IceTrackers: low-cost tracking of sea ice in remote environments



Photo from www.adn.com

J. Kasper A. Mahoney P. Winsor





Project Objectives

- Iteratively test a new, low cost platform for real time tracking of ice flows
 - GPS receiver and Iridium comms in a rugged, low cost buoyant platform
 - Easily deployed by residents from snow machine
 - Demonstrate survivalability when deployed from helicopter or fixed wing
 - Evaluate suitability for making ice deformation measurements (convergence and divergence)
 - 1/2- to 1/3 the cost of existing
 IABP buoys





	Months after Award											
Project Timeline	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36
Ice drifter design, construction and purchase												
Post-Award Meeting (teleconference w/ BOEM)	June, 2014											
Post-Award Meeting Summary delivered to BOEM & CMI	July, 2014											
Field, Logistics and Permitting Plan			Nov Dec. 2014									
Snowmachine Deployment off Barrow				Jan Feb., 2015								
Helicopter Deployment off Barrow				Mar., 2015								

Deployment Strategy

- 5 deployed by snowmachine from Barrow (late Feb. 2015)
- 10 by helicopter (late April 2015) from Barrow
- Final 5: modified based on lessons learned in previous deployments, opportunistically deploy/leverage with other projects



- First set within GI's Barrow ice radar mask
- Second set in drifting pack ice

Project webpage under construction



From: http://dm.sfos.uaf.edu/chukchi-beaufort/

Site will allow for

- real time tracking of drifters
- Comparison between drifters and Barrow ice radar

