



DYNAMIC POSITIONING CONFERENCE
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Training

Panel Discussion

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Transocean

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Opening Statement: Rig Managers, OIMs and Captains have high expectations of their DP personnel. The system which trains and provides DPOs should be tough, robust and demanding.

QUESTION 1. DP Systems are used on a wide variety of vessels that have different priorities. How does your training program prepare DPOs to meet the different goals of different customers? What do you propose to improve training?

ANSWER: The Nautical Institute training program is not designed to address priorities of different industries or types of vessels in depth. The classroom sections are supposed to briefly review all of the major types of vessels and simulator training often covers different types of vessels in limited scope. Specific training would be too narrow for the broad range of students and limited classroom time of the program. The Nautical Institute DP certificate is intended to be a starting point to help a new employee learn DP on the job, not provide a fully qualified DPO for any vessel.

QUESTION 2. DP control systems are simple, robust, reliable control systems. Most DP incidents result from the DP operator failing to recognize and respond correctly to problems that actually arise external to the DP system, e.g. a diesel may suddenly become over excited and cause a high system voltage, which requires the DPO identify the faulted engine and get it off the board in a hurry. How does your company train a DPO to handle unpredictable and unexpected events external to the DP system? If not, how would you propose to provide it?

ANSWER: Standard training courses are not designed to provide this level of training. Advanced or goal-specific training is offered to various degrees by various training centers. Almost any program can be offered with sufficient money and development time, but the owners will need to specifically detail what is desired.

QUESTION 3. Formal DP training focuses on the DPO as an “end-user”. Minimal time is devoted to control theory, systems analysis, vessel limits, propeller performance characteristics and what affects it, power plant theory, etc. Serious DP incidents result when the DPO lacks the technical knowledge to understand all of the possible failure modes of the DP and other interrelated automation systems. What is your company doing to expand DP understanding of the theory that underlies ALL DP platforms and interrelated automation systems? If not, how would you propose to provide it?

ANSWER: In their course evaluations most students ask for more practical training, not more theory. DP technical courses are offered by some vendors. Kalmann filters are covered. The biggest issue is the limited time of the current courses, there isn't sufficient time to go into much depth in the standard length courses. It was suggested from the audience to provide separate position reference sensor system training. The panel response was that nearly anything can be provided but owners will have to specify what they want and be willing to pay for it. Corporate sponsored schools and standards were suggested. The NI certificate does not include qualification or training on integrated control systems, only DP, but integrated control system training can be provided for additional cost and time.

QUESTION 4. What does your company offer to train DPOs how to use data loggers for DP System performance evaluation and improvement? If not, how would you propose to provide it?

ANSWER: It would take a lot of time to train student how to use a data logger to interpret DP performance. The Nautical Institute program only provides a quick overview of data loggers. Additional training is available on request.

QUESTION 5. Simultaneous and close up operations (SIMOPS and CLOSEOPS) are becoming important issues. Does your company offer training to help DP owners and DPOs properly assess the risks of SIMOPS and CLOSEOPS? What about handling failures during SIMOPS and CLOSEOPS?

ANSWER: There is not enough time in the Nautical Institute program to teach SIMOPS and CLOSEOPS in detail, though it is reviewed. Learning SIMOPS and CLOSEOPS requires a strong effort by the Owner and Operator on location to do a good job of training before operations proceed.

QUESTION 6. NI certification specifies classroom instruction and vessel time but does not require an exam to demonstrate measurable comprehension of DP skills, nor is an assessment made of simulator performance. What is your opinion about making a graded DP skills test and an observation assessment of simulator performance part of the certification?

ANSWER: The Nautical Institute program is not designed to measure the technical, theoretical, practical, or operational skill level of students. The Nautical Institute program is designed to provide a basic level of training and exposure, not evaluation of ability or learning. The NI encourages verification of DPO abilities on the vessel by the owner. One problem is the present technology of classroom simulators is not good enough to make observation of performance valid. Also, the trainers feel that new DPOs can't be expected to make good decisions at the entry level, thus their decision-making cannot be judged at this level. Quizzes would take too much time away from training, so are not given.

QUESTION 7. Many professions require continuing education for practitioners, to keep current and to refresh seldom-exercised knowledge. What suggestions might you have in this regard for DP Personnel.

ANSWER: The trainers agree, but do not have a recommendation. The owner should specify their needs and the trainer will be happy to provide it. Specific courses have been created for some companies. DPOs in the audience indicated that they would appreciate some "official" help prompting this to occur as they feel the training would be extremely valuable but is unlikely to be required by owners without a "push". Crisis training – difficult operating conditions – degraded equipment identification and problem mitigation would be valuable as these cannot be done on the vessel. Today 90% of DPOs are non drilling so trainers typically focus most on non-drilling industry needs.

QUESTION 8. I would be reluctant to take my car for repair to a mechanic that did not know how to drive, yet DP manufacturer's field engineers often have no training in DP system operation! Are Field Service Staff in your company required to be fully qualified as DPOs? If not, why not?

ANSWER: All three major DP vendors send their technicians to Operator courses. It was pointed out that to tune a DP system requires extensive Operator knowledge.

QUESTION 9. DP System user manuals do not explain DP system theory. Usually, what is explained is how to change settings, not how changes affect performance. Is your company doing anything to change the manuals into valuable reference tools that will help DPOs optimize DP Systems?

ANSWER: All the vendors agreed that the manual do not provide good theory. Providing theory was postulated as not a good idea because it could lead to liability issues if the theory that is published is incorrect.

QUESTION 10. Many DP drilling rigs have an integrated bridge control room. The DPO may be in charge of ballast controls, VMS/PMS, power plant operation, and other automation systems as well as DP. How should training be modified to produce multi-skilled DP Operators?

ANSWER: This question was skipped to save time.

QUESTION 11. What percentage of students completing your various classes fail them? (If the answer is “very few”, does that not suggest they are pretty much rubber stamps?) How do you measure “pass” and “fail”?

ANSWER: None of the students fail. The Nautical Institute training program is not intended to be used to evaluate ability or provide a measurable skill level but to provide sufficient training for a DPO to start his or her DP career. It is up to the owners to determine DPO skill and ability levels