



SPRINT is an acoustically aided inertial navigation system (AAINS) for subsea vehicles. The system extends the operating limits of Ultra-Short BaseLine (USBL) and can dramatically improve operational efficiency.

SPRINT makes optimal use of acoustic aiding data from acoustic positioning and other sensors such as Doppler velocity log (DVL) and pressure sensors. This improves position accuracy, precision and integrity in any water depth while reducing operational time and vessel costs.

COURSE OBJECTIVES

The course is designed around the USBL aided SPRINT INS system. The course provides theory together with a thorough practical understanding of the operation of Sonardyne's SPRINT AAINS. The course covers all aspects of USBL aided INS positioning, including DVL calibration, the use of USBL, DVL and Pressure Depth aiding sensors.

COURSE PRE-REQUISITES

It is assumed that course participants will already be competent users of USBL acoustic positioning systems. However, a USBL training module can be added to the SPRINT course if required.

COURSE SYLLABUS

The following modules are covered in the theory sessions with the knowledge re-enforced by practical exercises:

- Lodestar Attitude Heading Reference System
- Lodestar Hardware Configuration and Testing
- Lodestar as an INS for subsea vehicle
- Lodestar Firmware Upgrade and Installation
- SPRINT Installation and configuration
- Typical ROV Installation
- SPRINT Software
- Operational Guidelines & Pre -Requisites
- Application of External Aiding Sensors
- Time Synchronisation
- USBL Aiding Theory of Operation
- USBL Aiding Operational Guidelines
- Review Source of Errors & QC
- Tracking Diagnostic Tools and Resolution of Tracking Problems
- QC of Tracking Data
- Rejection Criteria and Optimisation
- Troubleshooting and Advanced Configuration
- Ongoing Maintenance
- Introduction to Janus Post Processing Tool
- DVL Aiding and Calibration QC

WHO SHOULD ATTEND?

Course attendees are likely to include:

- Hydrographic Surveyors
- Survey Engineers
- Acoustic Surveyors

COURSE TEACHING MEDIUM

The course delivery and written material are in English.

COURSE DURATION

The Operator Training Course is 2 days in duration.

NUMBER OF PARTICIPANTS

Courses are for up to 6 participants. This instructor-to-participant ratio ensures good one-to-one support, particularly during the hands-on sessions.

If required bespoke courses can be run for more than 6, with an additional instructor required.

BOOKING AND CONFIRMATION

Details of course dates, training centre locations, availability and full terms and conditions can be found at: www.sonardyne.com

To reserve a place, please email: training@sonardyne.com

TRAINING COURSE DELIVERABLES

- Booklet containing course material, plus USB stick containing supporting information.
- SPRINT S5 Operator Course attendance certificate.