



Klein, a MIND Technology business, the world leading manufacturer of high-quality side scan sonars, will be hosting a three (3) day side scan sonar training at the Seacoast Science Center in Rye Beach, NH. Practical sessions will be held on UNH Gulf Challenger, based in Newcastle, NH.

Participants will develop a thorough understanding of sonar image analysis as well as obtain hands-on experience with both multi-beam and single beam sonars such as the System 5000 V2 Multi-Beam Sonar and the latest in Side Scan Sonar Technology—the 4K-SVY Professional Survey side scan with True-Bottom™ tracking featuring Klein BLUE Technology.

**Dates:** May 10-12, 2022 8:00 am - 4:00 pm

**Who should attend:**

Hydrographers, First Responders, Police and Fire Fighters, Marine Construction Surveyors, UXO, SAR & Salvage Operators, Geologists and Habitat Mapping Specialists and Archeologists.

**Training Topics:**

**Principles of Underwater Acoustics**

Sonar Record Analysis, Targets & Shadows, reflectivity of underwater materials, detailed target and shadow analysis, targets in the Water Column Under the Towfish

**Noise and Interference**

Surface Return, Acoustic Noise, Electronic Noise, Refraction and Biological Noise

**Anomalies**

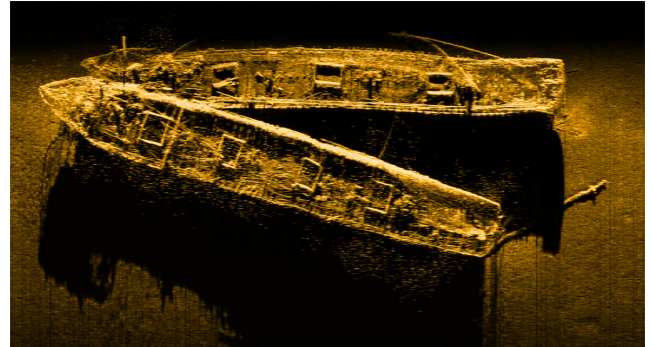
Second Sweep Returns, Cross Talk, Multi-Path, Ringing, Hyperbolas and Flaring

**General Sonar Imagery**

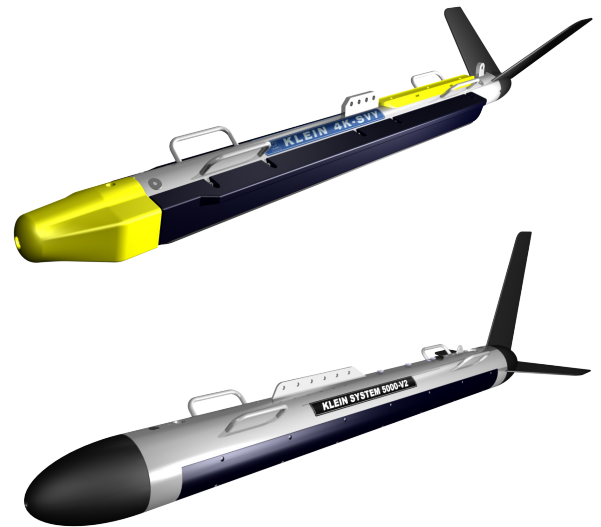
Shipwrecks, Hazardous Drums, Aircrafts, Automobiles, Fishing Gear, Marine Structures, Debris Fields

**Navigation**

Layback and Target Positioning, Search Patterns, Range/Overlap, Shallow Water Operations, Small Target Search, Crime Scene/Accident Mapping, Artificial Reef Surveys, Drowning Victims, Operating Sonar & MAG Simultaneously, Deep Tows



*The Difference Is In The Image*



**Training Costs:**

- \$800 USD per participant
- \$700 USD for Law Enforcement, Military and University students
- Price includes training materials, training certificate and lunch each day.

For reservations contact [KleinSales@MIND-Technology.com](mailto:KleinSales@MIND-Technology.com)

**Guest Instructor: Vince Capone**

Vincent Capone, M.Sc. is a side scan sonar specialist and a regular instructor at the US Navy Mine Warfare Center. He has trained US EPA, US Army Corps of Engineers, numerous law enforcement agencies, first responders and numerous military organizations.



Vince has worked with the US Navy Supervisor of Salvage on aircraft search and recovery OPS including the space shuttle Columbia. He planned the search for and was the operations manager for the successful recovery of Apollo 11 rocket motors from the deep ocean. Vince is a noted authority on underwater exploration as well as an ROV pilot and diver. He owns Black Laser Learning which focuses on training in marine technology and software.

Training space is limited ~ Make sure you register early!