Icetech 2006
July 16-19, 2006
Banff, Canada

Program & Conference Guide

Organizing Committee:
Frank Bercha, Chair
Alex Brovkin, Website
Connie Carruthers, Sponsorship
Chris Hill, Exhibits & Publicity
Dave McGonigal, Program
Roger Pilkington, Papers
Colin Revill, Finance

Sunday 1800-2100
Icebreaker Reception
Hors d’oevres, and classic entertainment. Main dining area.

Monday 1900-2200
Alpine Fun Night
Alpine entertainment and fun contests. Main dining area.

Tuesday 1830-2230
Western BBQ
Local entertainment and traditional Native Hoop Dancing (buses depart at 1830, return at 2230)

CANATEC Associates International ltd.
Monday, July 17 2006

Max Bell Auditorium Room 252

OPENING CEREMONY, Chair - C. Carruthers
Welcome: Conference Chair - F. Bercha
Welcome: Mayor of Raiff, Canada, USA

PLENARY SESSION, Chair - C. Revill (M-PS-1)
The Mission of the Canadian Coast Guard in the Arctic, F. Robertson (Canada)
Harmonization of Polar Rules, V. Santos Pedro (Canada)

Coffee Break 1000-1020

Aker Arctic

ICEBREAKER PERFORMANCE 1, Chair - F. Robertson 1020-1120
(M-IP-1)
Propulsion and Maneuvering Model Tests of the USCGC Healy in Ice and Correlation with Full-Scale, S. J. Jones and M. Lau (245 Canada)
Experience of Azipod Vessels in Ice, G. Williksen, M. Arpiainen, M. Nini, T. Mattsson (134 Finland)

SAKHALIN DEVELOPMENTS 1, Chair - A. Keinonen (M-SD-1)
Six Years in Sakhalin Offshore Oil Management of Risk, Operations in Ice, A. Keinonen, R. Browne, W. Jobbs and E. Lumm (105 Canada)
Ice Monitoring in Support of Risk Management for Sakhalin Energy’s Offshore Oil Production, R. Pilkington, et al. (106 Canada)

ISO WG8-Arctic Structures 1, Chair - D. Blanchet, K. Croasdale, W. Spring (M-ISO-1)
ISO WG8 Arctic Structures Standard - Overview, D. Blanchet
Presentations by technical panel representatives: TP4A-Reliability, F. Bercha, TP7-Pressure, T. Pihelkin, M. McKenna

ICEBREAKER PERFORMANCE 2, Chair - P. Valanto 1120-1220
(M-IP-2)
Transport Route from Dikson, K. Riska, K. Breific, S. Inge Eide, K. Croasdale (M-ISO-2)

SAKHALIN DEVELOPMENTS 2, Chair - A. Keinonen, K. Croasdale, W. Spring (M-ISO-1)
Panel 2, ISO WG members attending IceTech - open discussion facilitated by D. Blanchet

Lunch (Main dining area) 1230-1345

US Arctic Research Commission

ICE-STRUCTURE INTERACTIONS 1, Chair - O. Gudemstad (M-IS-1)
Reliability of Arctic Offshore Installations, F. Bercha, O. Gudemstad, D. Nield, R. Foschi, F. Sliggers, N. Nikitina (113 Canada)
A Study of the Failure Mechanisms of Ice Ridges Interacting with the Confederation Bridge Piers, M. E. Soly and T. Brown (226 Canada)
Evaluation of Ice Loads Acting on Spray Ice Islands, Y. Morgan, J. Bruce, D. Masterson, and M. Dinniman (144 Canada)

ARCTIC EER & SAFETY 1, Chair - E. Radloff (T-EEER-1)
Development of Canadian Arctic and Open Water EER Standards, F. Bercha and E. Radloff (154 Canada)
Ice Breaking Lighthouse, B. Johannson (162 Canada)

Developments on Ice-Strengthened Ships, G. Igloliorte, A. Liddiard, and M. Steele (170 Canada)

Panel presentations facilitated by D. Blanchet

Coffee Break 1545-1605

D. F. Dickins and Associates

SUBSEA SYSTEMS 1, Chair - S. Loest (M-SS-1)
Subsea Venturi Surface Development in the Arctic, O. Gudemstad and S. Loest (165 Canada)
Wellhead Protection Concepts for Subsea Marginal Developments - Grand Banks of Newfoundland, C. Fowell (226 Canada)
Marine Ice Profiling: Future Directions, D. Fisell, J. Marco (106 Canada)

ICE-STRUCTURE INTERACTIONS 2, Chair - C. Hill (M-IS-2)
A Comparative Study on the Linear Wave Response of a Flat Floating Body, C. Wung (257 Singapore)
Real Icebreaking Experience in Strait of Cansues Sea, Arctic and Antarctic, G. Balkov (170P)

Hospitability Suite (Molson Room) 1805-1900

Bercha Group

Tuesday, July 18 2006

Max Bell Auditorium Room 252

PLENARY SESSION, Chair - V. Santos Pedro (T-PS-2) 0900-1000
Arctic Marine Shipping Assessment (AMSA): The Arctic Council’s Response to Changing Marine Access, L. Brigham (169 USA)
International Shipping and the Changing Arctic: Centre for Military and Strategic Studies, R. Huebert (Canada)

Coffee Break 1000-1020

Sandwell Engineering

NORTHERN SEA ROUTES 1, Chair - D. Laible (T-NSR-1)
The Siberian Arctic Ocean Highway: Redefining the World’s Trading Pathways, N. Tananaev, A. Zaitsev, and V. Belikov (120 Russia)
AMSA Marine Activity Data Collection Effort, R. MacDonald (170P Canada)
A Proposed Icebreaker for Shipping LNG from the Canadian Arctic, R. Dick, M. Bell and A. Prior (135 UK)

AMSA marine activity data collection effort, V. Santos Pedro (Canada)
Panel: all ISO WG8 members attending Icetech - open discussion facilitated by D. Blanchet

LUNCH 1230-1345

Devon Canada

ICEBREAKER PERFORMANCE 5, Chair - C. Young (T-IP-5) 1345-1445
Statistical Analysis of the Optimum Amount of Bullard Roll Required for Towing an Icebreaker, C. Young and P. F. Rudkin (121 Canada)
Evolution of an Instrumental Measurement System Called MOTAN, M. Teerikorpi (121 Canada)
Summary of Installations on Five Ice-Strengthened Ships, M. Johnson (195 Canada)
Recent Advances in Structural Design of Ice-Strengthened Vessels, D. Murphy (149 Canada)

Panel: all ISO WG8 members attending Icetech - open discussion facilitated by D. Blanchet

Coffee Break 1545-1605

Sandwell Engineering

OFFSHORE DEVELOPMENT ENGINEERING 1, Chair - A. Brovkin (T-ODE-1) 1605-1705
Module Optimization on Early Stage of Design for Remote Exploration and Production Sites, A. Brovkin, G. Zelych, and M. Chen (136 Canada)
A Proposed Method for Iceberg Design Loads on Ships Navigating in Ice, V. Alexeyev (119 Russia)

Panel: all ISO WG8 members attending Icetech - open discussion facilitated by D. Blanchet

Hotelity Suite (Molson Room) 1805-1900

Bercha Group
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<th>Location</th>
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<td>PLENARY SESSION, Chair - R. Pilkington (W-PS-3)</td>
<td>Room 252</td>
<td>R. Pilkington</td>
<td>Adventures in Arctic Naval Architecture, P. Noble (158 USA)</td>
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<td>Arctic Escape, Evacuation, and Rescue - Past, Present, and Future,</td>
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<td>F. Bercha (111 Canada)</td>
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<td>1000-1020</td>
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<td>1020-1120</td>
<td>REGULATIONS AND AMSA 1, Chair - I. Kubat (W-REG-1)</td>
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<td>I. Kubat</td>
<td>The Development of an Arctic Standard for Floating Production Systems,</td>
<td>C. Makrygiannis, R. McKenna, B. Wright, N. Allyn,</td>
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<td>T. Slidnes, W. Jolles, M. Morland, and R. Grant (150 Canada)</td>
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<td>1020-1120</td>
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<td>Climate Change Impact on Northern Shipping Regulations, I. Kubat,</td>
<td>I. Kubat, R. Gorman, A. Collins and G. Timco (108 Canada)</td>
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<td>R. Gorman, A. Collins and G. Timco (108 Canada)</td>
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<td>Ice Simulations, J. Liu, M. Lau and F. Williams (126 Canada)</td>
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<td>J. Knott (146 Canada)</td>
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<td>Rational Approach to Integrate the Design of Propulsion Power and</td>
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<td>1230-1345</td>
<td>Lunch</td>
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<td>Propeller Strength for Ice Ships, S-K. Lee (131 USA)</td>
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<td>1345-1445</td>
<td>ARCTIC MARINE SHIPPING ASSESSMENT 1, Chair - L. Brigham (W-AMSA-1)</td>
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<td>L. Brigham</td>
<td>General Questions and Survey Results - How will technological</td>
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<td>advances influence the future of marine activity in the Arctic Ocean,</td>
<td>L. Brigham, R. MacDonald, K. Juurnaa,</td>
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<td>Facilitators-AMSA TEAM: L. Brigham, R. MacDonald, K. Juurnaa,</td>
<td>E. Cunningham, V. Santos Pedro</td>
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<td>1445-1545</td>
<td>ARCTIC MARINE SHIPPING ASSESSMENT 2, Facilitator - L. Brigham (W-AMSA-2)</td>
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<td>L. Brigham</td>
<td>Effect of technological advances and climate change on Arctic</td>
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<td>shipping in the first half of 21st century.</td>
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<td>1545-1605</td>
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<td>1605-1700</td>
<td>CLOSING CEREMONIES, Chair - F. Bercha</td>
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<td>F. Bercha</td>
<td>Awards, announcements and closing remarks.</td>
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**IMV Projects**

**ARCTIC MARINE SHIPPING ASSESSMENT 3, Facilitator - R. MacDonald (W-AMSA-3)**
- Effect of technological advances and climate change on Arctic offshore development and tourism in the first half of the 21st century.
- ARCTIC MARINE SHIPPING ASSESSMENT 4, Fourth session same time as above (W-AMSA-4 location TBA)

... have a safe journey home