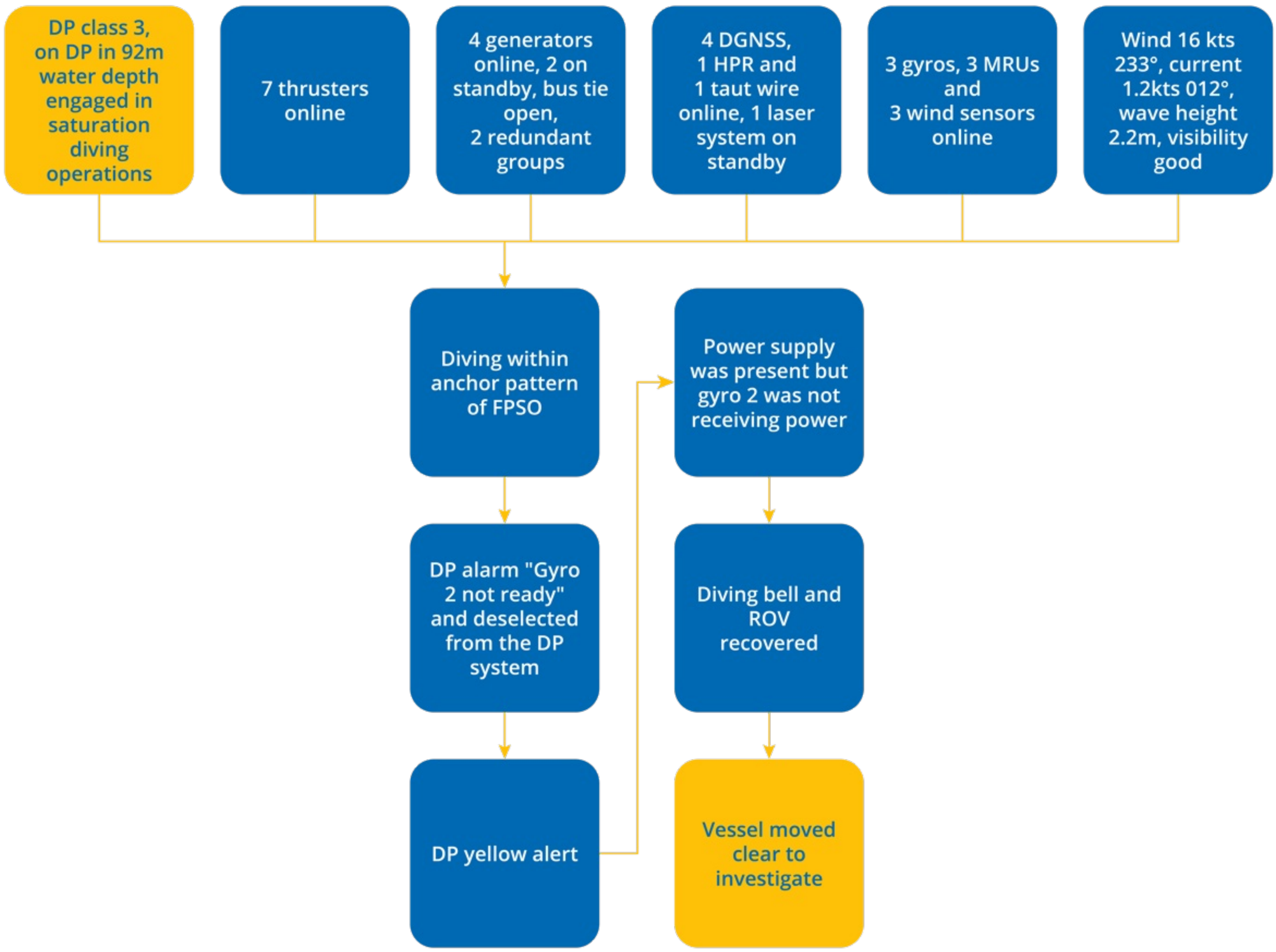
An unassociated failure of one part of a gyro system affected the DP system

Undesired event

DP Event • Published on **27 February 2018** • Generated on **28 January 2026** • DPE 01/18

The systems connected to the DP system need to be fully understood to avoid failures in one connected part affecting the whole DP system.



Comments

A new Gyro was installed as a replacement but failed to start with first attempt.

Further investigation revealed that the ‘Gyro 2 remote control unit’ located on the forward bridge had a fault, failure of it caused Gyro 2 to shut down. When the ‘Gyro 2 remote control unit’ was disconnected the new Gyro was switched on with no further problems.

After a stabilisation period the Gyro was tested, found operational and the signal to DP reinstated. DP operations were resumed.

In conclusion, the original Gyro 2 was, and remains, healthy.

Considerations

- It can be assumed that good operational activity planning took place and the ASOG indicated a yellow alert to be activated with the loss of one gyro.
- The logic of systems connected to the DP system need to be fully understood so that a failure in one part of a connected system does not affect the DP system.
- With the availability of so many position reference systems, it may be better to use two DGNSS, and keep the other two DGNSS as monitoring.
- It is unclear what the Gyro 2 remote control unit is required for, but it appears to have introduced an additional failure mode of the gyro and should have been identified in the DP FMEA.