



Australian Government

MARC021 Transmit and receive information by marine VHF radio

Release: 1

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Modification History

Release 1. This unit first released with MAR Maritime Training Package Version 2.0.

Application

This unit involves the skills and knowledge required to transmit and receive information by marine very high frequency (VHF) radio on a commercial vessel according to regulations, including carrying out user-maintenance and fault-finding procedures on radio equipment and power supplies; and operating an emergency position indicating beacon (EPIRB), a search and rescue radar transponder (SART) and AIS search and rescue transmitter (AIS-SART)), automatic identification system man overboard (AIS-MOB) device, and digital selective calling man overboard (DSC-MOB) device.

The unit applies to Coxswains Grade 1 and Masters of commercial vessels requiring proficiency in the use of marine VHF radio equipment to transmit and receive information to and from shore and vessel-based operators. They work relatively independently under broad operational requirements, with limited accountability and responsibility for themselves and others in achieving the prescribed outcomes.

This unit covers VHF radio equipment only; MARC020 Transmit and receive information by marine radio should be selected where competency in both VHF and HF radio is required.

The unit is consistent with relevant maritime regulations and certification requirements as specified in the Radiocommunications Act 1992.

Pre-requisite Unit

Not applicable.

Competency Field

C – Equipment Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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| 1 Operate VHF radio equipment to transmit and receive messages | <p>1.1 VHF radio equipment is selected for operation within limits of specifications</p> <p>1.2 VHF radio equipment is operated to transmit and receive various types of signal according to manufacturer instructions, established radio operation procedures and regulatory requirements</p> <p>1.3 Regulations and procedures applicable to vessel stations equipped with VHF radio and digital selective calling (DSC) facilities are applied during radio communication</p> <p>1.4 Work health and safety WHS/occupational health and safety (OHS) procedures and hazard control strategies are applied when operating VHF radio equipment according to vessel safety management system</p> <p>1.5 Radio communication problems are documented and promptly reported according to established procedures</p> |
| 2 Maintain and fault-find VHF radio equipment | <p>2.1 Routine maintenance checks are carried out on VHF radio equipment according to manufacturer instructions and specifications, and company procedures</p> <p>2.2 Out-of-specification performance and faults in VHF radio equipment are correctly identified and investigated using prescribed fault-finding techniques according to established user maintenance procedures and manufacturer instructions</p> |
| 3 Access search and rescue VHF radio facilities | <p>3.1 Request is made to the appropriate organisation for the provision of the required search and rescue services</p> <p>3.2 Information required by the Modernised Australian Ship Tracking and Reporting (MASTREP) System is supplied and received in the required format</p> |
| 4 Deploy and operate an EPIRB, SART and AIS-SART | <p>4.1 Routine checks are carried out on EPIRBs, SARTs and AIS-SARTs to confirm their operational capability according to manufacturer instructions and specifications</p> <p>4.2 Appropriate action is taken to rectify or replace EPIRBs, SARTs or AIS-SARTs that are found to be malfunctioning or are inoperable according to manufacturer instructions and company procedures</p> |

- 4.3 EPIRBs, SARTs and AIS-SARTs are deployed as according to manufacturer instructions and established search and rescue procedures
- 5 **Operate a man overboard (MOB) device as a locating device in an emergency**
 - 5.1 Routine checks are carried out on AIS-MOB and DSC-MOB devices to confirm their operational capability according to manufacturer instructions and specifications
 - 5.2 AIS-MOB and DSC-MOB devices are operated according to manufacturer instructions and regulatory requirements

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Literacy - required for reading and interpreting regulations and procedures and documenting communication problems.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Radio communication is carried out accurately and consistently in both normal and emergency situations using shipboard VHF radio equipment, EPIRBs and SARTs in compliance with the relevant sections of the World Radiocommunication Conference (as amended) and maritime regulations.

Radio communication includes one or more of the following:

- Distress, Urgency and Safety communications
- medical service
- navigational
- normal vessel-to-vessel service (ship to ship)
- normal vessel-to-shore service (ship to shore)

Organisations include one or more of the following:

- coast stations
- company bases
- fishing organisations and cooperatives
- limited coast stations
- private shore stations
- state/territory police forces

Available radio services include one or more of the following:

- MASTREP
- medical advice services
- public correspondence
- search and rescue

Unit Mapping Information

This unit replaces and is equivalent to TDMME1007A Transmit and receive information by marine VHF radio or telephone.

Links

MAR Maritime Training Package Companion Volume Implementation Guide at: - -
http://companion_volumes.vetnet.education.gov.au/Pages/TrainingPackage.aspx?pid=22