

ECDIS ISOLATED DANGER MARKS



- RISQ - Item 3.18: Can the Master and watch-keeping officer demonstrate familiarity with the use of ECDIS?
- SIRE 2.0 – 4.1.1: Were the Master and navigation officers familiar with the company procedures for the set up and operation of the ECDIS units fitted?.
- OCIMF: Recommendations on Usage of ECDIS and Preventing Incidents. First Edition. - 4.1.3 ECDIS displays.
- MSC.530(106): "ADOPTION OF THE REVISED PERFORMANCE STANDARDS FOR ECDIS".
- IHO S-52: "Specification for Chart Content and Display Aspects of ECDIS (Ed.6.1.1)" .

FINDING

During an onboard navigational audit, the PAS Auditor observed that the ECDIS system was not properly configured to display isolated danger symbols. Additionally, the vessel's planned route was plotted in close proximity to these hazards, and the bridge team did not clearly mark or properly consider them



THIS SYMBOL INDICATES AN ISOLATED DANGER OF A DEPTH LESS THAN OR EQUAL TO THE DEFINED SAFETY CONTOUR VALUE OR FOR CASES WHERE THE CHARTED DEPTH OF THE DANGER IS UNKNOWN.

IMPORTANCE

Isolated dangers typically indicate significant underwater hazards - such as **rocks**, **wrecks**, or **obstructions** - located within otherwise navigable waters. If not properly identified by the navigator, these hazards can pose a serious risk of grounding or collision, especially in coastal or shallow waters. The effectiveness of ECDIS relies heavily on correct user configuration. While the system may contain accurate chart data, it will not display or alert for critical features like isolated danger symbols unless key settings are properly configured. These include setting the appropriate safety contour, enabling chart layer alerts, and ensuring that officers are familiar with interpreting symbols that may not be automatically highlighted.

LESSONS LEARNED

- Ensure that the **Safety Depth** and **Safety Contour settings** are accurately configured in accordance with the vessel's draft.
- **Activate the additional display layers for navigation**, rather than relying solely on the standard display mode.
- **Confirm that all charted dangers** are clearly highlighted on the ECDIS and that a comprehensive hazard check is performed during voyage planning process.
- Utilize the **pick report function** to review the properties of charted objects located in proximity to the vessel's planned route.
- Verify that Officers are properly trained in ECDIS symbology and understand how to effectively apply safety-related settings.