GUIDE FOR THE CLASSIFICATION NOTATION

THRUSTER-ASSISTED MOORING (TAM, TAM-R, TAM (Manual)) FOR MOBILE MOORING SYSTEMS JANUARY 2013

NOTICE NO. 1 – December 2015

The following Changes were approved by the ABS Rules Committee on 17 November 2015 and become **EFFECTIVE AS OF 1 DECEMBER 2015.**

(See http://www.eagle.org for the consolidated version of the Guide for the Classification Notation Thruster-Assisted Mooroing, with all Notices and Corrigenda incorporated.)

Notes - *The date in the parentheses means the date that the Rule becomes effective for new construction based on the contract date for construction, unless otherwise noted. (See 1-1-4/3.3 of the ABS Rules for Conditions of Classification (Part 1).)*

SECTION 1 INTRODUCTION

3 Application

(Revise first paragarph of Subsection 1/3, as follows:)

(1 December 2015) The provisions of this Guide apply to mobile offshore units operating with TAM systems. Sections 2 and 3 of the Guide provide the technical requirements and survey requirements for the optional notations: **TAM** (Automatic position control system), **TAM-R** (Automatic position control system with redundancy), and **TAM (Manual)** (Manual position control system) for mobile offshore units. At the request of the Owners, the TAM system may be verified for compliance with the provisions of Sections 2 and 3, with the appropriate class notation assigned.

This Guide may be used in tandem with Appendix 3-4-A1, "Guide for Position Mooring Systems" of the ABS *Rules for Building and Classing Mobile Offshore Drilling Units (MODU Rules).*

(Revise Paragraph 1/3.1, as follows:)

3.1 Class Notations *(1 December 2015)*

The requirements for conditions of Classification for the entire drilling units and offshore structures are contained in the ABS *Rules for Conditions of Classification – Offshore Units and Structures (Part 1)*. Additional requirements specific to thruster-assisted mooring systems are contained in this Guide.

For TAM systems, which are fitted with a TA system that is capable of automatically maintaining the position and heading of the unit under specified maximum environmental conditions having an independent centralized manual position control with automatic heading control that have been built, installed and commissioned to the satisfaction of the ABS Surveyors to the full requirements of this Guide, where approved by the Committee for service for the specified design environmental conditions, will be classed and distinguished in the ABS *Record* by the notation ✠ **TAM**.

For TAM systems, which are fitted with a TA system that is capable of automatically maintaining the position and heading of the unit under specified maximum environmental conditions with redundancy as determined by failure mode and effects analysis (FMEA) having an independent centralized manual position control with automatic heading control that have been built, installed and commissioned to the satisfaction of the ABS Surveyors to the full requirements of this Guide, where approved by the Committee for service for the specified design environmental conditions, will be classed and distinguished in the ABS *Record* by the notation ✠ **TAM-R**.

For TAM systems, which are fitted with a TA system with centralized manual position control and automatic heading control to maintain the position and heading under specified maximum environmental conditions that have been built, installed and commissioned to the satisfaction of the ABS Surveyors to the full requirements of this Guide, where approved by the Committee for service for the specified design environmental conditions, will be classed and distinguished in the ABS *Record* by the notation ✠ **TAM (Manual)**. This notation assumes continuous attention of a TA operator.

The symbol "✠" (Maltese-Cross) signifies that the system was built, installed and commissioned to the satisfaction of the ABS Surveyors. TAM systems that have not been built under survey to ABS, but which are submitted for Classification, will be subjected to special consideration. Where found satisfactory and thereafter approved by the Committee, it will be classed and distinguished in the *Record* by the notation described above, but the symbol "✠" signifying survey during construction will be omitted.

SECTION 2 GENERAL REQUIREMENTS

(Revise Subsection 2/1, as follows:)

1 General *(1 December 2015)*

In evaluating the capability of the TAM system for mobile offshore units with the intent of assigning the optional notation **TAM**, **TAM-R**, or **TAM (Manual)**, the provisions in this Section are to be complied with as applicable.

(Revise Subsection 2/3, as follows:)

3 Analysis Conditions for Thruster-Assisted Mooring (TAM, TAM-R) System *(1 December 2015)*

The TAM or TAM-R system shall be designed for the intact and damaged conditions as defined in Section 2, Tables 1A and 1B.

(Renumber Section 2, Table 1 as Section 2, Table 1A, as follows:)

TABLE 1A
Intact and Damaged TAM Definitions

(Add new Section 2, Table 1B, as follows:)

TABLE 1B
Intact and Damaged TAM-R Definitions *(1 December 2015)*

TAM-R Definition and Mooring Line Factor of Safety	*Mooring System Condition*	*Thrust Assist (TA) System Condition*
Intact	Intact	Intact
Damaged	Intact	Damaged with redundancy as determined by failure mode and effects analysis (FMEA).
Damaged	Damaged	Intact

(Revise Section 2, Table 3, as follows:)

TABLE 3
Allowable Thrust for Manual and Automatic Thrust Assist (TA) Systems *(1 December 2015)*

		Analysis Condition		*Class Notation*
		Intact	*Damaged*	
Allowable Thrust	Automatic Thrust Assist Systems	Equal to the available thrust or effective bollard pull when the thruster system is operating normally	Equal to the available thrust	**TAM**
			The available thrust shall account for the worst failure as determined by failure mode and effects analyses (FMEA).	**TAM-R**
	Manual Thrust Assist Systems	Equal to the available thrust or effective bollard pull when the thruster system is operating normally multiplied by Reduction Factor of 0.7	Equal to the available thrust multiplied by Reduction Factor of 0.7	**TAM (Manual)**