

Guidelines for The Design and Operation of Dynamically Positioned Vessels

IMCA is the international trade association representing offshore, marine and underwater engineering companies. It seeks to:

- ◆ promote the common interests of its members
- ◆ resolve industry-wide issues
- ◆ provide a single authoritative voice for its members

Members include pipelay, heavy lift, diving, remotely operated vehicle, survey and offshore construction contractors, plus a variety of contractors operating specialist marine equipment.

IMCA sections embrace the key offshore regions of:

- ◆ Americas
- ◆ Asia-Pacific
- ◆ Europe & Africa
- ◆ Middle East & India

IMCA has two core committees in which all members participate:

The Safety, Environment & Legislation Core Committee monitors the output of national and international bodies, circulates relevant information to members and advances the industry position wherever necessary.

The Training, Certification & Personnel Competence Core Committee oversees a major scheme devoted to promoting safety by defining and encouraging competence in key safety-related jobs.

Members choose to participate in the work of one of more of IMCA's four divisions:

- ◆ Diving
- ◆ Marine
- ◆ Offshore Survey
- ◆ Remote Systems & ROV

IMCA has published substantial and comprehensive guidance based on its members' experience in a range of related areas and runs a number of training and certification schemes. More details on specific activities are contained on this and other information sheets.

IMCA's *Guidelines for the Design and Operation of Dynamically Positioned Vessels* represent a practical amalgamation of current regulations, operating procedures and good practice. The document provides a standard that is both achievable and capable of enhancing safety. This publication is a 1999 update of the original document.

The revision of the guidelines was prompted by the International Maritime Organization's Maritime Safety Committee approving its own guidelines for DP vessels in 1994. The US Coast Guard, Norwegian Maritime Directorate, UK Health & Safety Executive and several other flag state representatives were involved in the drafting of these guidelines, along with the DPVOA forerunners of IMCA's Marine Division Management Committee.

IMO, in its MSC Circular 645, sets out three classes for DP vessels and these classes are incorporated in the revised IMCA guidelines.

The changes in the IMCA guidelines also reflect the acceptance at IMO of another IMCA document – *The Training and Experience of Key DP Personnel* (IMCA M 117), together with the increasing number of class 3 vessels being constructed.

The revision also includes more references to other published material and reflects the increasing practice of risk analysis.

A supplement has also been produced on two-vessel operations (IMCA M 161), in line with these guidelines and again referencing a number of other relevant documents.

Contents

Basic Principles for All DP Vessels

- 1 Basic philosophy
- 2 Scope of dynamic positioning
- 3 Extent of dynamic positioning FMEA proving trials
- 4 System capability definition
- 5 Operation, training and documentation
- 6 DP equipment characteristics
- 7 Weather precautions
- 8 International, government and regulatory organisation requirements
- 9 Training

Specific Requirements by Vessel Type

The above basic principles are then followed by eight chapters detailing specific requirements for the following vessel types:

- 1 Diving support vessels
- 2 Drilling vessels
- 3 Floating production units
- 4 Accommodation vessels
- 5 Crane vessels
- 6 Shuttle tankers
- 7 Pipelay vessels
- 8 ROV support vessels

covering areas relevant to each, including:

- ◆ Design philosophy
- ◆ Redundancy
- ◆ Communications
- ◆ DP alert system
- ◆ Shallow water
- ◆ Operations
- ◆ Personnel responsibilities and capabilities
- ◆ Training and experience

Guidelines for the Design and Operation of Dynamically Positioned Vessels IMCA M 103

£20 – IMCA Members; £80 – Non-members

Supplement on Two-Vessel Operations

IMCA M 161

£15 – IMCA Members; £60 – Non-members

For a complete list of available publications, please contact the IMCA office or visit our website at www.imca-int.com/marine/