ALASKA STATE LEGISLATURE
JOINT ARMED SERVICES COMMITTEE
March 7, 2006
3:39 p.m.

MEMBERS PRESENT

Senator Gary Wilken, Co-Chair
Representative John Coghill, Co-Chair
Senator Charlie Huggins
Senator Gary Stevens
Senator Bettye Davis
Representative Bob Lynn

MEMBERS ABSENT

Senator Fred Dyson
Representative John Harris
Representative Jay Ramras
Representative Eric Croft
Senator Gene Therriault
Representative Richard Foster

COMMITTEE CALENDAR

Presentation: Alaska Aviation Safety Project

PREVIOUS COMMITTEE ACTION

None to report

WITNESS REGISTER

General Campbell
POSITION STATEMENT: Introduced the Presentation

Jim Harpring, Principal Investigator
Department of Military and Veterans Affairs
POSITION STATEMENT: Delivered the PowerPoint Presentation

Frank McQuery, Program Manager
Alaska Aviation Safety Program
POSITION STATEMENT: Delivered the PowerPoint Presentation

ACTION NARRATIVE

CO-CHAIR GARY WILKEN called the Joint Armed Services Committee meeting to order at 3:39:50 PM. Present were Senators Charlie Huggins, Gary Stevens, Bettye Davis, Representative Bob Lynn and Co-Chair Representative John Coghill Jr.

^Overview: Alaska Aviation Safety Project

3:40:41 PM
CO-CHAIR GARY WILKEN welcomed General Craig Campbell.

GENERAL CRAIG CAMPBELL, Commissioner, Department of Military and Veterans Affairs, Adjutant General, Alaska National Guard, introduced himself.

3:42:24 PM
It has been the vision of United States Senator Ted Steven to use technology to improve aviation safety in Alaska. The end game vision is to have digital mapping for the entire State of Alaska and wireless technology that can be used from the cockpit.

3:43:53 PM
The primary presentation would be from Jim Harpring who works mostly on communication-driven projects. With him was Frank McQuery with the Alaska Aviation Safety Project. Alaska is on the leading edge of aviation technology, which includes global satellite, cell phone, and wireless technology.

Representative Bob Lynn joined the meeting.

3:45:15 PM
JIM HARPRING introduced the first slide of the PowerPoint Presentation.

Slide 1: A NASA Research Project
The goal is to reduce aviation related accidents in Alaska. The project began in 2001 with the use of remote imaging technologies and the use of integrated wireless technologies in non-traditional applications.

3:46:48 PM
Slide 2: Supporting Elements/Agencies
The project is supported by RCC, NASA, NTSB, FCC, Medallion Foundation, Alaska Air Carriers Association, University of Alaska, Space Imaging, Intermap Technologies Inc, E-Terra, and volunteers.

Slide 3: Technology
The technology is high-resolution satellite imagery, which uses different satellites to map toward 3D spatial visualization.

3:48:54 PM
Slide 4: Project Data Requirements
Data that is required for the project are imagery and digital terrain data (DEM) to produce the 3D digital model. [Slides of various angles of Portage Pass were shown to the committee on the projector.]

3:51:20 PM
Slide 7: Alaska Aviation Safety Areas Collected
MR. HARPRING highlighted the total area collected and the AASP progress to date.

Slide 9: Microsoft Flight Simulator
[Slides of various flight simulator technologies were shown to the committee on the projector]

3:53:38 PM
Slide 10: Medallion Foundation
The Medallion Foundation is a 501 (C) Not-for-profit organization out of Anchorage comprised of a group of individuals who are mostly retired pilots. [Mr. Harpring launched a Medallion Foundation info-mercial on the projector screen]

3:55:47 PM
Slide 12: The Future
The future goal is to collect more imagery and DEMs for additional mapping and to incorporate those into the flight simulators statewide. In the test areas they hope to incorporate the use of wireless devices aboard the aircraft and establish Alaska as a leader for that type of research. [Mr. Harpring launched a two-minute excerpt from a History Channel feature titled Modern Marvels, Private Planes, which aired December 23rd, 2003.]

3:59:57 PM
MR. HARPRING explained that cell phones operating under digital flight rules can act like transponders and can be tracked using cutting edge technology.

CO-CHAIR WILKEN asked whether the signal to the cell phone comes down from a GPS.

MR. HARPRING responded no. As of 2005, every cell phone sold in the United States must be GPS-locatable. The feature is set and the GPS chip is in the cell phone. When the cell phone is dialed to the emergency 911 number it pings to 911 Central or a rescue coordination service. This technology can be used to track aircraft as well.

4:03:57 PM
FRANK MCQUERY added that the Federal Communications Commission (FCC) is very much in favor of developing the cell phone technology. It is taking existing off-the-shelf commercial technology and extracting value from them.

4:06:42 PM
Slide 16: Proof of Concept
Evaluations show the project would have no interference with land-based communications, yet this is an ongoing project and all of the questions are not answered.

Slide 16: NASA Wireless Research Area
The entire State of Alaska, absent a 50-mile buffer with Canada and a 7-mile buffer offshore would present utilization of the services.

4:08:48 PM
Slide 17: Digital Flight Plan Concept
Accurate, three-dimensional, digital databases are necessary for the technology to work and yet there is not a single statewide map that meets national standards.

Benefactors and Beneficiaries of the project include:

- General Aviation Community
- Medallion Foundation
- Rescue Coordination Center
- National Transportation Safety Board
- Department of Defense
- Iditarod Air Force
- Public and private agencies
- Others

4:13:03 PM
Slide 21: MOA (DNR, UAF, DMVA) Map the State
The project will provide accurate mapping. There is a memorandum of agreement (MOA) signed between the Department of Natural Resources, the University of Alaska in Fairbanks, and the

Department of Military and Veterans Affairs and Governor Murkowski endorses the deal.

4:15:43 PM
Slide 23: Overall Goals Met

- Build consensus between government, commercial and civic groups to map the State
- Facilitate a collaborative planning effort
- Understand customer needs
- Make products available to the end users as quickly as possible

The project has been recognized nationally.

4:19:24 PM
MR. HARPRING reiterated the program uses existing cell phone towers and simple cell phone technology. It would get rid of radar as well and provide huge cost savings.

4:24:34 PM
MR. HARPRING summarized by noting that new cell phones coming out in Europe have two ports on them with a device that allows a keyboard, a small flat screen, and Internet service.

CO-CHAIR WILKEN thanked the presenters and adjourned the meeting at 4:26:33 PM.