Good Maintenance On Board Ships

Table 8. Fire Fighting Appliances

Item	Check Points	Satisfied/Not	Remarks	Reg.
Fire integrity	Insulation on "A" class bulkheads and decks in good condition			SOLAS 74/88 Reg. II-2/42 SOLAS 74/00 Reg.II-2/9
	Penetrations of ventilation ducts cable penetration and pipes through "A" class bulk heads and decks in good order			
	Cable penetration in "A" or "B" class division in good condition			SOLAS 74/88 Reg. II-2/9.2
Fire doors	Operate satisfactorily			- SOLAS 74/88 Reg. II-2/47 SOLAS 74/00
	Self-closing doors not to be fitted with hold-back hooks, rope or wedge		For 81 NS	
	Condition of door, door frame and door hinge			Reg.II-2/9
Skylights	Closing arrangements in good order			SOLAS 74/88 Reg.
	Skylights to be of steel and not contain glass panels		For 81 NS	II-2/11.2.2, SOLAS 74/00 Reg. II-2/9.5.2.2
	Operate satisfactorily			
	Cargo holds			_
	Engine room			SOLAS 74/88 Reg. II-2/5.1.4 SOLAS 74/00 Reg. II-2/5.2
Fire dampers	Accommodation spaces			
	Control stations			
	Other spaces Clear marking of "Close-Open" No hole/defection of dampers			
	Operate satisfactorily			SOLAS 74/88 Reg. II-2/4 SOLAS 74/00 Reg.II-2/10.2
Main fire pumps	Proper pressure maintained			
	Pressure gauges in good order		_	
	Operates satisfactorily			
	Proper pressure maintained			
Emergency fire pump	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			
	Fire hoses easily coupled to hydrants			
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			SOLAS 74/88
	Length of fire hoses in machinery spaces not more than 15 m			
	Length of fire hoses in other spaces and open deck not more than 20m			
	Length of fire hoses for open deck not more than 25m; on ship with a max. breadth in excess of 30m			
	Checking the number of hoses acc. to the fire control plan			
	Complete with nozzle and couplings			Reg. II-2/4 SOLA74/00
	All nozzles in good condition, without leakage			Reg.II-2/10.2
Nozzles	- 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	Stowed in good condition and easily usable			
hoses and nozzles	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			
	Cylinders in good condition, without serious corrosion/damage			SOLAS 74/88 Reg. II-2/6 SOLAS 74/00 Reg.II-2/10
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: three years			
Foam type fire extinguisher of 135 litters capacity or equivalent in firing space of boiler and in spaces of fuel oil system	Visual condition in good order, without wastage		For 81NS	SOLAS 74/88 Reg. II-2/7.1.3 SOLAS 74/00 Reg.II-2/10.5
	Easily usable condition			

Good Maintenance On Board Ships

Item	Check Points	Satisfied/Not	Remarks	Reg.
Foam type fire extinguishers of 45 litters capacity or equivalent in engine room	Visual condition in good order			SOLAS 74/88 Reg. II-2/7.2 SOLAS 74/00 Reg.II-2/10.5
	Easily usable condition			
Fixed fire extinguishing arrangement in E/R, cargo spaces and cargo pump room* (CO ₂ or Halon, foam, water spray)	Piping in lines in good order, without leakage or no heavy corrosion			
	Regular checking of lines by air blow or water flow test		-	SOLAS 74/88 Reg. II-2/7.1.1, 53 SOLAS 74/00 Reg.II-2/10.5.1. 1, 10.7 *Cargo pump R/M:(For 00NS) SOLAS 74/00 Reg.II-2/10.9
	CO_2 or Halon cylinders to be level/weight measured. Proper test certificate on board			
	Effectiveness of foam or dry chemical extinguishing medium (Proper quantity, sample analysis)			
	Testing the audible alarm for the release of gas (CO ₂ or Halon)			
	Water mist system is not manual mode and water supply valve to be opened			
Fire detection	Regular checking of the detection system and fire alarm			SOLAS 74/88 Reg. II-2/13 SOLAS 74/00 Reg.II-2/7
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			SOLAS 74/88 Reg. II-2/15.2 SOLAS 74/00 Reg.II-2/4.2.2
	- 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	Satisfactory operation of emergency stop			SOLAS 74/88 Reg. II-2/11.4 SOLAS 74/00 Reg.II-2/5.2
Means of isolating the fuel supply to individual engines	Satisfactory operation of means to isolate the fuel supply		For 00NS	SOLAS 74/00 Reg.II-2/4.2.2

Check Points	Satisfied/Not	Remarks	Reg.
Two (2) sets for cargo ships Four (4) sets for tankers			SOLAS 74/88 Reg. II-2/17 SOLAS 74/00 Reg. II-2/10.10 Res.MSC.338 (91) and Res. MSC.339(91)
Stowage condition in good order according to the fire control plan			
Protective clothing, boots and gloves, helmet, electric safety lamp, axe are 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 or 100 % + Air compressor			
A fireproof lifeline of sufficient length for each breathing apparatus with a snaphook. Storage position is clearly marked (00NS)			
Emergency lights in stowage positions			SOLAS 74/88 Reg. II-1/43
1 set of spare cylinders for each mandatory breathing apparatus for fire drill if air compressor (means of recharging) is not provided		For all ships: By 1 January 2017.	SOLAS 74/00 Reg.II-2/15.2
Fire-fighter's communication (Two-way explosion-proof portable radio)		For new ship 1 July 2014. For Exist. ship By 1 July 2018.	SOLAS 74/00 Reg.II-2/10
Type of fire-fighter's outfits (Audible alarm and visual device of remaining cylinder air)		For new ship 1 July 2014. For Exist. ship By 1 July 2019.	FSS Code Chap.3, 2.1.2.2
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))			SOLAS 74/88 Reg. II-2/19 SOLAS 74/00 Reg. II-2/10.2
At least one (1) shore connection with standard flange dimensions available on board			
Four (4) sets of bolts and nuts, each of 16 mm in diameter, 50 mm in length available on board			SOLAS 74/88 Reg. II-2/19 SOLAS 74/00
			Reg. II-2/10.2 SOLAS 74/88
Operates satisfactorily Alarms in the control panel function properly			Reg. II-2/62 SOLAS 74/00 Reg. II-2/4.5.5
	Two (2) sets for cargo ships Four (4) sets for tankers Stowage condition in good order according to the fire control plan Protective clothing, boots and gloves, helmet, electric safety lamp, axe are 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 or 100 % + Air compressor - A fireproof lifeline of sufficient length for each breathing apparatus with a snaphook Storage position is clearly marked (00NS) Emergency lights in stowage positions I set of spare cylinders for each mandatory breathing apparatus for fire drill if air compressor (means of recharging) is not provided Fire-fighter's communication (Two-way explosion-proof portable radio) Type of fire-fighter's outfits (Audible alarm and visual device of remaining cylinder air) 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)) At least one (1) shore connection with standard flange dimensions available on board Four (4) sets of bolts and nuts, each of 16 mm in diameter, 50 mm in length available on board One (1) gasket packing available on board	Two (2) sets for cargo ships Four (4) sets for tankers Stowage condition in good order according to the fire control plan Protective clothing, boots and gloves, helmet, electric safety lamp, axe are 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 or 100 % + Air compressor - A fireproof lifeline of sufficient length for each breathing apparatus with a snaphook Storage position is clearly marked (00NS) Emergency lights in stowage positions 1 set of spare cylinders for each mandatory breathing apparatus for fire drill if air compressor (means of recharging) is not provided Fire-fighter's communication (Two-way explosion-proof portable radio) Type of fire-fighter's outfits (Audible alarm and visual device of remaining cylinder air) 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)) At least one (1) shore connection with standard flange dimensions available on board Four (4) sets of bolts and nuts, each of 16 mm in diameter, 50 mm in length available on board One (1) gasket packing available on board	Two (2) sets for cargo ships Four (4) sets for tankers Stowage condition in good order according to the fire control plan Protective clothing, boots and gloves, helmet, electric safety lamp, axe are 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 or 100 % + Air compressor - A fireproof lifeline of sufficient length for each breathing apparatus with a snaphook Storage position is clearly marked (00NS) Emergency lights in stowage positions 1 set of spare cylinders for each mandatory breathing apparatus for fire drill if air compressor (means of recharging) is not provided For new ship 1 July 2014. For Exist, ship By 1 July 2018. Type of fire-fighter's outfits (Audible alarm and visual device of remaining cylinder air) 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)) At least one (1) shore connection with standard flange dimensions available on board One (1) gasket packing available on board One (1) gasket packing available on board

Item	Check Points	Satisfied/Not	Remarks	Reg.
Emergency lights	Satisfactory lighting condition in engine room, corridors in accommodation, wheel house, control stations, outside passage			SOLAS 74/88 Reg. II-1/43
	Bulbs and glasses without damage			
Means of escapes	Ready for immediate use			SOLAS 74/88 Reg. II-2/45 SOLAS 74/00
	Steps and handrails without damage			
	Lighting operates satisfactorily			Reg. II-2/13
Emergency Escape Breathing Devices	Stowage condition in good order according to the fire control planEasily usable condition			
	Suitable maintenance according to the Manufacturer's instruction			SOLAS 74/00 Reg.II-2/13
(EEBD)	Confirmation of Air-pressure			106.11 2, 13
	Expiry date or Shelf life	Expiry (Shelf) date		
	Piping, pump, valves and nozzles in good order, without leakage, heavy corrosion or damage		For 00NS	SOLAS 74/00 Reg.II-2/10.5.6
Fixed local application	Regular checking of lines by air blow or water flow test		For 00NS	
fire-fighting system	Operate satisfactorily		For 00NS	
	Suction valve opened properly		For 00NS	
	Select automatic release mode		For 00NS and UMS	
Fire-fighting devices	Visual condition in good order		For new installation on	SOLAS 74/00 Reg.11-2/10.6.4
for deep fat cooking equipment	Operate satisfactorily		or after 1 July 2002	
Protection of cargo pump room	Operate satisfactorily		:	SOLAS 74/00 Reg.II-2/4.5.10
Helicopter facilities	Arranged in accordance with the plan for Helicopter Facilities			SOLAS 74/88 Reg. II-2/18.8 SOLAS 74/00 Reg. II-2/18
	Fire-fighting appliances in good order			SOLAS 74/00 Reg.II-2/18
Fixed fire extinguishing system for exhaust ducts from galley ranges	Visual condition in good order			SOLAS 74/88 Reg.II-2/16.7
	Operate satisfactorily			SOLAS 74/00 Reg.II-2/9.7.5

^{*} Maintenance, testing and inspections for fire fighting appliances (SOLAS 74/00 Reg.II-2/14.2.2.1) are to be carried out in accordance with the maintenance plan (SOLAS 74/00 Reg. II-2/14.2.2.2) including the Flag special requirements prepared by company.