

Explorer

Fascination for the North Pole is as old as humanity itself, and expeditions have been setting out for the Pole ever since the early twentieth century. Many men dreamed in their youth of one day going on such an expedition - at least, I did, and still do sometimes. And now climate change is making it possible to advance further into the polar seas than ever before, bringing within reach new milestones in arctic exploration. Fresh shipping routes and oil & mineral fields are becoming a reality, opening up opportunities for the world, but more specifically for those countries adjacent to the North Pole.

Russia is becoming a maritime state with growing possibilities for shipping along the northern coast of its vast territory, at least during certain periods of the year. Norway, a small country, is finding new oil fields off its northern coast, while Denmark eagerly examines any and all opportunities on the ice and in the waters of its autonomous territory of Greenland. Canada and the United States meanwhile look for new economic chances in all the above fields.

With all these countries fishing in the same pond, the geopolitical weight of the Arctic is on the increase. Mapping of the seabed, seismic surveying and delimitation of territorial waters: all go hand-in-hand with top level diplomacy. Hydro International, researching the progress of Arctic mapping (see article-by-Chris Reed), found a joint Canadian/US effort that just this summer saw two icebreakers, the Canadian Louis S. St-Laurent and the American Healy, teaming up for the third summer in a row, following two successful expeditions in previous years, reaching latitudes as far as 84 degrees north. These are not the only two icebreakers making their way through the Polar pack-ice; the Swedish Oden, chartered by Denmark, and the Yamal, a Russian nuclear-powered icebreaker, have undertaken similar voyages, as has the Akademik Fedorov. The Polarstern, a German icebreaker, also launched an AUV under heavy pack-ice north of Spitsbergen.

By the end of this year a new bathymetry grid of the Arctic Ocean is to be put online. The *Oden*, the *Healy*, the *Akademik Fedorov* and the *Polarstern* are equipped with multi-beam echo sounders. But despite all successful expeditions, only 6% of the Arctic Ocean has been mapped, which by the standards of project leader Martin Jakobsson of Stockholm University means it isn't mapped at all.

So there is still a great deal of exploring to be done on the projected possibilities offered by the Arctic Ocean. Still a lot of work to do, which means plenty of opportunities for hydrographers and hydrography. Summer is almost over in these regions, and the pack-ice will be expanding again. Time to process, analyse and contemplate all data captured this summer, with a long winter ahead for the task. We'll keep you posted on outcomes and initiatives deployed.

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