



Master's Check List

Preventive Maintenance & Port State Control

July 2006



MANAGING RISK

Master's Check List

- Improve safety, reduce losses and breakdowns
- Enhance on board maintenance
- Comply with applicable safety, security, and pollution prevention requirements
- Avoid off-hire, Port State detention and targeting

Please note:

This list includes the most common and critical deficiencies based on recent statistics and experience, requiring frequent maintenance onboard. Therefore, it is neither a comprehensive list that includes all possible deficiencies nor a substitute for the operator's own maintenance scheme. In particular, hull structure and machinery are not covered in detail.

In addition to hardware deficiencies, a number of operational deficiencies and those related to ISM and ISPS Codes are also included. An effective Safety Management System onboard, well supported by company resources, will significantly reduce the likelihood of the ship being detained.

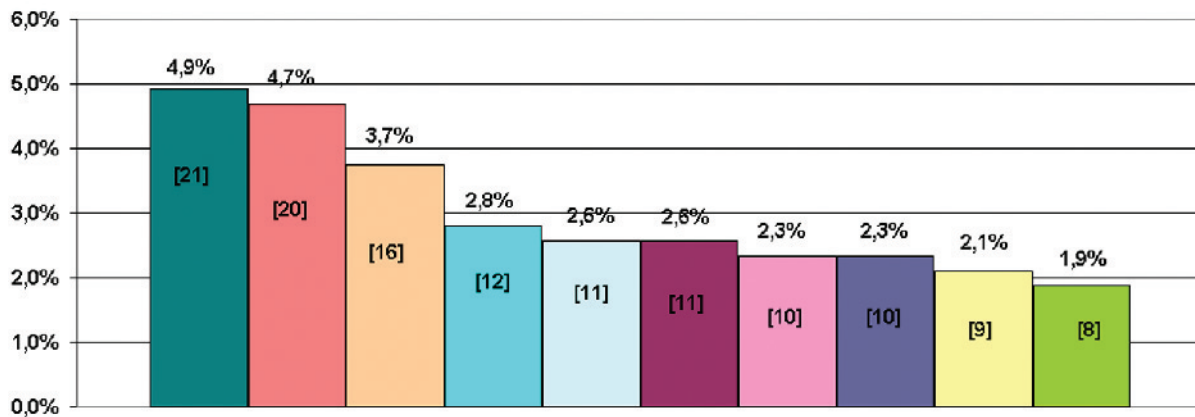
Special national Port State requirements are not included in the check list and should be checked separately before arriving at each port. It is also advisable that the websites of the major PSC regimes are monitored regularly in order

to be prepared for planned concentrated inspection campaigns (CIC). The same holds true for important new regulatory information and guidance posted by flag states.

This list may be used regularly on a voluntary and advisory basis as a supplement to operator's maintenance scheme to meet responsibilities for adequate maintenance onboard.

Discovered deficiencies are to be promptly rectified or reported to DNV, Flag Administration and/or Port Authorities as appropriate. The owner should keep onboard a record of identified deficiencies and their rectification actions.

If you are not in agreement that the detention of your ship is warranted, you have the right to appeal. Most of the PSC regimes have published appeal procedures that could be found on their websites.



(percentage of total number of detainable deficiencies & by [number])

■ Lifeboats [21]	■ Fire pumps [20]
■ Vent/fire-dampers/valves/ QC devices [16]	■ Maintenance of the ship & equipment(ISM) [12]
■ Oil filtering equipment [11]	■ Abandon ship drills [11]
■ Launching arrangements for survival craft [10]	■ Cleanliness of engine room [10]
■ Ventilators/air pipes/casings [9]	■ Machinery (leakage, boilers, etc.) [8]

Most common detainable deficiencies found by PSC on DNV classed ships in 2004

If your ship is detained, contact your local DNV office immediately for assistance and request attendance. The DNV surveyor will facilitate rectification of deficiencies, verify compliance with the applicable requirements and expedite release of the ship.

DNV ID No.: _____

Ships' Name: _____

Main area / item	Check with respect to	1)
Master's office & responsibilities	PSC inspections commence in the Master's office.	
<ul style="list-style-type: none"> Ship certificates & documents Crew (STCW) SOPEP 	<p>Original copies available, validity, stamps, signatures, endorsements & entries</p> <p>All personnel adequately certificated and documents available, records of rest, etc.</p> <p>Approved, updated and contact details included</p>	
<ul style="list-style-type: none"> ISM & ISPS Code 	Master to be familiar and have understanding of the Safety Management System (ISM Code) and Ship & Port Security Code (ISPS). All documents approved, updated & available (see also ISM & ISPS related in next page)	
Accommodation (ILO)		
<ul style="list-style-type: none"> Sanitary facilities Ventilation, heating, lighting Galley/handling spaces Fire fighting measures 	<p>Sufficient, not damaged, clean.</p> <p>In good working condition and clearly marked.</p> <p>Cleanliness, satisfactory arrangements and supply of hot & fresh cold water</p> <p>Fire doors operative and in good condition; fire detectors & fire fighting equipment available, in place and in working order.</p>	
<ul style="list-style-type: none"> Fire control plan Means of escape 	<p>In place and up to date.</p> <p>Marking of escape routes and unobstructed</p>	
Bridge		
<ul style="list-style-type: none"> Radar Magnetic compass Lights, shapes, sound-signals Nautical charts & publications Echo sounder Radio /GMDSS VHF installation INMARSAT-C /EGC EPIRB Ship's radar transponder NAVTEX Fire detection 	<p>In good operating condition</p> <p>Easily readable, last calibration (updated deviation card)</p> <p>In good operating condition</p> <p>Provided on board and validity/up-to-date</p> <p>Functioning correctly</p> <p>Installations (Main, MF, MF/HF) in operating condition, tools & spare parts</p> <p>In good operating condition including DSC performance</p> <p>In good operating condition</p> <p>Validity of battery and hydrostatic release, updated maintenance records</p> <p>Correctly located, battery expiry date</p> <p>Good performance</p> <p>Main control panel and alarm bells in operating condition</p>	
Deck		
<ul style="list-style-type: none"> Decks, Bulkheads Railings/cat walks Cargo and other hatchways/covers Doors (weather tight) Ventilators, air pipes, casings Fire dampers, means of control Fixed fire extinguishing installation Mooring arrangements Oil discharge monitoring & control 	<p>Corrosion/pitting, cracks, buckling and other damage</p> <p>Corrosion/wastage, cracks, buckling, missing parts etc.</p> <p>Corrosion, cracks, buckling to coamings, stays etc., covers in good condition</p> <p>Corrosion, tightness, packing, handles/clamps</p> <p>Good operating condition, corrosion, tightness and clearly marked</p> <p>Operating condition, seized/corroded, clearly marked</p> <p>Check fire main for any leakage, spot test hydrant valves, check hoses /nozzles</p> <p>Condition of ropes/wires, anchoring devices, winches/capstans clearly marked and in good operating condition</p> <p>Operating condition and function test (tankers only)</p>	
Engine room		
<ul style="list-style-type: none"> Main & auxiliary engines Cleanliness of engine room Bilge pumping arrangement Jacketed piping system for high pressure fuel lines Oil record book Retention of oil on board Oily water sep./filtering equipment 15 PPM alarm arrangements Steering gear Fire fighting measures 	<p>Leakage, instrumentation, insulation of hot surfaces (above 220C°)</p> <p>Leakage, oil traces in bilge and other parts in the engine room, no oily rags</p> <p>Bilge pump and bilge high level alarm</p> <p>Approved system in order including collecting tanks and alarms</p> <p>Availability on board and correct entries, up-to-date</p> <p>Sludge tanks capacity & arrangement / delivery to shore facilities</p> <p>Certificate available, in good operating condition, no illegal by-pass</p> <p>Operating condition and auto-stop</p> <p>Leakage/oil spill, defects, corrosion, functioning correctly</p> <p>Good condition of fire doors, main fire pumps (adequate pressure), equipment available and in operating order, quick closing valves and remote stops.</p>	
Working spaces		
<ul style="list-style-type: none"> Working arrangements Lighting 	<p>Ensure that the arrangement in any working space is satisfactory to prevent accidents and that there are always free entrances/escapes to and from such spaces.</p> <p>Sufficient lighting to perform the work to be carried out.</p>	

1):	X = In order	N = Not checked	R = Deficient	NA = Not applicable
Date:.....	Signature:.....		Ship Stamp:	
Place:.....	Name:.....			

Main area / item	Check with respect to	1)
Fire fighting measures	(See also Engine room and Accommodation)	
• Fire detection	Fire detectors in place and as required	
• Fire doors	Operative and in good condition	
• Fire fighting equipment	Ready availability, portable fire extinguishers; number, position, last service	
• Fixed fire extinguishing installation	Operating condition and latest service report	
• Fire dampers, means of control, vent.	Operating condition, seized/corroded, clearly marked	
• Main & emergency fire pumps	Operating condition, easily started and fire lines have sufficient pressure	
Life saving appliances		
• Lifeboats	Condition of hull and attachments, inventory as required & in date, proper stowage	
• Rescue boats	Engine start, condition of hooks & attachments, inventory, proper stowage	
• Life rafts	Number, auto-release, condition, last service date, proper stowage	
• Launching arrangement	Condition for launching and brakes, well maintained lifeboat davit	
• Life buoys	Correct number, good condition, marking, lights, quick release, lifelines etc.	
• Life jackets & immersion suits	Correct number, good condition, lights, whistles retro-reflective tape, marking	
• Emergency equip. for 2-way	Operating condition, spare batteries, validity	
• Embarkation arrangements	Ladders, deck area and clear of obstructions	
Load lines related	(See also Deck area)	
• Loading/stability manual	Approved and with latest intact stability information	
• Freeboard marks	Marking and position (port & starboard side)	
• Overloading	Ship not overloaded	
MARPOL related	(See also Engine room – ref. MARPOL, Annex I- oil pollution)	
• Annex II (Nox. Pollution)	Cargo record book updated, P&A Manual, residue discharge system	
• Annex III (harmful substances)	Adequate packaging, marking & labelling, proper stowage etc	
• Annex IV (sewage) & V (garbage)	Approved sewage treatment plant, Garbage management plan and record book	
• Annex VI (air pollution)	Required documentation and crew familiar with operating procedures	
Safety in general		
• Closing devices / watertight doors	Tightness: packing, dogs/clamps, hinges & strength: corrosion, cracks	
• Emergency lighting/batteries	Adequate, operating condition, including emergency generator where fitted	
• Electrical equipment in general	Insulation, cables, earthing and cleanliness/dryness	
• Pilot/ accommodation ladder	Condition for safe access (including gangways)	
• Means of escape	Marking, condition and no obstructions	
SOLAS operational control		
• Muster list	Entries up-to-date	
• Fire drills / Abandon ship drills	Regularly held and logged.	
• Fire control plan	Posted in approved form as required	
• Manuals, instructions, etc.	Available and as required.	
• Continuous Synopsis Record (CSR)	Ensure consistency of information	
ISM related	Safety Management Certificate & Document of Compliance	
• Safety and environmental policy	Documented safety, pollution prevention & compliance policy	
• Designated person(s) ashore	Known to personnel, supported by the Company with resources	
• Master's responsibility & authority	Described in SMS, understood by Master and supported by the Company	
• Resources & personnel	Crew composition, fitness, familiarisation, communication & training, resources	
• Emergency preparedness	Procedures, drills and Company's availability 24/7 documented	
• Maintenance of ship and equipment	Maintenance routines, testing and records documented & implemented	
ISPS related	International Ship Security Certificate	
• Ship Security Plan	Approved & protected from unauthorized access or disclosure	
• Ship Security Officer (SSO)	SSO onboard and familiar with his duties and documented training	
• Access Control	Establish identification and purpose of visitors.	
• Restricted areas	Identified and clearly marked	
• Records	Records of SSP activities (training, drills, threats etc) to be kept updated	
• Ship Security Alert System (SSAS)	Maintenance and test records available; system operational and complies with Flag	
Special National Requirements	Additional national requirements for the relevant Port State	

www.dnv.com

For more information and ordering: contact your local DNV office or one of our Maritime Service Centres

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