

## Title: PSC Deficiencies with potential for significant consequences

### What happened

A managed ship was inspected under the Asia-Pacific MOU. The inspection ended with three (3) “action code 17” (rectify before departure) deficiencies, as follows:

- 1) Forward masthead light was showing incorrect Horizontal Arc of Visibility
- 2) Stern Light was showing incorrect Horizontal Arc of Visibility
- 3) Fire Screen Door 005 indication on the Bridge panel showing only open position

All three (3) deficiencies were immediately rectified by the shipboard command and the ship departed without further complications.



### Root causes/contributory factors

The internal investigation carried out onboard identified the following Findings/Contributory Factors/ Root causes:

#### Re PSC deficiencies 1 and 2:

- The forward masthead navigation light and the stern navigation light were inadvertently swapped by a ship electrician during their installation onboard approximately 5-6 years ago

**Note:** Masthead top navigation lights and stern navigation light have different sectors of visibility (respectively 225° vs 135°) and different intensity providing the required ranges of visibility (6 nm vs 3 nm)

- The wrong positioning of the navigation lights has not been discovered neither by the ship's crew, nor by the Recognized Organization (RO) surveyors during their periodical PSSC renewal surveys
- Human error during installation of the navigation lights, relating most probably to:
  - o Capability
  - o Distraction
- Lack of proper supervision by the senior Electrical Officers and Navigation Officers
- Omission by the RO surveyors

**Caution:** Marine Insurance Policies and Contracts of Carriage (of cargoes and passengers) have warranty clauses implying that the ship shall be “seaworthy” at the beginning of the voyage. Had the ship been involved in a collision incident while navigating with swapped masthead and stern navigation lights, its seaworthiness would be seriously challenged during an incident investigation, with possible serious consequences ranging from loss of insurance cover to voiding Owner's right under the Contract of Carriage to limit his liability

**Re PSC deficiency 3:**

- The proximity switch at the fire screen door frame and the magnet attached to the door have not been properly aligned and adjusted at the appropriate distance during their installation approximately seven (7) months ago. Accordingly they don't activate indication on the Bridge control panel when the door is closed
- Human error during assembly of the door switch, relating most probably to:
  - o Capability
- Failure to follow Planned Maintenance procedures

**Proposed Corrective/Preventive Actions****Vessels:**

- Discuss during SEPPH Committee meeting
- Re-visit COLREG and Company procedures referenced below
- Check all navigation lights onboard are properly installed as per COLREG requirements and marked (any spares kept in stock shall be clearly marked too)
- Confirm back to the DPA completion of above action items

**The Company:**

- Distribute a Case Study to the managed fleet

**Reference**

- IMO Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs), as amended
  - o Rules 21, 22 and 23
  - o Annex I
- Company eLVMS:
  - o [Operations](#) > [Safety Management](#) > [Safety Equipment & Maintenance](#) > Fire Fighting Appliances and related Planned Maintenance [Operations](#) > [Risk Management](#) > Operational Risk Assessment
  - o [Forms](#) > [Ship Forms](#) > Safety Forms: SAF03A "FFA Planned Maintenance Record Chart"

Completed