



Port State Control - Top detention items

Reduce the risk of detentions

2009 edition

Introduction

This booklet provides information on the most common and critical deficiencies reported during port state inspections. This information is based on recent statistics and experience gained from DNV vessels that have been detained by Port State Control. It is intended as a quick reference guide and may be used by the crew prior to arriving at a port. This guide is not a substitute for the vessel's own maintenance system. However, it can be used as a supplement in an effort to reduce the risk of detention. More guidance and detailed check lists can be found within the DNV PSC Tool Kit.

In addition to the listed deficiencies, a number of operational deficiencies related to the ISM Code have been increasingly recorded by PSC officers. An effective Safety Management System onboard, well supported by company resources, will significantly reduce the likelihood of the ship being detained.

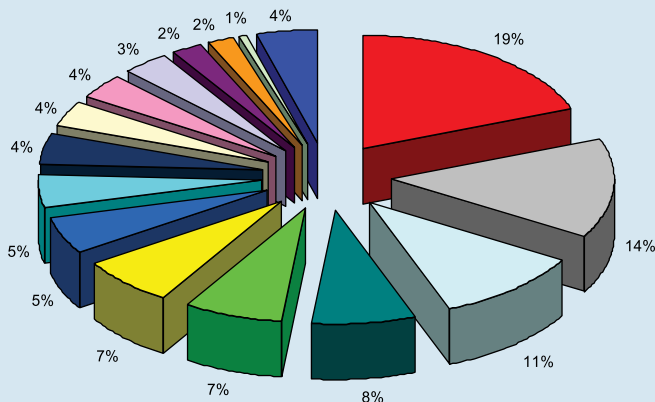
Special national Port State requirements should also be referenced before arriving at each port. Due focus should also be given to concentrated inspection campaigns and new regulations as they come into force.

If the vessel is detained by Port State Control, DNV is to be notified immediately and requested for attendance onboard. The DNV surveyor will facilitate rectification of deficiencies, verify compliance with the applicable requirements and expedite release of the vessel.

The chart on the following page shows the percentage of detention deficiencies sorted by main category group found by PSC on DNV classed ships during the period of 2006 to 2008, sorted by main category group.

For ordering additional copies of this guide and also the complete DNV PSC Tool Kit, please contact your local DNV office or one of our Maritime Service Centres.

Detention deficiencies per Category Group found on DNV Ships in 2006-2008



Name of category & Number of Deficiencies [Total/Detainable]

- Fire safety measures [848/308]
- ISM related deficiencies [417/224]
- Life safety measures [548/172]
- Propulsion and auxiliary machinery [520/123]
- MARPOL - Annex I [276/121]
- Stability, structure and related equipment [450/110]
- Load lines [327/88]
- Safety of navigation [442/73]
- Ship's certificates and documents [232/71]
- MARPOL- (Annex II,III,IV,V & operational) [193/59]
- STCW [153/58]
- Radio communications [201/54]
- SOLAS related operational deficiencies [162/32]
- ILO 147 (Accommodation, Food&Catering, etc.) [464/31]
- Maritime security [64/12]
- Other [258/70]



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Be better prepared!



Quick pre-port arrival check

- **Access control in place**
- **Valid certificates and documents**
Originals, endorsements & entries
- **ISM Code**
On board maintenance, procedures, drills and company's availability 24/7 to be properly documented
- **Life saving appliances**
In good condition, adequate number, proper stowage
- **Fire fighting measures**
Readily available, operative and in good condition
- **Nautical publications & charts**
Onboard and updated
- **Top detention items**
See next pages

Life-saving appliances

Lifeboat



Example

PSC Finding: Starboard lifeboat's motor could not be started. Crew took over twenty minutes to start engine. A second attempt to start also failed (ground for detention).

What to look for

- Free access
- Deterioration of hull material.
(e.g. reinforced fibre glasses)
- Propeller & rudder in good working condition
- Engine easily started
Inoperative engine is one of the most common defects
- Release mechanism
- Complete inventory
(proper quantity, date of expiry and good condition)
- Launched every 3 months

Repaired: The injector of the engine has been cleaned and overhauled. Upon completion proper starting of the engine was demonstrated by the crew.

Life-saving appliances

Launching arrangements



Example

PSC Finding: Port & Starboard Lifeboat Davit winch foundation found heavily corroded and wasted. Starboard found more corroded than port foundation (ground for detention).

What to look for

- Davits & winches
Corroded foundation is one of the most common defects
- Wires & hooks
- Remote control
- Recovering gear
- On-Load and Off-load release
- Guide rollers
- Manual brakes
- Limit switches
- Periodical inspection
- Instructions of maintenance & service

Rectification: Starboard winch foundation previously renewed. Port lifeboat winch foundation renewed and on survey found in order, winch assembly refitted with new bolts and lock washers.

Fire safety measures

Emergency Fire Pump



Example

PSC Finding: Emergency fire pump failed to start after blackout. During testing of the emergency fire pump by the PSC Officer, the pump failed to pick up suction after 20 minutes (ground for detention).

What to look for

- Good operating condition
- Self priming
- Ready to use at all times
- Test starting arrangements
- Sufficient pressure to fire lines
Insufficient pressure is one of the most common defects
- Operating instructions are posted in plain view

Rectification: The fire pump remote sea suction valve was found closed due to lack of hydraulic operating pressure. The hydraulic pressure was restored and the fire pump was re-tested and found in order.

Fire safety measures

Fire main, hydrants & hoses



Example

PSC Finding: Fire line in engine room leaked. Wastage on fire main and deck foam line was observed (ground for detention).

What to look for

- Free from leaks
Leakages on fire line or fire hose is one of the most common defects
- Hydrants valves moving freely
- Nozzles in place and in good working condition
- Pressure tested

Repaired: The leaked fire line was permanently repaired. The pipe replaced. UTM from fire main & deck foam line was taken and wasted length partly renewed. Pressure test was carried out and no leakage observed.

Fire safety measures

Fire dampers & ventilation



Example

PSC Finding: Several fire flaps not operable; corroded and seized closing device (ground for detention).

What to look for

- No damages or corrosion
Seized fire dampers is one of the most common defects
- Moving freely
- Locking device
- Sealing rubber
- Regularly tested

Rectification: A number of fire flaps were found in very poor condition or not operable at all. The ducts containing the actual fans (and supports for electric motors) were found holed and thin. These ducts were now temporary repaired by doubler plates, but need to be renewed; condition of class issued. Several accommodation and galley fire dampers were found without operating cable attached. This was all rectified.

Fire safety measures

Fire & weathertight doors



Example

PSC Finding: Doors within main vertical zone – malfunctioning closing device for door in Engine room (ground for detention).

What to look for

- Well maintained
- Hold back arrangements
- Closing device
 - Door not closing properly is one of the most common defects*
- Clamping devices - doors can be operated from both sides
- Hinges
- Gaskets and sills

Rectification: The closing device was repaired and tested. Found in order.

Fire safety measures

Cleanliness in engine room



Example

PSC Finding: Excessive oil leaking from the ships service diesel generators and the main engine. The oil has coated the machinery, collected in the surrounding bilges, saturated the lagging in the associated piping, and has covered the engine room deck plates. The condition of the engine room presents a significant fire and safety hazard to the vessel and crew (ground for detention).

What to look for

- Free from leaks
Dirty engine room is one of the most common defects
- Bilges and drip trays are clean
- Oily rags and waste disposed in special container
- Platforms and ladders not slippery
- Safe access - no obstruction by buckets, drums etc.

Rectification: Excessive oil in engine room cleaned as much as possible, oil leaks from main and auxiliary engines brought under control and some of the damaged/oil permeated lagging of pipes changed. Condition of class given for further examination of main and aux. engine; in the meantime ER to be continuously manned (EO notation suspended).

MARPOL Annex I

Oil filtering equipment & 15 ppm alarm



Example

PSC Finding: After 45 min of trying the chief engineer was not able to prove proper operation of OWS. He also could not provide manufacturer's manual...overboard discharge valve was found to be seized in closed position and inoperable...PSC verified 3 separate ways of by passing the OWS and discharge oil directly to sea. An ISM audit to be carried out.

What to look for

- Good operating condition
Operational failure is one of the most common defects
- 15 ppm alarm arrangements
- Calibrated correctly
- No unauthorized connection overboard
- Spare parts available
- Crew members trained to operate
- Posted operating instructions

Rectification: A new pump was installed. OWS was tested and found in good working condition. 15 ppm alarm and 3 way valve tested and confirmed in operation. Overboard valve tested and found operational. OWS manual (photocopy) was found on board and reviewed. Existing bolted end flange attached to existing pipe work located in between the OWS and 3 way valve was now removed and blanked off. An ISM audit was carried out before departure.

Load Line

Vent heads, air pipes, goose necks



Example

PSC Finding: Numerous water ballast tank air vent closing devices were found defective; wasted top sealing surfaces (ground for detention).

What to look for

- Intact and well maintained
- Free from holes, corrosion and damages
Corrosion is one of the most common defects
- Flame screen
- Closing devices moving freely
- Sealing of cover
- Locking arrangement

Rectification: All ballast tank air vent heads were opened and checked. Total 33 pieces of vent head inner rings were repaired by workshop.

Radio Communication

GMDSS radio station



Example

PSC Finding: MF/HF DSC not connected to reserve source of energy (ground for detention).

What to look for

- Reserve source of energy
- Battery charger
- Battery expiry date
- SART at correct location
- Portable GMDSS VHF
- MF/HF installation
 - Malfunctioning of MF/HF is one of the most common defects*
- Antennas

Rectification: The defective cable supplying power from emergency batteries has been replaced.

Maritime Service Centres

Det Norske Veritas, Germany
Tel: +49 40 890 5900
hamburg@dnv.com

Det Norske Veritas, Russian Federation
Tel: +7 812 326 9030
stpmsc@dnv.com

Det Norske Veritas, Greece
Tel: +30 210 41 00 200
pirmar@dnv.com

Det Norske Veritas, UK
Tel: +44(0)20 7357 6080
london.msc@dnv.com

Det Norske Veritas, Netherlands
Tel: +31 (0)10 292 27 22
Rotterdam.Maritime.CSM@dnv.com

Det Norske Veritas, Singapore
Tel: +65 6508 3750
sngms@dnv.com

Det Norske Veritas, Dubai, U.A.E
Tel: +971 4 3526626
maritime.dubai@dnv.com

Det Norske Veritas, USA
Tel: +1 201 512 8900
mnsro@dnv.com

Det Norske Veritas, Rio de Janeiro
Tel: +55 21 3722 7232
Rio.Maritime@dnv.com

Det Norske Veritas, China
Tel: +86 21 3208 4518
mchcn100@dnv.com

Det Norske Veritas, Japan
Tel: +81 78 291 1302
kobe@dnv.com

Det Norske Veritas, Republic of Korea
Tel: +82 51 611 7100
acea@dnv.com

Det Norske Veritas AS, Norway
Tel: +47 67 57 99 00
nordic.maritime.service.centre@dnv.com

Det Norske Veritas AS

Veritasveien 1
N-1322 Høvik, Oslo
NORWAY
www.dnv.com

Class Systematics
mggno891@dnv.com
Tel: +47 67 57 99 00
Fax: +47 67 57 99 11

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