



Australian Government

MARC043 Transmit and receive information by marine radio

Release: 1

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Modification History

Release 1. New unit of competency. Licensing/regulatory information has been incorporated in accordance with Regulatory requirements. Assessment Requirements have been strengthened in accordance with Regulatory requirements.

Application

This unit involves the skills and knowledge required to:

- transmit and receive information by marine radio, including using marine very high frequency (VHF) and high frequency (HF) radio according to regulations
- carry out user maintenance and fault-finding procedures on radio equipment and power supplies
- operate emergency position indicating radio beacons (EPIRBs), search and rescue radar transponders (SARTs), automatic identification system search and rescue transmitters (AIS-SARTs), AIS man overboard (AIS-MOB) devices and digital selective calling MOB (DSC-MOB) devices.

This unit applies to people working in the maritime industry in the capacity of:

- master on commercial vessels <80 m in length within the exclusive economic zone (EEZ) or
- chief mate or deck watchkeeper on a vessel <80 m in length within the EEZ.

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit. The Radiocommunications Act 1992 (the Radcomm Act), through the Radiocommunications Licence Conditions (Maritime Ship Licence) Determination 2015 requires that operators of VHF maritime ship stations are appropriately qualified to operate the stations. This means that operators are required to hold a relevant Australian maritime radio operator's certificate of proficiency or an equivalent overseas qualification.

The Australian Maritime College (AMC) acts as the Australian Communications and Media Authority (ACMA) delegate in providing marine radio certificate services under the Radcomm Act, including the issue of Long Range Radio Operator's Certificates of Proficiency (LROCPs). Operators who have attained a Statement of Attainment from a Registered Training Organisation (RTO) for this unit can apply to the AMC for the issue of a LROCP without the need to sit a further examination. This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as defined in the National Standard for Commercial Vessels (NSCV) Part D.

Pre-requisite Unit

Not Applicable

Competency Field

C – Equipment Operations

Unit Sector

Not Applicable

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Operate VHF and HF radio equipment to transmit and receive messages

2 Maintain and fault-find radio equipment

PERFORMANCE CRITERIA

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

- 1.1** Appropriate VHF and HF radio equipment is selected for operation within limits of specifications
- 1.2** Radio equipment is operated to transmit and receive various types of signal according to manufacturer instructions, established radio operation procedures and regulatory requirements
- 1.3** Regulations and procedures applicable to vessel stations equipped with radio voice communications (radiotelephony) and digital selective calling (DSC) facilities are applied during radio communication
- 1.4** Work health and safety (WHS)/occupational health and safety (OHS) procedures and hazard control strategies are applied when operating radio equipment according to vessel safety management system
- 1.5** Radio communication problems are documented and promptly reported according to organisational procedures
- 2.1** Routine maintenance checks are carried out on radio voice communications (radiotelephony) equipment according to manufacturer instructions and specifications, and organisational procedures
- 2.2** Out-of-specification performance and faults in radio equipment are correctly identified and investigated using prescribed fault-finding techniques according to

- established user maintenance procedures and manufacturer instructions
- 3 Access search and rescue radio facilities**
- 3.1** Request is made to the appropriate organisation for the provision of the required search and rescue services
- 3.2** Information required by the Modernised Australian Ship Tracking and Reporting System (MASTREP) is supplied and received in the required format
- 4 Deploy and operate an EPIRB, SART and AIS-SART**
- 4.1** Routine checks are carried out on EPIRBs, SARTs and AIS-SARTs to confirm their operational capability according to manufacturer instructions and specifications
- 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 organisational procedures
- 4.3** EPIRBs, SARTs and AIS-SARTs are deployed as required according to manufacturer instructions and established search and rescue procedures
- 5 Operate a 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.

Range of Conditions

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

Unit Mapping Information

This unit replaces and is equivalent to MARC020 Transmit and receive information by marine

radio.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>