

Breakout Session #5 – Synthesis and Prioritization
Wednesday a.m., 9 October 2013
Group 1

Dear Arctic Logistics Elf:

We envision a world where Arctic Logistics are being coordinated and supplied in an intra-agency, inter-agency, and international manner to allow scientists to conduct interdisciplinary all-season observations and manipulations of the circumarctic (biosphere, atmosphere, cryosphere, and hydrosphere) from manned and autonomous (in situ, shipborne, airborne, and satellite) platforms, on time scales ranging from real-time to decades. Existing infrastructure will be maintained and updated. There must be an online catalog of all projects with access to well-documented data and metadata for observations and data products. Locally-based logistics support should extend beyond the regional hub into local communities using small support / interpretation/ outreach centers that are serving needs of individual projects while also respecting locally-relevant observations and local culture. Best practices and technologies will be adopted to minimize the carbon footprint and environmental impact of operations.

Notes:

Integrated research objectives and field research leads to integrated logistics and cost saving. Interdisciplinary, interagency, and international. Maximize inclusion of local communities and local knowledge in field logistics.

Locally based logistics agents and office facilities that seamlessly serve the needs of local communities and visiting researchers. Important to have the Umiak like capacities to extend beyond the regional hub into local communities using small offices/bases/interpretation/outreach centers that are serving needs of individual projects while also respecting needs of locally relevant observations and local culture.

Access: 1) physical access, more and better platforms, coordinated use of existing platforms both nationally and internationally; 2) political access by better international cooperation to insure access to all the arctic 3) with appropriate data sharing.

Same as above: Update and improve our existing infrastructure aircraft, ice stations, ships, satellites; sharing the territories and coordinating all this into one big data pool at the end.

Interdisciplinarity: we should not just build logistics but build Interdisciplinarity in at the ground floor; with end to end thinking through the social sciences with outreach and involvement of local communities. Need to clarify funding streams for

developing next generation of autonomous observing technologies while meeting gaps and needs. Fleet of autonomous platforms that the community can draw from. International covered already.

Future marine research in the arctic needs two new icebreakers, one operated for science by a science institution, and one by the Coast Guard. Database/ catalog to prevent redundancy and maximize data quality. Future field research needs ability to meet surge demand via affordable flexible and compatible logistics, both equipment and procedures.

Future logistics needs will require better coordination and planning to make efficient use of platforms and expand the scope to operations. We will do this on interdisciplinary, interagency, and international basis. Examples include scheduling projects to platforms to maximize utilization; using russian platforms to gain access to that part of the arctic; interagency sharing of vessels and aircraft; and training young investigators in systematic operations and logistics planning.

Suggested Table of Contents

0. Executive Summary, include vision
1. Introduction
2. Vision of Arctic Research in Twenty Years
3. Recommendations by Arctic Research Domain
 - a. Terrestrial
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - b. Marine
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - c. Atmospheric
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - d. Social Science
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - e. Glaciology, Ice Sheets
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - f. Coastal
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
4. Regionally-Specific Recommendations (focus on what was not covered above, but repeat if there is a regionally-specific flavor to the recommendation)
 - a. Alaska

- i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - b. Greenland
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - c. Canada
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - d. Russia
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - e. European Arctic
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
 - f. Central Arctic Ocean
 - i. Sustaining and Expanding Logistics Resources
 - ii. Opportunities for Improved Coordination of Resources
- 5. Cross Cutting Recommendations (This is an opportunity to summarize the big picture aspect of what was discussed above and to focus on what was not covered above)
 - a. International Coordination
 - b. Interagency, Intraagency Coordination
 - c. Interdisciplinarity
 - d. High Level Coordination of field opportunities and assets
 - e. Technology Development (Autonomous, low energy, communications, cyber infrastructure)
 - f. (Human) Capacity Building
 - i. teaching people how to plan big projects
 - g. Maximizing Safety and minimizing Risk