CIRCULAR LETTER

No. 311-05-1975c

dated 22.08.2023

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2023, ND No. 2-020101-174-E

Item(s) of supervision:

ships under construction and technical documentation

Entry-into-force date:

01.09.2023

Cancels / amends / adds Circular Letter No.

dated

Number of pages:

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Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part I "Classification" and Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships"

Director General

Sergey A. Kulikov

Text of CL:

We hereby inform that the Rules for the Classification and Construction of Sea-Going Ships shall be amended as specified in the Appendices to the Circular Letter.

It is necessary to do the following:

- 1. Bring the content of the Circular Letter to the notice of the RS surveyors, interested organizations and persons in the area of the RS Branch Offices' activity.
- 2. Apply the provisions of the Circular Letter during review and approval of the technical documentation on ships (or equipment installed on board the ships, or products/machinery installed on board the ships) contracted for construction or conversion on or after 01.09.2023, in the absence of a contract, during review and approval of the technical documentation on ships requested for review on or after 01.09.2023.
- 3. Apply the provisions of the Circular Letter during review of the technical documentation on ships under construction and in service upon request of the interested parties.

List of the amended and/or introduced paras/chapters/sections:

Part I: para 2.2.56 and Table 2.5

Part XVII: Section 29

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Information on amendments introduced by the Circular Letter (for inclusion in the Revision History to the RS Publication)

Nos.	Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
1	Part I, para 2.2.56	New para has been introduced containing requirements for assignment of distinguishing marks ACFP(P), ACFP(S) and ACFP(S,F)	311-05-1975c of 22.08.2023	01.09.2023
2	Part I, Table 2.5	New item 2.32 has been introduced containing requirements for assignment of distinguishing marks ACFP(P), ACFP(S) and ACFP(S,F)	311-05-1975c of 22.08.2023	01.09.2023
3	Part XVII, Section 29	New Section has been introduced containing requirements for container ships and other ships of 500 gross tonnage and over designed for carriage of containers and equipped with additional fire-fighting means	311-05-1975c of 22.08.2023	01.09.2023

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2023,

ND No. 2-020101-174-E

PART I. CLASSIFICATION

2 CLASS OF A SHIP

1 **New para 2.2.56** is introduced reading as follows:

"2.2.56 Distinguishing marks of a ship designed for carriage of containers and equipped with additional fire-fighting means.

For ships with descriptive notation **Container ship** or distinguishing mark **CONT** (deck), or **CONT** (cargo hold(s) No.), or **CONT** (deck) (cargo hold(s) No.) in the class notation, one of the following distinguishing marks may be added to the character of classification:

ACFP(P) (Additional Cargo Fire Protection (Portable)) — the ship is fitted with portable equipment and additional fire-fighting outfit intended for firefighting in way of cargo holds and container stowage decks;

ACFP(S) (Additional Cargo Fire Protection (Stationary)) — the ship is fitted with additional equipment, fire-fighting outfit and systems which constitute an extensive set of fire-fighting means in way of cargo holds and container stowage decks;

ACFP(S,F) (where **F** means flooding) — the ship, alongside being fitted with additional equipment, fire-fighting outfit and systems which constitute an extensive set of the fire-fighting means in way of cargo holds and container stowage decks, is designed considering possible flooding of a cargo hold in case of fire.".

2 **Table 2.5**. **New item 2.32** is introduced reading as follows:

"2.32 ACFP() — distinguishing marks for a ship designed for carriage of containers and equipped with additional fire-fighting means

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
ACFP(P) ACFP(S) ACFP(S,F)	The distinguishing mark is assigned to ships having descriptive notation Container ship or distinguishing mark CONT (deck), or CONT (cargo hold(s) No.), or CONT (deck) (cargo hold(s) No.) in the class notation. One of the following distinguishing marks may be added to the character of classification of such ships: ACFP(P) (Additional Cargo Fire Protection (Portable)) — the ship is fitted with portable equipment and additional fire-fighting outfit intended for firefighting in	Rules for the Classification and Construction of Sea-Going Ships Part I "Classification", 2.2.56 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", Section 29

Distinguishing mark	Brief description	References to additional RS requirements for the distinguishing mark
	way of cargo holds and container stowage decks;	
	ACFP(S) (Additional	
	Cargo Fire Protection	
	(Stationary)) — the ship	
	is fitted with additional	
	equipment, fire-fighting	
	outfit and systems which	
	constitute an extensive	
	set of fire-fighting means	
	in way of cargo holds and	
	container stowage decks;	
	ACFP(S,F) (where F	
	means flooding) — the	
	ship, alongside being	
	fitted with additional	
	equipment, fire-fighting	
	outfit and systems which	
	constitute an extensive	
	set of the fire-fighting	
	means in way of cargo holds and container	
	stowage decks, is designed considering	
	possible flooding of a	
	cargo hold in case of fire	

PART XVII. DISTINGUISHING MARKS AND DESCRIPTIVE NOTATIONS IN THE CLASS NOTATION SPECIFYING STRUCTURAL AND OPERATIONAL PARTICULARS OF SHIPS

3 **New Section 29** is introduced reading as follows:

"29 REQUIREMENTS FOR CONTAINER SHIPS AND OTHER SHIPS OF 500 GROSS TONNAGE AND OVER DESIGNED FOR CARRIAGE OF CONTAINERS AND FITTED WITH ADDITIONAL FIRE-FIGHTING MEANS

29.1 GENERAL

29.1.1 Application.

- **29.1.1.1** The requirements of this Section apply to ships whose special equipment ensures effective fire protection in way of cargo holds and container stowage decks, and supplement the requirements stipulated in Part VI "Fire Protection", Part VIII "Systems and Piping" and in this Part.
- **29.1.1.2** For ships with descriptive notation **Container ship** or distinguishing mark **CONT (deck)**, or **CONT (cargo hold(s) No.)**, or **CONT (deck) (cargo hold(s) No.)** in the class notation, one of the following distinguishing marks may be added to the character of classification:
- **ACFP(P)** (Additional Cargo Fire Protection (Portable)) the ship is fitted with portable equipment and additional fire-fighting outfit intended for fire fighting in way of cargo holds and container stowage decks;
- **ACFP(S)** (Additional Cargo Fire Protection (Stationary)) the ship is fitted with additional equipment, fire-fighting outfit and systems which constitute an extensive set of fire-fighting means in way of cargo holds and container stowage decks;
- **ACFP(S,F)** (where **F** means flooding) the ship, alongside being fitted with additional equipment, fire-fighting outfit and systems which constitute an extensive set of fire-fighting means in way of cargo holds and container stowage decks, is designed considering possible flooding of a cargo hold in case of fire.

29.1.2 Technical documentation.

- **29.1.2.1** In order to assign the distinguishing mark **ACFP(P)** to a ship, the following technical documentation shall be submitted to the Register as part of the technical design or plan approval documentation (A stamped as "Approved", AG stamped as "Agreed"):
 - .1 arrangement diagrams of fire-fighting equipment (considering 29.2.1) (A);
 - .2 list of fire-fighting equipment (considering 29.2.1) (AG).
- **29.1.2.2** In order to assign the distinguishing mark **ACFP(S)** or **ACFP(S,F)** to a ship, the following technical documentation shall be submitted to the Register as part of the technical design or plan approval documentation:
 - .1 arrangement diagrams of fire-fighting equipment (considering 29.2.1) (A);
 - .2 list of fire-fighting equipment (considering 29.2.1) (AG);
- .3 diagrams of ventilation systems showing the location of fire dampers, closures of ventilation ducts and ventilation openings in cargo holds (A);
 - .4 diagram of fire alarm system (A);
 - .5 calculations of fire extinguishing and flooding systems (AG);
 - **.6** diagrams of fire extinguishing and flooding systems (A);
 - .7 cargo hold flooding control booklet (AG);
- **.8** stability and damage stability calculations showing that the ship complies with the requirements set out in Sections 2 and 3 of Part V "Subdivision" taking into account possible flooding of cargo holds (AG);
- .9 calculations of longitudinal and local strength of ship hull showing that the ship complies with the requirements in 3.1 of Part II "Hull" and Part XVIII "Additional Requirements for Structures of Container Ships and Ships, Dedicated Primarily to Carry their Load in Containers", taking into account possible flooding of cargo holds (AG);
- **.10** functional diagram of alarm and monitoring system activated when water is detected in the hold and upon reaching the design water level at flooding (A).

29.2 TECHNICAL REQUIREMENTS FOR ASSIGNMENT OF DISTINGUISHING MARKS ACFP(P), ACFP(S), ACFP(S,F)

29.2.1 General requirements.

29.2.1.1 Ships having the distinguishing mark **ACFP(P)**, **ACFP(S)** or **ACFP(S,F)** in the class notation shall be fitted with additional systems and items of fire-fighting outfit in accordance with Tables 29.2.1.1-1 and 29.2.1.1-2.

Special fire extinguishing systems shall be controlled and monitored from the control station. The control station may be a part of the navigation bridge or fire control station.

Table 29.2.1.1-1

Additional equipment	Distinguishing mark in the class notation		
Additional equipment	ACFP(P)	ACFP(S)	ACFP(S,F)
Additional requirements for water fire	_	+1	+1
main system			
Flooding system for cargo holds	_	_	+ ²
Water-spraying system	_	+3	+3
Ventilation system	_	+4	+4
Fire detection and alarm system	_	+ ⁵	+ ⁵

¹ Refer to 29.2.2.

Table 29.2.1.1-2

Additional aguipment	Distinguishing mark in the class notation		
Additional equipment	ACFP(P)	ACFP(S)/ACFP(S,F)	
Water mist lance	+1	+ ¹	
Fire-fighting outfit	+ ²	+ ²	
Thermal imaging camera for fire patrols	+ ³	+ ³	
Fixed water monitors	-	+4	
Air compressor	+ ⁵	+ ⁵	

² Refer to 29.2.4.

³ Refer to 29.2.5.

⁴ Refer to 29.2.6.

⁵ Refer to 29.2.7.

Additional aguipment	Distinguishing mark in the class notation	
Additional equipment	ACFP(P)	ACFP(S)/ACFP(S,F)
Refer to 29.2.8.1. Two pcs. for ships designed to carry containers on or above the weather deck.		
² Refer to 29.2.8.2.	•	
³ Refer to 29.2.8.3.		
⁴ Refer to 29.2.3.		
⁵ Refer to 29 2 8 4		

29.2.2 Water fire main system.

- **29.2.2.1** Water fire main system shall meet the requirements in 3.2 of Part VI "Fire Protection" relating to cargo ships, subject to the requirements below.
- **29.2.2.2** The water supply to the fire main serving the cargo holds and container stowage decks shall be a ring main supplied by the main fire pumps laid to the port and starboard side with isolation valves installed at intervals not more than 40 m.
- **29.2.2.3** Fixed fire pumps shall ensure simultaneous delivery of at least four water jets required in 3.2.6.2 of Part VI "Fire Protection". The number and location of fire hydrants shall ensure the delivery of at least two water jets from different hydrants, one of which shall be delivered through a hose of standard length as stipulated under 5.1.4.1 of Part VI "Fire Protection", to any part of cargo holds or container stowage deck areas. Distances shall be determined without taking containers into account.

The capacity of the fire pumps shall be sufficient for simultaneous operation of water fire main system and operation of systems and equipment specified in Tables 29.2.1.1-1 and 29.2.1.1-2 in the following combinations, whichever is larger:

- .1 operation of one fixed water monitor in accordance with 29.2.3 and operation of water-spraying system intended for protection of external surfaces of superstructures and deckhouses with capacity specified in 29.2.5.2; or
- .2 operation of mobile water monitors in accordance with 6.7.3 of Part VI "Fire Protection" and operation of the water mist lance required by Table 5.1.2 of Part VI "Fire Protection".

29.2.3 Fixed water monitors.

- **29.2.3.1** Fixed water monitors shall be installed for protection of the weather deck areas where containers are located.
- **29.2.3.2** The number and location of fixed monitors on board shall comply with the following requirements:
- .1 the number and location of monitors shall be such that any point of the top tier of containers can be reached by the water jet from at least two monitors, taking into account the maximum height of the container tier;
- .2 the monitors shall be located in such a way that the water jet is not obstructed by any ship's structures;
- **.3** if the monitor is cut-off in the event of fire, the remote control shall be provided in addition to the manual control of the monitor.
- **29.2.3.3** If the monitors are fed with water by pumps other than the main fire pumps, their capacity shall be sufficient for operation of one monitor at maximum supply. A connection shall be provided between the pipeline supplying monitors and the water fire main and a non-return shut-off valve shall be fitted in this connection.

If fixed monitors are fed with water by the main fire pumps, the total pump supply and pipeline diameter shall be sufficient to provide the simultaneous operation of the required number of fire hoses and fixed monitors in accordance with 29.2.2.3.

- **29.2.3.4** Remote controls for monitors and controls for remote start of pumps shall be available at the control station/fire control station.
 - **29.2.3.5** Water monitors shall be of a type approved by the Register.

29.2.4 Flooding system for cargo holds.

- **29.2.4.1** Flooding system for cargo holds is intended for flooding of one of the cargo holds in emergency cases. Simultaneous flooding of several cargo holds is not considered.
- **29.2.4.2** If the flooding is provided by pumps other than main fire pumps, a connection shall be provided between the flooding system piping and water fire main, and a non-return shut-off valve shall be fitted in this connection.

The water fire main system, ballast system or a piping system through which water will flow to the hold by gravity or using an alternative method may be used to flood the hold.

Where the water fire main system is used, the system pumps shall be designed for delivery of at least two water jets required in 3.2.6.2 of Part VI "Fire Protection" and parallel water supply for hold flooding according to 29.2.4.3.

- **29.2.4.3** In any case, the filling time of one hold shall not exceed 24 hours. In the case of carriage of containers with dangerous goods of Class 1, the time for full or partial hold flooding (for example, at the lowest tier of containers installed in the hold) shall be agreed with the Register.
- **29.2.4.4** Valves and pumps controls and monitoring means shall be located at the control station/fire control station. Shut-off isolation valves shall be provided that ensure operation of the system in case of damage of water main at any point and on each pipeline leading directly to the hold. The valves shall be remotely controlled from the control station/fire control station, installed in a safe location outside of the cargo hold and, in addition, indication showing their position o(open/closed) shall be provided.

The shut-off valves shall be designed to close when the actuator fails (power loss).

Valves or other means shall be provided in the flooding system to stop the flow of water to any other cargo holds in the event of damage of a common filling pipe for these holds.

Arrangements shall be provided to prevent water ingress from a flooded hold to any other space on the ship.

- **29.2.4.5** Cargo holds shall be equipped with an alarm and monitoring system complying with the requirements in 7.10 of Part XI "Electrical Equipment" and in 2.4 of Part XV "Automation" and available at the control station/fire control station in order to prevent undesigned hold flooding. The system shall provide visual and distinct audible alarm signal when water is detected in the hold and upon reaching the design water level at flooding.
- **29.2.4.6** In case dangerous goods (of Class 4.3) are intended to be carried in containers, an instruction plate shall be provided close to the controls of the system, informing that these cargoes may react with water.

Enclosed and open cargo holds intended for the carriage of containers with flammable liquids having a flash point below 23 °C or toxic liquids of subclass 6.1 or 8 specified in 7.2.4 and Table 7.2.4-3 of Part VI "Fire Protection" shall be equipped with the fixed drainage system complying with the requirements in 7.14.1 of Part VIII "Systems and Piping".

29.2.4.7 Arrangements shall be made to allow drainage of the flooding water from the cargo hold to a suitable holding tank.

Ballast tanks may be used for this purpose, provided the water from these tanks is pumped to another ship or to land-based reception facilities in order to prevent pollution.

An easily removable grating or screen shall be installed over each drain opening of the drainage system in cargo holds to prevent blocking of the drain openings according to 7.6.10 of Part VIII "Systems and Piping".

29.2.4.8 Cargo hold flooding control booklet.

A cargo hold flooding control booklet shall be developed and be available on board the ship. This booklet shall include:

- .1 description and drawings of cargo hold flooding and drainage means;
- .2 detailed instructions covering the operations to flood and empty the cargo holds;
- .3 calculations of stability at flooding of each hold to the level of cargo height showing that the ship complies with the requirements of Sections 2 and 3 of Part V "Subdivision".
 - 29.2.5 Water-spraying system.
 - **29.2.5.1** A water-spraying system shall be installed on board for protection of:
- .1 exposed boundaries of superstructures and deckhouses, enclosing accommodation spaces and facing container stowage deck or facing cargo holds without hatch covers designed for carriage of containers. External boundaries of unmanned forecastle spaces not containing high fire-risk materials, outfit or equipment, for example, paint store, do not require water-spray protection;
 - .2 foundations of the manually-controlled monitors required under 29.2.3;
- .3 exposed lifeboats, liferafts and muster stations facing container stowage areas or facing cargo holds without hatch covers intended for carriage of containers regardless of distance to them, except for the exposed muster stations and exposed launching routes from the life rafts storage location to the ship side where rafts are located and ready for launching at both sides.

29.2.5.2 The system shall be capable of covering all areas mentioned in 29.2.5.1.1 — 29.2.5.1.3 with a uniformly distributed water application rate of at least 10 $l/m^2/min$ for the horizontal surfaces and 5 $l/m^2/min$ for vertical surfaces.

The number and location of nozzles shall be such as to ensure an effective distribution of water with the specified intensity of supply. On vertical surfaces, spacing of nozzles protecting lower areas may take account of anticipated rundown from higher areas.

For structures having no clearly defined horizontal or vertical surfaces, the capacity of the water-spraying system shall not be less than the projected horizontal surface multiplied by 10 l/m²/min.

- **29.2.5.3** Stop valves shall be fitted in the main supply line(s) in the water-spraying system, at intervals not exceeding 40 m, for the purpose of isolating damaged sections. Alternatively, the system may be divided into two or more sections that may be operated independently, provided the necessary controls are located in accordance with 29.2.5.5.
- **29.2.5.4** Where the water-spraying system is fed with water by dedicated pumps and piping system, the pumps shall be capable of supplying water at the required pressure simultaneously to all sections of the system to protect the exposed surfaces of superstructures, deckhouses facing the container stowage deck or facing holds without hatch covers intended for carriage of containers both in fore and aft parts of the ship. A connecting pipeline to the water fire main shall be provided and a non-return shut-off valve shall be installed on the connection.

Where the water-spraying system is fed by water from the main fire pumps, the total delivery of pumps and pipe diameter shall be sufficient to provide the simultaneous operation of the required number of fire hoses and the water-spraying system in accordance with 29.2.2.3.

- **29.2.5.5** The valve controls and pump controls shall be available at the control station/fire control station.
 - 29.2.6 Ventilation system for cargo holds.
- **29.2.6.1** The ventilation system shall be controlled from the central control station. Ventilation of cargo holds for carriage of containers shall be fitted with controls so grouped that all fans serving the cargo hold may be stopped at once.
- **29.2.6.2** Remote closing of all ventilation openings except for those located in the hatch covers shall be possible.
- **29.2.6.3** The ventilation openings located in the hatch covers shall be fitted with quick-closing devices (for example, hinged cover with ear-nuts). Containers located on the hatch covers of cargo holds shall not impede closure of ventilation openings.
 - 29.2.7 Fire detection and alarm system.
- **29.2.7.1** Cargo spaces for carriage of containers shall be protected by the fixed fire detection and fire alarm system complying with the requirements in 4.2.1 of Part VI "Fire Protection", or the sample extraction smoke detection system complying with the requirements in 4.2.1.6 of Part VI "Fire Protection", or the multi-criteria fire detection and fire alarm system complying with the requirements in 4.2.4 of Part VI "Fire Protection".
 - 29.2.8 Fire-fighting equipment and outfit.
- **29.2.8.1** The water mist lance shall comply with the requirements set out in 5.1.24 of Part VI "Fire Protection".

If one water mist lance required under item 19 of Table 5.1.2 in Part VI "Fire Protection" is available on board the ship, only one lance is required additionally.

29.2.8.2 At least 6 fireman's outfits shall be provided onboard, including as required under item 10 of Table 5.1.2 in Part VI "Fire Protection".

Fireman's outfits shall meet the requirements in 5.1.15 of Part VI "Fire Protection".

- **29.2.8.3** Additionally, at least two portable thermal imaging cameras for fire patrols shall be provided. In the case of carriage of dangerous goods, the cameras shall be explosion-proof with explosion group 1Exd or 1Exp. The explosion group and temperature class shall be consistent with the category of the cargo carried. The cameras shall be kept in easily accessible place on the navigation bridge.
- **29.2.8.4** The ship shall be fitted with suitably located means for full recharging of breathing air cylinders with clean air, complying with the requirements in 5.1.15.2 of Part VI "Fire Protection"."