

**PART II RULES FOR THE CONSTRUCTION
AND CLASSIFICATION OF SHIPS
IDENTIFIED BY THEIR MISSION**

TITLE 111 FIRE-FIGHTING (Fi-Fi)

SECTION 1 NAVAL ARCHITECTURE

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CHAPTER A APPROACH

CHAPTER CONTENTS

- A1. APPLICATION
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A1. APPLICATION

100. Application

101. The present Title 111 applies to equipment installed on board ships with the additional Class notation "Fire-fighting" as detailed below.

102. Fi-Fi Class 1: ships fitted to fight the early stages of fires, operating at short range and supporting rescue operations, provided with a protective barrier enabling the ship to approach to the fire location.

103. Fi-Fi Class 2: ships fitted with independent equipment capable of sustaining continuous external fire-fighting of large fires from long distances.

104. Fi-Fi Class 3: ships fitted with independent equipment capable of sustaining continuous external fire-fighting of large fires from long distances. However, vessels of notation Fi- Fi Class 3 have pumps of higher capacity and more equipment than the ships Fi-Fi Class 2.

105. Fi-Fi Cap: Vessels fitted with independent equipment for fighting of external fires, but whose equipment is not fully in compliance with the requirements for flow of the notations in Fi-Fi CLASS 1, 2 and 3.

- a. Such ships are to follow as far as possible the requirements for vessels Fi-Fi Class 2.
- b. Where the requirements cannot be fully attended to, exemptions may be granted by RBNA on a case-by-case basis.

CHAPTER B DOCUMENTS, REGULATIONS AND STANDARDS

CHAPTER CONTENTS

- B1. DOCUMENTS
 - B2. REGULATIONS
 - B3. TECHNICAL STANDARDS
-

B1. DOCUMENTS

100. Additional documents for ships with class notation Fi-Fi

101. The following additional documents are to be submitted for approval:

- a. General arrangement showing the location of all fire-fighting equipment ;
- b. Details of all fire- fighting equipment such as pumps, monitors, including their capacity, range and trajectory of the jet;
- c. Schematic diagram of the system of fire fighting by water;
- d. Plan of bedplate of monitors;
- e. Diagram of the remote and local control system of the water monitors;
- f. Diagram of the fixed system of foam for firefighting;
- g. Diagram of the remote and local control system of the foam monitors;
- h. Specification and plan of location of firemen's equipments;
- i. Description of the means of maintaining the position of the ship during firefighting operations;
- j. Fire Fighting Operation Manual.

B2. REGULATIONS

See Part II, Title 11, Section 1, Chapter B, Subchapter B2

B3. TECHNICAL STANDARDS

100. Additional Standards

101. In addition to the regulations in Part II, Title 11, Section 1, reference is made to the following standards:

International Organization for Standardization (ISO standard 3941)

National Fire Protection Association (NFPA 10)

CHAPTER H CONDITIONS OF LOADING, BUOYANCY AND STABILITY

CHAPTER CONTENTS

H1. FREEBOARD
– See Part II, Title 11, Section 1

H2. SHIP LIGHTWEIGHT
– See Part II, Title 11, Section 1

H3. LOADING CONDITIONS
– See Part II, Title 11, Section 1

H4. BUOANCY AND SUBDIVISION
– See Part II, Title 11, Section 1

H5. INTACT STABILILITY

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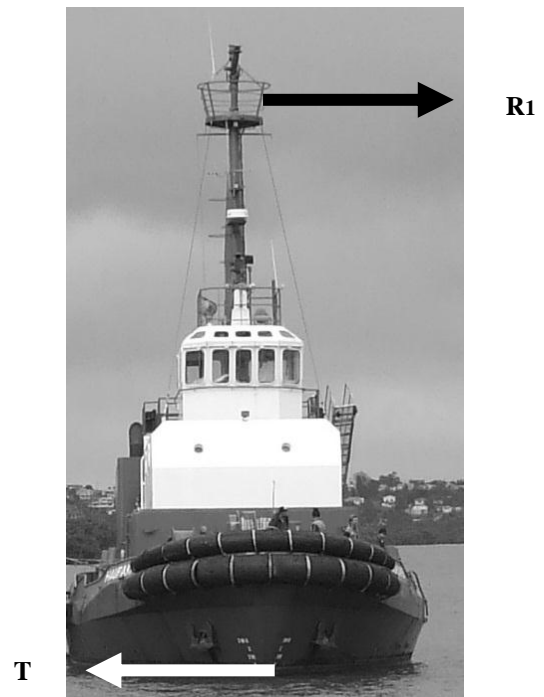
100. Additional criteria of stability

101. The stability criteria and loading conditions of Chapter H of Part II, Title 11, Section 1, are to be checked to determine the ability of the ship to support the effect of the reaction to the water jet coming from the fire monitors on board.

102. A fire-fighting ship will possess sufficient stability when the inclining moment of the angle of static equilibrium, θ_0 , corresponding to the first intersection between the curve of the overturning moment and of the righting moment is less than 5° with monitors operating and the maneuvering thruster operating in the most severe condition.

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FIGURE F.H5.102.1



where:

R1, R2 – reaction forces introduced by the water jets of the monitors.

T – reaction force introduced by the water resistance resulting from the lateral displacement of the vessel as a result of the water jets, applied at the transverse centre of buoyancy.

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