

MDK 333 - AUTOMATIC RADAR PLOTTING AIDS

Learning How to Learn:

- Employ self-study techniques while learning the user interface of several different ARPA Radar simulators.
- Demonstrate the STCW Code KUPs for Officer in Charge of a Navigation Watch: 3.5.A, 3.6.

Course Description

This course presents the principals and operation of automatic radar plotting aids. It includes the legal aspects of ARPA including IMO and USCG standards, the theory in input and processing characteristic of ARPA, the theory of operation, control functions and adjustments, the acquisition and tracking of contacts, the limitations and potential errors of ARPA and special ARPA related features. STCW.

Credit Hours

1

Contact Hours

1

Lab Hours

2

Required Prerequisites

All prerequisites for all GLMA courses are satisfied by following the approved Course Sequence Guide and any deviation from this guide needs to be approved by the cadet's adviser.

Corequisites

MDK 331

Recommended Prerequisites or Skills Competencies

ENG 111 and MTH 111

Course Learning Outcomes

Knowledge:

- State the regulatory standards for ARPA Radar Systems.
- Describe the theory of input/processing characteristics for ARPA.
- List the purpose and use of operating controls.

Application:

- Demonstrate competency when using the ARPA display during various simulation experiences.
- Demonstrate the acquisition and tracking of multiple contacts on an ARPA Radar.
- Differentiate between collision hazard non-hazard ARPA contacts.

Integration:

- Make informed decisions regarding vessel movements by synthesizing interface data, navigational charts, nautical rules and safety parameters.

Human Dimension:

- Identify as maritime officers.
- Collaborate with others to research information from manufacturers' manuals to develop systems proficiency.

Caring - Civic Learning:

- Recognize the importance safe navigation plays in preventing economic loss, loss of life, or environmental damage.