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We all have a role to play

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Abstract

The human factor is often a hidden contributor towards DP incidents. Incidents continue to be reported from vessels within the 500m zone of installations and from DP vessels involved in critical operations in the offshore industry. Certification is not a guarantee of competence and continual professional development is essential. To operate DP vessels team work is required and clients, vessel owners, training establishments, regulators, auditors and seafarers can all contribute. Time needs to be found for operational and emergency drills and key DP personnel need to understand the role of others.

Applicable international guidance is contained in IMO MSC/Circ.645/738, dated 1996, *Guidelines for the Training and Experience of Key DP Personnel*, which is a direct copy of the entire text of IMCA M117 - *The training and experience of key DP personnel*.

The consequences of getting it wrong can be catastrophic so this paper explores what is required in order to provide a competent and committed crew on board a DP vessel.

Introduction

The human element of a DP System is essential and is possibly the most vulnerable

The IMCA DP incident reporting scheme receives reports submitted by both members and non-members. From the reports received it is evident that DPO's continue to mistakenly press the wrong button and engineers close the wrong valve and many of these simple human errors are made due to distractions rather than lack of knowledge. So whilst more complex human behaviour also contributes to DP incidents this highlights that even well trained and experienced operators can still make mistakes.

IMCA will do all it can to highlight and raise awareness of these simple errors, I am also convinced that operational and emergency drills, on the job and simulator training will assist in reducing both simple and more complex human errors. IMCA encourages charterers and vessel owners to work together so that time is allocated within a contract to allow for operational and emergency drills.

Competence to perform a task is so much more than just being able to produce a certificate. Experience, knowledge, training and commitment all combine and must be maintained in order to ensure a competent crew is on board to operate the vessel. Once a role is mastered it is important that acquired skills are not allowed to decline. Owners have a duty to encourage crew to maintain and improve their level of knowledge and be proactive in learning about new technology and practices.

An essential part of any Safety Management System is to provide checks and perform audits to maintain and ensure continuous improvements. Prior to Safety Management Systems being adopted as the norm operational personnel within a team checked each other to a greater or lesser extent. The difference today is that the checks and audits are better structured and recorded. The audits performed as part of a Safety Management system should encourage greater performance and not just be a tool for highlighting non-compliance.

International regulation and industry guidelines

International regulation and industry guidelines provide frameworks for Safety Management Systems.

Section B of the STCW convention provides guidance for vessel operators and states that personnel engaged in operating a Dynamic Positioning (DP) system should receive relevant training and practical experience. All training should be given by properly qualified and suitably experienced personnel. Upon appointment to a vessel operating in DP mode, the master, DPOs and other DP-trained personnel should be familiarized with the specific equipment fitted on and the characteristics of the vessel. Particular consideration should be given to the nature of the work of the vessel and the importance of the DP system to this work.

The objectives of the International Safety Management Code are to ensure safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular to the marine environment and to property.

I understand that due to the size of their vessels many Gulf of Mexico vessel operators are not subject to the above requirements. However the Safety and Environmental Management Systems (Code of Federal Regulations – 250.1905) requires installation operators to “verify that contractors are trained in the work practices necessary to perform their jobs in a safe and environmentally sound manner, including training on operating procedures, the safe work practices and the emergency response and control measures.”

IMCA considers that the best way for a vessel operating company to conform to this requirement is to operate with an efficient and robust Safety Environmental Management System. This might sound onerous to some but companies that have been providing safe services to installations for many years should easily be able to comply with the requirements of a Safety Management system and therefore this will not be seen as a burden.

IMO MSC/Circ.645/738, dated 1996, Guidelines for the Training and Experience of Key DP Personnel is a direct copy of the entire text of IMCA M 117 – The training and experience of key DP personnel and provides guidance for companies operating DP vessels.

IMCA M 117 – The training and experience of key DP personnel is undergoing review by the IMCA membership. Current proposals are to make the identification of Key DP personnel more evident with a new section in M117 specifically listing the personnel and defining their responsibilities in relation to DP operations. It acknowledges as key an experienced and knowledgeable person in the DP operating vessel company office with the responsibility and authority to develop procedures for the training and development of all key DP personnel.

Safety Management Systems for DP Vessels

The purpose of a Safety Management System is to provide for the safe management and operation of the ship and for pollution prevention.

A Safety Management System achieves this by providing a management organisation that responds to the needs of those on board to achieve and maintain high standards of safety and environmental protection. It is the commitment, competence, attitudes and motivation of individuals at all levels that will determine the success or otherwise of the company Safety Management System.

This paper concentrates on the training and competence for key DP personnel. IMCA document M 117 – The training and experience of key DP personnel sets out the requirements for qualification, training, experience and familiarity of key DP personnel. It provides the vessel operator with guidance specifically related to DP vessel operations to assist them fulfil their obligations within a Safety Management System.

The aim of IMCA M 117 – The training and experience of key DP personnel is to provide guidance to improve the safety and efficiency of DP operations, by defining minimum industry guidelines for:

- Formal training, qualification and competence levels of key DP personnel;
- Developing and sustaining competence and currency through continuous personal development for key DP personnel.

The following topics are covered:

- Key DP Personnel identified
- Training
- Qualification and knowledge requirements
- Recommended vessel experience
- DP vessel and Industrial Mission Familiarisation
- Competence assurance and assessment
- Continuous Personnel Development
- Operational and emergency training drills
- The importance of DP incident reporting

Conclusion

Effective communication is essential

Providing for open and honest communication across the industry will assist in maintaining and improving the safe operation of our vessels. Vessel operators are responsible for operating their vessels safely however clients, vessel owners, training establishments, regulators, auditors and seafarers have a combined responsibility to assist in the safe operations of offshore vessels, the consequences of getting it wrong can be catastrophic.

Many factors affect the training and experience of personnel but in an efficient and effective Safety Management System the following four elements will be recognised and this will greatly contribute towards safe and efficient DP operations.

1. Provide time for operational and emergency training
2. Accept that certification alone does not guarantee competence
3. Encourage the concept of Continuous Personal Development
4. Audits both internal & external need to provide a positive contribution

References

- International Convention on Standards of Training, Certification & Watchkeeping for Seafarers (STCW) Section B-V/f
- International Safety Management Code
- Safety and Environmental Management Systems (Code of Federal Regulations – 250.1905).
- IMO MSC/Circ.645/738, dated 1996, *Guidelines for the Training and Experience of Key DP Personnel*
- IMCA M117 - *The Training and Experience of Key DP Personnel*