



Working on Ice

CAGC INFORMATION ALERT

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With increased activity in the Arctic regions equipment and personnel working on ice has become commonplace. The danger is obvious: if the ice is not capable of supporting the weight, an incident becomes imminent. Determining ice thickness can be accomplished by drilling through and measuring it or the use of Ground Penetrating Radar (GPR). Ice thickness and ice quality are two completely different things. There are many factors that must be considered to determine the weight bearing capacity of the ice being traveled upon.

Information on calculating ice weight bearing capabilities and travel on ice is available from Alberta Human Resources and Employment: Workplace Health and Safety. A small publication entitled "Traveling, standing, working on ice requires extreme caution" explains how to calculate safe ice thickness for most scenarios. To order, go to the government of Alberta website at <http://www.3gov.ab.ca/hrd/shw/publications.htm> access "Booklets, Bulletins and Manuals", and look under the heading "Safety Hazards – Equipment Operation, Workplace Conditioning".

There is an informative document published by the US Army Corps of Engineers. It is available online at <http://www.crrel.usace.army.mil/ierd/tectran/ieieb13.htm>

Also, a company that specializes in engineered ice management solutions is:

Trillium Engineering
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