1. Purpose

1.1. This bulletin is intended to outline the Bahamas requirements for the carriage of ECDIS and carriage of nautical charts and publications in electronic and paper formats.

1.2. This bulletin should be read in conjunction with IMO Assembly Resolution A.817(19), as amended by resolutions MSC.64(87) and MSC.86(70); International Maritime Organisation (IMO) Maritime Safety Committee (MSC) Resolution MSC.232(82); MSC Circular MSC.1/Circ.1503 and BMA Information Bulletin No 138.

2. Application

2.1. This Bulletin applies to all Bahamian ships to which Regulation 19 of Chapter V of the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS), applies and which are required to carry charts and publications required by SOLAS Regulation V/27.

3. General

3.1. Paper nautical charts and publications, electronic navigational charts (ENC), Raster charts (RNC) and paper and electronic publications, carried under the provisions of SOLAS Chapter V, are to be corrected to the latest edition of “Notices to Mariners”.

3.2. Notices to Mariners are available in both paper and electronic format and may be distributed to vessels directly by various means. Notices to Mariners in electronic format may be distributed to vessels directly by authorised chart agencies under the authority of government authorised Hydrograph offices.

4. **Equivalence regarding digital electronic navigational charts, Raster navigational charts, nautical list of lights and other digital nautical publications.**

4.1. The Bahamas Maritime Authority (BMA) considers the carriage of SOLAS required documentation in an electronic format as being equivalent to the carriage of paper documentation, subject to the following:

   i. The **electronic charts (ENC/Raster)** and **electronic publications** must be issued officially, or otherwise authorised and approved, by a SOLAS Contracting Government;

   ii. The products must meet the requirements of marine navigation;

   iii. The products must be kept up to date; and adequate backup (see below) must be provided so that the safety of navigation is not compromised;

   iv. Local electronic versions of charts and publications issued by a third party pertaining to geographical areas of a country may be accepted if that party regularly receives official data and updates to its charts and publications from a SOLAS Contracting Government.

   v. The assessment of the acceptability for use onboard for the electronic products mentioned in iv above should be carried out by the Company\(^1\), taking in to account the above guidance on equivalence.

5. **Carriage and use of Electronic Chart Display and Information Systems (ECDIS)**

5.1. The definition of an ECDIS as contained in the Annex to MSC82.232(82) is:

   **Electronic Chart Display and Information System (ECDIS)** means a navigational information system which with adequate back-up

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\(^1\) The "Company" is the entity responsible for the management of the ship in accordance with the ISM Code. For ships to which the ISM Code is not applicable, the Company is the "Managing Owner" in accordance with Section 52 of the Merchant Shipping Act.
arrangements can be accepted as complying with the up-to-date chart required by regulations V/19 and V/27 of the 1974 SOLAS Convention, as amended, by displaying selected information from a System Electronic Navigational Chart (SENC) with positional information from navigational sensors to assist the mariner in route planning and route monitoring, and if required display additional navigational-related information.

5.2. SOLAS V/19 requires the carriage of ECDIS, conforming to the performance standards for electronic charts, to be fitted on certain vessels by the dates shown in SOLAS V/19.2.10

5.3. SOLAS V/19.2.1.4 requires the carriage of nautical charts. The BMA recognises that ECDIS conforming to the performance standards for electronic charts satisfies the chart carriage requirements specified in SOLAS V/19.2.1.4, provided that back up arrangements are provided, as required by SOLAS V/19.2.1.5.

5.4. For ships required to carry ECDIS it is the responsibility of the Company to determine the form of chart to be used on board as the primary means of navigation. For the purposes of compliance with SOLAS V/19.2.1.4 and 19.2.1.5 the following arrangements are deemed acceptable for Bahamian ships:

<table>
<thead>
<tr>
<th>Primary System</th>
<th>Secondary requirement</th>
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<tbody>
<tr>
<td>ECDIS operating in electronic navigational chart (ENC) mode or,</td>
<td>Either: a second independent ECDIS which has a separate power supply and data input,</td>
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<tr>
<td>where ENC Coverage is not available, RCDS Mode</td>
<td>operating in electronic navigational chart (ENC) mode or, where ENC Coverage is not</td>
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<td></td>
<td>available and RCDS Mode is operating, Paper charts (adequate and up to date for the</td>
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<td>intended voyage).</td>
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<td>OR</td>
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<tr>
<td></td>
<td>Paper charts (adequate and up to date for the intended voyage).</td>
</tr>
<tr>
<td>Paper Charts</td>
<td>ECDIS Fitted (as required by SOLAS V/19.2.10 and complying with V/27.)</td>
</tr>
</tbody>
</table>
5.5 Training requirements for ECDIS are outlined in BMA Information Bulletin No.138.

5.6 Masters should be guided by the limitations of RCDS as outlined in part D of MSC.1/Circ.1503.

5.7 Companies choosing to use Paper Charts as the primary means of navigation on vessels required to have ECDIS fitted should note the following:

- The ECDIS must still comply with A.817(19) performance Standards for Electronic Chart Display and Information systems or MSC.232(82) revised performance standards for electronic chart display and information systems;

- To comply with SOLAS V/19 and V/27 the fitted ECDIS must be fitted with the latest up to date editions of ENC’s or Raster Charts where ENC coverage is not available.

Navigational Officers on ships where paper charts are primary means of Navigation but ECDIS “IS FITTED” must be trained in the use of ECDIS as required by BMA information bulletin No 138

6. **Electronic versions of nautical publications, lists of lights, tide tables and other nautical publications**

6.1. Electronic versions of nautical publications, lists of lights, tide tables and other nautical publications are accepted by the BMA subject to the following:

i. The electronic versions shall be issued officially by an administration, authorised Hydrographical office or other approved organisation;

ii. The digital publications shall be available to the Officer of the Watch (OOW), without limitations, on the bridge;

iii. The computer used shall be dedicated for information storage and retrieval and shall always be connected to the emergency source of power required by SOLAS II-1/42 or II-1/43; and

iv. For back-up, the digital publications shall also be installed on another computer onboard, which shall also be made available to the OOW within a short period of time.
7. **Revision Record**

Rev.7 (9th February 2016) - further editorial to table
Rev.6 (9th February 2016) – Editorial error correction to table
Rev.5 (1st February 2016) – Clarification of the term Term “ECDIS Fitted” and minor editorial changes shown in blue
Rev.4 (18 August 2015) – Reference to SN.1/Circ.207 & 276 changed to MSC.1/Circ.1503 and change to paragraph 5.4
Rev.3 (17 August 2015) – Editorial changes, shown in blue
Rev.2 (21 January 2013) Editorial changes