#### TO ALL FLEET VESSEL

Ref: DMA-SAPID/IAFI01/99/C1110

Date: 2020.06.28

In The Name Of God

Good Day, Dear Sir

Kindly pl's find attached <u>ICS Circular letter No. Circular TI-20-11 with the subject of "Guideline on Maintenance and Inspection of FFA"</u> for your kind attention and necessary precaution measures.

You are requested to confirm receipt, discuss the contents in the next consolidated meeting on board & keep a copy in the file DA-11 .

BEST REGARDS CAPT.A.Momeni.N. Accident Investigation And Fleet Inspection Department Of Maritime Affairs Sapid Shipping Co.

<u>Tel:+98-21-2610 0357</u> <u>Fax:+98-21-2610 0356</u> <u>Direct Tel:+98-21-2384 3543</u>

PL'S REPLY TO; <u>dma@sapidshpg.com</u> <u>cso@sapidshpg.com</u>



# IRAN CLASSIFICATION

#### **Technical Information**

Code: **TI-20-11** 

Date: 24.06.2020

### **Example 2001 Classification Society**

## <u>Subject: Guideline on Maintenance and Inspection of Fire protection</u> <u>& fire-fighting equipment</u>

According to SOLAS Chapter II-2 Reg. 14.2.2, maintenance, testing and inspections for fire protection systems as well as fire-fighting systems and appliances shall be carried out based on the guidelines developed by the Organization (Refer to MSC.1/Circ.1432 as amended, including the amendments by MSC.1/Circ.1516) and in manner having due regard to ensuring reliability of them.

Regarding to above, the appendixes gives an overview of maintenance, testing and inspections for fire protection system and fire-fighting appliances, except fixed fire-extinguishing system as below:

- Appendix – Table for maintenance, testing and inspections for Fire protection & fire-fighting equipment

#### Note:

- ➤ Due to the release of this Technical Information, previous ICS Technical Information No.2013-01 dated 23.04.2013 are revoked
- ➤ The references in tables, as amended, are minimum guidelines on which such inspection are to be based, in case there are any instructions by the manufacture, those instructions are to be followed, as well.
- ➤ The inspection interval for items which carried out by shipyard staff or crew during ship construction, starts from delivery date of a vessel.
- ➤ It should be noted that certain jobs may be performed by competent crew members, while others shall be performed by specially trained persons. The parts which the inspections and maintenance shall be completed by service supplier or competent crew members or specially trained persons or may attended by surveyor, are indicated in the list.

For any questions about this Technical Information, please contact:

Iranian Classification Society (ICS)
Convention & Legislation Department

Phone: +98-21-42186210 Fax: +98-21-88837744 E-Mail: cld@ics.org.ir

Person in charge: Ehsan Hassani & Reza Safari

#### Disclaimer:

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# Appendix to ICS Technical Information No. TI-20-11 Table for maintenance, testing and inspections for Fire protection & fire-fighting equipment



Equipment	Interval	Ву	Requirement	Regulation	Ship type
Firefighter's outfits	Monthly	Ship	Verify that lockers providing storage for fire-fighting equipment contain their full inventory and that equipment is in serviceable condition.	MSC.1/Circ.1432, par. 5.5	All
Self-contained Breathing apparatuses (SCBAs)	Weekly	Ship	Examine cylinder gauges to confirm they are in the correct pressure range.	MSC.1/Circ.1432, par. 4.5	All
	Monthly	Ship	The breathing apparatus shall be inspected.	BCH Code, par. 3.16.8 IBC Code, par. 14.2.6 IGC Code, par. 14.2.6	Tanker (Chemical & Gas)
	Annually	Service supplier or maker	The equipment shall be inspected and tested.		
	Annually	Ship	Check that all breathing apparatus face masks and air demand valves are in serviceable condition.	MSC.1/Circ.1432, par. 7.8.2	All
	5-yearly	Service supplier	Perform hydrostatic testing of all self-contained breathing apparatus cylinders.	MSC.1/Circ.1432, par. 9.4	All
	Monthly	Ship	The compressed-air equipment shall be inspected.	BCH Code, par. 3.16.8	Tanker
Air-recharging system for SCBAs	Annually	Service supplier or maker	The equipment shall be inspected and tested.	IGC Code, par. 14.2.6	(Chemical & Gas)
	Annually	Service supplier or ship or maker	Check breathing apparatus air recharging systems, if fitted, for air quality.  Note: By crew provided a suitable measurement device is available on board and the test device is to be agreed with the maker of the air recharging system.	MSC.1/Circ.1432, par. 7.8.1	All
Emergency escape breathing devices (EEBD)	Weekly	Ship	Examine cylinder gauges to confirm they are in the correct pressure range.	MSC.1/Circ.1432, par. 4.5	All
	Annually	Ship	Check according to maker's instructions.	MSC.1/Circ.1432, par. 7.8.3	All
	5-yearly or as specified by maker less than 5Y)	Service supplier	Hydrostatic pressure testing of all EEBD cylinders as per manufacturer's instructions	IACS Rec. No.88	All

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Equipment	Interval	Ву	Requirement	Regulation	Ship type
Fixed fire detection and alarm systems	Weekly	Ship	Verify that all fire detection and fire alarm control panel indicators are functional by operating the lamp/indicator test switch.	MSC.1/Circ.1432,par. 4.1	All
	Monthly		Test a sample of detectors and manual call points so that all devices have been tested within five years.	MSC.1/Circ.1432,par. 5.10	All
	Annually		Test all fire detection systems and fire detection systems used to automatically release fire extinguishing systems for proper operation, as appropriate.	MSC.1/Circ.1432,par. 7.2.1	All
			Visually inspect all accessible detectors for evidence of tampering, obstruction, etc., so that all detectors are inspected within one year.	MSC.1/Circ.1432,par. 7.2.2	
			Test emergency power supply switchover	MSC.1/Circ.1432,par. 7.2.3	
Portable fire extinguishers	Annually	Ship	Inspection in accordance with the manufacturer's instructions and based on inspection guide in Res.A.951 (23), table 9.1.3.	Res.A.951 (23), par. 9.1	All
	5-yearly	Ship	At least one fire extinguisher of each type manufactured in the same year and kept on board a ship shall be test discharged as part of a fire drill.	Res.A.951 (23), par. 9.1.1	
	10-yearly	Service supplier	All fire extinguishers together with propellant cartridges shall be hydraulically tested in accordance with the recognized standard or the manufacturer's instructions.	Res.A.951 (23), par. 9.1.2	
Wheeled (mobile) Fire extinguishers	Annually	Ship	Verify that all are in place, properly arranged, and are in proper condition.	MSC.1/Circ.1432, par. 5.9	
			Inspection in accordance with the manufacturer's instructions.	MSC.1/Circ.1432, par.7.12.1	4
			Wheeled (mobile) fire extinguishers shall be visually inspected to check that all accessible components are in proper condition.	MSC.1/Circ.1432, par.7.12.2	
			The hydrostatic test date of each cylinder is to be checked.	MSC.1/Circ.1432, par.7.12.3	All
			Dry powder wheeled (mobile) fire extinguishers are to be inverted to ensure that the powder is agitated.	MSC.1/Circ.1432, par.7.12.4	
	5-yearly		Visual examination of at least one wheeled (mobile) extinguisher of each type manufactured in the same year and kept on board.	MSC.1/Circ.1432, par. 9.6	
	10-yearly	Service supplier	All fire extinguishers together with propellant cartridges shall be hydraulically tested in accordance with the recognized standard or the manufacturer's instructions.	MSC.1/Circ.1432, par. 10.5	

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Equipment	Interval	By	Requirement	Regulation	Ship type
Portable foam applicator units	Monthly		Verify that all portable foam applicators are in place, properly arranged, and are in proper condition.	MSC.1/Circ.1432,par. 5.8	
	Annually	Ship	Verify that all portable foam applicators are set to the correct proportioning ratio for the foam concentrate supplied and that the equipment is in proper order.	MSC.1/Circ.1432, par.7.11.1	
			Verify that all portable containers or portable tanks containing foam concentrate remain factory sealed, and that the manufacturer's recommended service life interval has not been exceeded.	MSC.1/Circ.1432, par.7.11.2	
			Portable containers or portable tanks containing foam concentrate, excluding protein based concentrates, less than 10 years old, that remain factory sealed can normally be accepted without the periodical foam control tests required in MSC.1/Circ.1312 being carried out.  Note: The foam control tests are to be conducted by Service supplier or maker.	MSC.1/Circ.1432, par.7.11.3	All
			Protein-based foam concentrate portable containers and portable tanks shall be thoroughly checked and, if more than five years old, the foam concentrate shall be subjected to the periodical foam control tests required in MSC.1/Circ.1312, or renewed.	MSC.1/Circ.1432, par.7.11.4	
			The foam concentrates of any non-sealed portable containers and portable tanks, and portable containers and portable tanks for which production data is not documented, shall be subjected to the periodical foam control tests required in MSC.1/Circ.1312.	MSC.1/Circ.1432, par.7.11.5	
	Monthly	Ship	Verify that all fire hydrants, hoses and nozzles are in place, properly arranged, and are in serviceable condition.	MSC.1/Circ.1432, par. 5.1.1	
			Operate all fire pumps to confirm that they continue to supply adequate pressure.	MSC.1/Circ.1432, par. 5.1.2	
			Verify that emergency fire pump fuel supply is adequate and heating system is in satisfactory condition, if applicable.	MSC.1/Circ.1432, par. 5.1.3	
	Quarterly	Ship	Verify that international shore connection(s) is/are in serviceable condition.	MSC.1/Circ.1432, par. 6.1	
Fire mains, fire pumps, hydrants, hoses and nozzles	Annually	Ship	Visually inspect all accessible components for proper condition.	MSC.1/Circ.1432, par. 7.1.1	
			Flow test all fire pumps for proper pressure and capacity. Test emergency fire pump with isolation valves closed.	MSC.1/Circ.1432, par. 7.1.2	All
			Test all hydrant valves for proper operation.	MSC.1/Circ.1432, par. 7.1.3	
			Pressure test a sample of fire hoses at the maximum fire main pressure, so that all fire hoses are tested within five years.	MSC.1/Circ.1432, par. 7.1.4	
			Verify that all fire pump relief valves, if provided, are properly set.	MSC.1/Circ.1432, par. 7.1.5	
			Examine all filters/strainers to verify that they are free of debris and contamination.	MSC.1/Circ.1432, par. 7.1.6	
			Verify that the nozzle size/ type is correct, maintained and working.	MSC.1/Circ.1432, par. 7.1.7	

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Equipment	Interval	Ву	Requirement	Regulation	Ship type
Galley exhaust ducts	Annually	Ship	Verify that galley exhaust ducts and filters are free of grease build-up.	MSC.1/Circ.1432, par. 7.6.2	All
Fire doors	Weekly	Ship	Verify that all fire door control panel indicators, if provided, are functional by operating the lamp/indicator switch.	MSC.1/Circ.1432, par. 4.3	All
	Quarterly		Test all fire doors located in main vertical zone bulkheads for local operation.	MSC.1/Circ.1432, par. 6.4	Passenger Ships
	Annually		Test all remotely controlled fire doors for proper release.	MSC.1/Circ.1432, par. 7.7	All
Fire dampers	Quarterly	Ship	Test all fire dampers for local operation.	MSC.1/Circ.1432, par. 6.3	All
	Annually		Test all fire dampers for remote operation.	MSC.1/Circ.1432, par. 7.6	All
Ventilation systems	Annually	Ship	Test all ventilation controls interconnected with fire protection systems for proper operation.	MSC.1/Circ.1432, par. 7.6.3	All
International Shore Connection	Quarterly	Ship	Verify that international shore connection is in serviceable condition	MSC.1/Circ.1432, para 6.1	All

- ❖ <u>Ship</u> Means Crew members and/or senior ship's officers qualified and competent in accordance with relevant circulars. <u>It should be stated in the ship's quality system who is considered competent to carry out service/maintenance of certain equipment.</u> In case, all work should be carried out as part of a planned maintenance system with all necessary procedures, work instructions, manuals, tools, spares and calibrated test equipment readily available onboard.
- Service supplier means Service supplier for the type of equipment/service approved by ICS or administration (service company / accredited laboratory / shore-based maintenance provider)
- ❖ <u>Maker</u> means Manufacturer of the equipment or service company approved by the manufacturer