

COGOS6

Calibrate and verify the system integrity of offshore survey equipment



Overview

The unit deals with the following:

- 1 Calibrate offshore survey equipment
- 2 Verify the calibration of offshore survey equipment
- 3 Verify integrity of survey system

During this work you must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO YOU.

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Performance criteria

- You must be able to:*
- P1 assist in performing calibration of surface and sub-surface navigation equipment
 - P2 assist in performing calibration of LBL acoustic navigation equipment
 - P3 assist in performing calibration of basic survey sensors
 - P4 analyse the calibration data and performed basic data cleaning
 - P5 calculate the relevant system values (offsets and scale factors)
 - P6 communicate results to the appropriate person for verification
 - P7 work safely in accordance with operational requirements and associated Safe Systems of Work
 - P8 analyse the relevant sensor calibration report and compared with historical data
 - P9 identify the causes of poor results and residual errors
 - P10 enter the sensor offsets and correction factors into the online system
 - P11 confirm all relevant sign conventions and units
 - P12 log test data
 - P13 carry out final system checks
 - P14 accurately record the results

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Knowledge and understanding

You need to know and understand:

- K1 how to identify system components requiring calibration and the frequency of such calibrations
- K2 the project calibration requirements for surface and sub-surface navigation equipment
- K3 the project calibration requirements and procedures for LBL acoustic navigation equipment and basic survey sensors (e.g. gyro compass, multibeam, Doppler velocity log)
- K4 the project calibration requirements and procedures for additional survey sensors
- K5 the effect of poor or un-calibrated systems on data quality and system operation
- K6 the principles and practice of error propagation
- K7 how to obtain and interpret information on safety
- K8 your own responsibilities as they relate to Organisational Safety Policy, Workplace Safety Policy, Evacuation Procedures, Fire Procedures.
- K9 the range of analytical techniques available
- K10 how and when to select the appropriate analytical technique
- K11 the limits of achievable accuracy
- K12 the causes of error
- K13 how to access and interpret the calibration report
- K14 how the software package operates and how it is structured
- K15 the relevant sign conventions and units

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Additional Information

Scope/range related to performance criteria

Safe Systems of Work must include processes or systems that incorporate Hazard Identification, Risk Assessment, Permit to Work and any other associated systems.

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Suite Offshore Surveying

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