

Rules for Building and Classing

Marine Vessels

Notices and General Information



January 2024



RULES FOR BUILDING AND CLASSING

MARINE VESSELS JANUARY 2024

NOTICES AND GENERAL INFORMATION

**American Bureau of Shipping
Incorporated by Act of Legislature of
the State of New York 1862**

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Notices and General Information

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Notices and General Information

Introduction

1. The 2024 edition of the *Rules for Building and Classing Marine Vessels* has undergone a major update to improve the clarity and ease of use of the Rules:
 - a) A goal-based standards approach has been introduced as an alternative path to compliance appropriate for novel concepts, new technologies, and alternative arrangements.
 - b) Non-mandatory guidance has been added as Commentaries within the text of the Rules.
 - c) Notations have been clearly indicated as mandatory or optional.The same updates have also been made to the generic Parts 1A, 2, and 7.
2. The 2024 edition of the *Rules for Building and Classing Marine Vessels* consists of the Parts as shown in Table 1. In this regard, we would bring the following to the user's attention:
 - a) The purpose of the generic title *ABS Rules for Conditions of Classification (Part 1A)* is to reflect the expanded contents of PART 1A, as a result of including consolidated requirements for "Classification" applicable to all types of and sizes of vessels, barges and specific shipboard arrangements/systems, etc., except for those in offshore service, as specified in the Foreword to Part 1A. The supplemental requirements previously contained in individual Rules and Guides have been consolidated into Chapters of Part 1A.
 - b) The purpose of the generic *ABS Rules for Alternative Arrangements, Novel Concepts and New Technologies (Part 1D)* is to introduce a procedure for acceptance of alternative arrangements, novel concepts, and new technologies based on Goals and Functional Requirements, including a consolidated list of Tier 1 Goals.
 - c) The purpose of the generic title *ABS Rules for Materials and Welding* of PART 2 is to emphasize the common applicability of the requirements to ABS-classed vessels, other marine structures and their associated machinery, and thereby make PART 2 more readily a common "PART" of various ABS Rules and Guides, as appropriate. The Rules for steel, aluminum, and FRP materials have been consolidated into a single Part 2.
 - d) The purpose of the generic title *ABS Rules for Survey After Construction (Part 7)* is to reflect the expanded contents of PART 7, as a result of including consolidated requirements for "Surveys After Construction" applicable to all types and sizes of vessels, barges and specific shipboard arrangements/systems, etc., as specified in Part 7, Chapter 1, Section 1.
3. The numbering system applied in the Rules is shown in Table 2.
4. The primary changes from the July 2023 Rules are identified and listed in Table 3. The effective date of the indicated Rule Changes is 1 January 2024, unless specifically indicated otherwise.

For certain changes that have a major impact on shipyards, designers and vendors, ABS has instituted a two-year Rule cycle to give the industry more time to prepare for these changes. The text of these changes will appear in a box along with the effective date just under the existing Rule requirement.
5. The listing of CLASSIFICATION SYMBOLS AND NOTATIONS is available from the ABS website <http://www.eagle.org/absdownloads/index.cfm> for download.

6. In association with the harmonization of the Common Structural Rules (CSR) for Bulk Carriers and Oil Tankers, on 1 July 2015, the three Sub-parts, 5A, 5B, and 5C, of Part 5 of the *Rules for Building and Classing Marine Vessels* are as follows:

Contents

Part 5A: General Hull Requirements (IACS CSR Part 1)

Part 5B: Ship Types (IACS CSR Part 2)

Part 5C: This Part is divided into two separate booklets as follows:

Chapters 1 to 6: Tankers and Bulk Carriers not covered by Part 5A and Part 5B and Container Carriers

Chapters 7 to 22: Passenger Vessels, Liquefied Gas Carriers, Chemical Carriers, Vessels Intended to Carry Vehicles, Vessels Intended to Carry Liquid Cargoes in Bulk (other than Oil or Chemical), Membrane Tank LNG Carriers, Vessels Using Gases or other Low-Flashpoint Fuels, Fire Fighting Vessels, Oil Recovery Vessels, Escort Vessels, Vessels Under 90 m (295 ft) Intended for Towing, Fishing Vessels, Box-Shaped Bulk Carriers, General Dry Cargo Vessels, Heavy Lift Ships, and Anchor Handling Vessels.

Part 5D: Offshore Support Vessels for Specialized Services

Application – Oil Tankers

The structural requirements in Part 5A, Pt 1 and Part 5B, Pt 2, Ch 2 of the Rules are applicable for double hull oil tankers of 150 m in length and upward, with structural arrangements as specified in Part 5A, Pt 1, Ch 1, Sec 1, [1.3].

For oil tankers with structural arrangements not covered by Part 5A, Pt 1 and Part 5B, Pt 2, Ch 2, the requirements in Part 5C, Chapters 1 or 2, are to be complied with.

Application – Bulk Carriers

The structural requirements in Part 5A, Pt 1 and Part 5B, Pt 2, Ch 1 of the Rules are applicable for single side skin and double side skin bulk carriers of 90m in length and upward, with structural arrangements as specified in Part 5A, Pt 1, Ch 1, Sec 1, [1.2].

For vessels intended to carry ore or bulk cargoes, other than the single side skin or double side skin bulk carriers of 90 m in length and upward with structural arrangements as specified in Part 5A, Pt 1 and Part 5B, Pt 2, Ch 1, the requirements in Part 5C, Chapters 3 or 4 are to be complied with.

Application – ABS Construction Monitoring Program

These compulsory requirements for **CSR** notation are specified in Part 5C, Appendix 1, Section 2.

Application – Onboard Systems for Oil Tankers and Bulk Carriers

The onboard systems for all tankers are to comply with the requirements of Part 5C, Chapter 1, Section 7, and for all bulk carriers are to comply with the requirements of Part 5C, Chapter 3, Section 7 of the Rules.

Application – References

Other Parts of the ABS Rules that are referenced within Part 5A, 5B, 5C, and 5D are also to be applied.

The following flow chart indicates the application of the Rules and typical Class Notations for tanker and bulk carrier vessels, of which arrangements and scantlings are in full compliance with the Rules:

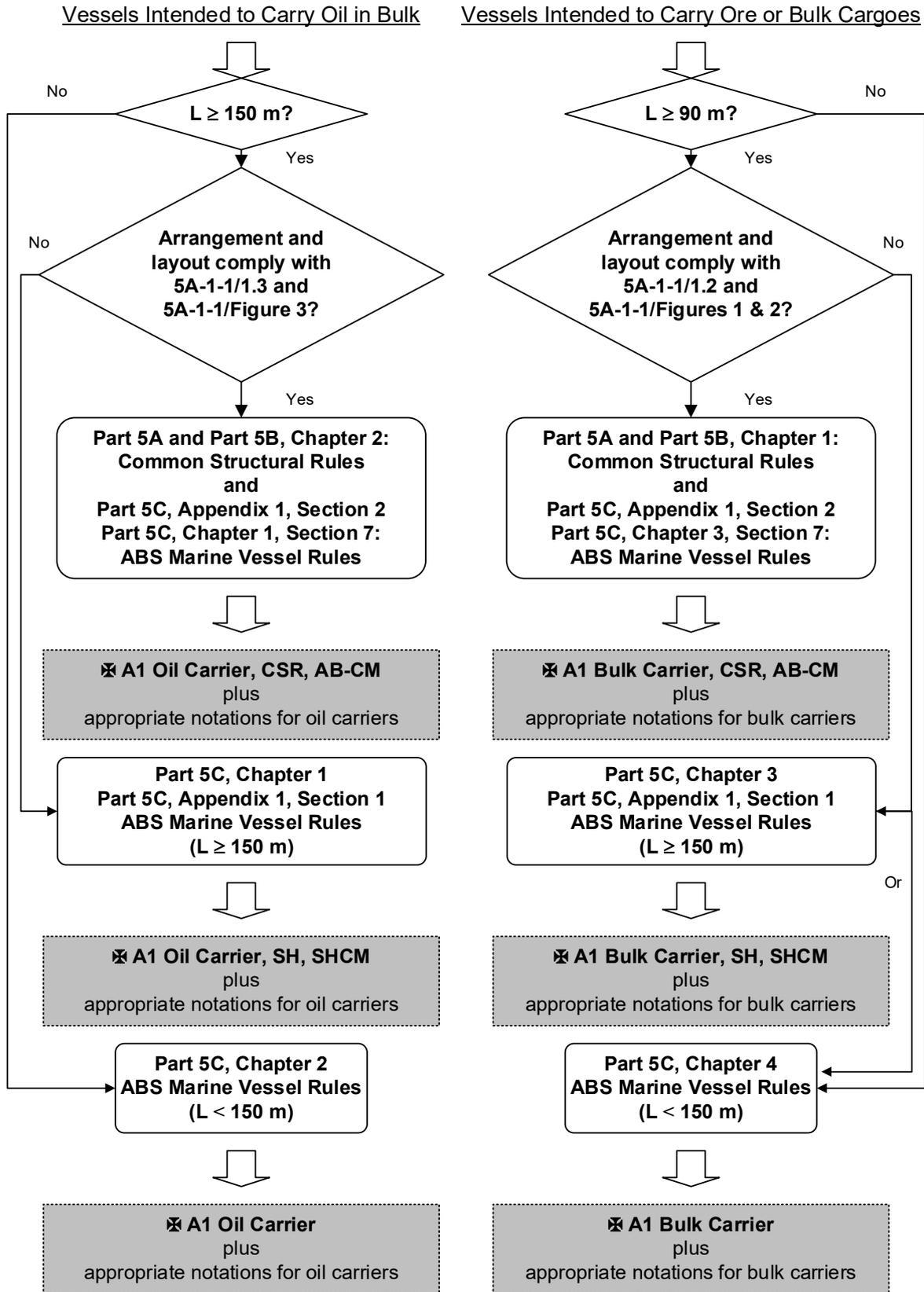


TABLE 1
Applicable Editions of Parts Comprising January 2024 Marine Vessel Rules

Notices and General Information		January 2024
Part 1A:	Rules for Conditions of Classification	January 2024
Part 1D:	Rules for Alternative Arrangements, Novel Concepts and New Technologies	January 2024
Part 2:	Rules for Materials and Welding Rules for Testing and Certification of Materials Rules for Welding and Fabrication	January 2024
Part 3:	Hull Construction and Equipment	January 2024
Part 4:	Vessel Systems and Machinery	January 2024
Part 5A:	Specific Vessel Types General Hull Requirements (IACS CSR Part 1)	January 2024
Part 5B:	Specific Vessel Types Ship Types (IACS CSR Part 2)	January 2024
Part 5C:	Specific Vessel Types Chapter 1 & 2 Oil Carrier Chapter 3 & 4 Bulk Carrier Chapter 5 & 6 Container Carrier	January 2024
Part 5C:	Specific Vessel Types Chapter 7 Passenger Carrier Chapter 8 Liquefied Gas Carrier Chapter 9 Chemical Carrier Chapter 10 Vehicle Carrier Chapter 11 Vessels Intended to Carry Liquid Cargoes in Bulk (other than Oil or Chemical) Chapter 12 Liquefied Gas Carrier with Membrane Tanks Chapter 13 Vessels Using Gases or other Low-Flashpoint Fuels Chapter 14 Fire Fighting Vessels Chapter 15 Oil Recovery Vessels Chapter 16 Escort Vessels Chapter 17 Vessels Under 90m (295 ft) Intended for Towing Chapter 18 Fishing Vessels Chapter 19 Vessels Intended to Carry Bulk Cargoes without Upper Wing Tanks and Lower Wing Tanks Chapter 20 General Dry Cargo Vessels (New) Chapter 21 Heavy Lift Ships (New) Chapter 22 Anchor Handling Vessels (New)	January 2024

Part 5D:	Offshore Support Vessels for Specialized Services Chapter 1 Vessels Intended for Offshore Support Services Chapter 2 Offshore Supply Chapter 3 Anchor Handling and Towing Chapter 4 Fire Fighting Chapter 5 Diving and Remotely Operated Vehicles (ROVs) Support Chapter 6 Oil Spill Recovery Chapter 7 Safety Standby Rescue Chapter 8 Pipe Laying Chapter 9 Heavy Lift Chapter 10 Well Intervention Chapter 11 Well Stimulation Chapter 12 Well Test Chapter 13 Escort Chapter 14 Wind Turbine Installation, Maintenance and Repair (Wind IMR) Chapter 15 Cable Laying Chapter 16 Subsea Services	January 2024
Part 6:	Specialized Items and Systems Chapter 1 Strengthening for Navigation in Ice Chapter 2 Refrigerated Cargo Vessels Chapter 3 Exhaust Emission Abatement Chapter 4 Low and High Voltage Shore Connection Chapter 5 Alternative Fuels (New)	January 2024
Part 7:	Rules for Survey After Construction	January 2024

TABLE 2
Division and Numbering of Rules

<i>Division</i>	<i>Number</i>
Part	Part 1
Chapter	Part 1, Chapter 1
Section	Section 1-1-1
Subsection (see Note 1)	1-1-1/1
Paragraph (see Note 1)	1-1-1/1.1
Subparagraph	1-1-1/1.1.1
Item	1-1-1/1.1.1(a)
Subitem	1-1-1/1.1.1(a)i
Appendix	Appendix 1-1-A1 or Appendix 1-A1-1

Note:

1

An odd number (1, 3, 5, etc.) numbering system is used for the Rules. The purpose is to permit future insertions of even-numbered paragraphs (2, 4, 6, etc.) of text and to avoid the necessity of having to renumber the existing text and associated cross-references, as applicable, within the Rules and associated process instructions, check sheets, etc.

Rule Change Notice (2024)

TABLE 3
Summary of Changes from the July 2023 Rules
EFFECTIVE DATE 1 January 2024 – shown as (2024)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 1	Rules for Conditions of Classification	
1A-1-1/7, 9	Classification	To provide definition of different stamps in the Rules to clarify the scope of review and limit ABS liability.
1A-1-3/3, 5	Classification Symbols and Notations	To include the new notations "General Dry Cargo Vessel" and "Crane Vessel" and to clarify the requirements for Special Purpose Vessels.
1A-1-4/1.3, 1.7, 7.5	Rules for Classification	To not indicate the publication year for referenced standards to prevent confusion and conflict in the application of the Rules, to clarify the meaning of commentary in ABS Rules, and to clarify when the SHR Notation is mandatory.
1A-1-7/3	Submission of Plans	To require submission of list of all the system integrators for a vessel to identify the responsible parties for submission of documentation.

EFFECTIVE DATE 1 January 2024 – shown as (2024)
(based on the date of purchase order of the materials)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 2	Materials and Welding	
2/Foreword	Foreword	To add Goal Based Standards and other clarifications
2-1-1	General Requirements	To add Goal Based Standards and other clarifications and to make the section apply to all reference standards (ASTM, EN or ISO standards), update based on IACS UR W11, and add reference to ISO/DIS 2566 based on IACS W2.5.4 Rev 2.
2-1-2	Ordinary-strength Hull Structural Steel	To add Goal Based Standards and other clarifications and to delete redundant 2-1-2/9.13 (unsatisfactory test requirements are summarized in 2-1-2/9.11) and add Charpy Impact in-house check requirements on ABS Grade A less than 50 mm in 2-1-2/Table 4 and 5 Notes.
2-1-3	Higher-strength Hull Structural Steel	To add Goal Based Standards and other clarifications and to classify the product form to either plates and wide flats, tubulars, section or bar, further clarify plate form coiled, and add maximum carbon equivalent for thickness greater than 100 mm and lesser and equal to 150 mm.
2-1-4	Low Temperature Materials	To add Goal Based Standards and other clarifications and to indicate manufacturer approval is required, to include reference to all applicable rule cites for low temperature materials, to combine 2-1-4/7, 9, 11 into Table 1 and add Equivalent EN standards (for Nickel steels), and to include information required for certification of products.
2-1-5	Hull Steel Castings	To add Goal Based Standards and other clarifications and to include requirements for ABS grades and generally based on ASTM A27 60-30 Class I, and to include additional ABS steel casting grades (CA, CB, CC, CD, CE, CF) based on ASTM A27 and ASTM A148 standards.
2-1-6	Hull Steel Forgings	To add Goal Based Standards and other clarifications.
2-1-7	Ordinary and Higher Strength Steels with Enhanced Corrosion Resistance Properties for Cargo Oil Tanks	To add Goal Based Standards and other clarifications.
2-1-8	Extra High Strength Steel	To add Goal Based Standards and other clarifications.

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
2-2-1	Anchors	To add Goal Based Standards and other clarifications and to align with IACS UR A1.4.1.2.
2-2-2	Anchor Chain	To add Goal Based Standards and other clarifications and to include requirements for NDE of bars, castings or forging intended for anchor chain and NDE after proof load test from the ABS Offshore Mooring Chain Guide and align the values in 2-2-2/Table 2 with IACS Req. 1981/Rev.7 2020/Corr.1 2021.
2-2-3	Rolled Steel Bars for Chain, Cast and Forged Materials for Accessories and Materials for Studs	To add Goal Based Standards and other clarifications.
2-3-1	General Requirements	To add Goal Based Standards and other clarifications, and to eliminate duplicate requirements by aligning with or referring to Section 2-1-1.
2-3-2	Steel Plates for Machinery, Boilers and Pressure Vessels	To add Goal Based Standards and other clarifications and to remove content excerpted from ASTM standards and provide references instead, to include Chemistry, Mechanical Properties, Inspection & Rectification required for certification of plate, and to add guidance for forming requirements.
2-3-3	Seamless Forged-steel Drums	To add Goal Based Standards and other clarifications.
2-3-4	Seamless-steel Pressure Vessels	To add Goal Based Standards and other clarifications.
2-3-5	Boiler and Superheater Tubes	To add Goal Based Standards and other clarifications and to outline general requirements for manufacture, testing, inspection and certification of tubes in accordance with a recognized standard or proprietary specification or ABS grades identified in 2-3-5/41, remove content from ASTM standards and provide references instead.
2-3-6	Boiler Rivet and Staybolt Steel and Rivets	To add Goal Based Standards and other clarifications and to outline general requirements for manufacture, testing, inspection and certification of rivets in accordance with a recognized standard or proprietary specification or ABS grades identified in 2-3-6/15 and remove content excerpted from ASTM standards to avoid conflicts.
2-3-7	Steel Machinery Forgings	To add Goal Based Standards and other clarifications and to outline general requirements for manufacture, testing, inspection and certification of forgings in accordance with a recognized standard or proprietary specification or ABS grades identified in 2-3-7/3 and remove content excerpted from ASTM standards to avoid conflicts.
2-3-7-A1	Repair and Cladding of Shafts	To add Objective and other clarifications and to relocate Appendix 7-A1-11 to Appendix 2-3-7-A1.
2-3-8	Hot-rolled Steel Bars for Machinery	To add Goal Based Standards and other clarifications and to add certification requirements.
2-3-9	Steel Castings for Machinery, Boilers and Pressure Vessels	To add Goal Based Standards and other clarifications and to include scope of steel castings for machinery, boiler and pressure vessels, to clarify requirements for ladle and product analysis, to include requirements for mechanical properties, to include requirements for ABS grade steel machinery, boiler, PV castings based ASTM standard requirements.
2-3-10	Ductile (Nodular) Iron Castings	To add Goal Based Standards and other clarifications and to align with other casting sections (2-1-5, 2-3-9), include general requirements for mechanical properties, and include requirements for ABS grades based on ASTM A536.
2-3-11	Gray-iron Castings	To add Goal Based Standards and other clarifications and to align with other casting sections, to include general requirements for mechanical properties, and to include requirements for ABS grades based on ASTM A48.

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
2-3-12	Steel Piping	To add Goal Based Standards and other clarifications and to remove content from ASTM standards is removed to avoid conflicts and replace with references, to include general requirements for steel making and fabrication of pipe, to indicate tests and or inspection are to be in accordance with the applicable ABS grade in 2-3-12/41 or recognized national standard or proprietary specification, to specify requirements for ABS grades based on ASTM standards, to provide guidance for welding, and to remove tables duplicated from ASTM standards.
2-3-13	Piping, Valves and Fittings for Low-Temperature Service [Below -18C (0F)]	To add Goal Based Standards and other clarifications and to include general requirements for steel making, to include general requirements for ladle and product analysis, to include other tests that may be applicable at the option of the purchaser, to include requirements for impact tests, and to specify requirements for ABS grades based on ASTM standards.
2-3-14	Bronze Castings	To add Goal Based Standards and other clarifications and to relocate 7-A1-10/1 into 2-3-14, to align with IACS W24, and to advise grinding can be carried out to thickness limits indicated on the ABS approved drawing.
2-3-15	Austenitic Stainless Steel Propeller Castings	To add Goal Based Standards and other clarifications and to add the quality of finished casting, and to move content from 7-A1-10/3 and amend based on ASTM A743.
2-3-16	Seamless Copper Piping	To add Goal Based Standards and other clarifications and to remove content from ASTM standards and add references instead, to include requirements for heat treatment, to include “Microscopical Examination” requirements as per ASTM B42, to include guidance for NDE, to include requirements for ABS grades based on ASTM B42.
2-3-17	Seamless Red-brass Piping	To add Goal Based Standards and other clarifications and to include requirements for heat treatment, remove content from ASTM standards and provide references instead, to include guidance for NDE, and to include requirements for ABS Grade RB based on ASTM B43.
2-3-18	Seamless Copper Tube	To add Goal Based Standards and other clarifications and to remove content from ASTM standards and provide references instead, to include requirements for heat treatment, to include guidance for NDE, and to include requirements for ASTM B75.
2-3-19	Condenser and Heat Exchanger Tube	To add Goal Based Standards and other clarifications and to remove content from ASTM standards and provide references instead, to include requirements for heat treatment, and to include requirements for ASTM B111.
2-3-20	Copper-Nickel Tube and Pipe	To add Goal Based Standards and functional requirements and to outline general requirements for manufacture, testing, inspection and certification of tubes in accordance with a recognized standard or proprietary specification or ABS grades identified in 2-3-20/29 and to remove content excerpted from ASTM standards is removed to avoid conflicts.
2-3-21	Monel Pipe and Tube	To add Goal Based Standards and other clarifications and to remove content from ASTM standards and provide references instead, to include general requirements for steel making and fabrication of tubes, to include heat treatment requirements, to align content with the applicable ASTM standard, and to indicate tests and or inspection are to be in accordance with the applicable ABS grade in 2-3-21/31 or recognized national standard or proprietary specification, and to specify requirements for ABS grades based on ASTM standards.

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
2-4-1	Hull Construction	To add Goal Based Standards and other clarifications and to add requirement to perform surface NDE of built-up area prior to finishing the weld joint, to add guidance on tack welds and temporary attachments, sequencing of welds, handling of electrodes, back gouging, peening, flame straightening, and repair welding, to add additional items to be considered for increase in preheat, and to include requirements for PWHT.
2-4-1-A1	Welding In Way of Water Backing	To add Goal Based Standards and other clarifications and indicate water backed welding is permitted only for ordinary and higher strength steels with specified minimum yield strength of 355 MPa, delete requirement for 40kj/in welding heat input, and add requirement for weld procedure qualification when there is a change in FCAW welding consumable manufacturer.
2-4-2	Boilers, Unfired Pressure Vessels, Piping and Engineering Structures	To add Goal Based Standards and other clarifications and to make general updates about welding and fabrication of boilers and PVs based on ASME BPVC Section VIII Div 1, 2 and 3 and to add Table 2 to tabulate requirements for preheat and PWHT exemptions for ABS grade plates, tubes and pipes used in fabrication of boilers and pressure vessels.
2-4-3	Weld Tests	To add Goal Based Standards and other clarifications and to remove content regarding weld procedure and welder qualification and refer to Part 2-A9, 2-A11, AWS D1.1, ASME IX when necessary and to add requirements for weld procedure review.
2-4-4	Piping	To add Goal Based Standards and other clarifications and to include requirements for Charpy test during weld qualification and supplemental essential variables when toughness is required by the referencing code, base metal and weld metal thickness qualification range in accordance with the applicable code and cases where deposited weld metal is less than the base metal thickness, use of permanent backing ring on services where backing ring may cause corrosion, material thickness transition during weld fit-up to minimize stress concentration between pipes with different wall thickness, preheat check and temperature monitoring during welding and including tack weld, magnetic particle inspection for Class II piping at the discretion of the attending Surveyor, and cold bending at a temperature below transformation range to prevent cracking or damages to the pipe structure.
2-4-5	Aluminum Welding in Hull Construction	To add Goal Based Standard and Functional Requirements, to require that temporary attachments are made by qualified welders or tack welders using a qualified WPS, and to add Figure 18 to provide examples of typical weld defects.
2-5-1	General	To add Goal Based Standards and other clarifications.
2-5-2	Standard Test Methods	To add Goal Based Standards and other clarifications.
2-5-3	Chemical Composition	To add Goal Based Standards and other clarifications.
2-5-4	Heat Treatment	To add Goal Based Standards and other clarifications.
2-5-5	Tensile Properties	To add Goal Based Standards and other clarifications.
2-5-6	Corrosion Testing	To add Goal Based Standards and other clarifications.
2-5-7	Sheet, Plate and Rolled Products	To add Goal Based Standards and other clarifications.
2-5-8	Closed and Open Extrusions	To add Goal Based Standards and other clarifications.
2-5-9	Hull Forgings	To add Goal Based Standards and other clarifications.
2-5-10	Hull Castings	To add Goal Based Standards and other clarifications.
2-5-11	Rivets	To add Goal Based Standards and other clarifications.
2-5-A1	Aluminum/Steel Bi-material Transition Joints	To add Goal Based Standards and other clarifications and to update the test requirements in accordance with MIL-J-24445.
2-5-A2	Dissimilar Materials	To add Goal Based Standards.

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
2-5-A3	List of Destructive and Nondestructive Tests Required for Materials and Responsibility for Verifying	To add Goal Based Standards.
2-6-1	General	To add Goal Based Standards and other clarifications.
2-6-2	Fabrication	To add Goal Based Standards and other clarifications.
2-6-3	Building Process Description	To add Goal Based Standards and other clarifications.
2-6-4	Quality Control	To add Goal Based Standards and other clarifications.
2-6-5	Testing	To add Goal Based Standards and other clarifications and to include a paragraph for visual inspection and align with BS EN 59:2016.
2-6-6	Repair	To add Goal Based Standards and other clarifications..
2-A1-1	List of Destructive and Nondestructive Tests Required for Materials and Responsibility for Verifying	To add Goal Based Standards and other clarifications.
2-A1-2	Physical, Chemical, Mechanical Properties to be considered for Design	To add new section covering material properties typically required for design and any other properties that may be required based on application and environment.
2-A2-1	General	To add Goal Based Standards and other clarifications and to add reference to retests 2-A2-1/33.
2-A2-2	Electrodes for Shielded Metal Arc Welding	To add Goal Based Standards and other clarifications.
2-A2-3	Wire-Flux Combinations for Submerged Arc Welding	To add Goal Based Standards and other clarifications.
2-A2-4	Wire and Wire Gas Combinations for Gas Metal Arc Welding and Flux Cored Wires for Flux Cored Arc Welding	To add Goal Based Standards and other clarification and to reorganize Subsections 2-A2-4/5 and 2-A2-4/7 into approval requirements for semi-automatic testing and automatic testing, respectively.
2-A2-5	Requirements for the Approval of Aluminum Filler Metals	To add Goal Based Standards and other clarifications.
2-A3-1	Application of Filler Metals to ABS Steels	To add Goal Based Standards and other clarifications and add Commentary.
2-A4-1	Procedure for the Approval of Manufacturers of Semi-finished Products for Hull Structural Steel (2010)	To add Goal Based Standards and other clarifications.
2-A4-2	Procedure for the Approval of Manufacturers of Rolled Hull Structural Steel	To add Goal Based Standards and other clarifications.
2-A4-3	Procedure for the Approval of Manufacturers of Extra High Strength Steels	To add Goal Based Standards and other clarifications.
2-A5-1	Procedure for the Approval of Manufacturers of Hull Structural Steels Intended for Welding with High Heat Input	To add Goal Based Standards and other clarifications.
2-A6-1	General	To add Goal Based Standards and other clarifications and to align with IACS Rec 69 Rev 2.
2-A6-2	Surface Inspection	To add Goal Based Standards and other clarifications and to align with IACS Rec 69 Rev 2.
2-A6-3	Volumetric Inspection	To add Goal Based Standards and other clarifications, to align with IACS Rec 69 Rev 2, and to remove redundant note in Table 1.
2-A6-Annex 1	General Location for the Type of Nondestructive Examinations of Typical Hull Steel Castings	To add Goal Based Standards.
2-A7-1	General	To add objective and to align with IACS Rec 68 Rev 1.

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
2-A7-2	Surface Inspection	To add objective, to align with IACS Rec 68 Rev 1, and other general updates to clarify wording.
2-A7-3	Volumetric Inspection	To add objective, to align with IACS Rec 68 Rev 1, and other general updates to clarify wording.
2-A7-4	Ultrasonic Examination of Carbon Steel Forgings for Tail Shafts	To add Goal Based Standards and other clarifications and to relocate Appendix 7-A1-12 to Appendix 2-A7-4 and remove excerpt from ASTM A388 and include as Annex.
2-A8-1	Additional Approval Procedure for Steel with Enhanced Corrosion Resistance Properties	To add objective, to align with IMO Res. MSC.289(87), and to relocate Subsection 11.3 & 11.5 to a new Subsection 15 for Approval.
2-A9-1	General Requirements	To add Goal Based Standards and other clarifications, to update based on IACS W28 Rev 3, to include limits and ranges of the applicable essential variables in 3.5, to include plug welds in 3.9, and to add section for requirements on weld process/techniques not covered by Appendix 2-A9-1.
2-A9-Annex 1	Location of Charpy V-Notch Impact Test	To add objective.
2-A9-Annex 2	Hardness Test (Typical examples of hardness test)	To add objective.
2-A9-Annex 3	Welding Positions	To add objective.
2-A10-1	Scheme for the Approval of Aluminum Manufacturers	To add Goal Based Standards and other clarifications and to outline the procedure for manufacturer approval and clarify requirements for renewal of mill approval.
2-A11-1	General	To add Goal Based Standards.
2-A11-2	Welders Qualification for Hull Structures	To add Goal Based Standards and other clarifications, to include clarification about welder qualification for pipes, structural tubulars and TKY Joints, to include guidance for annual vision test, to include wording about acceptance of qualification by other class societies, and to provide guidance for welder qualification in Figures.
2-A11-3	Welding Operators Qualification	To add Goal Based Standards and other clarifications and to add qualification requirements for automatic and machine welding
2-A11-4	Certification Process	To add Goal Based Standards.
2-A11-Annex1	Example of Welder's Qualification Certificate	To add Goal Based Standards and other clarifications.
2-A12-1	Comparison of Existing Materials and Welding Rules vs. 2018 Materials and Welding Rules	To delete cross-reference table.

EFFECTIVE DATE 1 January 2024 – shown as (2024)
(based on the contract date for new construction between builder and Owner)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 3	Hull Construction and Equipment	
3-1-1	Definitions	To add Goal Based Standards and other clarifications.
3-1-2	General Requirements	To add Goal Based Standards and other clarifications and to clarify the requirements for material and structure details, add requirements for certification of gangways and accommodation ladders and pilot ladders and to add the new Subsection for foundations and supporting structures.
3-2-1	Longitudinal Strength	To add Goal Based Standards and other clarifications and to delete 3-2-1/3.1, C1 for OSVs.
3-2-1/7.5	Longitudinal Strength	This PRC adds a reference of the notation LSC for loading and stability computer software (LSC), and LSC(DC) for LSC equipped with damage control.

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
3-2-2	Shell Plating	To add Goal Based Standards and other clarifications and to add detailed requirements for bilge keels.
3-2-3	Decks	To add Goal Based Standards and other clarifications.
3-2-4	Bottom Structures	To add Goal Based Standards and other clarifications and to clarify the requirements for double bottom depth based on SOLAS and MARPOL and refine the requirements.
3-2-5	Frames	To add Goal Based Standards and other clarifications and to provide the requirements for longitudinal frames forward of 0.75L from AP and add the Q factor for section modulus calculation of side frames when using high tensile material.
3-2-6	Web Frames and Side Stringers	To add Goal Based Standards and other clarifications and to align applicability of 3-2-6/11 “Vessels Subject to Impact Loads” with the text of 3-2-2/3.11 “Side Fenders”
3-2-7	Beams and Longitudinals	To add Goal Based Standards and other clarifications and to update 3-2-7/1.3 to primarily address longitudinally framed vessels
3-2-8	Pillars, Deck Girders, and Transverses	To add Goal Based Standards and other clarifications and to update n factor in 3-2-8/3.3: to 7.01, consistent with the cargo load density described in this sub-section and the design head "h" used in other equations.
3-2-9	Watertight Bulkheads and Doors	To add Goal Based Standards and other clarifications and to incorporate revision of IACS UI SC156.
3-2-10	Deep Tanks	To add Goal Based Standards and other clarifications and to add section modulus requirements for girders and webs of higher-strength material.
3-2-11	Superstructures, Deckhouses and Helicopter Decks	To add Goal Based Standards and other clarifications and to indicate requirements for side plating of deckhouse and arrangement of web frames or bulkheads, to make the requirement consistent with spacing and span of the stiffeners, to add considerations for alternative technical assessment, to add 3-2-11/3.5.1 OSV, to add applicability of alternative end connection arrangement indicated for OSV to other types of vessels, and to add definition of helicopter length in accordance with ICLL and IACS UR S3.
3-2-12	Machinery Space and Tunnel	To add Goal Based Standards and other clarifications.
3-2-13	Stems, Stern Frames, Rudder Horns, and Propeller Nozzles	To add Goal Based Standards and other clarifications and to add specific requirement for heavy plate floor thickness in way of the rudder horn and formula for heavy shell plates.
3-2-14	Rudders and Steering Equipment	To add Goal Based Standards and other clarifications and to add formulas for deep tanks, SM of steering nozzle, thickness of internal diaphragms, SM of azimuthal thruster nozzle, pod stiffeners, thickness of girders/hull supports, to include cross-referenced tables, and to allow consideration of direct calculations/FEM analysis developed by the manufacturer in accordance with 3-2-2/20 for pod stiffeners.
3-2-15	Protection of Deck Openings	To add Goal Based Standards and other clarifications, to align with UR S21A. Rev.1, Corr.2, to add the application scope for each type of protection to deck openings, to indicate that the coaming stiffening requirements in this section are not applicable to the coamings in 3-2-15/9, to delete the wording of special consideration for coamings other than stiffened by longitudinals and add a Commentary on how to accept coamings with vertical stiffeners, to delete the minimum pressure for position 1 and position 2 because these pressures are always less than those in 3-2-15/3.3, to add equivalent material for wedge and two layers of tarpaulin in accordance with Reg.15.(10) and (11) of ICLL, and to add requirements for hatchways closed by covers of steel and fitted with gaskets and clamping devices for spaces other than cargo holds.
3-2-16	Protection of Shell Openings	To add Goal Based Standards and other clarifications and to align with ICLL and IACS UR S8 and S9.

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3-2-17	Bulwarks, Rails, Freeing Ports, Portlights, Ventilator, Tank Vents and Overflows	To add Goal Based Standards and other clarifications, merge bulwark requirements for SVR/OSV/U90m Rules, consolidate freeing ports requirements for all vessels and provide detail guidance in calculation of freeing port area, change wording of “Portlight” to “Sidescuttle”, consolidate windows and deadlights requirements for all vessels, add skylight and viewing port requirements, and relocate windows standards from 5C-7-A2.
3-2-18	Ceiling, Sparring, and Protection of Steel	To add Goal Based Standards and other clarifications and to clarify requirement for general cargo vessel when loading cargo through cargo hatch, to keep minimum rule requirement for old practice, and to add commentary on tanks occasionally used for ballast.
3-2-19	Weld Design	To add Goal Based Standards and other clarifications and to remove duplicate requirements for selection of electrodes or welding procedure, to combine all end connections and intersections of intermittent welding with unifying the required length of double continuous welding to the depth of the member, and incorporate CSR requirements of dimension of partial penetration weld and welding at opposite side of bevel.
3-2-20	Guidance on Finite Element Analysis	To add Goal Based Standards and other clarifications and to update and clarify modelling and analysis procedures.
3-2-A1	Calculation of Shear Stresses for Vessels Having Longitudinal Bulkheads	To add Goal Based Standards and other clarifications and to update and clarify modelling and analysis procedures.
3-2-A2	Loading Manuals and Loading Instruments	To add Goal Based Standards and other clarifications and to add the length of less than 90 m for Category II vessels for which loading manual is not required according to IACS UR S1.2.1.
3-2-A2/9.3 and 11	Intact Stability Requirements for Offshore Support Vessels	This PRC moves the survey requirements of loading instrument to the chapters of initial survey and survey after construction.
3-2-A3	Loading Manuals and Loading Instruments: Additional Requirements for Bulk Carriers, Ore Carriers and Combination Carriers 150 Meters (492 Feet) and above in Length (Lf)	To add Goal Based Standards and other clarifications.
3-2-A4	Buckling Strength of Longitudinal Strength Members for Vessels Over 61 m (200 ft) in Length	To add Goal Based Standards and other clarifications.
3-2-A5	Guidelines for Calculating Bending Moment and Shear Force in Rudders and Rudder Stocks	To add Goal Based Standards and other clarifications.
3-2-A6	Portable Beams and Hatch Cover Stiffeners of Variable Cross Section	To add updated figure.
3-2-A7	Ice Operation	To remove Appendix since it has become very dated and has many errors/outdated information.
3-2-A8	Review of Temporary Industrial Equipment and Modules	To add Goal Based Standards and other clarifications.
3-3-1	General Requirements	To add Goal Based Standards and other clarifications, incorporate recent SOLAS amendments, incorporate the requirements of IMO MSC..1/Circ.1570, add Commentary to address known weights. add Commentary with references, and to add Commentary of ABS practice and figures.
3-3-1/19	General Requirements	This PRC adds a notation LSC for vessels with loading and stability computer software, and LSC(DC) for those additionally equipped with damage control.
3-3-A1	Intact Stability of Tankers During Liquid Transfer Operations	To add Goal Based Standards and other clarifications.
3-3-A2/1	Intact Stability Requirements for Offshore Support Vessels	To add Goal Based Standards.

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3-3-A3	Intact Stability Requirements for Fishing Vessels Under 90 Meters (295 Feet)	To add Goal Based Standards and other clarifications and to align with IMO Code on Intact Stability 2008 as amended and provide explanations in accordance with the Final Act of the International Conference on Safety of Fishing Vessels, 1993 by MSC 92/11/1.
3-3-A4	Subdivision and Damage Stability Requirements for Bulk Carriers	To add Goal Based Standards and other clarifications.
3-3-A5	Damage Stability Requirements for Offshore Supply Vessels	To add Goal Based Standards and other clarifications.
3-3-A6	Damage Stability Requirements for Fishing Vessels	To add Goal Based Standards and other clarifications.
3-3-A7	Onboard Computers for Stability Calculations	To add Goal Based Standards and other clarifications and to make reference to IACS UR L5 and add reference to ABS Letters to Owners of new and existing tankers.
3-3-A7/15 and 17	Computer Software for Onboard Stability Calculations	This PRC moves the survey requirements of stability computer software to the chapters of initial survey and survey after construction.
3-4-1	Fire Protection, Detection, and Extinction	To add Goal Based Standards and other clarifications and to introduce SFP requirements for non-SOLAS vessels.
3-4-A1	Fiber Reinforced Plastic (FRP) Gratings	To add Goal Based Standards and other clarifications.
3-5-1	Anchoring, Mooring, and Towing Equipment	To add Goal Based Standards and other clarifications and to reduce length from 90 to 40m for vessels allowed to use winches for anchoring and align with IACS, indicate mandatory notation RW, indicate optional requirements, not required as a condition of classification, indicate mandatory requirement for vessels required to comply with SOLAS, and add Commentary for compliance with SOLAS safe mooring requirements for vessels constructed after 1 January 2024.
3-5-2	Mooring of Oil Carriers at Single Point Moorings	To add Goal Based Standards and other clarifications.
3-5-3	Equipment without the Symbol (E)	To indicate whether the notation is optional and other clarifications.
3-6-1	Visibility	To add Goal Based Standards and other clarifications and to add Figure 1A to clarify angles of obstruction and min. angle between obstructions.
3-7-1	Tank, Bulkhead and Rudder Tightness Testing	To add Goal Based Standards and other clarifications and to align with IACS UR S14.
3-7-2	Trials	To add Goal Based Standards and other clarifications.
3-7-3/7	Surveys	This PRC moves the survey requirements of loading instrument and stability computer software from 3-2-A2 and 3-3-A7 to 3-7-3.
PART 4	Vessel Systems and Machinery	
4-1-1	Classification of Machinery	To add Goal Based Standards and other clarifications and to add design principles, document submission requirements for repair and modification of machinery, considerations for machinery vibrations, and plastic fittings (Table 6).
4-2-1	Internal Combustion Engines	To add Goal Based Standards and other clarifications and specify that the achievable engine continuous output is to be determined by the engine designer in the case of turbocharger damage for single main propulsion engines with one turbocharger with the rotor blocked or removed or with two or more turbochargers with one turbocharger shut off.
4-2-1-A1	Documentation for the approval of internal combustion engines	To make minor revisions and updates for clarity.
4-2-1-A2	Type Testing Procedure for Crankcase Explosion Relief Valves	To make minor revisions and updates for clarity.
4-2-1-A3	Type Testing Procedure for Crankcase Oil Mist Detection and Alarm Equipment	To add Goal Based Standards and other clarifications.
4-2-1-A4	Crankshaft Strength Calculations	To align with current ABS practice and other clarifications.

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4-2-1-A7	Alternative Method for Calculation of Stress Concentration Factors in the Web Fillet Radii of Crankshafts by Utilizing Finite Element Method	To make minor revisions and updates for clarity.
4-2-1-A8	Guidance for Evaluation of Fatigue Tests	To align with current ABS practice and other clarifications.
4-2-1-A9	Guidance for Calculation of Surface Treated Fillets and Oil Bore Outlets	To add Goal Based Standards and other clarifications and to align with IACS UR M53.
4-2-1-A10	Guidance for Calculation of SCFs	To make minor revisions and updates for clarity.
4-2-1-A11	Guidance for Spare Parts	To clearly state that availability of spare parts is to be considered and decided by the owners.
4-2-2	Turbochargers	To add Goal Based Standards and other clarifications.
4-2-3	Gas Turbines	To add Goal Based Standards and other clarifications and to update requirements for designing the shafts, supports, combustors, and fire extinguishing systems and specify that it is the responsibility of the designer or manufacturer to take into consideration the different modes of vibrations in the evaluation of the shafting system.
4-2-3-A1	Plans and Data for Gas Turbines	To delete Appendix 4-2-3A1 since the content is incorporated in Section 4-2-3.
4-2-4	Steam Turbines	To add Goal Based Standards and other clarifications.
4-3-1	Gears	To add Goal Based Standards and other clarifications.
4-3-1-A1/1 to 21	Rating of Cylindrical and Bevel Gears	To make minor revisions and updates for clarity.
4-3-1-A1/23	Rating of Cylindrical and Bevel Gears	To make minor revisions and updates for clarity.
4-3-2	Propulsion Shafting	To add Goal Based Standards and other clarifications and to simplify definition of shaft diameter to be used in coupling bolt diameter calculations and add the prescriptive requirements for the multi-slope design greater than double in the stern tube bearing.
4-3-2-A1	Special Approval of Alloy Steel Used for Intermediate Shaft Material	To clarify items regarding cleanliness of steel and reference to the acceptance criteria in ISO 1647 and other clarification in line with IACS UR M68.
4-3-3	Propellers	To add Goal Based Standards and other clarifications.
4-3-4	Steering Gears	To add Goal Based Standards and other clarifications and to change "maximum continuous rated shaft rpm" to "maximum ahead service speed" to align with IACS UI SC 246.
4-3-5	Thrusters	To add Goal Based Standards and other clarifications.
4-3-6	Waterjets	To add Goal Based Standards and other clarifications and to add design criteria, and control and instrumentation requirements for waterjets.
4-3-7	Propulsion Redundancy	To add Goal Based Standards and other clarifications.
4-3-8	Podded Propulsion Units	To add Goal Based Standards and other clarifications and to provide requirements for multiple podded thruster installations where each thruster is provided with one cooling fan (i.e., no redundancy).
4-3-9	Contra-Rotating Propellers	To add Goal Based Standards and other clarifications.
4-4-1	Boilers and Pressure Vessels and Fired Equipment	To add Goal Based Standards and other clarifications and to incorporate recognized standards for Plate Heat Exchanger and updated recognized standards and codes in 4-4-1/1.5, clarify sufficient corrosion allowance, and update in line with latest ASME BPVC.
4-4-1-A1	Rules for Design	To incorporate changes in accordance with 2021 ASME BPVC Section I, II and VIII Div 1, cover openings exempted from reinforcement beyond those in definite pattern, and insert missing row for ABS Grade MA.
4-5-1	Anchor Windlass	To add Goal Based Standards and other clarifications.
4-6-1	General Provisions	To add objective and other clarifications.

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4-6-2	Metallic Piping	To add Goal Based Standards and other clarifications and to add Note regarding prototype tests of flexible hoses from IACS UR P2, changed denominator in formula for permissible stress from rupture stress in 100,000 hours from 1.8 to 1.6 as per IACS UR P1 , and to add Commentaries to explain where rupture stress values may be obtained and to suggest the factors to consider when connecting overboard discharges.
4-6-3	Plastic Piping	To add Goal Based Standards and other clarifications and to align with IACS UR P4 and IMO Resolution. A.753(18), as amended by IMO Resolutions. MSC.313(88) and IMO Res. MSC.399(95).
4-6-4	Ship Piping Systems and Tanks	To add Goal Based Standards and other clarifications and to add requirements from MSC.1/Circ.1534 from benchmarking exercise and revise per IACS UR P3 Rev. 5 (Apr. 2021).
4-6-4/19	Ship Piping Systems and Tanks	Optional FTS notation is created to provide additional reliability and redundancy features above the requirements already in MVR for the fuel treatment and supply systems on the vessel using residual fuel.
4-6-5	Piping Systems for Internal Combustion Engines	To add Goal Based Standards and other clarifications and to add requirements for fuel oil piping system cleanliness and for lubricating oil piping system cleanliness, and to reflect the industry practice of 12 consecutive starts of propulsion engines for multi-propulsion installation.
4-6-6	Piping Systems for Steam Plants	To add Goal Based Standards and other clarifications and to add Commentaries in 4-6-6/3.7 to refer to ASME B31.1 for stress calculations, clarify fuel oil requirements for boilers not used for propulsion or power generation and boilers not related to safety function of the vessel, and to add Figure 1 to relate the requirements to a typical Steam and Condensate system.
4-6-7	Other Piping Systems	To add Goal Based Standards and other clarifications and to specify that split flanges are acceptable for internal hydraulic piping of thrusters subject to conditions and to delete the requirement to have pressure relief device for every cylinder of oxygen or acetylene.
4-7-1	General Provisions	To add Goal Based Standards and other clarifications and to add definitions based on SOLAS and IMO MSC/Circ.1120.
4-7-2	Provisions for Specific Spaces	To add Goal Based Standards and other clarifications and to add "oil fired equipment" which is to be covered by Local Application Water-based Fire Extinguishing Systems, revise some sentences to align with SOLAS and IMO MSC.1/Circ. 1276, and add requirements for spaces containing Lithium-ion(Li-ion) battery fire fighting systems based on the ABS "Requirements for Use of Lithium-ion Batteries in the Marine and Offshore Industries".
4-7-3	Fire-extinguishing Systems and Equipment	To add Goal Based Standards and other clarifications and to add requirements for Clean Agent Fire Extinguishing System per MSC/Cir.848, update requirements for Fixed Foam Fire Extinguishing Systems in accordance with the FSS Code, add explanation for wet/dry pipe sprinkler system in accordance with IMO Resolution A.800(19), add Commentary on IMO MSC.1/Circular 1556 interpretation, add requirements for special attention during installation of sprinkler piping per Resolution MSC.403(96), incorporate IMO Res. MSC.484(103), delete Passenger Vessel fire detection and alarm requirements since they are covered in 5C-7-6/5.3 to 5.9, and add definitions.
4-7-4	Requirements for Vessels Under 500 Gross Tons	To add Goal Based Standards and other clarifications and to add Table 1 to summarize requirements for fire main system based on gross tonnage exceeding 150, or at and below 150 and to refer to 5C-1-27 and 5C-1-29 for deck foam system and fixed fire extinguishing system since current wording has no specific prescriptive requirements.

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4-8-1	General Provisions	To add Goal Based Standards and other clarifications and to include enclosure protection rating of equipment in the arrangement drawing, add drawing submission for semiconductor convertors to the list, add harmonic analysis document submission, delete the sentence regarding drawing submissions as we no longer receive hard copies, and add definition of non-sparking fans based on IACS UR F29.
4-8-2	System Design	To add Goal Based Standards and other clarifications and to add requirement for Lithium-ion batteries to comply with the “Requirements for the Use of Lithium-ion Batteries in Marine and Offshore Industry” regardless of the capacity and add notes 9 and 10 in Table 1 regarding radio equipment as required by Chapter IV of SOLAS.
4-8-3	Electrical Equipment	To add Goal Based Standards and other clarifications and to align the Rule requirements with IEC 60092-302-2, Clause 8.210.2, add handrail requirements applicable to the equipment in association with the specific Class notation, be consistent with the MOU Rules, and add watertight door IP degree requirement in the Table 2 Notes.
4-8-4	Shipboard Installation and Tests	To add Goal Based Standards and other clarifications and to include the alternate arrangement of dead ship starting for vessels that are less than 500 gross tons and do not comply with SOLAS, provide clarification for ventilation requirement of battery room where low-hydrogen-emission (LHE) batteries are only installed, add requirement for ventilation for hazardous areas based on item 8.2.1 of the IEC 60092-502 (1999), add reference to hazardous areas related to hybrid electric power system, which may contain battery, supercapacitor and also fuel cell, update the hazardous area classification of miscellaneous spaces based on zone 1 and zone 2 concept, and update the acceptable certified safe equipment according to zone concept.
4-8-4-A1	Type Test Procedure for Plastic Cable Tray and Protective Casing	To add Goal Based Standards and other clarifications.
4-8-5	Special Systems	To add Goal Based Standards and other clarifications.
4-9-1	General Provisions	To make minor revisions and updates for clarity.
4-9-2	Essential Features Requirements	To add Goal Based Standards and other clarifications.
4-9-3	Computer-based Systems	To update 4-9-3 based on the latest draft of IACS UR E22, rev.3 and to move mandatory requirements from 4-9-3/A1 and A2 into the main section. 4-9-3/11 is moved to 4-9-2/17
4-9-3-A1	Definitions and Notes Relating to SDLC and Hardware Test and Evidence Documentation in 4-9-3/Tables 2 and 3	To merge the requirements in 4-9-3/A1 into Section 4-9-3 for clarity and delete the Appendix.
4-9-3-A2	On Board Use and Application of Computer-based systems	To move mandatory requirements from 4-9-3/A2 into Section 4-9-3 and delete the remaining repeated/superseded guidelines.
4-9-4	Integrated Automation System	To add Goal Based Standards and other clarifications.
4-9-5	ACC Notation	To add Goal Based Standards and other clarifications.
4-9-6	ACCU Notation	To add Goal Based Standards and other clarifications.
4-9-7	Vessels with Compact Propulsion Machinery Spaces	To add Goal Based Standards and other clarifications.
4-9-8	Special Systems	To add Goal Based Standards and other clarifications.
4-9-9	Equipment	To add Goal Based Standards and other clarifications and to align the Rules with the changes in handrail requirements for control panels of equipment for essential and emergency services in MVR 4-8-3/1.15 and add prototype test requirement for instrumentation used in Cat II and III computer-based systems.
4-9-10	Installation, Tests and Trials	To add Goal Based Standards and other clarifications.
4-9-11	Vessels Less Than 500 GT Having a Length Equal to or Greater Than 20 m (65 ft)	To add Goal Based Standards and other clarifications.

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4-9-12	Towing Vessels Less Than 500 GT Having a Length Equal or Greater Than 20 m (65 ft) and Equal or Less than 46 m (150 ft) Classed with ABCU-H Notation	To add Goal Based Standards and other clarifications and to add prototype test requirement for instrumentation used in Category II and III computer-based systems.
PART 5C	Specific Vessel Types	
5C-1-7	Cargo Oil and Associated Systems	To add Goal Based Standards and other clarifications and to update and add new definitions, to add requirements for corrosion resistant flame screen for thermal oil expansion tank, vapor emission control instruction manual is to be placed on board, to delete requirements for Cargo Pump Room Ventilation and omission of dampers on emergency intakes, to align requirements with latest FSS Code, and to indicate that non-return valve is required on the cargo main side for the arrangement of the spool piece.
5C-2-1	Introduction	To add Goal Based Standards and other clarifications and to make consistent with Reg.27 of ICLL 1966 as amended, add MARPOL Annex 1 Regulation 12A and 22 for fuel oil tank protection and cargo pump room protection, and incorporate ABS interpretation about the acceptable arrangement for separation of cargo oil tanks and the pump room recess into category A machinery space.
5C-2-2	Hull Structure	To add Goal Based Standards and other clarifications and to clarify acceptable engineering analysis methods for deep supporting members.
5C-2-A1	Hull Girder Shear Strength for Tankers	To delete Appendix 5C-2-A1 since it is not an acceptable arrangement for oil tankers required to be double hull and double bottom.
5C-3-7	Cargo Safety and Vessel Systems	To add Goal Based Standards and other clarifications and to indicate class notation as mandatory and update list of cargoes in accordance with MSC.1/Circ.1395 rev.4.
5C-4-1	Introduction	To add Goal Based Standards and other clarifications and to add requirements for oil fuel tank protection in line with MARPOL Annex I, Reg.12A, add requirements for means of access in structures in line with SOLAS Ch.II-1, Reg.3-6, and add requirements for loading instrument in line with 3-2-A2/9 and SOLAS Ch.XII/Reg.11.
5C-4-2	Hull Structure	To add Goal Based Standards and other clarifications and to clarify the requirements for inner bottom reinforcement due to loading of ore or heavy bulk cargo and hatch covers of cargo hold carrying ballast water or other liquids according to SVR 2004, and to add requirements for lower stool plating due to grab handling according to MVR 3-2-4/9.5, sloping plate of lower wing tanker due to grab handling according to MVR 3-2-4/9.5, and requirements for structures beyond cargo spaces.
5C-5-7	Cargo Safety	To add Goal Based Standards and other clarifications and to indicate class notation as mandatory and change the text from SOLAS and IMO documents; and indicate in italics.
5C-6-1	Introduction	To add Goal Based Standards and other clarifications and to add 5C-6-1/Figure 1 for consistency with 5C-2-1 and to relocate 5C-6-1/1.5 to 5C-6-2.
5C-6-2	Hull Structure	To add Goal Based Standards and other clarifications and to relocate requirements for torsional boxes moved from 5C-6-1/1.5 to 5C-6-2/2.5, to provide requirements for consistent assessment of bottom supporting structures and guidance on the use of FEM analysis, to give specific design guidance in accordance with MSC/Circ.608/Rev. 01 "Interim Guidelines for Open-top Containerships".
5C-7-1	Introduction	To add Goal Based Standards and other clarifications, to clarify mandatory notations, delete the limitation of applicability of the Chapter based on the vessel length, and update definitions to align with other Rules.

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5C-7-2	Hull Structure	To add Goal Based Standards and other clarifications and to clarify scope of the section to be applicable to vessels over 61m (200 ft) of length, add minimum requirements for deck girders & transverses, and add considerations for bottom longitudinals.
5C-7-3	Subdivision and Stability	To add Goal Based Standards and other clarifications, to remove duplicate requirements, and to Incorporated recognized standards.
5C-7-3-A1	Onboard Computers for Stability Calculations	To consolidate the requirements for onboard stability programs into the Marine Vessel Rules.
5C-7-4	Structural Fire Protection	To add Goal Based Standards and other clarifications. and to italicize all IMO SOLAS and FSS Code direct text.
5C-7-5	Machinery Equipment and Systems	To add Goal Based Standards and other clarifications and to clarify that Part 4 of MVR is applicable and 5C-7-5 and 5C-7-6 are additional requirements for passenger vessels, to add steering gear capabilities required for passenger vessels with both traditional and non-traditional steering systems, and to delete paragraphs that have been shifted to functional requirements.
5C-7-5/25	Machinery Equipment and Systems	To create a new "SRtP" class notation for passenger vessel to cover the IMO circulars (e.g., MSC.1/Circ.1369, Interim explanatory notes for the assessment of passenger ship systems' capabilities after a fire or flooding casualty) and interpretations (e.g., MSC.1/Circ.1437, Unified interpretations of SOLAS Regulation II-2/21_Capabilities after a fire or flooding casualty) as well as the Class scope that covers the design verification and testing points of views.
5C-7-6	Fire Safety Systems	To add Goal Based Standards and other clarifications and to delete 5C-7-6/1.1.1 to 1.1.5 since they are covered by 4-7-1/9 and to add requirement for fixed local application firefighting system.
5C-7-7	Additional Notations	To add Goal Based Standards and other clarifications and to delete all notations except COMF/COMF+ which are related to the passenger vessel directly.
5C-7-A1	IMO Guidance for Structural Fire Protection	To add row 18 in the table to include IMO MSC.1/Circ. 1634.
5C-7-A2	International Standards for Windows	To consolidate requirements by referring to existing window construction requirements in 3-2-17/9.5.
5C-7-A3	Direct Calculations	To add new Appendix to relocate and consolidate requirements on direct calculations from 5C-7-2.
5C-8-1	General (ABS)	To add Goal Based Standards and other clarifications.
5C-8-2	Ship Survival Capability and Location of Cargo Tanks	To add source IMO documents and other clarifications and to incorporate the footnotes of IGC Code into the main text as mandatory in line with current practice.
5C-8-3	Ship Arrangements	To add ABS interpretation for air-locks and change some Rules and interpretations to Commentaries, incorporate Footnotes of IGC Code in main text, and add source IACS documents.
5C-8-4	Cargo Containment	To add Commentaries on the extent of the low temperature steel for deck plating and inner longitudinal bulkheads, etc. of Type A independent tanks, on heating systems for structures, to include interpretations by IACS UI GC 20, 21 and 13 and IMO MSC.1/Circ.1625, that the scantlings of Type A tanks should be determined in accordance with the "ABS Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks", clarify the ABS Interpretation that hull structures are not to be less than those required by 5C-12 for vessels (L ≥ 150m) or 5C-2 for vessels (L < 150 m) and delete ABS interpretation to 5-8-4/21.3.1 as it is included in the "ABS Guide for Building and Classing Liquefied Gas Carriers with Independent Tanks".
5C-8-5	Process Pressure Vessels and Liquid, Vapour, and Pressure Piping Systems	To add Goal Based Standards and other clarifications and to add Commentary to explain the non-applicability of this section and require the Surveyor's verification of the material for cargo pumps.
5C-8-6	Materials of Construction and Quality Control	To add the material test of cargo pump and other clarifications.

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5C-8-7	Cargo Pressure/Temperature Control	To add Commentary on boil-off handling.
5C-8-8	Vent Systems for Cargo Containment	To add IACS sources and Commentaries for clarification.
5C-8-9	Cargo Containment System Atmosphere Control	To add Goal Based Standards and other clarifications.
5C-8-10	Electrical Installations	To delete requirement for cables to be constructed in such a way as they will not act as a conduit for hazardous gas. gas leakage through cables is not likely and to delete requirement for cable glands which are addressed in other sections.
5C-8-11	Fire Protection and Extinction	To add Goal Based Standards and other clarifications and to delete interpretation 5C-8-11/3.2 (ABS) as ABS requirement is more stringent based on benchmarking study.
5C-8-12	Artificial Ventilation in the Cargo Area	To clarify the air change capacity for hold spaces containing independent tanks.
5C-8-13	Instrumentation and Automation Systems	To provide cross reference to Part 4, Chapter 9 for automation.
5C-8-14	Personnel Protection	To make minor revisions and updates for clarity.
5C-8-15	Filling Limits for Cargo Tanks	To make minor revisions and updates for clarity.
5C-8-16	Use of Cargo as Fuel	To update the scope of FMEA.
5C-8-17	Special Requirements	To align the Rules with the IGC Code.
5C-8-18	Operating Requirements	To add IACS sources and make minor revisions and updates for clarity and to add requirements for when an ESD valve is actuated by hydraulic or pneumatic system.
5C-8-19	Summary of Minimum Requirements	To align the Rules with the IGC Code.
5C-8-A1	Guidelines for the Uniform Application of the Survival Requirements of the Bulk Chemical Code and the Gas Carrier Code	To add reference to IACS Rec 110 & IMO Circular MSC.1/CIRC.1461 and to revise paragraph numbering of 5C-8-A1/2.4: in accordance with MSC. Circ 406.
5C-8-A3	Non-Metallic Materials	To align the Rules with the IGC Code.
5C-8-A4/4.6, 5.1	Standard for the Use of Limit State Methodologies in the Design of Cargo Containment Systems of Novel Configuration	To align the Rules with the IGC Code.
5C-8-A5	Reliquefaction System (ABS)	To add Goal Based Standards and other clarifications and to indicate the document type: Review (R), Information (I) and Kept onboard (OB), add Figure of BOG reliquefaction process for better understanding, and clarify Anti Surge requirements.
5C-8-A6	Gas Combustion Units/Thermal Oxidizers (ABS)	To add Goal Based Standards and other clarifications.
5C-8-A7	Dual Fuel Diesel and Single Gas Fuel Engines (ABS)	To add Goal Based Standards and other clarifications and to add definition of double block and bleed valve, annotate plans and data to indicate for review or for information, specify that double block and bleed valves are to be in accordance with corresponding requirements in Chapters 5C-8 or 5C-13.
5C-8-A8	Dual Fuel Gas Turbine Propulsion System	To add Goal Based Standards and other clarifications and to add automatic shut off of the individual gas valve in the event of gas turbine exhaust temperature high-high in Table 1 in accordance with 5C-8-16/8.3.2 and 4-2-3/7.7.2.
5C-9-1	General	To add Goal Based Standards and other clarifications and to align required thickness of stainless steel plate with current ABS practice.
5C-9-2	Ship Survival Capability and Location of Cargo Tanks	To delete the obsolete paragraph (IMO Res. MSC.176(70)) and to add IACS UI CC7.
5C-9-3	Ship Arrangements	To add IMO/IACS document references for clarity and to delete the obsolete paragraph (IMO Res. MSC.176(70)).
5C-9-4	Cargo Containment	To add Goal Based Standards.
5C-9-5	Cargo Transfer	To add IMO/IACS document references for clarity and to delete the obsolete paragraph (IMO Res. MSC.176(70)).

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5C-9-6	Materials of Construction, Protective Linings and Coatings	To delete the obsolete paragraph (IMO Res. MSC.176(70)).
5C-9-7	Cargo Temperature Control	To delete the obsolete paragraph (IMO Res. MSC.176(70)).
5C-9-8	Cargo Tank Venting and Gas-Freeing Arrangements	To delete the obsolete paragraph (IMO Res. MSC.176(70)) and to add new Subsection "Cargo Tank Purging" in accordance with IBC Code 2020 consolidated edition.
5C-9-9	Environmental Control	To add IMO/IACS document references for clarity and to delete the obsolete paragraph (IMO Res. MSC.176(70)).
5C-9-10	Electrical Installations	To delete the obsolete paragraph (IMO Res. MSC.176(70)) and to add IACS UI number for clarity.
5C-9-11/1, 2, 3, 4	Fire Protection and Fire Extinction	To add IACS UI numbers for clarity, deleted the obsolete paragraph (IMO Res. MSC.176(70)), add 5C-9-11/1.4 in accordance with IBC Code 2020 edition, and correct 5C-9-11/2.1 in accordance with IBC Code 2020 edition.
5C-9-12	Mechanical Ventilation in the Cargo Area	To delete the obsolete paragraph (IMO Res. MSC.176(70)) and to add IACS UI numbers for clarity.
5C-9-13/1, 2	Instrumentation	To add IACS UI numbers for clarity, delete the obsolete paragraph (IMO Res. MSC.176(70)), and add 5C-9-13/1.1.3 in accordance with IBC Code 2020 edition.
5C-9-14/1, 2, 3	Personnel Protection	To delete the obsolete paragraph (IMO Res. MSC.176(70)) and to add IACS UI number for clarity.
5C-9-15	Special Requirements	To add IACS and IMO references for clarity and renumber based on IBC Code 2020 Edition.
5C-9-16	Operational Requirements	To add IACS and IMO references for clarity and renumber based on IBC Code 2020 Edition.
5C-9-17	Summary of Minimum Requirements	To add IACS and IMO references for clarity and renumber based on IBC Code 2020 Edition.
5C-9-18	List of Chemicals to Which the Code Does Not Apply	To delete the obsolete paragraph (IMO Res. MSC.MSC.340(91)).
5C-9-19	Index of Products Carried in Bulk	To delete the obsolete paragraph (IMO Res. MSC.MSC.340(91)).
5C-9-20	Transport of Liquid Chemical Wastes	To delete the obsolete paragraph (IMO Res. MSC.176(70)).
5C-9-21	Criteria for Assigning Carriage Requirements for Products Subject to the IBC Code	To delete the obsolete paragraph (IMO Res. MSC.176(70)).
5C-9-A1	Guidelines for the Uniform Application of the Survival Requirements of the Bulk Chemical Code and the Gas Carrier Code	To clarify IMO requirements references and application.
5C-9-A2	Calculation of the Capacity of Foam Systems for Chemical Tankers	To add comparison table of two examples and Commentary on Engineering Software.
5C-9-A3	Resolution A.567(14)	To add Commentaries for clarity.
5C-10-1	Introduction	To add the application scope of the requirements Part 3 and 5C-10 for vehicle carriers, clarify notations as mandatory or optional, clarify the area percentage of openings in sides and above deck for open ro-ro space in accordance with SOLAS Reg.II-2/3.35, and clarify special category space which can be accommodated on more than one deck and its conditions according to SOLAS Reg.II-2/3.46.
5C-10-2	Vehicle Carrier	To add Goal Based Standards and other clarifications and to clarify the parameters used for wave-induced bending moment and shear force due to bow flare slamming, clarify the maximum racking conditions used for transverse strength calculation, clarify the cargo gear certification for ramps, require loading and unloading information be available to operating personnel, add requirements for securing and supporting structures of retractable decks, and clarify the requirements in way of intersections of girders and transverses.

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5C-10-3	Vehicle Passenger Ferry	To add Goal Based Standards and other clarifications and to clarify the requirements for decks and their supporting structures used for the transport railroad cars.
5C-10-4	Cargo Safety	To add Goal Based Standards and other clarifications.
5C-11-1	Introduction	To add Goal Based Standards and other clarifications and to incorporate application to vessels for carriage of other liquids cargoes that are not oil, petroleum in any form, of chemical in bulk.
5C-11-2	General Requirements	To add Goal Based Standards and other clarifications and to define structural requirements for vessels under 150 meters and for vessel of more than 150 meters, clarify required engineering analysis based on the length of the vessels, and align with Reg.27 of ICLL 1966 as amended.
5C-11-3	Hull Structure	To add Goal Based Standards and other clarifications and to clarify acceptable engineering analysis methods for deep supporting members for vessels under 150 meters in length, add acceptable engineering analysis for vessel of 150 meters or more in length, and clarify acceptable engineering analysis methods for deep supporting members.
5C-11-A1	Hull Girder Shear Strength for Tankers	To add Goal Based Standards and other clarifications.
5C-13-1	General (ABS)	To add Goal Based Standards and other clarifications.
5C-13-2	General	To add Figure showing the application of Rules for Low Flash Point Fuels, add IACS sources, incorporate IGF Code 2.2.42 revised by IMO MSC.458(101), and indicate IMO Guidelines for alternative designs MSC.1/Circ.1212 and MSC.1/Circ.1455.
5C-13-3	Goal and Functional Requirements	To delete statement, "Operational, training, or national requirements are shown in Arial Italic." as it is not applicable.
5C-13-4	General Requirements	To replace Part A1 which refers to IGF Code Chapter 5 to 15 with "Sections 5C-13-5 to 5C-13-15" and to add references to "ABS Guidance Notes for Gas Dispersion Analysis" and "ABS Guidance Notes for FMEA".
5C-13-5	Ship Design and Arrangement	To align definition of fv with IGF Code 5.3.4.2 as amended by IMO Res. MSC.458(101).
5C-13-6	Fuel Containment System	To incorporate IGF Code 6.8.3 revised by IMO Res. MSC.458(101) and general updates for clarity.
5C-13-6-A2	Reliquefaction Systems (ABS)	To add Goal Based Standards and other clarifications.
5C-13-6-A3	Gas Combustion Units (ABS)	To add Goal Based Standards and other clarifications.
5C-13-7	Material and General Pipe Design	To add definition of design pressure (P0) and other clarifications.
5C-13-8	Bunkering	To delete that testing procedures are only to be submitted for survey verification, clarify the scope of testing procedure during sea/gas trial, indicate the document type: Review (R), Information (I) and Kept Onboard (OB), and add IACS UI number for clarity.
5C-13-9	Fuel Supply to Consumers	To add Goal Based Standards and other clarifications and to incorporate IGF Code 9.5.3, 9.5.4, 9.5.4 and 9.5.6 added by IMO Res. MSC.458(101), add list of systems/subsystems to the submittal items, update the scope of the FMEA submission, and clarify scope of testing procedures.
5C-13-10	Power Generation Including Propulsion and other Gas Consumers	To make minor revisions and updates for clarity and to clarify scope of FMEA submission and scope of testing procedures for sea/gas trials and to incorporate IGF Code 10.3.1.1.1 per IMO Res. MSC.458(101).
5C-13-10/3.2.4 (ABS)	Power Generation Including Propulsion and other Gas Consumers	To clarify and address high pressure DFD engine testing in gas mode during sea trials.
5C-13-10-A1	Dual Fuel Gas Turbine Propulsion System (ABS)	To add Goal Based Standards and other clarifications.
5C-13-11	Fire Safety	To incorporate IGF Code 11.3.3 and 11.3.3.1 as revised and added by IMO Res. MSC.458(101) and to add new Subsection based on MO Res. MSC.475(102).

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
5C-13-11/3.1	Fire Safety	To implement IACS UI GF13 REV.1 MAY 2023.
5C-13-12	Explosion Prevention	To make minor revisions and updates for clarity.
5C-13-13	Ventilation	To add IACS sources and make minor revisions and updates for clarity.
5C-13-14	Electrical Installations	To clarify requirements on electrical equipment earthing.
5C-13-15	Control, Monitoring and Safety Systems	To delete requirement of gas detection above 60% LEL as there is an existing requirement on “above 40% LEL”, clarify anti surge requirements, and provide cross reference to Sections 4-9-3 and 4-9-4 for computer-based systems requirements.
5C-13-16	Manufacture, Workmanship and Testing	To provide for guidance on applicable recognized standards and to align with MSC.475(102).
5C-13-17	Drills and Emergency Exercises	To make minor revisions and updates for clarity.
5C-13-18	Operation	To make minor revisions and updates for clarity.
5C-13-19	Training	To make minor revisions and updates for clarity.
5C-14-1	Fire Fighting Vessels	To add Goal Based Standards and other clarifications.
5C-15-1	Oil Recovery Vessels	To add Goal Based Standards and other clarifications.
5C-16-1	Escort Vessels	To add Goal Based Standards and other clarifications.
5C-17-1	General	To add Goal Based Standards and other clarifications and to clarify the requirements for multi-purpose towing vessels and change the quick release device for towing line or towing winch as mandatory requirements according to Chapter 2, 2.4.3.4 and 2.8.5.3 of Intact Stability Code as amended by IMO Res. MSC.415(97).
5C-17-2	Stability	To add Goal Based Standards and other clarifications and to add the subdivision and damage stability requirements for towing vessels of 80 m in freeboard length or above and add loading conditions for towing vessels.
5C-17-3	Towing Gear	To add Goal Based Standards.
5C-17-4	Vessel Design	To add Goal Based Standards.
5C-17-5	Equipment	To clarify the equipment requirements for towing vessels.
5C-17-6	Tests	To clarify that Quick Release notation is mandatory.
5C-17-A1	Intact Stability Guidelines for Towing Vessels	To delete Appendix 5C-17-A1, since the intact stability criteria of towing vessels is available in 3-3-1 and 3-3-A2/1, 3, 9 and 15, which are referred to in 5C-17-2.
5C-18-1	General	To add Goal Based Standards and other clarifications.
5C-18-2	Vessel Design	To add Goal Based Standards and other clarifications.
5C-18-3	Subdivision and Stability - General	To add Goal Based Standards and other clarifications.
5C-18-4	Equipment	To add Goal Based Standards and other clarifications.
5C-18-5	Machinery Equipment and Systems	To add Goal Based Standards and other clarifications and to add requirements for high level bilge alarms in the engine room and a general alarm for all fishing vessels no matter the tonnage.
5C-18-6	Ammonia Refrigeration Systems	To add Goal Based Standards and other clarifications and to require that refrigerating plant automation stop and activation of gas evacuation are to be when ammonia concentration exceeds 300 ppm (not 300), in accordance with 5C-18-6/3.15.2.
5C-18-7	Safety Requirements	To add Goal Based Standards and other clarifications.
5C-18-A1	Appendix 1	To add Goal Based Standards and other clarifications.
5C-19-1	Introduction	To add Goal Based Standards and other clarifications and to clarify that the Box Shaped Bulk Carrier requirement is mandatory for box shape vessels primarily designed to carry dry cargoes in bulk and add hull girder torsional strength requirements.
5C-19-2	Hull Structure	To add Goal Based Standards and other clarifications and to specify that side girders double bottom side girders are to be spaced every 3 m and that vessels that carry liquid in cargo holds are to have adequate strength against sloshing loads.

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5C-20-1	General	To add new requirements for general dry cargo vessels.
5C-21-1	General	To add new requirements for crane vessels.
5C-21-2	Vessel Design and Equipment	To add new requirements for crane vessels.
5C-22-1	Anchor Handling Vessels	To reinstate the "Anchor Handling Vessel" notation for vessels other than OSVs and add requirements for damage stability for anchor handling tugs under 80 m in length and without the "Supply" notation.
5C-A1-3	Requirements for Building and Classing Vessels Under 90 m (295 ft) Intended for Service in Domestic Waters	To add Goal Based Standards and other clarifications.
PART 5D	Offshore Support Vessels for Specialized Services	
5D-1-1	General	To add Goal Based Standards and other clarifications and to update rule reference to ice class rules. since ice class rules have been overhauled, 6-1-4 and 6-1-5 removed, 6-1-6 updated and renumbered to 6-1-4.
5D-1-1/5.1	General	To clarify minimum requirements for OSVs in different services and remove requirement that vessels are to be assigned at least one specialized functional service.
5D-1-2	Special Purpose	To add Goal Based Standards and other clarifications and to add plans to be submitted, add commentaries based on IMO MSC.1/Circular 1422, include description of each regulation referred to for ease of use, and add list of IMO circulars for guidance regarding SRtP and Safety Center.
5D-1-3	Domestic Service	To require the notation for domestic service vessels to be mandatory.
5D-1-4	Strengthening for Heavy Cargoes	To add Goal Based Standards and other clarifications.
5D-2-1	General	To add Goal Based Standards and other clarifications and to add definitions and explain difference in scope between 5D-2-1, 5D-2-2 and 5D-2-3..
5D-2-2	Vessel Design	To add Goal Based Standards and other clarifications and to delete redundant paragraph in 5D-2-2/1.11 referring to CSS Code and CTUs Guidelines, because the same are referred in 5D-2-2/1.1, delete statement in 5D-2-2/3.1 that "there is no quantity limitation for carriage of drilling fluids, cargo fuel having a flash point not lower than 60°C and non-noxious liquid substances", specifying steel bulkheads and decks for segregation of machinery spaces and dry bulk cargo spaces, delete requirement in 5D-2-2/3.7 for coaming for accommodation, machinery, control and service spaces which exceeds OSV Chemical Code for HNLS since the cargoes are only non-HNLS for this section, and add Commentary regarding detachable connections of dry bulk cargo in machinery spaces.
5D-2-3	Carriage of Limited Amounts of Hazardous and Noxious Liquid Substances	To add Goal Based Standards and other clarifications\ and to incorporate OSV Chemical Code and new notation Supply-CHEM.
5D-2-3/3	Carriage of Limited Amounts of Hazardous and Noxious Liquid Substances	To clarify that either the HLNS or CHEM notation is mandatory since all requirements in this section are mandatory.
5D-3-1	General	To add Goal Based Standards and other clarifications and to change the quick release device for towing line or towing wire and emergency release system for towing winches as mandatory requirements for the vessels with the notation TOW, add the minimum requirements for OSVs without AH and TOW notations, and change BP(xx) notation as mandatory notation.
5D-3-1/3	General	To clarify that the TOW and AH notations are optional since the requirements cover industrial equipment outside the minimum scope of class.
5D-3-2	Stability	To add Goal Based Standards and other clarifications and to reference the intact stability criteria of anchoring handling and/or towing vessels is available in 3-3-1 and 3-3-A2/1, 3, 5, 7, 9, 13 and 15.

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5D-3-3	Vessel Design	To add Goal Based Standards and other clarifications and to change the recommendation of 25 mm for the reinforcement of working deck plating against heavy impact load and wear and tear to a requirement, and add criteria for supporting structures under securing fittings and under tugger winches and/or capstans used for shifting anchors/chains.
5D-3-4	Anchor Handling and Towing Gear	To add Goal Based Standards and other clarifications and to add Commentary for the applicability of the requirement for towing winch emergency release systems.
5D-3-5	Tests	To add Goal Based Standards and other clarifications.
5D-3-A1	Guidelines for Static Bollard Pull Test Procedure	To add Goal Based Standards and other clarifications.
5D-3-A2	Intact Stability Guidelines for Anchor Handling	To delete the section and make reference to 3-3-A2/13 instead.
5D-3-A3	Intact Stability Guidelines for Towing	To delete this section since the contents are already in 3-3-A2/15.
5D-4-1	General	To add Goal Based Standards and other clarifications and to clarify notations as mandatory or optional, add minimum requirements for OSVs with classification notation FF Capable, add requirements for FF Capable notation for aluminum hulls or deckhouse, and add minimum requirements for OSVs without Fire Fighting classification notations.
5D-4-1/3	General	To clarify that the FFV notations are optional and refer to the minimum requirements for vessels operating in this service.
5D-4-2	Seakeeping	To add Goal Based Standards and other clarifications.
5D-4-3	Fire Fighting Systems, Arrangements, and Equipment	To add Goal Based Standards and other clarifications and to add NPSH curve requirement to prevent NPSH issue, delete recommendation stating fire pump suction velocity to prevent cavitation, add commentary section on cavitation phenomenon, delete FFV3 since mobile high expansion foam generator requirement is already existing in Subsection 11, and add commentary for high expansion foam guidelines and Types of Foam Generators from NFPA 11.
5D-4-4	Structural Fire Protection	To add Goal Based Standards and other clarifications and to add basic requirements for FF Capable notation for aluminum hull or deckhouses.
5D-4-5	Tests and Surveys	To add Goal Based Standards and other clarifications.
5D-4-A1	Intact Stability Requirements for Fire Fighting Operations	To add Goal Based Standards and other clarifications.
5D-5-1	General Requirements	To add Goal Based Standards and other clarifications and to clarify notations as mandatory or optional, clarify documents to be submitted for ABS review, and add the minimum requirements for OSVs without DSV, ROV or DSV/ROV Capable notations.
5D-5-1/3	General Requirements	To clarify that the notations Diving Support Vessel (DSV) and Remote Operated Vessel (ROV) are optional since they cover industrial equipment beyond the minimum scope of class.
5D-5-2	Seakeeping	To add Goal Based Standards and other clarifications.
5D-5-3	Diving System Arrangement	To add Goal Based Standards and other clarifications.
5D-5-4	Remotely Operated Vehicles (ROVs) and Support System Arrangement	To add Goal Based Standards and other clarifications.
5D-5-5	Diving Support and/or ROV Capability	To add Goal Based Standards and other clarifications.
5D-5-6	Surveys, Inspections, and Tests	To add Goal Based Standards and other clarifications.
5D-6-1	General	To add Goal Based Standards and other clarifications and to add minimum requirements for vessels without oil spill recovery class notation and a decision making flowchart in selecting the appropriate Oil Spill Recovery notations.
5D-6-2	Definitions	To add Goal Based Standards and other clarifications and to add definition for oil skimming equipment.

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5D-6-3	Hull Construction	To add Goal Based Standards and other clarifications.
5D-6-4	Machinery Equipment and Systems	To add Goal Based Standards and other clarifications and to align with the general requirement of permanently installed equipment, reduce air changes to eight times since oil recovery function is used occasionally, to allow hazardous area classification based on recognized standards, and to clarify conditions upon which non-certified equipment in enclosed spaces should be shut down to prevent fire or explosion in line with IEC 60092-502.
5D-6-5	Oil Spill Recovery Capability	To add Goal Based Standards and other clarifications.
5D-6-6	Oil Spill Recovery Standby Class 2	To add Goal Based Standards and other clarifications.
5D-6-6/1	Oil Spill Recovery Standby Class 2	Update the OSR-S2 notation to be mandatory. All requirements in this section need to be met in order for a vessel to carry out this operation.
5D-6-7	Oil Spill Recovery Capability Class 2	To add Goal Based Standards and other clarifications.
5D-7-1	General	To add Goal Based Standards and other clarifications and to add minimum requirements for vessels without SSR notation.
5D-7-3	General Requirements	To add Goal Based Standards and other clarifications.
5D-7-4	Accommodations for Survivors	To add Goal Based Standards and other clarifications.
5D-7-5	Rescue and Safety Equipment	To add Goal Based Standards and other clarifications.
5D-7-6	Navigation and Communication Equipment	To add Goal Based Standards and other clarifications and to delete obsolete navigational equipment requirement in 5D-7-6/2.
5D-7-7	Surveys	To add Goal Based Standards and other clarifications.
5D-8-1	General	To add Goal Based Standards and other clarifications and to add the minimum requirements for OSVs without Pipe Lay notation.
5D-8-1/3	General	To clarify that the Pipe Lay notation is optional since it covers industrial equipment beyond the minimum class requirements.
5D-8-2	Seakeeping	To add Goal Based Standards and other clarifications and to add site specific station keeping and a Commentary to refer to Industry standards, incorporate the provisions of external force effects on DP capabilities defined in the DP Guide for pipelaying vessels and define documentation requirements, delete additional section for stability loading condition.
5D-8-3	Vessel Design and Arrangements	To add Goal Based Standards and other clarifications and to add provision for optional CRC notation.
5D-8-4	Pipe Laying Equipment and Systems	To add Goal Based Standards and other clarifications and to add Commentary on Abandonment and Recovery (A&R) system.
5D-8-5	Tests, Trials, and Surveys	To add Goal Based Standards and other clarifications.
5D-9-1	General	To add Goal Based Standards and other clarifications and to add the minimum requirements for vessels fitted with heavy lift crane and the notation OSV (Heavy Lift) is not requested.
5D-9-1/5	General	To clarify that the Heavy Lift notation is Optional since it covers industrial equipment beyond the minimum scope of class.
5D-9-2	Seakeeping	To add Goal Based Standards and other clarifications and to incorporate the provisions for external force effects of heavy lift on DP capability into MVR for heavy lift vessels and define the documentation requirements.
5D-9-3	Vessel Design and Equipment	To add Goal Based Standards and other clarifications and to remove reference to Appendix 5D-9-A1 for subsea lifting, since the entire Appendix 5D-9-A1 is proposed to be deleted, add alternative approach when the strong points are not situated on the crossings of bulkheads and web frames allowing use of direct strength analysis, add cross reference to MVR 3-2-20 for FEM analysis, and add buckling strength requirements.
5D-9-4	Tests, Trials, and Surveys	To add Goal Based Standards and other clarifications.

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5D-9-A1	Subsea Lifting	To remove the entire Appendix since for cranes engaged in subsea lifting, the certification of the crane is to be in accordance with the current ABS Guide for Certification of Lifting Appliances (LA Guide hereafter) as per 5D-9-3/5.
5D-10-1	General	To add Goal Based Standards and other clarifications.
5D-10-1/7	General	To clarify that this notation is optional since it covers industrial equipment beyond the minimum scope of class.
5D-10-2	Well Intervention Ready	To add Goal Based Standards and other clarifications.
5D-10-3	Well Intervention Systems Installation on Vessels Without Service Notation	To add Goal Based Standards and other clarifications.
5D-10-4	Well Intervention Vessels	To add Goal Based Standards and other clarifications.
5D-10-5	Well Intervention Equipment and Systems	To add Goal Based Standards and other clarifications.
5D-10-6	Surveys	To add Goal Based Standards and other clarifications.
5D-11-1	General	To add Goal Based Standards and other clarifications and to include the procedures for storage and handling fluids and dry additives as well as emergency shutdown and disconnection in the Operating Manual.
5D-11-1/7	General	Clarify that the WS notation is optional since it covers industrial equipment beyond the minimum class requirements.
5D-11-2	Seakeeping	To add Goal Based Standards and other clarifications and to permit pre-laid mooring equipment as an alternative to the Circle P Notation.
5D-11-3	Vessel Design	To add Goal Based Standards and other clarifications.
5D-11-4	Acid and Liquid Nitrogen Systems	To add Goal Based Standards and other clarifications and to add requirements for acid systems.
5D-11-5	Personnel and Fire Protection	To add Goal Based Standards and other clarifications.
5D-11-6	Well Stimulation Ready	To add Goal Based Standards and other clarifications.
5D-11-7	Well Stimulation System Installation on Vessels without Service Notation	To add Goal Based Standards and other clarifications.
5D-12-1	General	To add Goal Based Standards and other clarifications and to add new section on selection of class for consistency.
5D-12-1/7	General	Remove vague wording related to notations associated with the primary service of the vessel.
5D-12-2	Well Test Ready	To add Goal Based Standards and other clarifications.
5D-12-3	Well Test Systems Installation on Vessels without Well Test Notation	To add Goal Based Standards and other clarifications.
5D-12-4	Permanent Well Test Systems	To add Goal Based Standards and other clarifications and to add new section on Communication to be consistent with 5D-1 and 5D-11.
5D-12-6	Surveys	To add Goal Based Standards and other clarifications.
5D-13-1	General	To add Goal Based Standards and other clarifications and to add requirements for subsea service vessels without Escort Notation.
5D-13-1/3	General	To clarify that the Escort notation is optional because it covers industrial equipment beyond the minimum scope of class.
5D-13-2	Plans and Data	To add Goal Based Standards and other clarifications.
5D-13-3	Definitions	To add Goal Based Standards and other clarifications.
5D-13-4	Intact Stability	To add Goal Based Standards and other clarifications.
5D-13-5	Towing Gear	To add Goal Based Standards and other clarifications.
5D-13-8	Tests and Surveys	To add Goal Based Standards and other clarifications.
5D-14-1	General	To add Goal Based Standards and other clarifications and to add requirements for Wind Turbine Installation Maintenance and Repair Vessels without Wind-IMR Notation.
5D-14-1/5	General	To clarify that the Wind IMR notation is optional since it covers industrial equipment beyond the minimum scope of class.

Notices and General Information

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
5D-14-2	Vessel Design	To add Goal Based Standards and other clarifications.
5D-14-4	Tests, Trials, and Surveys	To add Goal Based Standards and other clarifications.
5D-15-1	General	To add Goal Based Standards and other clarifications and to add requirements for cable laying vessels without Cable Lay Notation.
5D-15-1	General	To clarify that the Cable Lay notation is optional since it covers industrial equipment beyond the minimum scope of class.
5D-15-2	Seakeeping	To add Goal Based Standards and other clarifications.
5D-15-3	Vessel Design and Arrangements	To add Goal Based Standards and other clarifications and to address the requirement for crane pedestal and supporting structure.
5D-15-4	Cable Laying Equipment and Systems	To add Goal Based Standards and other clarifications and to address Abandonment and Recovery System.
5D-15-5	Tests, Trials, and Surveys	To add Goal Based Standards and other clarifications.
5D-16-1	General	To add Goal Based Standards and other clarifications and to add requirements for subsea service vessels without Subsea Service Notation.
5D-16-1/5	General	Clarified that the Subsea Service Notation is optional since it includes industrial equipment beyond the minimum scope of class.
5D-16-2	Seakeeping	To add Goal Based Standards and other clarifications.
5D-16-3	Vessel Design and Equipment	To add Goal Based Standards and other clarifications.
5D-16-4	Supporting Machinery and Systems	To add Commentary regarding risk assessment to evaluate mitigation measures to reduce the risks associated with a sudden release of hook load in each heavy lifting operation.
5D-16-5	Tests, Trials and Surveys	To add Goal Based Standards and other clarifications.
PART 6	Specialized Items and Systems	
6-1-0 Foreword	Foreword	To align with ice class rules update and make changes to update the Foreword with recent changes.
6-1-1	Introduction	To add Goal Based Standards and other clarifications and to align with changes to Sections 6-1-4 to 6-1-6.
6-1-2	Structural Requirements for Polar Class Vessels	To add Goal Based Standards and other clarifications.
6-1-3	Machinery Requirements for Polar Class Vessels	To add Goal Based Standards and other clarifications and to remove formula in 6-1-3/9.9.1 for a force that is not used in the Rules and to update 6-1-3/Figure 1 to include non ramped loads.
6-1-4	Requirements for Enhanced Polar Class Notation	To delete Section 6-1-4 since the enhanced ice class rules have never been used.
6-1-5	SECTION 5 Requirements for Vessels Intended for Navigation in First-year Ice	To delete Section 6-1-5 since the Rules were based on 60s/70s Russian thinking and are outdated and since these ice classes compete with the more widely used Baltic ice classes.
6-1-5	Requirements for Icebreaker*	To provide requirements and a notation for icebreakers where the arrangement, powering, and scantlings of the hull structure and propulsion machinery are determined based on the operational profile of the icebreaker and the corresponding ship-ice interaction scenarios.
6-1-6	Baltic Ice Classes	To update Section 6-1-6 to clean up the Rules and create two low ice classes to stay competitive at the outgoing D0 and E0 ice strengthening levels.
6-2-1	General	To add Goal Based Standards and other clarifications.
6-2-2	Plans and Data to be Submitted	To indicate the document type: Review (R), Information (I) and Kept Onboard (OB).
6-2-3	Hull Construction	To add Goal Based Standards and other clarifications.
6-2-4	Cargo Handling Equipment	To add Goal Based Standards and other clarifications and to align with ABS Guide for Certification of Lifting Appliances and reinforce that the notations are “optional”.
6-2-5/1, 3, 5, 7, 9, 17	Refrigerated Cargo Spaces	To add Goal Based Standards and other clarifications and to move acceptance/description of alternative arrangements to Commentary.
6-2-6	Refrigeration Machinery	To add Goal Based Standards and other clarifications.

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
6-2-7/1	Ancillary Systems	To add Goal Based Standards and other clarifications.
6-2-8	Fire Extinguishing Systems and Equipment	To add Goal Based Standards and other clarifications.
6-2-9/1, 7.3, 9.1	Electrical Systems	To add Goal Based Standards and other clarifications and to move acceptance/description of alternative arrangements to Commentary.
6-2-10/1, 5, 9.5, 15.7	Instrumentation, Control and Monitoring	To add Goal Based Standards and other clarifications and to move acceptance/description of alternative arrangements to Commentary and add reference to 4-9-3/9 and 4-9-3/11 for software and hardware aspects of computer-based systems for refrigerated cargoes.
6-2-11	Ammonia Refrigeration System	To add Goal Based Standards and other clarifications and to specify that Refrigeration Plant Shutdown is to be activated when Ammonia vapor Concentration exceeds 300 ppm to align with 6-2-11/15.3.2.
6-2-12/1, 3.5, 5.1, 7.7.8, 13.3, 21.1	Controlled Atmosphere Systems	To add Goal Based Standards and other clarifications and to move acceptance/description of alternative arrangements to Commentary.
6-2-13	Refrigerated Cargo Container Carrier	To add Goal Based Standards and other clarifications.
6-2-14	Refrigerated Edible Bulk Liquid Tanker	To add Goal Based Standards and other clarifications.
6-2-15	Refrigerated Fish Carrier	To add Goal Based Standards and other clarifications.
6-2-16	Testing	To add Goal Based Standards and other clarifications.
6-3-1	General	To add Goal Based Standards and other clarifications and to clarify the submission of the plans when the optional notations are not requested, add respective IMO Guidelines for each exhaust abatement system, modify requirement for EGR systems to align with MEPC.307(73) and MEPC.340(77), and deleted alternatives since approval of the alternative arrangements are included in Part 1D, Chapter 2.
6-3-1/9.3, 9.5, 9.7	General	To offer the optional EGC-EGR (M) notation for vessels that meet the minimum class and statutory requirements
6-3-2	EGC – SOx Scrubbers	To add Goal Based Standards and other clarifications and to add IMO Guideline for the SOx Scrubber, add detailed requirements for the acceptance of extra strong pipe for connection of the valve to the NaOH tank, add detailed ventilation requirements for spaces containing the chemical tanks, add acceptance criteria for eyewash and safety showers, add requirements to accept summary alarms of the system in the vessel's centralized monitoring system, not require ABS approval for the testing procedure for initial commissioning trials of the SOx scrubber, modify display requirements for the spill tray level, and add nickel-chromium-iron alloy cladding as an additional corrosion resistance protection material.
6-3-3	EGC – Selective Catalytic Reduction Systems	To add Goal Based Standards and other clarifications and to add IMO Guideline for SCR, simplify requirement for the switchboard of the standby pump or fan, add requirements for Urea Storage Tank, add detailed requirements for the acceptance of extra strong pipe for connection of the valve to the Urea tank, add acceptance criteria for acceptance of eyewash and safety showers, add requirements to accept summary alarms of the system in the vessel's centralized monitoring system add requirements for Control & Monitoring, and add requirements for Safety Shutdown System.
6-3-3/11.3.1	EGC – Selective Catalytic Reduction Systems	To include an exemption clause for reductant tank to be of steel on FRP Yachts less than 500GT as per IACS UR M77 Rev 3 and 4

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6-3-4	EGC – Exhaust Gas Recirculation Systems	To add Goal Based Standards and other clarifications and to add IMO Guideline for water treatment system in EGR, delete obsolete requirement regarding the applicability of EGC-EGR notation, modify requirement for blowers of EGR to be in accordance with applicable parts of 4-2-1/7.9 and 4-2-2, simplify requirement for the switchboard of the standby pump or fan in 6-3-4/9.9.3.ii, add Added detailed requirements for the EGR washwater overboard discharge to be in line with the requirements for the SOx Scrubber washwater overboard discharge in 6-3-2/11.3.3.ii., add requirements for overboard discharge when plastic pipes are used to be in line with the requirements for the SOx Scrubber washwater overboard discharge in 6-3-2/11.3.3.iv, add detailed requirements for the acceptance of extra strong pipe for connection of the valve to the NaOH tank, add detailed ventilation requirements for spaces containing the chemical tanks, add acceptance criteria for eyewash and safety showers, add requirements to accept summary alarms of the system in the vessel’s centralized monitoring system and modify display requirements for the spill tray level.
6-3-4/1	EGC – Exhaust Gas Recirculation Systems	To offer the optional EGC-EGR (M) notation for vessels meeting the minimum class and statutory requirements.
6-3-5	Exhaust Emission Monitoring Systems	To add Goal Based Standards and other clarifications and to delete acceptance of alternative arrangement since this is now part of Goal-Based Standards.
6-4-1	General	To add Goal Based Standards and other clarifications and to change the name of the Chapter from High Voltage shore connection to “Low and High Voltage Shore Connections” an add requirements for Low Voltage Shore Connection installations on board ships.
6-4-2	System Design	To add Goal Based Standards and other clarifications and to add the new notation "LVSC", incorporate two alternative procedures to assure the integrity of the bonding described in IEC 80005-1, and specify that the selection of necessary breaker size for the prospective short-circuit current value should be in accordance with IEC 80005-1/4.7.
6-4-3	Equipment Design	To add Goal Based Standards and other clarifications and to address the changes associated with the new notation "LVSC".
6-4-4	Installations	To add Goal Based Standards and other clarifications and to address the installation requirements associated with both the existing notation and new notation “LVSC”.
6-4-5/9, 11, 13	Survey	To add Low Voltage Shore Connection survey items.
6-5-1	Biofuel Notations	To add two new notations, Biofuel 1 and Biofuel 2,

EFFECTIVE DATE 1 July 2024 – shown as (1 July 2024)
(based on the contract date for new construction between builder and Owner)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 4	Vessel Systems and Machinery	
MVR 4-9-13	Cyber Resilience for Vessels	To incorporate IACS UR E26 into a new Section 4-9-13 and introduce a new notation CR for cyber resilience requirements.
MVR 4-9-14	Cyber Resilience for On-board Systems and Equipment	To incorporate IACS UR E27 into a new Section 4-9-14.

Part 7 “Rules for Survey After Construction”

The reference date which is indicated in the parentheses following the title of the requirement in this Part is the date that the requirement becomes effective [e.g., 7-2-1/1 “Vessels for Unrestricted Service” (2024) is to apply for vessels undergoing survey on or after 1 January 2024].

EFFECTIVE DATE 1 January 2024 – shown as (2024)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 7	Rules for Survey After Construction	
7-1-1	General Information	To add Goal Based Standards and other clarifications, and to clarify the definition and requirements for Expanded Survey (ESDC) Notations for general dry cargo vessels.
7-2-1	Vessels for Unrestricted Service	To add Goal Based Standards and other clarifications.
7-2-1/1	Vessels for Unrestricted Service	To remove Rule requirement since LASH barges are no longer classed.
7-2-2	Vessels in Great Lakes Service	To add Goal Based Standards and other clarifications.
7-2-3	Vessels in Rivers and Intracoastal Waterways Service	To add Goal Based Standards and other clarifications.
7-2-3/9	Vessels in Rivers and Intracoastal Waterways Service	Update for vessels with River Service service and using alternative arrangements.
7-3-1	Hull Surveys – Requirements for Internal Examinations of All Vessels	To add Goal Based Standards and other clarifications and to rename Section to “General” for consistency with Chapter 6, add requirements on thickness measurements and close-up surveys and remote inspection techniques (RIT) in line with IACS UR Z7, and add requirements on ultrasonic tightness testing of hatch covers and watertight doors in line with current ABS practice.
7-3-2	Vessels for Unrestricted Service	To add Goal Based Standards and other clarifications and to add requirements for hose test, carriage of containers on bulk carriers, vessels with the EBCAD, SH, SHCM or CSR, AB-CM Notation, tank barges, operation manual to be verified on board, piping in way of tanks, Fatigue-Sensitive Areas, extensive areas of wastage, ultrasonic tightness testing of hatch covers, vessels < 90m in length (unrestricted service), cofferdams below raised deck houses, bulk carriers carrying cement, and ESP vessels with either CSR AB-CM or SH, SHCM Notation.
7-3-2/1.1.5(a) and (b)	Vessels for Unrestricted Service	To move the annual and periodical survey requirements of loading instrument and stability computer software from 3-2-A2 and 3-3-A7 to 7-3-2.
7-3-3	Vessels in Great Lakes Service	To add Goal Based Standards and other clarifications and to add requirements for Year of Grace surveys, in line with current ABS practice.
7-3-4	Vessels in Rivers and Intracoastal Waterways Service	To add Goal Based Standards and other clarifications and to add new subsection “Annual Surveys” in line with current ABS practice.
7-3-5	Alternative Means to Credit Survey Requirements	To add Goal Based Standards and other clarifications and to add new section to establish the conditions for the alternative means for examination of the hull structure and compartments including internal structures of the vessel to allow the intent of the rules to be met by some means other than the prescriptive requirements of the Rules
7-4-1	Drydocking Surveys – Survey Requirements	To add Goal Based Standards and other clarifications.
7-5-1	Tailshaft Surveys – Survey Requirements	To add Goal Based Standards and other clarifications.
7-5-2	Allowable Bearing Weardown	To add Goal Based Standards and other clarifications.
7-6-1	Machinery Surveys - General	To add Goal Based Standards and other clarifications.

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7-6-2	Survey Requirements	To add Goal Based Standards and other clarifications and to add new requirements for operational test of the arrangements to regain steering capability, protection of internal combustion engines, dynamic positioning systems, pump room ventilation system, remote controls on fuel oil deep tanks, and relief valves.
7-6-2/1.19	Survey Requirements	Adding annual survey requirements for new SRtP notation created under 5C-7-5/25.
7-6-2/1.5.1, 1.7, 3.7	Survey Requirements	To clarify the application of 7-6-2/1.7 and 7-6-2/3.7 to all vessels using gas or low flashpoint fuels as an alternative fuel and that these sections do not apply to vessels carrying those fuels as cargo.
7-6-2/1.9.1, 1.9.4 & 3.14	Survey Requirements	Added new sections under 7-6-2/1.9.4 and 7-6-2/3.14 " Additional requirements for Vessels using Biofuel or Biofuel Blends" for instructions on survey after construction.
7-6-2/3.1.2(a)	Survey Requirements	To provide clarification regarding the identification of undersized bearings.
7-6-3	Vessels in Great Lakes Service	To add Goal Based Standards and other clarifications and to add requirements for Year of Grace surveys, in line with current ABS practice.
7-6-4	Alternative Means to Credit Survey Requirements	To add Goal Based Standards and other clarifications and to add new section to establish the conditions for the Alternative Means for examination and/or testing of the machinery systems and machinery spaces to allow the intent of the Rules to be met by some means other than the prescriptive requirements of the Rules.
7-7-1	Boiler Surveys – Survey Requirements	To add Goal Based Standards and other clarifications.
7-8-1	Shipboard Automatic and Remote-control Systems – Annual Surveys	To add Goal Based Standards and other clarifications.
7-8-2	Special Periodical Surveys	To add Goal Based Standards and other clarifications.
7-9-1	Cargo Refrigeration System	To add Goal Based Standards and other clarifications and to add requirement for actual temperatures in refrigerated spaces to be recorded and included in the loading certificate, and retire APLUS, ASLS, and SASLS Notations.
7-9-2	Hull Condition Monitoring System	To add Goal Based Standards and other clarifications and to add requirement for sensor recalibration.
7-9-3	One Man Bridge Operated System	To add Goal Based Standards and other clarifications.
7-9-4	Propulsion Redundancy System	To add Goal Based Standards and other clarifications.
7-9-5	Quick Release System	To add Goal Based Standards and other clarifications and to add requirements for Surveyor to review records and to test system in the presence of a Surveyor.
7-9-6	Thrusters and Dynamic Positioning System	To add Goal Based Standards and other clarifications and to add propeller nozzles to external examination, note that borescope may be acceptable, add exam of water tunnel based on issues with water jets, add commentary on extent of DP trials, add records of DP incidents or repairs, add requirement to establish what the DP configuration is on the vessel and verify that it matches the DP Ops Manual, and add commentary about what a complete performance test is.
7-9-7	Vapor Emission Control System	To add Goal Based Standards and other clarifications.
7-9-8	Fire Fighting Service	To add Goal Based Standards and other clarifications.
7-9-8/9	Fire Fighting Service	To add new subsection in 7-9-8/9 with survey requirements for Minimum Requirements for Vessels without Fire Fighting Notation.
7-9-9	Safety Standby Service	To add Goal Based Standards and other clarifications.
7-9-10	Offshore Installations Support Service	To add Goal Based Standards and other clarifications and to add list of applicable vessels, add general discussion and removed redundant text, replace references with appropriate text for requirement, align with Part 5D, and add survey requirements for subsea service, in line with Part 5D

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7-9-10/10, 16, 18, 20, 21.1, 22, 25.1, 26	Offshore Support Services	To add new subsections to cover the situation where an OSV is carrying out a service without getting the full notation.
7-9-11	Oil Recovery Service	To add Goal Based Standards and other clarifications and to add requirements for Intermediate Surveys and for Class 1 vessels.
7-9-12	Automatic or Remote Control and Monitoring Systems for Vessels in Port	To add Goal Based Standards and other clarifications.
7-9-13	Bridge Design and Navigational Equipment/Systems	To add Goal Based Standards and other clarifications and to consolidate requirements for NBLES (COS) notation.
7-9-14	Integrated Tug-Barge (ITB) Combinations Intended to Operate on the Great Lakes	To add Goal Based Standards and other clarifications.
7-9-15	Environmental Safety	To add Goal Based Standards and other clarifications.
7-9-16	Crew Habitability on Ships and Workboats	To add Goal Based Standards and other clarifications.
7-9-17	Comfort on Ships and Yachts	To add Goal Based Standards and other clarifications.
7-9-18	Compliance with the ILO Maritime Labour Convention, 2006 Title 3 Requirements	To add Goal Based Standards and other clarifications.
7-9-19	Yachts	To add Goal Based Standards and other clarifications.
7-9-20	Tailshaft Condition Monitoring	To add Goal Based Standards and other clarifications and to add note regarding the start of the 15-year extension.
7-9-21	Oil Carriers Equipped for Mooring at Single Point Moorings	To add Goal Based Standards and other clarifications.
7-9-22	Inert Gas Systems for Ballast Tanks	To add Goal Based Standards and other clarifications.
7-9-23	Inventory of Hazardous Materials (IHM)	To add Goal Based Standards and other clarifications.
7-9-24	Hull Inspection and Maintenance Program	To add Goal Based Standards and other clarifications and to add note about change of owner and why it would matter and Commentary about why qualified hull inspections need to be up to date.
7-9-25	Lithium Batteries	To add Goal Based Standards and other clarifications.
7-9-26	Ballast Water Exchange and Treatment	To add Goal Based Standards and other clarifications and to add discussion about what would require examination of the entire system and a requirement to check software update and test records.
7-9-27	Coating Performance Standard	To add Goal Based Standards and other clarifications and to add that ballast tanks need to be maintained in GOOD condition and add sections for CPS-COT notation and CorrResistant notation.
7-9-27/1, 3 & 5	Coating Performance Standard	To incorporate the requirements of CPS in accordance with SOLAS Chapter II-1/3-2 and Chapter II-1/3-11.
7-9-28	Vessel Maneuverability	To add Goal Based Standards and other clarifications.
7-9-29	Exhaust Emission Abatement Systems	To add Goal Based Standards and other clarifications.
7-9-30	Fire-Fighting Systems for Cargo Areas of Container Carriers	To add Goal Based Standards and other clarifications and to add positive pressure arrangements, include helmet radios, correct to read “firefighter’s outfit locker”, and add RRDA requirement, in line with the “Guide for Fire-Fighting Systems for Cargo Areas of Container Carriers”
7-9-31	Supercapacitors	To add Goal Based Standards and other clarifications.
7-9-32	Line Cutters	To add Goal Based Standards and other clarifications.
7-9-33	Aquaculture Service Vessels	To add Goal Based Standards and other clarifications and to replace duplicated text with references to Section 7-9-1.
7-9-34	Wind Assisted Propulsion System Installation	To add Goal Based Standards and other clarifications.

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7-9-35	Mitigation of Infectious Disease Transmission	To add Goal Based Standards and other clarifications and to add note regarding documents required to perform the survey.
7-9-36	Deep Water Anchoring	To add Goal Based Standards and other clarifications and to add notes regarding measurement of chain.
7-9-37	Ergonomic Container Lashing	To add Goal Based Standards and other clarifications.
7-9-38	Smart Functions for Marine Vessels and Offshore Units	To add Goal Based Standards and other clarifications.
7-9-39	Offshore Support Vessels with Laid-Up Record Comment	To add Goal Based Standards and other clarifications.
7-9-40	LNG Regasification Vessels	To add Goal Based Standards and other clarifications.
7-9-41	Means of Access to Tanks and Holds for Inspection	To add Goal Based Standards and other clarifications and to add requirement for review of records, in line with SOLAS II-1, Part A-1, Reg 3-6/4.1.8 and IACS Rec. 90 5.2.5.
7-9-42	Low Temperature Environments	To add Goal Based Standards and other clarifications.
7-9-43	Enhanced Fire Protection	To add Goal Based Standards and other clarifications.
7-9-44	Ice Loads Monitoring Systems	To add Goal Based Standards and other clarifications.
7-9-45	Lifting Appliances	To add Goal Based Standards and other clarifications and to add commentaries about which cranes would not be subject to ILO, when a surveyor is required to witness slewing bearing rocking tests, about what winches are Manriding Winches, and what comprises a maintenance basket, move requirements for personnel lifting from Guide to Rules, add requirements for recording current software version and record test dates, planning meeting, verification of certificates/calibration records for weights/dynamometer, review of monthly inspection records required in 5.4, and survey of maintenance baskets, add reference to MVR Part 4 for repairs or modifications to Cargo Gear machinery, and add notes about use of fixed lift points and NDT.
7-9-45/1.1.5	Lifting Appliances	To add requirement that copies of the certificates of examination issued by the Surveyor are to be inserted in the Register of Lifting Appliances, since Surveyors need the document throughout the life of the vessel.
7-9-46	Cybersecurity Implementation for the Marine and Offshore Industries	To add Goal Based Standards and other clarifications and to add requirement for documentation review
7-9-46/3	Cybersecurity Implementation for the Marine and Offshore Industries	To add survey after construction requirements for the ISQM and SQM notations from the Guide for Integrated Software Quality Management.
7-9-47	Underwater Noise and External Airborne Noise	To add Goal Based Standards and other clarifications.
7-9-48	Sustainability Notations	To add Goal Based Standards and other clarifications.
7-9-49	Special Loading of Ore and Ore/Oil Carriers	To add Goal Based Standards and other clarifications.
7-9-50	Low and High Voltage Shore Connection Systems	To add requirements for survey after construction for the Low and High Voltage Shore Connection Systems detailed in Part 6 Chapter 4 of the Marine Vessel Rules.
7-9-51 (New)	Crane Vessel	To add a new section 7-9-51 due to the new notation Crane Vessel in MVR 5C-21.
7-9-52 (New)	Optional Class Notation – FTS(v, p, T)	Requirements created to support the new optional notation FTS on the survey point of view.
7-9-53 (New)	Remote Surveys	To add new section to include Annual and Special Survey for REMSURI and REMSUR2 notations.
7-9-54 (New)	Vessels Designed for Bottom Contact (DBC)	To relocate the survey requirements from the ABS Requirements for Vessels Designed for Bottom Contact into Part 7.
7-9-55 (New)	Offshore Spaceports	To incorporate survey requirements from the ABS Requirements for Building and Classing Offshore Spaceports into Part 7.

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7-10-1	Steel Floating Dry Docks - Survey Interval	To add Goal Based Standards and other clarifications.
7-10-2	Hull Surveys	To add Goal Based Standards and other clarifications.
7-10-3	Machinery Surveys	To add Goal Based Standards and other clarifications.
7-10-4	Drydocking Surveys	To add Goal Based Standards and other clarifications and to create a new section for Drydocking Surveys of steel floating dry docks.
7-11-1	Underwater Vehicles, Systems, and Hyperbaric Facilities - General	To add Goal Based Standards and other clarifications and to relocate specific requirements for annual and special surveys into 7-11-3 and 7-11-4.
7-11-2	Survey Interval	To add Goal Based Standards and other clarifications and to add notes about premature commencement to align with Section 7-2-1.
7-11-3	Annual Surveys	To add Goal Based Standards and other clarifications and include updates, notes, and commentary based on current ABS practice, add new paragraphs about surface support requirements, and add requirements examination of host vessel and certificates.
7-11-4	Special Periodical Surveys	To add Goal Based Standards and other clarifications and include updates, notes, and commentary based on current ABS practice, replace text referencing “bolts” with note discussing “belts”, and add test dive information.
7-11-5	Surveys for Transit Damage	To add Goal Based Standards and other clarifications.
7-11-6	Lock-Out Submersibles for U.S. Government Service	To delete Section (all requirements are captured in 7-11-3/1.2, and this section does not contain survey requirements) and replace with survey requirements for Lock-Out Submersible G..
7-11-7	Relocation or Reinstallation of Portable Diving Systems	To add Goal Based Standards and other clarifications and to add commentary to describe “held in abeyance” and reorganize and retitled Subsections 3 and 5 to reflect that surveys are for relocation and reinstallation.
7-12-1	Sailing Yachts not Receiving AMS Notation – Survey Intervals	To add Goal Based Standards.
7-12-2	Hull Surveys	To add Goal Based Standards and other clarifications.
7-12-3	Machinery Surveys	To add Goal Based Standards and other clarifications.
7-12-4	Comfort on Yachts	To add Goal Based Standards and other clarifications.
7-A1-1	Underwater Inspections in Lieu of Drydocking Surveys	To add Goal Based Standards and other clarifications and to add new paragraphs added on availability of UWILD and Conditions of Class due to Grounding Damage Surveys.
7-A1-2	Surveys of Voyage Repairs to Hull Structure	To add Goal Based Standards and other clarifications.
7-A1-3	Vessel Lay-up and Reactivation	To add Goal Based Standards and other clarifications and to add new paragraphs requiring vessels in Lay-Up Status not to move, or be moved, until a reactivation survey has been completed, requiring a Reactivation Survey if the vessel is to be moved to perform final reactivation, and regarding computer-based systems and new Subparagraphs permitting vessels to be attended for occasional surveys such as Damage Survey or Repair Survey while in lay-up and regarding early commencement of special periodical surveys during reactivation.
7-A1-4	Additional Information on Hull Thickness Measurement	To add Goal Based Standards and other clarifications and to add requirements for Survey Planning Meeting, in line with current ABS practice, survey attendance in line with IACS PR No.19, witness of thickness measurement, results found in excess of the allowable individual plate wastage limits, and thickness measurements in way of Close-up areas.
7-A1-5	Procedures for Certification of Firms Engaged in Thickness Measurement of Hull Structures	To add Goal Based Standards and other clarifications.

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7-A1-6	Report on Thickness Measurement of Bulk Carriers Non Double Skin (CSR and Non-CSR Vessels) and General Dry Cargo Vessels (1 July 2013)	To add Goal Based Standards and other clarifications.
7-A1-7	Report on Thickness Measurement of Oil Carriers - Non Double Hull, Ore/Oil Ships - Non Double Hull and Chemical Carriers, etc.	To add Goal Based Standards and other clarifications.
7-A1-8	Intermediate and Special Periodical Survey Preparation for ESP and ESDC Vessels	To add Goal Based Standards and other clarifications and to add new paragraph regarding the vessel's Construction Monitoring Plan.
7-A1-9	Reporting Principles for ESP Vessels	To add Goal Based Standards and other clarifications and to add requirements to report failure type and failure descriptor
7-A1-10	Bronze and Stainless Steel Propeller Castings	To relocate existing Appendix 7-A1-10 to Materials 2-3-14 and 2-3-15 and Appendix 7-A1-16 to 7-A1-10.
7-A1-11	Repair and Cladding of Shafts	To relocate existing Appendix 7-A1-11 to Materials 2-3-7-A1 and Appendix 7-A1-17 to 7-A1-11.
7-A1-12	Ultrasonic Examination of Carbon Steel Forgings for Tail Shafts	To relocate existing Appendix 7-A1-12 to Materials 2-A7-4 and Appendix 7-A1-18 to 7-A1-12.
7-A1-13	Report on Thickness Measurement of Oil Carriers - Double Hull (CSR and Non-CSR Vessels)	To add Goal Based Standards and other clarifications.
7-A1-14	Surveys Based on Preventative Maintenance Techniques	To add Goal Based Standards and other clarifications and to harmonize requirements for service suppliers, add requirements for verification that manufacturer's recommended maintenance procedures are available on board and random checks to confirm that the program complies, where computers are utilized for shipboard record keeping, and condition-monitoring maintenance techniques categories, a note on Smart Functions, and a new section for special survey of sustainment shore office.
7-A1-15	Report on Thickness Measurement of Bulk Carriers - Double Skin (CSR and Non-CSR Vessels)	To add Goal Based Standards and other clarifications.
7-A1-16	Thickness Measurement and Close-up Survey Requirements at Special Periodical Surveys	To relocate existing Appendix 7-A1-10 to Materials 2-3-14 and 2-3-15 and Appendix 7-A1-16 to 7-A1-10, add Goal Based Standards and other clarifications and to add note referencing wastage allowance tables in 7-A-4.
7-A1-17	Survey of Portable Modules	To relocate existing Appendix 7-A1-11 to Materials 2-3-7-A1 and Appendix 7-A1-17 to 7-A1-11, add Goal Based Standards and other clarifications and to add note to discuss reason why survey of portable modules is required, reorganized requirements into "installation" and "annual" requirements so they get captured at a defined survey and lifesaving requirements so it is part of annual survey for PIMS and PAMS, and to specify that portable accommodation modules are to be certified.
7-A1-18	Alternative Means to Credit Survey Requirements	To add new Appendix to establish alternative survey requirements to attend the objectives of the rules not fulfilled by current prescriptive rules and guide evaluation of equivalency for proposed new ways to attend the survey requirements in accordance with the objectives of the rules.