)
- * Valves C, M - Open when running purifier from storage tk to service tk during normal operation
- * Valve B - Suction/Transfer from service tk - cross connected with suction/transfer from SI Service TK. Normally Closed.
- * Valve Z - Emergency cross over. Normally Closed
- * FO Service tanks overflow to FO Storage Tanks.

NOVEC System and Siemens Fire System

Notes:

NOVEC System Notes:

- * **General notes:**
 - 6 NOVEC bottles for main engine room space (900#), 1 for EOS (600#), and 1 for EDG (200#).
 - NOVEC 1230 retardant removes the heat leg from the fire triangle to extinguish
 - NOVEC JBox – activated by the pressure switches, which sends an electrical signal to shutdown panels for the Main engines, SSDGs, Boilers, and Ventilation.
- * **Before activation ensure:**
 - The space is evacuated
 - Watertight doors are closed between the engine room and both Aux machinery spaces.
- * **Remote activation stations:**
 - **Locations:**
 - In EOS, for Main Engine Room Space, 60 sec. delay
 - In Engine Room Stairwell, for EOS, 30 sec. delay
 - **To Activate remotely:**
 - Activate lever on valve control pilot bottle (by pulling pin and activate the lever on the top of the bottle), then do the same to activate lever on cylinder control pilot bottle
- * **Local activation station: (Located in NOVEC Locker in NYE Aux Machinery Space)**
 - **To Activate Locally:**
 - Release the control valve pilot bottle (by pulling pin and activate the lever on the top of the bottle), then do the same for the cylinder control pilot bottle, by activating both bottles it then activates the sirens located in each space and the time delay bottle (bottle with round brass disc on the valve)
- * **Upon completion of the time delay bottle**
 - Nitrogen from the valve and cylinder bottles flow through 1/8" stainless tubing to the nitrogen cylinders (1800 psi) which triggers flow thru rubber hoses to red fire retardant cylinders (Novec 360psi).
 - Before the NOVEC retardant is released into the space the red square pressure switches are activated one which shutdown the Main Engines, SSDGs, boilers, and ventilation for effective fire suppression. Another that operates the horn/strobe in the activated spaces.

- * **EDG space notes:**
 - No time delay on this system
 - 2 heat detectors in the space that would automatically set off the system if either one are activated

Siemens Fire System Notes:

- * **General notes:**
 - **Fire Panels** (Located in EOS, SI & NY Pilot Houses)
 - 120V emergency circuit (breaker located in Emergency power panel EP102 – in SIPH)
 - To deactivate – pull battery first then shut 120V source
 - **Smoke Detectors**
 - Located in the Main Machinery space, VSP rooms, Aux. Machinery spaces, and on all decks
 - Use canned smoke to activate.
 - Activates fire alarm
 - Does not activate fire screen doors
 - If detector located directly in front of the elevator is activated the elevator goes to the furthest possible deck and remains there until the fire condition is cleared
 - **Heat Detectors**
 - Located in the Main Machinery space, Aux. Machinery Spaces, EDG, and VSP rooms

Safety System Notes:

Fire System General Notes:

* Fire Pumps

NOTE: Make sure all fire pump overboard valves (#1, #2, and #3) are shut upon start up otherwise sufficient pressure will not be able to be obtained.

- Main E/R fire pump #1 & #2 (located on Stbd side Main engine room near SSDGs) should run around 80 PSI
- Emergency E/R Fire pump (located in NY Aux. space) should run around 70 PSI

* Fire Stations

- 29 Fire Stations located throughout the Vessel
 - Engine room – 2 Fire stations
 - SemiPortable Dry Chem near Boiler
 - Aux Space (NY & SI) – 2 Fire stations in each
 - Shaft Alley (NY & SI) – 2 Fire stations in each
- Voith Compartment (NY & SI) – 1 Fire Station in each

* Fire Main Isolation valves

- Intermediate deck (under stairwell) – isolates engine room
- Main NYE Deck (Room next to Elevator) – For emergency fire pump only
- NY Bridge Dk (Top of stairwell, in overhead) – Isolates fire station #1
- SI Bridge Dk (Top of stairwell, in overhead) – Isolates fire station #5
- Security Equip Rm (hurricane Dk, Port Side) – Isolates fire stations #2, #3
- EDG Room – Isolates fire station #4
- In Fiddley one deck above EOS – Fire main isolation valve for engine room from pumps #1 & #2.

* Fire Damper System – Electrically operated dampers (120V), Not Fusible link

- If Fire Damper closes, either by testing or closed due to a fire, its associated area ventilation fans will shutdown.
- Main Fire damper shutdown panel is located in Elect. Equipment room on Hurricane Deck
 - Zone 1 – EOS (Panel located in EOS)
 - Zone 2 – NY Passenger Area (Panel located in Electronics Room Under NY Pilothouse)
 - Zone 3 – SIE Passenger Area (Panel located in Electronics Room Under SI Pilothouse)
 - Zone 4 – NYE Crew Area (Panel located in Fan Room Under NY Pilothouse)
 - Zone 5 – SIE Crew Area (Panel located in Fan Room Under SI Pilothouse)
- Each Zone has sub panels A, B, C located in various locations (ie. Electrical closets, intermediate deck, fan rooms, etc)

- * **Fire Screen Door System** – Main Breaker located in snack bar panel
 - SI Pilot house control panel (Main) – switches operate all doors on each deck
 - NY Pilot house control panel (remote) – switches operate all doors on each deck.
 - Bridge deck SI End Electrical closet (next to elevator) – UPS located in back of the closet. If power is lost to the control panel in the SI Pilothouse check to ensure UPS is operating correctly, may need to be reset.

Novec System General Notes: (Novec Locker located in NY Aux space Port side)

See manufacturers manual for more information.

- * **EOS** (Release either local at bottles or in stairwell going up to main deck from EOS)
 - 1 Novec 1230 Cylinder & 1 Nitrogen Release Cylinders
- * **Engine Room** (Release either local at bottles or in EOS)
 - 6 Novec 1230 Cylinders & 9 Nitrogen Release Cylinders
- * **Emergency Generator Room** (Release local at bottle or outside EDG room)
 - 1 Novec 1230 Cylinder

Emergency Panel Locations:

(IE. Fuel shutoff, E-Stop, Fire Damper Shutdown, Watertight door Release, Fire System annunciation panel, ETC.)

- * **Engine Room**
 - **EOS**
 - Fuel Shutoff, E-Stop Control Panel, Watertight door release Panel, Fire Damper Shutdown panel, Fire system Annunciation Panel, Novec Remote Release (for Engine room space) (EOS Novec Remote Release Located on stairwell in engine room)
 - **Pilot house (NY & SI)**
 - E-Stop Control Panel, Watertight Door Release Panel, Fire Damper Shutdown panel, Fire system Annunciation Panel
 - **EDG**
 - EDG Fuel Shutoff

Cathodic Protection Notes: (located under EOS)

See manufacturers manual for more information.

Marcon Screen Notes: (located under EOS)

See manufacturers manual for more information.

- * **Blue** – ACK RTN – Acknowledged, Trouble return to normal
- * **Black** – ACK ALM – Acknowledged, Trouble still exists
- * **RED** – UNACK ALM – Unacknowledged existing alarm