CHINA CLASSIFICATION SOCIETY

Rule Change Notice For:

RULES FOR CLASSIFICATION OF MOBILE OFFSHORE UNITS 2012

Version: December, 2015，RCN No.1
Effective date: 1 January, 2016

Beijing

Contents

PART ONE PROVISIONS OF CLASSIFICATION

CHAPTER 2 SCOPE AND CONDITIONS OF CLASSIFICATION

Section 9 ASSIGNMENT, MAINTENANCE, SUSPENSION, CANCELLATION AND REINSTATEMENT OF CLASS

2.9.2 Suspension and cancel of class

2.9.2.1（4）③ when a special survey has not been completed within the period of time specified by CCS and no extension is granted by CCS, unless the unit has been under attendance for completion of the special survey prior to resuming trading, by the due date.

a. Under “exceptional circumstances”, CCS may grant an extension to allow for completion of the special survey, provided that the unit is attended and the attending Surveyor so recommends upon satisfactory survey to the following extent:

(a) annual survey;

(b) re-check of outstanding recommendations/conditions of class;

(c) progression of the special survey as far as practicable;

(d) where the docking survey is due prior to the expiry date of the extension, an underwater examination is to be carried out by an approved diving company. Such underwater examination may be dispensed with in the case of extension of docking survey not exceeding 36 months provided the unit is without any outstanding recommendation/condition of class regarding underwater parts.

b. In the case that the class certificate will expire when the unit is expected to be at sea, an extension to allow for completion of the special survey may be granted provided there is documented agreement to such an extension prior to the expiry date of the certificate, and provided that positive arrangements have been made for attendance of the Surveyor at the first port of call, and provided that CCS is satisfied that there is technical justification for such an extension. However, if owing to “exceptional circumstances” the special survey cannot be completed at the first port of call, the subparagraph a. above may be followed, but the total period of extension is in no case to be longer than 3 months after the original due date of the special survey.

CHAPTER 5 SURVEYS AFTER CONSTRUCTION

Section 1 GENERAL PROVISIONS

5.1.5 Definitions

5.1.5.1(3) A Preload Tank is a tank within the hull of a self-elevating unit. These tanks are periodically filled with salt water ballast and used to preload the footings of the unit prior to commencing drilling operations. Preload Tanks are considered equivalent to Ballast Tanks.

5.1.5.1(4) Transverse Section

A Transverse Section includes all continuous longitudinal members such as plating, longitudinals and girders

at a given section of the unit.

5.1.5.1(6) Critical Structural Area

Critical Structural Areas are locations which have been identified from calculations to require monitoring or from the service history of the subject Unit or from similar Units or sister Units, if applicable, to be sensitive to cracking, buckling or corrosion which would impair the structural integrity of the Unit.

5.1.5.1(8) Substantial Corrosion

Substantial Corrosion is an extent of corrosion such that assessment of corrosion pattern indicates a wastage in excess of 75% of allowable margins, but within acceptable limits.

5.1.5.1(9) Excessive Diminution

Excessive Diminution is an extent of corrosion beyond allowable limits.

5.1.5.1(10) Corrosion Prevention System

A Corrosion Prevention System is normally considered a full hard protective coating.

Hard Protective Coating is usually to be epoxy coating or equivalent. Other coating systems, which are neither soft nor semi-hard coatings, may be considered acceptable as alternatives provided that they are applied and maintained in compliance with the manufacturer's specifications.

5.1.5.1(11) Prompt and Thorough Repair

A Prompt and Thorough Repair is a permanent repair completed at the time of survey to the satisfaction of the Surveyor, therein removing the need for the imposition of any associated condition of classification.

5.1.5.1(13) Close-Up Survey

A Close-Up Survey is a survey where the details of structural components are within the close visual inspection range of the surveyor i.e. normally within reach of hand.

5.1.5.1(14) Special consideration

Special consideration or specially considered (in connection with close-up surveys and thickness measurements) means sufficient close-up inspection and thickness measurements are to be taken to confirm the actual average condition of the structure under the coating.

5.1.5.1(15) Coating Condition

Coating Condition is defined as follows:

GOOD condition with only minor spot rusting

FAIR condition with local breakdown at edges of stiffeners and weld

Connections and/or light rusting over 20% or more of areas under consideration, but less than as defined for POOR condition

POOR condition with general breakdown of coating over 20% or more of areas or hard scale

at 10% or more of areas under consideration

5.1.5.1(19) Propulsion Assist

Units that are given the notation "Propulsion Assist" are non-self-propelled Units fitted with thrusters intended to assist in maneuvering or propelling while under tow.

5.1.6 Preparations for survey

5.1.6.1 Conditions for survey

(1) The Owner is to provide the necessary facilities for a safe execution of the survey. For confined space entry,

the requirements of IACS Procedural Requirement PR37 should be followed.

(2) Tanks and spaces are to be safe for access, i.e. gas freed, ventilated and illuminated.

(3) In preparation for survey and thickness measurements and to allow for a thorough examination, all spaces are to be cleaned including removal from surfaces of all loose accumulated corrosion scale. Spaces are to be sufficiently clean and free from water, scale, dirt, oil residues etc. to reveal corrosion, deformation, fractures, damages, or other structural deterioration. However, those areas of structure whose renewal has already been decided by the Owner need only be cleaned and descaled to the extent necessary to determine the limits of the areas to be renewed.

(4) Sufficient illumination is to be provided to reveal corrosion, deformation, fractures, damages or other structural deterioration.

(5) Where soft or semi-hard coatings have been applied, safe access is to be provided for the surveyor to verify the effectiveness of the coating and to carry out an assessment of the conditions of internal structures which may include spot removal of the coating. When safe access cannot be provided, the soft or semi-hard coating is to be removed.

5.1.6.2 Access to structures

(1) For survey, means are to be provided to enable the surveyor to examine the hull structure in a safe and practical way；

(2) For survey in void compartments and water ballast tanks, one or more of the following means for access, acceptable to the Surveyor, is to be provided：

① permanent staging and passages through structures;
② temporary staging and passages through structures;
③ lifts and movable platforms;
④ boats or rafts;
⑤ other equivalent means.

5.1.6.3 Equipment for survey

(1) Thickness measurement is normally to be carried out by means of ultrasonic test equipment. The accuracy of the equipment is to be proven to the Surveyor as required. Thickness measurements are to be carried out by a firm approved by the society in accordance with UR Z17.

(2) One or more of the following fracture detection procedures may be required if deemed necessary by the Surveyor:

① radiographic equipment;
② ultrasonic equipment;
③ magnetic particle equipment;
④ dye penetrant;
⑤ Other acceptable NDT Techniques.

5.1.6.4 Survey Offshore or at anchorage

(1) Survey offshore or at anchorage may be accepted provided the Surveyor is given the necessary assistance from the personnel onboard.

(2) A communication system is to be arranged between the survey party in the tank or space and the responsible officer on deck. This system must also include the personnel in charge of ballast pump handling if boats or rafts are used.

(3) When boats or rafts are used, appropriate life jackets are to be available for all participants. Boats or rafts are to have satisfactory residual buoyancy and stability even if one chamber is ruptured. A safety checklist is to be provided.

(4) Surveys of tanks by means of boats or rafts may only be undertaken at the sole discretion of the Surveyor,

who is to take into account the safety arrangements provided, including weather forecasting and ship response in reasonable sea conditions. Reference is made to IACS Recommendation 39 - Guidelines for use of Boats or Rafts for Close-up surveys.

5.1.9 Repairs

5.1.9.1 Any damage in association with wastage over the allowable limits (including buckling, grooving, detachment or fracture), or extensive areas of wastage over the allowable limits, which affects or, in the opinion of the Surveyor, will affect the unit's structural, watertight or weathertight integrity, is to be promptly and thoroughly repaired (see 5.1.5.1(11) of this Chapter).

5.1.9.2 If it is difficult to complete the above repairs in the port where the above defects are found and with the consent of CCS, consideration may be given to allow the unit to proceed directly to a port with adequate repair facilities for completing the repairs, provided safety is guaranteed. This may require transit and unloading and/or temporary repairs for the intended voyage.

5.1.9.3 Additionally, when a survey results in the identification of structural defects or corrosion, either of which, in the opinion of the Surveyor, will impair the unit's fitness for continued service, remedial measures are to be implemented before the unit continues in service.

5.1.9.4 Where the damage mentioned in 5.1.9.1 is isolated and of a localised nature which does not affect the unit's structural integrity, consideration may be given by the surveyor to allow an appropriate temporary repair to restore watertight or weather tight integrity and impose a Recommendation/Condition of Class in accordance with IACS PR 35, with a specific time limit.

Section 2 TYPES AND PERIODS OF SURVEYS

5.2.3 Surveys of the outside of the unit's bottom and related items

5.2.3.2 There is to be a minimum of two examinations of the outside of the unit's bottom and related items during each five-year special survey period. One such examination is to be carried out in conjunction with the special survey. In all cases the interval between any two such examinations is not to exceed 36 months. The surveys are to be carried out in accordance with the relevant requirements in Section 7 of this Chapter. Consideration may be given at the discretion of the Society, to any special circumstances justifying an extension of the interval, pecial circumstances is defined in 2.1.3.1（18） of chapter 2.For units operating in salt water for less than six (6) months each year, the survey interval may be increased by the Society.

5.2.4 Special surveys

5.2.4.2 The Special Survey may be commenced at the 4th Annual Survey and be progressed with a view to completion by the 5th anniversary date. When the Special Survey is commenced prior to the 4th Annual Survey, the entire survey is to be completed within 15 months if such work is to be credited to the Special Survey.

5.2.4.5 A survey planning meeting is to be held prior to the commencement of the survey.

5.2.9 Lay-up and reactivation surveys

5.2.9.1 General requirements

(1) When the Classification Society is notified by the Owner that a Unit has been laid-up, this status will be noted in the vessel's survey status and surveys falling due during lay-up may then be held in abeyance until the vessel reactivates, at which time they are to be brought up-to-date.

5.2.9.4 Reactivation surveys

(1) Units which have been laid up and are returning to active service, regardless of whether the Classification Society has been previously informed that the vessel has been in lay-up, a Reactivation Survey is required. The requirements for the Reactivation Survey are to be specially considered in each case, having due regard being

given to the status of surveys at the time of the commencement of lay-up, the length of the lay-up period and the conditions under which the vessel has been maintained during that period.

Section 3 MAIN STRUCTURE AND EQUIPMENT SURVEY

5.3.2 Annual surveys

5.3.2.2（6）② checking the provision and randomly examining the condition of the portable and non-portable fire extinguishers;

5.3.2.2（7）② thickness measurements of areas of substantial corrosion identified at previous surveys;

5.3.2.2（7）③ where extensive corrosion is found or when considered necessary by the Surveyor, thickness measurements are to be carried out and renewals or repairs made when wastage exceeds allowable margins. If the results of these thickness measurements indicate that substantial corrosion is found, then the extent of thickness measurements is to be increased to determine areas of substantial corrosion. 5.3.5.2(4) of this part may be used as guidance for these additional thickness measurements. These extended thickness measurements are to be carried out before the annual survey is credited as completed.

5.3.4 Special surveys

5.3.4.1(3) In addition to the applicable items specified in 5.3.2 of this Section, special surveys are to include examination, tests and checks of the items listed in 5.3.4.2 to 5.3.4.8 to ensure that the main structure, equipment and related piping (as required by 5.3.4.9) are in satisfactory condition and that the unit is fit for the intended purpose for the next five (5) year class period, subject to proper maintenance and operation and the periodical surveys being carried out at the due dates. The examinations of the main structure are to be supplemented by thickness measurements and testing as required in 5.3.5, to ensure that the structural integrity remains effective. The aim of the examination is to discover substantial corrosion, significant deformation, fractures, damages or other structural deterioration, that may be present.

5.3.4.1 (4) Items for docking survey specified in Section 8 of this Chapter. However, a docking survey completed within 15 months before the due date of the special survey may be accepted as a survey carried out at the same time with the special survey.

5.3.4.2(4) All special and primary application structures (as defined in IACS Recommendation No. 11) and identified critical structural areas are to be subjected to Close up survey.

5.3.4.2(6) Where provided, the condition of corrosion prevention system of ballast tanks is to be examined. Where a hard protective coating is found in POOR condition and it is not renewed, where soft or semi-hard coating has been applied, or where a hard protective coating was not applied from time of construction, the tanks in question are to be examined at a frequency determined by the classification society. Thickness measurements are to be carried as deemed necessary by the Surveyor;

5.3.5.2 (1) The minimum requirements to thickness measurement for all types of units at special surveys are given respectively in Tables 5.3.5.2 (1)①, ②, ③ and ④.

5.3.5.2(2) When thickness measurements indicate substantial corrosion, the extent of thickness measurements is to be increased to determine areas of substantial corrosion. Table 4 of Appendix B may be used as guidance for these additional thickness measurements.

Minimum Requirements for Thickness Measurements for Surface-Type Units at Special Surveyable

Table 5.3.5.2(1)①

Special Survey No. 1 Age ≤ 5	Special Survey No.2 <5 Age ≤10	Special Survey No.3 10< Age ≤ 15	Special Survey No.4 and subsequent 15 <Age
(1) Suspect areas throughout the unit.	(1) Suspect areas throughout the unit. (2) One transverse section of deck plating abreast the moon pool opening within the amidships 0.6L, together with internals in way as deemed necessary. Where unit is configured with side ballast tanks, the plating and internals of the tanks are also to be gauged in way of the section chosen. (3) Moon pool boundary bulkhead plating.	(1) Suspect areas throughout the unit. (2) Two Transverse Sections (Girth Belts) of deck, bottom and side plating abreast the moon pool and one hatch opening within the amidships 0.6L together with internals in way as deemed necessary. Where unit is configured with side ballast tanks, the plating and internals of the tanks to be gauged in way of the required belts, Remaining internals in ballast tanks to be gauged as deemed necessary. 3) Moon pool boundary bulkhead plating. 4) Internals in forepeak tank and aft peak tank as deemed necessary.	(1) Suspect areas throughout the Unit (2) A minimum of three Transverse Sections (Girth Belts) of deck, bottom, side, and longitudinal-bulkhead plating in way of the moon pool and other areas within the amidships 0.6L, together with internals in way (including in perimeter ballast tanks, where fitted in way of belts). (3) Moon pool boundary bulkhead plating. (4) Internals in forepeak and after peak tanks as deemed necessary. (5) Lowest strake of all transverse bulkheads in hold spaces. Remaining bulkhead plating to be gauged as deemed necessary. (6) All plates in two wind and water strakes, port and starboard, full length. (7) All exposed main deck plating full length and all exposed first-tier super-structure deck plating (poop, bridge and forecastle decks). (8) All keel plates full length plus additional bottom plating as deemed necessary by the Surveyor, particularly in way of cofferdams and machinery spaces. (9) Duct keel or pipe tunnel plating or pipe tunnel plating and internals as deemed necessary. (10) Plating of sea chests. Shell plating in way of overboard discharges as considered necessary by the attending surveyor.

Notes:

1. Thickness measurement locations are to be selected to provide the best representative sampling of areas likely to be most exposed to corrosion, considering ballast history and arrangement and condition of protective coatings.

2. Thickness measurements of internals may be specially considered by the Surveyor if the hard protective coating is in GOOD condition.

3. For units less than 100 meters in length, the number of transverse sections required at Special Survey No.3 may be reduced to one, and the number of transverse sections required at subsequent Special Surveys may be reduced to two.

4. For units more than 100 meters in length, at Special Survey No.3, thickness measurements of exposed deck plating within amidship 0.5 L may be required.

Minimum Requirements for Thickness Measurements for Self-Elevating Units at Special Survey

Table 5.3.5.2（1）②

Special Survey No. 1 Age ≤ 5	Special Survey No.2 <5 Age ≤10	Special Survey No.3 10< Age ≤ 15	Special Survey No.4 and subsequent 15 <Age
(1) Suspect areas throughout the unit (particular attention to be paid to the legs in way of the Splash Zone).	(1) Suspect areas throughout the unit. (2) Legs in way of Splash Zone. (3) Primary application structures where wastage is evident. (4) Representative gaugings of upper hull deck and bottom plating and internals of one preload (ballast) tank.	(1) Suspect areas throughout the unit. (2) Legs in way of Splash Zone. (3) Representative gaugings, throughout, of special and primary application structures. (4) Leg well structure. (5) Representative gaugings of deck, bottom, and side shell plating of hull and mat. (6) Representative gaugings of upper hull deck and bottom plating and internals of at least two preload (ballast) tanks.	(1) Suspect areas throughout the unit. (2) Legs in way of Splash Zone. (3) Comprehensive gaugings, throughout, of special and primary application structures. (4) Leg well structure. (5) Representative gaugings of deck, bottom, and side shell plating of hull and mat. (6) Substructure of derrick as deemed necessary. (7) Representative gaugings of internals of all preload (ballast) tanks.

Minimum Requirements for Thickness Measurements for Column-Stabilized Units at Special survey

Table 5.3.5.2（1）③

Special Survey No. 1 Age ≤ 5	Special Survey No.2 <5 Age ≤10	Special Survey No.3 10< Age ≤ 15	Special Survey No.4 and subsequent 15 <Age
(1) Suspect areas throughout the unit. (2) Columns and bracings where wastage is evident in Splash Zone.	(1) Suspect areas throughout the unit. (2) Representative gaugings of columns and bracings in Splash Zone together with internals in way as deemed necessary. (3) Special and primary application structure where wastage is evident.	(1) Suspect areas throughout the unit. (2) Representative gaugings, throughout, of special and primary application structures. (3) One Transverse Section (Girth Belt) of each of 2 columns and 2 bracings in Splash Zone together with internals in way as deemed necessary. (4) Lower hulls in way of mooring lines where wastage is evident. (5) One Transverse Section (Girth Belt) of each lower hull between one set of columns.	(1) Suspect areas throughout the unit. (2) Comprehensive gaugings, throughout, of special and primary application structures. (3) One Transverse Section (Girth Belt) of each of one-half of the columns and bracings in Splash Zone and internals in way as deemed necessary (i.e., gauge half of the unit's columns and bracings in Splash Zone). (4) Lower hulls in way of mooring lines where wastage is evident. (5) One Transverse Section (Girth Belt) of each lower hull between one set of columns. (6) Representative gaugings of substructure of drilling derrick.

Guidance for additional Thickness Measurements in way of Substantial Corrosion Table 5.3.5.2（2）

Structral member	Extent of measurement	Pattern of measurement
Plating	Suspect area and adjacent plates.	5 point pattern over 1 square meter.
Stiffeners	Suspect area.	3 measurements each in line across web and flange.

Section 4 SURVEYS OF MACHINERY INSTALLATIONS AND SYSTEMS

5.4.2 Annual surveys

5.4.2.4 For self-propelled units, a general examination of main and auxiliary engines, boilers, steering machinery, pumps, pipings, electrical installation including those in hazardous areas, and fire extinguishing systems is to be carried out. For non-self propelled units, a general examination of items required for classification such as auxiliary machinery, pumps, piping, electrical installation in hazardous areas and fire extinguishing systems is to be carried out. Propulsion-assist and dynamic positioning equipment should be surveyed on the basis of Annual Survey-Machinery in accordance with the requirements of the Society

Section 5 SURVEYS OF ELECTRICAL INSTALLATIONS

5.5.4 Special surveys

5.5.4.4（9）Emergency power systems are to be examined and tested.

Section 6 SURVEYS OF FIRE AND EXPLOSION PREVENTION EQUIPMENT

5.6.2 Annual survey

5.6.2.3（4）Alarm systems including fire and gas detection.

Section 7 SURVEYS OF THE OUTSIDE OF THE UNIT’S BOTTOM AND RELATED ITEMS

5.7.3 In-water surveys

5.7.3.2(6) The in-water visibility and the cleanliness of the hull below the waterline is to be clear enough to permit a meaningful examination which allows the surveyor and diver and/or ROV pilot to determine the condition of the plating, appendages and the welding. The Classification Society is to be satisfied with the methods of orientation of the divers/ROVs on the plating, which should make use where necessary of permanent markings on the plating at selected points.

Section 8 SURVEYS OF PROPELLER SHAFTS AND STERNTUBE SHAFTS

5.8.1 General requirements

5.8.1.2 Other propulsion systems shall be surveyed according to CCS Rule