



## “Christmas Tree Lights...!”

**#1# Real Case:** Recently, it has been reported that a cargo vessel faced difficulties in Novorossiysk, Russia when the Port State Control Officers boarded the vessel for a detailed PSC inspection. Amongst other findings, the navigation lights onboard were observed to be inoperative. More specifically, *the port side (emergency) and starboard side (main) navigation lights were found damaged and corroded*, resulting in the vessel’s detention.

In spite of the latest advancements in maritime navigation technologies such as GPS, ECDIS, and several other satellite signaling systems, **Navigation Lights, resembling Christmas tree lights** still play an important role in navigation of ships at sea.

**Prevention at Sea highlights below the main factors affecting the navigation lights performance along with some points to consider for their onboard maintenance;**

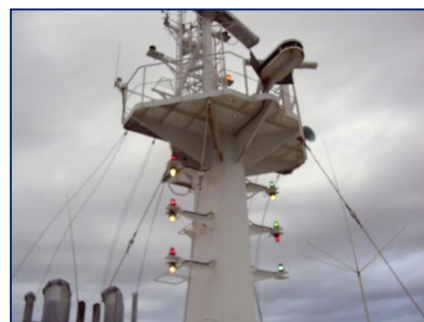


Photo - Nav. Lights/ Christmas tree lights

### Factors affecting Navigation Lights

- **Water (sea and rain water):** Since all navigation lights are located on the outside part of the ship’s deck, they are prone to effects of seawater, rainwater and atmospheric moisture. The navigation lights are thus placed in weather tight and watertight enclosures.
- **Vibrations:** Since the navigation lights are located at the highest points of the vessel, they are always under the effect of vibrations, when main engine is running. This is yet another cause of bulb failure.
- **Sun light and wind:** Due to continuous sunlight, the life of the light fittings often gets reduced especially if they are made of plastic.
- **Wire securing:** The wires of navigation lights that are secured to the mast, get tangled or loosen due to exposure to weather conditions.

### Equipment Maintenance – Points to consider!

- ✓ Check Periodically the light fittings for leakage of water;
- ✓ Check the light holders inside the fittings for any signs of corrosion;
- ✓ Ensure the use of vibration absorber material such as rubber gasket material, wherever possible;
- ✓ While working on the navigation lights, check for any loose nut bolts and holders. Tighten and secure them whenever necessary.
- ✓ Installation of weatherproof brass material light fittings is highly recommended.
- ✓ All the navigation lights on ships are installed in pairs, i.e. two in numbers. If one fails, the other one replaces it. However, it is important that Officers in charge perform routine maintenance checks on these lights and also check the light/ bulb failure alarms for the same.

[Source: Marine Insight]



Keep a booklet on-board illustrating all the possible navigational light colour combinations for specific vessel conditions

Prevention at Sea wishes you

**Merry Christmas and a Happy and Prosperous 2018 to you and your families!**

**Don’t cure, prevent!** For more information, please do not hesitate to contact us.



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