

**PART I CLASS MANAGEMENT**

**TITLE 01 CLASS - ASSIGNMENT**

**SECTION 2 CLASS - MANAGEMENT**

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- B DESIGN ANALYSIS
- C INSPECTION OF THE UNIT
- D INSPECTION OF COMPONENTS
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**CHAPTER A  
CLASSIFICATION STAGES**

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- A2. STAGES OF CLASSIFICATION FOR UNITS NOT YET UNDER CONSTRUCTION
- A3. STAGES FOR UNITS ALREADY UNDER CONSTRUCTION
- A4. STAGES FOR EXISTING UNITS
- A5. STAGES FOR MAJOR REPAIRS OR MODIFICATIONS

**A1. BEGINNING OF THE CYCLE OF CLASS**

**100. Admission to Class**

101. The assignment of a Class encompasses the services of checking the conditions under which the unit is being built or the condition of existing units. It is carried out during the construction or by survey of existing units.

**200. Cycle of Class**

201. The cycle of class (period of classification) is counted from the specific surveys of the final construction stages, or from the specific Admission to Class surveys of existing units, when the Class Certificate is issued for the first cycle.

**A2. STAGES OF CLASSIFICATION FOR NEW UNITS NOT YET UNDER CONSTRUCTION**

**100. Sequence to be followed:**

101. The following stages are to be followed:

- a. Classification Contract;
- b. Design analysis of the plans and documents;
- c. Surveys during construction,
  - c.1. Examination of the parts of the unit covered by the Rules and by applicable statutory regulations for hull and machinery construction, to obtain appropriate evidence that they have been built in compliance with the rules and regulations, taking account of the relevant approved drawings.
  - c.2. Appraisal of the manufacturing, construction, control and qualification procedures, including welding consumables, weld procedures, weld

connections and assemblies, with indication of relevant approval tests;

c.3. Witnessing inspections and tests as required in the Rules including materials, welding and assembling, specifying the items to be examined and/or tested and how (e.g. by hydrostatic, hose or leak testing, non-destructive examination, verification of geometry) and by whom.

d. Inspection of materials and components at work comprised of:

d.1. Appraisal of material and equipment used for unit construction and their inspection at works are given in the RBNA Rules for the Construction and Classification of Steel Units, in Part III, Titles 61 to 63. Acceptance of these items is verified through the survey process carried out at the manufacturer's works and the issuing of the appropriate certificates;

e. Supervision of the quay and sea trials;

f. Confirmation that any outstanding class items, i.e., non-conformities in relation to the RULES requirements, have been attended to; and

g. Issue of the CLASS CERTIFICATES

**A3. STAGES OF CLASSIFICATION FOR NEW UNITS ALREADY UNDER CONSTRUCTION**

**100. Sequence to be followed:**

101. The following stages are to be followed:

- a. Classification Contract;
- b. Design analysis of the plans and documents;
- c. Surveys during construction, from the building stage as found;
- d. Inspection of materials and components already installed on board,
- e. Inspection of materials and components at work;
- f. Supervision of the quay and sea trials;
- g. Confirmation that any outstanding class items, i.e., non-conformities in relation to the RULES requirements, have been attended to; and
- h. Issue of the CLASS CERTIFICATES.

**A4. STAGES FOR EXISTING UNITS**

**100. Sequence to be followed:**

101. The following stages are to be followed:
- a. Classification Contract;
  - b. Design analysis of the plans and documents;
  - c. Analysis of the existing certificates of unit's components;
  - d. Surveys on board the existing unit;
  - e. Inspection and tests of the materials and components installed on board;
  - f. Supervision of the quay and sea trials;
  - g. Confirmation that any outstanding class items, i.e., non-conformities in relation to the RULES requirements, have been attended to; and
  - h. Issue of the CLASS CERTIFICATES.

**A5. STAGES FOR MAJOR REPAIRS OR MODIFICATIONS**

**100. Sequence to be followed:**

101. The following stages are to be followed:
- a. Classification Contract for unit not classified yet;
  - b. Design analysis of the plans and documents;
  - c. Surveys on board the existing construction;
  - d. Inspection and tests of the materials and components installed on board;
  - e. Supervision of the quay and sea trials;
  - f. Confirmation that any outstanding class items, i.e., non-conformities in relation to the RULES requirements, have been attended to; and
  - g. Issue of the CLASS CERTIFICATES.

**CHAPTER B  
DESIGN ANALYSIS**

CHAPTER CONTENTS

- B1. ANALYSIS AND CALCULATIONS
  - B2. SPECIAL DESIGNS
  - B3. CONFORMITY WITH REGULATIONS OF NATIONAL AND INTERNATIONAL ADMINISTRATIONS
- 

**B1. ANALYSIS AND CALCULATIONS**

**100. Compliance with the RULES**

101. The RULES establish requirements - i.e., practical parameters for concepts, dimensioning, performance levels, formulas, prescriptions and procedures – through which it is verified the compliance of the design with the Rules to determine whether the unit is eligible to the CLASS to be assigned to it.

**200. Direct Calculation**

201. Whenever deemed appropriate by the designer, gathering the data regarding loads, stress distribution and reaction settings as well as environmental conditions, the calculations carried out by direct method are to be submitted for review and approval.

**300. Presentation of the documents for approval**

301. The documents required for class are presented for approval in either of two ways:

- a. **three hard copies of each:** two hard copies are retained by the Society and one hard copy is sent back to the Owners, duly stamped, as a register of the approval;
- b. **in virtual files:** the approval is also registered in the virtual files.

302. Where the Society is required to carry out Statutory Certification, the documents and plans required by the Maritime Authority are to be always sent in three hard copies and one digital copy:

- a. two hard copies are retained by the Society and one hard copy is sent back to the Owners, duly stamped, as a register of the approval;
- b. one digital copy is sent to the Maritime Authority.

303. The documents and plans required for the assignment of Class are listed below.

304. The documents required for Statutory Certification are listed in the NORMAM 01 and below, where reference is made to units subject to SOLAS, MARPOL, ILCC, TONNAGE Codes and IMO MODU Code.

## **B2. SPECIAL DESIGNS**

### **100. Special analysis**

101. The unit's designs that include new concepts and new solutions will be submitted to special analysis of RBNA, in agreement with assumptions made by designers, Owners, builders, etc., including the use of direct calculation.

102. The designs not specifically indicated in these Rules are to be subject to procedures equivalent to those of item B2.101 above.

## **B3. CONFORMITY WITH NORMAMs AND INTERNATIONAL REGULATIONS**

### **100. National and International regulations**

101. Where Statutory Certificates for the units under the Brazilian Flag are issued, the design and construction of units classified are checked for compliance with the requirements of NORMAMs (Standards of Brazilian Maritime Authority), which remits to the IMO MODU Code.

102. Where Statutory Certificates are issued under Foreign Flags, the design and construction of units classified are checked for compliance with the requirements of the National Maritime Authority and according to IMO MODU Code.

### **200. Compliance with National and International Regulations**

#### **201. MODU Code**

Units built from 01/01/2012 are to comply with the requirements of the MODU 2009 Code;

Units built from 01/05/1991 are to comply with the requirements of the MODU 89 Code;

Units built from 31/12/1981 are to comply with the requirements of the MODU 79 Code.

Units built before 31/12/1981, however, shall submit any differences in relation to the MODU 79 Code to DPC for assessment of the need to establish additional or alternative requirements.

#### **202. IMO SOLAS Convention**

Mobile units are to comply with the requirements of the SOLAS Convention as recommended in the MODU Code.

Fixed units are not require to comply with the SOLAS Convention.

#### **203. IMO ISM Code**

Self-propelled mobile units are to comply with the requirements of the ISM Code.

Mobile units not self-propelled and fixed units are not subject to the ISM Code.

#### **204. IMO MARPOL Convention**

Fixed and mobile units are to comply with the requirements of the ISM Code.

#### **205. IMO International Load Line Convention**

Mobile units are to comply with the requirements of the IMO International Load Line Convention LL 66 as required by the MODU Code.

Fixed units are not subject to the ILL Convention.

#### **206. IMO International Tonnage Convention**

Mobile units are to comply with the requirements of the IMO Tonnage 69 convention.

Fixed units are not subject to the requirements of the IMO Tonnage 69 Convention.

#### **207. IMO IMDG Code**

The stowage and handling of dangerous goods are to comply with the requirements of the IMDG Code.

#### **208. Recommendations for units fitted with Dynamic Position Systems – IMO MSC/Circ.645**

The units fitted with dynamics positioning systems are to comply with the requirements of IMO MSC/Circ.645)

#### **209. IMO Diving Code**

The diving systems on board fixed or mobile units are to comply with:

IMO Resolution A.831(19)

DPC NORMAM 15

#### **210. COLREG**

The mobile units are to comply with the requirements of the COLREG when moving during a voyage. When stationary, such units are to comply with the Section III of the COLREG (signals)

211. **DPC NORMAM 01 Chapter 9** “Embarcações e plataformas empregadas na prospecção e extração de petróleo e minerais”

### 300. Certification of Mobile Offshore Drilling Units

301. All Mobile Offshore Drilling Units are to be certified in accordance with the International Conventions and their amendments, as follows:

- a. Mobile Offshore Drilling Unit Safety Certificate
- b. In accordance with the MODU CODE 79/89/2009, as applicable;
- c. Safety Radio Certificate as per SOLAS 74 for mobile self-propelled units when under Voyage;
- d. ISM Certificate for self propelled units, in accordance with the ISM Code;
- e. DOC – Document of Compliance, for self-propelled units, in accordance with the ISM Code;
- f. IOPP Certificate in accordance with the MARPOL 73/88 Annex I as amended, for mobile units;
- g. International Sewage Pollution Certificate as per MARPOL 73/88 Convention Annex IV, as amended;
- h. International Load Line Certificate, as per ILL 66 Convention, for mobile units;
- i. International Tonnage Certificate, as per Tonnage 69 Convention as amended, for mobile units.

### 400. IACS requirements

401. The present Rules comprehend the IACS Unified Requirements (UR D), and Recommendations (Rec) where applicable.

402. In units where the RBNA has received delegation to carry out statutory certification, the IACS Unified Interpretations (UI) are of mandatory use as applicable.

403. Where relevant, the present Rules comprehend the IACS Procedural Requirements (PR).

## B3. TECHNICAL STANDARDS

### 100. Industrial Standards

101. The present Rules follow industrial standards where applicable to materials and equipment destined to be installed on board units classified by RBNA or other societies. Where this is the case, the applicable standards are indicated in the relevant Chapters of the Rules.

## CHAPTER C INSPECTIONS AND CERTIFICATION

### CONTEÚDO DO CAPÍTULO

#### C1. PLANS AND INFORMATION

#### C1. PLANS AND INFORMATION

##### 100. Plans and information for Newbuilding.

101. Each applicant for approval of plans must submit three hard copies or virtual files of each of the following described plans, specifications, and structural calculations concerning the construction, arrangement, required equipment, and safety features of the unit:

##### 102. Section 1 - Naval Architecture

- General arrangement
- Arrangement of hazardous areas (classified areas)
- Inboard and outboard profile
- Cross curves of stability or equivalent data
- Wind heeling moment curves or equivalent data
- Summary of distributions of fixed and variable weights
- Curves of form or equivalent data
- Cross curves of stability or equivalent data
- Wind heeling moment curves or equivalent data
- Capacity plan
- In addition to the above, an arrangement plan of watertight compartmentation should be submitted as early in the design stage as possible, for review of damage stability.
- Stability calculations, both intact and damaged, over the appropriate range of drafts, including the transit conditions.
- Evaluation of the unit's ability to resist overturning while bearing on the sea bed.

NOTE: Submitted calculations are to be suitably referenced. Results from relevant model tests or dynamic response calculations may be submitted as alternatives or as substantiation for the required calculations.

##### 102. Section 2 - Structure

Hull and structural plans and design data Plans showing the scantlings, arrangements and details of the principal parts of the structure of each unit to be built under the Society's survey are to be submitted for approval before construction commences.

These drawings are to clearly indicate the scantlings, types and grades of materials, joint details and welding, or other methods of connection.



These plans are to include the following, where applicable:

- Plan indicating design loading for all decks
- Transverse sections showing scantlings
- Longitudinal sections showing scantlings
- Decks, including helicopter deck
- Framing
- Shell plating
- Watertight bulkheads and flats
- Structural bulkheads and flats
- Tank boundaries with location of overflows
- Pillars and girders
- Diagonals and struts
- Legs
- Structure in way of jacking or other elevating arrangements
- Stability columns and intermediate columns
- Tank sounding tables
- Methods and locations for non-destructive testing
- Welding details and procedures
- Foundations for main machinery and boilers.
- For self-elevating units, column stabilized units, and units with special hull configuration, structural calculations and plans showing special structural features.
- Each approved weld procedure for the fabrication of each structure using different grades or strengths of material and each approved weld test procedure.
- Significant operational loads from drilling derrick and associated equipment, such as riser tensioners, on supporting structures, and other similar type significant loadings
- Calculations substantiating adequacy of structure to transmit forces between legs and hull through the jacking or other elevating system.
- Corrosion protection arrangements

NOTE: Submitted calculations are to be suitably referenced. Results from relevant model tests or dynamic response calculations may be submitted as alternatives or as substantiation for the required calculations.

### 103. Section 3 - Equipment

#### a. Equipment and accessories

- Hulls, pontoons, footings, pads or mats
- Arrangement and details of watertight doors and hatches
- Anchor handling arrangements
- Lines or offsets
- Corrosion control arrangements
- Doors, hatches, ventilators, etc., and their means of closure, are to be indicated. Piping and ventilation systems should be shown in sufficient detail to evaluate their effects on the watertight integrity of the unit after incurring damage.
- Arrangement of ports, doors, and airports in shell plating.
- Hatch coamings and covers in weather and watertight decks.

- Details of hinged subdivision watertight doors and operating gear.
- Scuppers and drains penetrating shell plating.

#### b. Lifting Appliances

- Arrangement of cranes. (Section 3, RBNA Guide for Lifting Appliances)
- Stress and arrangement diagrams, bill of materials, and supporting calculations for all structural components listed in the RBNA Guide for Lifting Appliances
- Drawings of foundations and substructures with supporting calculations for support and stability of each crane under its rated load.
- Plans showing the installation of the safety features Drawings of the means provided to stop motion and set brakes during a power failure.
- One line diagrams of the electrical power circuits of the electric power crane overload protection
- Diagrams of the hydraulic or pneumatic power and control systems as applicable.

#### c. Fire Control

- Fire protection arrangements and fire extinguishing systems are to be in accordance with the Rules as specified herein. Fire control plans are to be submitted for review on which the following, as a minimum, should be clearly shown:
  - Locations of fire control stations;
  - Various fire sections enclosed by various classes of fire divisions;
  - Arrangement of fire detectors and manual fire alarm stations;
  - Arrangement of combustible gas detectors;
  - Arrangement of hydrogen sulphide gas detectors;
  - Locations of respiratory protection equipment for hydrogen sulphide;
  - General alarm actuating positions;
  - Arrangement of various fire-extinguishing appliances;
  - Locations of Fighter's Outfits;
  - Location of Helicopter Crash Kit;
  - Arrangement of water spray nozzles and sprinklers (if fitted);
  - Locations of emergency shutdown (such as oil fuel source shutdown, engine shutdown, etc.) stations;
  - The Ventilating system including Fire dampers positions, Ventilating Fans control positions with indication of identification numbers of Ventilating Fans serving each section;
  - Arrangement of fire/watertight doors and their remote control positions;
  - Blowout preventer control positions;
  - Escape route and means of access to different compartments, decks, etc.;

**d. Life Saving Equipment**

- The location and arrangement of each lifesaving system including each embarkation deck, showing each overboard discharge and clearances from projections and obstructions in the way of launching lifeboats, rescue boats, and life-rafts throughout the range of list and trim angles.
- The design weight of each lifeboat, rescue boat, and davit-launched life-raft when fully equipped and loaded.
- Working loads of davits and winches.
- Types and sizes of falls.

Manufacturer's name and identification

**e. Safety plans**

- The following plans are to be submitted (see note):
- Safety and Fire Fighting plan
- Hazardous areas classification drawing, including information about all openings located in these hazardous areas
- Fire structural protection drawings
- Fire detection and extinguishing system description and drawings, including fire-fighting water piping and pumping systems, with flow calculations
- Alarm and internal communication systems description and drawings
- Emergency shutdown systems description, procedures and drawings
- Escape way and life saving appliances description and drawings..

Note: One or more of the above plans may be combined in one or more plans at designer's convenience.

**104. Section 4 – Accommodation**

Arrangement plans showing each accommodation space, ventilation, and means of escape

**105. Section 5 - Machinery**

- General arrangement showing particularly location of essential machinery and equipment
- Remote level indicating systems and draught measurements systems
- Boiler feed system
- Sea water distillation system
- Location and arrangement of drip-trays and gutter-ways
- Jacking systems, for self-elevating units
- Propulsion and power generating systems.
- Incinerators

**106. Section 6 - Piping**

**a. General**

- Bilge and ballast piping, outside and inside machinery spaces

- Sea inlets, scuppers and sanitary discharges
- Air vents, overflow and sounding piping systems and/or devices
- Fuel oil and lubricating oil systems, including pipings and tanks not forming part of the unit's structure
- Live steam piping
- Reduced pressure steam, draining, and exhaust piping
- Machinery circulation and cooling piping
- Compressed air systems for remote control, instrumentation, engine starting and bulk handling, including compressed air units and piping
- A accessories such as heaters, coolers, etc.
- Exhaust ducts of engines and boilers

**b. Thermal oil heating installation,**

- Piping and pumping systems
- General arrangement of the installation
- Boilers including their major components
- Protections against oil leakage
- Monitoring and alarm systems
- Nature and characteristics of the thermal oil: viscosity, flash point, fire point, decomposition temperature, auto-ignition temperature, etc.

**c. Hydraulic installations, containing the following information:**

- Piping and pumping systems
- Arrangement of the installations
- Protections against leakage
- Description of the main components
- Protection against overpressure
- Monitoring and alarm systems

**d) Ventilation**

- Mechanical and natural ventilation systems including location of air intakes and exhausts, air renewal rate per hour, location of fan controls
- Air intakes and exhaust outlets of internal combustion engines and boilers

**107. Section 7 - Electrical**

The following electrical plans and diagrams are to be submitted:

**a. General arrangement of:**

- main switchboard
- other distribution boards
- emergency switchboard
- generators
- electric propulsion plant, if any
- motors and equipment serving the essential services,
- batteries
- cable trays.

**b. Single line diagrams of the main and emergency distribution networks, including single line diagrams of intrinsically safe circuits, indicating:**

- make, type, cross section area, of the conductors
- with mention of the intensity carried under full load
- make, type and rating of switch-gears, fuses and circuit-breakers.

**c. For main, sub and emergency switchboards:**

- assembly drawing showing the various sections and the arrangement of the equipment and instrumentation
- bus-bar arrangement with mention of their cross section areas.

**d. For offshore units where hazardous area(s) is(are) existing:**

- a general diagram showing the location of the electrical equipment within the hazardous area(s) and their safety type (e.g. Ex “d” II BT3)
- an evidence of the safety character of the above equipment
- the list of explosion protected equipment.

**e. Impressed current cathodic protection systems if applicable.**

**108. Construction Portfolio**

- a. A construction portfolio must be prepared for each unit and must be approved by RBNA. The portfolio must document the location and extent of application of different grades and strengths of materials and include a description of the materials and welding procedures employed and any other relevant construction information. The portfolio must contain the following:
  - a. A construction portfolio must be prepared for each unit and must be approved by RBNA. The portfolio must document the location and extent of application of different grades and strengths of materials and include a description of the materials and welding procedures employed and any other relevant construction information. The portfolio must contain the following:
  - b. Structural plans showing areas incorporating different grades and strengths of materials. A simplified plan may be included in the portfolio if it adequately defines the different areas of application.
  - c. A list of different grades or strengths of material that conform to the RBNA Ship Rules, Part III, complete specifications, including chemical and physical properties, special testing and any heat treatment.
  - d. Each approved weld procedure for the fabrication of each structure using different grades or strengths of material and each approved weld test procedure.
  - e. Information, restrictions or prohibitions regarding repairs or modifications.

**109. Operating Manual**

- a. If an approved manual is changed, only the pages affected by the change need be submitted if the manual is bound in such a way as to allow old pages to be removed easily and new ones inserted and if the manual has a record of page changes.

**b. Content**

As a minimum, the operating manual is to include the following information, where applicable:

- general description and principal particulars of the unit
- general arrangement plan showing watertight compartments, closures, vents, intakes and discharges, down flooding points
- capacity plan showing the capacity, centre of gravity and free surface correction for each tank, fixed and variable
- deck loads, permanent ballast, and the location of draught gauges and draught marks
- book of loading conditions
- data for each approved mode of operation, including design and variable loading, environmental conditions, sea bed conditions, etc.
- permissible loadings for all decks
- minimum anticipated sea and atmospheric temperatures
- amount of snow and ice allowable on deck
- stability drawings including body plan, inclining experiment results and allowable KG curves
- hydrostatic curves or equivalent data
- amount of allowable marine growth
- towing arrangements
- temporary mooring and position anchoring arrangements
- ballast control system drawings including piping diagram
- showing remote and manual control devices • bilge system
- hazardous areas drawings
- fire bulkhead arrangement drawing
- fire and gas drawings showing types and locations of detection and extinguishing equipment
- schematic diagrams of main emergency power supplies and electrical installations
- details of emergency shutdown procedures for electrical equipment
- corrosion protection system including:
  - in case of impressed current system, operating manual and detail of maintenance operations
  - in case of sacrificial anodes: detail of maintenance/retrofit operations
- identification of helicopter uses for the design of the helicopter deck
- list of key as-built drawings incorporated in the Operating Manual or in the construction portfolio
- design Criteria Statement issued by the Society, including classification restrictions, if any
- design data sheets referred to in the Design Criteria Statement
- classification Certificates, continuous survey lists
- other certificates issued by the RBNA.

**200. Units classed after construction**

**201. General**

The following documentation will be required for the

classification of units classed after construction.

202. Operating manual

203. Structure

- general arrangement
- midunit section or representative sections, as applicable
- profile and deck plan
- watertight bulkheads
- rudderspan and rudderstock, if any
- shell expansion
- hatch covers, if any
- capacity plan
- loading conditions, calculation of still water bending moment and overall stresses as applicable, relevant documents, particulars of loading calculator and instruction booklet as per Society's requirements, according to the case
- stability documents.

204. Machinery and equipment

205. The following documentation is to be submitted:

- engine room general arrangement
- diagrammatics of fuel (transfer, service), bilge, ballast,
- lubricating oil, cooling, steam and feed, general service and starting compressed air piping
- drawings of boilers and air receivers

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206. Only for self-propelled units

- drawings of shaft line, reduction gear and propeller, if any
- drawings of steering gear, if any
- torsional vibration calculations as per conditions laid down in the Unit Rules; such documents are required only for units less than 2 years old and for older units the propelling system of which has been modified during the two years preceding the classification.

207. Electrical systems

The following documentation is to be submitted:

- master plan of power distribution, lighting and emergency
- power circuits
- single line diagram of networks and switchboards
- location and arrangement of electrical equipment in hazardous areas.

**C2. HULL, STRUCTURE, EQUIPMENT AND MACHINERY SURVEYS OF MOBILE OFFSHORE DRILLING UNITS**

**100. Surveys and certification**

101. Each unit should be subject to the surveys specified below:

- a. an *initial survey* before the unit is put in service or before the certificate is issued for the first time;
- b. a *renewal survey* at intervals specified by the Administration but not exceeding five years except where C2.102.d is applicable;
- c. an *intermediate survey* within three months before or after the second anniversary date or within three months before or after the third anniversary date of the certificate, which should take the place of one of the annual surveys specified in C2.101 above;
- d. an *annual survey* within three months before or after each anniversary date of the certificate;
- e. *radio station surveys* and
- g. an *additional survey* as the occasion arises.

102. The surveys referred to in C2.100 above<sup>1</sup> should be carried out as follows:

- a. the initial survey should include a complete inspection of the structure, safety equipment and other equipment, fittings, arrangements and material to ensure that they comply with the provisions of the Code, are in satisfactory condition and are fit for the service for which the unit is intended;
- b. the renewal survey should include an inspection of the structure, safety equipment and other equipment to ensure that they comply with the provisions of the Code, are in satisfactory condition and are fit for the service for which the unit is intended;
- c. the intermediate survey should include an inspection of the structure, fittings, arrangements and safety equipment to ensure that they remain satisfactory for the service for which the unit is intended;
- d. the annual survey should include a general inspection of the structure, safety equipment and other equipment to ensure that they have been maintained and that they remain satisfactory for the service for which the unit is intended;
- e. the dry-dock survey and the inspection of items surveyed at the same time should be such as to ensure that they remain satisfactory for the service for which the unit is intended. RBNA in agreement with the Administration may allow underwater inspections in lieu of a dry-dock survey provided that they are satisfied that such an inspection is equivalent to a dry-dock survey;
- f. the radio survey should be sufficient to assure compliance with the relevant provisions for cargo units of SOLAS chapter IV; and
- g. an additional survey, either general or partial according to the circumstances, should be made after a repair resulting from investigations or wherever any important repairs or renewals are made. The survey should be such as

to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanunit of such repairs or renewals are in all respects satisfactory, and that the unit complies in all respects with the provisions of the Code.

103. The intermediate, annual and dry-dock surveys referred to in C2.101 above should be endorsed on the certificate.

103. As an alternative to the renewal and intermediate surveys provided for in C2.101 the RBNA may, at the owner's request, approve a continuous survey programme provided that the extent and frequency of the surveys are equivalent to renewal and intermediate surveys. A copy of the continuous survey programme, together with the record of the surveys, should be kept on board the unit and the certificate annotated accordingly.

104. After any survey of the unit under this Rule has been completed, no change should be made to structure, equipment, fittings, arrangements and materials covered by the survey, without the sanction of the RBNA.

105. A certificate called a Mobile Offshore Drilling Unit Safety Certificate shall be issued upon satisfactory conclusion of an initial or renewal survey to a unit which complies with the provisions of the Code. Any exemptions granted shall be clearly noted on the Certificate. The certificate shall be drawn up in the form corresponding to the model given in the appendix to the Code. If the language used is neither English nor French, the text shall include a translation into one of these languages. The Mobile Offshore Drilling Unit Safety Certificate (2009) shall be issued for a period which is not exceed five years.

106. Notwithstanding the provisions of paragraph 1.6.11.1, when the renewal survey is completed within three months before the expiry date of the existing certificate, the new certificate should be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of expiry of the existing certificate.

107. When the renewal survey is completed after the expiry date of the existing certificate, the new certificate should be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of expiry of the existing certificate.

## **CHAPTER D INSPECTION OF COMPONENTS**

### **CHAPTER CONTENTS**

#### **D1. DESIGN AND TYPE APPROVAL**

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#### **D1. DESIGN AND TYPE APPROVAL**

##### **100. Approach [IACS UR Z17]**

101. The manufacture of components in third parties is to have the presence of a RBNA surveyor to inspect the stages of the work and to witness the correct performance of the tests.

102. The manufacturers, for that end, will provide locations and safe conditions, including the provision of as programme previous to the beginning or the surveys containing the schedule of work, the preparations for and the inspections and tests to be carried out.

##### **200. Conditions of supply**

201. The conditions of supply will indicate the conditions for the classification and the Classification Society fees.

##### **300. Surveys and Certificates**

301. The components (materials and equipment) will be subject to a survey denominated Specific Component Survey, as per Part I, Title 01, Section 2, Chapter F. Upon satisfactory conclusion of the surveys and tests, the relevant Certificate is to be issued.

## CHAPTER E SURVEYS OF THE CLASS PERIOD

### CHAPTER CONTENTS

- E1. APPROACH
- E2. ANNUAL SURVEYS
- E3. INTERMEDIATE SURVEY
- E4. SURVEY IN DRY DOCK
- E5. PROPELLER SHAFT SURVEY
- E6. ISOLATED CASES SURVEYS.
- E7. CLASS RENEWAL SURVEY
- E8. OCCASIONAL SURVEYS
- E9. PERIODICAL SURVEYS OF THE SPECIAL SURVIVE UNITS

#### E1. APPROACH

##### 100. Application and programme

101. The units classified by RBNA are submitted to periodical surveys for the maintenance of the hull and machinery CLASS, as indicated below.

See Part I, Title 02, Section 2 for the scope of surveys, application and conditions for survey.

102. When time is due, as stated in these Rules, the units will be placed under conditions of having their hulls and equipment inspected, with all their spaces to be inspected and / or tested with unimpeded access and safe condition, so that the tests to be followed can be performed.

103. For carrying out surveys of hull and machinery in dry, the unit will be placed in dry or floating dock and / or slipway on docking blocks that provide appropriate conditions for due inspections and tests.

#### E2. ANNUAL SURVEYS

##### 100. Annual Hull and Machinery Survey – (VAC /VAM - Vistoria Annual de Casco/Maquinas);

101. The annual hull and machinery surveys of the unit afloat (VAC, VAM) are to be carried out every year of unit's service.

#### E3. INTERMEDIATE SURVEY

##### 100. An Intermediate Hull Survey (VIC)

101. An *intermediate survey* within three months before or after the second anniversary date or within three months before or after the third anniversary date of the certificate, which should take the place of one of the annual surveys specified in C2.101 above.

#### E4. SURVEY IN DRY DOCK

##### 100. Survey in dry dock (VDC)

101. A minimum of two *dry-dock surveys* during any five-year period. Where E4.200 is applicable this five-year period may be extended to coincide with the extended period of the validity of the certificate. In all cases the intervals between any two such surveys should not exceed 36 month, except where the additional class notation INWATER SURVEY has been assigned. In this case, special consideration shall be given by RBNA in agreement with the Administration regarding allowing inwater surveys *in lieu of* dry docking surveys as per C2.102.e above.

##### 200. In-water Survey Hull and Machinery (VSC-VSM)

201. RBNA in agreement with the Administration may allow underwater inspections in lieu of a dry-dock survey provided that they are satisfied that such an inspection is equivalent to a dry-dock survey.

#### E5. PROPELLER SHAFT SURVEY (VEP)

##### 100. Propeller shafts

101. This survey is to be carried out at the end of each final classification cycle.

#### E6. OTHER SURVEYS

##### 100. Thickness measurement of anchor chains.

101. To be carried out in the end of every the cycle of classification after the 2nd cycle.

##### 200. Engine overhaul/repair.

201. To be carried out according to the manufacturers' recommendations.

##### 300. Rudder stock.

301. To be carried out at the end of each cycle of classification after the 2nd cycle.

**E7. CLASS RENEWAL SURVEY**

**100. Class renewal survey Hull and Machinery**

101. Class renewal surveys of hull and machinery are held at each end / beginning of a cycle of class. Such surveys require dry docking and thickness measurements of the hull structure.

102. Class renewal surveys are referred to as Class renewal survey no. "x", where "x" corresponds to the cycle of class.

**E8. OCCASIONAL SURVEYS**

**100. Occasional survey of hull and Machinery in Dry Dock and/or Floating (VOC-VOM)**

101. The occasional surveys of hull and machinery in dry dock and/or floating (VOC, VOM) are carried out where the unit has sustained damage; the unit should be inspected immediately after the occurrence, or in cases of planned alterations. In both situations the repair and/or work will be supervised by the surveyors of RBNA in order maintain the hull and/or machinery class.

**E9. CONTINUOUS SURVEYS**

**100. Continuous surveys**

101. As an alternative to the renewal and intermediate surveys the RBNA may, at the owner's request, approve a continuous survey programme provided that the extent and frequency of the surveys are equivalent to renewal and intermediate surveys. A copy of the continuous survey programme, together with the record of the surveys, should be kept on board the unit and the certificate annotated accordingly. See also the ships Rule, Part I, Title 01, Section 2, Chapter F.

**E10. LAY UP SURVEYS**

**100. Lay up surveys**

101. Upon Owners' request, a unit out-of-commission may be subject to specific requirements for maintenance of class during the period of inactivity.

102. In case the Class Society is not notified of the laying-up of the unit or in case the lay-up maintenance program is not implemented and/or the surveys of the program are not carried out inside the unit's class will be automatically suspended and/or withdrawn in accordance with the requirements set down in this guideline.

103. The criteria, precautions and procedures recommended for:

- a. Declaring the unit as "laid-up";

- b. A subsequent laying-up survey at the commencement of the period;
- c. Maintenance of the class during the period in which the unit is laid-up by means of annual lay-up condition surveys carried out in substitution to the annual class surveys which are no longer required throughout the laying-up period; and
- d. Class reactivation of the unit in order to return to active service.

**CHAPTER F  
SPECIFIC SURVEYS**

CHAPTER CONTENTS

- F1. SPECIFIC SURVEY FOR HOMOLOGATION OF WELDING PROCESS
- F2. SPECIFIC SURVEY FOR QUALIFICATION OF WELDERS
- F3. DESIGN AND TYPE APPROVAL – MANUFACTURERS APPROVAL
- F4. SPECIFIC SURVEY FOR APPROVAL OF SERVICE SUPPLIERS
- F5. SPECIFIC SURVEY FOR CLASSIFICATION OF MATERIALS
- F6. SPECIFIC SURVEY FOR CLASSIFICATION OF EQUIPMENTS
- F7. OTHER SPECIFIC SURVEYS
- F8. CONTINUOUS MACHINERY SURVEY (CMS)
- F9. PLANNED MAINTENANCE SCHEME (PMS) FOR MACHINERY
- F10. ACCEPTANCE OF MANUFACTURER'S QUALITY CONTROL ASSURANCE SYSTEMS FOR WELDING CONSUMABLES

**Note: For the specific surveys under the present Chapter F, see the ship Rules (Rules for the Construction and Classification of Units According to their Missions, for open sea navigation,) Part I Title 01, Section 2, Chapter F.**

## **CHAPTER G STATUTORY SURVEYS**

These measures, which are to be available to clients, include, but are not limited to:

### CHAPTER CONTENTS

- a. the inclusion of the Unified Interpretations in the Society’s classification Rules, or
- b. an appropriate provision in the Society’s contracts for statutory certification services.

### G1. ACCREDITATION

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#### **G1. ACCREDITATION [IACS PR 31]**

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##### **100. Definition**

101. The term “Statutory Survey” includes surveys under the responsibility of the Maritime Authority. The purpose of the Statutory Surveys is to assess compliance with national or international regulations.

##### **200. Statutory Surveys carried out by the RBNA**

201 The accreditation to carry out the statutory surveys is given by the Brazilian Maritime Authority.

Note: RBNA is a Recognized Organization (RO) registered at the IMO GISIS.

202. The statutory surveys for which the RBNA is accredited are informed in the RBNA site.

203 When delegated by the Administration concerned, RBNA will act on its behalf within the limits of such delegation. In this respect, RBNA will take into account the relevant national and international requirements, survey the unit, report and issue or contribute to the issue of the corresponding certificates.

204. The above surveys do not fall within the scope of the classification of units, even though their scope may overlap. Items which are statutory but have been considered as Classification Items by IACS UR Z1 have been inserted in the present Rules as Class items.

205. In statutory matters, when authorized by the Administration concerned and acting on its behalf, RBNA applies the available IACS Unified Interpretations (UIs), unless the Administration provides another interpretation or decides otherwise.

##### **300. Mandatory applications of IACS Unified interpretations [IACS PR 31]**

301. Considering the mandatory nature of adopted IACS Unified Interpretations, the RBNA requires compliance with the IACS Unified Interpretations applicable to a unit, its machinery and equipment, in accordance with the implementation dates and provisions stated in the UI, when acting as a recognized organization, authorized by a flag State Administration to act on its behalf, unless the flag Administration provides its own interpretation.