



Marine Notice 6/2017
Supersedes 16/2014

Official Nautical Charts

Purpose

This Marine Notice draws attention to the importance of using only official nautical charts to comply with flag State requirements, which implement the relevant regulations of Chapter V of the *International Convention for the Safety of Life at Sea (SOLAS)*, as amended.

Official charts are those issued by or on the authority of a government, authorised hydrographic office or other relevant government institution.

Background

AMSA continues to witness the use of unofficial paper and electronic nautical charts on board ships for passage planning and navigation.

AMSA's port State control regime records deficiencies against ships that use unofficial nautical charts. AMSA can also detain such ships and those that amend their original voyage plans whilst enroute to an Australian port (and don't use the required official charts for the amended plan).

Ships have also been found to be navigating using a small scale chart, when a larger scale chart is more appropriate (but is not available on-board). This is contrary to safe navigational practice.

Official nautical charts

SOLAS Chapter V regulation 27 requires nautical charts and nautical publications necessary for the intended voyage to be adequate and up-to-date. Ships should also take into account the guidelines for voyage planning, as adopted by the International Maritime Organization (IMO) Resolution A.893(21).

For an Electronic Navigational Chart (ENC) or paper nautical chart to be considered adequate for navigational purposes, it must be:

- issued officially
- of appropriate scale, suitable for the navigational task at hand
- of the latest edition
- used in its original form, and
- maintained up-to-date, using the latest available notices to mariners or ENC update service.

Official Australian nautical charts

Official Australian paper charts are issued and updated by the Australian Hydrographic Service (AHS) under the 'AUS' series. The series is also largely reproduced by the United Kingdom Hydrographic Office. AHS paper nautical charts are easily identified by their 'AUS' chart number and AHS crest above the chart's title.

A list of authorised AHS chart distribution agents is at www.hydro.gov.au.

Official Australian ENC are issued and updated by AHS under the 'AU' series. They provide the same or better bathymetric and near shore coverage of Australia's area of charting responsibility.

The AU ENC series is distributed locally in a range of packs via the AusENC Service. A list of authorised AHS ENC distribution agents is at www.hydro.gov.au, and on the IC-ENC website (www.ic-enc.org).

Unofficial nautical charts

Unofficial nautical charts should not be used for voyage planning or navigation.

Unofficial paper charts include (but are not limited) to:

- photocopies
- facsimiles or imitations of official paper charts
- large format commercial printed copies of scanned ENC, and
- paper charts 'assembled' by printing several small portions of a Raster Navigational Chart (RNC)

Unofficial paper charts can be distorted, out-of-date or may omit important navigational features. Scans may not capture all detail shown on the original official chart.

Unofficial copies of official ENC can be at inappropriate scales, contain out-of-date data, miss significant features and information, not have access to a timely or reliable update service, not display correctly or fail to include chart reliability information.

Unofficial electronic charts include those specifically published for recreational use (which typically contain a warning regarding their unsuitability).

Recognizing unofficial paper charts

All AHS charts are metric and are referred to WGS 84. The 'look and feel' comparison may also raise suspicion that a chart is unofficial. An unofficial nautical chart may have:

- a superseded edition date (compared with corresponding details on the AHS website)
- ink of a different colour (or be in black and white)
- inconsistent colour across the chart
- colours that can be erased, or
- a different weight or feel of the paper.

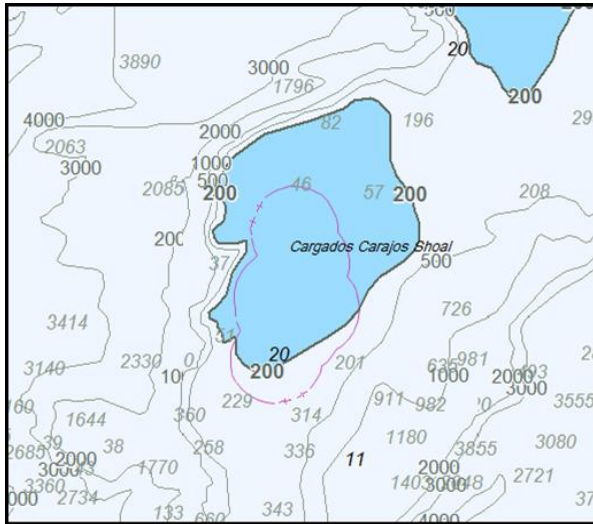
Recognizing unofficial ENC

Unofficial electronic charts are required to carry a warning that they are not suitable for navigation. They may have packaging which incorrectly refers to them as 'professional', use misleading phrases such as 'uses official data' or be in a format other than S-57/S-63.

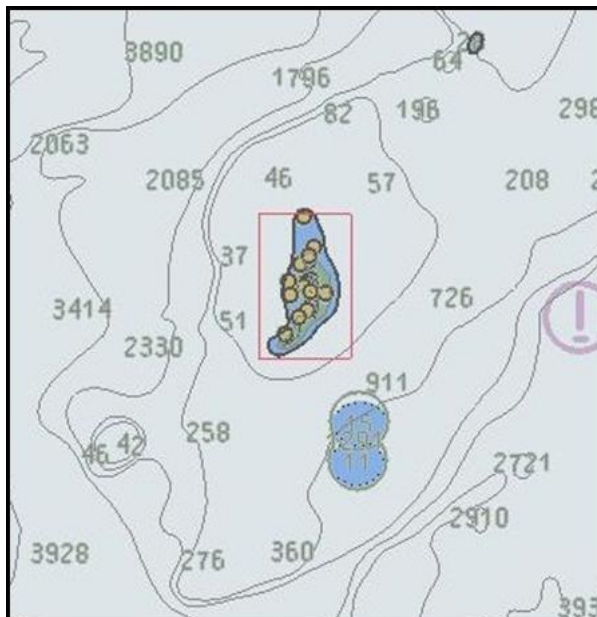
Once in use, unofficial electronic charts are likely to:

- not contain the zones of confidence/CATZOC data quality information layer (asterisks enclosed by a triangle or ellipse in a repeating pattern), with a strong tendency to make any poorly charted areas look better than they are;
- cause an on-screen alert "Unofficial Data" on the ECDIS (unencrypted ENC trigger this as well). This alert may also be generated by the absence official ENCs (a gap in the available ENC coverage). On some ECDIS, this alert is visible on-screen.

Official ENC also have a chart or general information panel accessible via the ECDIS, which will detail the ENC number and producing organisation, as well as other useful information about the ENC.



Unofficial electronic chart with reef, islands and obstructions missing. Incorrect depth areas and contours result in an incorrect and unreliable safety depth contour (defaulting to 200m instead of the missing 30m contour incorrectly suggests all lesser depths are highlighted). Note that the 11m obstruction is one of several not highlighted, the 15m obstruction is missing and a false 10m shoal appears to have been added.



Official ENC with reef, islands, obstructions and depths all displayed correctly. Safety depth contour includes all dangers to shipping.

Recommendations

If you suspect that an 'AUS' paper chart or an 'AU' ENC is not genuine, please contact AHS at (hydro.sales@defence.gov.au) and provide relevant details. AHS will actively seek to stop the production and sale of unofficial copies of AHS products.

AMSA reminds ship owners, operators, agents and masters that the carriage of up-to-date nautical charts is critical to the safety of navigation. AMSA urges all purchasers, users, marine surveyors and recognised organisations to be vigilant in identifying unofficial nautical charts.

A fact sheet on unofficial charts can also be found at <http://hydro.gov.au/factsheets/factsheets.htm>

Examples of poor navigational practices

AMSA Marine Notice 2014/17 outlines navigational practices that should be followed by masters and officers in charge of a navigational watch on ships operating in Australian waters.

Gary Prosser
Deputy Chief Executive Officer
Australian Maritime Safety Authority
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GPO Box 2181
CANBERRA ACT 2601

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