

Applanix Aboard Coast Guard Icebreaker for Arctic Survey Trip



Applanix' POS MV position and orientation system technology will be working with nautical sensors aboard the U.S. Coast Guard icebreaker *Healy*, which left port in early August 2007 to map the sea floor off the Alaskan arctic coastline. The installed POS system will assist onboard marine echo sounder systems and other vessel sensors during bathymetric mapping by measuring sensor and ship positioning and orientation during data capture, even under the most demanding sea and ice conditions.

One of the main purposes of the mapping work, to be carried out aboard the *Healy*, is to determine the extent of the continental shelf north of Alaska. Along with environmental and geographic research goals, the data collected onboard the *Healy* will help register U.S. coastal boundary information with the U.N. Commission on the Limits of the Continental

Shelf so that rights over the resources of the sea floor and subsurface (including oil and gas drilling rights) may be preserved.

By combining the dynamic accuracy of uninterrupted measurement of position, roll, pitch and true heading with the accuracy of Global Positioning System (GPS) positioning, the self-contained POS MV system works in conjunction with a variety of sensors, including echo sounders, LIDAR, multibeam sonar systems and others. If given the exact sensor position and orientation at the precise moment of data capture as a reference point, sonar data can be properly corrected and quickly processed to produce maps with far greater data pixel location accuracy.