

FAULTY SENSOR LEADS TO BALLAST OVERFLOW



Dry - BMS Subject Area 20 ('Cargo & Ballast')

- HELMET ELEMENT 5 'Environment and Energy' – Item 6 'Ballast water management'
- HELMET ELEMENT 8 'Cargo Operations' – Item 1 'Safe cargo operation and cargo securing'
- Ballast Water Management Convention & Guidelines (IMO's BWMS Code), 2018 Edition

FINDING: During an onboard Cargo Audit by our Assessor at the port of Rotterdam, the vessel was under cargo discharging operation and ballasting her tanks at the same time. The Chief Officer did not notice a faulty sensor in the Ballast Tank's Radar system resulting in a ballast tank overflow.

IS THIS IMPORTANT?

Monitoring the ballasting/deballasting operations in ports is essential as it may result in unpleasant consequences if not performed according to the international and local regulations. For example, in a number of cases vessels were accused of splashing and spotting the harbor's berth, due to the accidental overflow of their ballast tanks. Additionally, many reported incidents involving over-pressurization of tanks resulted in damage to the hull, the piping system and the air vents.

SUGGESTIONS

- Crosscheck the tank's innage by comparing the electronic readings with manual/ local soundings.
- Ensure that ballast pumps' RPMS are being reduced to minimum during critical stages or in an event of possible malfunction of the loading instrument sensors.
- Retain spare sensors for immediate replacement onboard.
- Ensure that scupper plugs are placed properly to retain any liquid accumulation on deck and keep a portable pump in readiness.

REMEMBER

- Air vents with float type closing appliance are not designed for continuous ballast water overflow.
- Avoid topping the tanks or overflowing while in freezing weather conditions.
- Compare the calculated shear forces and bending moments to comply with the permissible strength limits of the vessel at all times during operation.
- Establish proper communication between cargo control room and deck party.
- Before a ballasting operation, make sure that the ballast water is clean from impurities.