

# Comprehensive Revision of Part C of the Rules

## Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Parts A and C  
Guidance for the Survey and Construction of Steel Ships Parts A and C

## Reason for Amendment

ClassNK's independently developed hull structural rules have been revised as needed over the years in response to things such as increases in ship size, diversification of hull structures, countermeasures for damage, incorporation of amendments to IMO Conventions and IACS Unified Requirements, etc.

On one hand, the aforementioned rule revision process has helped ensure that the current rules are sufficiently safe with proven track records of problem-free application. On the other hand, such revisions typically have only been just partial in nature (i.e. limited to specific requirements at a particular time) and the technical background (e.g. loads, strength models, safety factors) for each requirement sometimes differs depending on when it was actually amended. This has led to some inconsistencies between different chapters and inadvertently complicated the overall structure of the various chapters, which in turn has made some parts of the Rules difficult to understand.

For this reason, a comprehensive revision of Part C of the Rules has been ongoing since 2017. The revision began with the development of elemental technologies for the evaluation of loads, corrosion additions, strength criteria, etc. and the preparation of a draft which incorporates these technologies into a new chapter structure. In addition, the draft also reflects the results of examining the applicability and comparing the hull scantlings required by the draft with the proven ones.

Part C of the Rules is therefore comprehensively revised in accordance with the above so as to incorporate recent technological and safety developments as well as to improve the overall structure, readability and understandability of the requirements contained therein.

## Outline of Amendment

The main contents of this amendment are as follows:

- (1) Comprehensively revises Part C of the Rules.
- (2) Amends Part A of the Rules to specify the affixation of the class notation *Advanced Structural Rules (ASR)* to classification characters of ships subject to the comprehensively revised Part C of the Rules.
- (3) Amends relevant requirements in Part A of the Rules regarding the affixation of relevant class notations specified in Part C of the Rules in accordance with the comprehensive revision of Part C of the Rules

“Rules for the survey and construction of steel ships” has been partly amended as follows:

Whole of Part C has been amended as follows.

**Part C            HULL CONSTRUCTION AND EQUIPMENT**

(See the separate document)

# Part A GENERAL RULES

## Chapter 1 GENERAL

### 1.2 Class Notations

#### 1.2.1 General\*

Sub-paragraph -4 has been added as follows.

4 For ships subject to the application of Part C and contracted for construction on or after 1 July 2023, the notation of “Advanced Structural Rules” (abbreviated to ASR) is affixed to the Classification Characters in addition to at the head of the related provisions of 1.2.4 (e.g. ASR, CNC).

Paragraph 1.2.3 has been amended as follows.

#### 1.2.3 Structural Materials for Main Hull

For ships that use materials other than steel as the structural material for the main hull in accordance with the provisions of ~~1.1.7-5~~ 3.2.1.1-2, Chapter 3, Part 1, Part C or 1.3.1-3, Part CS, an appropriate notation is affixed to the Classification Characters as follows.

- (1) For ships made of aluminium alloy:  
*Aluminium Alloy* (abbreviated to *AL*)
- (2) For ships other than those specified in (1), a notation deemed appropriate by the Society may be affixed.

Paragraph 1.2.4 has been amended as follows.

#### 1.2.4 Hull Construction and Equipment, etc.\*

**1** For ships intended for the carriage of liquid cargoes in tank(s) integrated with their hull structures and complying with the provisions of ~~Chapter 29~~ Part 2-7, Part C or Chapter 24, Part CS as appropriate, the notation of “*Tanker*” is affixed to the Classification Characters. For such ships intended for carriage of flammable liquid cargoes (except those specified in -2 or -3 below) and complying with the appropriate requirements specified in **Part D, Part H** and **Part R**, an additional notation corresponding to the flashpoints of the cargoes is affixed as follows.

- (1) For ships intended for the carriage of liquid cargoes having a flash point on and below 60°C other than oils:  
*Tanker, flammable liquid-flash point on and below 60 °C* (abbreviated to *TFLB*)
- (2) For ships intended for the carriage of liquid cargoes having a flash point above 60°C other than oils:  
*Tanker, flammable liquid-flash point above 60 °C* (abbreviated to *TFLA*)
- (3) For ships intended for the carriage of oils having a flash point on and below 60°C:  
*Tanker, oils-flash point on and below 60 °C* (abbreviated to *TOB*)
- (4) For ships intended for the carriage of oils having a flash point above 60°C:  
*Tanker, oils-flash point above 60 °C* (abbreviated to *TOA*)

**2** Notwithstanding the provisions specified in -1, for ships carrying dangerous chemicals in bulk complying with the provisions of **Part S**, an appropriate notation corresponding to the type of ships

specified in **2.1.2, Part S**, is affixed to the Classification Characters as follows.

- (1) For type I ships:  
*Chemical Tanker Type I* (abbreviated to *CT I*)
- (2) For type II ships:  
*Chemical Tanker Type II* (abbreviated to *CT II*)
- (3) For type III ships:  
*Chemical Tanker Type III* (abbreviated to *CT III*)
- (4) For ships complying with the requirements for both type II and type III ships:  
*Chemical Tanker Types II & III* (abbreviated to *CT II&III*)

**3** For ships carrying liquefied gases in bulk complying with the provisions of **Part N**, an appropriate notation corresponding to the type of ships specified in **2.1.2, Part N** is affixed to the Classification Characters as follows.

- (1) For type 1G ships:  
*Liquefied Gas Carrier Type 1G* (abbreviated to *LGC 1G*)
- (2) For type 2G ships:  
*Liquefied Gas Carrier Type 2G* (abbreviated to *LGC 2G*)
- (3) For type 2PG ships:  
*Liquefied Gas Carrier Type 2PG* (abbreviated to *LGC 2PG*)
- (4) For type 3G ships:  
*Liquefied Gas Carrier Type 3G* (abbreviated to *LGC 3G*)

**4** In addition to the requirements in -1 above, for ships carrying liquefied gases in bulk complying with the provisions of **Part N**, an appropriate additional notation corresponding to the type of tanks is affixed as follows.

- (1) For independent prismatic tanks of type A:  
*Independent Prismatic Tanks of Type A* (abbreviated to *IPT Type A*) (e.g. *LGC 2G(IPT Type A)*)
- (2) For independent prismatic tanks of type B:  
*Independent Prismatic Tanks of Type B* (abbreviated to *IPT Type B*) (e.g. *LGC 2G(IPT Type B)*)
- (3) For independent spherical tanks of type B:  
*Independent Spherical Tanks of Type B* (abbreviated to *IST Type B*) (e.g. *LGC 2G(IST Type B)*)
- (4) For independent tanks of type C:  
*Independent Tanks of Type C* (abbreviated to *IT Type C*) (e.g. *LGC 2PG(IT Type C)*)
- (5) For membrane tanks:  
*Membrane Tanks* (abbreviated to *MT*) (e.g. *LGC 2G(MT)*)
- (6) For others tanks:  
*Other Tanks* (abbreviated to *OT*) (e.g. *LGC 2G(OT)*)

**45** For ships intended for the carriage of liquid cargoes in independent tank(s) (except those specified in -2 or -3 above), the notation of “*Tank Carrier*” (abbreviated to *TC*) is affixed to the Classification Characters. In this case, an additional notation corresponding to its cargoes may be affixed in the same manner as specified in -1 above.

**56** For ships intended for the carriage of ore cargoes or similar cargoes having equivalent high density, generally having two longitudinal watertight bulkheads and a double bottom throughout the cargo spaces and complying with the provisions of ~~Chapter 30~~ **Part 2-3, Part C**, the notation of “*Ore Carrier*” (abbreviated to *OC*) is affixed to the Classification Characters.

**67** ~~For ships intended for the carriage of dry cargoes in bulk, generally having a single deck, a double bottom, bilge hopper tanks and topside tanks in cargo spaces~~ For ships intended for the carriage of dry cargoes in bulk, ~~generally having a single deck, a double bottom, bilge hopper tanks and topside tanks in cargo spaces~~ having a single deck, and a double bottom and double-side skin for the length of cargo region, but not having bilge hopper tanks and topside tanks and complying with the provisions of ~~Chapter 31~~ **Part 2-2, Part C**, the notation of “*Bulk Carrier modified*” (abbreviated to *BCM*) is affixed to the Classification Characters. ~~Notwithstanding the provisions above, for ships specified in 31.1.2-1, Part C, an appropriate notation~~

~~corresponding to the type of ships specified in 31.1.2-1, Part C is affixed to the Classification Characters as below. For such ships which have not been subject to the requirements for loading and/or unloading in multiple ports, the additional notation of “No Multi-port loading/unloading” (abbreviated to *NO MP*) is affixed to the notation specified in (1) to (3) below.~~

~~(1) For ships of *BC-A: Bulk Carrier Type A* (abbreviated to *BC-A*)~~

~~(2) For ships of *BC-B: Bulk Carrier Type B* (abbreviated to *BC-B*)~~

~~(3) For ships of *BC-C: Bulk Carrier Type C* (abbreviated to *BC-C*)~~

**78** For bulk carriers as defined in ~~31A.1.2(1)~~ An1.1.2(1), Annex 1.1, Part 2-2 “Additional Requirements for Bulk Carriers in Chapter XII of the SOLAS Convention”, Part C and complying with the applicable provisions of ~~Chapter 31A and 34.2 Annex 1.1, Part 2-2~~, Part C, 13.5.10 and 13.8.5, Part D and 1.2.3, Part U, the notation of “*BC-XII*” is affixed to the Classification Characters.

**89** For ships intended for the carriage of containers, generally having a double bottom in cargo spaces and complying with the provisions of ~~Chapter 32 Part 2-1~~, Part C, the notation of “*Container Carrier*” (abbreviated to *CNC*) is affixed to the Classification Characters.

**10** For ships intended for the carriage of wood chips, generally are ships of single-side skin construction having a single deck, double bottom and bilge hopper tanks and complying with the provisions of Part 2-4, Part C, the notation of “*Chip Carrier*” (abbreviated to *CPC*) is affixed to the Classification Characters.

**11** For ships intended for the carriage of unoccupied motor vehicles without cargo, having multiple decks and complying with the provisions of Part 2-6, Part C, the notation of “*Vehicles Carrier*” (abbreviated to *VC*) is affixed to the Classification Characters.

**912** For ships having cargo spaces not normally subdivided in any way and normally extending to either a substantial length or the entire length of the ship in which cargoes can be loaded and unloaded normally in a horizontal direction, and complying with the provisions of Part 2-6, Part C as well as the relevant requirements of these Rules, the notation of “*Roll on-Roll off*” (abbreviated to *RORO*) is affixed to the Classification Characters.

**103** For ships which are engaged in designated operations such as dredging, lifting heavy loads, fire fighting, offshore supply, towing, etc. and which comply with the requirements in Part O (hereinafter, referred to as work-ships), an appropriate notation is affixed to the Classification Characters in accordance with the provisions of Part O.

**114** For structures positioned for a long period of time or semi-permanently at a specific sea area, an appropriate notation is affixed to the Classification Characters in accordance with the provisions of Part P.

**125** For floating offshore facilities complying with the provisions of Part PS which are not primarily intended for the transport of cargo and are positioned at specific oil producing sea areas for long periods of time or semi-permanently, which are also fitted with crude oil/petroleum gas production, storage and offloading systems, appropriate notation is to be affixed to the Classification Characters in accordance with the provisions given in Part PS.

**136** For floating structures intended for the carriage of cargoes in cargo holds, on decks and/or in tanks integrated with hull structures, not propelled by mechanical means and complying with the provisions of Part Q (hereinafter referred to as barges), the notation of “*Barge*” (abbreviated to *B*) is affixed to the Classification Characters. Additional notation corresponding to hull structure and type of cargo is affixed as follows:

(1) For barges of pontoon type intended for the carriage of cargoes only on upper decks:

*Barge, Pontoon Type* (abbreviated to *BP*)

(2) For barges intended for the carriage of liquid cargoes in tank(s) integrated with their hull structures. In this case, an additional notation corresponding to cargoes is affixed in the same manner as specified in -1 or -2, as appropriate:

*Barge, Tanker* (abbreviated to *BT*)

- (3) For barges carrying liquefied gases in bulk in accordance with the provisions of **Part N**. In this case, an additional notation corresponding to cargoes is affixed in the same manner as specified in -3. :

*Barge, Liquefied Gas Carrier* (abbreviated to *BLGC*)

**147** For submersibles complying with the provisions of **Part T**, the notation of “*Submersible*” (abbreviated to *SBM*) is affixed to the Classification Characters.

**158** For ships equipped with support systems for submersibles (mother ships/support ships) complying with the provisions of **Part T**, the notation of “*Equipped with Support System for Submersible*” (abbreviated to *EQ SS SBM*) is affixed to the Classification Characters.

**169** For ships equipped for the carriage of dangerous goods (refer to **3.2.20, Part R**) in accordance with the provisions of **Chapter 19, Part R** and **4.10, Part H**, the notation of “*Equipped for Carriage of Dangerous Goods*” (abbreviated to *EQ C DG*) is affixed to the Classification Characters.

**1720** For ships equipped for the carriage of motor vehicles with fuel in their tanks for their own propulsion in accordance with the provisions of **20.2.1-1, Part R** and **4.8.1, Part H**, the notation of “*Equipped for Carriage of Vehicles*” (abbreviated to *EQ C V*) is affixed to the Classification Characters.

**1821** For vehicle carriers, as defined in **3.2.54, Part R**, equipped for the carriage of motor vehicles with compressed natural gas in their tanks for their own propulsion in accordance with the provisions of **Chapter 20A, Part R** and **4.8.2, Part H**, the notation of “*Equipped for Carriage of Compressed Natural Gas Powered Motor Vehicles*” (abbreviated to *EQ C CNGPMV*) is affixed to the Classification Characters.

**1922** For vehicle carriers, as defined in **3.2.54, Part R**, equipped for the carriage of motor vehicles with compressed hydrogen in their tanks for their own propulsion in accordance with the provisions of **Chapter 20A, Part R** and **4.8.3, Part H**, the notation of “*Equipped for Carriage of Compressed Hydrogen Powered Motor Vehicles*” (abbreviated to *EQ C CHPMV*) is affixed to the Classification Characters.

**203** For ships equipped for the carriage of coal in accordance with the provisions of ~~**31.7.510.6.1, Part 2-2, Part C**~~ and **4.9, Part H**, the notation of “*Equipped for Carriage of Coal*” (abbreviated to *EQ C C*) is affixed to the Classification Characters.

**214** For ships equipped for the carriage of lumber in accordance with related provisions of ~~**11.3-14.8.3.1, Part 1, Part C, 23.1.3-310.4, Part 2-5, Part C**~~ and **Part U**, the notation of “*Equipped for Carriage of Lumber*” (abbreviated to *EQ C LB*) is affixed to the Classification Characters.

**225** For ships strengthened for cargo operations with the use of a grab deemed as appropriate by the Society, in accordance with the provisions of ~~**31A.6.2-1(1)**~~ **10.5, Part 2-2, Part C**, the notation of “*GRAB*” is affixed to the Classification Characters.

**236** For ships complying with the provisions of ~~**25.2.2-1-3.3.5.3, Part 1, Part C, 22.4.2, Part CS, 1.2.2 Section 5 Chapter 3, Part CSR-B**~~ or **2.1.1.2 Section 6, Part CSR-T**, the notation of “*Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in All Types of Ships and Double-side Skin Spaces of Bulk Carriers*” (abbreviated to *PSPC-WBT*) is affixed to the Classification Characters.

**247** For ships complying with the provisions of ~~**25.2.3-3.3.5.4, Part 1, Part C**~~ or **22.4.3, Part CS**, an appropriate notation corresponding to corrosion protection is affixed to the Classification Characters in accordance with the following (1) to (3):

- (1) Where coatings in accordance with *IMO Resolution MSC.288(87)* are applied:  
*Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers* (abbreviated to *PSPC-COT*)
- (2) Where corrosion protection by corrosion resistance steel in accordance with *IMO Resolution MSC.289(87)* is applied:

*Performance Standard for Corrosion Resistant Steel for Cargo Oil Tanks of Crude Oil Tankers* (abbreviated to *PSCRS-COT*)

- (3) Where coatings in accordance with *IMO* Resolution *MSC.288(87)* and corrosion protection by corrosion resistance steel in accordance with *IMO* Resolution *MSC.289(87)* are applied in combination:

*Performance Standard for Protective Coatings / Performance Standard for Corrosion Resistant Steel for Cargo Oil Tanks of Crude Oil Tankers* (abbreviated to *PSPC/PSCRS-COT*)

~~258~~ For ships intended for the carriage of cargoes having moisture contents which exceed transportable moisture limit in accordance with the provisions of ~~1.1.3-5~~**10.5.1, Part 2-3, Part C, 1.1.3-2, Part CS and 1.1.1-3, Part U**, the notation of “*Specially Constructed Cargo Ship*” (abbreviated to *SCCS*) is affixed to the Classification Characters.

~~29~~ For ships strengthened for helidecks deemed as appropriate by the Society, in accordance with the provisions of **10.4.6, Part 1, Part C**, the notation of “*HELIDK*” is affixed to the Classification Characters.

~~2630~~ For ships complying with the provisions of **2.3.1-1(11), Part B**, the notation of “*Noise Code*” (abbreviated to *NC*) is affixed to the Classification Characters.

~~2731~~ For self-unloading ships, as defined in **1.3.1(19) of Part B**, that complying with the provisions of ~~1.1.3-6, 31A.3.1-8 and 31A.5.1-3, of~~ **10.5, Part 10.5, Part C**, the notation of “*Self-unloader*” (abbreviated to *SUL*) is affixed to the Classification Characters.

~~2832~~ For ships complying with the provisions of **Part GF**, the notation of “*Equipped for Use of Low-flashpoint Fuels*” (abbreviated to *EQ U LFF*) is affixed to the Classification Characters. Details of the used fuel are to be entered in the Classification Register as descriptive notes for the ship.

~~2933~~ For ships having a propeller shaft Kind *1C* complying with the provisions of **6.2.11, Part D**, the notation of “*1C*” is affixed to the Classification Characters.

~~304~~ Unless otherwise specified above, for ships deemed necessary by the Society, an appropriate notation may be affixed to the Classification Characters.

### **1.2.5 Polar Class Ships and Ice Class Ships\***

Sub-paragraph -4 has been amended as follows.

**4** For ships made of steel corresponding to a design temperature ( $T_D$ ) for operation in water areas with low temperatures (*e.g.* Arctic or Antarctic waters) in accordance with the provisions of ~~1.1.12-13.2.2.2, Part 1, Part C~~, the notation of “*Design Temperature Category: TD*” (abbreviated to *TD*) is affixed to the Classification Characters.

Paragraph 1.2.6 has been amended as follows.

### **1.2.6 Application of Hull Structural Analysis**

The class notations indicated below in (1) to (~~54~~) are added to classification characters for ships for which direct strength calculations and/or fatigue strength assessments are carried out by a method approved by the Society for determining structural scantlings or structural details.

- (1) Where ~~the yield strength assessment and buckling strength assessment~~ the strength assessment by cargo hold analysis are carried out ~~based upon direct strength calculations deemed appropriate by the Society~~ in accordance with ~~1.1.22~~ the relevant requirements in Chapter 8, Part 1 or Part 2, Part C:

~~(PS-DA) – (PrimeShip-Direct Assessment)~~

PrimeShip-Direct Assessment (abbreviated to *PS-DA*)

- (2) Where the fatigue strength assessment ~~of structural details that are deemed necessary to assess~~

~~by the Society~~ by finite element analysis are carried out in accordance with ~~1.1.23~~ the relevant requirements in **Chapter 9, Part 1 or Part 2, Part C:**

~~(PS-FA) = (PrimeShip-Fatigue Assessment)~~

*PrimeShip-Fatigue Assessment* (abbreviated to *PS-FA*)

In addition, an appropriate additional notation corresponding to the wave load and the design fatigue life  $T_{DF}$  to be considered is affixed as follows.

(a) Where the fatigue strength assessment by using the worldwide loads

*PrimeShip-Fatigue Assessment (World Wide,  $T_{DF}$ )* (abbreviated to *PS-FA(WW,  $T_{DF}$ )*)

(b) Where the fatigue strength assessment by using the North Atlantic Ocean load

*PrimeShip-Fatigue Assessment (North Atlantic,  $T_{DF}$ )* (abbreviated to *PS-FA(NA,  $T_{DF}$ )*)

Where the fatigue strength assessment is carried out in accordance with the provisions of **9.2.1.1-2, Part 2-9, Part C**, the notation of “-Superior” (abbreviated to -S) is added. (e.g. *PS-FA-S(WW,  $T_{DF}$ )*)

~~(3) Where the yield strength assessment and buckling strength assessment are carried out in accordance with **32.9, Part C:**~~

~~(PS-DA-CNC) = (PrimeShip-Direct Assessment-Container Carrier)~~

(43) Where the yield strength assessments and buckling strength assessments of primary members in all cargo spaces are carried out based upon direct load analysis and direct strength calculations deemed appropriate by the Society using individual design regular waves obtained from direct load analysis in accordance with ~~1.1.22~~ **1.1.2.4-3(1) or (2), Part C:**

~~(PS-DA-DLA) = (PrimeShip-Direct Assessment-Direct Load Analysis)~~

*PrimeShip-Direct Assessment-Direct Load Analysis* (abbreviated to *PS-DA-DLA*)

(54) Where the fatigue strength assessment of structural details of primary members in all cargo spaces that are deemed necessary by the Society are carried out based upon direct strength calculations using loads obtained from direct load analysis in accordance with ~~1.1.23~~ **1.1.2.4-3(1) or (2), Part C:**

~~(PS-FA-DLA) = (PrimeShip-Fatigue Assessment-Direct Load Analysis)~~

*PrimeShip-Fatigue Assessment-Direct Load Analysis* (abbreviated to *PS-FA-DLA*)

“Guidance for the survey and construction of steel ships” has been partly amended as follows:

Whole of Part C has been amended as follows.

**Part C            HULL CONSTRUCTION AND EQUIPMENT**

(See the separate document)

## Part A GENERAL RULES

### A1 GENERAL

#### A1.2 Class Notations

Paragraph A1.2.4 has been amended as follows.

##### A1.2.4 Hull Construction and Equipment

**1** With respect to the provisions of **1.2.4, Part A of the Rules**, for catamarans or trimarans complying with relevant requirements specified in these Rules, the notation of “*Catamaran*” (abbreviated to *CAT*) or “*Trimaran*” (abbreviated to *TRI*) is affixed after the notation relating to the structural materials for main hull specified in **1.2.3, Part A of the Rules**.

**2** With respect to the provisions of **1.2.4, Part A of the Rules**, in case that the provisions of ~~C27.1.1~~ **C14.3.1.1-1, Part C of the Guidance** are applied, the design conditions for anchors, chain cables and windlass are to be entered in the Class Register as descriptive notes for the ship.

**3** For ships complying with the provisions of **1.2.4-1, -2, -3, and -2528, Part A of the Rules** that are designed for the carriage of specific cargoes, the details are to be entered as descriptive notes in the Classification Register for the ship.

**4** With respect to the provisions of **1.2.4-2 and -3, Part A of the Rules**, design pressure and design temperatures of cargo spaces are to be entered in the Classification Register as descriptive notes for the ship.

~~**5** With respect to the provisions of **1.2.4-6, Part A of the Rules**, for ships whose maximum cargo density is restricted to less than  $3.0 \text{ ton/m}^3$  or the assignment of specified empty holds at designed maximum load draught is restricted; details are to be entered in the Classification Register as descriptive notes for the ship.~~

~~**6** For ships complying with the provisions of **1.2.4-6, Part A of the Rules**, and that are registered as bulk carriers in compliance with the provisions of **C31.1.1-1, Part C of the Guidance**, the notation “*Bulk Carrier modified*” (abbreviated to *BCM*) is to be used.~~

~~**7** In accordance with the provisions of **1.2.4-7, Part A of the Rules**, ships which are at the beginning stage of construction on or after 1 July 2006 are affixed with the notation *BC-XII*. For ships complying with **1.2.4-6, Part A of the Rules** that have the notation *BC-XII*, then both applicable notations may be affixed, e.g., “*NS\*(BC-A, BC-XII)*”.~~

~~**85** With respect to the provisions of **1.2.4-114** and **-125, Part A of the Rules**, design criteria such as water depth and wave height are to be entered into the Classification Register as descriptive notes for the ship.~~

~~**96** With respect to the provisions of **1.2.4-147, Part A of the Rules**, design conditions such as maximum diving depth are to be entered in the Classification Register as descriptive notes for the ship.~~

~~**107** For ships complying with the provisions of **1.2.4-7** and **1.2.4-225, Part A of the Rules**, the notation “*GRAB*” is to be affixed as in the following example: “*BC-XII, GRAB*”~~

Paragraph A1.2.5 has been amended as follows.

##### A1.2.5 Polar Class Ships and Ice Class Ships

With respect to the provisions of **1.2.5-4, Part A of the Rules**, the character corresponding to the appropriate design temperature category specified in ~~Table C1.1.12-1(1), Part C of the Guidance~~

**Table 3.2.2-5, Chapter 3, Part 1, Part C of the Rules** (“*a*” to “~~*e*~~” for “ $T_{Da}$ ” to “ $T_{D\cancel{e}}$ ” respectively) is to be added to the notation of “*TD*”.