

THE REPUBLIC OF LIBERIA

Bureau Of Maritime Affairs

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28 January 2005

MARINE OPERATIONS NOTE: 1/2005

Re: Use of Electronic Charts and acceptance other equivalent arrangements accepted Under Regulations V/19 and V/27 of SOLAS

Reference: (a) SOLAS Chapter V Regulations 19 & 27

(b) Liberian Marine Notice NAV-001

Dear Owner/Operator:

Regulation V/19.2.1.4 of the International Convention for the Safety of Life at Sea, 1974 as amended (SOLAS) requires 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. An electronic chart display and information system (ECDIS) may be accepted as meeting the chart carriage requirements.

- 1. This Administration may accept certain ECDIS systems as meeting the chart carriage requirements found in Regulation V/19.2.1.4 of SOLAS, provided the operator can show the Administration that:
- a. The ECDIS is type approved in accordance with relevant international standards. (The relevant international standards are found in IMO Assembly Resolution A.817 (19) as amended by MSC.64 (67), Annex 5 and MSC.86 (70), Annex 4.) The ECDIS unit must also be tested and licensed by an officially accredited Prototype Test Center in accordance with IMO and the International Electrotechnical Commission (IEC) standards.
- b. The vessel is sailing on waters covered by officially issued electronic navigation charts (ENC), and;
- c. There are adequate backup arrangements, which can be:
 - A second type approved ECDIS connected to the main and emergency powers supply, with a sufficient portfolio of updated paper charts for any area on its trade route not covered by the ENC, or
 - A traditional updated Chart Portfolio applicable to the ship's trade.

- 2. The updating of the ENC and the back up system (either electronic or paper charts) has to take place on a regular basis. When paper charts are used as the back-up, the charts shall include:
 - a. The planned route; and
 - b. The ship's position will be updated regularly in narrow channels to enable the safe take over of ECDIS functions should the system fail.
 - c. To assist in the immediate take-over by means of paper charts, the following arrangements are accepted:
 - A radar interfaced to GPS and facilitating radar maps and importation of route plans to assist in the safe take over of ECDIS Functions,
 - A radar with selected parts of ENC information overlay, in compliance with a Annex 4 of Resolution MSC 64(67) may be part of the backup arrangement and used for safe take over of ECDIS functions provided the chart information is stored and displayed independently of ECDIS (Annex 5 of Resolution MSC 64(67).
- 3. The fee for the acceptance letter or fax is \$500 for each ship.
- 4. The Administration accepts the use of Raster Chart Display Systems (RCDS) when ENC charts are not available, provided the client has trained the crew in the use of the RCDS and the fact that RCDS may appear distorted. In addition a folio of paper pack up charts for the areas not covered by ENCs must be maintained on board.
- 5. The Administration also accepts Sailing Directions, List of Lights, Notices to Mariners, Tide Tables and other nautical publications necessary for the intended voyage in electronic digital format, as meeting the requirements of Regulation V/27 of SOLAS, provided the electronic chart display, information system and back up arrangements allow instant access at any time to the nautical publications without distortion or obstruction of the chart display. In addition, the ship's crew must have access to information provided officially or on behalf of a government authorized Hydrographic Office or other relevant government institution and the ships master and navigational officers must be properly trained in the use of the system.
- 6. The electronic chart and information system and all electronic publications used for navigation shall be sufficient for the trade route, adequate for navigation and maintained up-to-date for the intended voyage.

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