R/V SIKULIAQ

AICC April 20th 2011







R/V SIKULIAQ

- Alaska Region Research Vessel (ARRV)
- Ice-capable general oceanographic research ship
 - IACS PC-5 Ice Classification one of the first in US
 - 261 feet length
 - 4,053 LT displacement at design draft
 - 5,750 BHP
 - 45-day endurance
 - Integrated power plant with AC propulsion motors
 - Tractor style Z-drives
- Owned by NSF, being built and operated by UAF
- UNOLS Global Class
- Homeport in Seward, Alaska





SIKULIAQ SCHEDULE What has happened to date?

- October 2008 Final Design Review
- August 2009 Z-drive Contract with Wartsila
- December 2009 Shipyard Contract With Marinette Marine
- January 7th 2010 Shipyard Contract Start Date
- January 4th 2011 Cutting Steel
- January 21st 2011 Module Construction Started
- •April 11th 2011 Keel Laying Ceremony



Keel Laying Ceremony April 11 2009







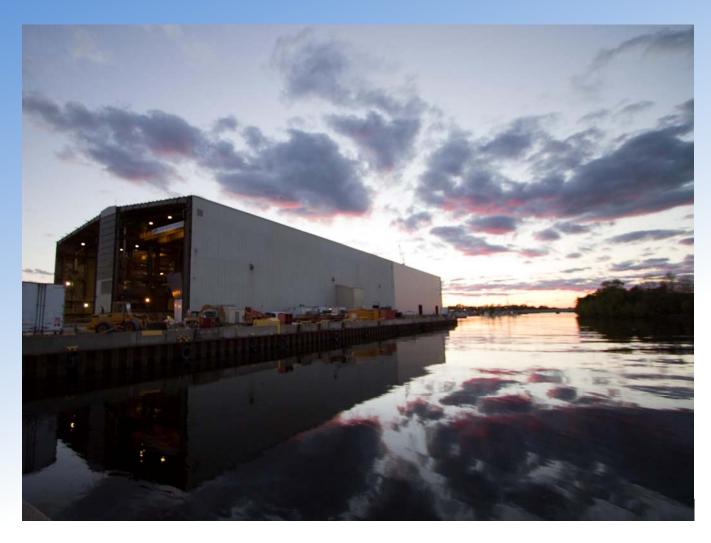
Design Verification Weight Issues

- Shipyard estimate ~ 300LT greater than Contract Estimate
- Weight+VCG too high design not viable

Weight Mitigation

- Increase length 6 feet in parallel midbody (261 ft ship)
- Change from Steel to Aluminum structure above 02 deck
- Eliminate elevator service above 01 deck
- Shorten/rearrange Pilothouse
- Misc- light-weight joinery, steel reductions, electric deck heat, ...





MMC Building 10





Current Construction Status





Module Construction





Mockup of Bridge





Mockup Main Lab



Sikuliaq Science Workshops



Shipyard-Marinette, WI Ocean Science-Salt Lake City, Utah May 10-11 2011 Feb 19-24 2012

Contact - Terry Whitledge terry@ims.uaf.edu +1 907 474 7229



SIKULIAQ Science Workshop 10-11 May 2011 Best Western Riverfront Inn 1821 Riverside Avenue Marinette, WI 54143

10 May	
0830	Introductions of Participants and Project Team
0845	Overview and Goals of the Workshop – Terry Whitledge
0855	Vessel Design and Layout – Dan Oliver
0915	Description of Science Systems - Marc Willis & Steve Hartz
	Comparisons with other vessels – Thompson, Healy, Knorr & Palmer
1015	Break
1030	Outfitting for mission scenarios
1130	Transition to Operations – Dan Oliver
1200	Lunch at Hotel
	Disciplinary Presentations of Current & Proposed Projects
1300	Biological Discussions – Jackie Grebmeier & Carin Ashjian
1330	Geology & Geophysics Discussions – Bernie Coakley & Margo Edwards
1400	Chemical Discussions – Ana Aguilar-Islas & Lee Cooper
1430	Physical Discussions – Tom Weingartner & Peter Winsor
1500	Break
1530	Shipyard tour
1700	Travel to Mock-up Warehouse
1715	Start Tour of Mock-ups
1800	Catered Dinner at mockups
	White boards/Flip charts to lead discussions
11May	
0830	5 Minute Science Ideas of Participants
0930	The UNOLS scheduling process and multi-ship operations – Jon Alberts
0945	Agency Issues and Initiatives; Further Discussion
1030	Break
1100	Discussion on further venues for science community involvement and future workshops
1200	Adjourn





UNIVERSITY OF ALASKA FAIRBANKS

America's Arctic University

SIKULIAQ SCHEDULE

What Does the Future Look Like?

Science Meeting (at Shipyard)	May 2010
Z-drives Delivered to Shipyard	Jan 2011
Ocean Science Meeting Salt Lake	Feb 2012
Move from assembly building	May 2012
Launch	Jun 2012
Builder's Trials	Oct 2012
Acceptance Trials	May 2013
Delivery	Jun 2013
Post Delivery Dockside/Training	Jun 2013
Transit and Science Trials	Aug 2013
NSF Inspection	Dec 2013
Available for Science	Jan 2014
Ice Trials	Mar 2014
Inport and Drydock	May 2014









Questions ??





