

GUIDE FOR

DYNAMIC POSITIONING SYSTEMS

NOVEMBER 2013

NOTICE NO. 1 – September 2015

The following Changes become **EFFECTIVE AS OF 1 SEPTEMBER 2015**.

(See <http://www.eagle.org> for the consolidated version of the Guide for Dynamic Positioning Systems 2013, 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 5 CONTROL SYSTEMS

(Revise Subsection 5/15, as follows:)

15 Display and Monitoring (1 September 2015)

The DP control station is to receive alarms and warnings reflecting the status of the DP system. If the vessel exceeds preset position and heading limits an alarm is to be initiated. If the alarms in the DP control station are slave signals of other alarm systems, there are to be a local acknowledgement and silencing device. The silencing device is not to inhibit new alarms.

The display unit is to present a position plot including the location of the vessel relative to the reference sources. The plot may be vessel relative, or a true motion presentation. For DP control systems designed with redundancy, there is to be at least two independent position displays. If the display is used for presentation of warnings or alarms, they are to have priority over other information and they are not to be inhibited by other data currently being displayed.

The critical DP alarms and displays are to be available in **DPS-3** backup DP control station. Non-critical DP alarms (e.g., grouping of alarms, logging on by authorized crew only to the alarm monitoring system, etc.) are to be of non-intrusive type announcements for the DP operator, since in a fire or loss of compartment situations, many failed electrical systems, thrusters and other alarms may be initiated simultaneously.

SECTION 6 AUXILIARY SYSTEMS (APPLIED TO DPS-2 AND DPS-3)

(Revise Subsection 6/3, as follows:)

3 Fuel Oil (1 September 2015)

The fuel system is to be arranged to follow the redundancy concept. The duty pump is to be powered from within the same redundancy group as the component or system it serves. The effect of pump failure is not to exceed the WCFDI. If the fuel system requires heating, then the heating system is to be designed with the appropriate level of redundancy.

The design of the fuel system is to facilitate isolation of services between DP operation and industrial functions if applicable.

Actuators for quick closing valves are to be installed on a per engine basis and hence, any remote control system is to fail safe with respect to station keeping.

Fuel strainers and filters are to be arranged to facilitate changes without taking equipment out of service.

For **DPS-3**, a minimum of one service tank is to be provided for each redundant group. The service tanks are to be in separate compartments with A-60 partitions following overall split redundancy concept. The valves in the crossover facilities, if arranged, are to be located as close as possible to the bulkhead and operable from both sides.

SECTION 10 SPECIFIC VESSEL TYPES

3 Mobile Offshore Drilling Units

(Revise Paragraph 10/3.9, as follows:)

3.9 Emergency Shutdown System (1 September 2015)

The general emergency shutdown philosophy for the vessel and the effect of the emergency shutdown system on the redundancy of the DP system is to be carefully considered.

Risks associated with technical faults and inadvertent operations of the emergency shutdown system are to be considered. Each vessel is to develop a detailed plan for recovery and restoration of operation after operation of each level of ESD.

ESD Stations that can enable a total unit shutdown should not be located in locations which are unmanned under normal operations except in the backup DP Control Station, if provided. Where ESD stations are provided at the lifeboat stations or other unmanned locations, the total unit ESD (complete shutdown) is to be protected from unauthorized personnel or not available at these unmanned locations.

3.9.1 ESD Operation Manual

- i) The ESD Operation Manual describes the ESD system and unit specific operational guidelines.
- ii) ESD Operations are to consider the potential risks and risk areas as well as the appropriate responses for each risk.
- iii) The ESD Operation Manual is to define the ESD levels and provide a list of equipment or areas that are affected by the different ESD levels. Also, the manual is to indicate which ESD levels are available at each ESD station. Further, the manual is to provide instructions on to reset the affected systems after each ESD.
- iv) The descriptions and instructions in the ESD Operation Manual are not to conflict with the WCFDI identified in the DP FMEA.

- v) The ESD Operation Manual is to provide guidance describing the typical scenarios that the ESD levels should be used and who has access to use them.
- vi) The ESD Operation Manual is to be included or referenced in the unit's operating manual.

3.9.2 Gas Detection/ESD System Cause and Effect Chart

Where shutdown groups are initiated automatically upon gas detection, a Gas Detection/ESD System Cause and Effect Chart shall relate gas detection sensors to ESD shutdown groups of equipment and areas on the unit.

(Add new Paragraph 10/3.19, as follows:)

3.19 Documentation (1 September 2015)

In addition to the documentation requirements of Subsection 1/7 of this Guide, the following documents are to be submitted for review:

- i) ESD Operation Manual
- ii) Gas Detection/ESD System Cause and Effect Chart