



IRCLASS

ANNUAL REPORT

PORT STATE
PERFORMANCE

2015

CONTENTS

	PAGE
Foreword	2
Objectives of Port State Inspections	3
IRCLASS performance under PSC MOUs	4
Analysis of PSC Detentions	5
Consolidation	25
Conclusion	26



IRCLASS
Indian Register of Shipping

FOREWORD

This annual report provides details and analysis of the inspections carried out under Port State on vessels classed with IRCLASS during the year 2015. The report includes statistics and performance under various MOUs including USCG.

The objective of this report is to build awareness on the state of PSC detentions and the areas which have been found deficient during the year 2015 with the intent of improving the performance of IRClass fleet.

During the period 1st September to 30th November in the year 2015 Concentrated Inspection Campaign was carried out on ships by Paris, Tokyo and Indian Ocean MOUs in respect of ‘Crew Familiarization for Enclosed Space Entry’ however focus area remained with respect to the implementation of MLC 2006.



IRCLASS
Indian Register of Shipping

OBJECTIVE OF PORT STATE CONTROL INSPECTIONS

Under the provisions of the applicable International Conventions, the Flag Administration is responsible for promulgating laws & regulations and for taking all other steps which may be necessary to give the applicable conventions full and complete effect so as to ensure that, from the point of view of safety of life and pollution prevention, a ship is fit for the service for which it is intended and seafarers are qualified and fit for their duties. It is the prime responsibility of the flag state to ensure the ships flying its flag are in compliance with statutory, national and International requirements.

PSC MOUs have been established for an effective port State control regime in their respective regions. This is achieved through co-operation and coordination of its member countries and thus to eliminate substandard shipping. Main aim is to promote maritime safety, by way of protection of the marine environment, safety of ships and safety of seafarers.

International Conventions under IMO and ILO provide for control procedures to be followed by a party to a relevant convention with regard to foreign flag ships visiting their ports. Whenever there is any reason to believe that ship owners, ship managers or classification societies have failed to comply with the requirements of the international maritime conventions, Port State Control comes onto the scene and upon finding them substandard, ensures that suitable measures are taken. These measures, if minor, could be dealt-with over a period of time, or if significant then before they are allowed to sail. Control measures could also be vessels being debarred from entering a PSC jurisdiction.

A ship is termed as substandard when its hull, machinery, equipment or operational safety is substantially below the standards required by the relevant convention or whose crew is not in conformance with the safe manning document.



IRCLASS PERFORMANCE UNDER PSC MOUs:

The total PSC detentions in the year 2015 showed an increase in number compared to the preceding two years. Detentions under Tokyo MOU continued to top the list with a total of 6 detentions. There were two detentions under Paris MOU this year compared to the achievement of “Zero” detentions under Paris MOU continuously for last 3 years. There has not been any detention under USCG.

Performance of IRCLASS under various MOUs:

BLOCK YEARS	PERFORMANCE CATEGORY PARIS MOU	PERFORMANCE CATEGORY TOKYO MOU	ZERO POINT CATEGORY USCG
2009-2011	MEDIUM	HIGH	YES
2010-2012	MEDIUM	HIGH	YES
2011-2013	MEDIUM	HIGH	YES
2012-2014	MEDIUM	HIGH	YES
2013-2015	MEDIUM	HIGH	YES

The performance has been “High” under Tokyo MOU and “Zero” point category is maintained under USCG since 2009.

Under Paris MOU, the grading has been “Medium”, though technically IRS performance has been to the highest standard with “Zero” detention in previous 3 block year periods. The grading under “Medium” category is based on the calculation methodology adopted by the MOU, which is unfavorable if the numbers of inspections are less.

IRCLASS is hopeful that the methodology for grading ROs will be suitably modified by Paris MOU so that the grading will reflect the true performance. Representation sent to Paris MOU has received affirmation from them.



Number of inspections and detentions under various MOUs in 2015 was as follows:

PSC MOUs/Authorities	Number of Inspections	Number of Detentions
TOKYO	98	6
INDIAN OCEAN	26	2
PARIS	22	2
USCG	13	0
RIYADH	39	4
BLACK SEA	5	0
TOTAL		14

ANALYSIS OF PSC DETENTIONS IN 2015

In the year 2015, a total of 14 PSC detentions were recorded, the overview of which are detailed below:

Ship type wise:

Ship Type	Number of Vessels detained
BULK CARRIERS	7
OIL TANKERS	2
OIL/CHEMICAL TANKER	1
GENERAL CARGO	2
GENERAL DRY CARGO	1
RO-RO	1
TOTAL	14



Age wise:

Age of vessel at detention	Number of Vessels detained
0 to ≤ 5yrs	2
>5 to ≤ 10yrs	2
>10 to ≤ 15yrs	3
>15 to ≤ 20yrs	4
>20yrs	3
Total	14

Flag wise:

Flag	Number of Vessels detained		Tokyo MOU	Indian Ocean MOU	Paris MOU	Riyadh MOU
India	11	=	6	1	2	2
Panama	2	=	0	0	0	2
St. Kitts & Nevis	1	=	0	1	0	0
Total	14	=	6	2	2	4

A total of forty five (45) detainable deficiencies were identified during PSC inspections for ships detained with number of detainable deficiencies varying from 1 to 8 Nos. for ships which were detained. None of these detainable deficiencies were attributed to RO responsibility by Paris, Tokyo MOUs as per published data.



ANALYSIS OF DETAINABLE DEFICIENCIES

DETAILS OF PSC DETAINABLE DEFICIENCIES

Description of Detainable Deficiencies with Thetis Code is tabled below:

Deficiency Code	Thetis Code	Details of Deficiency
Structural Condition	02107	Additional lube oil suction from lube oil tank not fitted with remote controlled valve (can be closed from ER interior only).
Emergency Systems	04114	Emergency generator does not start automatically after a simulated black out.
	04114	Emergency generator out of order due 3 unit seize mix waste oil.
	04114	Emergency generator out of order.
	04114	Emergency generator out of order.
Radio Communications	05105	MF/HF radio not working.
	05118	The NBDP cannot be operated by GMDSS operator.
Fire Safety	07101	Exhaust collectors on aux. engine not protected, not insulated.
	07108	Air bottle for quick closing valve operation found not filled.
	07113	Emergency fire pump found not working.
	07115	Fire dampers (Port and stbd side from chimney) from engine room ventilators found stuck. Not possible to close. Open/Close position not marked. Also protective covers missing or wire mesh found damaged.
	07115	Stbd engine room vent blower flap not fully closing.
	07120	All corridors used as means of escape in accommodation space not fitted with handrails.
	07126	Accumulated oil and contaminated water in engine room bilge wells
	07126	Main engine generators and purifiers lub oil and fuel leaking.
Alarms	08107	Oil mist detector unable to calibrate due to lack of test kit on board.
	08102	CO2 release alarm not working.
	08108	Bilge high level alarm (fore) not working.
	08107	Main generators high pressure fuel leaking alarm not working.
	08107	Main generators high pressure jacketed pipe leaking alarm not working.
	08108	Engine control room monitoring system out of order.



Working and Living Conditions – Working conditions	09232	Engine room house keeping found in poor condition with oily rags all over in Engine room, Main engine bilges found with oil all over posing fire hazard.
Safety of Navigation	10114	VDR breakdown.
	10114	S-VDR malfunction.
	10116	Sailing Directions Vol. 19 needed for last and next voyage – missing.
	10127	Master failed to ensure adequate official nautical charts to be used for inbound passage to Qingdao as evidenced by Deficiency No. 1
Life Saving Appliances	11101	Port & Stbd lifeboat engines found not working.
	11101	S/S life boat unable to be started.
	11101	The P/S lifeboat only can start by one group battery.
	11101	The S/S lifeboat only can start by one group battery.
	11110	All life rafts secured by tapes. Life rafts unable to be released by itself.
Propulsion and auxiliary machinery	13102	Main generator No. 2 out of order.
	13102	Main generators fuel oil leaking.
	13108	Emergency fresh water cooling pump for main engine not working.
Pollution Prevention – MARPOL Annex I	14102	Sludge tanks almost full. Waste oil stowed on deck in plastic drums due to lack of space in sludge tanks.
	14104	Oily water separator found not working since 27/10/2015.
	14104	Oily water separator defective (Oil – water interface detector defective).
Pollution Prevention – MARPOL Annex IV	14402	Sewage treatment plant top aeration blower found not working, STP found not in use.
	14402	Sewage treatment plant cut of order due to air blower and chlorinating pump malfunction. Chlorine tank (butcher) empty.
ISM	15109	Main generator oil leaking.
	15150	Considering serious deficiencies safety management system found to be ineffective.
	15150	Safety Management audit by the Administration is required before departure of the ship. Deficiencies marked ISM are objective evidence of a serious failure or lack of effectiveness, of implementation of the ISM Code.
	15199	Safety Management System as implemented fails to ensure effective shipboard operation and emergency preparedness as evidenced by deficiencies above.
Labour Conditions. – Conditions of employment	18201	Repeated non-conformities of minimum rest period requirements for seafarers, during port operations, over several months.
	18299	Deficiencies Nos. 1 to 10 are evidence of ineffective implementation of MLC 2006, (Conditions of employment, accommodation, recreational facilities and food and catering).

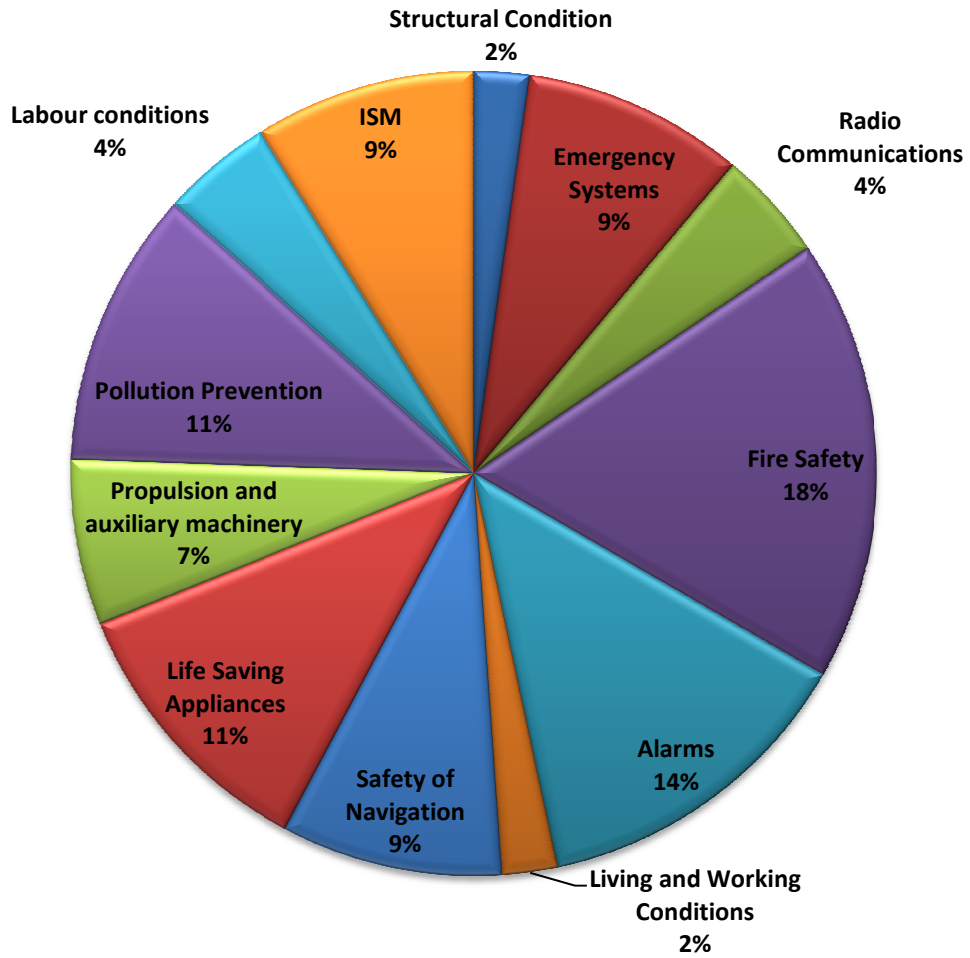


Number of Detainable deficiencies per category and percentage:

No.	Categories	No. of Detainable Deficiencies	% of Total
01.	Fire Safety	8	18%
02.	Alarms	6	14%
03.	Life Saving Appliances	5	11%
04.	Pollution Prevention	5	11%
05.	Emergency Systems	4	9%
06.	Safety of Navigation	4	9%
07.	ISM	4	9%
08.	Propulsion & Auxiliary Machinery	3	7%
09.	Radio Communication	2	4%
10.	Labour Conditions	2	4%
11.	Living and Working Conditions	1	2%
12.	Structural condition	1	2%
	Total Detainable Deficiencies	45	100%



PSC Detainable Deficiencies



The comparative data of detentions year wise is provided below:

NUMBER OF DETAINABLE DEFICIENCIES OVER YEARS

2015	2014	2013	2012	2011
45	24	32	62	31

Comparison of detainable deficiencies category wise over years

	% of Detainable Deficiencies				
	2015	2014	2013	2012	2011
Fire Safety	18%	25%	32%	15%	39%
Life Saving Appliances	11%	4%	16%	2%	13%
Certificates & Documentation	0%	17%	16%	8%	3%
Safety of Navigation	9%	-	6%	8%	3%
ISM	9%	4%	6%	5%	10%
Emergency Systems	9%	17%	6%	-	-
Radio Communication	4%	8%	3%	3%	-
Structural Condition	2%	-	3%	2%	-
Propulsion & Machinery	7%	13%	3%	3%	3%
Alarms	14%	-	9%	3%	-
Pollution Prevention	11%	-	-	27%	16%
Water/Weather tight Condition/Load line	-	4%	-	8%	13%
Living & Working Conditions	2%	8%	-	11%	-
Labour conditions	4%	-	-	-	-
ISPS	-	-	-	5%	-

Details of PSC Inspections of Ships Classed with IRCIASS under USCG, Paris, Tokyo Indian Ocean and Riyadh MOUs for last two years (2014 & 2015)

MOU	No. of Inspections		No. of Inspections with Deficiencies		No. of Detentions		Total No. Deficiencies	
	2015	2014	2015	2014	2015	2014	2015	2014
Paris	22	29	13	13	2	Nil	59	61
Tokyo	98	77	65	48	6 [#]	4 [#]	274	296
Indian Ocean	26	27	18	15	2 [#]	1 [#]	89	174
USCG	13	12	Not Published	Not Published	0	1	Not Published	Not Published
Riyadh	39	27	Not Published	Not Published	4	2	Not Published	Not Published
Black Sea	5	8	3	2	0	1	11	15

Above statistics are taken from respective MOU websites

Australia (AMSA) is a member of both the Tokyo MOU and the Indian Ocean MOU. Note: Two detentions in year 2015 and two detentions in 2014 by Australia (AMSA) were found published in both Tokyo MOU and also in Indian Ocean MOU, However in above mentioned table statistics for years 2015 and 2014 one vessel counted under Tokyo and other one is counted under Indian Ocean MOU in order to avoid repetition of same vessel detention in two different MOU's.



SHIP TYPE WISE:

	% of Total Ships Detained			
	2015	2014	2013	2012
Bulk Carrier	50%	45%	50%	36%
Oil Tankers	14%	-	25%	21.5%
General Cargo/General Dry cargo	22%	22%	-	21.5%
Oil/Chemical Tanker	7%	11%	12.5%	7%
Ore Carrier	-	-	-	-
Container Ship	-	-	-	-
Hopper Dredger	-	-	-	-
Tug	-	-	12.5%	14%
OSV	-	11%	-	-
Ro-Ro	7%	11%	-	-

AGE PROFILE WISE:

	% of Total Ships Detained			
	2015	2014	2013	2012
25 years and above	7%	33.3%	12.5%	21.5%
20 years to 25 years	14%	-	-	14.25%
15 years to 20 years	29%	33.3%	25%	21.5%
10 years to 15 years	22%	33.3%	25%	14.25%
5 years to 10 years	14%	-	-	14.25%
Less than 5 years	14%	-	37.5%	14.25%



Maximum numbers of deficiencies category wise as noted under:

IRS	TOKYO	INDIAN OCEAN	PARIS	USCG
1) Fire safety 2) Alarms 3) Life saving appliances 4) Pollution prevention 5) Safety of navigation	1) Fire safety 2) Safety of navigation 3) Life saving appliances 4) Certificates & Documentation 5) Emergency systems	1) Safety of navigation 2) Fire safety 3) Life saving appliances 4) Certificates & Documentation 5) Emergency systems	1) Certificates & Documentation 2) Working & Living conditions 3) Fire safety 4) Safety of navigation 5) Life saving appliances	1) Fire safety 2) ISM 3) Life saving appliances 4) Marpol 5) Propulsion and Auxiliary machinery

From the comparison of data following can be summarized :

- ✓ Maximum number of deficiencies have been recorded under categories “Fire Safety”, “Safety of Navigation” and “Life Saving Appliances”. It can be construed that these categories form the focus area and deserve more attention in order that detentions can be avoided.
- ✓ The number of detainable deficiencies have come down from 32 in 2013 to 24 in 2014 but increased to 45 in 2015.
- ✓ Most vessels detained during last four years i.e. 2012 – 2015 by ship type are Bulk Carriers.
- ✓ Most vessels detained during last four years i.e. 2012 – 2015 by age group were in the range of 10 to 20 years.



PSC INSPECTION DEFICIENCIES:

Other than the detainable deficiencies discussed above, other deficiencies noted during PSC inspections are listed below. These deficiencies have been categorized under various headings in order to bring similar deficiencies under a single heading and to note the number of deficiencies noted under each heading.

Details of Deficiency

- *Certificate & Documentation*

- Safety Equipment Cert. Form E information not complete.
- Safe manning document invalid due to UMS alarms malfunction since 02.02.2015.
- CSR information not matching with DOC information.
- The date of issue of the updated record of Anti-Fouling systems not specified.
- International anti-fouling system certificate not available on board during the inspection.
- Dangerous cargo endorsement of all three engine room ratings not available on board.
- Flag endorsement of officers other than 2/O not available on board.
- Endorsement by flag expired.
- Medical fitness certificate for Radio officer expired 06.03.2015.
- At time of inspection, it was noted that several crew's Seafarer Employment Agreement (S.E.A.) expired.
- Three Officers SEA's expired (one to two months), Master, 3/O and 3/E. 3/E requested repatriation for compassionate reasons on 14 Dec. 2014.
- Two Seafarer SEA's expired.
- Direct contract terms for Chief Officer at variance with his SEA and CBA. SEA's do not clearly specify monthly leave entitlements; vary with CBA (CO, TNOC's, 3O, 2E and 4E's).
- 10 crew SEA (employment agreement) expired several months ago.
- Current version of applicable CBA for officers not on board.
- Shipboard working arrangement not in accordance with MLC reg. 2.3.
- Records of seafarers daily hours of work and rest in February 2015 do not reflect actual hours of work or rest.
- SOPEP not up to date.
- Corrected entries found in oil record book without the signature of the officer in charge.
- Old copies of oil record book and garbage record book not available for inspection.
- Oil record book entries not as required (to be rectified at first coming entry).
- ORB used cooking oil must be recorded in the ORB MARPOL Annex V.
- Hydraulic oil leak noted from cargo line No. 1-3 port side automatic connections.
- Training record of SEEM – Not applicable.
- Cargo ship safety radio certificate is not original.
- 4th Engineer certificate of competency flag endorsement is not original.
- Officers not on board.



- ***Structural Condition***

- Hatch comings found corroded at several locations and not properly maintained.
- Suitable working access (Handrails and non-slip surfaces) to steering gear control panels not provided fully.
- Additional lube oil suction from lube oil tank not fitted with remote controlled valve (can be closed from ER interior only).
- Wastage of girders and longitudinal – At FR 12 (Stbd Eng. Room) – At FR 9, Next to AFT peak inlet – Thruster housing, Main Deck Port side: Stiffeners. – Main Deck drain off flaps port and stbd.
- Hull corrosion – Hull condition outside very corroded and also cargo floor very corroded.
- Main deck and stairs damaged and corrosion.
- Side shell plating corroded (to be rectified within 3 months).
- Observed oil leakages from steering gear to be repaired/eliminated.
- Hatch cover corrosion (to be rectified within one month).
- Deck plating corrosion (to be rectified within 3 months).
- Hatch coaming corrosion (to be rectified within one month).
- Thick layer of concrete found laid over rescue boat deck. Thickness of plating is unable to be determined.
- IMO No. (Aft) not clear.
- Lifeboat S deck radio corroded (to be rectified within one month).

- ***Water/Weather tight conditions***

- Load line marks on port side hardly readable not painted. There are 3 different Plimsoll marks welded on port side and visible.
- Load line mark and draft mark not clear.
- Load line marks of assigning authority -Not coincided with load line certificate.
- Ship's freeboard marks unreadable.
- Fore draft marks not clear (to be rectified within one month).
- Draft and plimsoll mark is not clear (to be rectified within one month).
- The freeboard marks not using have not been covered
- Main accommodation ladder not fitted in safe mode.
- Life ring on poop deck both side missing.
- Cargo hold hatch cover maintenance not in every month in accordance with IMO Res. HSC 169(79).
- Rubber sealed at funnel door defective.
- Air vent for fresh water on poop deck broken.
- Protective cover of No. 4 DB(S) air pipe head missing.
- Ventilators corroded.
- Engine room skylight packing found in damaged condition.
- A cargo tank must be equipped with a closed gauging device. Gauging system for port slop tank is not operational.
- The level gauge for F.P.T. out of order.



- ***Emergency Systems***

- Secondary access to the emergency fire pump in steering gear room locked from inside.
- Emergency fire pump cannot pump out water (Min draft for FFP is 6.4 M, and ship actual AFT draft is 6.5 M while PSC inspection).
- Fire insulation of emergency fire pump suction line in engine room – partly taken off.
- Forward life raft st. emergency light to lit.
- Emergency lighting, batteries and switches inoperative.
- Emergency light embarkation st. not lit.
- Fire lamp not on during firing even though lamp changed (To check wire diagram).
- Starboard lifeboat launching emergency light defective.
- Missing ETB (One piece).
- The emergency light for GMDSS operation out of order.
- No evidence of lifeboat or rescue boat lowered and maneuvered in water within last 3 months. No evidence available for the freefall launch or simulated launch of free fall lifeboat over last six months.
- Water ingress alarm system-hold#1: permanent pre-warning alarm due to damaged sensor. There is no indication on the control panel where the power supply comes out.
- Emergency generator does not start automatically after a simulated black out.
- Emergency generator – fuel tank – leakage.
- Emergency generator could not been start.
- Emergency generator out of order due 3 unit seize mix waste oil.
- Emergency generator out of order.
- Scenario for enclosed space rescue drill not provided.
- Rescue boat davit not tested at time of inspection.
- Enclosed space entry 2nd rescue drill which was carried out on 30th Sept. 2015 only by table top discussion.

- ***Radio Communications***

- Last successful test of MF/HF DSC to shore station was more than one month ago.
- MF/HF radio not working.
- NBDP (Narrow band direct printing) not working.
- Reserve source of energy – New GMDSS batteries installed but the expiry date not specified.
- The NBDP cannot be operated by GMDSS operator.
- The procedures for cancel the fault distress message is not posted next GMDSS equipments.

- ***Cargo operations including equipment***

- Each transfer pipe system must not leak under statistic liquid pressure at least 1.5 times the maximum working pressure. Vacuum line on #3 cargo oil pump is visibly leaking.
- Venting arrangement shall be so designed and operated as to ensure that vacuum in cargo tanks does not exceed design standard, vacuum side of P/V valve on 1P flame screen is dirty and will not allow passage of air.



- **Fire Safety**

- Exhaust collectors on aux. engine not protected, not insulated.
- Insulation materials on bulkhead between engine room and S/G room (EFP location) seriously damaged.
- Inert gas system water level indicator defective.
- Inert Gas System must be check.
- Fire Doors: Main Deck to upper deck, Main deck to twin deck found unable to close fully.
- The fire door to steering gear room cannot full close.
- Fire doors/openings in fire-resisting divisions.
- Two self closing fire doors between main engine room and steering gear lashed open.
- Fire door cannot close tightly on D deck.
- Engine room upper deck entrance door not closing fully by door closure.
- 1 x smoke detector found not working (Main Deck, Alleyway outside galley).
- Fire detectors partly not marked by IMO symbols.
- Air bottle for quick closing valve operation found not filled.
- Telephone of CO2 room cannot connect with bridge.
- Fire hose nozzle not arranged (No.15).
- Engine room bottom platform EEBD found partially filled.
- Emergency fire pump found not working.
- Main fire pump No.2 motor not placed.
- Stbd engine room vent blower flap not fully closing.
- Fire dampers (Port and stbd side from chimney) from engine room ventilators found stuck. Not possible to close. Open/Close position not marked. Also protective covers missing or wire mesh found damaged.
- Corroded sanitary vent (bridge deck-to be rectified within one month).
- Engine room means of escape emergency exit roots should be pointed more clearly with highlighted arrows on the floor.
- Insulating material for emergency escape trunk not intact.
- All corridors used as means of escape in accommodation space not fitted with handrails.
- Ships enclosed space list not indicated in SMS manual.
- Main engine – oil leakage, insulation of machinery exhaust system – oily, dirty.
- Diesel generators steering gear, purifier room – oil leakage.
- Engine room cleanliness – much oily bilge water was accumulated throughout engine room.
- Emergency generator ventilator cover rubber packing wasted.
- Paint locker – light fitting cover loose.
- Non return drain plug (All cargo hold) – not effective closing device.
- One self-closing device for sounding pipe not in position.
- One self-closing cock on Engine room lower floor for sound pipe to oil tank malfunction.
- Seized main deck fire main isolation valve.
- Termination of sounding pipe for No. 2 FO tank not fitted with self-closing control cock.
- Galley exhaust uptake oily.
- Fire extinguisher not in place.
- Fire hoses, spanners and nozzles not placed.



- Emergency generator room vent not working.
- Accumulated oil and contaminated water in engine room bilge wells.
- Steering gear hydraulic leaking.

- ***Alarms***

- Instrumentation shall be fitted for continuously indicating the oxygen content of the inert gas. Ship's and oxygen analyses is not operational.
- Oil mist detector unable to calibrate due to lack of test kit on board.
- Main generators high pressure jacketed pipe leaking alarm not working.
- Secondary alarm computer out of order. Engine room alarm printer out of order.
- Engine control room monitoring system out of order. Further investigation to be carried out by classification society.
- The alarm of hold No.1 of water ingress panel alarm is not working properly.
- Bilge high level alarm fore not operational.
- CO2 release alarm not working.

- ***Working and Living Conditions – Living Conditions***

- Ventilation on bridge deck – marking missing.

- ***Working and Living Conditions – Working Conditions***

- Some lights in engine room not working.
- Hydraulic jack for No. 3 & No. 6 cargo hatch cover seal leakage.
- Step plate on forecastle deck for windlass easily broken.
- Some lub oil pumps on poop deck not properly lashed.
- Main switchboard (440V) in the ships engine control room was displaying low insulation.
- Where cables which are installed in hazardous area introduce the risk of fire or explosion, special precautions against such risks shall be taken. Cable supports for electrical control on the most riser are severely wasted and broken away.
- Vapor collection piping must be electrically bonded to the hull and must be electrically continuous. Bonding cables are broken or missing in several locations on deck.
- Sludge pump seal found leaking.
- Steam pipes for No.2 H.F.O. tank leaking.
- Machinery and associated piping systems shall be of a design and construction adequate for the service for which it is intended. Ship's service air line in vicinity of 62 is severely wasted and holed.
- International access signals not enough in staircase spaces.
- M/E # IFO booster pump and boiler water circulating pump #1 coupling guard found not fitted in place.
- Aux. engine #1 Exhaust pipe found not fully covered with insulation.
- Oxygen, Acetylene bottles found kept together in accommodation deck.
- Filled lub oil drums found kept in accommodation deck without securing arrangements.



- Bunker F.O. samples found stored in steering gear room where no fire fighting arrangement is available.
- Safety net of gangway not as required.
- Hydraulic jack pipe line for no.2 cargo hold leak.
- Length of anchor chain different between the emergency towing booklet and pilot information card.
- Windlass S.S. the hydraulic motor suffered a catatonic failure breaking its casing. Temporary repair carried out through the installation of a used motor of fake characteristic
- Spring winch forward not working.
- Both Aux. engine bilges found with traces of oil.
- Engine room floors covered with oil.
- Cleanliness of engine room not satisfactory.
- Engine room house keeping found in poor condition with oily rags all over in Engine room, Main engine bilges found with oil fell over facing fire hazard.
- CO2 room blower not operational.
- Obstructed fire hose box and a hydrant (aft).
- Worn mooring lines.

- ***Safety of Navigation***

- Pilot ladder steps are slack.
- In ballast condition pilot ladder fixed on main deck it's shorter than freeboard. Vessel will depart in cargo condition without problem. Captain to a presently repair before next sail in ballast condition after next discharge port (ETB 28.07.2015).
- The radars cannot display the information of speed log.
- Gyro compass repeater in navigation bridge front position.
- Spare magnetic compass not available on board.
- Deviation table – data expired.
- Signaling lamp – 2 of signaling lamps not working.
- Short of one spare bulb for day light signal lamp.
- Photocopied large scale chart BA 1506 used for previous voyage.
- Old edition charts used for the previous voyage (AUS 270, AUS281).
- Charts – Not updated since week 52 last year.
- Officer unfamiliar with depth alarm settings on ECDIS.
- Official Electronic Navigation charts for intended and previous voyage not available.
- AIS Off.
- The VDR cannot receive the signals of AIS or RADARS.
- VDR breakdown.
- S-VDR malfunction.
- Voyage data recorder (VDR) not properly.
- The tables 2015 not on board.
- Notice to marine NP.247(1) not up to date.
- MARPOL Annex V (2012) – missing ISPS Code Book – Old edition.
- Australian Seafarers Handbook and 2015 Tide tables not on board.



- Lack of 05 weekly editions of notices to mariners.
- Notices to Mariners not up to date (last on board S1/2014).
- Radio signals Vol.6, List of lights, Tide tables – as electronic publications only, installed on one computer which needs to be restarted after black-out, without any back-up arrangements.
- The catalogue of admiralty charts and publications (NP 131) 2015 edition not up to date.
- NP 131 not corrected up to date.
- Sailing directions Vol.19 needed for last and next voyage – missing.
- NP 131 not be corrected with addendum.
- Master failed to ensure adequate official nautical charts to be used for inbound passage to Qingdao as evidenced by Deficiency No.1.
- BNWAS operation mode not controlled by Master only, all duty officers knew the access password.
- Station code “Q” not be selected in NAVTEX.
- Notices to mariners not up to date (last onboard 46/2014).
- Rudder side indicator not working.

- *Life Saving Appliances*

- Stbd lifeboat boarding light frame and bracket wasted.
- Glass of starboard lifeboat forward window dirty and not providing clear vision.
- The air pressure of self-releasing system for starboard lifeboat set incorrectly, not ready for use.
- Boarding ladder for lifeboat not provided.
- Some of reflective tapes on the hull of starboard lifeboat covered by paint.
- The S/S lifeboat only can start by one group battery.
- Weekly check inspection for lifeboat not properly carried out.
- Lifeboat port hole glass cracked.
- Port & Stbd lifeboat engines found not working.
- S/S life boat unable to be started.
- Stbd-side life boat – propeller shaft revolution unable to us changed to ahead. Rubber ball for drain plug missing or stuffed. Life boat number 2nd means of identifying the ship to which it belongs not indicated on the top.
- The P/S lifeboat only can start by one group battery.
- The magnetic compass of the starboard life boat has a big difference with bridge magnetic compass.
- Life boat retro-reflective tapes deteriorated.
- Reserve source of energy of life boat (p) not charged properly.
- Reserve source of energy of rescue boat(s) not charged properly.
- All life rafts secured by tapes. Life rafts unable to be released by itself.
- Rescue boat cannot be launched with gravity or mechanical power.
- Accumulator not in readiness for launching of rescue boat at time of inspection.
- Lifebuoys lifeline bonded not as required on poop deck.
- Lack additional life buoy with light and line nearby the gangway.
- Man overboard life buoy rope rotten, POR and ship name faded.



- Quantity of lifejackets not marked at slow position in engine room.
- The embarkation means for ship's forward life raft (6P) was found to be knotted ropes.
- Boarding platform at freefall lifeboat unsafe.
- Lifeboat ant seasickness tablets expiry on March.
- Lifeboat instruction no as per ship specific.
- Enclosed space entry drill not being carried out once in 2 months.
- Stbd side boiler gauge glass found not working.
- Stbd life boat found not lowered and maneuvered in water in last 3 months (first lowered and maneuvered in water on 22/07/2015).
- 5 yearly load testing of both port & stbd life boat davit found not available on board.
- Both life boat painters are of polypropylene rope.
- Some of reflective tapes on the hull of starboard lifeboat covered by paint.
- Stbd side lifeboat engine speed liner stuck up.

- ***Propulsion and auxiliary machinery***

- Engine room aft bottom platform deck leak stbd side had oil stain.
- Engine room workshop glass plate protection missing.
- Main generator No. 2 out of order.
- Attached lub oil pump for Aux. engine #2 not working and having unauthorized modified pipe line arrangement.
- Main generators fuel oil leaking.
- Aux. Engine S.W. cooler is leaking.
- A/E No. 1 & 2 pump area oily and dirty.
- No.1 A/E cooling water pump found leaking seriously.
- M/Generator out of order – alternator copper strip broken.
- Aux. Boiler water level indicator found steam leaking.
- One thermometer of M/E cooling system is damaged.
- Cooling water pump seal for main air compressor #1 found leaking.
- Emergency fresh water cooling pump for main engine not working.
- Some drums stowed near emergency fire pump hatchway and not secured.
- Accumulation of oil on main engine high pressure pipe.
- One S.W. pipe (near to lub oil pumps) is leaking.
- M/E air cooler pipe – L/T pipe leaking.
- Steam & water for calorifier leak.
- Main engine and generators oil leaking.
- Main air compressor #2 found tripped on overload found jammed and not rotating.
- Ballast pump valve leaking.
- Main generator sea cooling pump leaking.

- ***Pollution prevention***

- Inventory of SOPEP store not posted.
- SOPEP store must be clean and in order.



- ***Pollution prevention – MARPOL Annex I***

- Two plastic containers (1 cbm each) full of used oil stowed on open deck used as sludge tank. Massive numbers of rusted drums with oil stowed on open deck.
- Sludge tanks almost full. Waste oil stowed on deck in plastic drums due to lack of space in sludge tanks.
- Retention of oil on board – All quantities from bilge and sludge tanks and bilge wells to be delivered to port facilities. Receipt to be submitted to PSC office.
- Oily water separator defective (Oil-water interface detector defective).
- Ship's oil filtering equipments recirculation line was found logged during the operational test.
- Oily water separator found not working since 27/10/2015.
- Sludge pump is leaking.
- Oily water separator 15 ppm alarm not working properly (error).
- Engine room bilges platform – mix fuel and oil in bilges.

- ***Pollution prevention – MARPOL Annex III***

- Marking and labeling E.P. Suction valve.

- ***Pollution prevention – MARPOL Annex IV***

- Sewage treatment plant top aeration blower found not working, STP found not in sue.
- Sewage treatment – Discharge pump was not working and under repair.
- Sewage treatment plant cut of order due to air blower and chlorinating pump malfunction. Chlorine tank (butcher) empty.
- Aft peak tank with capacity of 8.98 cu.mtr., as sewage holding tank not marked on ISPP Cert. by classification IRS and lack of discharge rate table.
- Lack discharge rate table for sewage water approved by the Administration.

- ***Pollution prevention – MARPOL Annex V***

- Garbage not classified in Engine room.
- Garbage shore disposal certificate for disposal on 22/09/2015 not mentioning the name of the vessel.
- Garbage Management Plan not up to date – old garbage categories, missing storage capacity for garbage.
- Great amount of garbage (not separated) found on board. To be delivered to shore facilities.
- Garbage – Not separated according to garbage management plan.
- The cover to container for Ash near incinerator space is of inflammable material.



- ***Pollution prevention – MARPOL Annex VI***

- Record of engine parameters for M/E & D/G not applicable.
- Records of training of the operators of the incinerator could not be presented on board.
- Incinerator unable to be started during inspection.

- ***ISM***

- ISM related deficiency – pre arrival and pilot list not completed.
- Master and several other officers and crew member's record of daily hours of work and rest for December 2014, January 2015 and February 2015 do not comply with minimum rest hour criteria of STCW 95 and MLC 2006. Despite a Non Conformity raised by master for above breaches, safety management system as implemented on board failed to address the root cause of the breach of rest hour regulation and suggest effective preventive action.
- Man overboard drill found not carried out as per SMS Manual – EM 015 (MOB).
- Main engine oil leaking.
- Main engine oil filtering system leaking.
- Every company should develop, implement and maintain a safety management system. PSCO discovered objective evidence supported by the above and deficiencies that the company has failed to implement an effective safety management system. Recommend external audit.
- Documentation reverse power trip.
- Considering the above serious deficiencies safety management system found to be ineffective.
- Safety Management Audit by the administration is required before departure of the ship. Deficiencies marked ISM are objective evidence of a serious failure or lack of effectiveness of the implementation of the ISM Code.
- Safety Management audit by the Administration is required before departure of the ship. Deficiencies marked ISM are objective evidence of a serious failure or lack of effectiveness, of implementation of the ISM Code.
- Safety Management System as implemented fails to ensure effective shipboard operation and emergency preparedness ad evidence by deficiencies above.

- ***ISPS***

- Access control not properly carried out.
- Open enters on deck (ISPS).
- Access control to the ship – not carried out at gangway when PSCO came on board.
- Access control of ship – No. 1D check when enter the ship.
- Access control to ship – NO ISPS proper check, No ISPS signs available.
- Shipboard drill plan of 2015 not available on board.
- Drills according to plan and procedure for recovery of persons from the water not carried out.



- ***Other***

- Drills according to plan and procedure for recovery of persons from the water not carried out.

- ***Labour Conditions – Conditions of employment***

- Several examples of minimum rest period violations for Master and Chief Officer during port operations during Nov. and Dec. 2014.
- Minimum rest period violations for Chief Officer, Trainee Navigation Officers, Trainee Electrical Officer in the month of December (MLC Reg. 2.3).
- Several rest period violations during March and April 2015.
- Repeated non-conformities of minimum rest period requirements for seafarers, during port operations, over several months.
- Seafarers not receiving monthly accounts of payments.
- Chief Engineer SEA has expired (3 months) on 02.04.2015.
- Deficiencies Nos. 1 to 10 are evidence of ineffective implementation MLC 2006 of MLC 2006, (Conditions of employment, accommodation, recreational facilities and food and catering).

- ***Labour Conditions – Accommodation, recreation, facilities, food and catering***

- Hospital accommodation (sick bay) not as required.
- Two seafarers living in a two berth cabin.
- Crew and officer televisions unable to receive transmissions.
- Inadequate quantity of provisions (fresh fruit, vegetables and fish) on board.
- No fresh fruit and vegetables on board.
- Poor quality fresh vegetables on board.
- Defective washing machine in crew laundry.
- Washing machines in crew and petty officers laundries defective. (Crew washing clothes by hand).

- ***Labour Conditions – Health protection, medical care social***

- Low insulation on 220V distribution panel on main switchboard.
- Low insulation in 220V feeder panel in engine control room.
- One spring rope in use shows excessive wear.



Consolidation

- (i) Based on the type of deficiencies raised during Port State inspections, following can be noted:
- Maximum numbers of detentions continue to be of ships, which are more than Ten years old.
 - Majority of ships detained continue to be Bulk Carriers.
 - Number of ships detained have increased from previous year.
 - Maximum number of detainable deficiencies relate to following categories:
 - Fire Safety
 - Safety of Navigation
 - Life Saving Appliances
 - All deficiencies identified under category “Emergency Systems” are related to Emergency Generator
 - Number of detainable deficiencies have increased from previous year.
 - In the year 2015 many deficiencies were related to compliance to MLC 2006 requirements.
- (ii) Deficiencies encountered in previous years found repeated in PSC Inspections.
- (iii) Many of the PSC findings noted could have been avoided:
- (i) By effective implementation of planned maintenance system
 - (ii) By ensuring an effective system of monitoring and inspection
 - (iii) By identification of the deficiency and timely corrective action
 - (iv) By informing the flag state/RO in respect of identified deficiencies and seeking advice
 - (v) By awareness of statutory requirements and ensuring compliance



Conclusion :

IRCLASS is committed to maintenance of high standard in respect of fleet quality under its class at all times. Detention of any of the classed ship is considered as serious deficiency of the services rendered.

Irrespective of the detainable deficiency categorized by PSC authorities as RO related or not, all detentions which have taken place within close proximity (around 3 months) of IRCLASS carrying out any types of Class or Statutory periodical surveys, have been specially analyzed in order to find out any significant deficiency which can be linked to the surveys and corrective action implemented accordingly.

In the endeavor to avoid any detention, IRCLASS has put in place following measures:

- (i) A system to monitor the fleet quality and identify ships requiring special attention;
- (ii) Aim to control the number of total deficiencies by
 - a) effective periodical surveys
 - b) effective ISM audits
 - c) effective and judicious use of IACS PR-17 reporting
 - d) utilising occasional survey visit to verify the upkeep of vessel and advising owner/ manager on the basis of fleet monitoring.
 - e) Forwarding the list of deficiencies identified during PSC inspections on IR classed vessels to owners & managers on bi-monthly basis.
- (iii) Frequent meetings with owners / managers to discuss the problems faced by them and their monitoring process for maintenance of ships.
- (iv) Arrange owners / managers meet to update them with deficiencies being raised by PSC.
- (v) Analyzing every detention in order to find the root cause and implementing corrective action;



- (vi) Providing bi-monthly compilation of PSC deficiencies to surveyors and owners/managers in respect of PSC detentions and nature of deficiencies raised so that presence of similar deficiencies can be verified on ships. Also owners/managers are requested to maintain the record of inspection;
- (vii) Keeping surveyors and owner/managers informed in respect of any Concentrated Inspection Campaigns by PSC and undertaking verification on board during routine survey attendance in order to ensure compliance;
- (viii) Analyzing PSC deficiencies and including items as relevant in survey checklists so that specific items are checked for compliance during change of flag / first entry / periodic surveys;
- (ix) Surveyors have been advised to take photographs of deficiencies prior to and after the repairs in order to determine the condition of repairs;
- (x) Subscribing to “RIGHTSHIP” in order to monitor the vessel’s performance as reported by a third party & comparing with data under fleet monitoring.
- (xi) Providing advisory to owners/managers.

Performance of a vessel under Port State Control is a joint responsibility of both IRCLASS and owners/managers. Accordingly, IRCLASS requests all the ship-owners / managers to take necessary steps to ensure ships are maintained at all times with due regard to effective implementation of safety management system.

