Port State Control: The Top Ten PSC findings

Or how to avoid detention



Edition 2010

Update on the most frequent deficiencies listed by PSC

Most shipowners and operators consider Port State Control a necessary evil. But if your ship gets detained, it can be really expensive. Besides port dues and a possible off-hire situation, any delay negatively affects your ship's profitability. Since our focus at GL is on ship safety and profitability, we naturally take a keen interest in Port State Control results.

We have analysed again the PSC data of the last two years to discover the most frequent defects found on board. This new 2010 edition outlines the main deficiencies found by PSC on detained GL-classed ships and tells you which parts of the inspected ships PSC was focusing on in the past two years. Compared with the data of our previous edition it shows that there has been no major change in the types of deficiencies found in recent years.

By making sure that the parts of a ship mentioned in these Top Ten items comply with international requirements, you can reduce the risk of PSC detentions.

Deficiencies found on detained ships by category (2008-2009)



We have broken down these categories even further for the past two years to discover the **Top Ten findings** that the PSC has listed in the detention reports. The rankings determined two years ago are included in brackets to indicate where changes have occurred:

Charts and nautical publications	(1)
Engines, generators, auxiliaries	(2)
Cleanliness of engine room	(3)
Oily water separator	(4)
Oil Record Book	(5)
Magnetic compass	(-)
Emergency fire pump arrangements	(9)
Fire dampers	(8)
Fire doors	(-)
Lifeboats	(7)
	Engines, generators, auxiliaries Cleanliness of engine room Oily water separator Oil Record Book Magnetic compass Emergency fire pump arrangements Fire dampers Fire doors

Of course, the frequency with which these deficiencies occur may vary from year to year – not least because inspection campaigns will focus on some areas on board ships and possibly increase the number of specific deficiencies. These campaigns are published in advance by PSC and our website. And naturally PSC concentrates on new regulations when they come into force. However, we believe that by focusing on these **Top Ten findings** and passing on this information to your crews, you can reduce the risk of being detained.

As a result of our evaluations and experience with PSC inspections, we would like to mention that most PSC findings can be attributed to a lack of maintenance in general. In many cases PSC adds an ISM-related deficiency if technical defects are found. All vessels operate under a Safety Management System in accordance with the ISM Code including the relevant procedures for ship and equipment maintenance. Under a strictly implemented system, the occurrence of deficiencies should be suppressed to a wide extent.

Safety of navigation



1. Charts and nautical publications



The charts and publications to be used for the next intended voyage must be up-to-date.



Nautical Publications including notices to mariners, pilot books, list of lights, tide tables, nautical almanac, IAMSAR documentation, etc. must be found on board and up-to-date for the next intended voyage.

Main engines and auxiliaries

2. Engines, generators, auxiliaries



Others (56%) Main engines (12%) Cleanliness (17%) Generators (15%)

All generators need to be in good working order and provide sufficient electric power, including 100% redundancy.

The emergency power supply must be working properly and needs to start up – even automatically – if needed.

Secondary starting systems have to function at any time.

There should be no significant leaks from engines.

Any such leaks are to be dealt with by the crew as soon as they occur.

No illegal plastic or rubber piping must be found in the piping arrangements.

If uncustomary arrangements have been installed due to ongoing maintenance or repair works, PSC should be informed.



A system should be in place to ensure that all publications on board can be easily updated. Evidence of updating is to be provided to PSC.

The notice to mariners should be consulted for any updates or new editions.



Main engines and auxiliaries

3. Cleanliness of engine room



Oil in the engine room represents a possible fire hazard and safety hazard for the crew if oil makes the floor plates or decks slippery.

Engine rooms must be reasonably clean.

Bilges should not contain excessive amounts of residue, but be emptied into holding tanks or ashore, as required.

Soaked-through insulations should be renewed.

MARPOL Annex I

4. Oily water separator (OWS)



The oily water separator needs to be in working order at all times, even if not used in Special Areas where use is prohibited.

Others (49%)

Book (25

The persons in charge need to be able to show how to operate the system and conduct a test.

The relevant operating instructions need to be posted in the vicinity.



Cleanliness is a subjective matter and the whole issue should be discussed with PSC in the light of the actual circumstances onboard.



All piping connected to the bilge system and OWS must be fitted according to requirements.

Suspicious piping arrangements will be checked internally by PSC for oily residues.

Piping arrangements must comply with approved drawings which have to be available.

MARPOL Annex I

5. Oil Record Book



The Oil Record Book must be kept on board in the current format.



6. Magnetic compass

Safety of navigation



The magnetic compass must be in good conditions.

The compass must be easily readable from the conning position.

A pelorus must be available for taking bearings.

Documentation of ongoing compass deviation control must be available.

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Entries are to be made in the forms as per latest requirements. Codes must be used correctly as required.

The disposal of any oily residues must be properly documented.



A spare magnetic compass must be readily available if required.

No air bubbles are allowed in the bowl.

Fire safety measures



7. Emergency fire pump



The emergency fire pump is to be ready for use at all times.

The responsible crew members must be able to start the pump.



hoses on deck.



Fire safety measures

E/R FANDAMPER S/S

8. Fire dampers

The fire dampers must be working properly.

Handles must be easy to move and the inscription has to show the name of the closable compartment and the position of the handle "open" and "closed".

The dampers should be clearly marked.

If closures work with a flap, it has to be properly hinged and move easily.

Rubber packings need to be in good conditions and toggles greased and capable of tightly closing the flap.

Fire safety measures

9. Fire doors



Fire doors have to be in good working conditions. The closing device must be able to properly close the door.

All doors must be arranged as per fire plan.

Life saving appliances



10. Lifeboats



Lifeboats must be structurally sound with no defects or signs of wastage and attached parts such as the rudder, lifelines, skates etc. have to be in place.



No allowance for keeping doors permanenty open using wires, etc.



The lifeboat motor must be in good conditions and easy to start by the crew members. The gear, shaft and propeller have to be in good working conditions.

The inventory must be complete and not outdated.

Useful links

The deficiencies detailed in this booklet are those which were mainly listed by PSC. Of course, there may be many other items listed as deficient in PSC reports. Ships should always be maintained to comply with all applicable international convention requirements. For regular equipment checks we recommend you use the **PSC Maintenance Checklist**.

The list and further information can be found on the GL website under "PSC related".

Regular maintenance reduces the risk of problems during PSC inspections on board ships.





Don't give PSC a chance to find deficiencies!

PSC history of ships inspected:

PARIS MOU database:	www.parismou.org
TOKYO MOU database:	www.tokyo-mou.org
USCG database:	http://homeport.uscg.mil/mycg/portal/ep/home.do >> Port State Control
BLACK SEA MOU database:	www.bsmou.org
INDIAN OCEAN MOU database:	www.iomou.org
MEDITERRANEAN MOU database:	www.medmouic.org
EQUASIS database:	www.equasis.org

Germanischer Lloyd:

General information:	www.gl-group.com
PSC Maintenance Checklist:	www.gl-group.com/pdf/maintenancechecklist.doc

Assistance in PSC matters from GL Head Office:

Fleet Service Department: Phone: +49 40 36149-1111 Fax: +49 40 36149-5555

PSC specialists:

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For immediate assistance on site, we advise you call the nearest GL surveyor's office

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