Paris MoU on Port State Control

PSCircular 77

15 SEPTEMBER 2015

BRIDGE NAVIGATION WATCH ALARM SYSTEM (BNWAS)

Function

A Bridge Navigation Watch Alarm System is a safety device intended to alert other members of the crew should the bridge watch keeper become inactive or incapacitated.
BNWAS is a simple timer that must be reset at regular intervals by an action on the bridge. If it is not reset then alarms sound in stages to alert the crew. For details see MSC 128(75) for the IMO BNWAS performance standard.

Carriage Requirement

This is defined in SOLAS V/19 2.2.3 and summarized below:

Cargo ship

Category of vessel	Not later than
Constructed on or after 1 July 2011	
150GT and upwards	1st July 2011
Cargo ship constructed before 1 July 2011	
3000GT and upwards	1st survey after 1 July 2012
500GT and upwards but less 3000GT	1st survey after 1 July 2013
150GT and upwards but less 500GT	1st survey after 1 July 2014

Passenger ship

Category of vessel	Not later than
Constructed on or after 1st July 2011	During build
Constructed before 1st July 2011	1st survey after 1 July 2012

There was a substantial period between the development of the IMO Performance Standard MSC 128(75), the corresponding IEC 62616 standard and the mandatory carriage dates. In this period some administrations developed their own standards and made carriage mandatory.
IMO has recognised that a variety of BNWAS type products have been developed and installed. Where a BNWAS, installed before 1st July 2011, does not have a type approval certificate showing compliance with SOLAS requirements, then an Administration may issue an exemption or letter of equivalence.

With the adoption of MSC 350(92) amendments (entered into force on 1 January 2015) ships constructed on or after 1 July 2002 shall be fitted with navigational systems and equipment which will fulfil the requirements prescribed in SOLAS V/19 2.1 to 2.9.

Ships constructed before 1 July 2002 shall be fitted with the BNWAS required in paragraph SOLAS V/19 2.2.3, as follows:

.1 passenger ships irrespective of size, not later than the first survey after 1 January 2016;

.2 cargo ships of 3,000 gross tonnage and upwards, not later than the first survey after 1 January 2016;

.3 cargo ships of 500 gross tonnage and upwards but less than 3,000 gross tonnage, not later than the first survey after 1 January 2017; and

.4 cargo ships of 150 gross tonnage and upwards but less than 500 gross tonnage, not later than the first survey after 1 January 2018.

Administrations may exempt ships from the application of the requirement above when such ships will be taken permanently out of service within two years after the implementation date specified in subparagraphs above.

Checks

1. SOLAS requires that the BNWAS is operational while at sea – check by questioning master, any log entry or ask if a procedure has been written (Note: you cannot see or comment on the actual procedure, as you are a PSCO not an auditor) and check that it is understood by bridge watch keepers.

2. The change of BNWAS Mode (Off, Auto, On) must be secure – check that it is by key or pass code and how it is controlled.

3. BNWAS should support an emergency call system, i.e. the alarm can be triggered manually from Bridge to other parts of vessel – confirm crew know how to do this

4. The BNWAS should be tamperproof – check for signs of tampering around mode control switch, power supply fuse.

5. Confirm how resets are made by asking the master/crew. It may be a combination of items in 7 below

6. Check reset functions if possible, which can be by:
   - Buttons, which should be of illuminated,
   - movement detectors – false resets can be generated by movement of objects or air such as from ventilation or equipment cooling fans– check for possible movement in their vicinity, ie cables. Confirm that their operation has been validated after physical changes to bridge that may affect them.
   - the operation of navigation equipment, such as radar controls.

7. More Detailed

Check the staged alarms sound at the required interval – confirm staged alarms sound off the bridge by setting BNWAS to on and allowing it to pass through each stage without resetting. This could be done whilst carrying out the general overview of the accommodation.

8. Deficiency Code

Code[1]	Defective item	Nature of defect	Delay action taken	Base Code[1]	Convention reference	Equipment Related? Y/N	Detainable? Y/N	RO related? Y/N
10138	BNWAS	Inoperative, Malfunctioning, Inadequate, Missing	Rectified, At the next port, Within 14 days, Before departure, At an agreed repair port, As in the agreed class condition, As in the agreed flag State condition, Master instructed to ….	01050	SOLAS V/ 19 2.2.3	Y	Y	Y

9. Action Taken

9.1 BNWAS not being operated at sea – Rectify before departure (ISM)
9.2 BNWAS controls not secure – Rectify before departure, Rectify at next port
9.3 Emergency call system not functioning – Rectify before departure
9.4 Alarm not working and/or at correct staged intervals – Rectify before departure

1 Final Code and Base code number have been determined upon mutual agreement and decision by Coding SB.