

# Checklist for Maintenance and Inspection of Safety Equipment

With this overview of recommendations for maintenance and inspection requirements and recommendations for safety equipment, Germanischer Lloyd provides a compact and practical tool for ship owners, operators and surveyors. New maintenance requirements for such equipment are published irregularly and in various IMO documents and chapters, which makes it cumbersome and time consuming to keep track of all changes. This list contains all requirements regarding safety equipment and includes also requirements and recommendations by Germanischer Lloyd. National requirements, if any, should be observed in addition.

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Please note: National requirements of relevant flag-states for maintenance and inspection are available via the flag state names in this section.

# 1. Life Saving Appliances

	SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval		
		Cargo Ships	Passenger Ships	Log Book Entry	Service Company <sup>1</sup>	Ship's Crew	SOLAS Requirement	GL	
								Requirement	Recommendation
<b>Survival craft, rescue boats and launching appliances</b> (visual inspection)	III/20.6.1, MSC/Circ. 1206	X	X	X		X	weekly		
Test run of <b>life- and rescue boat engines</b>	III/20.6.2, MSC/Circ. 1206	X	X	X		X	weekly		
<b>Davit launched lifeboats</b>	Moved from stowed position	X		X		X	weekly		
	Turned out from stowed position	X	X	X		X	monthly		
Testing of <b>public address and general alarm system</b>	III/20.6.4	X	X	X		X	weekly		
Testing of <b>emergency lighting</b>	III/19.3.3.9		X	X		X	weekly (Passenger Vessel)		
		X		X		X	monthly (Cargo Vessel)		
<b>LSA incl. lifeboat equipment</b> acc. to checklist	III/20.7.2, MSC/Circ. 1047	X	X	X		X	monthly		

		SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval		
			Cargo Ships	Passenger Ships	Log Book Entry	Service Company	Ship's Crew	SOLAS Requirement	GL	
									Requirement	Recommendation
<b>Immersion suits</b>	Shipboard inspection by crew	III/20.7, MSC/Circ.1047	X	X			X	monthly		
	Air pressure test (seams and closures)	MSC/Circ. 1114	X	X		X	(X)	3 yearly		yearly ( for suits older than 10 years)
<b>Inflatable liferafts, lifejackets, MES</b> (by approved service station)		III/20.8.1.1	X	X		X		12 months (administration can allow extension up to 17 months)		
<b>Hydrostatic release units</b> (non-disposable)		III/20.9.1	X	X		X		12 months (administration can allow extension up to 17 months)		
Maintenance of <b>falls used in launching</b> :		III/20.4, MSC216(82)	X	X	X	X	(X)	periodic inspections; special concern to hidden areas; Renewal latest after 5 years	Ships crew only if properly trained and familiar with these works	

	SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval		
		Cargo Ships	Passenger Ships	Log Book Entry	Service Company	Ship's Crew	SOLAS Requirement	GL	
								Requirement	Recommendation
<b>Launching appliances</b> (thorough examination and dynamic test of the winch brake)	III/20/11.1, MSC.152(78) LSA Code 6.1.2.5.2 MSC/Circ. 1206	X	X	X	X		yearly		
<b>Lifeboat on-load release gear</b> (thorough examination and test by properly trained personnel)	III/20.11.2.2 MSC/Circ. 1206	X	X	X	X		yearly		
Lifeboat on-load release gear (overhauling + load test)	III/20.11.2.3	X	X	X	X		5 yearly		
<b>Compressed air cylinders for lifeboats</b> with selfcontained air support system (external inspection)	--	X				X	--		yearly
<b>Compressed air cylinders for lifeboats</b> with selfcontained air support system (hydrostatic testing)	IACS REC.No.88	X			X		--		5 yearly
<b>Compressed air cylinder in liferaft</b> container (hydrostatic testing)	--	X	X		X		--		10 yearly
<b>Line-throwing rockets</b>	III/18 LSA Code 1.2.3, 7.1	X	X			X	Makers expiry date		3 yearly

	SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval		
		Cargo Ships	Passenger Ships	Log Book Entry	Service Company	Ship's Crew	SOLAS Requirement	GL	
								Requirement	Recommendation
<b>Rocket parachute flares</b>	III/6.3 LSA Code 1.2.3, 3.1	X	X			X	Makers expiry date		3 yearly
<b>Smoke signals</b>	III/7.1.3 LSA Code 1.2.3, 3.3	X	X			X	Makers expiry date		3 yearly
<b>Lifebuoy lights</b> (electric type) - battery replacement	III/7.1.3 LSA Code 1.2.3, 2.1.2	X	X			X	Makers expiry date		1 yearly
<b>Food rations</b> of lifeboat equipment	LSA Code 4.4.8.12	X	X			X	Makers expiry date		5 yearly
<b>First-aid outfit</b> of lifeboat equipment	III/41.8.20 LSA Code 4.4.8.20	X	X			X	Makers expiry date		1 yearly

## 2. Fire Fighting Equipment

	SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval			
		Cargo Ships	Passenger Ships		Log Book Entry	Service Company	Ship's Crew	SOLAS Requirement	GL	
									Requirement	Recommendation
<b>Cylinders of breathing apparatus</b> (Check for leakages)	II-2/10.10.2.5,	X	X	X		X	Weekly			
Hydrostatic test	19.3.6.2; MSC/Circ. 850	X	X	X	X		5 yearly			
<b>Fireman's outfits, fire extinguishers, fire hydrants, hoses and nozzles</b> in place, properly arranged and in proper condition	MSC/Circ. 850	X	X	X		X	monthly			
<b>Fixed fire fighting stop valves</b> in proper open or closed position	MSC/Circ. 850	X	X	X		X	monthly			
Check <b>appropriate pressure of wet pipe sprinkler systems</b> indicated by gauges	MSC/Circ. 850	X	X	X		X	monthly			
Correct <b>levels of water of sprinkler system pressure tanks</b> indicated by glass gauges	MSC/Circ. 850	X	X	X		X	monthly			
<b>Sprinkler system pumps</b> operate automatically on reduction of pressure	MSC/Circ. 850	X	X	X		X	monthly			
Check <b>operation of fire pumps</b>	MSC/Circ. 850	X	X	X		X	monthly			
Function test of all <b>automatic alarms for sprinkler systems</b> by using test valves for each section	MSC/Circ. 850	X	X	X		X	quarterly			
Check condition of <b>international shore connection</b>	MSC/Circ. 850	X	X	X		X	quarterly			

		SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval			
			Cargo Ships	Passenger Ships		Log Book Entry	Service Company	Ship's Crew	SOLAS Requirement	GL	
										Requirement	Recommendation
Test of fire doors and fire dampers	for local operation	MSC/Circ. 850	X	X	X		X	quarterly			
	for remote operation	MSC/Circ. 850	X	X	X		X	yearly			
Portable fire extinguishers and mobile fire extinguishers – check for proper location, charging pressure and condition		II-2/10.3; MSC/Circ. 850 IMO Res.A.951(23) <sup>(1)</sup>	X	X	X		X <sup>(2)</sup>	yearly	yearly		
Fixed fire extinguishing systems, such as gas-, foam-, powder-, water spray or water mist - Inspection		II-2/10.4; FSS Code (IMO Res. MSC. 98(73))	X	X		X		--	2 yearly		
Foam-water and water-spray fixed fire-fighting systems - operation test		MSC/Circ. 850	X	X	X		X	yearly			
Test of fire detection system for proper operation		II-2/7.3.2; MSC/Circ. 850	X	X	X		X	yearly	yearly		
CO <sub>2</sub> -gas and halon cylinders, cylinders of fixed gas fire extinguishing systems - level check		II-2/14; MSC/Circ. 850	X	X			X	--	2 yearly		
Fire hoses – hydrostatic test		MSC/Circ. 850	X	X	X		X	yearly			
Flow test of fire pumps incl. sprinkler pumps for proper pressure and flow		MSC/Circ. 850	X	X	X		X	yearly			

(1) for portable fire extinguisher

(2) service to be undertaken by, or under the supervision of, a person with demonstrable competence

	SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval		
		Cargo Ships	Passenger Ships	Log Book Entry	Service Company	Ship's Crew	SOLAS Requirement	GL	
								Requirement	Recommendation
Operation test of all <b>hydrants</b>	MSC/Circ. 850	X	X	X		X	yearly		
Operation test of <b>sprinkler system connections</b> from the ship's fire main	MSC/Circ. 850	X	X	X		X	yearly		
Check of <b>breathing apparatus air recharging systems</b> for air quality	MSC/Circ. 850	X	X	X	X		yearly		
Blow air through the piping of <b>extinguishing gas systems</b>	MSC/Circ. 850	X	X	X		X	yearly		
Control valves of <b>fixed fire-fighting systems</b> – internal inspection	MSC/Circ. 850	X	X		X		5-yearly		
<b>SCBA Cylinders</b> – hydrostatic testing	MSC/Circ. 850	X	X		X		5-yearly		
<b>EEBD</b> (SCBA cylinders-hydrostatic testing as mentined above)	MSC/Circ. 849, FSS Code (IMO Res.MSC.98(73))	X	X				Maintenance according to makers instructions		
Foam concentrate for <b>fixed foam fire extinguishing systems</b>	II-2/14; MSC/Circ. 850; MSC/Circ. 670	X	X		X		3 years after filling and yearly thereafter		
Foam concentrate <b>for portable foam applicator units</b>	Class rules (1)(4)	X	X		X		---	5-yearly (renewal)	

	SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval		
		Cargo Ships	Passenger Ships	Log Book Entry	Service Company	Ship's Crew	SOLAS Requirement	GL	
								Requirement	Recommendation
CO <sub>2</sub> or other gas cylinders (hydrostatic pressure test and internal inspection) <sup>1</sup>	Class rules (1)(2)	X	X		X		--	10 yearly (at least 10 %)	
Fire extinguishers and associates propellant gas cylinders - hydrostatic pressure test	MSC/Circ. 847 IMO Res.A.951(23)	X	X		X		10 yearly		
CO <sub>2</sub> hose assemblies - visual check	Class rules (1)(3)	X	X		X			2 yearly	
CO <sub>2</sub> hose assemblies made of synthetic rubber to be replaced	Class rules (1)(3)	X	X		X			10 yearly	

<sup>1</sup> except halon cylinders

- (1) I Ship Technology
- 0 Classification and Surveys
- (2) Item B.1.5.5.3
- (3) Item C.1.3.3.10.1
- (4) Item C.1.1.4

### 3. Radio Equipment

	SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval			
		Cargo Ships	Passenger Ships		Log Book Entry	Service Company	Ship's Crew	SOLAS Requirement	GL	
									Requirement	Recommendation
Satellite EPIRBs	IV/15.9	X	X	X (1)	X		5-yearly by approved shore-based maintenance facility			
	IV/15.9	X	X		X		yearly by approved service supplier			
Radio Battery	IV/13.6.2	X	X	X	X		yearly by approved service supplier			

### 4. Navigational Equipment

Voyage Data Recorder (VDR)	V/18.8	X	X	X (1) (2)	X		yearly by testing facility		
Steering gear	V/26	X	X	X		X	12 hours before departure		

- (1) Certificate of Compliance
- (2) Maintenance report

## 5. Others

	SOLAS Reg. + other Instruments	Application		Record			Frequency / Interval			
		Cargo Ships	Passenger Ships		Log Book Entry	Service Company	Ship's Crew	SOLAS Requirement	GL	
									Requirement	Recommendation
Measurement of <b>Low Location Lighting</b> systems	ISO 15370, SOLAS II-2/13.3.2.5		X		X		5-yearly by approved service supplier			
<b>Lightweight survey</b>	II-1/22.3		X		X		5-yearly			
<b>In Service Inclining Test system</b>	Class rules	X			X		--	5-yearly		
<b>Medical Oxygen cylinders</b> – hydraulic pressure test	--	X	X		X		--		5-yearly	