



## **ENGINEERING CHECKS**

**CG 47 CLASS**

## AUXILIARIES (AX) PRE-UNDERWAY PHASE

5811	ANCHOR WINDLASS (Inport Drop Test)		
Component/Sub-Component	Proposed Procedure	Accepted Procedure	
Inspect Tech Manual Support			
Inspect PMS Support			
Inspect posted operating/safety instructions and lubrication data			
Inspect fluid samples			
Inspect for proper HPU fluid levels			
Inspect for proper lubrication of mechanical components			
Inspect Gauge Calibration			
Inspect relief valve data is properly posted			
Inspect all flex hoses are properly tested and labeled			
Inspect mechanical brake operator linkages			
Inspect stroke control linkages			
Inspect flange shields			
Inspect for adequate nitrogen charge for windlass			
Inspect speed limiter			
Inspect for adequate LP air pressure for chain compressor			
Inspect capstan/wildcat brake assembly – mechanical brake components (worm gear end cap as required).			
Inspect electric brake			
Inspect filter differential indications			
Inspect HPU mechanical seal leakage			
Test Compensating Relief Valve is properly set			
Test - Conduct Inport Anchor Drop test			
- Inspect Servo/Replenishment Pressures during wildcat operation			
- Inspect Chain Compressor operation			
- Inspect Anchor drops from the hawsepipes			
- Test electric brake operation			

- Inspect reduction gear lubrication (gauges/sight flows/dipsticks)		
Test crossover valve operation		
Test wildcat/windlass solenoid switch		
Test Main Relief Valve lifts correctly		

5600 / 5611	STEERING (Inport System Verification)		
Component/Sub-Component	Proposed Procedure	Accepted Procedure	
Inspect Tech Manual and EOSS Support			
Inspect PMS Support			
Inspect operating/safety instructions and hydraulic system/electrical wiring diagrams are posted			
Inspect proper fluid levels			
Inspect hydraulic oil fill connections are properly labeled			
Inspect fluid samples			
Inspect Gauge Calibration			
Inspect rudder stock grounding straps			
Inspect filter indicators			
Inspect Servo/Replenishment Pressures are correct			
Inspect all flex hoses are properly tested/labeled			
Inspect flange shields are properly installed			
Test N2 accumulators are properly charged			
Test the trick wheel stops			
Inspect the crush block clearances			
Test the rudder follow up error (1 deg increments at 0 to 5 deg; 5 deg increments at 5 to 25 deg)			
Test ABT operation			
Test compensator relief valve settings			
Test main relief valve settings			
Test (inport) rudder swing checks			
Test (inport) blocking valve			
Test auxiliary emergency steering pump			
Test manual emergency steering system			
Inspect ram for scoring			
Test steering casualty alarm			
Test pump remote operation and transfer of controls to pilot house			
Test for static rudder split (pilot house in control)			
Test for indicator error (pilot house in control)			

5512 / 5513 / 5515	LOW and MEDIUM PRESSURE AIR SYSTEM	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EOSS Support		
Inspect PMS Support		
Inspect Gauge Calibration		
Inspect operating/safety instructions are posted		
Inspect compressor oil level and oil samples		
Test compressor pressures and temperatures		
Test compressor capacity control system		
Inspect compressor belt condition		
Test compressor auto control and safety switches		
a. Operational control switches (115/120/125)		
b. Low oil pressure		
c. High discharge pressure		
d. High air and water temp		
Inspect all relief valve testing is within periodicity		
Inspect location of intake/vent supply		
Inspect receiver flask certification		
Test priority valve operation		
Inspect sea water cooling system		
Inspect 50/50 mixture of ethylene glycol		
Test type I and type II dehydrator operation		
a. Gauge calibration		
b. Tower operation		
c. Purge air pressure		
d. Automatic drain operation		
e. Dew point		
f. Inspect PMS and Tech Manual support		

5511 / 5515	HIGH PRESSURE AIR SYSTEM	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EOSS Support		
Inspect PMS Support		
Inspect Gauge Calibration		
Inspect operating/safety instructions are posted		
Inspect compressor oil level and oil samples		
Test compressor auto control and safety switches		
a. Start / Stop switch		
b. Low oil pressure switch		
c. Jacket water temp switch		
d. Compressor temp/pressure monitor operation		
Inspect compressor pressures and temperatures		
Inspect compressor drive belt condition		
Inspect condensate monitoring/drain system		
Inspect all flex hoses are properly tested/labeled		
Inspect all relief valve testing is within periodicity		
Inspect HP air flask certification		
Inspect sea water cooling system		
Inspect air intake/ventilation supply location		
Inspect all HP/LP air reducing stations		
Inspect fresh water pump belts		
Inspect capacity		
Inspect oil wipers		
Inspect pressure regulator valve		
Inspect 50/50 mixture of ethylene glycol		
Inspect seals for oil leaks		

<b>5210</b>	<b>FIRE PUMPS (ELECTRIC and STEAM)</b>	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EOSS Support		
Inspect PMS Support		
Inspect Gauge Calibration		
Inspect Transducer Calibration		
Inspect Coupling Guard		
Inspect relief valves are within periodicity		
Test remote start/stop functions		
Test local start/stop functions		
Inspect pump operation/design discharge pressure, unusual noise, bearing temps, etc.		
Test the over speed trip (STEAM)		
Test the speed limiting governor (STEAM)		
Test the turbine auxiliary lube oil pump low-pressure automatic start switch operation (STEAM)		
Inspect lube oil filter indications and oil level (STEAM)		
Test combination exhaust and relief valve (STEAM)		
Inspect the packing and mechanical seal leakage		
Inspect for ferrous fasteners		
Inspect the resilient mounts		
Inspect condition of expansion joints		
Inspect all flex hoses are properly tested/labeled		
Inspect piping lagging		
Inspect grounding straps		
Test remote operated suction/discharge valves		
Inspect the suction strainer		

<b>5240</b>	<b>SEAWATER SERVICE PUMPS</b>	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EOSS Support		
Inspect PMS Support		
Inspect Gauge Calibration		
Inspect Transducer Calibration		
Inspect Coupling Guard		
Test remote start/stop functions		
Test local start/stop functions		
Inspect pump operation/design discharge pressure, unusual noise, bearing temps, etc.		
Inspect packing and mechanical seal leakage		
Inspect for ferrous fasteners		
Inspect foundation and resilient mounts		
Inspect condition of expansion joints		
Inspect all flex hoses are properly tested/labeled		
Inspect piping lagging		
Inspect grounding straps		
Test remote operated suction/discharge valves		
Inspect the suction strainer		
Test the firemain to seawater reducing station operation, condition and relief valve test periodicity		

5140	AIR CONDITIONING PLANTS		
Component/Sub-Component	Proposed Procedure	Accepted Procedure	
Inspect EPA certifications			
Inspect Tech Manual and EOSS Support			
Inspect PMS Support			
Inspect Gauge Calibration			
Inspect operating/safety instructions are posted			
Inspect compressor oil level and oil samples			
Inspect warning at entrance (Freon usage) posted			
Inspect Refrigerant logs			
<b>Test halocarbon monitor operation</b>			
Test capacity control system operation			
Test calibration of safety shutdowns/alarms			
a. HP/LP pressure switches			
b. C/W, S/W flow/press/temp switches			
c. Low refrigerant temp switch			
d. Low oil pressure switch			
Inspect moisture indicators			
Test compressor operation (parameters, suct/disch valves)			
Test for leaks (oil/freon/water)			
Inspect chilled water pump			
a. suction valve			
b. discharge valve			
c. mechanical seal			
Inspect chilled water expansion tank			
a. Proper operating level			
b. Filling pipe air gap			
c. Relief valves and vacuum breakers			
d. Hose disconnects and warning sign			
Test PPU			
Inspect recovery unit (Inventory Item)			
Inspect for available vacuum pump			
Inspect sea water system			
a. Pump operation			
b. Zincs and nylon tube inserts present			
c. Condenser header condition			
d. Seawater Regulating valve			
Inspect motor controller			
Inspect coupling guard			
Inspect resilient mounts			

5811				ANCHOR WINDLASS DROP AND RETRIEVAL DEMONSTRATION			
Component/Sub-Component		Proposed Procedure		Accepted Procedure			
Inspect flex hoses							
<b>AUXILIARIES (AX) UNDERWAY DEMO PHASE</b>							
Test - Conduct Anchor Drop and Retrieval test							
- Inspect Servo/Replenishment and Main Relief Pressures during wildcat operation							
- Inspect Anchor drops from the hawsepipe							

5600 / 5611		STEERING DEMONSTRATION			
Component/Sub-Component		Proposed Procedure		Accepted Procedure	
Inspect proper fluid levels					
Inspect correct Servo/Replenishment pressures					
Test - Demonstrate timed rudder swing checks/blocking valve test Ahead (as per provided procedure)					
Test - Demonstrate timed rudder swing checks/blocking valve test Astern (as per provided procedure)					
Inspect for dynamic rudder split from helm indicator					

5331	WATER HEATERS		
Component/Sub-Component	Proposed Procedure	Accepted Procedure	
Inspect Tech Manual and EOSS Support			
Inspect PMS Support			
Inspect list of heaters onboard and spaces hot water services (berthing/laundry/galley)			
Inspect gauge calibration			
Inspect outlet temp at heater (verify operation)			
Inspect relief valve test data			
Inspect relief valve drain piping			
Inspect cold water inlet pipe for check valve			
Test high temp switch setting			
Test high temp switch warning light			
Inspect lagging condition			
Inspect for steam / water leaks			
Inspect Temp Reg Valve for locking device			
Inspect heater foundation			
Test water temp at basin/spigot			

5351	STEAM RISER and COPPER SERVICE STEAM PIPING		
Component/Sub-Component	Proposed Procedure	Accepted Procedure	
Inspect Gauge calibration			
Inspect PMS Support			
Inspect warning placard posted – warning bleed pressure before disconnecting...			
Inspect piping/valve condition and operation			
Inspect protective cover			
Inspect relief valve for test data			
Inspect overall area preservation			
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Inspect ship has reviewed NAVSEA Wash DC R 130557Z FEB 01 concerning copper piping			
Inspect the ship has established an inspection program IAW NAVSEA message			
Inspect - Conduct a walkthrough of all copper service steam piping to check for leaks IAW NAVSEA message			

5315	WATER PRODUCTION DEMONSTRATION – REVERSE OSMOSIS		
Component/Sub-Component	Proposed Procedure	Accepted Procedure	
Inspect Tech Manual Support			
Inspect PMS Support			
Inspect relief valves are within periodicity			
Inspect HP pump oil level			
Inspect flexible hose condition and test tag			
Test salinity dump valves			
Test salinity panel			
Inspect Accumulator Pressure			
Test the operation of the product and brine flowmeters			
Test - Demonstrate 80% water production capability during the 4 Hour Water Production Demonstration			
- Inspect RO to ensure the unit has not been set to produce above maximum recommended capacity (discharge pressure setting, production and sea water injection temperature diagram curve and tables)			
- Inspect the operating panel for alarm / unusual conditions.			
- Inspect 3 and 20 micron filter differential pressure			
- Inspect all fittings and connections for leaks			
- Inspect demineralizer operation			
Inspect freshwater flush			

5311	WATER PRODUCTION DEMONSTRATION – FLASH TYPE EVAPS	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect PMS and Tech Manual support		
Inspect gauge calibration		
Test flow meter		
Inspect evaporator shell (sight glasses, diffuser cap and scale buildup)		
Test salinity dump valves		
Test interlock device between potable water and feed water valves		
Inspect feed pump (labeled, packing gland, foundation, seal / gland cavity)		
Inspect brine pump (labeled, packing gland, foundation, seal / gland cavity)		
Inspect distillate pump (labeled, packing gland, foundation, seal / gland cavity)		
Inspect brine pump (labeled, packing gland, foundation, seal / gland cavity)		
Inspect heater drain pump (labeled, packing gland, foundation, seal / gland cavity)		
Inspect flexible hose condition and test tag		
Inspect feedwater strainer (foundation and basket)		
Inspect pipe labeling and lagging condition		
Test – Demonstrate 80% water production capability during the 4 Hour Water Production Demonstration		

8543	DUMBWAITER	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EOSS Support		
Inspect PMS Support		
Inspect posted operating/safety instructions at each station		
Inspect posted lubrication chart at top station		
Inspect trunk bi-parting doors		
Inspect machinery access cover bolts & nuts		
Inspect machinery oil level		
Inspect hoist machinery mounting hardware		
Inspect hoist drum		
Inspect hoist wire rope and end fittings		
Test slack rope device and limit switch		
Test the hoist brake		
Test the up over travel limit switch		
Test the up deck level limit switch		
Test trunk bi-parting door limit switch		
Inspect car broken rope device		
Inspect car bi-parting door assembly		
Inspect car for missing components		
Test lower level trunk bi-parting doors and limit switch		
Test down over travel limit switch		
Test down level limit switch		
Inspect trunk buffer springs		
Test E-call and sound powered phone system when installed		
Inspect clean out cover mounting hardware		
Inspect motor controller for loose leads, posted placards, grounds and correct fuses		
Inspect dumbwaiter trunk for preservation and cleanliness		
Inspect guide rails		
Test each control station E-stop button		

8543	PACKAGE CONVEYOR	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EOSS Support		
Inspect PMS Support		
Inspect posted operating/safety instructions (two man rule/ do not ride) at each station		
Inspect posted lubrication chart at top station		
Test for audible warning when starting conveyor		
Inspect that all station doors are locked		
Inspect that all station controllers are locked		
Test door interlock system		
Inspect load/unloader at each station		
Test door cannot close when loader/unloader is in horizontal or 30 deg inclined position		
Test loader/unloader down interlock switch at each station below upper most level		
Test jam limit switch at each station		
Inspect safety shields are properly installed		
Test up-over travel switch/device operation		
Test clean out door interlock switch if applicable		
Test down overtravel device and switch		
Test indexing feature		
Test E-stop and run/stop buttons at all stations		
Inspect proper florescent lighting at each station		
Inspect trunk shielding and mounting hardware		
Inspect trunk guide rails		
Inspect conveyor trunk for preservation/cleanliness		
Inspect all carrier trays are installed and tight		
Test all station growlers and phone circuits are functional and headsets are present		
Inspect conveyor has been load tested within the last five years to include weight test data		
Inspect speed reducer is filled to proper level with oil		
Inspect drive, driven and carrier chains are properly tensioned		
Test bite panel for correct components and proper operation		
Inspect motor controller for loose leads, posted placards, grounds and correct fuses		
Inspect drive machinery for missing/loose components		

5161	REFRIGERATION PLANTS	
Components/Sub-Components	Proposed Procedure	Accepted Procedure
Inspect EPA certifications		
Inspect Tech Manual and EOSS Support		
Inspect PMS Support		
Inspect Gauge Calibration		
Inspect operating/safety instructions are posted		
Inspect compressor oil level and oil samples		
Inspect warning at entrance (Freon usage) posted		
Inspect Refrigerant logs		
<b>Test halocarbon monitor operation</b>		
Test capacity control system operation (vent plug)		
Test calibration of alarm / shutdowns		
a. HP / LP pressure switches		
b. Sea water flow / pressure switch		
Test compressor operation (parameters, suction/discharge valves)		
Inspect for piping suppressors		
Inspect for leaks (oil/freon/sea water)		
Inspect refrigerant recovery system/vacuum pumps		
Inspect sea water system (pump operation, zincs, nylon tube inserts, and condenser header)		
Test chill/freezer boxes for fan operation, lighting, coil condition and curtains		
Inspect ventilation (flow/location/indicators and alarms		

6641	FAN ROOMS	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect deck condition		
- No standing water		
- Deck rusted / exfoliated		
- Deck drain not installed		
- Deck drain missing, not secured within deck socket or inoperative		
Inspect deck/bulkheads have no painted over rust		
Inspect lighting is operative and covers installed		
Inspect adequate lighting present in space		
Inspect vent duct condition		
- Access covers present		
- Access cover fasteners not rusted/missing		
- Duct interior is clean		
Inspect correct vent/piping system labeling		
Inspect fan motor installed correctly (flow)		
Inspect filters are clean and can be easily removed		
Inspect filter DP gauge is operative		
Inspect vent heating element is operative and not deteriorated		
Inspect cooling coils are clean		
Inspect thermostatic controls are calibrated, connected and operational		
Inspect the cooling coil drain is piped to the deck drain and is not clogged		
Inspect the proper color coding of piping		
Inspect that all hand wheels are present		
Inspect for damaged / missing lagging		
Test the C/W or steam solenoids are operational		
Inspect for chilled water / steam leaks		
Inspect for bull's eye and CCOL in space		
Inspect for any unauthorized stowed material		
Inspect for any unauthorized flammables		
Inspect the filter cleaning shop		

5331	POTABLE WATER PUMPS	
Component/Sub-Component	Proposed Procedure	Accepted Procedure
Inspect Tech Manual and EOSS Support		
Inspect PMS Support		
Inspect Gauge Calibration		
Inspect Transducer Calibration		
Inspect Coupling Guard		
Test local start/stop functions		
Inspect pump operation/design discharge pressure, unusual noise, bearing temps, etc.		
Inspect packing and mechanical seal leakage		
Inspect for ferrous fasteners		
Inspect foundation and resilient mounts		
Inspect all flex hoses are properly tested/labeled		
Inspect grounding straps		

**ELECTRICAL (EL)  
PRE-UNDERWAY PHASE  
CG 47**

<b>3202/3113</b>	<b>SHIPS SERVICE GAS TURBINE GENERATORS</b>	
<b>COMPONENT/SYSTEM</b>		<b>PROPOSED PROCEDURE</b>
Test dead bus pick-up 3202/047		A-9R
Test reverse power relays 3202/047		R-6 R-7 (ECP 422 & 515 installed)
Test auto parallel operation		EOP
Test manual parallel operation		EOP
Test manual load shedding		24M-3R
Test fault current detector		18M-5R 18M-6R (ECP 515 installed)
<b>ELECTRICAL PLANT CONTROL CONSOLE (EPCC)</b>		
<b>COMPONENT/SYSTEM</b>		<b>PROPOSED PROCEDURE</b>
Perform Logic Self-Test		EOP
<b>400 HERTZ CONVERTERS</b>		
<b>COMPONENT/SYSTEM</b>		<b>PROPOSED PROCEDURE</b>
Test split and parallel operation		EOP / CSOSS
Test Shunt FIU Shunt Trip Operation		U-4
<b>4221</b>	<b>TELL-TALE PANEL/NAVIGATION SIGNAL LIGHT PANEL</b>	
<b>COMPONENT/SYSTEM</b>		<b>PROPOSED PROCEDURE</b>
Test navigational lighting panel		R-2/R-3
Measure insulation resistance of Navigational panel.		S-1
Measure insulation resistance of Signal light panel.		S-1
<b>4331</b>	<b>ANNOUNCING SYSTEMS</b>	

<b>COMPONENT/SYSTEM</b>		<b>PROPOSED PROCEDURE</b>
Test general, chemical, and collision alarms from all stations		Q-1R/R-1
Test 1MC from all stations		Q-1R/R-1
Test 5 MC operation		Q-2R
Test 21MC operation		Conduct Operational Test
Measure speaker group insulation resistance		A-1
<b>4751</b>	<b>DEGAUSSING SYSTEM</b>	
<b>COMPONENT/SYSTEM</b>		<b>PROPOSED PROCEDURE</b>
Conduct linearity test		Q-1
Conduct ground test.		M-2
Inspect degaussing folder		NAVSEA TECH MANUAL
<b>3202</b>	<b>AUTOMATIC BUS TRANSFER EQUIPMENT</b>	
<b>COMPONENT/SYSTEM</b>		<b>PROPOSED PROCEDURE</b>
Test all Engineering ABTs		R-3
Test all remaining ABTs. (Day 2)		R-3
Test SABT's		18M-4
<b>5331 / 4371</b>	<b>EVAPORATORS</b>	
<b>COMPONENT/SYSTEM</b>		<b>PROPOSED PROCEDURE</b>
Test dump valve operation		S-2
Test alarm settings		S-2
<b>4373</b>	<b>WIND INDICATING SYSTEM</b>	
<b>COMPONENT/SYSTEM</b>		<b>PROPOSED PROCEDURE</b>
Test System For Proper Operation		R-1M

5081	THERMAL IMAGING SURVEY	
COMPONENT/SYSTEM		PROPOSED PROCEDURE
Commence Thermal Imaging Throughout The Ship <b>NOTE:</b> Any equipment surveyed that has a temperature rise of 40 degrees centigrade or above (3 or 4 star) must be repaired or tagged out prior to getting underway. The items will not be available until repairs are completed and re-shot for verification		R-1, R-2
2521	UNINTERRUPTED POWER SUPPLIES (UPS)	
COMPONENT/SYSTEM		PROPOSED PROCEDURE
Test CISE UPS for proper operation		R-2
Test PAMCE UPS for proper operation		R-2
Test S/CE 2 UPS for proper operation		R-2
Test S/CE 3 UPS for proper operation		R-2
Test EPCC UPS for proper operation		R-1

**ELECTRICAL (EL)  
UNDERWAY PHASE**

**NOTE:** Electrical Underway Checks Consist Mainly Of Space Walk-Through

Throughout The Ship.	
In each space inspect the following if applicable:	
<b>(INSPECT) FUSE BOXES</b>	
<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Are fuses pulled from designated circuits without danger tags affixed?	NSTM 300 - 2.4.1
Are there loose or missing locking nuts or gear adrift?	NSTM 300 – 4.8.1
Are circuits properly labeled for easy identification?	GSO 305E
Are there any bent, twisted, misaligned, or broken fuse clips?	NSTM 300 4.8.1
Is the interior rusty or dirty?	NSTM 300 – 4.8.1/5.2.4
Are fuses of the correct amperage and voltage installed?	GSO 303F NSTM 320 – 1.7.4
Are circuits fed from one set of fuses (except battle lantern circuits) multiple?	GSO 331C
Are fuse clips phosphor-bronze instead of silver plated?	NSTM 300 – 4.8.1.2
Were door hinges broken?	5100.19 SERIES NSTM 300
Are non-silver ferruled fuses installed?	NSTM 300 - 2.5.4
Are circuits over fused?	NSTM 300 – 2.5.4
Is clearance provided to permit complete accessibility for maintenance, repair, renewal of fuses, and testing?	GSO 300D
<b>(INSPECT) BATTLE LANTERNS</b>	
<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Were relay-operated lanterns installed in sufficient number?	NSTM 330 – 1.6.4.3.3.1
Are lanterns installed with suitable bracket assemblies to prevent removal of lantern?	NAVSEA 0964-000-2000 NSTM 300
Were lanterns inoperative?	NSTM 330 – 3.6.2
Were test switches and relay frames grounded?	NSTM 330 – 2.1.8
<b>(INSPECT) BATTLE LANTERNS (CON'T)</b>	
<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Were lanterns located in explosion proof enclosures (prohibit)?	NSTM 330 – 1.6.4.3.2.2
Were NEALS lanterns installed and were they	NSTM 330 – 1.6.4.3.2

charged (red indicator)?	
Were relay operated lanterns fused?	NSTM 330 – 1.6.4.3.3.3
<b>(INSPECT / TEST) SHORE POWER SYSTEM</b>	
<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Is shore power being properly rigged?	NSTM 320-2.2.7
Did shore power shunt trip interlocks trip its associated breakers when tested?	IAW PMS IAW EOSS GSO 320D
Was shore power system cabling between the receptacles and the ship's switchboard insulation resistance within EOSS or PMS Limits	SPRU NSTM 300/320
Were shore power indicating lights operative, white in color, and all screws installed?	NSTM 320 – 2.2.9
Were warning signs posted?	GSO 070H
Was there pigtail stowage installed?	GSO 320D
Does the shore power system meet the current standards:	GSO 320D
<ul style="list-style-type: none"> <li>- Have a Viking Connector System</li> <li>- Have AQB-LF400 Amp Circuit Breaker with shunt trip</li> <li>- Have a phase sequencing and phase orientation devices.</li> <li>- Have installed ammeter and selector switch to monitor total shore power current.</li> </ul>	

<b>(INSPECT) CATHODIC PROTECTION SYSTEM</b>	
<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Was the installed Cathodic Protection System operative and adjusted	GSO 633C
Were the rudder grounding straps made of 1-1/2 inch wide braided copper and brazed to the rudder stock and the hull?	NSTM 633 – 3.3.2.7 GSO 633C

Has the system been turned off greater than 15 days?	GSO 633G
Was brush rigging correctly installed?	NSTM 633- 3.3.2.6
Were shaft grounding brushes correctly installed?	NSTM 633 ICCP Tech Manual
Did shaft grounding brushes exhibit full contact with the slip ring?	NSTM 633 – 3.3.2.6 ICCP TECH MANUAL

**(INSPECT / TEST) ALARM SYSTEMS**

<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Test alarm switchboards and panels.	4351/Q-2
Were any alarm and warning systems inoperative or missing parts?	GSO 433J

**(INSPECT) ORDER/INDICATING/METERING SYSTEMS**

<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Were Tank Level Indicators (TLI's) out of calibration or inoperative?	GSO 437 E
Were valve position indicator circuits misadjusted or inoperative?	GSO 430H
Were there missing or inoperative salinity cells?	GSO 531B IAW PMS

**MOTOR CONTROLLERS**

<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Were interiors dirty, rusty, deteriorated, or contained gear adrift?	NSTM 302-3.3.2 GSO 320F
Were wiring diagrams, schematics or overload heater tables missing?	NSTM 302-3.3.1

**MOTOR CONTROLLERS (CON'T)**

<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Was controller electrical wiring properly banded?	ELECT PLT. INST. STD METHODS/GSO 302F
Were Start, Stop, "Emergency Run" or Reset buttons seized, missing or inoperative?	3001/S-1/18M-1
Were rubber boots cracked, torn or missing?	NSTM 300-3.2.2 3001/S-1/18M-1

Were overload relay heaters properly sized and adjusted to provide adequate protection for the motor?	NSTM 302-3.3.2 GSO 302G
Were switches protected against inadvertent activation?	GSO 070H
Were controllers with multiple power sources properly labeled?	GSO 305C
Were motor foundations properly preserved?	GSO 631J
Were controllers and remote operating stations properly labeled?	GSO 305C
Is clearance provided to permit complete accessibility for operation, maintenance, repair, renewal of fuses, and testing?	GSO 300D

**WORKBENCHES**

<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
- Does the workbench conform to standards set forth in NSTM 300 APP H? (Insulation, ground straps, disconnect switches, labeling, ground connections, etc)	NSTM 300 GSO 320E GSO 665 GSO 650

**(INSPECT) ELECTRICAL SAFETY**

<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Were flat irons a high-grade commercial type with a three pronged cord?	NSTM 300-2.7.3.6 GSO 640G
Were Ironing Board Stations in berthing space modified to remove spotlight and fill the access hole? Ensure irons are not hardwired.	GSO 640G

**(INSPECT) ELECTRICAL SAFETY (CON'T)**

<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Have shorting probes been modified by installing a nylon screw in the end of the probe and soldering the clip to the conductor?	NAVELEX 0101, 110A FIG 1-3 IAW PMS
Are portable tools/devices not stamped "Double Insulated" or equipped with a three pronged cord?	NSTM 300-2.7.3.3 IAW PMS

Were Hospital grade plugs used on portable equipment?	NSTM 300-2.7.3.2.8
Were light fixtures, guards, and covers securely mounted?	NSTM 300-4.3.3
Were over-sized lamps installed in lighting fixtures?	NSTM 330-2.2.4 NSTM 330-2.2.9
Were light fixtures missing lenses, protective guards, or faceplates?	NSTM 330-2.1.4 NSTM 330-2.2.6
Did diesel module room have adequate lighting?	GSO 331B GSO 332E
Were spray-tight fixtures adequately protected against water intrusion?	NAVSEA 0964-000-2000
Was bunk lighting cable hanging, or not routed through the inside of bunk stanchions?	NAVSEA 0964-000-2000
<b>(INSPECT) CABLING</b>	
<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Was PVC cabling installed (new construction only)?	GSO 304D
Were dead-ended cables properly identified/terminated?	NSTM 300-4.6.7 GSO 304E NSTM 300-4.6.9 DOD-STD-2003-1
Were useless or improperly installed cables removed?	NSTM 300-4.6.7.1 GSO 304E
Was cabling properly supported, routed or were nylon wire ties being utilized?	GSO 304E

<b>(INSPECT) CABLING (CON'T)</b>	
<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Were cables pulling out of equipment?	GSO 331E
Were cables improperly spliced?	GSO 304E NSTM 300-4.6.8 DOD-STD-2003-1
Were cables protected against being handholds or	GSO 304E

being stepped on?	
Was cabling run through beams without the use of chaffing rings?	NSTM 300 TABLE 300-4-4 GSO 304E
Was cabling running through metal partitions equipped with grommets?	GSO 304E NSTM 320-1.6.11
Were cable stuffing tubes properly assembled ?	NSTM 300-4.6.10.1 NSTM 300 TABLE 300-4-4 NSTM 320-1.6.11 GSO 304E
Were multiple cables running through one stuffing tube?	GSO 304E NSTM 300 TAB. 300-4-4
Were multi-cable penetrators installed in Flammable Liquid Storerooms?	GSO 304E MIL-STD-1310
<b>(INSPECT) BUS TRANSFER EQUIPMENT</b>	
<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Were ABT's installed for the following: <ul style="list-style-type: none"> <li>- Emergency Lighting.</li> <li>- IC Switchboard and panels.</li> <li>- Steering power panel.</li> <li>- Pumps associated with the main and auxiliary machinery plant having Low Voltage Release (LVR) control.</li> <li>- Fire pumps.</li> <li>- Fire extinguishing auxiliaries and controls.</li> </ul>	NSTM 320-1.3.2 GSO 320D
Did ASCO ABT transfer switches have an electrical charge on the metal screw on the manual operator?	NAVSEA FSC SER 03E2/03E2-234
Was the sliding interlock on manual bus transfer switches effective at preventing both breakers from being closed at the same time?	NSTM 300-4.8.4.2
Are feeder circuit breaker megger holes blanked off?	NAVSEA 230319ZNOV 98
Were Normal/Alternate source indicating lights operative?	NSTM 320-2.2.6.4
<b>(INSPECT) SHIP TELEPHONE SYSTEM</b>	
<b>COMPONENT/SYSTEM</b>	<b>PROPOSED PROCEDURE</b>
Was the system unreliable due to unresolved software or hardware deficiencies?	NSTM 430-3 GSO 432
Test battery back-up for telephone system	NSTM 313-2.5 GSO 313J
<b>(INSPECT) MOTORS</b>	

COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were motor foundations properly preserved?	NSTM 300- 5.4.3.10 GSO 631J
Was resilient mounted electrical equipment grounded to the ships hull through ground straps?	NSTM 300- 2.2.1
Did electrical rotating machinery have ball check grease fittings (zerk fittings) installed?	NSTM 244
Were coupling, belt, or chain guards effective?	GSO 320E
POWER PANELS	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Do labels specify the proper information?	GSO 305E
Do Breaker ratings match the circuit label current rating?	GSO 305E
Are multi-phase circuits missing breaker connecting handles?	GSO 324C
Were power panels located inside galley spaces?	GSO 320E
Is clearance provided to permit complete accessibility?	GSO 300D
CASUALTY POWER CABLES	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were cable ends properly terminated?	GSO 304E NSTM 320-3.4.1 DOD-STD-2003
Were cables deteriorated from age, heat, and humidity?	NSTM 079-47.4.2.2.10
Were normally energized power terminals labeled?	NSTM 320-1-2-8-2 GSO 320G
Were racks properly identified as to number/length of cables assigned to the rack?	GSO 305F
CASUALTY POWER CABLES (CON'T)	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Is there a label attached at the end of the cable to indicate the length and stowage rack number?	GSO 305F DOD-STD-2003
Are cable leads properly identified for phase identification?	NSTM 320-1.2.8.2
Were cable ferrules missing or heavily oxidized?	NSTM 079-47.4.2.2.6

Was an improper number/length of cable installed on a cable rack?	NSTM 079-47.5.6.1 GSO 320G
Were wrenches missing from terminals?	NSTM 079-47.4.2.3.3
Were covers installed on power terminals?	NSTM 079-47.4.2.3.4 NSTM 079-47.4.2.3.6 GSO 320G
ELECTRICAL DISTRIBUTION EQUIPMENT	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Was electrical distribution equipment securely mounted?	NSTM 300-4.3.3 GSO 300D
Electrical distribution equipment have loose or missing covers?	NSTM 300-4.3.3
Were control knobs or fasteners missing from electrical equipment?	NSTM 300-4.3.3
Was electrical equipment protected from water intrusion?	NSTM 300-4.4.1 NSTM 300-4.4.5
Is electrical properly mounted or was it suspended solely by electrical cables?	NSTM 300-4.3.3
Were 440 multipurpose outlets properly phased?	NSTM 320-1.4.1
Did Standard Navy Receptacles (SNR) and Multi-Purpose Outlets (MPO) have an interlock switch or was the switch function such that the plug could not be removed from an energized receptacle?	NSTM 320-1.4.1
Were electrical receptacles broken or damaged?	NSTM 300-2.7.6
Were 400HZ AC, 60HZ AC, and DC convenience outlets labeled to prevent equipment being used with the wrong frequency?	GSO 320
SOUND POWERED TELEPHONE SYSTEMS	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were any Sound Powered Circuits below 50,000 ohms resistance to ground?	GSO 432I
Were Sound Powered Call Signal Stations (growlers) inoperative, corroded, damaged or missing parts?	NSTM 430
Were Sound Powered Jackboxes improperly labeled, corroded, damaged, or missing parts?	NSTM 430-3.2
(INSPECT) LIGHTING	

COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were darken ship switches operative and adjusted properly? Ship provide list of darken ship switches for survey	DOD-HDBK-289 NSTM 330-3.6.5
Were light fixtures, guards, and covers securely mounted?	NSTM 300-4
Were over-sized lamps installed in lighting fixtures?	NSTM 330-2
Were light fixtures missing lenses, protective guards, or faceplates?	NSTM 330-2
Were spray-tight fixtures adequately protected against water intrusion?	NSTM 300-4
Did diesel module room have adequate lighting?	GSO 331B/332E
(INSPECT) BATTERY LOCKERS	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Was a Battery Log maintained?	NSTM 313-2 GSO 313F
Is there an electrical interlock between exhaust ventilation and battery charger?	5100.19C C0904 NSTM 313
Test ventilation interlocks	3131/S-2
Are Alkaline and Lead Acid Batteries being serviced in the same facility?	5100.19 C0904 GSO F
Is each locker provided with: - Rubber Gloves and Aprons. - Goggles. - Two battery fillers. - Two battery test sets. - One soda water container.	5100.19 GSO 313F NSTM 313
Does the locker contain an eye wash station and a deluge shower?	NSTM 313-2

(INSPECT) BATTERY LOCKERS (CON'T)	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Are battery storage racks greater than 12 inches between tiers?	GSO 313F
Were battery hold-down clamps provided?	GSO 313F
Are Acids stored in appropriate protective containers?	GSO 313F
Are battery charger plugs and jacks marked NEG. and POS.?	GSO 313F

(INSPECT) MISCELLANEOUS EQUIPMENT	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Is permanently mounted electrical equipment hardwired to the ships electrical system?	NSTM 330-1
Is hardwired electrical equipment permanently mounted?	NSTM 330-1
Was more than 1 multi-purpose power strip connected to one isolated receptacle circuit?	NSTM 300-2.7
Is electrical equipment mounted on non-conducted surfaces properly grounded?	3000 / A-5
Were Surge Protectors of the approved type?	3000 / A-4R
Are portable electric device power cords properly tinned?	3000 / Q-1R
Are permanent-type safety precautions, operating instructions, high voltage warning signs, and resuscitation instructions installed where required?	NSTM -H.5, I-2
Did electrical connection boxes have knockouts pushed in leaving access holes In the side?	NSTM 300-2.
Are non-watertight connection boxes being used in engineering spaces?	GSO 300D
Was rubber matting oil soaked, cracked, punctured, perforated or had imbedded metal or conductive particles?	GSO 634B

(INSPECT) MISCELLANEOUS EQUIPMENT (CON'T)	
COMPONENT/SYSTEM	PROPOSED PROCEDURE
Did dress ship lights have broken, missing, or incorrect guards?	NSTM 330-1 3000/ R2
Were dress ship light receptacles labeled "Dress Ship Light Streamers. Not to be used for any other purpose"?	NSTM 330-1-
Were panel switches controlling circuits that are de-	NSTM 330-1

energized during darkened ship operation marked DARKENED SHIP?	
Had the float charge on the UPS batteries been reduced from 135vdc to 129vdc?	IAW PMS
Was UPS electronic cabinet bottom sealed to prevent water of oil entry from lower level engine room?	GS0 300D/324D NSTM 300-4

**ELECTRICAL (EL)  
POST-UNDERWAY  
CG 47**

**OPEN AND INSPECT AS REQUIRED BY THE INSPECTION**

**COMPONENT/SYSTEM**

**PROPOSED  
PROCEDURE**



**MAIN PROPULSION (MP)  
PRE-UNDERWAY PHASE  
CG 47**

2340/2513	MAIN ENGINES
Component/Sub-Component	Proposed Procedure
Test Blow in Doors	2513/001 (S-5)
Test GTM Fire Extinguishing System - Test Release inhibitor switch - Test fire alarm push button - Test fire detection temp switch - Test flame detector - Halon/CO2 Bottles - Conduit/actuation cables - Hoses/fittings/check valves - Time delay	2521/005 (Q-5) 5553/001 (S-2R) NSTM 234
Inspect Gas Turbine - Gas Generator Assembly - Power Turbine Assembly - Transfer Gear box and components - Bleed Air Manifold	EOP GTMI GGTB 17, REV A
Inspect Base Enclosure Interior/Exterior and bonding /grounding straps	2340/002 (R-20) 2340/002 (R-26)
Verify all technical directives have been installed	GTB/MGTESR
Inspect LOSCA	EOP SOLA
Instruments, gauges and thermometers	CRL
Inspect Intake Dirty Side Inspect Intake Plenum Inspect Bell Mouth Screen Inspect water wash nozzles	2340/002 (R-12) 2513/001 (S-11) 2340/002 (R-11); MLOC
Inspect Demister Pads/Gaskets/Frames Inspect Intake (Silencer level)	2513/001 (S-11)
Conduct LP Air Start and GTM Idle Checks	EOP CAMS
Conduct HP Air Start and GTM Idle Checks	EOP CAMS
Conduct Methanol Test	NSTM 262-5.4.2.1
<b>VERIFY GTM CO2 MACHALT 482 INSTALLED (AUTO RELEASE TO MANUAL)</b>	<b>YES      NO</b>

2411	REDUCTION GEARS
Component/Sub-Component	Proposed Procedure
Test Shaft Turning Gear	EOP MRTG
Test GTM PT Brake Assemblies	EOP CMSI
Inspect Lube Oil Condition/sump level	2000/001 (R-1)
Inspect MRG Interior - Gear Teeth contact/condition/spray nozzles - Lube Oil Spray Pattern - Casing Interior - Attached LO Pump Angle Drive Gear - Attached CRP Angle Drive Gear - SSS clutch Manual Lock-out Mechanism operation - Power Turbine Break Piston Travel - Input Shaft Seals	2411 (S-1, S-2; A-2); TM 0942-LP-016-0010
Inspect Oil Flow in SFI's	NSTM 241
Instruments, gauges and thermometers	CRL
Inspect Casing Exterior	NSTM 241
Inspect Vent Fog Precipitator	EOP RGVS
Inspect Dehumidifier	EOP RGVS
Inspect Security Devices	NSTM 241-4.2.3
Inspect Flange Shielding	NSTM 505
Inspect Piping Systems	NSTM 505

2441	LINE SHAFT BEARINGS
Component/Sub-Component	Proposed Procedure
Inspect Lube Oil Condition/sump level	2000/001 (R-1)
Inspect Sump Drain Valve	2000/001 (R-1)
Inspect Seals	NSTM 244-2.6.30
Instruments, gauges and thermometers	CRL
Inspect Lubricator	NSTM 244
Inspect Dip Stick	EDORM
Inspect Lock Wires	EDORM
Inspect Bearing Depth Mic Surface	EDORM
Inspect Foundation	EDORM

2400	STERN TUBE SEALS	
Component/Sub-Component	Proposed Procedure	
Test Cooling Water Low Flow Alarm	2400/018 (S-1, S-4)	
Test Inflatable Seal	2400/018 (S-5)	
Instruments, gauges and thermometers	CRL	
Inspect Cooling Water Piping	NSTM 505	
Inspect Cooling Water Strainer/Filter	EOP STCW	
Inspect LP Air Supply	NSTM 505	
Inspect LP Piping/Hoses/Fittings	NSTM 505	
Inspect CO2/N2 Bottles/Piping/Fitting	2400/018 (30M-1)	
Inspect Emergency Flax Packing Kit	NSTM 244	
Inspect Backing Ring	NSTM 244	

2451	CRP SYSTEMS	
Component/Sub-Component	Proposed Procedure	
Inspect CRP Head Tank	2451/001 (R-3)	
Verify Calibration between Consoles and OD box	EOP CPPT	
Test Slew Rate	EOP CPPT	
Test Command Pitch Mismatch Alarm	EOP EOT	
Test Emergency Pitch Pump	2451/001 (R-2; 18M-1R)	
Inspect HOPM - Flex Hoses - Piping - Instruments, gauges and thermometers - Flange Shields	EOP CPPC NSTM 505 CRL	
Inspect Electric CRP Pump -- Pump - Mechanical Seal - Instruments, gauges and thermometers - Flange Shields	EOP CPPC NSTM 503-5.3.8.1.2.	
Inspect Oil Condition	2451/001 (R-1W)	
Inspect Attached CRP Pump - Inspect Mechanical Seal	NSTM 503-5.3.8.1.2.	

2620	LUBE OIL SYSTEMS	
Component/Sub-Component	Proposed Procedure	
Test MRG Lube Oil Sequencing	2620/001 (S-2)	
Test/Inspect Lube Oil Strainer	EOP LODS	
Test Lube Oil Purifier and Heater	EOP LOPO	
Inspect Electric MRG Lube Oil Pump -- Pump - Mechanical seal - Piping /flex hoses - Relief valves - Instruments, gauges and thermometers - Flange Shields	EOP CLOP NSTM 503-5.3.8.1.2. NSTM 505 CRL	
Inspect Attached MRG Lube Oil Pump - Mechanical seal - Piping/flex hoses - Relief valve - Instruments, gauges and thermometers - Flange Shields	NSTM 503-5.3.8.1.2. NSTM 505 CRL	
Inspect Temperature Regulating Valve	NSTM 505; 2620/001 (18M-1)	
Inspect Unloading Valve	NSTM 505	
Inspect Lube Oil Purifier -- Piping/flex hoses - Relief valve - Instruments, gauges and thermometers - Flange Shields	NSTM 503-5.3.8.1.2. NSTM 505 CRL 2640/008 (R-3)	
Check LO Purifier inlet strainer	2640/003 (R-7)	

2610	FUEL OIL SYSTEMS	
Component/Sub-Component	Proposed Procedure	
Test Service Tank Suct/Recirc Valves	EOP CFOP; 5000/005 (A-3)	
Test Quick Closing Valves	EOP CFOP; 2610 (9M-1)	
Test Coalescer Interlock		
Test Fuel Oil Booster Pump Logic Sequencing and Fault Circuitry	2610/006 (A-21)	
Test Coalescer Filter Shift Points		
Test GTM Fuel Oil Solenoid Trip Valves	EOP CFOP	
Inspect Booster Pumps - Flexible coupling - Mechanical seal - Piping - Relief valves - Inspect flange shielding	EOP CFOP NSTM 503-5.3.8.1.2. NSTM 505 2610/005 (R-1)	
Inspect fuel oil service heater	2610/803 (R-25)	
Inspect instruments, gauges and thermometers	CRL	
- <b>VERIFY FOBP MECH SEAL MACHALT 562 INSTALLED</b>	YES	NO

2521	CONTROLS	
Component/Sub-Component	Proposed Procedure	
Test PACC Alarms and Indicators	EOP CTAI	
Test PLCC Alarms and Indicators	EOP CTAI	
Test EOT Wrong Direction Alarm	EOP EOT	
Test PACC on UPS	2521/005 (R-1)	
Test PACC and PLCC Self Logic Test	EOP	
Conduct Torque Computer Test	EOP	
Inspect PACC instruments	CRL	
Inspect PLCC instruments	CRL	
Inspect Torsionmeter	CRL	
Inspect 800 Group Print	EOP CPSA	
Inspect and Test Bell/Data Logger	2521 (Q-1R)	

HULL STRUCTURE		
Component/Sub-Component	Proposed Procedure	
Bilges	NSTM 631	
Deck Plates	EOP MLOC	
Equipment Foundations	NSTM 631	
Pipe Brackets/Hangers	NSTM 505	
Paint and Preservation	NSTM 631	

5516	BLEED AIR SYSTEMS	
Component/Sub-Component	Proposed Procedure	
Test Motor Air Reg valve	5516/006 R-5W	
Test Masker Air Transfer Valve	5516/006 R-5W	
Test Mixing Bypass valve	5516/006 R-5W	
Test High Temp Bleed valve	5516/006 R-5W	
Test Masker Cooler inlet valve	5516/006 R-5W	
Test PRAIRIE Air Cooler inlet valve	5516/006 R-5W	
Test GTM 16 <sup>th</sup> Stage Bleed Air valves	5516/006 R-5W	
Test GTG 14 <sup>th</sup> Stage Bleed Air valve	5516/006 R-5W	
Test GTG Start Air Cooler inlet valve	5516/006 R-5W	
Test HP Start Reg valve	5516/006 R-5W	
Test 3 GTG Bleed Air Isolation valve	5516/006 R-5W	
Inspect GTM Bleed Air Reg valves	5516/006 R-5W	
Inspect GTG Bleed Air Reg valve	5516/006 R-5W	
Inspect Prairie Air Roto Seal	5516/006 R-5W	
Inspect Flex hoses	5000/009 A-2	
Inspect GTG Start Air Cooler	GTGMS	
Inspect instruments, gauges and thermometers	CRL	
Inspect Piping/Fittings	NSTM 505	
Inspect Masker Air Cooler	BMPA	
Inspect Masker Air Cooler relief vlv	NSTM 505	
Inspect Prairie Air Cooler	BMPA	
Inspect Prairie Air Cooler relief vlv	NSTM 505	
Inspect drain orifices	NSTM 505	
Test GTG /GTM bleed air check valves	5516/804 R-2	
Test bleed air low pressure alarm	5516/804 R-2 step 2	

FUEL OIL XFER SYSTEMS		
Component/Sub-Component	Proposed Procedure	
Test/operate Fuel Oil Purifier	EOP FOPO	
Inspect Transfer Pumps - Mechanical seal - Piping/flex hoses - Relief valves - Flange shields	EOP FOPO NSTM 503-5.3.8.1.2. NSTM 505	
Inspect fuel oil transfer heater	EOP FOPO	
Test Motor Operated Valves	5000/005 A-3	
Inspect fuel oil transfer and ballast consol	EOP CAF	
Test FSCC Alarms and Indicators	2521 (S-8)	
Test Local Fuel Control Console Alarms and Indicators	CA	

Inspect instruments, gauges and thermometers		CRL
3113	<b>GAS TURBINE GENERATORS</b>	
	Component/Sub-Component	Proposed Procedure
Test operation of RPM and temperature circuits Test Fire detection and protection circuitry Test LOCOP Alarms and Indicators		3113/002 (R-20; 21)
Test blow-in door automatic operation		3431/001 (S-5)
Inspect Turbine Enclosure - Compressor - Accessory Gear box - Diffuser Case - Combuster - Bleed Air Manifold - Electrical Wiring and Cables - Thermocouple harness and junction box - 5 <sup>th</sup> and 10 <sup>th</sup> stage bleed air valves - Elastomers/ - Engine side mounts/vertical mounts - Enclosure Exterior - Enclosure Interior		3113/001 (24M-2R; R-12) EOP GTGI
Inspect Reduction Gear Enclosure - Electrical Wiring and Cables. - Reduction gear vent piping - PTO shaft housing speed pick-up - Reduction gear lube oil sump level - Starter		EOP GTGI
Inspect Fire Fighting System - CO2 Bottles - Conduit/actuation cables - Hoses/fittings/check valves		5553/001 (S-2R)
Inspect/shift duplex seawater cooling strainers		EOP GTSS
Verify Engine lube oil sump level (23699)		2000/001 (R-1)
Inspect Module Mounts		GGTB 10 REV 1 AMED. A
Inspect GTG Flex Hoses		GGTB 6 REV 1
Inspect instruments, gauges and thermometers		CRL
Inspect Air Inlet System		3431/ (S-11)
Start GTG Verify all Start/Operating limits - Inspect thermocouple spread and average monitor		GTGMS
- <b>Verify MGT directive installed for new fuel nozzles.</b>		<b>YES NO</b>
- <b>Verify FADAC installed</b>		<b>YES NO</b>

5172	<b>WASTE HEAT BOILERS</b>	
	Component/Sub-Component	Proposed Procedure
<b>COLD PLANT:</b>		
Inspect gauge glass lighting		NSTM 221-3.4.2.7
Inspect instruments, gauges and thermometers		CRL
Inspect for proper lay up		NSTM 221-5.6
Inspect safety valves		NSTM 221-3.2.12.1
Inspect hand easing gear		NSTM 221-5.9.4.4
Inspect feed water control valve		NSTM 505
Inspect control condenser SW regulating valve		NSTM 505
Inspect steam stop valve		NSTM 505
Test Sight Glass isolation valves		NSTM 221-3.4.2.9
Inspect dump valve		NSTM 505
Inspect foundation		NSTM 221
<b>HOT PLANT:</b>		
Test low control air pressure alarm		5172/005 (S-3)
Test high/low/low-low water level alarms		
Test high/low steam pressure alarms		
Test soot blowers		EOP WHBP Sec 8
Test boiler water sample		NSTM 220
Inspect boiler casing for leaks		NSTM 221-2.13.7
Inspect bottom blow valves, piping for leakage		NSTM 221-4.17.3

5172	<b>FEED AND CONDENSATE SYSTEM</b>	
	Component/Sub-Component	Proposed Procedure
Test feed and drain tank high/low level alarms		5172/005 (R-8) a-g
Inspect operation of CIT system		EOP WHBP sect 7
Inspect feed pump mechanical seal leakage		NSTM 503-5.3.8
Inspect recirc pump mechanical seal leakage		NSTM 503-5.3.8
Inspect condensate cooler		EOP
Inspect control condenser		EOP SECT 1 STEP C

5172	<b>DFT</b>	
	Component/Sub-Component	Proposed Procedure
Test DFT for D.O.		5172/802 R-2; NSTM 220
Inspect relief valve		NSTM 505
Inspect gauge glass isolation valves		NSTM 505
Inspect gauge glass lighting		NSTM 221

<b>ADMINISTRATION PROGRAMS</b>	
Component/Sub-Component	Proposed Procedure
BW/FW Records (last 3 months)	NSTM 220
Bottom blow UT records	NSTM 220
Last BIRMIS report	NSTM 220

**MAIN PROPULSION (MP)  
UNDERWAY PHASE  
CG 47**

<b>FULL POWER AND QUICK REVERSAL DEMONSTRATIONS</b>	
Demonstrate Auto Plant Mode Logic (Split plant to Full Power)	EOP CSSF
Demonstrate Full Power ahead (1 hour)	2340/002 (R-9) EOSS/POG/9094.1B
Demonstrate Quick Reversal Astern	POG/Full Power Memo/EOSS
Demonstrate Quick Reversal Ahead	POG/Full Power Memo/EOSS
<b>LUBE OIL PURIFIER DEMONSTRATION</b>	
Demonstrate purifier operation	EOP LOPO
<b>FUEL OIL TRANSFER DEMONSTRATION</b>	
Demonstrate fuel oil purifier (s) operation	EOP FOPO
Demonstrate purifier (s) emergency stop capability	EOP FOPO
<b>PRAIRIE/ MASKER/BLEED AIR SYSTEM DEMONSTRATIONS</b>	
	Proposed Procedure
Verify operation and calibration of all gauges and instruments	CRL
Measure masker air flow rates to emitter belts in MER 1 and MER 2	5516/006 R-4Q
Measure Prairie air flow rates in MER 1 and MER 2	5516/804 (R-7)
Measure masker air flow rates to main strut fairwater and main strut rope guard	5516/804 (R-7)
Test GTG bleed air pressure regulating valves	5516/804 (R-7)