### **NORBIT BATHYMETRIC MULTIBEAM SURVEY TRAINING**

A practical training event for bathymetric multibeam data collection.



# **OVERVIEW**

Introducing NORBIT's 2-day Bathymetric Multibeam Operators Course (Level 1) on November 13-14<sup>th</sup>, 2023 in Lake Conroe, TX.

This course is designed to teach the set-up, validation, and operation of a highperformance NORBIT multibeam sonar system for bathymetric data collection. The system will be mobilized "out of the box" and participants will be guided through the set up on a vessel of opportunity in real-time. The training is classroom based and will include live demonstrations of onsite assets, as well as remote operation of the demonstration vessel by class participants.

Upon completion of this class, users will be able to set up a NORBIT sonar system with the highly portable PORTUS pole mounting solution, validate the installation and verify offsets and installation parameters, and collect accurate and repeatable bathymetric survey data.

Each participant shall be issued a certificate for NORBIT Multibeam Operators Course (Level 1) upon completion.

This even is limited in class size, and a first for the greater Houston region. Space is not guaranteed without prior registration and payment.

## **COURSE TOPICS**

- Σ. System set up and validation
- ۶, Multibeam alignment calibration (patch test)
- ۶, Independent plate check (accuracy assessment)
- Sensor suite bias and noise test
- **Bathymetric data collection and settings** 5
- Tips, tricks, and mitigating common errors Į,
- S Data exporting and storage

Location: Margaritaville Resort, Lake Conroe, Texas November 13-14, 2023 **Dates:** Format: In-Person **Tuition:** \$1,500\* first come, first served



\*Price excludes travel

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A practical training course in multibeam surveying.

#### **STUDENT TESTIMONIALS**

The students who attend this course come from a wide range of geographical locations, educational backgrounds, and experience levels. Past attendees include members of government agencies, private companies, small business owners, and academic researchers. Below are a sample of personal testimonials previous students have provided upon completing our course.

" The seahorse training course enlightened me on potential error sources and gave me a better understanding of multibeam sonar. It was also a great networking opportunity."

"Once again thank you for the training I received in May of 2017. The course was most helpful in our day to day operations. To anyone that is considering taking your next course I would say that the training you will receive from Seahorse is excellent. It would be beneficial to a surveyor of any experience. The information was delivered in such a way that it was easy to understand no matter your previous knowledge. The Seahorse Geomatics team were very helpful and patient while ex plaining any question I may have had. I would love to attend again."

"Seahorse Training was a complete, uncanned, and outside the box training for multibeam that covers everything needed to know from acquisition of the instrumentation to visualization and analysis of the data collection. Attendees will leave this training ready to do bathymetric data collection projects from beginning to end and they will feel well prepared to handle all troubleshooting that will arise. Cheers to Seahorse Training! "

#### "Benefits:

- Amount of material covered in a short period of time
- Overall knowledge of key instructors
- The Bathymetry Chapter was both informative and enjoyable

• Having such a diverse class with different purposes for using multi-beam data helped keep things interesting and is also probably challenging to organize a course around"

"This class helped me look at data collection with a "global" approach. I believe you can get the basics of individual system elements (Software/Sonar/Position) from field training, but knowing the limitations of each item will make you excel in all environments."

