## **Navy Completes Underwater Manned Diving System Test**

10 May 2012

WASHINGTON - The Naval Sea Systems Command completed the at-sea testing of its Saturation Fly Away Diving System (SATFADS) May 9, pressurizing the hull to a depth of 1,000 feet off the coast of Panama City, Fla.

NAVSEA's Supervisor of Salvage and Diving (SUPSALV) successfully completed the unmanned diving phase May 7, and divers began their pressurization for manned diving May 8, reaching a milestone in bringing a new salvage and recovery capability to the Navy.

"SATFADS provides the ability for Navy divers to work underwater longer at greater depths while avoiding large in-water decompression penalties," said Michael Dean, SUPSALV deputy director. "The saturation diving technique allows divers to postpone the lengthy decompression process until the completion of the mission when they can be safely decompressed in an on-deck recompression chamber."



**Tuesday, May 8:2012.** With 6 divers in the saturation complex habitat, the system was pressurized to a depth of 350fsw (feet of seawater). A dive bell excursion was conducted locking out all 3 bell divers to a depth of 392fsw. This image shows the first diver exiting the diving bell and lowering himself to the diver's stage.

The entire system measures 40 feet by 80 feet and includes a decompression chamber, manned dive bell, handling system, command and control center, two auxiliary support equipment containers, and bulk helium and oxygen storage racks. Living quarters are located in the decompression chamber. The system is air transportable, allowing it to be rapidly transported anywhere in the world and loaded onto a vessel of opportunity to conduct diving operations.



**Saturday May 5 2012.** SATFADS diving system loaded on a barge and moored in the Gulf of Mexico. That afternoon, the team performed unmanned testing at 490fsw and on 6 May the diving bell was tested at 1100fsw.

SATFADS is designed to support six divers working on the ocean floor for up to 21 days, with an additional nine days of decompression to support deep aircraft and ship recovery or salvage operations. The system will replace two decommissioned Pigeon-class submarine rescue vessels, which allowed divers to operate at a maximum depth of 850 feet.

"This system increases the Navy's salvage and diving capabilities, allowing us to put U.S. Navy saturation divers to greater ocean depths than previously attainable," said Paul McMurtrie, SATFADS program manager and a retired Navy master diver. "This new asset will greatly increase our manned diving capabilities as well as provide a one-of-a kind training asset for future Navy saturation divers."

SUPSALV is responsible for all aspects of ocean engineering, including salvage, in-water ship repair, contracting, towing, diving safety, and equipment maintenance and procurement in the U.S. Navy.