

Technical Circular

No.: 120/2017 Date: 22nd September 2017

To whomsoever it may concern

<u>Subject: RMI Marine Safety Advisory regarding Machinery Space</u> <u>Flooding.</u>

- Republic of Marshall Islands (RMI) has received many reports on incidents of unwanted ingress of the water in engine room or in machinery space due to a variety of reasons like mechanical failures of or during maintenance of pumps, piping system, and shaft seals.
- Based on these incidents RMI has issued Marine Safety Advisory no. 40-17 providing information and recommendations in preventing such incidents.
- Many of these incidents were occurred due to mechanical failures, inadequate pre task
 planning and supervision during maintenance resulting in blackout, propulsion failure,
 grounding and constructive total loss.
- Other causes identified as material failure due to ineffective or delayed Preventive maintenance system (PMS), excessive wear and tear, corrosion of hull, etc.
- Effective and urgent implementation of Emergency Engine Room procedures is necessary to respond the emergency and avoid damage but the Administrator's investigation noted that not all vessel engineers were adequately prepared to respond effectively to the incident.
- Based on above observations the Administrator has recommended ship owners,
 DPAs, Masters and Chief Engineers to review and revise following as appropriate:
 - 1. The applicable procedures in their SMS to ensure compliance with PMS requirements and for approving maintenance extensions for any systems needed to de-water a machinery space or whose failure could result in a machinery space flooding incident;
 - 2. The inspection and maintenance protocols prescribed by the vessel's PMS for systems such as sea chests, salt water cooling systems, and shaft seals to ensure they provide sufficient detail regarding the work that should be performed, including precautions that should be taken to reduce the potential for accidental flooding;



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- 3. The applicable procedures in their Company's SMS and PMS to ensure they address having damage control equipment ready for use and that the vessel's crew is drilled and ready to respond before starting a task that could result in a machinery space flooding incident; and
- 4. The applicable procedures in the Company's SMS to ensure machinery space flooding drills and training are conducted regularly. This should include a review of emergency procedures that should be followed if their vessel is without power or propulsion.

Enclosure:

1. RMI Marine Safety Advisory No. 40-17 Reg. Machinery Space Flooding

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