The SeaOtter features high-intensity acoustic pulse with wide frequency bandwidth and can operate in a wide range of geological conditions and water depths. It is fitted with a unique acoustic filter that suppresses radiation from the rear, front and sides. It can be used as a catamaran-mounted lightweight unit, allowing one person to easily launch, operate and retrieve it.

## Diving support system

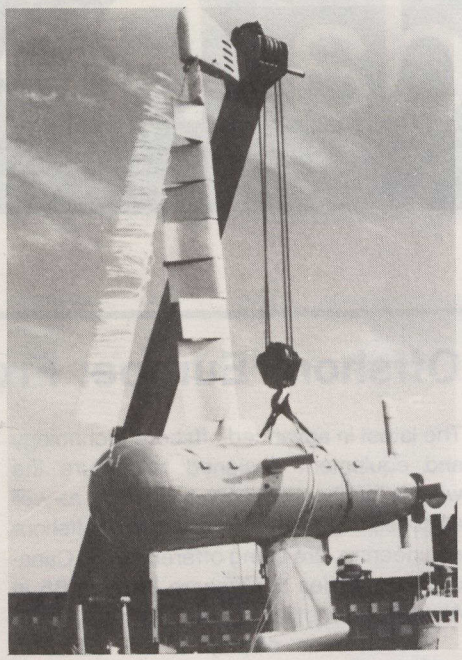
Nova's ECS is used with diver decompression chambers, where it provides high gas flow for diver life support. It features variable speed control, and humidity control for high performance on deep dives.

The company is also a leading world supplier of electrical slip rings, fluid rotary unions and hyperbaric blowers.

## Overcoming challenges

Canada's offshore industry is renowned for the manufacture of equipment that is capable of functioning for long periods of time under great stress and at great distances from repair facilities. The country's offshore area, more than six million square kilometres, covers a diverse topography and climate. Offshore exploration activity represents an annual investment of $2 billion in Canada and it is carried out regularly even in severe environments like the High Arctic, where awesome winter storms, pack ice and 10-12-million-tonne drifting icebergs can be encountered.

Most current oil and gas exploration activity in Canada is based on extensive marine surveys. Canadian firms have developed special oceanographic, hydrographic and other surveying techniques and equipment suited to the demanding operating conditions of the Arctic and the deep, storm-laden waters of the continental shelf, off Canada's east coast.



*The DOLPHIN is one of International Submarine's complete range of underwater surveying vehicles.*

In addition to the ARCS, a complete range of tethered, manned and radio remote-controlled vehicles, such as the DOLPHIN, a semi-submersible instrument platform, have been designed and manufactured in the country. The DOLPHIN improves previous surveying techniques by allowing several small vehicles to run along courses parallel to the main survey ship.

Canadian firms are also pioneering new drilling techniques. In the Beaufort Sea, for example, conventional drilling equipment could only be used during the short open water drilling season of between 80 and 120 days. For year-round use, Canadian companies have become world leaders in ice management, and are involved in daily ice reconnaissance, ice reconnaissance interpretation, and the use of specially-designed equipment such as icebreaking vessels.

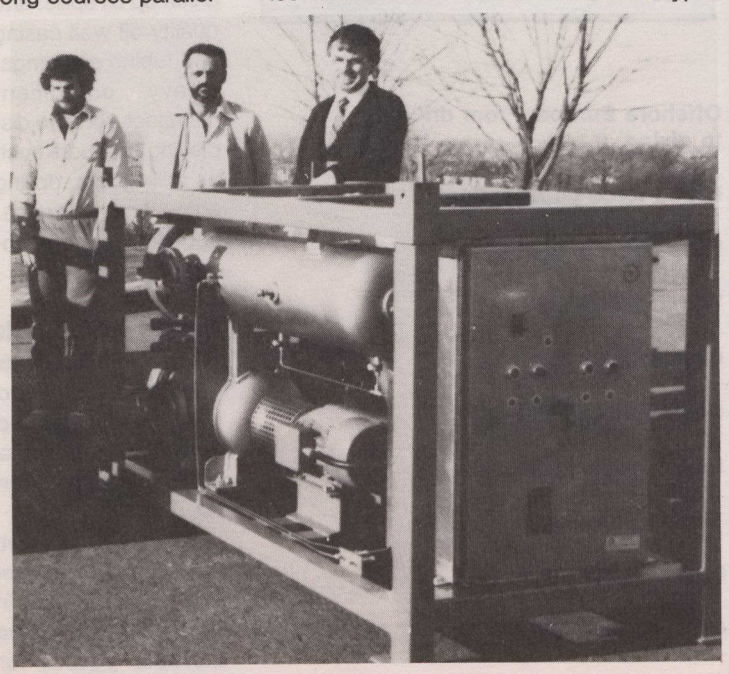
## Adapting to conditions

In the Arctic Islands, shallow waters are covered in a permanent sheet of land-fast ice. To adapt to these conditions, a method of drilling through the ice and using the ice itself as a work platform during the exploration phase has been devised.

On the Grand Banks, the danger posed by huge floating icebergs and pack ice is constant and during the winter season ice floes and tie-in ice are present, and superstructure icing occurs. Special positioning equipment to keep drilling vessels on location, as well as navigation and communications equipment to track movement of rigs and ships, and to anticipate the need to quickly move off location, have been designed to overcome these problems. In addition Canada has developed offshore supply vessels and other support equipment capable of withstanding severe conditions.

Another example of Canadian technology specially designed for the Arctic is the artificial island that enables operators to conduct exploration drilling work in ice-covered or ice-infested waters. The three main types


*The SeaOtter is the newest high-resolution seismic sub-bottom profiler from Huntec, that features high-intensity acoustic pulse.*



*Nova Scotia Research's ECS is used with diver decompression chambers and provides high gas flow for life support.*