

Trip Report
Arctic Domain Awareness Conference
St. Louis, Missouri
March 5-6, 2009

I was invited to participate in a closed meeting sponsored by the National Geospatial-Intelligence Agency (NGA) on issues related to the strategic and environmental outlooks as the climate in the Arctic changes. Since this was a security enabled meeting I cannot go into depth on many of the subjects discussed, but I can provide an overview that is relevant to the mission of the NSSI and to many of its members.

Significant was the focused discussions on the changes expected to the environment, demographics and economics of the U.S. Arctic (as well as the pan-Arctic environments). Related both to national security and environment were:

- Changes in water availability and quality expected over the next century
- Changes to social structure of northern communities, some brought on by human migration patterns occurring well outside Arctic environments
- Major shifts in economically important infrastructure and a renewed movement to adapt older, as well as newer, infrastructure beginning immediately
- Significant changes in disease patterns both in the human environment and in native animals
- Movement into alternate energy sources and economic stability in the Arctic

Strategically, it is expected the Arctic will experience a significant increase in international cargo shipping, border “testing,” and tourism as the ice free period increases. This translates into a greater need for such activities as search and rescue, technology to address contaminate issues, and a more visible open water presence for both the Navy and Coast Guard which will require more shipping and aircraft operational support.

Analyses by Department of Defense strategists suggest the movement to alternate energy sources will have significant economic impacts to Alaska. The potential change to non-traditional forms of energy could cause a decline, or a shift, in the Alaska economy and to shifting demographics in villages as they adjust to new technologies and potentially new sources of income, and the degradation of a subsistence based traditional lifestyle. Pressure on the Arctic could also come in the form of increased commercial fishing interests that would also require a significant support structure either in the floating or land based environments.

Much was presented at the conference in the form of analyses of “expected changes,” but it was short on how we collectively address expectations. There was discussion on the need for increased environmental baseline, monitoring and modeling, as well as a need to obtain the maximum benefits from research activities. One speaker called for more research that was interdisciplinary in nature and had applicability across individual agency mandates (sounds a little like NSSI). Conclusions reached were the need for a broader Arctic knowledge management program, greater coordination of Arctic research, and increased monitoring of both on-shore and at sea activities. There needs to be a focus on the water challenges so we can gain a strong knowledge base to adapt to the changes in supply and quality.