

BOT Press Release: November 19, 2003

MOVING VESSEL PROFILER ON BOARD THE AMUNDSEN IN THE BEAUFORT SEA

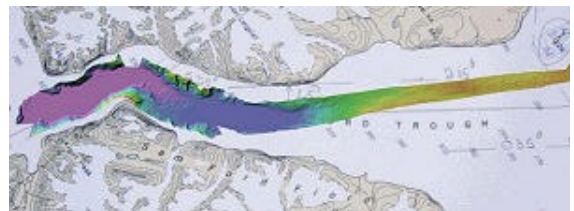


On September 13th, 2003, the newly upgraded *CCGS Amundsen* (previously the *CCGS Franklin*) left Quebec City for the Beaufort Sea equipped with a **MOVING VESSEL PROFILER (MVP™) 300-3400** and a **CTD Rosette Handling System** developed by *Brooke Ocean Technology Limited*.

As part of the *Canadian Arctic Shelf Exchange Study (CASES)*, the new Canadian research icebreaker's first international research mission will be to spend the winter in the icy waters of the Mackenzie Shelf to study the annual cycle of this poorly known ecosystem threatened by the present warming of the Arctic.

The MVP300-3400 system is profiling with the newest member of the MVP free fall fish, the *Multi-Sensor Free Fall Fish II*, which along with the standard complement of sensors carries a Sea-Bird 911*plus* CTD. The new MS-FFF II can be seen in the photo shown below.

The *Amundsen* is using an EM300 Multi-beam Sonar to produce the first pictures of the Arctic Ocean floor in high-resolution. The image shows the area of the Sam Ford Fjord mapped during trial runs near Clyde River.



Richard Sanfaçon, manager of data acquisition at the *Canadian Hydrographic Service*, had this to say:

"The first deployment of the CTD-Rosette system and the Moving Vessel Profiler (MVP) have been highly successful. These two instruments are the workhorses that enable oceanographers to collect water samples at different depths and to quickly measure water temperature and salinity along the course of the ship."

43 scientists are aboard the vessel to take part in these experiments exactly 100 years and 1 month after the explorer Amundsen. The *Amundsen* will continue on to the ice-free waters of Queen Maud Gulf.

The MVP™ is an underway CTD or sound velocity profiling system which permits near vertical data profiles to be collected with the use of a recoverable free fall fish. The system includes a computer-controlled smart winch and deployment system that permits the free fall fish to be deployed while the vessel is underway. MVP™ is completely automated, can be operated by computer without the requirement for personnel on deck and can provide real time sound velocity input into a multi-beam sounder.

The free fall fish can also be equipped with a variety of sensors, including a sound velocity probe, fluorometer and plankton counter. For multibeam surveys, MVP™ saves a minimum of 3 hours per day of ship time by eliminating the requirement to stop and complete a static cast. Significant savings in multibeam data processing can be realized through improved data quality.

BOT is a Canadian-based manufacturer of sensor platforms, cable handling systems and launch/recovery systems. Other MVP™ systems are in use in Canada, USA, Japan, China and Norway.

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