

SUPSALV Deep Ocean Systems Get Winter Workout

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Deep ocean search and recovery operations require highly specialized equipment and personnel. SEA00C (SUPSALV) has developed expertise and maintains several deep ocean search and salvage systems designed to work as deep as 20,000 feet. Over this winter, SUPSALV conducted three deep ocean search and recovery (S&R) tasks; one in the Atlantic Ocean and two in the central Pacific Ocean. Over the last 45 days, SUPSALV deployed its 20,000-foot system, CURV21, to the Pacific and our 8,000-foot system, Deep Drone, to the mid Atlantic in support of the U.S. Air Force, Commander, Submarine Force Pacific, and Commander, Naval Air Systems Command.

The first operation was conducted onboard the USNS NAVAJO about 240 miles SW of Pearl Harbor, HI. A Navy Deepwater Sensor was ignoring release commands and would not surface. SUPSALV was tasked to recover the DSDS Sensor. The Remotely Operated Vehicle (ROV) CURV and search sonar, ORION, and supporting equipment were flown out from Largo, MD to Port Hueneme, CA where they were installed on the deck of the Navy ocean tug USNS NAVAJO (T-ATF-169). The ship departed the West Coast in-route to Pearl Harbor where it met up with the rest of the search crew. A search was conducted between 14 and 20 December where CURV was able to locate the sensor's anchor in greater than 16000FSW and satisfy the SUBPAC representatives that the equipment did not remain on the ocean floor.



Actual image of sensor anchor taken from CURV ROV at a depth of 5,655 meters sea water. (18,500 Feet)

The second operation was also conducted onboard USNS NAVAJO. After a holiday stand down, the ship got back underway from Pearl Harbor and steamed to the Marshall Islands where she picked up the rest of the search crew. NAVAJO was on-station beginning its search for an Air Force asset by 7 January 2011. The search and recovery team conducted the search despite equipment challenges and sharply varying topography through depths over 14,000 fsw before returning to Pearl Harbor 24 January for offload. SUPSALV conserved considerable Navy resources by combining these two operations using one platform, saving both time and mobilization costs.



File photo of CURV-21, a 6,400-pound Remotely Operated Vehicle (ROV) that is designed to meet the US Navy's deep ocean salvage requirements to a maximum depth of 20,000 feet of seawater.

The most recent S&R operation was conducted off the East Coast. Approximately 100 miles east of the Chesapeake Bay entrance, a Navy helicopter lost its dipping sonar which is a listening device used in hunting submarines. SUPSALV was tasked to recover it. This time, SUPSALV deployed on USNS GRAPPLE, (T-ARS-53) out of Little Creek, VA with SUPSALV's 8000-foot capacity ROV, Deep Drone. The team got underway on 28 January and during Deep Drone's first dive they found the sonar device in 4,140 fsw. After hoisting it to the deck of GRAPPLE, the crew departed the op area and returned to Little Creek.



File photo of Navy SH-60 LAMPS helicopter with the AN/AQS-22 Airborne Low Frequency Sonar (ALFS) suspended from it. NAVAIR tasked SUPSALV to find a missing ALFS that was lost in the Atlantic Ocean.



*Deep Drone being retrieved onto USNS GRAPPLE the morning of 29 January, 2011.
In Deep Drone's manipulators is the ALFS which was recovered within 14 minutes of being at search
depth near the sea floor.*