ClassNK

GOOD MAINTENANCE ON BOARD SHIPS

-Maintenance Checklist for the Master-

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FOREWORD

Since the first edition of “Good Maintenance On Board Ships” was published in June 1994 and altered April 1996, in order to upgrade the maintenance standards of your ships, many ideas and comments from ship owners and parties concerned have been received.

Based on these ideas, comments and our database of detained ships, the Society has prepared this revised edition.

Shipmasters are expected to make proper arrangements for maintenance and always keep their ships in a safe and seaworthy condition.

We hope that this booklet will be helpful and useful for the shipmaster, as well as for ship owners. Any comments, questions and/or advice regarding further improvements to this publication would be very much appreciated.

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ADVICE TO MASTERS

The master of cargo ship is advised to use the checklist effectively, taking notice of the following matters :

1. The master should check the condition of his ship in accordance with “Checklist I” regularly, e.g. once every month or every few months depending upon the ship‘s operating conditions, but at least once every three months.
2. In addition to 1. above, the master should carry out an inspection in accordance with “Checklis II” within 24 hours before arrival at every port.
3. In case where the ship complies with the requirements of International Safety Management Code (ISM Code), the master should check the safety management system in accordance with “Checklist III” at the same interval as mentioned 1 above.
4. The master and crew shall fully understand the operating procedures for launching lifeboats including engine starting, emergency fire pumps, and other emergency equipment for safety, health and protection of the environment, through regular training of the crew and drills conducted on board the ship. The master and those in charge should also be thoroughly familiar with the operation of the main engine, steering gear and other essential machinery, in addition to the operating procedures for equipment relating to MARPOL convention, such as the oily water separator, 15 ppm alarm, oil discharge monitoring system and inert gas system.
5. In the case of a crew consisting of different nationalities, a smooth communication system should be established for use with and among the crew.
6. When deficiencies are observed during a voyage, the master should remedy them or take proper action without delay.
7. When deficiencies on board the ship are pointed out by Port State Control, the master must obtain a copy of the written report of such deficiencies from the Port Authority. Our branch offices are always ready to attend ships in order to facilitate the resolution of deficiencies arising as a result of detention, therefore if necessary, please contact nearest our branch office.

Abbreviations in the checklist

AS	Annual Survey
CLRG	International Convention for Preventing Collisions at Sea 1972 (COLREG 72)
COW	Crude Oil Washing System
DOC	Document of Compliance (SOLAS Chapter IX, Regulation 4)
ES	Existing Ship
GMDSS	Global Maritime Distress and Safety System
GOC	General Operator‘s Certificate for GMDSS
ILL	International Convention on Load Lines, 1966 (ILL 66)
ILO	International Labour Organization
IOPP	International Oil Pollution Prevention Certificate
ISM	International Safety Management (SOLAS Chapter IX, Regulation 1)
SS	Special Survey
IS	Intermediate Survey
MAS	Mandatory Annual Survey
MRPL	International Convention for the Prevention of Pollution from Ship‘s 1973, as modified by the Protocol of 1978 (MARPOL 73/87)
MSB	Main Switch Board
N.A.	Not Applicable
NLS	Noxious Liquid Substances Certificate
NS	New Ship
ODM	Oil Discharge Monitoring and Control System
PLI	Periodical Load Line Inspection
P & A	Procedure and Arrangement Manual
QTS	Quadrennial Thorough Survey
REC	Radio Electronic Certificate
SLS	International Convention for the Safety of Life at Sea, 1974 (SOLAS 74) SLS Ch. I, R. 23 (SOLAS Chapter I, Regulation 23) 81 ES : Existing ships constructed before 1 September 1984 (81 Amend.) 81 NS : New ships constructed on or after 1 September 1984 (81 Amend.) 83 ES : Existing ships constructed before 1 July 1986 (83 Amend.) 83 NS : New ships constructed on or after 1 July 1986 (83 Amend.) 88 ES : Existing ships constructed before 1 February 1992 (88 Amend.) 88 NS : New ships constructed on or after 1 February 1992 (88 Amend.) 00 ES : Existing ships constructed before 1 July 2002 (00 Amend.) 00 NS : New ships constructed on or after 1 July 2002 (00 Amend.)
SMC	Safety Management Certificate (SOLAS Chapter IX, Regulation4)
SMS	Safety Management System (SOLAS Chapter IX, Regulation 5 & 6)
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW 78) Amendment 1995

Checklist I

Table 1. Certificate & Documents

1. General

Item	Issued date	Expiry date	Last endorsement	Remarks
Registry Certificate				
Radio Station License				
Class Certificate			AS	
			IS	

2. Statutory Certificates

Item	Issued date	Expiry date	Last endorsement	Remarks
Load Line Certificate			PLI	
Safety Construction Certificate			MAS	IS for tankers of more than 10 years of age only.
			IS	
Safety Equipment Certificate			MAS	
			IS	
Safety Radio Certificate			N.A.	
IOPP			MAS	
			IS	
Bulk Chemical Fitness Certificate			MAS	for chemical tankers
			IS	
Gas Fitness Certificate			MAS	for liquid gas carries
			IS	
NLS Certificate			MAS	for carriage of Noxious Liquid Substance
			IS	
Exemption Certificate			N.A.	if any.
Tonnage Certificate			N.A.	
SMC			Intermediate Audit	
Copy of DOC			Annual Audit	
Certificate of Fitness for Ship Carrying Dangerous Goods				for carriage of dangerous goods (SLS Reg.II-2/54) Reg. II -2/19(00NS)

3. Miscellaneous Certificates

Item		Issued date	Expiry date	Remarks
Minimum Manning Certificate				
Officers Certificates				
	Master			GOC/ROC for GMDSS
	Chief Engineer			
	Officers			GOC for GMDSS
	Engineers			
	Radio Operators			GOC or REC for GMDSS
Medical certificate for each member				ILO Conv. No.73

4. Documents and Manuals

for All ships

Item	Approved by	Language	Understood by crew	Remarks
Stability Information				
Shipboard Oil Pollution Emergency Plan (SOPEP)				

Item	Properly recorded	Remarks
Oil Record Book, parts I and II		
Garbage Record Book		
Log Book		SLS II, III, V

Item	Issued by	Surveyed by	Last endorsement	Remarks
Cargo Gear Booklet		AS		
		QTS		

for oil tankers and chemical tankers

Item	Approved by	Language	Understood by crew	Remarks
Damage Stability Plan				
Operation Manual				
ODM Manual				
COW Manual				if any

for chemical tankers

Item	Approved by	Language	Understood by crew	Remarks
P & A Manual				

Item	Properly recorded	Remarks
Cargo Record Book		

for ships carrying Noxious Liquid Substances

Item	Approved by	Language	Understood by crew	Remarks
Shipboard Marine Pollution Emergency Plan (SMPEP) (on and after 1st January 2003)				

for liquid gas carriers

Item	Approved by	Language	Understood by crew	Remarks
Operation Manual				

for grain loading vessels

Item	Issued by	Expiry date	Remarks
Grain Loading Certificate			

Item	Issued by	Expiry date	Understood by crew	Remarks
Grain Loading Manual				

Other necessary documents

Item	Remarks
Survey Report Files	for bulk carriers and oil tankers
Record of ODM	for oil tankers
Damage Control Plan	for dry cargo ships constructed on or after 1 Feb. 1992 SLS Reg. II -1/23-1
Cargo Securing Manual	SLS Reg.VI/5 and VII/5
Garbage Management Plan	
Bulk Carrier Booklet	SLS Reg.VI/7
Reports of previous PSC inspection	
Loading Instrument (Computer)	SLS Reg.XII/11 (for bulk carriers with length above 150m)

Table 2. Nautical Publications and International Conventions

Item	Check Points	Satisfied/Not	Remarks	Reg.
Charts	Up-to date (Properly corrected)			SLS Reg. V/20, 21 V/21, 27 (00NS)
	Availability of operating areas			
Sailing Directions	Up-to date (the last editions)			
List of lights	Up-to date (the last editions)			
Notice to Mariners	Up-to date (the last editions)			
Tide Tables	Up-to date (the last editions)			
International Code of Signals	Up-to date (the last editions)			
International Conventions SLS CLRG MRPL LL STCW	Available on board			
Maritime Laws of Flag Administration	Available on board			

Other Necessary Publications

Table 3. Logbook Entries

Item	Check Points	Entry/Not	Remarks	Reg.
Steering gear testing and drills	Within 12 hours before departure. Emergency steering drills to be carried out every 3 months			SLS Reg. Ⅴ/19-2 Ⅴ/26 (00NS)
Abandon ship drills and fire drills	Each member of the crew every month. Within 24 hours after departure if more than 25% of the crew have not participated in drills in the previous month. Each lifeboat to be launched and operated every 3 months. Rescue boats to be launched and operated each month as far as possible, but at least once every 3 months.			SLS Reg. Ⅲ/ 19. 3
On-board training and instructions	Within 2 weeks after a crew member joins the ship, on-board training in the use of the ship‘s life-saving appliances including survival craft equipment. Instructions in the use of the ship‘s life-saving appliances and in survival at sea to be given at the same interval as the drills. Individual instruction in the use of the ship‘s life-saving equipment and appliances to be given within a period of 2 months.			SLS Reg. Ⅲ/ 19. 4
Weekly inspections	Visual inspection of all survival craft, rescue boats and launching Appliances. All engines in lifeboats and rescue boats to be run ahead and astern for 3 min. Testing of the general emergency alarm.			SLS Reg. Ⅲ /20. 6
Monthly inspection	Inspection of life-saving appliances and lifeboat equipment to be carried out using the check list required by Reg. Ⅲ /20.7.			SLS Reg. Ⅲ /20. 7

Table 4. Safety in General

Item	Check Points	Satisfied/Not	Remarks	Reg.
Fire control plans	Permanently exhibited in accommodation spaces.			SLS Reg. II-2/20 II-2/15 (00NS)
	Permanently stored in watertight cases outside the accommodation main entrances.(Port & Starboard)			
	Language understood by crew.			
	Kept up-to-date.			
Instruction book for maintenance and operation of fire fighting system	Readily available in an accessible position under one cover.			SLS Reg. II-2/20
	Language understood by crew.			
Muster List	Exhibited in W/H, E/R and crew accommodation spaces.			SLS Reg. III/8, 37
	To show duties according to Reg.III/37			
	Language understood by crew.			
Training Manual	Provided in each crew mess room and recreation room, or in each crew cabin, complying with requirements of Reg.III/35 and II-2/15.			SLS Reg. III /35 & II-2/15 (00NS)
	Language understood by crew.			
Instructions for on-board maintenance	Available on board and including all items showed by Reg.III/36.			SLS Reg. III /36
	Language understood by crew.			
Posters or signs	Provided on or in the vicinity of lifeboats, liferafts, rescue boats and their launching controls.			SLS Reg. III/9
	Use of symbols according to IMO Res.A760(18).			
Pilot ladders	Condition in good order, side ropes, rubber steps, wooden steps			SLS Reg. V/17 V/23 (00NS)
	Proper handholds available.			
Fire Safety Operational booklet	Provided in each crew mess room and recreation room, or in each crew cabin, complying with requirements of Reg. II-2/16.			SLS Reg. II-2/16
	Written in the working language			
Maintenance plan	Kept onboard, complying with requirements of Reg.II-2/14			SLS Reg. II-2/14

Table 5. Testing and drills

Item	Check Points	Satisfied/Not	Remarks	Reg.
Communication system between W/H and E/R, W/H and steering gear room, W/H and Radio room	Testing between each compartment.			SLS Reg. II -1/ 29.10, 37
Emergency generator	Operational test.			SLS Reg. II -1/43 44
	Confirmation of F.O. tank level.			
	Condition of starting devices.			
	Ease of operation by crew.			
Discharge test of fire fighting system by operation of main fire pumps / emergency fire pump separately	Operational test of main fire pump / emergency fire pump separately.			SLS Reg. II -2/4 II -2/10 (00NS)
	Sufficient delivery pressure. 6000 GT and over: 0.27 N/mm² under 6000 GT: 0.25 N/mm²	Pressure:	reaching distance 12m or over	
	Isolation valves operable.			
	No leakage of fire lines.			
	Confirmation of F.O. tank level for emergency fire pump engine.			
	Ease of operation by crew.			
Steering gear (S/G) system (Within 12 hours before departure)	Operation of main and Aux. S/G (full movement of the rudder).			SLS Reg. V /19-2 V/26 (00NS)
	Remote control system.			
	Emergency power supply.			
	Rudder angle indicators in relation to actual position.			
	Testing of alarms.			
	Automatic isolating arrangement. (if any)			
	Visual inspection of S/G and connecting linkage.			
	Operating instructions with block diagram in W/H, S/G room.			
Emergency steering gear drill (every 3 months)	Practice of emergency steering procedure (including direct control, communication, alternative power)			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Abandon ship drills (every month and within 24 hours of departure if 25% of the crew have not participated on board the ship in the previous month)	Summoning of the crew to muster stations with emergency alarm according to the muster list.			SLS Reg.III/19
	Confirmation of the duties stated in the muster list.			
	Lifejackets worn correctly by crew.			
	Lowering of at least one boat (Different boats shall be lowered in turn at successive drills).			
	Starting & operating the engine(s)			
	Emergency lighting test.			
	Each boat to be launched and manoeuvred by the assigned crew in the water every 3 months.			
Fire drills (every month and within 24 hours of departure if 25% of the crew have not participated on board the ship)	Summoning of the crew to stations according to the muster list.			
	Starting a main and emergency fire pump in turn, and discharging test using the two jets of water.			
	Checking fireman‘s outfits and other personal equipment, including fitting on crew member in turn.			
	Checking the communication equipment.			
	Checking the operation of fire door, watertight door, fire dampers and main inlets/outlets of ventilation system.			
	Operating shut-off valves of F.O. tanks and emergency stop of fans.			
SOPEP/SMPEP drill	Ship-related persons should be involved in the drill covering all parts of SOPEP/SMPEP which should be carried out at regular intervals.			SOPEP SMPEP

Table 6. Navigational Equipment

Item	Check Points	Satisfied/Not	Remarks	Reg.
Magnetic compass	Clearly readable by the helmsman at the main steering position.			SLS Reg. V/12 (b) V/19.2.1 (00NS)
	Communication between the standard compass position and the main steering position.			
	Bubbles are not in the compass.			
	Table/curve of residual deviation (every 1 year) is available.			
	Bearing device is provided.			
Gyro compass	Clearly readable by the helmsman at the main steering position.			SLS Reg. V/12 (d) V/19.2.1 (00NS)
	Condition of the master gyro, and gyro repeaters for bearing with bearing device.			
Heading information to emergency steering position	Visual compass at emergency steering position is available.			SLS Reg. V/12 (f) V/19.2.1, 19.2.3 (00NS)
	Communication system between the main steering position and emergency steering position.			
Heading Control System (HCS) (Auto Pilot)	Working satisfactorily			SLS Reg. V/19.2.8 (00NS)
	Versatile change-over between manual and automatic			
Track Control System (TCS, instead of HCS)	Working satisfactorily			SLS Reg. V/19.2.8 (00NS)
	Versatile change-over between manual and automatic			
Radar	Working satisfactorily.			SLS Reg. V/12 (g),(i) V/19.2.3, 19.2.7 (00NS)
	Plotting facilities are available. (00ES)			
ARPA	Working satisfactorily.			SLS Reg. V/12 (j) V/19.2.8 (00NS)
ATA (Automatic Tracking Aid)	Working satisfactorily			SLS Reg. V/19.2.5, 19.2.7 (00NS)

Item	Check Points	Satisfied/Not	Remarks	Reg.
EPA (Electronic Plotting Aid)	Working satisfactorily			SLS Reg. V/19.2.3 (00NS)
Echo sounder	Working satisfactorily.			SLS Reg. V/12 (k) V/19.2.3 (00NS)
Speed and distance log through water	Working satisfactorily.			SLS Reg. V/12 (l) V/19.2.3 (00NS)
Speed and distance log over ground	Working satisfactorily			SLS Reg. V/19.2.9 (00NS)
Indicators for rudder angle, Propeller RPM (Pitch & operational mode for CPP & side thrusters	Working satisfactorily.			SLS Reg. V/12 (m) V/19.2.5 (00NS)
Rate-of-turn indicator	Working satisfactorily.			SLS Reg. V/12(n) V/19.2.9 (00NS)
ECDIS (If provided instead of navigational charts)	Electronic Navigation Charts			SLS Reg. V/19.2.1 (00NS)
	Back-up System			
	Nautical data base			
GPS receiver	Working satisfactorily			SLS Reg. V/19/2.1 (00ES, 00NS)
AIS (Automatic Identification System)	Working satisfactorily			SLS Reg. V/19/2.4 (00ES, 00NS)
VDR (Voyage Data Recorder)	Working satisfactorily			SLS Reg. V/19.20 (00NS)
	Annual test			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Daylight signal	Working satisfactorily.			SLS Reg. V/11 V/19.2.2 (00NS)
	Supplied from emergency power.			
Navigation lights	Fore & aft masthead lights			COLREG
	Side lights			
	Stern light			
	Anchor light			
	Not under command light			
	Distribution panel			
Forecastle bell	Available on board.			
Gong (Ships of 100m and upwards in length)	Available on board.			
Whistle	Working satisfactorily.			
Black ball shapes	At least 3 sets available.			
Black diamond shape	for tug boat.			

Table 7. Lifesaving Appliances

Item	Check Points	Satisfied/Not	Remarks	Reg.
Lifeboat and/or rescue boat	Condition of hull inside & outside (no rust, no doublers).			SLS Reg. III/20,34 to 36
	Grab lines on both side in order.			
	Bilge keel rails on both side.			
	Rudder stock, rudder and tiller and stern frame in order.			
	Thwarts, side benches, clutch holes, gunwales in good condition.			
	Engine, foundation, exhaust pipe.			
	Propeller and shafting with clutch.			
	Reflective tape on hull.			
	Marking (Ship‘s name, No of persons, Registry of port etc.), retro-reflective tapes.			
	Plug with packing and a chain with indication of position.			
	Bilge pump with hose (testing).			
Lifeboat inventory	Verification according to inventory list.			
	Validity of provisions, pyrotechnics, portable fire extinguisher.			
	Watertight container.			
	Cover and stanchions (if any)			
Stowage of lifeboat and/or rescue boat	Visual condition of stowage.			
	Operation of air cut-off valves.			
	Condition of lifting arrangement.			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Launching arrangement of life boat and rescue boat	Condition of davits			SLS Reg. III/20
	Condition of blocks, falls, padeyes, links, fastening and all other fittings.			
	Falls to be turned end for end at intervals of not more than 30 months.	When turned		
	Fall to be renewed at intervals not exceeding 5 years.	When renewed		
	Condition of brake (Winch)			
	Brake (Winch) to be thorough examined at intervals not exceeding 5 years.	When examined		
	Condition of release gear			
	On-load release gear to be overhauled and tested under a load at intervals not exceeding 5 years.	When overhauled & tested		
	Condition of skates and fenders			
	Condition of embarkation ladders, handholds, side ropes, steps and fitting shackles/padeyes			
	Condition of boat lights by emergency power			
Inflatable liferafts	To be serviced at intervals not exceeding 12 months with release gear except when extension is authorized by the flag state.	When serviced		SLS Reg. III/31
	Container to be marked with ; maker‘s name, serial No., last service date, No. of persons, etc.			
	Fitting retro-reflective tapes			
Stowage of liferafts	Condition of stowage			
	Proper fitting of weak link (in case of a type without weak link, notice to be posted)			
	Condition of embarkation ladder			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Distress Flares	At least 12 parachute rocket signals available on board.			SLS Reg. III/6.3
	Validity			
Lifebuoys for ships of 83 ES	At least 8 lifebuoys with marking and retro-reflective tapes available.			SLS Reg. III/21 (SOLAS 74)
	Two buoys on bridge wings with quick release gear provided for self-igniting lights(SIL) & smoke signals. Illumination of SILs. Validity of smoke signals. Operation of release gear.			
	A buoys with SILs on each side. Illumination of SILs.			
	A buoy with buoyant line of 27.5 meters in length on each side.			
	A buoy without attachment on each side.			
Lifebuoys for ships of 83 NS L(m) No. of buoys less than 100m 8 less than 150m 10 less than 200m 12 200m or over 14	Proper No. of lifebuoys with marking and retro-reflective tapes.			SLS Reg. III/7.1, 32
	Two buoys with self-igniting lights (SIL) and smoke signals being capable of released by release gear, having a mass of at least 4kg on bridge wings. Illumination of SILs. Validity of smoke signals. Operation of release gear.			
	At least half of the total number of buoys to be provided with SILs. Illumination of SILs.			
	At least one buoy with a buoyant line on each side.(30m or twice the height at stowage position above water level, whichever is the greater.)			
	The remaining buoys without attachment on both sides.			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Lifejackets	A lifejacket for every person on board with retro-reflective tapes.			SLS Reg. III/7.2, 32
	Additional lifejackets for persons on watch and for use at survival craft stations.		For 83 NS	
	Each lifejacket with a whistle & light.			
Immersion suits	At least 3 sets for each lifeboat on board the ship, and ready for immediate use.			SLS Reg. III/7.3, 32
Thermal protective aids	For persons on board not provided with immersion suits, and ready for immediate use.			SLS Reg. III/32, 34
Two-way VHF radio-telephone apparatus	At least three sets complying with the standards			SLS Reg. III/6.2.1
	Operation of the apparatus.			
Radar transponders	At least one radar transponder on each side.			SLS Reg. III/6.2.2
	Validity of battery			
On-board communications	Operation of two-way communications between emergency control station, muster and embarkation stations and strategic positions			SLS Reg. III/6.2.4
General emergency alarm	Operation of alarm for summoning the crew to muster stations.			
Line-throwing appliances	Four rockets capable of carrying line at least 230m.			SLS Reg. III/18
	Proper instruction available.			
	Validity of rockets			

Table 8. Fire Fighting Appliances

Item	Check Points	Satisfied/Not	Remarks	Reg.
Fire integrity	Insulation on “A” class bulkheads and decks in good condition.			SLS Reg. II-2/42 II-2/9 (00NS)
	Penetrations of ventilation ducts cable penetration and pipes through “A” class bulk heads and decks in good order.			
Fire doors	Operate satisfactorily.			SLS Reg. II-2/47 II-2/9 (00NS)
	Self-closing doors not to be fitted with hold-back hooks.		For 81 NS	
Skylights	Closing arrangements in good order			SLS Reg. II-2/ 11.2.2, 9.5.2.2 (00NS)
	Skylights to be of steel and not contain glass panels.		For 81 NS	
Fire dampers	Operate satisfactorily.			SLS Reg. II-2/5.1.4 II-2/5.2 (00NS)
	Cargo holds			
	Engine room			
	Accommodation spaces			
	Control stations			
	Other spaces			
	Clear marking of “Close-Open”.			
Main fire pumps	Operate satisfactorily.			SLS Reg. II-2/4 II-2/10.2 (00NS)
	Proper pressure maintained.			
	Pressure gauges in good order			
Emergency fire pump	Operates satisfactorily.			
	Proper pressure maintained.			
	Pressure gauges in good order			
	Prime mover in good condition.			
	Exhaust gas piping in good order.			
Fire main piping	No leakage, heavy wastage in lines			
	No doublers, clamps, soft patches in lines			
Isolation valves	Operate satisfactorily.			
Hydrants	Fire hoses easily coupled to hydrants			
	Satisfactory operation of valves.			
	Valve handles not broken			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Fire hoses	All hoses in good condition, without leakage.			SLS Reg. II-2/4 II-2/10.2 (00NS)
	Checking the number of hoses acc. to the fire control plan			
	Complete with nozzle and couplings			
Nozzles	All nozzles in good condition, without leakage.			
	Jet type nozzles, and jet/spray dual type in engine room. Operation of easy change mode.		For 81 ES	
	Jet/spray dual type with shut-off device for all nozzles. Operation of easy change mode and shut-off devices.		For 81 NS	
Stowage boxes of fire hoses and nozzles	Stowed in good condition and easily usable.			
	Clearly painted (red color) boxes.			
Portable fire extinguishers (foam, dry power, CO_2)	Checking the number of portable fire extinguishers of each type according to the fire control plan.			SLS Reg. II-2/6 II-2/10 (00NS)
	Cylinders in good condition, without serious corrosion/damage.			
	Validity of the medium foam : one year dry powder : five year CO_2 : measure at Class SS and IS			
Portable foam applicator unit	Checking the air-foam nozzle, portable tank of foam making liquid, and one spare tank.		For 81 NS	
	Testing the connection to fire main by a fire hose.			
	Condition of stowage container in good order.			
	Validity of foam making liquid: four years (impossible to extend by sampling)			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Foam type fire extinguisher of 135 litters capacity in firing space of boiler and in spaces of fuel oil system	Visual condition in good order, without wastage.		For 81 NS	SLS Reg. II-2/7.1.3 II-2/10.5 (00NS)
	Easily usable condition.			
	Validity of the medium (one year)			
Foam type fire extinguishers of 45 litters capacity in engine room	Visual condition in good order.			SLS Reg. II-2/7.2 II-2/10.5 (00NS)
	Easily usable condition.			
	Validity of the medium (one year)			
Fixed fire extinguishing arrangement in E/R and cargo spaces (CO_2 or Halon, foam, water spray)	Piping in lines in good order, without leakage or no heavy corrosion.			SLS Reg. II-2/7.1.1, 53 II-2/ 10.5.1.1, 10.7 (00NS)
	Regular checking of lines by air blow or water flow test at Class SS and IS.			
	CO_2 or Halon cylinders to be level/weight measured at Class SS and IS. Proper test certificate on board.			
	Validity of foam liquid (5 years). After 5 years, effectiveness of foam liquid to be checked, and a sample test certificate available on board.			
	Testing the audible alarm for the release of gas (CO_2 or Halon)			
Fire detection	Regular checking of the detection system and fire alarm.			SLS Reg. II-2/13 II-2/7 (00NS)
Fuel oil tank shut-off valves over 500L: ships built on and after 1 July 1995 over 1000L: ships built before 1 July 1995	All valves to be closed by remote control from outside of E/R. Satisfactory operation of valves.			SLS Reg. II-2/15.2 II-2/4.2.2 (00NS)
	In case that shut-off valves are operated by air, the air cylinder is always charged with correct pressure. Pressure gauge in good condition.			
Emergency stop of fans and fuel oil pumps in E/R	Satisfactory operation of emergency stop.			SLS Reg. II-2/11.4 II-2/5.2 (00NS)

Item	Check Points	Satisfied/Not	Remarks	Reg.
Means of isolating the fuel supply to individual engines	Satisfactory operation of means to isolate the fuel supply			SLS Reg. II-2/4.2.2 (00NS)
Fireman's outfit	Two(2) sets for cargo ships Four(4) sets for tanks			SLS Reg. II-2/17 II-2/10.10 (00NS)
	Stowage condition in good order according to the fire control plan.			
	Protective clothing, boots and gloves, helmet, electric safety lamp, axe. Easily usable condition.			
	Breathing apparatus with a smoke helmet or smoke mask and air pump, with proper length of air hose, or a self-contained breathing apparatus.			
	200 % spare air cylinders available on board			
	A fireproof lifeline of sufficient length for each breathing apparatus with a snaphook.			
Fire extinguishing arrangement in paint lockers	Fire fighting system in good order. (Type of arrangement is in accordance with the requirements of the flag state. e.g. portable fire extinguisher is acceptable for ships flying flag of Panama, Japan, etc. (00ES))			SLS Reg. II-2/18.7 II-2/ 10.6.3 (00NS)
International shore connection	At least one(1) shore connection with standard flange dimensions available on board.			SLS Reg. II-2/19 II-2/10.2 (00NS)
	Four sets of bolts and nuts, each of 16 ㎜ in diameter, 50 ㎜ in length available on board.			
	One gasket packing available on board.			
Inert gas system	Operates satisfactorily.			SLS Reg. II-2/62 II-2/4.5.5 (00NS)
	Alarms in the control panel function properly.			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Emergency lights	Satisfactory lighting condition in engine room, accommodation spaces, wheel house, control stations, outside passage.			SLS Reg. II-1/43
	Bulbs and glasses without damage.			
Means of escapes	Ready for immediate use.			SLS Reg. II-2/45 II-2/13 (00NS)
	Steps and handrails without damage.			
	Lighting operates satisfactorily.			
Emergency Escape Breathing Devices (EEBD)	Stowage condition in good order according to the fire control plan. Easily usable condition.			SLS Reg. II-2/13 (00NS/ES)
	Suitable maintenance according to the Manufacturer's instruction.			
Fixed Local Application Fire-fighting System	Piping, pump, valves and nozzles in good order, without leakage, heavy corrosion or damage			SLS Reg. II-2/10.5.6 (00NS)
	Regular checking of lines by air blow or water flow test at class SS and IS.			
	Operate satisfactorily at class SS and IS.			
Fire-fighting devices for Deep Fat Cooking Equipment	Visual condition in good order.			SLS Reg. II-2/10.6.4 (00NS)
	Operate satisfactorily at class SS and IS.			
Protection of Cargo Pump Room	Operate satisfactorily			SLS Reg. II-2/4.5.10 (00NS/ES)
Helicopter Facilities	Arranged in accordance with the plan for Helicopter Facilities.			SLS Reg. II-2/18.8 II-2/18 (00NS/ES)

Table 9. Radio Installation

Item	Check Points	Satisfied/Not	Remarks	Reg.
VHF installation	Function satisfactorily.			SLS 88 Reg.IV/7
MF installation	Function satisfactorily.			SLS 88 Reg.IV /8,9,10,11
MF/HF installation	Function satisfactorily.			
INMARSAT	Function satisfactorily.			
NAVTEX receiver	Function satisfactorily.			SLS 88 Reg.IV /7.1.4
Satellite EPIRB	Function satisfactorily.			SLS 88 Reg.IV /7.1.6
	Validity of battery			
	Expiry date of free float sensor.			
Sources of energy	Main source in good order.			SLS 88 Reg.IV/13
	Emergency source in good order.			
	Reserve source in good order. Batteries in good condition as a result of measuring specific gravity of acid, liquid level and terminal voltage.			
Antenna	Satisfactory condition, without damage or missing components.			SLS 88 Reg. IV /6
	Antenna masts and brackets in good condition, without heavy corrosion or wastage.			
Tools and spares	Available on board.			SLS 88 Reg.IV/15
Maintenance records	Available on board.			
Radio log book	Proper records in the log books.			SLS 88 Reg.IV/17
Clock	Operates satisfactorily			
Lighting in radio space	Normal and emergency lights in good condition			

Table 10. Load Line

Item	Check Points	Satisfied/Not	Remarks	Reg.
Freeboard marks	Clearly marked on shell plating each side.			lLL AX I Reg.5, 6
Superstructure end bulkhead	No heavy wastage exceeding permissible limit.			lLL AX I Reg.11
Doors of all access openings in bulkhead at ends of enclosed superstructures.	Effective weathertightness.			lLL AX I Reg.12
	No heavy corrosion, holes.			
	Condition of gaskets and clamping devices in good order.			
Access hatches	Effective weathertightness.			lLL AX I Reg.13,14
	Hatch coamings in good condition without heavy wastage or holes.			
	Condition of gaskets and clamping devices in good order.			
Cargo hatches	Effective weathertightness.			lLL AX I Reg.13 to 16
	Hatch coamings and stays in good condition without heavy wastage or holes.			
	Hatch covers in good condition without heavy wastage or holes.			
	Condition of gaskets and clamping devices in good order.			
	Battens and wedges available on board in good order.			
	Tarpaulins in good condition without holes.			
Machinery space openings	Effective weathertightness.			lLL AX I Reg.17
	Covers, casings and coamings in good condition without heavy wastage or holes			
Manholes, flush scuttles	Effective weathertightness.			lLL AX I Reg.18
	Covers and bolts in good condition without heavy wastage.			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Deckhouses, companionways with openings in freeboard deck	Effective weathertightness.			ILL AX I Reg.18
	Bulkhead plating in good condition without heavy corrosion or holes.			
	Doors in good condition without heavy corrosion or holes. Gaskets and clamping devices in good order.			
Ventilators	Coamings in good condition without heavy corrosion, holes.			ILL AX I Reg.19
	Closing covers in good condition, efficient weathertightness.			
	Gaskets, clamping devices in order.			
Air pipes	Coamings in good condition without heavy corrosion or holes.			ILL AX I Reg.20
	Air pipe heads in good condition without heavy corrosion or holes.			
	Floats in pipe heads in good order.			
	Wire gauzes in good condition.		for oil tanks only	
Cargo ports and similar openings	Effective weathertightness.			ILL AX I Reg.21
	Steel plating and attachments in good condition without heavy wastage.			
Scuppers, inlets, discharges	Distance pieces in good condition without heavy corrosion or holes.			ILL AX I Reg.22
	Non-return valves in good order without heavy corrosion or holes.			
Side scuttles	Effective watertightness.			ILL AX I Reg.23
	Deadlights in good order.			
Freeing ports	Draining arrangements in good order.			ILL AX I Reg.24
Bulwarks and stays, guard rails	Condition in good order without heavy corrosion, holes or cracks.			ILL AX I Reg.25
Life lines, gangways, passages	Condition in good order without heavy corrosion, missing components or holes.			
Uprights, lashings	Sockets, eye plates, stanchions in good condition without heavy corrosion, holes or cracks,		For timber carriers only	ILL AX I Reg.44

Table 11. Hull Construction and piping on deck

Item	Check Points	Satisfied/Not	Remarks	Reg.
Main deck plating Cross deck plating	Condition in good order. No heavy wastage, corrosion, cracks.			SLS Ch. II-1 Part B
F'cle deck plating, Poop deck plating	Condition in good order No heavy wastage, corrosion, cracks.			
All piping on deck with valves	Condition in good order. No heavy wastage, corrosion, cracks.			
Electric cable conduit	Condition in good order. No heavy wastage, corrosion, cracks.			
Cargo holds	Bulkheads, frames, tanktop plating in good condition. No heavy corrosion, wastage, holes or cracks.			
	Access ladders, piping in good condition. No heavy wastage, holes.			
Ballast tanks	No leakage, damage.			
	Bulkheads (trans/longl.), longitudinals, transverse rings, horizontal girders, other members in good condition. No heavy corrosion, wastage, holes or cracks.			
	Access ladders, piping in good condition. No heavy wastage, holes			
Cargo tanks	No leakage, damage.			
	Bulkheads (trans/longl.), longitudinals, transverse rings, horizontal girders, other members in good condition. No heavy corrosion, wastage, holes or cracks.			
	Access ladders, piping in good condition. No heavy wastage, holes			
Fuel oil tanks	No leakage, damage.			
	Bulkheads (trans/longl.), longitudinals, transverse rings, horizontal girders, other members in good condition. No heavy corrosion, wastage, holes or cracks.			
	Access ladders, piping in good condition. No heavy wastage, holes			

Item	Check Points	Satisfied/Not	Remarks	Reg.
Other compartments (Bos'n store, deck stores, etc.)	Bulkheads (trans/longl.), longitudinals, transverse rings, horizontal girders, other members in good condition. No heavy corrosion, wastage, holes or cracks.			SLS Ch. II-1 Part B
Pump room	Bulkheads, longitudinals, web frames, other members in good condition. No heavy corrosion, wastage, holes or cracks.			
	Access ladders, piping in good condition. No heavy wastage, holes.			
	Particular care to be taken to ensure electrical equipment in good order, lights (explosion proof).			

Table 12. Machinery in Engine room

Item	Check Points	Satisfied/Not	Remarks	Reg.
Main engines	Operate satisfactorily.			
	Safety devices function properly.			
	Remote control function properly.			
Generator engines	Operate satisfactorily.			
	Safety devices function properly.			
	Remote and automatic control function properly.			
Boilers	Operate satisfactorily.			
	Safety devices function properly.			
	Remote and automatic control function properly.			
	Pressure gauges in good order, and calibration is made every year.			
	Water level gauges in good order.			
Essential machinery	Operate satisfactorily.			SLS Ch. II-1 Part C
	Safety devices function properly.			
	Remote and automatic control function properly.			
	Meters and gauges in good order.			
Piping	No heavy corrosion or leakage.			
	All valves operate satisfactorily.			
Bilge lines	Bilge pumps, pipings in good order.			
Cleanliness of E/R	Must be clean without rubbish or waste oil.			
Guards and fencing	Protection covers and/or guards in good order.			

Table 13. Electrical Equipment

Item	Check Points	Satisfied/Not	Remarks	Reg.
Lighting in E/R	All lights in good order.			SLS Ch. II-1 Part D
	Protection covers or guards in good order.			
Lighting in accommodation spaces	All lights in good order.			
	Protection covers or guards in good order.			
Lighting in control station, working room, steering room and other spaces	All lights in good order.			SLS Ch. II-1 Part D
	Protection covers or guards in good order.			
Emergency cables	Condition in good order. No exposed wire, heavy corrosion, especially on weather deck.			
Emergency lights	All lights in good order without damage.			
Anti-explosion lights in dangerous spaces, pump room, battery room, paint locker etc.	All lights in good order. No broken covers and guards. Tightening handles available on board.			
Insulating mats around MSB	Insulating mats available on board or insulation cement permanently laid up on the floor.			

Table 14. Mooring Arrangements

Item	Check Points	Satisfied/Not	Remarks	Reg.
Anchor & chain cables	Condition in good order, no heavy wastage, missing components or damage.			
	Stowage condition in good order.			
Windlass	Winches in good condition.			
	Brake bands in good condition, no abnormal wear.			
	Foundations, grating plates in good condition, no wastage, missing or broken sections.			
Mooring system	Winches in good condition.			
	Brake bands in good condition, no abnormal wear.			
	Foundations, grating plates in good condition, no wastage, missing or broken sections.			
	Sufficient ropes available on board and in good condition.			
	Capstans operate satisfactorily.			
Emergency Towing Arrangements (ETA)	Arrangements in good condition.		for tankers of not less than 20,000 DWT	SLS Reg. II-1/3-4

Table 15. Marine Pollution

Item	Check Points	Satisfied/Not	Remarks	Reg.
Oily water separator with pump	Operates satisfactorily.			MPL AX I Reg.16, 17, 19
	No heavy corrosion, holes on the outer casing.			
	Operation of valves in good order.			
	Pressure gauges in good order.			
Discharge piping	No heavy corrosion, holes in lines.			
	All valves operate satisfactorily.			
	No discharge pipes installed without approval of ClassNK.			
Sludge pump	Operates satisfactorily.			
Standard discharge connection	Available on board.			
15 PPM alarm	Operates satisfactorily.		for ships of 10,000G/T and above	
	Alarm functions properly.			
	Auto stop functions properly.			
ODM	Operates satisfactorily.		for tankers only	
	Regularly check by the service engineers.			
Oil/water interface detector	Available on board.			MPL AX I Reg. 15(3)(b)
COW	Operation effective.			MPL AX I Reg.13
	COW machine and piping lines in good order.			
Garbage management	Pollution placard			MPL AX V
	Garbage management plan on board.			
	Maintain a garbage log.			

Table 16. Cargo Handling Gear

Item	Check Points	Satisfied/Not	Remarks	Reg.
Masts, posts, booms, jibs including attachments (eye plates, heel pieces, gooseneck)	Condition in good order. No serious wear, heavy corrosion or damage.			ILO
Loose gear (blocks, sheaves, hooks, shackles, wire ropes, etc.)	Condition in good order. No heavy wear, corrosion or damage.			
	Distinguishing numbers stamped on loose gear.			
	Test certificates available.			
Periodical inspection by a competent person (NK surveyors)	The annual survey (every year) is not over due.	Last survey date:		
	The quadrennial survey and load test (4 years) are not over due.	Last survey date:		
	Correct endorsement of cargo gear booklet.			

Table 17. Accommodation

Item	Check Points	Satisfied/Not	Remarks	Reg.
Toilets	Flushing of toilets in good condition. Toilets to be clean.			ILO STCW
	Floor tiles in good condition without broken tiles. Floor to be clean.			
	Floor drainage in good condition.			
Shower rooms, washbasins, laundry room	Spaces in good condition. Rooms to be clean.			
	Hot water available for use.			
Air ventilating in accommodation spaces	Ventilation heating/cooling spaces in good condition.			
Medical equipment	proper medical equipment available on board.			
	Proper medicines available and within validity dates.			
Sick bay	Clean and ready for emergency use.			
Galley	Clean and with no rubbish.			
	Floor tiles clean and not broken.			
	Range hoods, ventilating opening with wire net to be clean of oil.			
Mess rooms and crew cabins	Clean and with no rubbish.			

Checklist II

(Within 24 hours before arriving at a port)

Table 1. Certificate & Documents

1. General

Certificate	Validity to be checked	Remarks
Registry Certificate		
Radio Station License		
Class certificate	AS/IS endorsed within due ranges.	

2. Statutory Certificates

Certificate	Validity to be checked	Remarks
Load Line	PLI endorsed within due range.	
Safety Construction	MAS/IS endorsed within due ranges.	
Safety Equipment	MAS/IS endorsed within due ranges.	
Safety Radio	Within validity.	
IOPP	MAS/IS endorsed within due ranges.	
Bulk Chemical Fitness	MAS/IS endorsed within due ranges.	for chemical tankers
Gas Fitness	MAS/IS endorsed within due ranges.	for liquid gas carries
NLS	MAS/IS endorsed within due ranges.	for carriage of Noxious Liquid Substance
Exemption Certificate	Within validity.	
Tonnage Certificate	Within validity.	
SMC	Intermediate Audit endorsed within due range.	
Copy of DOC	Annual Audit endorsed within due ranges.	

3. Miscellaneous Certificates

Certificate	Validity to be checked	Remarks
Minimum Manning Certificate	Within validity.	
Officers' Licenses and Appropriate Training certificates	Within validity.	
Master	Within validity.	GOC/ROC for GMDSS
Chief Engineer	Within validity.	
Officers	Within validity.	GOC for GMDSS
Engineers	Within validity.	
Radio Operators	Within validity.	GOC or REC for GMDSS
Navigational/Engine watch keeping rating's certification	Within validity.	
Medical certificate for each member	Within validity.	

4. Documents and Manuals

for All ships

Documents	Available on board	Remarks
Stability Information		
Shipboard Oil Pollution Emergency Plan (SOPEP)		

Documents	Proper Entries	Remarks
Oil Record Book, parts I and II		
Garbage Record Book		
Log Book		

Documents	Available on board	Remarks
Cargo Gear Book		

for oil tankers and chemical tankers

Documents	Available on board	Remarks
Damage Stability information		
Operation Manual		
ODM Manual		
COW Manual (If any)		

for chemical tankers

Documents	Available on board	Remarks
P & A Manual		

Documents	Proper Entries	Remarks
Cargo Record Book		

for ships carrying Noxious Liquid Substances

Item	Approved by	Language	Understood by crew	Remarks
Shipboard Marine Pollution Emergency Plan (SMPEP) (on and after 1st January 2003)				

for liquid gas carriers

Documents	Available on board	Remarks
Operation Manual		

for grain loading vessels

Documents	Available on board	Remarks
Grain Loading Certificate		
Grain Loading Manual		

Other (if available)

Documents	Available on board	Remarks
Survey Report Files		for bulk carriers and oil tankers
Record of ODM		for oil tankers
Damage Control Plan		for dry cargo ships constructed on or after 1 Feb. 1992 SLS Reg.II-1/23-1
Cargo Securing Manual		SLS Reg.VI/5 and VII/5
Garbage Management Plan		
Bulk Carrier Booklet		SLS Reg.VI/7
Reports of previous PSC inspection		

Table 2. Nautical Publications and International Conventions

Item		Check Points	Satisfied/Not	Action
Chats		Charts for intended voyage (Current and corrected charts)		
Sailing Directions		Current editions available		
List of lights		Current editions available		
Notice to Mariners		Current editions available		
Tide Tables		Current editions available		
International Code of Signals		Current editions available		
International Conventions	SOLAS COLREG MARPOL LOAD LINE STCW	Available on board		

Table 3. Logbook Entries

Item	Date of the last drill/inspection	Entry/Not
Steering gear testing and drills		
Abandon ship drill		
Fire drill		
On-board training and instructions		
SOPEP drill		
Weekly inspection		
Monthly inspection		

Table 4. Safety in General

Item	Check Points	Satisfied/Not	Action
Fire control plan	Exhibited in accommodation spaces.		
	Stored in a container outside main accommodation entrances. (Port & Starboard).		
	Up-to date		
Instruction book for maintenance and operation of fire fighting system(00ES)	Readily available in an accessible position with all instructions within one cover.		
Muster List	Exhibited in W/H, E/R and crew accommodation spaces.		
	Showing duties according to SLS Reg.III/37.		
	In a language understood by all crew.		
Training Manual for fire fighting system and life saving apparatus	Exhibited in mess room/recreation room or each crew cabin.		
	In a language understood by all crew.		
Instructions for on board maintenance	Readily available for crew.		
	In a language understood by all crew.		
Maintenance plan for fire fighting system	Readily available for inspection whenever required by the Administration.		
Fire Safety Operational Booklet	Exhibited in mess room/recreation room or each crew cabin.		
	Written in the working language of the ship.		

Table 5. Testing and drills

Item	Check Points	Satisfied/Not	Action
Communication system	Testing between each compartment.		
Emergency generator	Operational test.		
Emergency fire pump	Discharging test including check of fire main line on deck.		
Emergency steering gear	Operational test		
Fuel oil tank shut-off valves	Operational test		
Emergency stop of fans and fuel oil pumps in E/R	Operational test		
Fire doors	Operational test		
Lifeboat engines	Operational test		
Launching arrangement of lifeboats (Port & Starboard)	Lowering test		
Oily water separator	Operational test		
15 PPM alarm (if any)	Alarm test (simulated)		
ODM (if any)	Operational test		

Table 6. Closing Appliances

Item		Check Points	Satisfied/Not	Action
Ventilators/Air pipes				
	Upper deck	Test of operational condition		
	Poop deck	Test of operational condition		
	Accommodation decks	Test of operational condition		
Doors				
	Upper deck	Test of operational condition		
	Poop deck	Test of operational condition		
	Engine room	Test of operational condition		
	Steering room	Test of operational condition		
	Accommodation decks	Test of operational condition		
Hatches		Test of operational condition		

Table 7. Other Necessary Items

Checklist III

(for Safety Management System)

Item	Check points	Satisfied/Not	ISM Code
Report to Flag state	When the Company is not the same as the registered owner, any evidence is placed on board which shows that the registered owner has reported the full name and details of the Company to the Administration.		3.1
A copy of DOC	The type of ship is included in the DOC.		13
	The Company's particulars are the same in both the DOC and the SMC		
	Note: A copy of DOC need not be an authenticated or certified copy. (IMO ; MSC/Circ.927, MEPC/Circ.359, dated 21 July 1999)		
	Senior officers can identify the Company responsible for the operation of the ship.		3
Policy	Safety and Environmental-protection Policy has been placed onboard.		2.1
	Ship's personnel are familiar with that policy.		2.2
Designated Person(s)	Designated Person: Name_____ Title_____ Phone No. _____	—	4
	Senior officers can identify the Designated Person.		
Master's Responsibility and Authority	Following Master's responsibilities are clearly defined and documented. 1. To implement the safety and environmental-protection policy of the Company; 2. To motivate the crew in the observation of that policy; 3. To issue appropriate orders and instructions in a clear and simple manner; 4. To verify that specified requirements are observed; and 5. To review the SMS and report its deficiencies to the shore-based management.		5.1
	Master's overriding authority and authority to request the Company's assistance, as may be necessary, are established in the SMS.		5.2
	Master can produce documented proof of these responsibilities and authority.		5
	Master is fully conversant with the Company's SMS.		6.1.3

Item	Check points	Satisfied/Not	ISM Code
Onboard Training	Onboard training for newly joined crew: 1. The company has provided Master with "Written Instructions" concerning the need to ensure that all seafarer assigned, including those transferred to new assignments, to the ship are given proper familiarization with their duties, specific equipment and operating procedures of the ship concerned, in accordance with STCW A-I/14 2. "Essential Instructions" are documented and given to each member of crew prior to sailing. 3. Such training records are kept on board.		6.3
	Onboard training in support of the SMS: 1. Procedures for onboard training in support of the SMS are established and maintained. 2. Such training records are kept on board.		6.5
Onboard Communi-cation	Where the multi-national crew members are onboard: 1. Working language onboard is established. 2. Master's order or job instructions in working language are clearly understood by crew. 3. All members of crew can communicate effectively in the execution of their duties.		6.7
Shipboard Operations	Procedures for key shipboard operations specific to the ship are documented and provided with: • Pollution prevention – Engine bilge, sludge and bilge separator control / Garbage control and sewage control / Dirty and hold ballast control. • Navigation – Preparation for sea, Ship at sea, Preparation for arrival at port, Ship in port and Chart correction • Safe Working Practice – Hot work and Entering the enclosed spaces. • Bunkering operation • Communication		7
	All officers are conversant with the documented procedures on their assigned duties.		
Emergency Prepared-ness	Procedures for responding to the identified emergency shipboard situations are placed on board.		8.1
	Programs for drills and exercises to prepare for emergency actions are available on board.		8.2
	Records of such drills and exercises are available on board.		
	Procedures to contact with shore management in an emergency are established and maintained.		8.3

Item	Check points	Satisfied/Not	ISM Code
Non-conformity	Procedures for reporting non-conformities to the Company are kept onboard.		9.1
	Master has reviewed the SMS and reported its non-conformities to the Company.		5.1.5
	Officers can identify typical cases to be reported.		9.1
	The Company has taken corrective action for the reported non-conformities.		9.2
	Corrective actions have been completed, if any.		
Maintenance	Procedures for maintenance are kept onboard.		10.1
	Maintenance plans are available on board and have been practised.		10.2
	Maintenance records are available on board.		
	Important or critical equipment and technical systems are identified.		10.3
	Officers in charge are familiar with the specific measures of such equipment and systems, including the regular testing of stand-by arrangements and that are not in continuous use.		
Documen-tation	Procedures for document control are available on board		11.1
	Controlled documents are identified.		
	Obsolete documents have been removed.		11.2
	All valid documents relevant to the ship are available on board		11.3
	Relevant documentation on the SMS is in a working language or in languages understood by the ship's personnel.		6.6
Internal Audit	Procedures for internal audit are available on board		12.3
	Internal audits have been conducted in accordance with the procedures.		
	Master and Chief Engineer are familiar with the procedures and know how many audits are required per year.		
	The results of internal audit are available on board. **Last internal audit :** Date _____ by _____		12.5
External Audit	Records of external audit are available on board.		—
	Corrective actions have been taken timely, if any.		