



AFLOAT MAIN PROPULSION GAS TURBINE CHECKLIST

UPDATED APRIL 2026

SAFETY REVIEW ITEMS - Main Propulsion (Gas Turbine)

BILGES/MACHINERY FOUNDATIONS/DRIP PANS

ARE SPACES CLEAN, FREE OF GEAR ADRIFT, BILGES CLEAN AND DRY (FREE OF FLAMMABLE LIQUIDS)?

REF: EDORM

ARE EQUIPMENTS FREE OF LEAKS, OIL NOT POOLED ON FOUNDATIONS, AND DRIP PANS FREE OF OIL?

REF: EDORM

HEARING CONSERVATION/HEAT STRESS/SIGHT CONSERVATION

ARE NOISE HAZARD SIGNS POSTED IAW THE INDUSTRIAL HYGIENE SURVEY?

REF: OPNAVINST 5100.19 B4

ARE HEARING PROTECTION DEVICES AVAILABLE FOR PERSONNEL WORKING IN OR ENTERING DESIGNATED HAZARDOUS NOISE AREA OR UTILIZING HAZARDOUS TOOLS OR EQUIPMENT?

REF: OPNAVINST 5100.19 B4

ARE HEAT STRESS THERMOMETERS PROPERLY INSTALLED, MAINTAINED, AND VALIDATED (ETCH MARK ALIGNMENT WITH THE FREEZING POINT)?

REF: OPNAVINST 5100.19 B2

ARE THE LIST OF EYE HAZARDOUS AREAS IDENTIFIED IN THE BASELINE AND/OR RECENT INDUSTRIAL HYGIENE SURVEY? ARE DECK STRIPPING AND "CAUTION" SIGN INSTALLED IN THE VICINITY OF IMMEDIATE EYE HAZARD?

REF: OPNAVINST 5100.19 B5

ARE REQUIRED EYE WASH STATION PROPERLY MAINTAINED AND INSPECTED? ARE SIGNS POSTED?

REF: OPNAVINST 5100.19 B5

ARE POTABLE WATER VALVES TO EYEWASH STATIONS AND DELUGE SHOWERS ARE LOCKED OPEN WITH A LOCK-SHIELD KEY OR METAL, TAMPER-PROOF LANYARD AND MARKED AS A "W" FITTING?

REF: OPNAVINST 5100.19 B5

DECK PLATES/HANDRAILS/NON-SKIDS

ARE DECK PLATES FIRMLY FASTENED WITH A MINIMUM FASTENERS REQUIRED (1.25 FASTENERS PER SQUARE FOOT OF PLATE BUT NO LESS THAN TWO AND INSTALLED ON DIAGONALLY OPPOSITE SIDES?

REF: NAVSEA DWG 803-1340709 NOTE (1)

ARE ACCESS LADDERS SECURELY FIXED IN PLACE?

REF: NAVSEA DWG 803-1340709 NOTE (1)

ARE NON-SKID DECKING MATERIALS INSTALLED?

REF: OPNAVINST 5100.19 D1

MAIN SHAFTING/SPRING BEARINGS

IS PHYSICAL SECURITY IN PLACE FOR EQUIPMENT REQUIRING LOCKS OR LOCKING DEVICE?

REF: EDORM
NSTM 604 (TABLE 604-1-2; TABLE 604-2-1)

ARE BULKHEAD SEALS IN GOOD MECHANICAL CONDITION, SELF ALIGNING AND CAPABLE OF BEING ACTIVATED FROM EITHER SIDE OF THE BULKHEAD AND NOT IN CONTACT WITH THE SHAFT WHEN NOT IN USE?

REF: PMS MIP 2400

IS EMERGENCY PACKING TOOL KIT AVAILABLE AND INVENTORIED? INFLATION HOSES STOWED IN VICINITY OF STERN TUBE SEAL?

REF: NSTM 244
CNSP-0008-2024 (DDG-51 CLASS MX9 STERN TUBE SEAL EMERGENCY PACKING MATERIAL AND TOOL KIT)

ARE COOLING WATER PIPING/VALVES IN GOOD OVERALL CONDITIONS (NO SIGNS OF LEAKAGE, DENTS, GOUGES, CORROSION, ETC.)?

REF: NSTM 505
NSTM 244

ARE GAUGES INSTALLED/CALIBRATED?

REF: NSTM 504
PMS MIP 9802

IS THERE A MEANS FOR INFLATING SEAL AND PMS BEING ACCOMPLISHED ON CO2/N2 BOTTLE FOR SEAL?

REF: NSTM 244
PMS MIP 2400

GTM AND GTG

ARE GAS TURBINE MODULES FREE OF FUEL AND LUBE OIL LEAKS?

REF: GGTB 17
NSTM 505

ARE ELECTRICAL CONNECTIONS FREE OF CORROSION, PROPERLY INSULATED AND WIRE LOCKED?

REF: EOSS
NSTM 234
PMS MIP 2340
PMS MIP 3301
PMS MIP 3113

ARE UPTAKE SPACES IN SATISFACTORY CONDITION AND FREE OF COMBUSTIBLES?

REF: NSTM 234
NSTM 555
PMS MIP 2513
PMS MIP 2591

ARE BLOW IN DOORS IN GOOD MATERIAL CONDITION (TO INCLUDE DEMISTER PADS AND AGGLOMERATOR PANELS) AND WARNING PLACARDS POSTED IN THE VICINITY OF SPACE ENTRY POINTS?

REF: GGTB 27
NSTM 234
PMS MIP 2513
PMS MIP 3431
NON-TECHNICAL ADVISORY 0011-2024 (SITUATIONAL AWARENESS AND
GUIDANCE ON OPERATION OF BLOW IN DOORS)

IS THERE EVIDENCE OF EXHAUST GAS LEAKS FROM EXHAUST DUCTING?

REF: PMS MIP 2591
PMS MIP 2513

CRP SYSTEM

ARE HOPM AND OD BOX FREE OF OIL LEAKS AND ARE GAUGES CALIBRATED?

REF: NSTM 504
NSTM 556

ARE HYDRAULIC HOSES FOR EMERGENCY PITCH OPERATION AVAILABLE AT OD BOX AND IN
GOOD MATERIAL CONDITION?

REF: EOP/EOCC
NAVSEA S6430-AA-TED-010

PUMPS AND AUXILIARY MACHINERY

ARE MACHINERY FOUNDATIONS IN SATISFACTORY CONDITION, FREE OF CRACKS AND BASE
METAL DETERIORATION FROM CORROSION AND MECHANICAL JOINTS TIGHTENED?

REF: PMS MIP 6200/001

ARE COUPLING GUARDS INSTALLED ON ROTATING MACHINERY (PAINTED RED)?

REF: OPNAVINST 5100.19 C1 & C13

ARE EQUIPMENT OPERATING INSTRUCTIONS AND SAFETY PRECAUTIONS POSTED?

REF: NAVSHIPS DWG 804-1640412
NSTM 090

FLEXIBLE HOSES

ARE FLEXIBLE HOSE ASSEMBLIES PROPERLY INSTALLED AND IN SATISFACTORY
CONDITION?

REF: NAVSEA S6430-AE-TED-010 VOL.1 (SECTION 9)
PMS MIP 5000/009

ARE FLEXIBLE HOSES PROPERLY IDENTIFIED WITH A NONCORROSIVE METAL TAG THAT HAD
THE SHIP ID, HOSE TYPE/SIZE, SYSTEM PRESSURE AND INSTALLATION DATE?

REF: PMS MIP 5000/009
NAVSEA S6430-AE-TED-010 VOL 1 (SECTIONS 8.5 AND 9)

ESCAPE TRUNKS

ARE ESCAPE TRUNKS FREE OF OBSTRUCTIONS?

REF: OPNAVINST 5100.19 C1

DOES ESCAPE TRUNK BALANCE JOINER DOOR FULLY OPERATIONAL? ALL LIGHTS WORKING AND ALL EMERGENCY LIGHTING OPERATIONAL? HAVE PROPER MARKINGS?

REF: EDORM
NAVSEA DWG 804-5184129
NSTM 330
NSTM 079 VOL 2 (FIG 079-21.4)
PMS MIP 6241/002

ARE LABEL PLATES INSTALLED ON TOP OF ESCAPE SCUTTLES INSCRIBED WITH 1-INCH RED LETTERS THAT STATE "ESCAPE SCUTTLE DO NOT OBSTRUCT OR BLOCK"?

REF: NAVSHIPS DRWG 805-1640412

REDUCTION GEAR/ LUBE OIL

ARE MEDIUM OR HIGH SECURITY PADLOCKS INSTALLED (S&G MODEL 833 HIGH SECURITY LOCKS HAVE BEEN CHANGED OUT WITH ALOY MODEL PL655 OR PL656)?

REF: EDORM
NSTM 241
NSTM 604
ISEA ADVISORY NR 006-01

DO VENT FOG PRECIPITATORS/ MIST ELIMINATORS IN SATISFACTORY MATERIAL CONDITION AND WARNING PLATE POSTED INSCRIBED WITH "WARNING HIGH VOLTAGE"?

REF: NSTM 262
NSTM 241
NAVSEA STD DWG 803-2145504

ARE VENT FOG PRECIPITATOR COLLARS INSTALLED WHEN DEHUMIDIFIER IS IN OPERATION?

REF: EOSS

ARE THERE LOCKING DEVICES FOR ALL MAIN LUBE OIL PUMPS SUCTION AND DISCHARGE VALVES TO PREVENT SHUTTING?

REF: EDORM
EOSS

DOES THE LUBE OIL STORAGE AND SETTLING TANKS HAVE OVERFLOW AND DRAIN CONNECTIONS LEADING TO THE OILY WATER DRAIN OR WASTE COLLECTING SYSTEM?

REF: NSTM 541

PIPING AND SPRAY SHIELDS

ARE LUBE OIL AND FUEL OIL PIPING SPRAY SHIELDS OF CORRECT MATERIAL?

REF: NSTM 233
NSTM 505
NAVSEA DRAWING 803-2145518

ARE SPRAY SHIELDS PROPERLY INSTALLED?

REF: NSTM 505

ARE PIPING SYSTEMS ADEQUATELY LABELED AND COLOR CODED?

REF: NSTM 505 (TABLE 505-7-1)

ARE PIPING SUPPORT DEVICES PROPERLY MAINTAINED?

REF: NAVSHIPS DWG 804-1385781
NSTM 505

ARE FLAMMABLE AND NON-FLAMMABLE SYSTEMS LEAK TIGHT (NO VISIBLE EVIDENCE OF LEAK)?

REF: NSTM 505

IS LAGGING/INSULATION ADEQUATE AND IN SATISFACTORY CONDITION (SEAM INTACT AND TAPED/PIN/STUDS SECURE/NOT SOAKED IN OIL)?

REF: NSTM 635 (SECTIONS 2 AND 3)

VALVE/VALVE OPERATORS/ RELIEF VALVES

ARE REMOTE-OPERATED VALVES OPERATIONAL AND PROPERLY ATTACHED?

REF: NSTM 505

ARE VALVE HANDWHEELS PROPERLY SECURED, LABELED, AND COLOR CODED?

REF: NSTM 505

NAVSEA S0400-AD-URM-010/TUM

ARE RELIEF VALVES PROPERLY LABELED (METAL TAGS PROVIDED TO INDICATE SHIP NAME AND HULL NUMBER, DATE OF LIFT TEST, LIFTING PRESSURE, VALVE NUMBER OR IDENTIFICATION?)

REF: NSTM 505

EDUCTORS AND BILGE DRAINAGE

IS THERE A MINIMUM OF ONE SPACE SUCTION VALVE WHICH IS OPERABLE FROM THE DAMAGE CONTROL DECK?

REF: MILSPEC E-24127

ARE ACTUATING PRESSURE AND SUCTION PRESSURE GAGES INSTALLED AND PRESSURIZED?

REF: NSTM 505 FIG 505-10.2
MIP 5291

OIL LAB

IS REQUIRED NUMBER OF OVERBOARD OIL SPILL CLEAN UP KIT ON BOARD? MARK II KITS FULLY STOCKED AND ACCESSIBLE FOR QUICK USE?

REF: AEL 2-550024006
NSTM 593

ARE OIL SPILL KITS INSPECTED QUARTERLY AND REPLENISHED AS REQUIRED?

REF: OPNAVINST 5100.19 B3

DOES THE SHIP HAVE AN OIL SPILL CONTINGENCY PLAN THAT HAS BEEN TAILORED TO THE SHIP?

REF: OPNAVINST M 5090.1 A2

ARE PORTABLE ELECTRICAL LABORATORY EQUIPMENT TESTED FOR ELECTRICAL SAFETY IN ACCORDANCE WITH PMS?

REF: PMS MIP 3000/001

IS NAVIFLASH/APPROVED FLASHPOINT TESTER CALIBRATED?
REF: NSTM 262