NAVSEA Supervisor of Diving and Salvage (SEA 00C) Teams with NSWC Panama City and NUWC Seneca Lake Sonar Test Facility to Conduct 470 foot Saturation Dives in New York Finger Lakes

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SAT FADs Mission 14-01 is nearing its final stages at NUWC Seneca Lake Sonar Test Facility this week as U.S. Navy Divers completed a 10-day saturation diving mission in 470 feet on the deepest of the Finger Lakes in upper New York State.

This mission began in July when the SAT FADS team broke down and prepared to ship the Saturation Fly Away Diving System (SAT FADS) to NUWC's Seneca Lake Facility. By the end of July, after receiving and offloading 14 trucks, the team set up the SAT FADS system on a barge and began post-transportation system maintenance and testing. Diver and operator training came next and by September the dive system was ready for manned operations.

SAT FADS system installed on the barge in Seneca Lake, NY.

After a 29 September unmanned bell dive the Navy divers were cleared to go. The barge was moored about one-half mile into the lake alongside NUWC's Systems Measurement Platform (SMP). On 1 October, they successfully conducted the first manned bell dive to 470 fsw. The bell was deployed for nine hours. The divers completed five hours of bottom time working from the deployed bell. During this time the divers completed the first phase of a detailed bottom survey and validated the dressing procedures for the new contaminated water diving suit. On day two, they conducted 2 bell excursions completing the detailed bottom survey and recovering targeted objects on the bottom for the NUWC test facility.

Saturation dives being monitored topside in the Control Module

On 3 October, the divers completed their fourth bell excursion where they located and detached a clump weight assembly from the fiber optic array for the NUCW facility which will allow them to recover it without damaging the array. Additionally there was one more contaminated water diving suit procedure validation completed during the diving excursions. The bell was retrieved and the barge began its move back to shore on Saturday for 4 days of decompression. Divers will be kept in the deck decompression chamber until the decompression period is complete on 8 October.

The SAT FADS system on Seneca Lake, which includes the bell and umbilical hoses to the right, handling system (crane) holding the bell, command and control system, lockout chamber, and living quarters.

This successful operation supported the following goals:

- Continue the training and qualification of existing and new Navy Saturation divers.
- Conduct open water bell diving phase of the contaminated water dive suit R&D effort.

- Prove transportability over highways of the SAT FADS for rapid mobilization.
- Conduct detailed bottom survey of the underwater test site for the NUWC engineers.
- Disconnect clump weight from underwater array for NUWC test facility.
- Recover targeted objects from the bottom as required by the NUWC Test Facility staff.

The following commands supported the operation with divers, technicians, and or logistics support:

- SEA 00C (numerous Diving and Certification engineers)
- UEI: 4 Saturation Technicians, 1 engineer
- NUWC Keyport: 2 Government Divers
- NSWC PC: 1 Government Diver
- PSNS: 2 Government Divers
- NEDU: 5 Navy Divers, 2 Government Divers, 1 CWO
- SRDD: 9 Navy Divers
- GITMO Dive Locker: 1 Navy Diver
- NUWC Seneca Lake

Team of saturation divers before the operation

Diving Bell entering the water