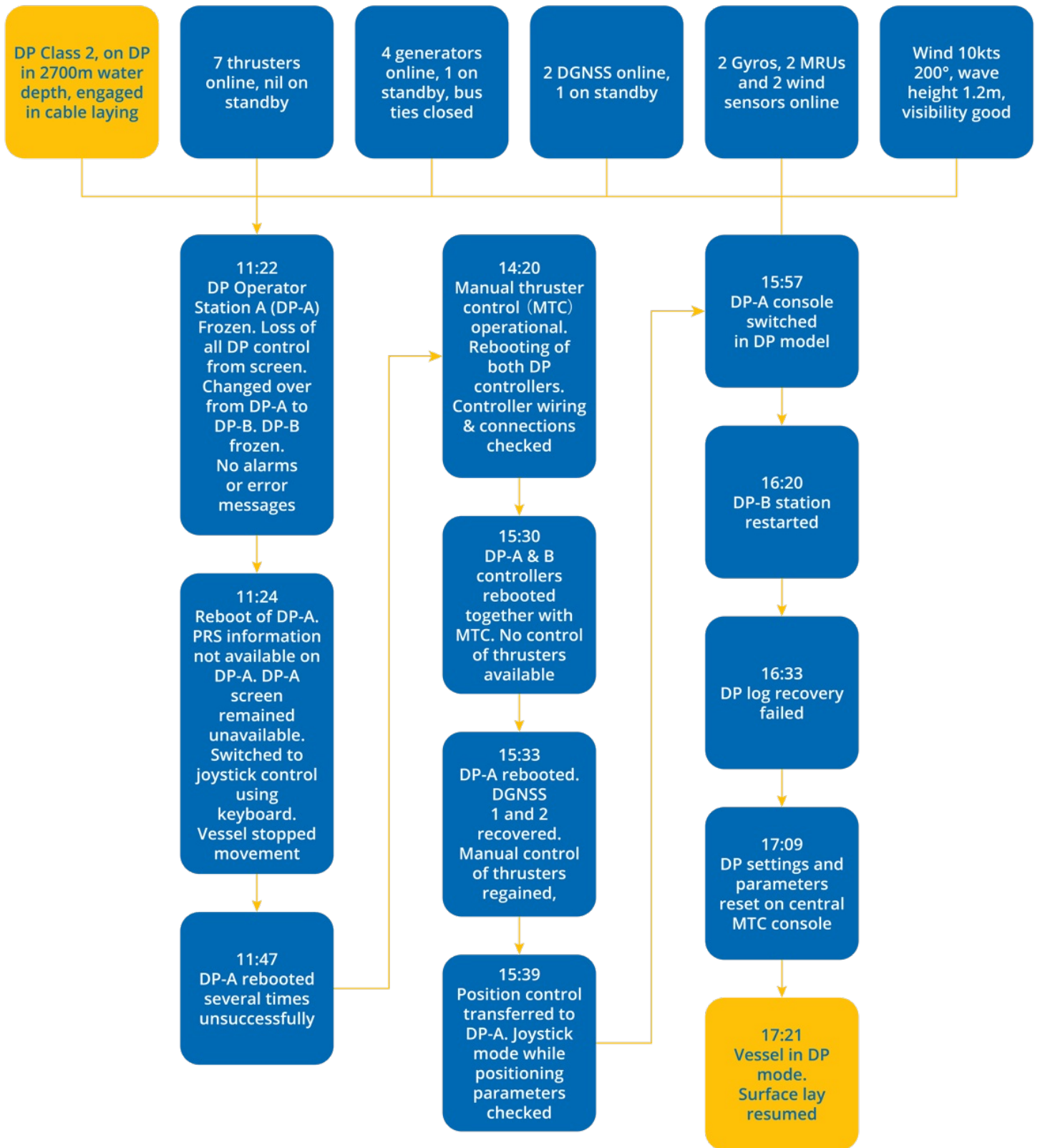


Human Factors caused a DP incident

Incident ●

DP Event • Published on 21 April 2021 • Generated on 28 January 2026 • DPE 01/21

Checklists were completed but the minimum number of PRS for a DP class 2 operation were not used.



Comments

Human factors played a role here, checklists were completed but the minimum number of position reference systems (PRS) for a DP class 2 operation were not used. When both the DGNSSs failed due to high noise, other PRSs were not readily available for deployment.

Considerations

- The vessel was not being operated as a DP Equipment Class 2 vessel due to a lack of position reference systems in use at the time of the incident.
- In addition to the IMCA guidance (Reference IMCA M252 – Guidance on position reference systems and sensors for DP operations), the applicable fundamental requirements are included in IMO MSC Circular 645 & 1580 and are as follows:
 - Position reference systems should be selected with due consideration to operational requirements, both with regard to restrictions caused by the manner of deployment and expected performance in working situations.
 - For equipment classes 2 and 3, at least three independent position reference systems should be installed and simultaneously available to the DP control system during operation.
 - When two or more position reference systems are required, they should not all be of the same type, but based on different principles and suitable for the operating conditions.
- IMCA M220 provides guidance on Operational Activity Planning. The incident report makes no reference to the existence or implementation of decision support tools such as ASOG, in order to make sure that the DP system is functioning correctly, and that the system has been set up for the appropriate mode of operation. The use of decision support tools such as ASOG is a requirement of IMO MSC.1 Circular 1580 (section 4) which applies to all existing vessels.
- Operational planning and the effective use of decision support tools should have ensured the correct deployment of position reference systems and identified the risk of DGNSS interference, prior to the operation.
- This was a critical operation with high potential risks, that required robust company operating procedures including trained and experienced personnel (Reference IMCA M117 – The Training & Experience of Key DP Personnel).
- It is not clear from the events reported why the vessel made contact with the installation despite being in manual joystick mode for 11 minutes considering light weather conditions. In the absence of detail, it is assumed that those operating the vessel had inadequate manoeuvring competencies.

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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