

NAVAL ENGINEERING ADMINISTRATION (MK-1 & MK-1A)

A one week course for Engineering Petty Officers, Engineering Officers, and Main Propulsion Assistants. Course topics include:

- Engineering department chain of command and training programs
- Maintenance programs
- Budget and procurement systems
- Records and correspondence
- Safety
- Supply and logistics

PRATT & WHITNEY FT4A GAS TURBINE (MK-4)

A one week course for MK E-5 and above designed to provide instruction on hot inspection, and troubleshooting of the Pratt & Whitney FT4A Gas Turbine. Instruction topics include:

- Hot section inspection
- Replacement procedures for first stage nozzle guide vanes
- Removal and inspection of pressure and temperature probes
- Borescoping
- Lockwiring techniques
- Performance monitoring

HYDRAULIC SYSTEMS & EQUIPMENT (MK-6)

A two week course for E-5 MK and above designed to teach hydraulic principles on the controllable pitch propeller (CPP) and fin stabilization system and basic system application. Course topics include. Course topics include:

- Hydraulic theory and basic formulas
- Components
- Troubleshooting principles and operations
- Practical sessions focused on connecting components together to form working systems
- Component assembly/disassembly, inspection, identification, repair, reassembly and testing

- Troubleshooting, diagnosing, correcting/repairing induced problems
- Fundamentals of fin and CPP machinery
- Fin and CPP hydraulic subsystems
- Operation, maintenance, and troubleshooting fin stabilizer hydraulics and CPP flow paths, operating pressures, temperatures, and valve settings
- Disassembly, inspection and reassembly of various system components
- System operation and maintenance procedures

GENERAL MOTORS MODEL 8-567-E2 & 8-645-E2 DIESEL ENGINE (MK-14)

A one week course designed to teach MK E-5 and above on tearing down, rebuilding and tuning GM Model 8-567-E2 & 8-645-E2 Diesel Engines.

REFRIGERATION & AIR CONDITIONING (MK-22)

A six week course of instruction on air conditioning and refrigeration (AC & R) principles, equipment operation, troubleshooting, and Environmental Protection Agency (EPA) certification. Topics include:

- Service equipment and techniques for AC & R , heat pump units and associated controls
- Troubleshooting and repairing ice cubers, ice flakers, water coolers, refrigerator-freezers, ventilation systems, heating and air conditioning systems, chill water units and their controls

CATERPILLAR 6.25" BORE DIESEL ENGINE (MK-25)

One week course of instruction on tear-down, troubleshooting and tune-up.

CATERPILLAR 3400 SERIES DIESEL ENGINE (MK-26)

One week course of instruction on tear-down, troubleshooting and tune-up.

270' WMEC S/S GENERATOR, WASTE HEAT RECOVERY SYSTEM & EVAPORATOR (MK-27)

One week course designed to teach MK E-5 and above the system, operating principles and maintenance of the waste heat recovery system and evaporator.

270' WMEC MAIN PROPULSION CONTROL & MONITORING SYSTEM (MK-29)

One week course of instruction designed to teach 270' WMEC watchstanders in the operation and casualty control procedures used with the MPCS monitoring system. Course topics focus on:

- Classroom instruction on normal and emergency operations
- Practical exercises on normal and emergency operations.

PAXMAN VALENTA RP200M DIESEL ENGINE (MK-30)

One week course of instruction designed to teach MK E-5 and above the tear down, maintenance and tune-up of the Paxman Valenta RP200 Diesel Engine used aboard the 110" WPB Island Class Patrol Boat. Topics include:

- Readings and measurements of engine components
- Operation and maintenance procedures of major systems
- Disassembly, reassembly, and inspection of diesel engine parts
- Usage of service literature and special tools
- Operation and disassembly of reduction gear

CATERPILLAR 3300 SERIES DIESEL ENGINE (MK-31)

Three day course designed to teach students the maintenance and troubleshooting procedures. Course topics include:

- Maintenance tasks
- Maintenance program and troubleshooting techniques
- Using DEMP data to troubleshoot the engine.

CATERPILLAR 3508 MAINTENANCE COURSE (MK-34)

Students will perform designated maintenance IAW CAT tech pub's, maintain the engine IAW CAT service manuals and restore the engine to normal operating parameters given an alarm or casualty.

CATERPILLAR 3608 MAINTENANCE COURSE (MK-36)

Students will perform designated maintenance IAW CAT tech pub's, maintain the engine IAW CAT service manuals and restore the engine to normal operating parameters given an alarm or casualty.

MTU Engine Operation and Maintenance (MK-32)

This is a two week course of instruction for the MTU 8V396 TE 94 diesel engine. There is an engine lab with a operational engine and complete control system, a static engine for detailed disassembly, and a simulator for electronics troubleshooting.

The course covers the following topics:

- Description, operation, and maintenance procedures of major systems
- Disassembly, reassembly, and inspection of diesel engine and control system components
- Explanation and usage of engine service manuals, electronics documentation, and special tools
- Troubleshooting of the engine and electronic control system.
- Hands on training for the Operating Data Recorder (ODR) and its associated software.

Centralized Supply(CS)

5 Day course of instruction which covers Centralized Supply using Configuration Management PLUS program. Topics include the following:

- MILSTRIP Codes
- Physical Inventory
- CMPlus Inventory Database Management
- Issues & Receipts
- Supply/Shipment Status
- CASREPs
- Material ID (FEDLOG)
- Orders (MILSTRIP & Commercial)
- Material Classification & SIM
- CMplus Basics (Sys Admin, Users, etc.)

This course is designed for those individuals who are involved with the management (Orders, Issues, Stocking, Receipts, Inventory) of Operating Materials and Supplies (OM&S) and allowance items at Coast Guard units, regardless of rating. PMIS: 500254

Other pertinent information:

The class is held in Martin Hall, Room 206A. Classes will begin at 0800 on Monday and are scheduled to graduate at 1600 on Friday. Working Blue or Undress uniforms are not authorized for this course.