Saturation Fly-Away Diving System (SAT FADS) Manned Testing underway at Naval Experimental Diving Unit (NEDU) in Panama City, Florida.

16 November 2010

US Navy SAT FADS at the pier at Naval Experimental Diving Unit, Panama City, FL. In this picture, the Bell Handling System is lowering the Manned Diving Bell into the water during initial manned testing conducted in September - October 2010.

The Saturation Fly-Away Diving System (SAT FADS) Acquisition Program was initiated by the Director of Ocean Engineering, Supervisor of Salvage and Diving, SEA 00C, in September 2003 at the request of the Submarine Warfare Division (N87), initiated by the Assessment Division (N81), and was approved by the Chief of Naval Operations (CNO). SAT FADS is required to retain an organic saturation diving capability to support the full range of Navy salvage and recovery operations ranging from crisis response from emergent casualties, as well as, planned response in and around the world's littorals and continental shelves.

The Saturation Fly-Away Diving System (SAT FADS) is designed to provide a mobile and worldwide capability for deep water sustained diving operations to depths of 1,000 FSW. SAT FADS supports 6 saturation divers for a period of 21 days, with an additional 9 days of decompression. The system is composed of five major components; 1) The Main Deck Decompression Chamber (which includes living quarters and air lock) 2) a Manned Diving Bell, 3) the Bell Handling System, 4) A Control Van, and 5) Two Auxiliary Support Equipment Vans. It is designed to be deployed using military aircraft and commercial over the road tractor trailers and can be installed on any suitable commercial vessel of opportunity.
SAT FADS completed the fabrication phase of the acquisition lifecycle in June 2010 and was subsequently relocated to Navy Experimental Dive Unit (NEDU) in Panama City, Florida where it has been reassembled for Manned Testing and certification. SAT FADS successfully completed its first manned dive on September 30th 2010. System commissioning will continue through operational evaluation, manned dives pier side, and ultimately successful conclusion of a 1,000 foot dry saturation dive.

*Inside the SAT FADS Diving Bell*

*SAT FADS Living Quarters occupied by the test team during initial manned testing*
NDCM (MDV) Kent Johnson, and a member of the NAVSEA 00C test team in the Control Van during manned testing.