

CERBERUS/NSPB Field test # 5
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Overview:

On 12-8-2014 the entire integrated system of Buoy and underwater CERBERUS unit was tested off the entrance of Santa Barbara harbor approximately 1 mile from the harbor mouth in 120 feet of water. Norm Nelson, Stuart Halewood, Erik Stassinis conducted the operation.

Weather:

Flat seas less than 1 ft with wind less than 2.0knts.
Cloud cover was minimal, with none in immediate proximity to the test location

Procedure:

Launch UCSB fish boat from SB harbor dock and meet with buoy system which was placed in the water at the SB Navy Pier. The boat would then move the entire system into deep enough water where the system could free-drift and operate as intended in regular deployment.

Results:

Towing of the buoy with a small boat in the harbor has challenges. Some software startup issues were observed, attributed mainly to recognizing the correct process in the auto profile mode. Some functions will start on their own without user input. Profile files were generated from approximately 10:23 to 13:25 local time. Full system operation was observed minus connection to iridium which may be due to software settings as well as physical communication component issues. The test was terminated when the profiler failed to ascend after several attempts. It is hypothesized that it came into contact with an underwater obstruction.

Future plans:

Further testing of communications systems is needed as well as a deeper water deployment where encountering obstructions is minimized.