



GUIDANCE NOTES ON

IN-SERVICE HULL STABILITY VERIFICATION

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Foreword

7-2-5/5 of the ABS Rules for Building and Classing Mobile Offshore Drilling Units (MODU Rules) requires ABS verification of an effective weight control program throughout the operational life of all column-stabilized units. Similar requirements apply to any other column-stabilized units, such as a tender unit, or an accommodation unit. These Guidance Notes provide technical recommendations and guidance for monitoring lightship weight and vertical center of gravity while a column-stabilized unit is in service.

Having a satisfactory in-service hull stability verification program may avoid the excess time and cost spent for preparation and completion of an inclining test.

The in-service hull stability verification program determines the location of vertical center of gravity of a column-stabilized unit at the operating location. This is achieved by performing frequent inclining tests at regular intervals at sea. Allowances can be made for the mooring and other external forces. By applying the in-service hull stability verification program, trends are developed from multiple tests, and these trends can be used to help identify any unaccounted weight onboard. This results in the improvement of the accuracy of the weight log.

These Guidance Notes become effective on the first day of the month of publication.

Users are advised to check periodically on the ABS website www.eagle.org to verify that this version of these Guidance Notes is the most current.

We welcome your feedback. Comments or suggestions can be sent electronically by email to rsd@eagle.org.

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SECTION 1 Introduction

1 General

The in-service hull stability verification program allows the location of vertical center of gravity of a Column-Stabilized Unit (CSU), hereafter referred as “unit”, to be determined throughout its operation life at any point in time. This is achieved by performing frequent inclining tests at regular intervals at sea. Allowances can be made for the mooring and other external forces. By applying the in-service hull stability verification program, trends developed from multiple in-service hull stability verification tests can be used to help identify unaccounted weight onboard and update the weight log accordingly. This results in a reduction in weight log discrepancies, and helps meet regulatory requirements. In comparison, a conventional inclining test requires the unit to be transported to a sheltered location in order to determine the vertical center of gravity (VCG), which is only known when the inclining test is complete.

7-2-5/5 of the ABS *MODU Rules* and 3.1.5 of the IMO *Code for the Construction and Equipment of Mobile Offshore Drilling, 2009 (MODU Code)* requires a lightweight survey or an inclining test to be conducted during a CSU’s first Special Survey of Hull. If the survey or test during first Special Survey demonstrated that the owner was maintaining an effective weight-control program, and onboard records/log of all weight changes throughout the CSU was well maintained in support of daily operations, lightship displacement may be verified by an in-service hull stability verification program described in these Guidance Notes.

3 Objective

These Guidance Notes provide recommendations and technical guidance on verifying the lightship weight and vertical center of gravity while the unit is in service. They supplement the following Rules for satisfying the classification requirements relevant to weight control:

- *ABS Rules for Building and Classing Mobile Offshore Drilling Units (MODU Rules)*
- *ABS Guide for Building and Classing Mobile Offshore Units (MOU Guide)*
- *IMO Code for the Construction and Equipment of Mobile Offshore Drilling, 2009 (MODU Code)*

5 Scope and Application

These Guidance Notes are primarily applicable to in-service hull stability verification of Column-Stabilized Units (CSU) at the operating location under favorable environmental conditions. Production installations may require special consideration.

Prior to acceptance for statutory purposes, flag State approval is required.

7 Definitions

ABS Recognized External Specialist. Service suppliers, not employed by ABS, who at the request of an equipment manufacturer, shipyard, unit’s owner or other clients provide services for a ship or a MODU such as inspection, measurements, test or maintenance of safety systems and equipment, the results of which are used by surveyors in making decisions affecting classification or statutory certification and services. For more information, please refer to: <http://ww2.eagle.org/en/rules-and-resources/recognized-specialists.html>, or contact Corporate ABS Programs at externalspecialist@eagle.org.

Deadweight. The weight of the unit excluding light weight. Thus, Displacement = Lightweight + Deadweight.