

CARRIAGE AND USE OF ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM (ECDIS)

This notice provides guidance to those Australian registered ships intending to employ ECDIS to meet the chart carriage requirements of the International Convention for the Safety of Life at Sea (SOLAS) revised Chapter V (Safety of Navigation) which entered into force on 1 July 2002.

Revised SOLAS V – Status of ECDIS

The revised SOLAS Chapter V Regulation 19.2.1.4 states that all ships irrespective of size shall have nautical charts and nautical publications to plan and display the ship's route for the intended voyage and to plot and monitor positions throughout the voyage.

Under the new regulation an Electronic Chart Display and Information System (ECDIS) may be accepted as meeting the chart carriage requirements of this subparagraph.

For a ship to depend totally on ECDIS for navigation, (as opposed to relying on paper charts); under SOLAS Chapter V Regulation 18, that system shall conform to the relevant performance standards of the International Maritime Organization (IMO) presently specified in Resolution A.817(19), Performance Standards for ECDIS, as amended and in particular:-

- Type approval of the hardware;
- The use of official electronic charts;
- Back-up arrangements; and
- Training.

AMSA Requirements for ECDIS Carriage by Australian Registered Ships

Under the terms of SOLAS Chapter V Regulation 19.2.1.4, an ECDIS, which meets the performance standards of IMO Resolution A.817(19) as amended, may be accepted by a national Administration as meeting the chart carriage requirement as specified in that regulation. The Australian Maritime Safety Authority (AMSA) is the national Administration in this context.

Beyond near coastal waters, (defined as being outside the Australian Economic Exclusion Zone) AMSA requires full compliance with SOLAS requirements for ECDIS when being used as the primary means of navigation. This includes the carriage of an "appropriate folio" of paper charts to complement the ECDIS when navigating on raster scanned charts, ie in the Raster Chart Display System (RCDS) mode of operation.

Within near coastal waters a safety case (risk assessment) can be presented to AMSA which if accepted will allow operators to dispense with the need for paper charts to be carried when ECDIS is operated in the RCDS mode.

User Training Requirements

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1995 (STCW 95) and the International Safety Management Code for the Safe Operation of Ships and for Pollution



Prevention (ISM Code) put the onus firmly on the shipowner or operator to ensure that mariners on their ships are competent to carry out the duties they are expected to perform.

If a ship is equipped with ECDIS, the shipowner or operator has a duty to ensure that users of such a system are properly trained in its operation, the use of electronic charts, and are familiar with the shipboard equipment before using ECDIS operationally at sea.

By the STCW 95 implementation date of 1 February 2002 all holders of Australian STCW 95 endorsed Certificates of Competency in the deck department were to have completed basic ECDIS training.

Before a watchkeeping officer or master intends to use a compliant ECDIS as the primary means of navigation they should complete a generic ECDIS Operators Course complying with IMO Model Course 1.27 - The Operational Use of Electronic Chart Display and Information Systems (ECDIS).

ECDIS type training is to be provided by the shipowner or operator under the terms of the ISM Code. Under the Code, the shipping company has a responsibility to "establish procedures to ensure that new personnel and personnel transferred to new assignments related to safety and protection of the marine environment are given proper familiarisation with their duties. Instructions which are essential to be provided prior to sailing should be identified, documented and given" (Section 6.3 of the ISM Code).

Additional Information on Carriage Requirements for ECDIS

The issues of type approval, legal standing of Electronic Navigational Charts, backup arrangements, operation in the RCDS mode, training, and type specific training are fully explained in the Comprehensive Guidelines for Industry (prepared by AMSA) which can be obtained on request or from the AMSA website. In addition, information concerning the types

of electronic charts that are recognised under SOLAS V for use in ECDIS can be found on the Australian Hydrographic Service website at www.hydro.gov.au

Further enquiries regarding the carriage and use of ECDIS in the light of this Marine Notice should be addressed to:-

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