

## Carmanah Solar Marine Lanterns Used in Ice Surveys in Anaktalak Bay



**Client:**

Through Go Deep International Inc.

**Location:**

Anaktalak Bay, Labrador  
Canada

**Equipment:**

Carmanah solar marine lanterns

In mid-2006, Carmanah Technology Corporation supplied 32 of its 501 Series solar marine lanterns for use as ice and hazard markers in Anaktalak Bay, Labrador. Sold through Go Deep International Inc., Carmanah's Canadian distributor, the lanterns are being used to track ice patterns and wildlife observations, as well as to guide snowmobile traffic in this remote northern bay.

Anaktalak Bay is located at Latitude: 56 deg 10 min N and Longitude: 62 deg 0 min W, and borders the Voisey's Bay mine, one of the largest nickel deposits in the world. The main claim block for the mine is located on the south side of Anaktalak Bay with shipping routes passing through it to reach the port facilities in nearby Edward's Cove. Anaktalak Bay is a fiord located near the community of Nain in northern Labrador, and is used by the Inuit for travel, as well as subsistence and commercial harvesting. Prolonged, recurring activity in the area has resulted

in the need to manage and monitor the annual ice and snow patterns, as well as increase visibility and safety on traveling routes.

Carmanah's 501 Series solar LED lantern selected for this project is a multipurpose solar-powered marine lantern suitable for virtually any low intensity navigation or hazard-marking requirement. It can be quickly installed and is completely waterproof, vibration proof and virtually indestructible; it offers an ideal solution where electricity is unavailable. The fully encapsulated lantern is designed for autonomous operation without any maintenance, such as bulb or battery replacement, for up to 5 years.

For the survey and monitoring process, the solar LED lanterns supplied were white, steady-on, and affixed to stakes. The stakes were installed onto the ice markers used to survey and document the pattern of ice growth and melting along the highly

traveled routes in this remote northern bay. The surveys were carried out weekly at remote stations to provide typical conditions with respect to ice and snow conditions.

Nain, population 1176, is the nearest township to Anaktalak Bay. The community was established in 1771 by Moravian Missionaries, and is the northernmost municipality in the province of Newfoundland and Labrador. Roads exist only within the community's core; transportation outside the built-up area is limited to boat in the summer and snowmobile in the winter.

Carmanah's solar LED lanterns are built to withstand harsh climates, while operating continuously for up to 5 years. The lanterns enabled the remote, rugged community of Anaktalak Bay to proceed with its planned monitoring and safety exercises with dependable performance.