

Appendix 1

Guidance to Masters of DP vessels in assessing the competency of DPO candidates

A trainee DPO must complete all phases of training, sea-going and shore-based, as defined within The Nautical Institute Scheme (see Section 9 of this handbook). This period of training will be recorded in the candidate's DP logbook. The fifth phase of the Scheme (see page 107 Phase E) is the final assessment of the candidate as a suitable person to keep a DP watch in the vessel. This assessment is to be made by the Master of the vessel at the time the candidate completes all preceding phases. The Nautical Institute recognises that the Master is most advantageously placed to make such an assessment.

In making their assessment, Masters should take into account a candidate's ability to demonstrate competence in the following areas:

- Ability to set the vessel up on DP in a satisfactory manner, using the appropriate facilities for the transfer from conventional manual control into DP joystick control, thence into full auto-position mode
- Ability to operate the DP system in all of its modes of operation (eg follow target, autotrack etc)
- The setting-up and use of all position reference systems, both individually and in combination. Recognition of the merits and limitations of individual PRS
- The function of the various peripheral systems associated with the DP system (eg wind sensors, MRUs, gyro compasses)
- The use of facilities for the manoeuvring of the vessel; changing position and heading, selecting suitable values for velocity, rate-of-turn, gain, etc
- A comprehensive knowledge of all the functions, facilities, operational controls and selections available at the system panel or desk. All DP systems are different; DPOs should be fully conversant with the system in their own vessels
- A practical understanding of the levels of redundancy in the vessel systems, with particular reference to the vessel's FMEA
- An ability to manoeuvre the vessel in both joystick mode, and in conventional manual mode. This is essential. Watchkeeping DPOs must be familiar with the shiphandling characteristics of their own vessel, and must be practised in such techniques. The DPO may be faced with the task of extracting the vessel from location in severe weather conditions, after the DP system has suffered partial or

total failure

- Ability to manoeuvre the vessel in manual mode in a degraded status (ie without the full spread of thrusters available, or with severe power restrictions)
- While engaged in DP operations in deteriorating conditions, recognise the appropriate time for the operation to be suspended on safety criteria
- Recognising a variety of failure modes, and subsequently making the correct responses and decisions
- Ability to interpret the variety of messages generated by the systems, eg warning, alarm and information messages
- The functions of the ship's power management system.

Once the Master is satisfied that the candidate can be trusted to act as a certificated DPO on watch, then he/she should complete the relevant phase within the candidate's Nautical Institute DP logbook. Please note that this logbook entry must not be completed at an earlier stage of the training process. The candidate may then forward the logbook to The Nautical Institute in London for processing and issue of the DPO certificate.