SAR Team ROV Training

SEARCH, LOCATE, IDENTIFY & RECOVER

This program is presented by Sonar Training Solutions with the support of Kongsberg Mesotech Ltd., Videoray and NMC.

Contact Information: Tel: 805 364-4362 sonartrainingsolutions@gmail.com

June 10, 11, 12, 2019
Northwestern Michigan College

So many Teams have access or own small ROVs; however, with personnel turnover, most units are often shelved or used ineffectively. STS offers a 3-day SAR ROV course focused at SAR search and recovery operations. It includes practical classroom instruction and hands-on flying of three models of ROVs. Course includes sonar search and piloting techniques, search patterns with and without subsea navigation, deployment options... (see next page for course content)

SPACE LIMITED
To allow each student maximum hands-on and piloting time
**Course Content:**

- Vehicle nomenclature and explanation of component system operation.
  - Top side control console
  - Tether / umbilical
  - Vehicle/manipulators
  - Lighting systems
  - Camera and video recording systems
  - Thruster configuration
  - Sonar

- Vehicle maintenance and troubleshooting
  - Pre-dive
  - Post-dive
  - Safety

- Navigation systems
  - Compass/bearing techniques
  - Sonar systems (single beam, multibeam)
  - Tracking systems

- Piloting techniques
  - Under-ice
  - Sloping bottom
  - In-water current

- Deployment techniques
  - Tether management

- Search techniques
  - Mission planning, documentation and sonar

- Recovery techniques

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**Practical ROV training specifically focused at SAR Team Operations**

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760 E. Front St., Traverse City, MI
(NMC Maritime campus and harbor)

ROV training Classroom

Northwestern Michigan College training facility

Approx. 16 hours of the program is dedicated to hands-on ROV operations!
The Instructors:

Dan Vasey comes to this program with 31 years of offshore commercial diving, ROV operations and a SONAR search and recovery background. Vasey is also a professional instructor and holds a full-time faculty position at Santa Barbara City College where he teaches commercial diving and ROV operations in the Marine Technology program. Dan spent three years running side-scan and ROVs for a shipwreck search company located in the Florida Keys. This job expanded to search projects in the South China Sea, Mediterranean and South America. Vasey keeps himself current in the industry by taking on ROV contract search and survey projects during college breaks. His most recent ROV project was documenting Great White Sharks for Discovery Channel’s “Shark Week.”

Mark W Atherton brings 40+ years of underwater imaging, SONAR, commercial diving, explosives and ROV experience to this program. For the first 17 years of his career, Atherton worked with underwater vehicles ranging from manned submersibles, ADS, Work and observation-class ROVs conducting underwater search and recovery operations, marine surveys and offshore oil and gas support projects. For the past 28 years he has held the position of Special Projects Manager for Kongsberg Mesotech Ltd.; Mark is involved with all phases of sonar system design, ROV/SONAR applications, and provides solutions for underwater imaging problems. His most recent project was sonar documentation of the Great Blue Hole in Belize for Aquatica Submarines and the Discovery Channel. Atherton is also the author of Echoes and Images. The Encyclopedia of Side-Scan and Scanning Sonar Operations.

Brian Abbott has degrees in geophysics and civil engineering, a military background and is a commercially trained diver. With over 24 years in the business, Brian uniquely brings to this course a passion in acoustically documenting underwater structures – any structure. In addition to bridges, docks and dams, he has acoustically visualized a 3000 BC sunken city in southern Greece, mapped the Titanic, documented a 15th century shipwreck in the Baltic... the list goes on. He is the best of the best in the underwater visualization industry. When he isn’t travelling the world on archeological expeditions, Abbott has his own company that completes acoustic visualization of underwater structures and marine engineering projects.

Mark Fleming is a retired U.S. Navy ‘Chief Warrant Officer 5’ with more than 30 years of service – and qualified as a Navy Diver (mixed gas/SCUBA), Master Explosive Ordnance Disposal (EOD) Technician, EOD Officer, and Naval Parachutist. Mark’s professional operational experience includes ROV operations in over 1400 fsw, rescue and recovery operations on shipwrecks and in remote locations, and explosive testing and integration on underwater vehicles. Fleming’s military tours include Office in Charge EOD Mobile Unit ONE in Rota Spain, Readiness and Training Officer EOD Mobile Unit FIVE Guam, Command Master Chief EOD Mobile Unit THREE. With this extensive EOD background, Mark is uniquely qualified to co-instruct this program considering today’s concerns with harbor and vessel security.

Fleming is currently the Business Development Director of Defense and Government Programs for VideoRay LLC. and responsible for developing and advancing VideoRay’s extensive network of underwater solutions, for military, government, and first responders.

This program teaches advanced ROV operational techniques to Search, Locate, Identify and Recover.

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Practical ROV training specifically focused at
Underwater Recovery Team Operations

Ask yourself these questions:

- What affects sonar target detection from an ROV-mounted sonar (minimum 3 answers)?
- What do you need to be careful of after meggering an ROV umbilical for continuity?
- What do you need to know to geo-reference a sonar target on an ROV?
- How do you complete an ROV under-ice search without navigation and guarantee search coverage?
- When don’t Ground Fault Interrupters (GFI) work on a generator?
- How do you effectively deploy a micro or small observation-class ROV during ‘live-boat operations’ to minimize the chance of tangling the vehicle’s umbilical in the vessel’s propeller?
- How do you efficiently complete an ROV search of a steep-sloped sea/lakebed?

If you can answer these questions, you don’t need this course!

Practicum Field Training:
Approximately 16 hours of this course are spent with hands-on field training conducting ROV search operations, completing search patterns, locating targets and running vehicle deployed sonar.

Individual and group tasks are assigned and evaluated.

3-Day Intense Program

STS is a registered System for Award Management (SAM) government supplier/vendor.

COST
$995.00 USD

You’ll learn more in 3 days than what most Low Cost ROV ‘Experts’ know – GUARANTEED!

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