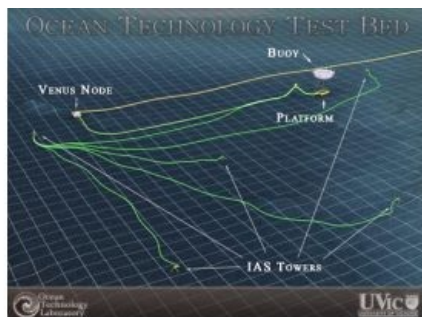


Internet Control of ROV



Internet users can now reach under the sea to pilot a remotely operated vehicle (ROV) docked at an unmanned experimental laboratory based off Vancouver Island. It means researchers worldwide can view video images direct from a Saab Seaeye Falcon ROV as it undertakes its designated tasks, along with a 3D image of the vehicle in operation.

Conceived by the Ocean Technology Laboratory team at the University of Victoria, the subsea hub platform is the first undersea laboratory with its own resident ROV. Real-time access over the Internet will allow researchers to monitor or conduct tests on equipment from anywhere in the world. This makes it a vital resource for external groups wanting to test products or conduct research.

The subsea laboratory - called an Ocean Technology Test Bed (OTTB) - is designed to exploit the potential of the Internet in accessing subsea research projects relating to the development of ocean technologies.

This can include research into acoustic tracking and communications, together with ROV and AUV development, and research into a whole range of new ocean technologies, both for science and offshore exploration in the oil and gas industry.

Linked to the VENUS Observatory Node in Patricia Bay off Vancouver Island, the OTTB consists of a recoverable platform with connection points for power and communication; a service buoy for raising and lowering the platform; and an integrated acoustic system (IAS) for wireless communication and 3D tracking.

In choosing a vehicle rugged enough to live and work reliably under the sea for long periods, the University opted for the Falcon ROV for its advanced communications and control architecture that allows fingertip manoeuvrability, and its ability to hold steady whilst undertaking delicate tasks in strong cross currents. The Falcon will also be used in service support of the facility including routine maintenance, re-positioning of instruments and assistance during deployments.

The OTTB is located in 100m of water and has an operating area that spans 2.5 square kilometres, within which the IAS provides precision 3D tracking via a number of cabled acoustic monitoring satellites.

The OTTB was designed and built by a team at the Ocean Technology Laboratory. This group develops undersea technology including underwater structural design, autonomous underwater vehicles and underwater acoustics.