# Ice safety device finds footing

ᏚmartQAMUTIK ᐱᓕᒪᒃᓴᓂᖏᑦ ᐃᓕᐅᕐᖓᑕᐅᔪᓂ ᐃᓕᓴᕐᕕᐅᓂ ᐊᑐᕐᑐᕐᓴᓂᖏᑦ ᐊᑐᖅᑕᐅᓂᖏᑦ ᑎᑎᖅᑐᓴᖅᑎᓂ ᐊᒋᐳᖅᓯᒪᔪᓂ ᓯᑯᐊᓂᖅ ᑎᒍᒥᐊᖅᓴᖅᑐᓂ ᒥᓂᔅᓴᐅᓂᖏᑦ, ᐃᓄᐃᑦ ᐊᑐᖅᑕᐅᓂᖏᑦ ᖃᓄᐃᓕᐅᕈᑎᒃ ᓄᓇᓕᖕᒥ ᐊᑐᖅᑕᐅᓂᖏᑦ, ᑭᓇᐅᔭᖓ ᑕᒪᐃᓐ ᐃᓄᖅᑲᓇᐃᔭᖓ ᖃᓄᐃᓕᐅᕈᑎᒃ ᐊᑐᖅᑕᐅᓂᖏᑦ, ᐃᓕᓴᕐᕕᐅᓂᖏᑦ ᐊᑐᖅᑕᐅᓂᖏᑦ ᐊᒻᒪᓗ ᑎᒍᒥᐊᖅᓴᖅᑐᓂ ᐃᓄᐃᑦ ᐃᓄᖅᑲᓇᐃᔭᖓ ᐃᓕᓴᕐᕕᐅᓂᖏᑦ. ᐊᓯᔾᔨᖅ ᐃᓕᓴᕐᕕᐅᓂ ᐊᑐᖅᑕᐅᓂᖏᑦ ᐊᒻᒪᓗ ᑭᓇᐅᔭᖓ ᐊᑐᕐᓇᖅᑐᓂ, ᑕᒪᑭᑦ ᐊᑐᖅᑕᐅᓂᖏᑦ ᐃᓄᐃᑦ ᐃᓄᖅᑲᓇᐃᔭᖓ ᐊᑐᖅᑕᐅᓂᖏᑦ.

photo courtesy of SmartICE

***SmartQAMUTIK training participants learn*** *about the features of the user interface mounted on the snowmobile's handlebars in Pond Inlet in March. From left, Andrew Arreak of Pond Inlet, Jimmy Aliqatuqtuq of Qikiqtarjuaq, Daniel Taukie of Iqaluit, Daniel Kooneeliusie of Qikiqtarjuaq, Ivan Koonoo of Pond Inlet and Ted Irniq of Iqaluit. Alvin Illungiayok and Daniel Alareak, both from Arviat, also took the training.*

## *SmartICE team expands*

**by Derek Neary**
Northern News Services
**Nunavut**

The team testing an ice thickness monitoring device has grown, funding is flowing in and the goal remains to distribute the safety technology to Nunavut communities.

As a result of testing over the past year, SmartICE units are being modified to better withstand extreme cold and wet spring melt conditions, said Trevor Bell, a geographer and scientist at Memorial University in St. John's and the lead researcher behind SmartICE, Sea-ice Monitoring And Real-Time Information for Coastal Environments.

There's also a redesign of the user interface featuring easier-to-read large letters and making it more practical to handle with bulky gloves or mitts on.

"It sits nicely on the handlebars of the Ski-Doo; it's very clear for the operator while they're driving, they can actually in real-time see the ice thickness below them... and it becomes more reliable in a range of different climatic and environmental conditions," Bell explained, adding that making SmartICE messages available in Inuktitut may be another future consideration.

SmartICE sensors attached to a qamutik – known as a SmartQAMUTIK – were used in Pond Inlet, Qikiqtarjuaq and Iqaluit earlier this year to check ice thickness. Several residents from those communities were trained in the use of the technology in March. A couple of trainees from Arviat, which will employ a SmartQAMUTIK this winter, were also introduced to the safety device. Daniel Alareak, Arviat's search and rescue chairperson, said he was thoroughly impressed with what he saw.

"That's going to save lives," Alareak said, adding that searches for missing travellers are common in the Hudson Bay area. "It's going to be a pretty useful tool."

Alareak said what was communicated in the classroom during SmartICE training was easy to understand, but he admitted that he found it challenging to get used to the electronic tablet.

### Data portal in testing mode

Another recent development is a data portal that will automatically be updated when a SmartICE team member returns to a community with new ice thickness data,. That data will be available within an hour to other residents. The beta version of that data portal is currently being tested and will hopefully be in use by the fall, Bell said, adding that technological support is being provided through C-Core, a Canadian research and development corporation based in St. John's.

The SmartICE initiative – a partnership of community, academic, government and industry – has received $400,000 in funding through a portion of the Arctic Inspiration Prize, a $325,000 contribution through the Canadian Northern Economic Development Agency (CanNor) and another $123,300 from Memorial University of Newfoundland within the past several months, among other contributions. But even more money will be required to bring plans to fruition, Bell acknowledged.

"We're actively looking for funding from the Government of Nunavut, the Qikiqtani Inuit Association, basically from anybody who will provide it to us because we're starting a Northern social enterprise, we're employing local people in the community, we're training them with advanced technology, which we hope (brings) a lot of transferable skills," said Bell, adding that Pond Inlet would be the operational hub for SmartICE regionally and also a training centre.

Although SmartICE will be a not-for-profit venture, to be sustainable there will be a need for ongoing revenue to maintain equipment, provide training and sustain the data portal. There may be a user fee for the service to cover those costs and the business plan is being formulated, Bell acknowledged.

However, longer-term applications extend far beyond hunters and trappers, Bell noted.

The floe edge tourism market, the winter turbot fishery, shipping, the Canadian Armed Forces and the Canadian Rangers are all also potential customers.

Realistically, it will likely be a couple more years before the technology is running throughout Nunavut, Bell predicted.

"We really want the community to decide how SmartICE operates... and that varies very much from once community to another," he said. "I think taking that slowly and carefully while we're training local people is very important."

ACCOMMODATIONS DIRECTORY

HAY RIVER

The CAMBRIDGE BLDG HOTEL SUITES
Deluxe accommodation in the heart of downtown Hay River
Phone: 867-874-2233
Toll Free: 866-277-7757
Fax: 867-874-2249
Email: reservations@greenwayaccommodations.ca
www.greenwayaccommodations.ca
Greenway

For advertising information, contact:
YELLOWKNIFE
Call: (867) 873-4031
Fax: (867) 873-8507
Email: advertising@nnsl.com
IQALUIT
Call: (867) 979-5990
Fax: (867) 979-6010
Email: advertising@nunavutnews.com
Website: www.nnsl.com

HAY RIVER

PTARMIGAN INN HOTELS LTD
Hay River's Premier
Full Service Hotel
10 J Gagnier St., Hay River, NT X0E 1G1
RESERVATIONS:
Phone: 867-874-6781 • Fax: 867-874-3392
www.ptarmiganinn.com • Email: reservations@ptarmiganinn.com
Toll Free 1-800-661-0842