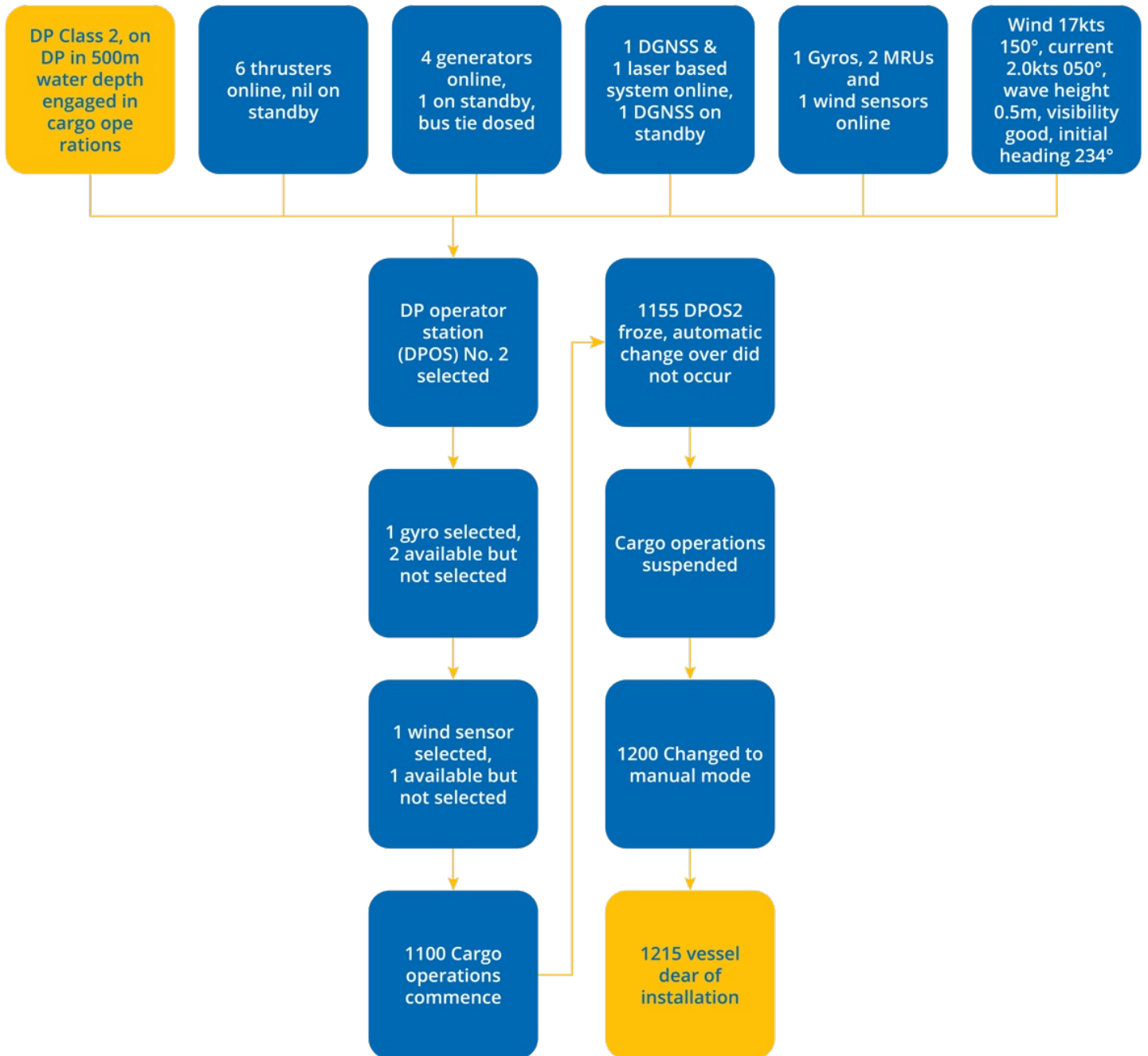


Operating outside DP equipment class 2 requirements

DP Event • Published on 3 September 2019 • Generated on 28 January 2026 • DPE 03/19

There were not enough PRSs or sensors online to meet requirements for equipment class 2 DP operations.



Comments

Although DP checklists were completed, the availability of the standby operator station was not confirmed. The most probable cause for DPOS2 to freeze and not auto changeover was traced to a faulty IO controller on DPOS2.

The vessel replaced the controller with a spare held on-board. At the time of the loss of DPOS2, Gyro feed was not available in any one of the controllers. Various position reference systems (PRS) and sensors were deselected and that caused the vessel to go in 'dead reckoning' when losing the IO controller on DPOS2.

Gyro 1 and 3 were both serviced at the next port call. Vessel simulated auto changeover of the DP Operating system and bump-less transfer was confirmed after maintenance.

Considerations

- There were not enough PRSs or sensors online to meet requirements for equipment class 2 DP operations.
- The setup of the vessel and the content of the incident report suggests insufficient understanding and training for both the DP control system and the DP operation.
- There seems to be some confusion about 'operator station' and 'controller'.
- The report states that the possible reason that the DP operator stations did not automatically change-over was a faulty I/O controller. A faulty I/O controller should have activated an alarm.
- If the single gyro online was not available to the DP controllers, it is unlikely that the controller/operator station will change-over to a controller that also does not have an available gyro input. This depends on the system architecture and the DP control system FMEA should have been used as part of the investigation process.
- Test of the changeover function between DPOS consoles and DPC controllers should be part of the field arrival check list.
- The report is inconclusive and suggests that further investigation and testing is required.

The case studies and observations above have been compiled from information received by IMCA. All vessel, client, and operational data has been removed from the narrative to ensure anonymity. Case studies are not intended as guidance on the safe conduct of operations, but rather to assist vessel managers, DP operators, and technical crew.

IMCA makes every effort to ensure both the accuracy and reliability of the information, but it is not liable for any guidance and/or recommendation and/or statement herein contained.

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