Marine Operations Group
Marine Technology Program
SRI International
Facilities
SRI’s Tampa Bay harbor-side facility accommodates a variety of operations and testing requirements

450-ft. Wharf
- 20’ alongside depth
- 2-ton capacity crane
- 3-phase 220/480 vac power
- Dockside Ethernet and water
- Dock is accessible for large truck deliveries
- Compressed air

Marine Operations Building
- 34’ x 54’ air conditioned operations support shop
- Direct wharf access
- 5-ton hoist
- Internet access
- Compressed air
- 3-phase 220/480 power
- Generator backed-up single phase 110 vac
- Conference/training room 1000 ft² (36+ person capacity)
- Additional office space, conference, and training rooms
Control Van

• Designed as a vehicle shipping container and operations support center
• Separate operations section and work space
• Theater-style seating
• Dimensions: 8’W x 20’L x 9.5’H
• Climate controlled
• Built-in automated, plumbed coffeemaker
Bluefin 12-inch AUV

- **Depth Rating**: 600m w/1000m option
- **Payload**: Up to 36” long, free flooding
- **Power**: Up to 8 hrs runtime; 100W of power for sensors
- **Speed**: 3 kts cruise (1.5 m/s); 5kts max (2.5 m/s)

**Navigation:**
- INS-Kearfott T24
- USBL- and DVL-aided
- GPS for initial fix
- Acoustic modem for updates

**Weight:**
- **Air**: Up to 550lb with payload
- **Salt water**: Neutral

**Dimensions**: 12-¾”D x 132” L
Deep Sea Systems Sea Max ROV

- **Depth Rating:** 300 meters with 1000-meter option
- **Payload:** up to 150 lbs
- **Sub Sea Power:** 800W of 12 or 24 VDC with 120AC available
- **Comms:** Fiber to surface; Ethernet and RS232/485 subsea
- **Navigation:** INS-Kearfott T16; USBL- and DVL-aided
- **Weight:** 1100 lbs in air
- **Dimensions:** 66” L x 35” W x 45” H
- **Launch and Recovery System:** Crane or A-frame
Coastal Operations Support

AUV operations

Target Deployment

Dive Support

M/V Sea Sub II

ROV Operations
Offshore Operations

R/V Seward Johnson at SRI’s 450’ dock.
Field Testing and Evaluation

- U.S. Coast Guard RDC T&E support
- MDAS (sensor deployment)
- ONR AUV / sonar testing
- Buoys, RF sensors, chemical
Imaging Sonars

**Didson**
- FOV: 28°
- Freq: 1.1 – 1.8 MHz
- Max range: 30 m
- Max depth: 300 m

**Blueview P900**
- FOV: 45°
- Freq: 900 KHz
- Range: 30 m
- Max depth: 300 m
High-Frequency Multibeam 3D Sonars

Blueview MB1350
- FOV: 45°x1°
- Freq: 1.350 MHz
- Max range: 25 m
- Max depth: 300 m

Blueview MB2250
- FOV: 78°x1°
- Freq: 2.250 MHz
- Max range: 10 m
- Max depth: 300 m
Low-Frequency Multibeam 3D Sonar

Imagenex Delta T 837B
- FOV: 120° x 3°
- Freq: 260 KHz
- Max range: 100 m
- Max depth: 1000 m
Volumetric 3D Sonar

Echoscope II

- FOV: 50° X 50°
- Freq: 375 KHz
- Range: 60 m
- Range res.: 1 cm
SONAR Data Processing

Length: 20 m

Length: 10 m
Qualifications and Certifications

• Established EH&S protocols
• NEPA environmental assessment
• DoD security clearances
• First aid / CPR /AED training
• Crane- and rigging-qualified
• HAZWOPER & hazardous material shipping
• STCW-BST (Coast Guard-approved Basic Safety Training)
• TWIC cards (commercial port access)
• Personnel with USCG and FCC licenses
Developer Support Tools

- Underwater pressure vessel design (metal & plastic PV available)
- Data acquisition systems available (A/D, DIO, RS-232 etc.)
- Custom software
  - Data acquisition and display
  - Real time web based data viewers
  - GIS support- data product development
  - 3D visualization software (Fledermaus)
  - Custom video logging and processing
  - Custom sonar acquisition & processing
- Survey grade underwater navigation sensors (RLG, INS, DVL etc.)
- Survey grade topside navigation systems (F190-HP, Starlink 210S)
- Underwater video systems
- Operations planning and logistical support
MarOps Clients

- ONR: mine counter-measures and sonar survey technologies
- ESTCP: support for underwater surveying of inert UXO
- NOAA: surveys of ship wrecks
- NOAA: fisheries survey support
- Field support for Navy testing of diver detection systems
- More
Underwater Technology Demonstration Site

- Site has an established NEPA environmental assessment
- Easy access from support facilities
- Local logistical support staff
- Less weather-sensitive than open ocean sites
- Calibration areas with known targets in charted locations
- Blind test areas with cluttered and clear environments
- Other customizations to meet special requirements
Common Tampa Bay Test Areas
NOAA Chart 11416

Soundings in feet

Cluttered Area
Mud bottom
(Construction debris)

Uncluttered Area
Mud bottom

Uncluttered sandy firm bottom

Port of St. Petersburg
SRI Dock
SRI Marine Operations:

John Kloske
SRI International
450 8th Avenue SE
St Petersburg, FL 33701
john.kloske@sri.com
Shop: 727.498-6765
Cell: 727.252-6477