



Australian Government

MARH009 Use an electronic chart display and information system to navigate safely

Release: 1

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Modification History

Not applicable.

Application

This unit involves the skills and knowledge required to maintain safe navigation of a commercial vessel greater than 500 gross tonnage (GT) using an electronic chart display and information system (ECDIS).

This unit applies to a Watchkeeper Deck, a Master up to 500 GT, a Master up to 80 metres Near Coastal or a Master Unlimited.

This unit has links to legislative and certification requirements.

Pre-requisite Unit

Not applicable.

Competency Field

H – Navigation

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.

- | | |
|---------------------------|---|
| 1 Set up an ECDIS | 1.1 ECDIS is initialised and programmed with own vessel data |
| | 1.2 Operational performance and accuracy of ECDIS is confirmed |
| | 1.3 Settings and values are adjusted to suit conditions for passage planning and navigation |
| | 1.4 Means of providing additional information is correctly interfaced with ECDIS |
| 2 Use an ECDIS for | 2.1 ECDIS is used to assist in passage planning and the conduct |

passage planning and navigation		of navigation
	2.2	Information on ECDIS is monitored to ensure safe navigation
	2.3	Information obtained from ECDIS is interpreted and analysed taking into account limitations of equipment, all connected sensors and prevailing circumstances and conditions
	2.4	Position of vessel is confirmed by alternative means
	2.5	Safety of navigation is maintained through adjustments made to vessel course and speed
	2.6	System and position alarms are responded to, to maintain safety of navigation
	2.7	Situational awareness is maintained while using ECDIS
3 Maintain data	3.1	Data produced by ECDIS that should be retained to conform with organisational procedures and regulatory requirements is identified
	3.2	Data is stored electronically or in hard copy as required by organisational procedures and regulatory requirements
	3.3	Security and access requirements for data are adhered to in accordance with organisational procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

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

- ECDIS must include:
- adequate and up-to-date back-up paper charts
 - adequate and up-to-date electronic charts
 - back-up systems
 - electronic position fixing system
 - gyro and log
 - raster charts
 - uninterruptable power supply
 - vector electronic chart systems

- Settings include one or more of the following:
- alarm parameters for anti-grounding
 - back-up arrangements
 - chart update status
 - completeness of chart data
 - proximity to contacts and special areas

- Additional information must include:
- automatic identification system (AIS) input
 - radar/automatic radar plotting aid (ARPA) input

- Information includes one or more of the following:
- chart data displayed
 - contacts
 - mode and orientation
 - own position
 - radar overlay functions
 - radar tracking
 - route monitoring
 - sea area display
 - user-created information layers

- System and position alarms must include:
- approach to waypoint, critical point, navigation danger and other ships
 - chart alarms
 - depth and contour alarms
 - mode losses
 - primary failure

- Situational awareness
- chart data and scale selection

includes one or more of the following:

- contact detection and management
- integrity of sensors
- safe water and proximity of hazards
- set and drift
- suitability of route

Data includes one or more of the following:

- chart correction information
- electronic navigational chart (ENC) source, date and edition
- vessel voyage details

Unit Mapping Information

This is a new unit. This unit is equivalent to MARH5003A Use an electronic chart display and information system to navigate safely.

Links

Companion Volume implementation guides are found in VETNet -

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