

German Navy Research Institute Takes Delivery of Survey Platform



Developing new underwater technologies for the German Navy is of prime concern to WehrTechnische Dienststelle, WTD 71. Therefore, they have decided on a MacArtney FOCUS 2 ROTV survey system representing a stable and flexible instrumentation platform as the basic tool for their development efforts.

With the purpose of testing SAS sonar technologies for mine detection, a full-scale on-site demo of a Raytheon ProSAS installed on a FOCUS 2 ROTV system was organised for WTD 71. The advantages of the FOCUS 2 ROTV as a flexible instrumentation platform were recognised by the researchers at WTD 71, who instantly came up with new ideas for other applications enabling WTD 71 to benefit from the strong features of the FOCUS system for their research activities.

Hydrographic Survey Payload

As a direct result of the demo, a set of requirements for integration of various sensor configurations was defined by WTD 71. In consequence, the FOCUS 2 has been supplied with a number of standard off-the-shelf products:

- MacArtney LUXUS compact low light cameras
- ORE Trackpoint 3 USBL transponder
- [Valeport MiniSVS sound velocity sensor](#)
- [Imaginex FL forward looking sonar](#)

Additionally, the FOCUS system has been prepared for installation of:

- Raytheon ProSAS synthetic aperture sonar
- Teledyne Reson multibeam sonar
- Kearfott INS

Finally, a special interface has been developed for integration of a range of WTD 71 developed sensors.

The NEXUS based multiplexer telemetry system is an integral part of the standard FOCUS ROTV system and capable of multiplexing and transmitting data to the surface from all of the above sensors in real time, thus enabling the researchers to evaluate the sensor data and performance instantly.