

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672

2628 SCOMM 116 JOINT ARMED SERVICES COMMITTEE, 1999-2000



RECORDS CERTIFICATION



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A handwritten signature in black ink, appearing to read "R. L. Davis", written over a horizontal line.

Signature of Camera Operator

12/5/2001
Date

SCOMM 116: JOINT ARMED SERVICES COMMITTEE, 1999-2000

MEMBERS:

SENATOR TIM KELLY, CO-CHAIR
SENATOR AL ADAMS
SENATOR PETE KELLY
SENATOR DRUE PEARCE
SENATOR GARY WILKEN
REPRESENTATIVE ELDON MULDER, CO-CHAIR
REPRESENTATIVE JOHN HARRIS
REPRESENTATIVE REGGIE JOULE
REPRESENTATIVE LISA MURKOWSKI
REPRESENTATIVE GENE THERRIAULT

Established as a permanent interim committee by Ch. 6, SLA 1999.

Contents: 3 files. 7 cassettes are also available of meetings held 7/19/99 - 9/28/00.

Note: This committee replaces the Joint Committee on Military Bases in Alaska, which was established as a permanent interim committee by Ch. 31, SLA 1998. It was co-chaired by Senator Tim Kelly and Representative Lisa Murkowski. No files, tapes or minutes are available from this committee.

LIST OF FILES (PAGE 1)

MICROFICHE #

1. 7/19-20/99 MEETING
2. 1/31/00 MEETING
3. 4/6/00 MEETING

SCOMM

116:1

**ALASKA LEGISLATURE
JOINT ARMED SERVICES COMMITTEE
ORGANIZATIONAL MEETING
JULY 19 – 20, 1999**

AGENDA AND ITINERARY

Note: Dress for both days is casual

Monday, 19 July 1999

- | | |
|-------------|--|
| 0815 | Van departs from Anchorage Legislative Information Office upper parking lot, 716 W. Fourth Ave. for National Guard Readiness Center, Fort Richardson.
NOTE: Members driving their Privately Owned Vehicles (POVs) must stop at the Fort Richardson Guard Shack and obtain a Day Pass to enter the base. You will need a Drivers License and Vehicle Registration. The Base Speed Limit is 25 mph unless otherwise posted and is strictly enforced. |
| 0900 – 1030 | Organizational Meeting, Marston Conference Room, B208, National Guard Readiness Center. Teleconference to Juneau, Fairbanks.
NOTE: The bridge number for members participating in the meeting via Teleconference is 1-800-368-8772. |
| 1030 - 1045 | Break |
| 1045 – 1115 | Department of Military and Veterans Affairs Overview Briefing
BG Phillip E. Oates |
| 1115 - 1145 | Army National Guard Briefing
BG Steve Korenek |
| 1145 – 1215 | Tour National Guard Readiness Center activities:
Rescue Coordination Center (RCC)
State Emergency Coordination Center (SECC)
Alaska State Troopers (AST) |

1215 – 1230	Buffet Lunch served in Marston Conference Room
1230 – 1250	Air National Guard Briefing Col George Cannelos
1250 - 1255	Transport to United States Property Fiscal Office, via Air Force Eagle Bus (note: to avoid private vehicle congestion and parking problems on the bases, military transportation will be provided between the briefing locations for Committee Members and attendees on both days.)
1255 – 1305	USPFO Orientation and Briefing MAJ Michael Thompson
1305 – 1310	Transport to Counter Drug Facility, Bldg 60802
1310 – 1345	Counter Drug Support Program Briefing and Display Lt Col Bob Kean
1345 – 1350	Transport to Youth Corps, Bldg. 60700
1350 – 1430	Youth Corps Presentation Mr. Tim Jones
1430 – 1440	Transport to United States Army Alaska Headquarters, Building 1, Fort Richardson
1440 – 1540	USARAK Briefings, Chaney Conference Room Introduction – MG Dean Cash Command Briefing Range Briefing – LTC Mark Vaughn
1540 – 1600	Transport to Bryant Army Guard Heliport, West Side of Hanger 4

1600 – 1610 Safety Briefing
COL Mark Stigar and CWO Jimmy Keyes

1700 End of first day. Transport to National Guard Readiness Center for
POVs. Van returns to Anchorage LIO

Tuesday, July 20, 1999

0810 Van departs from Anchorage Legislative Information Office upper
parking lot, 716 W. Fourth Ave., for ALCOM Headquarters,
Reeves Entrance, Elmendorf AFB. Members with POVs enter
Elmendorf AFB with letter provided by 11 AF/CP.

0845 Depart ALCOM Headquarters in Air Force Eagle Bus for Fort
Richardson

0910–1010 Windshield tour of Fort Richardson logistics facilities

Maintenance Facility
Mr. Gary Boyd

FOL Yard
CPT Kenwood

Warehouses
Mr. Tom Rentz

1010 – 1050 Arctic Equipment Layout, PAD 3, C Battery 4-11 Field Artillery
CPT Bruce Carswell

1050 – 1110 Transportation to Joint Mobility Center (JMC) Elmendorf AFB
with enroute briefing on 3rd Wing organization and windshield tour
of the F-15 Alert Facility, new F-15E aircraft shelters, new
munitions facilities provided by F-15 bed down, POL storage and
distribution

improvements and the new airlift squadron facility. - Capt. Jennifer Kramme

1110 - 1140 JMC Tour and Briefings

Deployment Process
Lt Mila Fesler

Cargo Deployment Function
SSgt Andrew Mills

1140 - 1200 Transportation to Iditarod Dining Facility with enroute briefing and windshield tour of 3rd Wing Flightline

1200 - 1245 Lunch with Air Force Top Enlisted Performers

Amn of the Quarter SrA Earl Thomas
NCO of the Quarter SSgt Alex Johnson
SNCO of the Quarter MSgt Theresa Matthews
CGO of the Quarter 1Lt Dennis Hale
AF Winner 10 Outstanding Amn SrA Margaret Rawls

Iditarod Dining Facility, cost: \$5.00 per person.

1245 - 1255 Transportation to Alaska Command Headquarters, escorted by Lt Gen Tom Case

1255 - 1310 Group photo on front steps with Polar Bear, proceed to Reeves Conference Center.

1310 - 1340 ALCOM Briefings: ALCOM Mission Briefing, LCDR Brian Casey

1340 - 1355 Approved MILCON Briefing, LTC Bob Hansen

1415- 1445 Commander's Comments

1445 Depart ALCOM Headquarters. Golf participants proceed to Eagle Glen Golf Course in POVs. Others return to Anchorage in POVs and LIO van.

1500 Golf participants arrive at Eagle Glen Golf Course

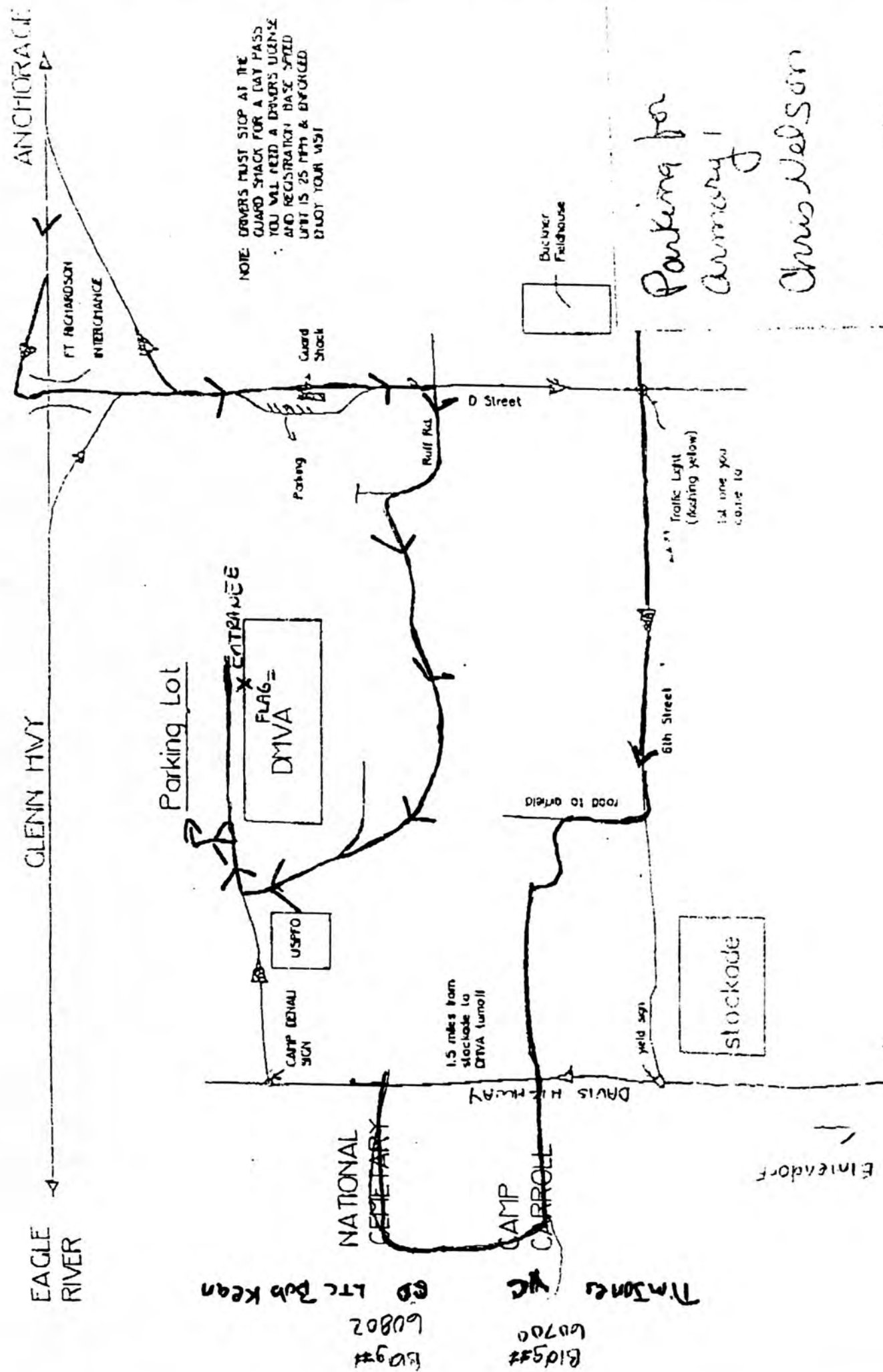
1505 Tee Time Group One

1510 Tee Time Group Two

1516 Tee Time Group Three

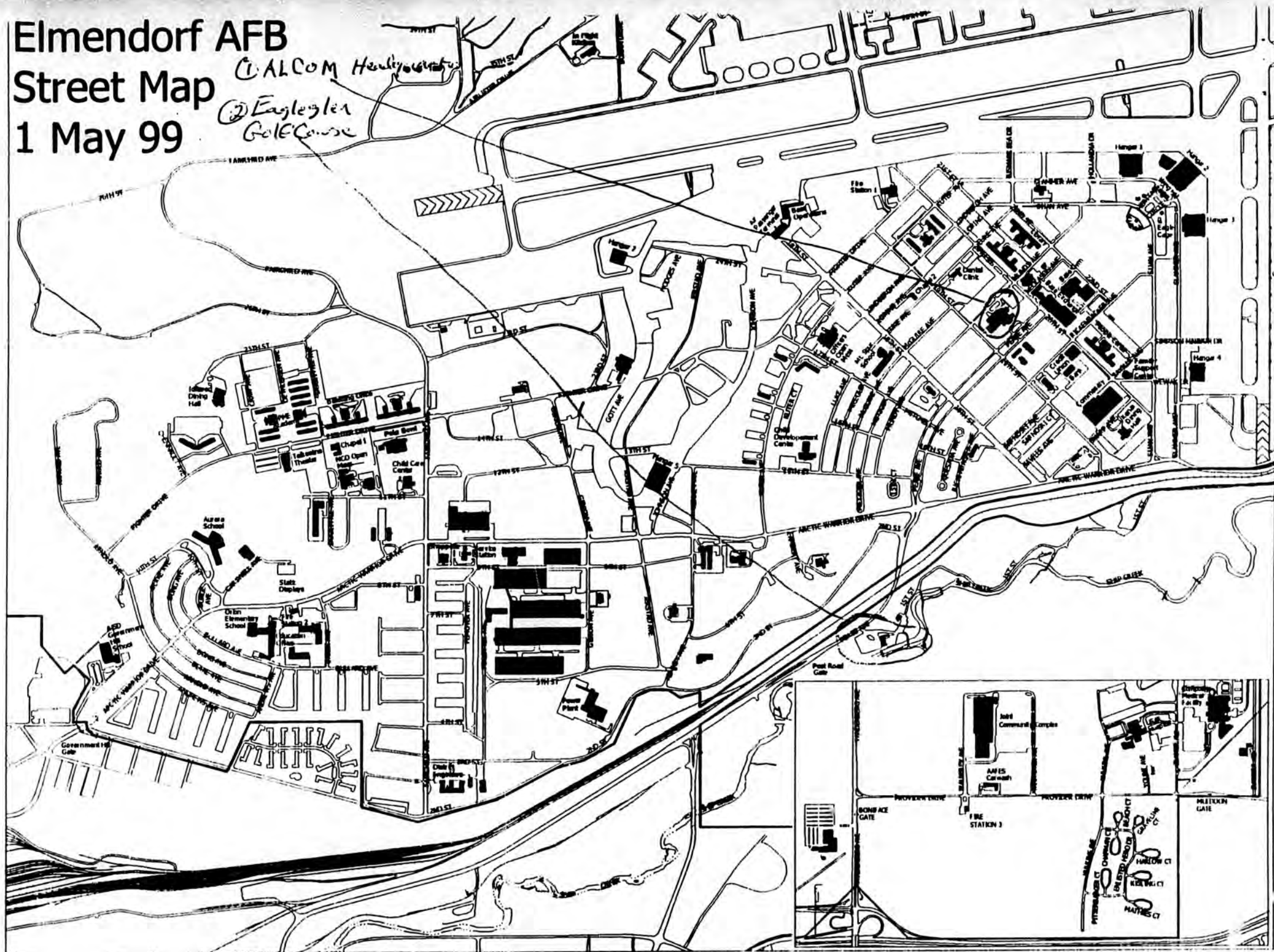
End of Second Day

POC: Anita Porter 907-428-6010



Elmendorf AFB
Street Map
1 May 99

② Eagles
Golf Course



SCOMM

116:2

ALASKA STATE LEGISLATURE

Sen. Tim Kelly, Co-Chair
Sen. Drue Pearce
Sen. Gary Wilken
Sen. Pete Kelly
Sen. Al Adams
Sen. Loren Leman, Alternate



Rep. Eldon Mulder, Co-Chair
Rep. Lisa Murkowski
Rep. Gene Therriault
Rep. John Harris
Rep. Reggie Joule
Rep. Bill Hudson, Alternate

Public Members: Jake Lestenkof • John Hoyt • George Vakalis • Dean Owen • Alan Walker • Charles Wallace

JOINT ARMED SERVICES COMMITTEE

AGENDA

Quarterly Meeting
Senate Finance Committee Room
State Capitol
Juneau, Alaska

Monday, January 31, 2000
Noon

1. Call to Order Senator T. Kelly, Representative Mulder
 - a. Introduction of Members and Guests
 - b. Approval of Minutes
2. Activities Report
 - a. Federal Aviation Administration Conference
on Military Airport Joint Use Mr. Owen
 - b. Institute of the North Conference
on Missile Defense in the Pacific Mr. Treadwell
 - c. Association of the United States Army
Conference on Space and Missile Defense Mr. Hoyt
 - d. National Association of Installation Developers
Conference on Military Base Privatization Mr. Vakalis
3. Military Issues Update staff

4. New Business

5. Special Presentations:

a. Coast Guard Update

RADM Barrett

b. Adak Reuse Update

Mr. Gromoff,
Mr. Gates

6. Adjourn

JOINT ARMED SERVICES COMMITTEE

October 4, 1999

1:15 p.m.

SENATE MEMBERS PRESENT

Senator Tim Kelly, Co-Chair
Senator Pete Kelly
Senator Gary Wilken
Senator Loren Leman – Alternate

HOUSE MEMBERS PRESENT

Representative Eldon Mulder, Co-Chair
Representative Gene Therriault
Representative John Harris
Representative Reggie Joule
Representative Lisa Murkowski

PUBLIC MEMBERS PRESENT

Dean Owen
Alan Walker
John Hoyt

OTHERS PRESENT

Representative Gail Phillips
Representative Joe Green
Janice Nielsen, Legislative Liaison, U.S. Army Pacific
Lance Herrington, U.S. Army Alaska
Loran Baxter, U.S. Army Corps of Engineers
Mead Treadwell, Managing Director Institute of the North
LTC Robert Michaud, Post Commander, Fort Greely
MAJ Brian Hilferty, U.S. Army, Alaska
Richard Anderson, OSD BRAC Coordinator
Joyce Duff, Fort Greely BRAC Coordinator
Tim Benintendi, Legislative Staff
Matt Gill, Legislative Staff
Casey Sullivan, Legislative Staff
Mark Morones, Legislative Staff
Ken Erickson, Legislative Staff
Mike Pauley, Legislative Staff
Dennis DeWitt, Legislative Staff
Amy Erickson, Legislative Staff
Pete Fellman, Legislative Staff

Craig Johnson, Morris Communications
Chris Nelson, Staff Director, JASC

COMMITTEE AGENDA

Committee Activities Update
Review of Upcoming Events
Missile Defense Conference Preview

ACTION NARRATIVE

CO-CHAIR TIM KELLY called the Joint Armed Services Committee to order at 1:15 p.m. at the Diamond Willow Club, Fort Greely, Alaska.

CO-CHAIR ELDON MULDER introduced Joint Armed Services Committee Members and guests and noted the presence of a quorum. He asked Chris Nelson, JASC staff director, to update committee members on interim activities.

CHRIS NELSON explained that the committee's major activities since its organizational meeting on July 18 have included high level meetings with Department of State and Department of Defense in Washington, D.C., participation in the National Association of Installation Developers Annual Conference and special seminar on military base privatization in Jacksonville, Florida, and a special meeting during the Legislative Special Session on Subsistence. He noted that Rear Admiral Thomas Barrett had given short overview of Coast Guard operations in Alaska at the meeting and later invited committee members to tour his headquarters and receive a more detailed presentation on Coast Guard activities later that afternoon. A Floor Session had precluded House members from accepting that invitation but Senate members and staff held a highly informative meeting with the Admiral and his staff.

CO-CHAIR KELLY directed that the Coast Guard's presentation be a major agenda item at the committee's next quarterly meeting in Juneau during the Legislative Session.

MR. NELSON said that major upcoming events included a special conference on civilian joint use of military airfields sponsored by the Federal Aviation Administration. He noted that Dean Owen would represent the committee at that conference. He then invited Mead Treadwell, Managing Director of the Institute of the North, to present a preview of his organization's upcoming ballistic missile conference.

MEAD TREADWELL explained that the conference, entitled "America's Front Line State and Japan: Briefing on Ballistic Missile Defense" would be held in Honolulu, Hawaii, on November 8-9, 1999. He said that Day 1 would focus on American missile defense policy which Day 2 would center on American and Japanese joint concerns on missile defense. Mr. Treadwell noted that recognized experts on missile policy had been invited to lead the discussions and that high level members of the Japanese Self Defense

Force and leading Japanese think tanks were expected to attend. He said Members of Congress would present policy updates and that topics to be discussed included land based vs. sea based missile defense options and negotiations on modifications to the 1972 Anti-Ballistic Missile Treaty. He outlined travel options and invited committee members to actively participate in the conference.

CO-CHAIR KELLY directed Mr. Nelson to coordinate committee member participation.

CO-CHAIR MULDER noted that Mr. Loran Baxter, U.S. Army Corps of Engineers, had briefed the committee earlier in the day on developments in the National Missile Defense program and announced that formal hearings on the Environmental Impact Statement for the program would be held in Fairbanks on November 1, Anderson on November 2, Delta on November 3, and Anchorage on November 4. He encouraged members to attend those meetings and send letters in support to the National Missile Defense office.

SENATOR LEMAN asked that a position paper be drafted on the issue.

REPRESENTATIVE MURKOWSKI asked whether the committee should advocate a particular location be selected. Following discussion, committee members agreed that deployment to any Alaska location would be appropriate.

CO-CHAIR MULDER directed staff to prepare a draft letter supporting the system for the committee's members.

CO-CHAIR KELLY invited Richard Anderson, OSD BRAC Coordinator, and Joyce Duff, Fort Greely BRAC Coordinator to brief the committee on BRAC activities at Fort Greely.

RICHARD ANDERSON explained that the Base Realignment and Closure Commission had announced Fort Greely's realignment on February 28, 1995 and set a six-year time period to complete the action. He noted that the realignment meant that the post headquarters and military activities would be relocated to Fort Wainwright while the Army would retain the training facilities and ranges. The residual force remaining at Fort Greely would be eleven military and fifty-five civilian personnel. He explained that the realignment created renovation and construction requirements at the facilities receiving Fort Greely's activities and reported that 30 per cent of those requirements have been met at Fort Wainwright while 100 per cent have been met at Black Rapids. He also noted that a Restoration Advisory Board (RAB) had been appointed to review the cleanup process. and that a historical archiving process for Fort Greely's buildings had been initiated. Major working issues identified by Mr. Anderson include the post-BRAC configuration of the Fort Greely Commissary and Exchange, the personnel draw down, and the proposal to convert a major portion of the cantonment area to a private prison.

CO-CHAIR MULDER introduced Craig Johnson of Morris Communications and invited him to describe his company's new publication, ALASKA MILITARY WEEKLY.

CRAIG. JOHNSON explained that, as its name indicated, ALASKA MILITARY WEEKLY will be a newspaper published each week devoted to armed forces activities in the state. He noted that it would contain stories of both local and national interest geared toward the men and women who serve in the military here.

CO-CHAIR KELLY noted that it would be appropriate for the committee to receive an update on reuse activities at Adak, the other Alaska base closed by the 1995 BRAC Commission. He directed Mr. Nelson to invite representatives of the Aleut Corporation, which had formed Adak's local reuse authority, to the committee's next meeting.

CO-CHAIR KELLY also stated that the committee was looking for people to serve on its Citizens Advisory Board.

JOHN.HOYT stated that the committee should take an active role in supporting the Northern Warfare Training Center. He suggested that letters should be sent to our congressional delegation and that discussion be held with senior commanders to increase the usage of this facility.

There being no further business to come before the committee, CO-CHAIR KELLY adjourned the meeting at 2:20 p.m.

JOINT ARMED SERVICES COMMITTEE

September 23, 1999

10:40 a.m.

SENATE MEMBERS PRESENT

Senator Tim Kelly, Co-Chair
Senator Drue Pearce
Senator Pete Kelly
Senator Gary Wilken
Senator Al Adams

HOUSE MEMBERS PRESENT

Representative Eldon Mulder, Co-Chair
Representative Lisa Murkowski
Representative Gene Therriault
Representative Reggie Joule
Representative John Harris

PUBLIC MEMBERS PRESENT

Dean Owen (via teleconference)
Jake Lestenkoff (via teleconference)

OTHERS PRESENT

Senator Jerry Ward
Senator Loren Leman
Representative Brian Porter
Representative Joe Green
Representative John Cowdery
Representative Allen Kemplen
Representative Sharon Cissna
Representative Richard Foster
Jim Chase, Department of Military and Veterans Affairs, via teleconference
Carol Carroll, Department of Military and Veterans Affairs

COMMITTEE AGENDA

U.S. Coast Guard Overview by Rear Admiral Barratt
Special Presentation: Army Privatization Programs
Interim Activities Report
Issues Update

WITNESS REGISTER

Rear Admiral Thomas Barratt
Commander 17th Coast Guard District
P.O. Box 25517
Juneau, AK 99802

Colonel Michael L. Sandberg
Deputy Chief of Staff for Logistics
U.S. Army Alaska
Building 1
600 Richardson Drive
Ft. Richardson, AK 99505

Major Brian C. Hilferty
Public Affairs Officer
U.S. Army Alaska
Building 1
600 Richardson Drive
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Mr. John Toenes
Deputy Director, Directorate of Public Works
U.S. Army Alaska
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Ft. Richardson, AK 99505

Mr. Gregory C. Endsley
Deputy Director, Directorate of Logistics
U.S. Army Alaska
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Mr. Mark S. Bryant
Chief, Management Services Division
U.S. Army Alaska
Building 1
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Ft. Richardson, AK 99505

ACTION NARRATIVE

TAPE 99-2, SIDE A
Number 001

CO-CHAIR TIM KELLY called the Joint Armed Services Committee

JT ARMED SERVICES CMTE

meeting to order at 10:40 a.m. Committee members present were Senator Tim Kelly, Senator Drue Pearce, Senator Gary Wilken, Representative Eldon Mulder, and Dean Owen and Jake Lestenkoff via teleconference.

CO-CHAIR ELDON MULDER moved to approve the minutes of the July 19, 1999 meeting. There being no objection, the minutes were approved.

CO-CHAIR TIM KELLY introduced Rear Admiral Thomas Barratt of the U.S. Coast Guard and announced that Rear Admiral Barratt will host a luncheon for committee members on September 24.

REAR ADMIRAL BARRATT informed committee members that he would be happy to speak to and show committee members, as well as individual legislators, what the Coast Guard does, how its work relates to the state, and to provide tours of Coast Guard installations.

REAR ADMIRAL BARRATT gave the following briefing to legislators. The U.S. Coast Guard has 2000 men and women serving in Alaska. The responsibilities of legislators are significant and they intersect with U.S. Coast Guard responsibilities through various operating administrations of the state. Whether the U.S. Coast Guard is successful in its missions in areas like fisheries enforcement or environmental protection depends on the Coast Guard's efforts, the laws and regulations it must enforce, the resources and training it gets, and the relationships it has with the people and agencies it works with.

REAR ADMIRAL BARRATT discussed his philosophy toward the Coast Guard's mission. First, Coast Guard officers must ask themselves if they are "doing the right thing" for themselves, their mission, their families, and for the communities they serve. "Doing the right thing" means providing operational excellence which requires good leadership, teamwork and innovation. Good teamwork must be applied to external, as well as internal operations. To be successful, the U.S. Coast Guard must partner effectively with agencies such as the Department of Public Safety (DPS) and the Department of Environmental Conservation (DEC). The more the Coast Guard is able to coordinate its efforts in operational excellence, the better the result will be for the industry it serves.

REAR ADMIRAL BARRATT noted the second most important component of his philosophy is that Coast Guard members must look out for each other as well as for the communities they serve. Community outreach efforts by the Coast Guard are very important in Alaska. He emphasized that he always has an open ear for legislators and believes outreach to the Legislature is important to ensure that he fully understands what legislators' issues are in regard to their

constituents.

REAR ADMIRAL BARRATT said his last directive to Coast Guard members is to honor the public trust they hold and to approach their jobs with integrity.

REAR ADMIRAL BARRATT discussed the issues he faces at this time. Oil transportation safety is an ongoing issue and the most important. The safety of other commercial vessels is also on the top on the list. He noted many commercial vessels dock at Dutch Harbor and that he believes it is better to enforce safety regulations and keep a ship in port than to find the ship out on the rocks. Passenger vessel safety, especially in light of the growth of the tourism industry in the state, is the second most important issue he faces. Small passenger vessel safety is also of concern. REAR ADMIRAL BARRATT said he first attempts to find regional solutions to problems and to reach out to industry representatives to avoid regulatory solutions whenever possible. He believes the best solutions are developed with cooperation, understanding, education, and partnerships.

REAR ADMIRAL BARRATT acknowledged that he is very personally bothered when deaths occur that could have been avoided and he is convinced that the Coast Guard is not doing as well as it could in that arena. He noted two young Canadian girls drowned in a skiff accident on the North Slope recently. The two girls were on a long journey without any emergency or life saving equipment. He said he will work as hard as he can to find a way to reduce the number of preventable deaths in Alaska.

CO-CHAIR TIM KELLY asked what the equivalent is to the United States Coast Guard in our neighboring countries.

REAR ADMIRAL BARRATT replied they have similar but not identical organizations. He will be meeting with the director of the Russian Federal Border Service this week. Historically, that organization has been more of a customs agency but it is taking on the additional responsibilities of fisheries enforcement and environmental protection. Russia's search and rescue operations are entirely separate from the Federal Border Service at this time. Canada's Coast Guard has recently taken on fisheries enforcement duties. Japan has a Coast Guard-type organization but inspection functions are not linked to it.

CO-CHAIR KELLY asked if the Canadian agency is referred to as the Canadian Coast Guard. REAR ADMIRAL BARRATT said it is, however it is under the purview of the Canadian Armed Forces.

REPRESENTATIVE RICHARD FOSTER asked what function Loran stations play now that satellites are used for navigational purposes.

REAR ADMIRAL BARRATT explained that Loran stations are used as a back-up system and he expects them to be in place for another eight to 10 years. Aircraft pilots use the GPS system but, because of reliability, transmission, and redundancy concerns, the aviation community is not willing to let go of the back-up system.

REPRESENTATIVE FOSTER asked if any Coast Guard icebreakers will be visiting the Nome and Kotzebue area in the near future.

REAR ADMIRAL BARRATT noted the icebreaker Healy (ph) will be visiting this fall and that although he is unaware of specific schedules, the Coast Guard plans to occasionally operate icebreakers in that area.

Number 285

SENATOR PEARCE asked if the Coast Guard has considered asking Congress to change the statute and regulations governing the gross tonnage for passenger vessels so that the Coast Guard can get more regulatory authority over the smaller vessels that have had problems.

REAR ADMIRAL BARRATT said nothing is underway now but when the small passenger vessel safety task force finishes its work, he will look at that issue. He noted that part of the problem lies in the fact that the masters on the vessels that Senator Pearce referred to are required to have a 100 ton license, even though the vessels they operate are larger. He stated that naval architects can be very creative in getting more passenger capacity and larger vessel size while complying with existing regulations. He maintained that the problem may lie in the regulations, but it may also lie in the competence and training and the approaches used by the industry to ensure that the masters are capable. He pointed out that some of the better tourism vessel operators require three, four, or five escorted trips to a destination before they allow a master to operate the vessel alone.

SENATOR PEARCE stated she is not necessarily questioning the ability of the masters on the smaller ships, however she would prefer that pilots be hired whenever a ship is carrying a large number of paying passengers. She noted what she thinks is happening on these ships is that the master is trying to navigate the boat, act as tour guide with a loudspeaker, and accommodate tourists on the bridge deck simultaneously. She expressed concern that because of the way the vessels were designed, the Coast Guard

cannot control the "manning" of the ships.

REAR ADMIRAL BARRATT said that is correct. He pointed out that these vessels are traveling to areas that are inherently dangerous; the master must pay attention to navigation and cannot "eyeball" a route.

Number 335

REPRESENTATIVE GENE THERRIAULT indicated that the Alaska Legislature has been debating the issue of whether to require recreational vessels to register and pay a tax to provide a match for federal dollars to establish a boating safety program. He asked Rear Admiral Barratt to comment on such a program.

REAR ADMIRAL BARRATT noted that the death rates have dropped substantially in states that have established boating safety programs. Effective state programs involve education and minimal regulatory requirements and use existing enforcement mechanisms. The death rate in Alaska is 10 times higher than some other states. He would like to work to cut that rate in half. He offered to talk about such a program in detail with Representative Therriault at another time.

SENATOR AL ADAMS asked if bulk fuel storage facilities fall under the jurisdiction of the Coast Guard.

REAR ADMIRAL BARRATT said they do.

SENATOR ADAMS asked what steps the Coast Guard is taking to get rural communities to comply with the regulations governing bulk fuel storage facilities and whether the Coast Guard has funds for that project.

REAR ADMIRAL BARRATT said that matching federal and state funds have been made available to do some of the work. The Coast Guard and DEC are prioritizing the facilities in need of repair so that the worst situations can be addressed first. He expects this project to take at least five years to address.

CO-CHAIR TIM KELLY thanked Rear Admiral Barratt for speaking to the committee. He then announced that representatives of the U.S. Army would brief the committee on the Army's privatization efforts.

CO-CHAIR ELDON MULDER introduced Major Brian Hilferty, Public Affairs Officer; Mr. John Toenes, Deputy Director of the Directorate of Public Works; Mr. Greg Endsley, Deputy Director of the Directorate of Logistics; Mr. Mark Bryant, Chief of Management

Services Division and Deputy Chief of Staff for Resource Management; and Colonel Mike Sandberg, Deputy Chief of Staff for Logistics, U.S. Army Alaska, and the Director of Logistics for the U.S. Army Garrison Alaska.

CO-CHAIR TIM KELLY noted that Representative Brian Porter, Senator Al Adams, Representative Lisa Murkowski, Representative Gene Therriault, Representative John Harris and Senator Pete Kelly had joined the committee.

Number 400

COLONEL SANDBERG informed committee members that the U.S. Army Alaska (USARAK) Directorates span Fort Richardson, Fort Wainwright and Fort Greeley.

COLONEL SANDBERG pointed out that his group gave the same briefing to the Joint Committee on Privatization on Monday. The group is attending to inform committee members of what USARAK, as a federal entity, is doing in the way of commercial outsourcing and privatization. The group has no intention of telling the State of Alaska how it should go about its efforts in that arena. He noted Mr. Bryant would begin the presentation with a general overview, and then he would give a director's perspective on how USARAK prepared its workforce to accept the fact that they were being studied for commercial outsourcing.

MR. MARK BRYANT presented a slide show consisting of 38 slides showing the basic history, regulatory requirements, and results of USARAK's competitive sourcing and privatization project.

Slides 1 and 2 are introductory and describe the purpose of the presentation.

Slide number 3 contains the general philosophy behind the project which is that government should not compete with the free enterprise system.

Slides 4 and 5 define competitive sourcing and privatization. Competitive sourcing is an activity in which government retains ownership of some of the equipment and the facilities. After the competitive sourcing study is conducted, USARAK chooses one of three ways to have the service performed: USARAK can turn control of the operations over to contractor performance but do the surveillance itself; it can provide the service in-house; or the service can be provided by another federal agency. USARAK may instead decide to privatize a service in which it turns over its assets to someone else and get out of the business entirely. The

choice between competitive sourcing and privatization is based on economy. The best examples of privatizing services are the ongoing studies on privatization of utilities and housing. The only stipulation for privatizing services is that it must be economical, so a cost analysis is conducted to determine if the service can be provided cheaper by a contractor.

Slide number 6 contains a detailed definition of an A-76 cost competition which Mr. Bryant explained is basically a full cost competition study. The study determines all costs involved in providing the service in-house. USARAK then solicits prospective bids. The cost competition methodology in A-76 is specified in the OMB circular. USARAK studies entire organizations, not only the functions it wishes to compete. The competitive sourcing can be done in two ways: if the organization has 10 or less appropriated funded positions, a direct conversion is done. If the organization has 11 or more employees, by law USARAK must do a full cost competition study.

Slide number 7 contains the history of competitive sourcing in the federal government. The Nichols Amendment of 1987 created a moratorium from 1987 to 1995 at which time the Commission on Roles and Missions was created by Secretary of Defense Cohen.

Slide number 8 shows the results of the studies from 1979 through 1996. After 468 studies were completed, a 28 percent savings resulted.

Slide number 9 contains the results of a GAO study completed in February of 1999. In 18 of the 53 studies, the performance work statements had to be revised. The performance work statement is the most important document in the entire process as it describes what the contractor is expected to do. Of 32 contracts, 4 were terminated for unsatisfactory performance.

Slide number 10 contains USARAK's strategy which is to achieve greater efficiency to get the best deal for the government and the taxpayer.

Slide number 11 shows the time limits for the studies established by OMB Circular A-76. A single function study is limited to 18 months. A multi-function study is limited to 36 months. Congress also set time limits for spending funds on studies that are a little bit longer.

Slide number 12 shows the starting point as determining what USARAK's commercial activities are and what the inherent government activities are.

Slide number 13 contains the major categories of the functions that can be studied according to the OMB Circular. This represents about 320 sub-functions. The functions that can be studied are also contained in other guides published periodically as part of the annual appropriation acts. MR. BRYANT said if a service can be found downtown or in the phone book, it has the potential of being contracted out to the commercial sector.

Slide number 14 contains the definition of an inherent government activity. MR. BRYANT said if an employee has the authority to make a decision on behalf of the government and commit it to an action, that position is an inherently governmental function.

Slide number 15 contains the reasons why cost competition is important to the federal government. Basically, USARAK just wants to perform better. MR. BRYANT credited the civil servants who have a vested interest in the studies and know how the functions are performed for the success of USARAK's privatization program.

Slide number 16 shows some of the perceptions of A-76 competitions. They are seen as difficult, controversial, and as always leading to appeals, which is not true. Of the 53 studies conducted, 10 were appealed, and only one of the appeals was won.

Slide number 17 discusses federal employee and union roles. No closed meetings occur and employees participate fully until the end of the process, at which time management begins to close off the process to the unions and employees. Employees are critical to the process in that they document their workload and identify areas for improvement.

TAPE 99-2, SIDE B

Slide number 18 shows the process for compiling documentation to announce USARAK's studies. By law, the process must be announced to Congress. The performance work statement is very detailed; the typical performance work statement for the vehicular logistics study fills several binders. After the performance work study is developed over 12 to 14 months, it is given to USARAK's director of contracting to solicit contract offers, and to a management review team. The performance work statement and the most efficient organization work documents are given to the U.S. Army audit agency to check the process. The contractor proposals are evaluated for past performance, quality, best value, and bench marking. When completed, USARAK selects the top bid which will compete with the in-house bid to complete a cost comparison. Standard software is used to compare the numbers and an initial decision is made. Once the initial decision is made USARAK automatically allows protests

and appeals for 30 days.

REPRESENTATIVE COWDERY asked if USARAK allows contractors to "cherry pick" when bidding.

MR. BRYANT explained that most studies are multi-function studies because of the economy of scale. USARAK requires contractors to bid on the entire contract. Furthermore, the directors of logistics and public works require one bid for public works projects and logistics for both Ft. Richardson and Ft. Wainwright.

MR. BRYANT noted after the appeals process is finished, USARAK notifies Congress and then takes 6 to 12 months to implement the contract. The contractor's bid must beat the in-house workforce bid, at least on personnel costs, by at least 10 percent or up to \$10 million, to compensate for the transition costs.

Slide number 19 contains the milestone requirements which are based on the statutory and regulatory mandates for completing the studies. In addition, headquarters gives USARAK specific due dates for completing the studies. The U.S. Army audit agency concluded that a large study would take about 33 months.

Slide number 20 lists the success factors of which the most important is open communication on every activity being conducted. USARAK publishes newsletters, a web page, and newspaper articles, and holds meetings with the workforce and the union. Both participate in the study. USARAK also tries to keep communities informed about what the studies involve. USARAK promotes a positive approach from the outset, and wants to complete the process as soon as possible. It believes it will not have to do large multi-function studies again for about 4 or 5 years. Current civilians have right of first refusal by law. If a contractor wins the bid, the contractor must first offer the displaced employees the right to a job if qualified.

Slide number 21 shows the general lessons learned. The A-76 program has been refined and revised and is an improvement over the program in existence in the 1980s.

REPRESENTATIVE COWDERY asked Mr. Bryant to explain the Brown and Root award in Kodiak to committee members.

MR. JOHN TOENES informed committee members that USARAK has a contract with a company named Brown and Root. It has a job order contract; it is not an A-76 cost comparison study. Beginning about 10 years ago, USARAK received consecutive year reductions in its number of civilian employees. USARAK took those reductions out of

a class of work it calls "project work" as opposed to scheduled maintenance and services. USARAK chose to solicit a contract for that work at Fort Richardson and Fort Wainwright and some other small sites around the state. Brown and Root was the successful bidder; its contract was for one year with four option years. It is now in its second contract. Contracting for those services has been very successful monetarily and administratively.

REPRESENTATIVE COWDERY asked how long Brown and Root has been performing the contract.

MR. TOENES replied that Brown and Root has been providing the services for over a decade.

SENATOR WARD asked Mr. Toenes to tell committee members what A-76 means.

MR. TOENES explained that in the 1950s, when this program first started, the executive branch of government decided the number of civil servants it wanted and how the agencies would be staffed. President Eisenhower decided to contract out commercial services. Congress, given that it had a constituency of over 3 million civil servants, created a public law (PL 105-262, Section 81-04) which required that anytime more than 10 civilians are involved in a study, some kind of cost comparison must take place before those employees can be displaced. The Office of Management and Budget, which is part of the executive branch, built OMB Circular A-76 which prescribes the method to be used to do a cost comparison study. A-76 was most recently revised in 1996.

Number 506

SENATOR PEARCE asked whether Congress must give approval when USARAK notifies it of a study with more than ten civilians involved, or whether notification is sufficient.

MR. BRYANT stated USARAK only notifies Congress of the result of the study.

SENATOR PEARCE asked, in reference to the Brown and Root contract, whether the union management was a part of the contract renewal process, during which she assumed another scoring would take place.

MR. BRYANT assumed not, however he deferred to Mr. Endsley to answer. Mr. Bryant clarified that the contracts are awarded for five years: one year with four option years. Upon the anniversary of the first review year, he asked Mr. Endsley if the union would be involved with that review.

MR. ENDSLEY explained that the director of resource management that remains at the installation oversees how well the contractor is performing and the costs. If the director sees that performance is poor or that costs are escalating, the government can take action to recompet the contract and bring it back in-house. Therefore, the union that remains at the installation will certainly be watching to see how the contractor does.

SENATOR PEARCE asked if, at the end of five years, the review process is much more elaborate, and whether the union is back at the table at that time.

MR. ENDSLEY said that right now there is no allowance for that. The contract bids are resolicited like any other government contract, therefore there is no methodology for the government to jump back in to compete at that time.

SENATOR PEARCE asked how many five year extensions can be granted before the full process must occur again by law.

MR. ENDSLEY explained that at the end of five years the full process must occur but it does not include the government part of the competition, it is just a contract resolicitation in which the private sector competes. The A-76 process does not allow in-house government services to compete at that time if everything is going well with the contract process.

MR. BRYANT added that the government could come back in and compete but it would have to beat the contractor's bid by ten percent.

MR. ENDSLEY noted a cost transfer study allows a review of a contractor who may become overpriced. If the study proves that the contractor is overpriced, the government workforce could compete but would have to beat the contractor's bid by ten percent.

MR. TOENES stated the process of commercial activities is actually designed to ultimately result in a contract, so when a scenario in which the in-house workforce wins, a commercial activity review is initiated again almost immediately and is continuous until the contract is bid again. There are only a few exceptions in which the in-house workforce might have the chance to reparticipate in the competition. The A-76 process is trying to guarantee that a cost competitive contractor ultimately winds up performing the services.

SENATOR PEARCE asked whether the bias is toward outsourcing.

MR. BRYANT said there is no bias.

SENATOR PEARCE noted that Mr. Toenes said that the process immediately starts again until outsiders do the work.

MR. BRYANT clarified that the term "bias" is inaccurate because this process is designed to be as fair as possible.

SENATOR PEARCE said she did not mean to use the word "bias" in a pejorative manner, however USARAK is deliberately trying to get the services provided by contractors.

MR. BRYANT agreed.

MR. BRYANT continued presenting the slides.

Slide 22 lists USARAK's four largest organizations under study: the Directorate of Logistics; the Directorate of Public Works; the Directorate of Plans, Training, Security, and Mobilization; and the Directorate of Community Activities. All totaled, the military and civilian personnel of those organizations represent 78 percent of USARAK. A much smaller percentage will be competed even though the entire organization is under study.

Slide number 23 contains the goals for USARAK's workforce. To identify all of the services that USARAK wants to buy as accurately as possible is the number one goal. Second, the in-house workforce must be prepared to be the successful bidder.

COLONEL SANDBERG asked committee members to note the second goal because he believes it is critical that the boss talk to the workforce and alert it to USARAK's efforts to make the workforce as competitive as possible.

MR. BRYANT noted that the third goal is to plan a smooth transition to the performance work statement, and the fourth goal is to pursue every avenue possible to take care of the people in the Directorates of Public Works and Logistics.

Slide number 24 contains study time lines for the years 1998 through 2001.

Slides 25 and 26 contain examples of before and after performance work statements for the service of lawn mowing.

Slide number 27 shows the source selection evaluation structure. It contains a formalized process for selecting the best contractor's bid to compete with the in-house workforce. It uses a source selection advisory council composed of senior staff members and a source selection evaluation board made up of 5 or 6

people. Technical experts also participate.

Slide number 28 defines privatization and lists the Army's privatization goals and its on-going studies. The on-going studies focus on steam, heat, electric, gas, and water and sewer facilities, as well as housing.

Slide number 29 is a cartoon depicting USARAK's implementation summary. USARAK may be smaller in the future but it hopes to be more streamlined and businesslike.

Slide number 30 is entitled "Conclusion" and describes USARAK's primary focus as mission performance with cost savings.

MR. BRYANT turned the presentation over to Colonel Sandberg for a perspective on actual studies conducted by USARAK.

Number 375

COLONEL SANDBERG stated that he has a number of individuals who are affected by the commercial activities studies that are underway in the Directorate of Logistics. Most of them are in jeopardy of losing their jobs. He discussed the last slides which pertain to the in-house employees.

Slides 31 through 38 are a briefing given to USARAK employees in each installation being studied. USARAK does not want its employees to read a headline in the newspaper once the studies are completed. USARAK is trying to prepare its in-house workforce to compete with any contractor and to win the ability to remain a viable government workforce. Initially, employees were trained. They were told how the study was going to take place and what would be expected of them so that they could prepare themselves and the rest of their workforce. They were then told they had to arm themselves by identifying in detail all tasks that they do, to be truthful in the information they provide, and to be tenacious about incorporating any changes into all study documents. Employees have been told that USARAK has to be brutally efficient. Because the person doing a job knows the best way to do it, employees were asked to communicate ideas about streamlining jobs and to think "out of the box." Employees understood that although USARAK will be smaller, it is confident that its employees can do the job best if the workforce can be more efficient, and that no contractor can do the job any better, especially for ten percent less.

SENATOR WARD noted that the subcommittees of the Joint Commission on Privatization are having some trouble getting through management to find out what individual employees are doing.

COLONEL SANDBERG remarked that the federal sector hired a contractor to come in and assist management to identify the tasks done by each employee. His employees were individually interviewed before any performance work statements were written. Before the interviews took place, all individual and collective tasks and functions of the subdivisions within the Directorates were flow charted.

SENATOR WARD asked if the flow-chart exposed inefficiencies in USARAK's operations.

MR. ENDSLEY replied that flow-charting is an incredibly good tool for finding inefficiencies.

CO-CHAIR MULDER asked if any duplication of services was highlighted.

MR. ENDSLEY said they found there were a number of duplicated services, primarily among the smaller services.

REPRESENTATIVE CISSNA asked how long the flow-charting process takes.

COLONEL SANDBERG replied that it depends on the complexity of what one is flow-charting. Some of the flow-charts were three inches thick. The process of creating a flow-chart takes a significant effort on the part of everyone in the organization from the lowest to highest level employee. In his directorate he has more than 20 people working full time to flow-chart at this time. More than 20 people worked full time to flow-chart the individual processes.

MR. TOENES said the process the Army goes through is based on Army Regulation 5-20, however it mirrors industrial engineering standards. It has two major components: brainstorming, the goal of which is to identify every task performed for at least one hour per year by anyone in the workforce; and second, to determine the cost of every step of each product made and service performed in a year. Flow-charting is invaluable in the process. He advised that almost every contract that has failed did so because of a poor performance work statement or because the contractor did not follow the structured industrial engineering process and simply "winged it."

REPRESENTATIVE COWDERY asked Mr. Toenes to tell committee members about the study for the replacement of light bulbs.

MR. TOENES conveyed that the original performance specification required that all lamps be lit. The contractor could choose two

alternatives: to replace each bulb as it expires, or to replace all bulbs at once, based on the life expectancy of the bulb. The most cost effective method is to replace all bulbs at once because the highest cost (up to 80 percent) of such services is labor.

Number 187

REPRESENTATIVE CISSNA referred to Slide 34 and asked if the training comes first.

COLONEL SANDBERG replied that his directorate did most of the preliminary work first.

MR. ENDSLEY added that he trained all employees on how to brainstorm and do flow-charts.

REPRESENTATIVE CISSNA asked if any materials could be shared from that process.

MR. ENDSLEY explained that USARAK hired a firm to train its workforce, but before that it held its own in-house training in which it used basic management techniques of brainstorming and flow-charting. He noted material is available at bookstores or any consulting firm could do that type of training.

MR. TOENES added that the material provided by the contractor is proprietary. Mr. Toenes said regarding the cost of the studies, some nearly 400 employee positions have been covered by performance work statements. The three year process will cost nearly \$9 million.

CO-CHAIR MULDER asked what percentage of USARAK's budget the \$9 million represents.

MR. TOENES replied the budget of the Directorate of Public Works for this year will be about \$160 million. He assumed the \$9 million would come out of three years' budgets, costing about \$3 million per year.

MR. ENDSLEY noted the Army hired contractors and paid them \$1,000 per position to perform the study. The Army has discovered that \$8,000 to \$9,000 per position is insufficient to hire a contractor to perform the study. They are estimating that \$13,000 to \$14,000 would be adequate.

Number 120

CO-CHAIR MULDER stated that basically seven percent of the budget

is dedicated toward doing the study of efficiency.

REPRESENTATIVE KEMPLER asked where the money comes from for the A-76 competition and whether other projects must compete for those funds.

COLONEL SANDBERG commented that the Army has budgeted for the position of Assistant Chief of Staff for Installation Management with funds to pay contractors to initiate the studies at the rate of \$1,000 per employee. USARAK has basically picked up the remainder of the cost.

MR. BRYANT noted that the Army Headquarters knew the studies would be difficult so it decided to centrally fund them, however it underfunded the studies. At one time they increased the amount to \$1400 per position, however now the Army audit agency believes it will cost \$8,000 to \$9,000 per position. About \$2.6 million was given to USARAK to do the project; \$1.2 was for the Directorate of Public Works study alone. The \$9 million that Mr. Toenes referred to was for the in-house workforce for training and meetings, and for materials and equipment for the core team. USARAK will pay about 75 percent of that amount.

COLONEL SANDBERG stated while training, employees were not doing their core functions within the Directorate.

MR. TOENES said that unfortunately, whether an in-house workforce cost comparison competition is the scenario, or whether USARAK would choose to go direct to contract should legislation allow that and it does not, the same process must be used to come up with a performance work statement to guarantee that the product and services are adequately provided. Therefore, the costs of the study would only be reduced slightly if the in-house workforce was not included.

REPRESENTATIVE KEMPLER asked whether the performance work statement is included in the \$9,000 per employee rate.

MR. BRYANT replied that it is not.

MR. TOENES clarified that Mr. Bryant was saying that the cost of the contractor was not built into that cost. The \$9 million amount includes the cost of building the performance work statement which entailed months of brainstorming and other industrial engineering processes by management and training the in-house workforce. The contractor's cost was not built into that amount.

REPRESENTATIVE KEMPLER asked if there are two costs, one for the

performance work statement and the second for the A-76 study process to determine whether the services could be provided by the private sector.

MR. ENDSLEY clarified that the process begins with writing a performance work statement which USARAK is doing with some outside assistance funded by the Army. USARAK then writes its government proposal for the contract. That is all part of the A-76 process. Not only is USARAK writing its proposal, private firms are simultaneously writing their proposals based on the solicitation and they compete at the end. From the starting point of writing the performance work statement to the cost comparison is all part of the A-76 study. A separate management study is done by USARAK to prepare a technical proposal, however that is just one part of the A-76 study for outsourcing.

REPRESENTATIVE KEMPLER asked if the state wanted to follow USARAK's process, whether the Legislature would be obligated to provide additional funding just as USARAK is receiving from Congress.

TAPE 99-3, SIDE A

MR. TOENES said the federal government did it in two ways. It centrally funded some of the consulting contractors, some of whom have been more successful in helping than others. Clearly 70 or 80 percent of the \$9 million is coming out of the annual operating budget of the Directorate of Public Works.

CO-CHAIR MULDER said it would seem that a long term savings could result from two things, even with the additional expense. Savings will result from outsourcing itself and they will result from the discovery of inefficiencies even in cases where services are not privatized.

COLONEL SANDBERG remarked that if USARAK determines that the production of some product or service cannot be done efficiently in-house, either because of the payroll rules involved or the levels of skills required, whether necessary or not, it can elect to contract the service as part of the in-house bid against which the other contract proposals will compete. He noted that the federal government was so sure that USARAK would realize savings, it incurred cutbacks before it began the study.

CO-CHAIR MULDER noted the incentive for the Department of Defense was based on the fact that it could capture and retain savings and use them for other projects within their own department.

CO-CHAIR MULDER asked who decided which core functions could not be

studied.

MR. BRYANT replied that is done by law and it is also spelled out in the OMB Circular. Office of Procurement policy statements are published regularly, and Army regulations are promulgated regularly. The basic determination was made by the Office of Management and Budget.

MR. TOENES added that the primary criteria used had to do with the proprietary nature of the work.

MR. BRYANT added the Defense Reform Initiative Decision Number 20 (DRID 20) pertains to inventory reform of commercial functions. It changed the way USARAK documents what is considered to be commercial in nature and what is not, therefore USARAK does have further promulgating guidance. In addition the Freedom from Acquisition Inventory Reform Act (FAIR) requires that the DRID 20 inventory be publicized in a commerce-business arena.

CO-CHAIR MULDER said that would allow someone to contest the fact that a core function could be handled by the private sector.

MR. BRYANT said that is correct.

SENATOR WARD asked Mr. Bryant to discuss the restrictions put on the group of people who make the final awards.

MR. BRYANT explained that all personnel who participate in the groups within the source selection evaluation board are exempted from the right of first refusal because they will have insider knowledge of the bids.

MR. ENDSLEY added that the folks that put together the government's technical proposal are also exempted from the right of first refusal.

COLONEL SANDBERG noted that firewalls are essentially established so that certain people are not privy to the information in the government's independent bid. That way they do not lose the right of first refusal which is key for the employees.

There being no further questions, CO-CHAIR MULDER thanked the group for sharing their presentation.

CO-CHAIR TIM KELLY noted Representatives Cowdery and Cissna, and Carol Carroll from the Department of Military and Veterans Affairs had joined the committee. He asked Chris Nelson, JASC staff director, to update committee members on interim activities.

CHRIS NELSON informed committee members that committee packets contain trip reports from the Washington, D.C. trip and the NAID Conference, among other materials. He noted an overnight trip to Ft. Greeley and Clear Air Station is planned for the quarterly meeting on October 4. The purpose of the trip is to view the proposed ground launch interceptor sites for ballistic missile defense. By the time that meeting occurs, a few significant events will have taken place in the ballistic missile defense program. The Environmental Impact Statement (EIS) for the Alaska sites has been completed and will be issued on October 1. Public hearings on the EIS are tentatively set for the first week of November in Fairbanks, Anderson, Delta, and Anchorage. Second, the first test of the exo-atmospheric kill vehicle, the "bullet that will hit the bullet", is scheduled for the first week in October. Also, while at Fort Greeley, the JASC will be briefed on the Northern Warfare Training Center and it will visit the Cold Regions Test Center.

MR. NELSON informed committee members that the Federal Aviation Administration is hosting a conference on the specific issues of privatization and joint use of military airfields on October 17-19. Also, the conference on ballistic missile defense with the Japanese is scheduled for November 8-9 in Honolulu, Hawaii. Mead Treadwell from the Institute of the North is coordinating that conference. A third conference of interest will be held in Tempe, Arizona on January 27-28, 2000. It is being put on by NAID and the subject is making military bases cost competitive.

MR. NELSON discussed background reading material he included in committee member packets. The National Intelligence Council's unclassified version of the CIA report on foreign missile developments outlines the magnitude of the threat. An excerpt of the Deutsch report is also included.

MR. NELSON noted that he and Senator Pearce learned that nations like China and North Korea are financing their weapons programs by raising capital in the Western stock and bond markets through companies directly owned by those countries. Federal legislation is being proposed that will require disclosure so that potential shareholders will be aware of what they are buying when stock or bond offerings are put on the Western stock market. Also, an article in Investors Daily pointed out that the largest public employee retirement system, the California system, has direct investments in several of the companies that build Chinese missiles.

MR. NELSON informed committee members that copies of an alternative

proposal to the national ballistic missile defense system, the AEGIS cruiser system, is contained in committee members' packets. The JASC is not opposing that system as it is a good supplement, however it is not an adequate replacement for a dedicated ground launch system.

Regarding the Base Realignment and Closure (BRAC) issue, MR. NELSON pointed out that he and Senator Pearce were told during their meeting with Pentagon officials that BRAC is off the table until at least the year 2003. The good news is that Alaska will have some time to assist its military bases in becoming more cost competitive, however the bad news is that the two items up for consolidation review in 2003 are depots and labs. Alaska has no depots but the Cold Region Test Center is a lab and will be a BRAC target.

MR. NELSON noted that the Department of Defense is looking at privatizing all utilities on Alaska bases by the year 2003. Both Elmendorf Air Force Base and Ft. Richardson officials are engaged in ongoing discussions with the Municipality of Anchorage. Some systemic problems have been discovered. The military, like other public agencies, has a deferred maintenance problem; the existing delivery systems are not in good shape. JASC wants to assist the Department of Defense in its privatization efforts, however it must be careful not to take on a white elephant.

MR. NELSON discussed proposed legislation. Staff is working with DEC on a solution to the statutory ban on the use of smoke in Alaska. DEC would allow the Army to use smoke on a permit basis. If DEC does not feel it can implement a permit process in compliance with existing statute, it will provide suggestions for legislation before the next legislative session to modify the existing statute.

SENATOR PEARCE asked if the dates for the public hearings on the EIS have been set. MR. NELSON said they have not, but the target date is the first week of November.

SENATOR PEARCE asked why the release of the EIS was delayed until October 1. MR. NELSON replied that he is unaware of any problems that may exist. He added that the Pentagon was originally looking at four Alaska sites for the ground launch interceptor system, but it has narrowed the field to two sites and is no longer considering Eielson or the Yukon maneuver area at Fort Wainwright.

JAKE LESTENKOFF asked Mr. Nelson if he has a copy of a report by the Pentagon that was sent to Congress in August entitled On the Utility of Sea Based Assets to National Missile Defense. MR.

NELSON answered that committee packets contain a policy paper by Frank Gaffney (ph) of the Institute of Strategic Studies. He offered to send a copy of the Pentagon's report to Mr. Lestenkoff.

SENATOR WILKEN asked about the agenda for the quarterly meeting.

MR. NELSON informed committee members they will leave Anchorage at about 7:30 a.m. and fly on National Guard aircraft to Allen Army Airfield where committee members will overnight. The following day the committee will fly to Clear. He noted that portions of the trip are available to other legislators and staff as the aircraft can accommodate them.

CO-CHAIR KELLY asked Mr. Nelson to prepare a memo to legislators to that effect.

SENATOR WILKEN offered to coordinate travel for Fairbanks participants who plan to drive.

CO-CHAIR MULDER suggested meeting with the City Council. MR. NELSON said that could be added to the agenda.

CO-CHAIR TIM KELLY asked committee members to submit the names of nominees for the Citizens Advisory Board to Mr. Nelson. He noted Mr. Nelson is preparing a mission statement and meeting schedule for the Board and that a meeting is tentatively planned in December.

There being no further business to come before the committee, CO-CHAIR KELLY adjourned the meeting at 12:40 p.m.

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14 December 1999

**Memo to Senator Tim Kelly and Representative Eldon Mulder
Co-Chairman, Alaska State Legislature Joint Armed Services Committee**

**Subject: Association of the United States Army Symposium on Space and Missile Defense
Trip Report**

1. At the request of the Joint Armed Services Committee I attended subject event in El Paso, Texas 1-3 December 1999. The symposium was sponsored by the Association of the United States Army (AUSA) with the direct support of US Army Space and Missile Defense Command (SMDCC) and the US Army Air Defense Artillery Center at Fort Bliss, Texas. The agenda covered current status and future plans for both National Missile Defense (NMD) and Theater Missile Defense (TMD) programs. This report will focus primarily on NMD since that is our Committee's focus and of greatest interest to Alaska.

2. References Attached or Cited:

- a. Symposium Agenda.**
- b. US Army Space and Missile Defense Command Strategic Plan.**
- c. AUSA News Desk feature "AUSA Symposium Focuses on Space and Missile Defense"**
- d. AUSA News Desk feature "Hoepfer: Information Comes From Space"**
- e. AUSA News Desk feature "A National Vision for Missile Defense"**
- f. US Army Air and Missile Defense Information on TMD, NMD, Patriot, JTAGS, MEADS, THAAD, Arrow and NMD Ground Based Elements.**
- g. AUSA Background Brief "National Missile Defense-Your Army Protecting the Homeland".**
- h. AUSA Background Brief "Army Theater Missile Defense-Challenges for 2010 and Beyond".**
- i. AUSA Background Brief "The Army's Interest in Space Control".**
- j. AUSA Army Magazine, December 1999 which contains several articles on missile defense.**

k. Full proceedings of the symposium may be found on the website of the SMDC at <http://www.smdc.army.mil/pubaff/exhibits.html>.

3. Key Personnel Contacted:

- a. General Gordon Sullivan, Retired 32d Chief of Staff of the Army and current President of AUSA. He is a strong supporter of NMD and the Army National Guard.
- b. Lieutenant General Ted Stroup, Vice President, Education, AUSA. LTG Stroup is also on the Advisory Council to the Joint Ballistic Missile Defense Office. He was instrumental in forcing the National Guard Bureau into action on preparing for the manning and operation of the ground based launcher component of the NMD system. That component, if based in Alaska, will be manned by the Alaska Army National Guard. LTG Stroup is a strong advocate and voice for the National Guard.
- c. Lieutenant General Tom Rhame, Vice President, Membership and Meetings, AUSA. LTG Rhame was kind enough to waive my conference fee saving the State of Alaska \$300.
- d. Mr. Josh Edwards, Director, Business Development, The Boeing Company. Boeing is the system integrator for the NMD system. We discussed use of the Kodiak Missile Launch Facility as part of the testing process for NMD systems. He said that Boeing is interested in doing just that.

4. Other Alaskans Present:

- a. MG Mark Hamilton, President, U of A.
- b. BG Steve Korenek and COL Scott Marcy, Alaska Army National Guard.
- c. Greg Thom of Congressman Don Young's Staff.
- d. Mr Dave Lewis, Operations Manager, Alaska Fiber Star.

5. Foreign Countries Represented: Canada, France, Germany, Great Britain, Israel and The Netherlands.

6. Symposium Highlights:

- a. LTG John Costello, CG, SMDC opened by citing the 1999 6 for 6 success rate for missile defense (2 Patriot, 2 THAAD, 1 Arrow and 1 NMD Ground Based Missile intercept). He also cited the passage of the NMD Act of 1999 which calls for the deployment of an NMD system as soon as technically feasible. He also discussed the SMDC Strategic Plan (see reference b) and his goals for 2000. As a sidelight, one of his goals is to demonstrate, through testing, the feasibility of destroying ground based rockets such as the Russian Katyusha, with ground based lasers. See

also reference c for additional information. He then introduced keynote speaker the Honorable Paul J. Hoeper, Assistant Secretary of the Army for Acquisition, Logistics and Technology.

b. Mr. Hoeper discussed the requirement for battle space awareness to insure information dominance and an overmatch capability. Synergism is essential between sensor and shooter. Citing the inadequacy of funds to pursue all aspects, he stressed the importance of pursuing the proper objectives. See also reference c and d for further information.

c. Representative John N. Hostettler (R-Indiana and a member of the House Armed Services Committee) next addressed the group expressing strong support of NMD. He quoted from the 1999 National Intelligence Estimate and stated that the threat to the US is real (from Russia, China, Korea, Iran and possibly Iraq). TMD and NMD is essential if we are to protect our forces in the field and our homeland. According to polling data 86% of US registered voters approve of development and deployment of NMD. He further pointed out strong congressional support for the National Missile Defense Act of 1999 and the fact that both Defense Secretary Cohen and Joint Chiefs Chairman General Shelton also support NMD. Rep Hostettler is a strong proponent of a multi-layered TMD system. See reference e for the full text of Congressman Hostettler's speech.

d. Major General Willie B. Nance, Program Manager, National Missile Defense Joint Program Office discussed the key factors upon which the decision to deploy the NMD system will be made. These include the state of system technology, its operational effectiveness, the threat, system cost and arms control objectives. He further described a desired system that would cover all of the US, have a human in control, and be capable of automated operation. The system is currently on track with the next two tests set for January and April 2000 with a decision due in June 2000.

e. Brigadier General Stephen J. Farrell, Director of Plans, United States Space Command Discussed the national strategy for defeating the ballistic missile threat. Basically this boils down to PREVENT by use of treaties and agreements; to DETER by maintaining a strong US military force; and to DEFEND with NMD if all else fails.

f. Lieutenant General George E. C. Macdonald, Deputy Commander-in-Chief, North American Aerospace Command who is a member of the Canadian Forces presented the Canadian Perspective on NMD. He stated that no talks had been held at the government level the US and Canada concerning NMD and that therefore Canada had not developed a position concerning NMD and that they may or may not participate in NMD development, funding, etc. Basically Canada:

- (1) Does not commonly understand the concept of NMD,
- (2) Questions whether there is any ballistic missile threat to Canada,
- (3) Is more concerned with none ballistic missile delivered weapons of mass destruction (terrorist threat),

(4) Opposes abrogation of the current Anti-Ballistic Missile Treaty, and

(5) Opposes weapons in space.

g. Senator Kay Bailey Hutchison (R-Texas), who was the mid conference dinner speaker and guest of honor gave strong support to the US military and NMD. Other than that there were no significant revelations in her speech.

h. The second day of the conference dealt primarily with TMD. It appears that there will be a continued effort to merge TMD and NMD with the goal of developing a multi layered system relying on an integration of all sensor and shooter systems to allow for detect-shoot-look-and shoot again if necessary.

7. Conclusions and Implications for Alaska: There is no question where the NMD program is headed in the future provided the threat continues to exist. The ultimate goal is to have spaced based sensors and space based laser systems capable of sensing and destroying threat missiles as close to threat home territory as possible, backed up by a robust ground based interceptor system. Implications for Alaska are :

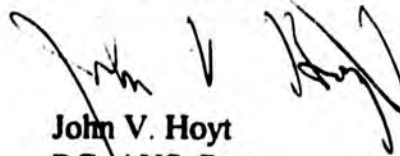
a. The future is bright for Alaska as far as NMD are concerned because of our strategic location in the world. Not only are we positioned for basing of ground interceptor missiles but we are well positioned for sensor systems.

b. The Kodiak Missile Launch facilities should see increased utilization as testing programs are accelerated.

c. University of Alaska should benefit because of its very powerfull computer, its Poker Flats Range, and its ability to provide the technical training necessary to man and operate NMD systems.

d. The Alaska Air and Army National Guard will surely benefit (and thus all of Alaska) since the Army Guard will man the ground based interceptor systems and the Air Guard will become increasingly more involved in manning sensor systems such as those at Clear Air Force Station as well as more involvement in NORAD command and control systems.

Respectfully submitted,


**John V. Hoyt
BG, AUS, Ret
Public Member**

10 enclosures: As listed

**TRIP REPORT
AAAE/FAA/DOD
MILITARY/CIVILIAN AIRPORT JOINT USE
ISSUES CONFERENCE**

**Jacksonville, Florida
October 17-19, 1999**

I attended the subject conference as a representative of the Alaska Legislature Joint Armed Services Committee (JASC). Other Alaskans at the conference were Mr. Richard Anderson, Base Transition Coordinator, Fort Greely; Mr. Peter Hallgren, Manager, Department of Economic Development, City of Delta Junction; and Teresa Fredrickson, Department of Economic Development, City of Delta Junction.

The focus of the conference was to offer assistance and information to military installations and/or communities faced with base closure or joint use airfield issues. The speakers were from the FAA, Department of Defense, an Aviation Consulting firm and installations that have been through a BRAC/Joint-Use conversation.

Since 1988 over 47 military airfields have been identified for closure or transition to civil airports. It is anticipated that 30 to 32 of these airports will be converted to civilian airports. Without this interest in reusing the airports, the property will be disposed of for non-airport use.

Military airfields generally have long runways and associated facilities, which make them ideal locations for civil airports. Many of these airports make ideal locations for industrial airparks or for supplementing existing airports by accepting overflow general aviation. This can result in business development coming to an area and in creating jobs.

AIRPORT IMPROVEMENT PROGRAM (AIP)

The opening session was a briefing on the Airport Improvement Program (AIP) given by a representative of the Military Airport Program Branch of the FAA. The 1999 authorization totaled 2.050 billion, with Alaska receiving a total of \$10,672,557. The Congress had not yet passed the 2000 allocation. AIP funding is primarily used for the improvement of existing infrastructure

and construction of new airports. Additionally there is discretionary money in this program for the study and mitigation of "Noise."

There was considerable discussion concerning Passenger Facility Charges (PFC). The reference for PFC's is 49 CFR, Part 158. These charges, of approximately \$3.00 per passenger, may be collected by an airport, when authorized by the FAA and are attached to tickets of enplaned passengers. The revenue generated by PFC's are available to the airport for use to finance the allowable costs of approved projects. PFC's are a viable source of revenue for all airports in Alaska, that hold a certificate issued in accordance with 49 CFR, Part 139.

MILITARY AIRPORT PROGRAM (MAP)

The FAA also provided a briefing on the Military Airport Program (MAP). This program was established in 49 USC 47118, and places special emphasis on the conversion of current joint-use or former military airports for the purpose of expanding the national air transportation system. This program uses 4% of the AIP discretionary funds to provide funding to qualified military airports for capital projects. The airports must be on the National Plan of Integrated Airport Systems (NPIAS), be designated for closure or joint-use, be geared for civilian use and the improvements made with MAP funds must be for civilian utilization. There are 12 airports in the MAP program. The application process is demanding and lengthy. Once an airport is accepted to the program, they are eligible for five years of funding. After the fifth anniversary, the airport must leave the program and another is added. Allen AAF is a good candidate to apply for MAP funding.

JOINT-USE AIRFIELDS

There are three Army airfields (AFF) in Alaska that are potential joint use facilities: Allen AAF at Fort Greely; Bryant AAF at Fort Richardson and Wainwright AAF at Fort Wainwright. In accordance with the Airport and Airways Improvement Act of 1982, the Department of Defense (DOD) shall make domestic military airports and airport facilities available for civil use to the maximum extent feasible. The DOD will consider joint use when it does not compromise military response security, readiness or safety.

Joint use of military airfields will be considered when a formal proposal is submitted by a local government agency eligible to sponsor a public airport. If the military determines joint-use is compatible with the mission, an environmental impact analysis process begins at the proponent's expense. If the Record of Decision is positive a joint-use agreement can be negotiated and executed. Agreements are tailored to each situation and are in effect for a minimum of twenty years.

Joint-use of Allen AAF at Fort Greely, is necessary for the economic recovery of Delta Junction, and could greatly reduce the maintenance costs to the Army. Joint use of Bryant AAF at Fort Richardson, and Wainwright AAF at Fort Wainwright would be a positive move in defending those installations against further BRAC action.

CONVEYANCES

The FAA made a presentation on Property Conveyances. The statutory authority for disposition of federal surplus property to non-Federal agencies for public airport purposes is provided for under 49 U.S.C. 47151-47153, and allows the Federal Government to convey surplus real or personal property without monetary compensation to a "State, political subdivision, municipality, or tax-supported institution" to establish a public airport.

SUMMARY

The pertinent issue for Alaska, is whether to pursue joint-use airfields. At this point, the decision on whether or not to move toward joint-use rests with the civilian communities. If there is interest, a formal request should go forward to the military. The U.S. Army Alaska (USARAK) position with regard to joint-use is not known. The JASC could be very helpful to both parties if the decision is made to move toward joint-use.

**OSD/SERVICE COMMUNITY CONFERENCE
MARCH 12-15, 2000 BOSTON, MA**

The OSD/Service Community Conference 2000 will focus on economic development practices, techniques, and tools as they relate to base closures and comparable small and large-scale development opportunities in the private marketplace. As in the past, the conference will also serve as a vehicle for information dissemination on issues such as property disposal, business development, and job generation. There will be ample opportunity for community representatives to discuss development trends and tactics with knowledgeable public officials and private entrepreneurs. Additionally, time and space will be available for communities to discuss specific issues with government and military representatives.

Event: OSD/Service Community Conference 2000

Dates: March 12-15, 2000 (Sunday - Wednesday)

Location: The Boston Park Plaza Hotel & Towers
64 Arlington Street
Boston, MA 02116-3912
Telephone: (617) 426-2000 Toll Free: 1-800-225-2008
www.bostonparkplaza.com

Conference Room Rate: \$105 plus taxes. The gov't room rate in Boston is expected to be \$192 plus taxes after 1/1/2000. To ensure securing the \$105 rate, make your room reservations early.

PROPOSED CONFERENCE OUTLINE

Sunday, March 12 (Arrival Day)

Afternoon - Tours in/around Boston area

Evening - Icebreaker Reception

Sidebar rooms available for private meetings throughout the afternoon

Monday, March 13 (OSD Day)

All Day - Plenary Session w/ Keynote Speaker and Breakout Sessions (3)

Breakfast (continental) - Luncheon w/ Speaker - Mid-Morning & Afternoon Breaks

Evening - Reception (*A Taste of Boston*)

Sidebar rooms available for private meetings throughout the day

Tuesday, March 14 (Military Services Day)

All Day - Community and Individual Service Meetings,
(All conference attendees invited to participate)

Breakfast (continental) - Luncheon w/ Speaker - Mid-Morning & Afternoon Breaks

Lunch-On-Your-Own (NAID may host lunch event for its community membership)

Sidebar rooms available for private meetings throughout the day

Community Participation Concludes

Wednesday, March 15

Morning - Army Intra-Service Meetings

Conference Concludes

ALASKA STATE LEGISLATURE

Sen. Tim Kelly, Co-Chair
Sen. Drue Pearce
Sen. Gary Wilken
Sen. Pete Kelly
Sen. Al Adams
Sen. Loren Leman, Alternate



Rep. Eldon Mulder, Co-Chair
Rep. Lisa Murkowski
Rep. Gene Theriault
Rep. John Harris
Rep. Reggie Joule
Rep. Bill Hudson, Alternate

Public Members: Jake Lestenkof • John Hoyt • George Vakalis • Dean Owen • Alan Walker • Charles Wallace

JOINT ARMED SERVICES COMMITTEE

AGENDA

Quarterly Meeting
Senate Finance Committee Room
State Capitol
Juneau, Alaska

Monday, January 31, 2000
Noon

1. Call to Order Senator T. Kelly, Representative Mulder
 - a. Introduction of Members and Guests
 - b. Approval of Minutes
2. Activities Report
 - a. Federal Aviation Administration Conference
on Military Airport Joint Use Mr. Owen
 - b. Institute of the North Conference
on Missile Defense in the Pacific Mr. Treadwell
 - c. Association of the United States Army
Conference on Space and Missile Defense Mr. Hoyt
 - d. National Association of Installation Developers
Conference on Military Base Privatization Mr. Vakalis
3. Military Issues Update staff

4. New Business

5. Special Presentations:

a. Coast Guard Update

RADM Barrett

b. Adak Reuse Update

**Mr. Gromoff,
Mr. Gates**

6. Adjourn

Senator Tim Kelley
Representative Eldon Mulder
Co-Chairs
Joint Armed Services Committee
State Capital
Juneau, Alaska 99801-1182



Re: Preparation for Possible 2001 Base Closure Actions

Dear Chairman:

The Anchorage Chamber of Commerce, through its Military Affairs Committee, has been working on several issues of mutual benefit to the residents of Anchorage and our military neighbors.

One of these issues is the effects of a possible 2001 base closings affecting one or more of our Alaskan military bases.

I believe that the additional closure of any of our Alaskan bases would have a significant impact on Alaska as a whole, let alone the adjacent communities.

In exploring the various strategic options available to protect and enhance the survivability of our bases, it has become quite obvious that we need a statewide strategy, but before we can develop this strategy, we need to accurately determine the vulnerabilities of our bases. Once determined, an action plan can be developed. The best way to assess these vulnerabilities is to hire a firm familiar with the BRAC process and that has extensive experience in making assessments and developing strategies. By taking this action, not only can the vulnerabilities be determined, but recommendations can be made as to what possible action might be taken to reduce their vulnerabilities. The state could then develop an action plan similar to, but more detailed/substantive than the "Texas" plan. Our committee has studied the Texas plan and is very confident that our state can come up with a more appropriate plan.

Because the bases are located around the state, it is requested that your committee take the lead and hire/oversee the outside consultants. Time is of the essence. Many of these firms may already be under contract with potential BRAC states.

The Anchorage Chamber of Commerce stands ready to assist you in your efforts. If you have any questions please do not hesitate to call me at 907-243-2485, or the Chamber president, April Jensen at 272-2401. This is important to all of us.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. Samuels", with a stylized flourish at the end.

Ralph Samuels
Chair, Anchorage Chamber of Commerce

Cc: Representative Lisa Murkowski, Chair of House Special Committee on Military & Veterans Affairs

ALASKA STATE LEGISLATURE

Sen. Tim Kelly, Co-Chair
Sen. Drue Pearce
Sen. Gary Wilken
Sen. Pete Kelly
Sen. Al Adams
Sen. Loren Leman, Alternate



Rep. Eldon Mulder, Co-Chair
Rep. Lisa Murkowski
Rep. Gene Thernault
Rep. John Harris
Rep. Reggie Joule
Rep. Bill Hudson, Alternate

Public Members: Jake Lestenkof • John Hoyt • George Vakalis • Dean Owen • Alan Walker • Charles Wallace

JOINT ARMED SERVICES COMMITTEE

JOINT ARMED SERVICES COMMITTEE

ACTIVITIES REPORT JULY 1, 1999 – JANUARY 10, 2000

OVERVIEW

In its first six months, the Alaska Legislature's Joint Armed Services Committee has held meetings in Anchorage, Juneau, and Delta, hosted tours of four military installations for legislators and staff, and sent representatives to four national conferences dealing with major defense issues. Committee Members met with the Commanding Generals of United States Army Pacific (USARPAC), Alaska Command (ALCOM), and United States Army Alaska (USARAK) as well as key officials in the U.S. State Department and the Ballistic Missile Defense Organization (BMDO). The Committee focused its efforts on three major areas: Base Realignment and Closure (BRAC), National Missile Defense (NMD), and the Defense Reform Initiative's (DRI) directive to transfer military base utility systems and other services to civilian entities. Additionally, Committee Members and staff began to work with the USARAK staff to address training and civilian encroachment problems on Army ranges.

ORGANIZATION

The Joint Armed Services Committee (JASC) was established as a permanent interim committee of the Alaska State Legislature on July 1, 1999, under authority of Chapter 6, SLA 1999. That law directed that its membership be composed of five members of the State Senate appointed by the Senate President, five members of the State House of Representatives appointed by the Speaker of the House, and six public members appointed jointly by the President and Speaker from Alaskans recommended by:

- The Alaska chapters of the major military service organizations: the Association of the United States Army, the Air Force Association, the Navy League of the United States, and the Marine Corps Association.
- United States Coast Guard representatives.
- The Mayor of the Municipality of Anchorage.
- The Mayor of the Fairbanks North Star Borough.
- The Adjutant General.
- The Alaska Federation of Natives and the Alaska Municipal League.

House Members appointed to the JASC are Representative Eldon Mulder (R-Anchorage), Representative Lisa Murkowski (R-Anchorage),

Representative Gene Therriault (R-Fairbanks), Representative John Harris (R-Valdez), and Representative Reggie Joule (D-Kotzebue). Representative Bill Hudson (R-Juneau) was appointed as the House Alternate Member.

Senate Members appointed to the JASC are Senate President Drue Pearce (R-Anchorage), Senator Tim Kelly (R-Anchorage), Senator Pete Kelly (R-Fairbanks), Senator Gary Wilken (R-Fairbanks) and Senator Al Adams (D-Kotzebue). Senator Loren Leman (R-Anchorage) was appointed as the Senate Alternate Member.

Public Members appointed to the JASC are Charles "Chick" Wallace upon the recommendation of the military associations; Alan Walker (Captain, Retired, U.S. Coast Guard) upon the recommendation of Coast Guard representatives; George Vakalis (Colonel, Retired, U.S. Army) upon the recommendation of the Mayor of Anchorage; Dean Owen (Colonel, Retired, U.S. Army) upon the recommendation of the Mayor of Fairbanks; John V. Hoyt (Brigadier General, Retired, Alaska Army National Guard) upon the recommendation of The Adjutant General; and Jake Lestenkof (Major General, Retired, Alaska Army National Guard) upon the recommendation of the Alaska Federation of Natives and the Alaska Municipal League.

MEETINGS AND BASE TOURS

The JASC held its Organizational Meeting at the National Guard Readiness Center on Fort Richardson in Anchorage on July 19, 1999. The Committee elected Senator Tim Kelly and Representative Mulder to serve as its Co-Chairs and established Subcommittees to focus on the specific issues of BRAC, NMD, DRI-Privatization, and Legislation.

BRAC Subcommittee members are Representative Therriault, Senator Pete Kelly, Senator Tim Kelly, and Mr. Vakalis.

NMD Subcommittee members are Senator Pearce, Representative Harris, Mr. Lestenkof, and Mr. Wallace.

DRI-Privatization Subcommittee members are Representative Murkowski, Senator Adams, Mr. Hoyt, Mr. Owen, and Mr. Vakalis.

Legislation Subcommittee members are Senator Wilken, Representative Joule, Representative Mulder, and Mr. Walker.

In other actions, the Committee appointed Chris Nelson (Lieutenant Colonel, Retired, U.S. Army Reserve) to serve as its Staff Director, and decided to join the National Association of Installation Developers (NAID), a nation organization which addresses base closure, reuse, and privatization issues. The Committee determined to meet at least once each Quarter and combine its meeting with a tour and briefings at Alaska's military installations.

After concluding its business meeting, the JASC spent the rest of the day receiving briefings and touring National Guard and USARAK facilities on Fort Richardson. These activities included

- An overview briefing on the Department of Military and Veterans Affairs by Brigadier General Phillip E. Oates, The Adjutant General.
-
- An Army National Guard briefing by Brigadier General Steve Korenek.
-
- An Air National Guard briefing by Colonel George Canelos.
- A tour of the National Guard Readiness Center activities including the Rescue Coordination Center (RCC), the State Emergency Coordination Center (SECC), and the Alaska State Troopers (AST).
- A tour and briefing at the Counter Drug Facility.
- A tour and briefing at the Alaska Youth Corps.
- An office call and briefing by Major General Dean Cash, Commanding General, USARAK, at USARAK Headquarters.
- An aerial tour of the Fort Richardson range areas on Army National Guard UH-60 Blackhawk helicopters.

On the following day, the JASC continued its tour of activities on the Fort Richardson-Elmendorf Air Force Base Military Reservation. These included:

- A tour of the Fort Richardson logistics complex including briefings at the Maintenance Facility, the Petroleum Oil and Lubricants (POL) Yard, and warehouses.
- An arctic equipment layout and demonstrations by soldiers from C Battery, 4/11th Field Artillery.
- A tour of the Joint Mobility Center (JMC) at Elmendorf AFB with briefings on the deployment process, cargo deployment functions, and parachute rigging demonstration.
- A windshield tour of the Elmendorf flight line including the F-15 Alert Facility, new F-15E aircraft shelters, new munitions facilities, and POL storage and distribution facilities.
- Lunch with top Air Force enlisted performers at the Iditarod Dining Facility.
- ALCOM Mission Briefing and Military Construction (MILCON) Briefing.
- Personal visit and issues discussion with Lieutenant General Tom Case, Commanding General, ALCOM.

The JASC held its second meeting on September 23, 1999 in Juneau during the Legislative Special Session on Subsistence. This meeting was centered on presentations on Coast Guard activities and USARAK's program of competitive sourcing and privatization.

Co-Chairs Tim Kelly and Mulder opened the meeting by introducing Rear Admiral Thomas Barrett, Commander of Coast Guard District 17, who gave a short overview of Coast Guard operations in Alaska and invited Committee members to tour his headquarters and receive a comprehensive briefing on his command's activities. House Members were subsequently called into session and prevented from accepting this invitation but the Committee's Senate Members and staff met were able to meet with RADM Barrett and his staff after the meeting adjourned for a thorough discussion of Coast Guard activities. The Members invited RADM Barrett to brief the full Committee in detail at its Quarterly Meeting during the regular Legislative Session.

RADM Barrett was followed by Colonel Michael L. Sandberg, Director of Logistics for USARAK and Mr. Mark S. Bryant, Competitive Sourcing Program Manager, who gave a detailed presentation on the Federal Government's out sourcing and privatization activities conducted under direction of Office of Management and Budget (OMB) Circular A-76. JASC Members were joined by Members of the Legislature's Commission on Privatization and Delivery of Government Services as well as other legislators for a thorough discussion of the Army's privatization initiatives in Alaska.

The JASC combined its regular quarterly meeting in October with base tours of the two proposed Ground Based Interceptors sites for the NMB system: Fort Greely in Delta and Clear Air Force Station in Anderson. The Committee additionally focused on the transition programs under way at Fort Greely which is being closed through a realignment action by the 1995 BRAC Commission. The Air National Guard and Army National Guard provided air transportation for the JASC members, other legislators, and staff to Fort Greely and Clear.

The JASC party flew from Kulis Air National Guard Base in Anchorage to Fort Greely on October 4. Escorted by LTC Robert Michaud, Post Commander, Mr. Richard Anderson, Office of the Secretary of Defense (OSD) BRAC Coordinator, Mrs. Joyce Duff, Fort Greely BRAC Coordinator, and Mr. Loran Baxter, Army Corps of Engineers NMD Project Coordinator, the party spent the morning touring Fort Greely. Activities included:

- A tour of the hanger and air operations center at Allen Army Airfield.
- A bus tour of the Fort Greely cantonment area which outlined the "prison footprint" bordering the section of the post identified for civilian reuse as a private prison.

A tour of one of the barracks intended for conversion to house prisoners.

A tour of the family housing complex and inspection of housing facilities available for reuse.

A tour of the range area identified as a potential GBI site. Members walked the site and were briefed on its geological features by Mr. Baxter.

A briefing on the mission and activities of the Northern Warfare Training Center by its commander, Major Stephen Murray.

Following lunch, the JASC held its regular business meeting in Fort Greely's Diamond Willow Club. Mr. Baxter gave a comprehensive briefing on the elements of the NMD system and explained its decision timetable and impact on Alaska. He noted that the formal hearing on the systems Environmental Impact Statement (EIS) had been scheduled for the first four days in November in Fairbanks, Anderson, Delta, and Anchorage. Mr. Baxter also announced that the Corps of Engineers would host an informational meeting and business opportunity fair for Alaska contractors interested in bidding on sections of the NMB construction project on November 9, 1999 at Elmendorf AFB.

He was followed by Mr. Anderson who gave an update on the Fort Greely realignment and the options being explored for civilian reuse.

Mr. Mead Treadwell, Managing Director of the Institute of the North, then made a presentation on the Institutes upcoming conference in Hawaii on ballistic missile defense in the Pacific. He noted that representatives from the Japanese government and leading Japanese think tanks would be present and invited the JASC to participate.

Staff reported on committee activities including the August trip to Washington, D.C., the NAID annual conference in Jacksonville, Florida, the Special Session meeting and Coast Guard briefing, and the upcoming Federal Aviation Administration Conference on Joint Use of Military Airfields.

Committee members directed staff to invite the Aleut Corporation to present an update on its reuse program at Adak at the next quarterly meeting which will be held in Juneau during the Legislative Session.

After the business meeting adjourned, the JASC party traveled by bus to the Bolio Lake Testing Area where they toured the Cold Regions Test Center

(CRTC) and received a briefing on its activities from its commander, LTC Robert Brewster, Jr.

The CRTC tour concluded the first day's activities and several members of the JASC party returned to Anchorage via Air National Guard aircraft to keep prior commitments for the following day.

That evening, members of the JASC and staff participated in a public Community meeting at the Delta Community Center chaired by Representative Harris. Members and staff discussed NMD and BRAC issues and answered questions from the audience. The party then returned to Fort Greely where they remained overnight.

On the morning of October 5, the JASC party flew in Army National Guard aircraft from Fort Greely to Clear Air Station where they were met by Lt Col John L. Emich, Commander, and Maj Jimmy Comfort, Operations Officer. Following a mission briefing, the party split into two groups for tours of the Clear Radar Upgrade facility, tech site, and command post. Members were able to view the proposed GBI site from the roof of the new radar facility. Following lunch, the party then returned to Kulis Air National Guard Base aboard Army National Guard aircraft.

The Joint Armed Services Committee is next scheduled to meet on January 31, 2000, in Juneau.

CONFERENCES

Committee members and staff represented the JASC at four major defense conferences during 1999. They combined their conference attendance with meetings with senior government officials and military leaders to maximize travel opportunities.

On the way to the National Association of Installation Developers (NAID) Annual Conference, JASC members and staff stopped in Washington, D.C., and met with officials of the Department of Defense, Department of State, and academic and public interest "think tanks" on the NMD and base privatization issues.

On August 5, Senator Pearce, Representative Harris, and staff met with Lee A. Feinstein, Principal Advisor on Non-Proliferation and Arms Control,

Office of the Policy Planning Staff, Department of State, and discussed the upcoming talks with the Russian Federation on the 1972 Anti-Ballistic Missile Treaty. Senator Pearce expressed the concern and anger in Alaska created by the quote attributed by the WASHINGTON TIMES to Morton Halprin, Chief of the Policy Planning Staff, that protecting "a few people living in remote parts of Alaska wasn't worth upsetting the Russians," and received Mr. Halprin's assurance that the story was erroneous.

Representative Harris gave Mr. Feinstein a copy of House Joint Resolution 8, which he authored, calling for the deployment of an Alaska based anti-missile defense system which will protect all fifty states. Mr. Vakalis joined the group that afternoon for a briefing at the Pentagon on developments in anti-ballistic missile programs by Colonel Larry Bramlett, Chief of Staff for the National Missile Defense Joint Program Office.

The following day, Representative Harris, Mr. Vakalis, and staff met in the Pentagon with Randall Yim, Deputy Under Secretary of Defense for Industrial Affairs and Installations for a thorough discussion of base privatization and BRAC issues.

The group then proceeded to Jacksonville, Florida, where they attended both the NAID Annual Conference and a special pre-conference workshop entitled "Making Bases Cost-Competitive."

On October 17-19, Mr. Owen represented the JASC at the Military/Civilian Airport Joint Use Issues Conference sponsored by the Federal Aviation Administration.

On November 8-10, Representative Mulder, Representative Murkowski, Senator Tim Kelly, Mr. Lestenkof, Mr. Hoyt, and staff represented the JASC at the Institute of the North's seminar entitled "America's Frontline States and Japan: Briefing on Ballistic Missile Defense" in Honolulu, Hawaii. The party spent the afternoon on November 9 at Headquarters, U.S. Army Pacific Command (USARPAC), Fort Shafter, for extended discussions on Alaska base issues with Lieutenant General Edward P. Smith, USARPAC Commanding General.

On December 1-3, Mr. Hoyt represented the JASC at the Association of the United States Army's Symposium on Space and Missile Defense in El Paso, Texas.

ISSUES

1. **BRAC** – This summer, Congress rejected the Clinton Administration's request to authorize another round of base closures in 2001. Base closure advocates have indicated that they will now wait for a new Administration to take office following the elections this November and then push for the appointment of a new BRAC in 2003. This delay provides advocates of Alaska's military bases with at least a two-year window of opportunity to develop strategies and programs to protect our bases. Goals for the JASC during this period can include:

- Working with our Congressional Delegation and military leaders to develop new missions for our bases and deploy new forces here. The effective integration of Army and Air Force activities within the Alaskan Command (ALCOM) provides unique opportunities for Joint Training and the stationing of power projection forces.

Pushing for needed reforms to the BRAC process. These include changing the single service base evaluation system to insure that joint operations and training factors are introduced any future analysis. Modifications to the Cost of Base Reuse Analysis (COBRA) model to include environmental cleanup costs must also be made.

Supporting efforts on Alaskan bases to reduce operational expenses and make the bases more cost competitive.

Facilitating reuse activities at Fort Greely and Adak which were realigned and closed by the 1995 BRAC Commission.

2. **NMD** – The Deployment Readiness Review (DRR) scheduled for June, 2000, will determine if a National Missile Defense system will be built and where it will be built. If those decisions are to build the system in Alaska, the only location from which all fifty states can be defended, there will be both immediate and long-term economic impacts on the state. The Draft Environmental Impact Statement on National Missile Defense Deployment issued in September, 1999, noted:

“It is anticipated that construction and operation of the GBI (Ground Based Interceptor) element at Fort Greely would provide an economic

benefit to the surrounding regions. An average of 300 construction workers would be employed over a 5-year period, and operation of the system could employ as many as 360 workers...The construction cost of the GBI and its support facilities at this location would be approximately \$626 million over a 5-year period, or an average of \$125 million per year. It is expected that the construction would result in indirect local expenditures of \$62 million per year for 5 years and would support an annual average of 620 non-contract jobs per year... The 360 personnel required to carry out the operational phase would generate at least \$9.7 million of direct income per year...approximately 108 jobs would be generated indirectly by the operational phase of the action."

Full time members of the Alaska Army National Guard would operate the NMD system.

The NMD deployment has the potential to trigger the creation of an entirely new space, science, and technology segment in our state's economy. Major aerospace companies including Boeing, Raytheon, and Lockheed-Martin will be employing Alaskans to build and maintain the system. The JASC has the opportunity to play a major role in encouraging these organizations to use and enhance our state's assets including the University of Alaska, the Alaska Aerospace Development Corporation's Kodiak Launch Facility and our currently underutilized military base infrastructure.

It must be remembered, however, that a favorable deployment decision is not automatic. The NMD system will face two critical tests between now and June and questions arising from the 1972 Anti-Ballistic Missile Treaty remain unresolved. The JASC must continue to aggressively advocate the deployment of the NMD system here.

3. **DRI-PRIVATIZATION** – A major goal of the Department of Defense (DoD) initiative to reduce the cost of operations on military bases is the transfer of base utility systems to private or local government entities. New operators face problems with these systems, however, because they are based on obsolete technologies and many have severe deferred maintenance problems. As noted earlier in the report, JASC members and staff participated in one conference on making bases more cost competitive during the last Legislative Interim. Mr. Vakalis will represent the JASC at a NAID conference on utility privatization on

January 26-29 and report on its activities at our meeting in Juneau on January 31.

4. OTHER ISSUES – Senator Tim Kelly and Representative Mulder have facilitated discussions between the Alaska Railroad and USARAK on issues impacting on the upgrade of the railroad tracks crossing Fort Richardson. Senator Leman and his staff are working with USARAK to resolve environmental concerns over smoke generation on Army ranges.

Missile test successful

The Associated Press

VANDENBERG AIR FORCE BASE, Calif. — A prototype national missile defense system passed a critical test on Saturday, intercepting and destroying an unarmed missile on a 16,000-mph collision course over the Pacific.

"It was a successful intercept," said Sheryl Irwin, a spokeswoman for the Department of Defense. "It did everything it was supposed to do, and it did it perfectly."

It was the first test of the "kill vehicle" missile's ability to destroy a target by smashing into it.

An unarmed Minuteman missile carrying a dummy warhead and a decoy balloon was launched just after 7 p.m. from this coastal base on a flight over the Pacific.

About 20 minutes later, the kill vehicle missile was launched from the Marshall Islands. The two missiles hurtled toward each other at a combined speed of about 16,000 mph.

Ten minutes later, 3,000 miles from California and about 140 miles above the ocean, they met.

"It looks like a great, big old bright flash," said Irwin, who watched from a Pentagon room crowded with anxious military observers.

"You saw it explode, and there was a loud roar — a very happy one that went up from the room. It proves that this technology is working and we can move forward with the program," she said.

The Minuteman's vapor cloud, lit in rainbow colors by the setting sun, could be seen for hundreds of miles.

The defender was the Raytheon-built Exoatmospheric Kill Vehicle, a 55-inch-long, 120-pound device carried aloft on a booster rocket.

The system is designed to destroy missiles launched by rogue states or terrorists, not a multissile barrage from a major nuclear power.

The test was the first of three before a readiness review scheduled by the Pentagon for June. To proceed with broader testing, at least two of the tests must result in an interception.

JUN-17-88 WED 7:10 DVA COMMISSIONER-TAG
**Pentagon: Alaska Best Site
 For National Missile Defense**
Would Require New ABM Treaty, And \$11 Billion

BY JOHN DONNELLY

The Pentagon has determined that interceptor rockets for an initial, limited national missile defense system would best be located in central Alaska, even though deploying them anywhere but Grand Forks, N.D., is not allowed by the 1972 ABM Treaty, according to officials and documents.

No decision on whether, let alone where, to deploy the system has been made. But the new finding, which has until now not been officially confirmed, has significant implications for defense and arms control. In 2000, the president will choose whether to deploy or continue development of a strategic defense. The current U.S. policy is that a deployment "may or may not" be treaty compliant, officials have said.

But the new determination in favor of Alaska, while it doesn't completely rule out the possibility Grand Forks would be the site for interceptors, appears to make it extremely unlikely. Consequently, and significantly, the determination makes it that much more likely that the ABM Treaty, which the Clinton administration has called the "cornerstone of strategic stability," will necessarily be renegotiated or even scrapped.

The news about Alaska and the national missile defense, or NMD, program was disclosed by the Ballistic Missile Defense Organization in a written response to a *Defense Week* query.

The statement also provided the firm official reckoning of the acquisition cost of deploying an initial 20-interceptor shield: \$9 billion if based in Grand Forks; \$11 billion in Alaska. By sharp contrast, in 1996, the Pentagon estimates for a 100-interceptor system was \$10 billion.

The much higher new estimate is the first to make use of contractor data submitted during the recent competition for the NMD prime contract. Last April, Boeing won the deal, potentially worth \$5.6 billion over the next seven years, to develop and possibly deploy the system.

Meanwhile, this publication has also learned which booster the Pentagon wants to lift the antimissile kill vehicle into space, a decision on which hundreds of millions of dollars, at a minimum, will hinge.

The winning choice reportedly comprises Alliant Techsystems' Graphite Epoxy Motor (GEM-40) as a first stage, while the second and third stages would be United Technologies' Pratt & Whitney Orbital motors. Perhaps 20, perhaps 100 "ground based interceptors,"

and nowhere in Asia, for example. But Lehnert observes consider that unlikely. Besides, critics would wonder why the U.S. was spending billions on a system pointed in just one direction.

Moreover, Lehnert said, the chances that Grand Forks could complement Alaska as a second site increase as the number and complexity of anticipated threat reentry vehicles increases. But deploying at more than one site is likewise prohibited by the treaty, so the same diplomatic issues would arise. No other sites are being discussed as candidate locations, he added.

For its part, the administration has never deviated from its strong support of the ABM Treaty. However, notwithstanding the new technical determination, many believe that the ABM Treaty prohibits deployment of any ABM system. Another important view is that sea- or space-based systems, which are explicitly

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or GEMs—meaning the booster plus the kill vehicle—would have to be built, in addition to others for testing, maintenance and spares.

The booster announcement isn't due until late next month. But knowledgeable officials from industry and the Pentagon agree that the joint staff, secretary's office and Army have agreed to accept this commercial booster option, rather than build a brand new one.

However, one official says, top Air Force officials—who believe existing Minuteman III ICBMs could do the booster job more cheaply, reliably and with less risk—are torn over whether to "go-conquer."

Doing so would be consistent with the Air Force's long-stated views. But it would set off what the source called "a stink bomb" on the E-Ring. At press time, the Air Force's decision, if it had been made, was not known.

Shooting down what may be the most likely near-term ICBM threats—a handful of relatively unsophisticated missiles, perhaps from North Korea, Iraq or Iran—can most effectively be done from Alaska. BMDO said in its statement. Alaska is the "optimum" spot to fire interceptors at such a limited, "rampart" threat, BMDO spokesman Air Force Lt. Col. Rick Lehnert said—no matter where in the world the missiles are launched from or where in the U.S. they are targeted.

A May 12 analysis by Mark Riss of the Pentagon's CAIO—Cost Analysis Improvement Group—obtained by *Defense Week*, bluntly described BMDO's position on basing and boosters as follows: "No booster meets our requirements from Grand Forks. GEM sitting in Central Alaska will satisfy near requirements for defended area."

The BMDO statement, a response to a request to confirm the CAIO document's comments, did so: "Our analysis shows an Alaskan based GEM site appears to optimize the ability of an NMD system to defend/protect all 50 states from a composite global threat of a few, simple RVs." Radars and battle management centers would be based elsewhere.

The new determination in favor of Alaska, like the new cost estimate, was made after a recent review of data submitted by contractors competing to run the program, Lehnert said.

Although no decision on siting has yet been made, the environmental impact process must start by this fall, Lehnert said. Grand Forks could conceivably be picked as a treaty-compliant single site if the threat were considered to only emanate from the Middle East,

based interceptors anyway.

By contrast, in the last several years the Army and Air Force have separately argued that they can defend all 50 states from Grand Forks for less than \$5 billion.

But last week's disclosures, on siting as well as cost, may bury those arguments, though the Air Force says for the Minuteman may survive, especially if the chosen booster experiences problems. The booster candidate is "commercial off the shelf," but the stages have never been integrated.

Possible sites in Alaska include Eielson AFB or Fort Wainwright in Fairbanks, Fort Greely in Delta Junction and Elmendorf AFB in Anchorage, Lehnert said. Incidentally, just last week the Air Force removed the last 150 Minuteman IIIs from Grand Forks AFB, but left 100 sites in caretaker status in case they're needed for strategic defense, the trade publication *Defense Daily* said.

Report favors Alaska missile site

Proposed missile sites



BOB FUGSTROM/Anchorage Daily News

System expected to create jobs, few environmental headache

By DAVID WHITNEY
Daily News Washington Bureau

WASHINGTON — The Defense Department organization planning for a national missile defense system said locating the launch site in Alaska raises few environmental concerns and would create hundreds of short- and long-term jobs.

The employment forecast is among the information contained in a newly completed draft environmental impact statement on the missile defense system.

Although the Ballistic Missile Defense Organization looked at sites in Alaska and North Dakota, the Defense Department has said that basing the system in Alaska is the only alternative if the Pentagon is to comply with federal law requiring that the system shield all 50 states from missile attacks by rogue states.

Siting the missile base in North Dakota would leave Alaska and Hawaii unprotected.

Earlier this month, the Clinton administration announced that it had

opened negotiations with Russia to amend the Anti-Ballistic Missile Treaty to permit basing the missile system in Alaska.

The changes would permit the United States to place 100 interceptor missiles in Alaska, although the administration's budget currently only funds 20 of them. They would be in underground silos and, according to the environmental statement, would never be fired unless an incoming missile threat was detected.

The draft statement is an early

step in the process for President Clinton to decide next year whether to proceed with deploying the system.

A crucial test of the missile interceptor is scheduled for this week — as early as Saturday evening, when a missile will be fired over the Pacific Ocean from Vandenberg Force Base in California. Minutes later a "kill vehicle" designed to intercept the missile will be launched from K

Please see Page B-3, DEFENSE

DEFENSE: Alaska missile site favored

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Wainwright Missile Range in the Marshall Islands.

The weekend test will be the first time the kill vehicle is tested in a missile encounter. In a briefing last month, Defense Department officials said that the success of the test will not be measured by whether the incoming missile is destroyed, but by how the kill vehicle operates in finding and maneuvering toward its speeding target.

The Defense Department is looking at three possible sites in Alaska for basing the missiles, which it calls "ground based interceptors." But according to the draft environmental statement, one of the proposed sites — the Yukon Training Area near Eielson Air Force Base in Fairbanks — does not appear suitable because of the risk to archaeological sites and the effects of permafrost.

The other two proposed sites are Clear Air Station near Anderson and Fort Greely near Delta Junction.

The environmental statement said that while the Fort Greely site, at \$626 million, would be slightly more expensive than at Clear, construction at Clear would disturb as much as 1.35 acres of wetlands.

Building the missile base at Fort Greely would employ about 300 construction workers for five years. It would result in indirect local expenditures of about \$62 million a year, which would create about 620 indirect jobs in the Delta Junction and Fairbanks areas during the construction, it said.

Once operational, the statement said, 360 people would be needed to run the Fort Greely missile base, and operations spending would create another 108 indirect jobs. The total employment would help offset the effects of the closure of Fort Greely under 1995 military realignments that eliminated more than 600 military and civilian jobs there.

According to the draft statement, the missile base is compatible with a local reuse plan for Fort Greely involving a potential prison and other industrial and agricultural operations.

"While not replacing all the jobs lost to Fort Greely as a result of the realignment, the (missile base) would be a considerable catalyst for the plan and would contribute substantially to its chances of success," the draft statement said.

Another 105 jobs could be created at Eareckson Air Station on Shemya Island at the

far western end of the Aleutian Islands where the Defense Department favors construction of an advanced radar station for early detection and tracking of incoming missiles. It would be only the second "X-band" radar system that the United States has built — and the first on U.S. soil. The only other one is at Kwajalein in the Marshall Islands.

Although many other radar systems would be used to track incoming missiles, the X-band would give radar coverage over Hawaii and nearly to the coast of Asia. The sophisticated system will be able to better discriminate between launched objects, the military said.

Data from the radar system would be used to set the flight path of missiles fired at the incoming targets. But the kill vehicle, once released from its rocket, is designed to track the target on its own, destroying it by the sheer force of slamming into it.

Public hearings will be held on the draft environmental impact statement in November in Fairbanks, Anderson, Delta Junction and Anchorage. Copies of the draft statement are available on the Internet web site of the National Missile Defense Organization, www.acq.osd.mil/bmdo.



INFORMING THE PUBLIC—Civil engineer Tony Torres, with the National Missile Defense program, middle, answers questions from local teacher Joanne White, bottom, while Dave Williams, a local construction engineer, looks over the literature Monday evening during a public hearing at the Carlson Center. "I'm here looking for more info on what's going on," White said. The hearings are being held by members of the Ballistic Missile Defense Organization to get public comment on expected environmental effects of building and operating the missile defense system.

Most speakers back missile site in Interior

By SEAN COCKENHAM
Staff Writer

Dozens of Fairbanks businesspeople, union leaders and politicians told missile defense planners Monday that the workforce and infrastructure of Interior Alaska is primed to build America's anti-ballistic missile shield.

"Let's bring in the new millennium, bring it on," said Fairbanks Mayor James Hayes at the Ballistic Missile Defense Organization's public hearing in the Carlson Center. "We're ready to build it here."

Fairbanksians also stressed the historically strong ties between the military and the Interior and emphasized the need for a national system to protect against a missile launch by a "rogue nation."

But in contrast to the BMDO's hearings in North Dakota last week, several of the speakers bashed the project as political pork and criticized the military's track record as a steward of Alaska's lands.

"If you dangle millions of dollars in front of any community, they are going to come up and say how great it is," said Seap McGuire.

The Fairbanks hearing, the first of four in Alaska this week, was designed to garner comment on the project's draft environmental study. About 130 people attended and some 40 signed up to speak.

The military is looking at basing the anti-ballistic missiles in Alaska, North Dakota, or perhaps both. President Clinton will decide next summer whether to deploy a national anti-ballistic missile system, and where.

The main Alaska sites under consideration to house the missiles are Fort Greely near Delta Junction and Clear Air Station near Anderson. Fort Wainwright and Eielson Air Force Base in the Fairbanks area are also being studied, but the missiles would conflict with those installations' existing missions, planners say.

The missile planners held

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MISSILE: Site

Continued from Page A-1

hearings in North Dakota last week and none of the speakers opposed the proposed system, said Lt. Col. Rick Lehner, BMDO spokesman. "They would like very much for it to come to North Dakota," Lehner said.

The White House and the Pentagon have said Alaska is the preferred choice, but Lehner emphasized that no decision has been reached.

Fairbanksians on Monday reminded the missile planners of the Interior's experience with major projects, from the trans-Alaska pipeline to the construction of local military bases.

Frank Williams, vice chancellor of the University of Alaska Fairbanks, said the expertise at the university would benefit the Department of Defense.

"The University of Alaska is enthusiastically supportive of the national missile defense program," he said.

The Fairbanks speakers said any of the Interior sites would be a good choice, although many noted that Delta Junction is going through a painful base downsizing.

Fairbanks Wendy's owner Rhonda Cur-

wen-Boyles offered the missile planners a unique incentive. "As the owner of Wendy's, I promise you if you bring the national missile defense to Delta, I'll meet you there with a new Wendy's restaurant," she said.

Johne Binkley, the chairman of the board of the Alaska Railroad Corp., said the railroad could be expanded to Delta Junction if the missile system is built there. The railroad already runs to Anderson, the other prime choice.

"We would look at extending the railroad, in cooperation with the Department of Defense, to Fort Greely," Binkley said.

Other speakers said the public hearing was supposed to be about the environmental impact of the system, suggesting that consideration was being overlooked amid the boosterism. "I don't see how this can not have an impact on water, soil and wildlife," said Bill Connor.

The project's draft environmental study said the environmental footprint of the system would be minimal. "Wherever the military has been in Alaska it has fouled the nest," countered Dan O'Neill.

The Anti-Ballistic Missile Treaty which the United States signed with the Soviet Union in

1972 was another sore point for opponents, who spoke of arms proliferation.

The treaty is a problem both for the implementation of any comprehensive national missile system, and specifically for basing missiles in Alaska.

Language in the treaty limits ABMs to North Dakota—which was home to America's intercontinental ballistic missiles—and would have to be amended or scrapped to permit an Alaska site. The Russians have so far refused to budge on the treaty.

Construction of the missile defense system is estimated at \$10.5 billion. It is designed to counter a limited attack from a rogue nation, such as North Korea, which analysts believe is developing the capability to strike the United States with a ballistic missile.

The missile planners will hold public hearings tonight at 7 p.m. in the Anderson School, in Delta Junction on Wednesday and in Anchorage on Thursday.

There will also be a missile defense forum tonight at UAF. The forum, which begins at 7 p.m. in the Geophysical Institute auditorium, will feature Pentagon BMDO spokesman Lehner and a retired weapons system expert who is critical of the project.



THE SECRETARY OF DEFENSE
WASHINGTON, DC 20301

Bmdu

NOV 30 1999

The Honorable Kent Conrad
United States Senate
Washington, D.C. 20510-3403

Dear Kent:

Recently, Deputy Secretary Hamre had an opportunity to discuss our National Missile Defense (NMD) program with you and other senators.

I wanted to follow up that discussion with a note to you on an important point you raised with Dr. Hamre regarding the location of elements of the NMD system. As you know, a deployment readiness review scheduled for next summer is expected to lead to a decision on deployment of an initial NMD architecture that would include an initial NMD interceptor site in Alaska. Our objective NMD system includes a second interceptor site. Because of its existing infrastructure, Grand Forks AFB is a strong candidate for a second site. The ultimate determination will depend upon developments in the threat and other elements of the objective NMD architecture.

I appreciate your continued support for our National Missile Defense Program.

With best wishes, I am

Sincerely,



U18168 / 99

Subject: North Dakota

Date: Tue, 19 Oct 1999 09:22:50 -0800

From: "Mead Treadwell" <meadwell@alaska.net>

To: "Christopher Nelson" <Christopher_Nelson@legis.state.ak.us>

CC: "Greg Thom" <Greg.Thom@mail.house.gov>, "jmoore" <jmoore@ktuu.com>

Our website, www.institutenorth.org, has transcripts of last year's conference including the speech made by North Dakota's Governor supporting a defense of all 50 states. Meanwhile, North Dakota isn't taking the Alaska site idea lying down...
Mead

(2) GRAND FORKS LAUNCHES LOBBYING MISSION, Grand Forks (ND) Herald, October 19, 1999. Plans to change the 1972 ABM treaty could have implications for North Dakota. To make sure the implications are positive, Grand Forks Mayor Pat Owens, Grand Forks Chamber of Commerce President Bob Gustafson, several people from the chamber's Council on Military Affairs, and other city officials are going to Washington on Sunday to lobby for the region. The ABM treaty between the United States and the Soviet Union established North Dakota as the single designated site in the United States for a missile defense system. Sen. Kent Conrad (D-ND) and Gov. Ed Schafer are concerned that an attempt to alter the treaty could include a shift in North Dakota's designation as a missile defense system site to Alaska. . . . Conrad said a North Dakota site could better defend the Eastern seaboard from a missile attack than a site in Alaska. In attempt to secure North Dakota's site designation, Conrad added an amendment to the Defense Department authorization bill that requires the secretary of defense to study the advantages of deploying national missile defense at two sites -- rather than just one -- to protect the against a missile attack. Congress expects to see a copy of that report March 15. That Clinton administration has said it supports the plan for a single site in Alaska, and deferred any consideration of a second site until a later date.



FACT SHEET



BMDD FACT SHEET IN 99-07

NATIONAL MISSILE DEFENSE INTEGRATED TEST PROGRAM

INTRODUCTION

Assessing emerging element technology capabilities, system technical performance, and overall system maturity is the focus of the integrated National Missile Defense test and evaluation activities. Analysis and evaluation of the data collected and derived from the initial series of integrated flight tests (IFTs) are required to assess incremental NMD maturity and capability. Demonstration of a limited capability in FY99 and FY00 will prepare the nation for a possible deployment of an NMD system in the next century.

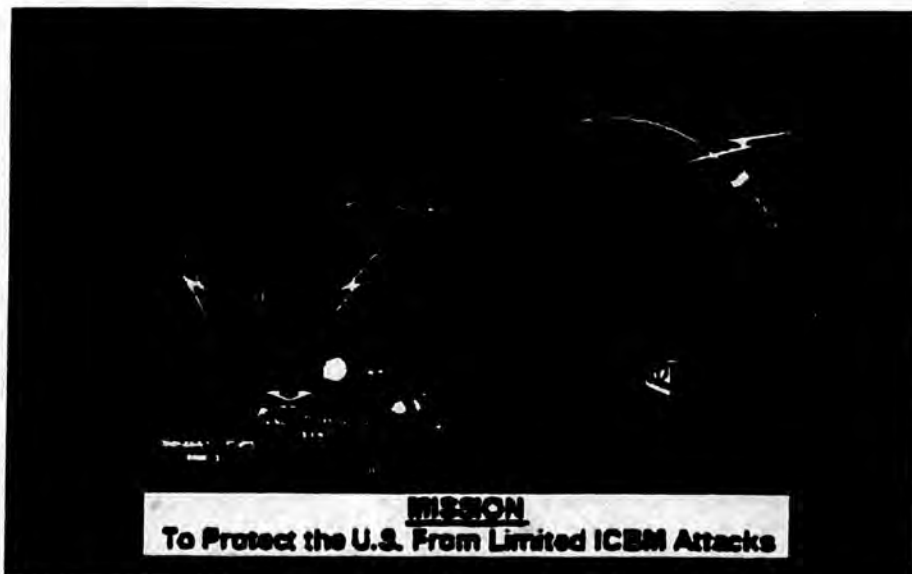
NMD ARCHITECTURE

To perform the essential ballistic missile defense mission, several basic functions must be integrated as a system: 1) long range sensor(s) to acquire, track, and identify the reentry vehicle (RV) among debris and decoy objects, provide tracking information to the Battle Management Command, Control and Communication (BMC3), and gather data to verify destruction of the RV; 2) an interceptor capable of intercepting targets beyond the earth's atmosphere, receives and processes in-flight target updates, performs onboard target selection, and provides reliable RV destruction; and 3) a BMC3 element for autonomous integration of target tracks, preparation of

engagement plans, and battle execution while supporting human-in-control and CINC decision making. The NMD elements that will perform these functions are shown in a notional architecture. The NMD system consists of four types of target tracking sensors (X-Band Radar (XBR), Upgraded Early Warning Radars (UEWR), the Space Based Infrared Satellite (SBIRS), and other forward based X-band radars, a Ground Based Interceptor (GBI), and BMC3. Except for SBIRS, all elements are being matured at a pace to support an integrated system test in FY00. The verification of NMD performance, capability, and maturity is based upon a system evaluation of the results from multiple integrated tests.

INTEGRATED TEST PROGRAM

The Integrated Test Program provides for the major test activities of the NMD Program for GBI, GBR-P, SBIRS, BMC3, UEWR and system-level integrated performance. System-level integrated testing depends on element availability, capability, and progress, and on opportunities to maximize data collection. These system-level integrated tests involve element hardware-in-the-loop (HWIL) simulations, Integrated System Test Capability (ISTC) combined system simulations, and flight test validations using simulated threat-representative targets. Near term NMD Program integration tests will use prototype hardware and software to demonstrate interface compatibility and command and control features. Flight tests will use targets launched from Vandenberg Air Force Base (VAFB), California, to Kwajalein Missile Range (KMR). The target complex will include a mock RV and decoys.



GBR - Ground Based Radar, XBR - X-Band Radar, UEWR - Upgrade Early Warning Radar, EKV - Exo Atmospheric Kill Vehicle, GBI - Ground Based Interceptor, and SBIRS - Space Based Infrared Satellite

NMD Notional Architecture

JUNE 1999

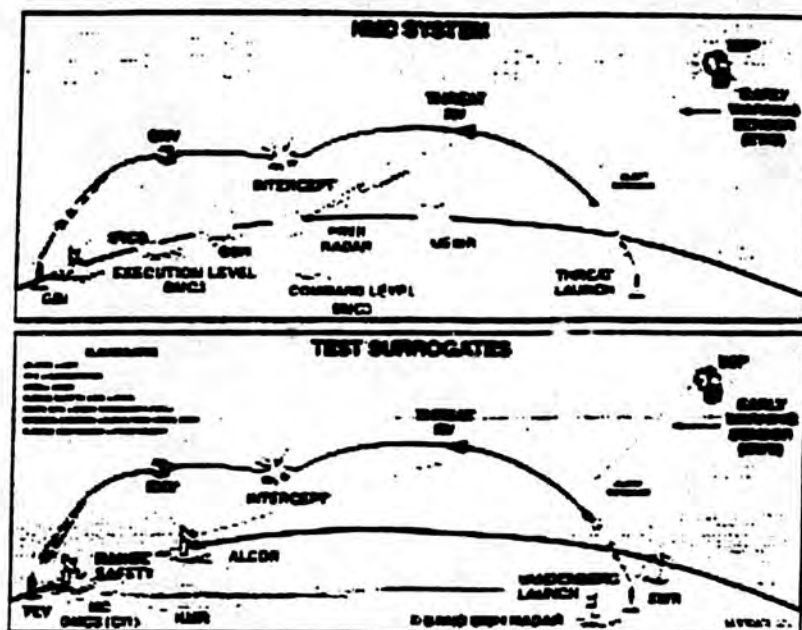
FORGING AMERICA'S SHIELD

INTEGRATED FLIGHT TEST PROGRAM

IFT 1A&2 successfully completed the sensor flight tests and have demonstrated readiness to initiate NMD EKV intercept flight testing (IFTs 3&4). IFT 1A&2 used element surrogates for the other maturing NMD system elements. The Air Force Maui Space Surveillance System (MSSS) represented the SBIRS, the KMR radars represented the X-Band Radar (XBR), the EKV Sensor payload/PLV represented the Ground Based Interceptor (GBI), and an execution level BMC3 representation (located at KMR) and a command level BMC3 representation (located at the Joint National Test Facility in Colorado) represented the BMC3 element. In addition to these NMD element surrogates, a number of Integrated Flight Test support resources were employed. These included an early warning radar and X-band dish radar (West Coast), Global Positioning System (GPS), Launch Support Services and Up Range Tracking (Western Test Range, VAFB), Mid-Range Tracking (Hawaiian Islands), Down Range Tracking and Interceptor Launch Support Services (KMR), Airborne Surveillance Testbed (AST), and the Range Interface Test Equipment (RITE) unit.

The NMD IFTs, conducted under BMDO's NMD Program, are designed, 1) to collect system-level data that addresses the system issues and key technical parameters, 2) to address the NMD Elements' Critical Issues and verify the Elements' performance, and 3) to demonstrate system effectiveness. IFT 1A&2 provided an assessment of GBI sensor technology and performance, IFT 3&4 will evaluate discrimination and intercept of RVs by kill vehicles, and IFT 5, identified as the initial integrated system test, will evaluate NMD system performance.

These flight tests serve as an assessment of incremental system maturity and with the inclusion of the system elements, as they become available, as a test structure that will ultimately evolve



**Test Surrogates Approximate NMD Elements.
Pathfinders for FY99 NMD System Test.**

into comprehensive NMD Integrated System Tests. The flight tests will not only provide the capability to test and evaluate initial system performance, but may also be used in conjunction with simulations, exercise emulations, HWIL, etc., to evaluate proposed system upgrades or improvements in the elements to incorporate technology advances. It will also provide a user training capability to address human-in-control capabilities, tactics, and procedures.

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FACT SHEET



BMDO FACT SHEET IN 99 06

NATIONAL MISSILE DEFENSE PROGRAM ARCHITECTURE

INTRODUCTION

While the end of the Cold War greatly reduced the threat of global conflict and large-scale attacks on the United States, the proliferation of weapons of mass destruction (WMD) and the means to deliver them pose a major threat to the security of the United States. Over 20 nations, some with interests inimical to the United States, possess or are developing nuclear, biological, or chemical weapons. Ballistic missiles have also proliferated widely and have been used extensively in regional conflicts. The future may bring the proliferation of longer range missiles which can be used to attack or threaten the United States. National Missile Defense (NMD) is the focus of the US response to these threats.

The current NMD program of the Department of Defense is developing and planning to deploy, if necessary, a ground-based missile defense system designed to protect the United States against limited ballistic missile threats. The NMD system is required to ensure that, with a very high probability of success, no weapons of mass destruction impact on US territory.

HOW WILL THE NMD SYSTEM WORK?

All elements of the NMD system will work together to respond to a ballistic missile directed against the United States. The U.S. Early Warning System, consisting of Defense Support Program (DSP) satellites, and its follow-on capability, the Space Based Infrared System (SBIRS) satellites, will detect the launch of enemy missiles and will subsequently track these missiles while also gathering information on them. After confirmation, this information will be passed to the Battle Management/Command, Control, and Communications (BM/C3) system while ground-based radars acquire and begin to track the missile. After defense engagement authority is granted, one or more interceptors will be launched on command to engage the threat. The BM/C3 system will continue to process radar and other system data in order to provide more information to the interceptor so it, in turn, can better discriminate between debris, false objects (penetration aids) and real warheads.

The interceptor will use its on-board sensor to acquire the threat, select the target warhead, and guide to a direct, high-speed collision using on-board computers and divert propulsion systems. During and after the engagement, the radars continue to collect data, and observe the intercept results in order to provide "kill assessment" information which evaluate the interceptor's success or failure.

COMPONENTS/ELEMENTS OF THE NMD SYSTEM

To meet the challenge of uncertainties about the threat characteristics and time scale extant in 1996, the DoD established NMD as a Major Defense Acquisition Program and Deployment Readiness Program. The program was to develop a NMD system capable of being deployed within three years after a deployment decision at a Deployment Readiness Review (DRR) in 2000. The DRR criteria are: existence of a threat and technological capability to proceed. In January 1999, the Secretary of Defense announced that the threat criteria would soon be met. Funds are now programmed to move NMD from the development phase to a deployment phase should the program be directed to do so. To reduce program risk, the NMD system is now projected to reach initial deployment in 2005 rather than 2003. As before, the decision to deploy will be made at the DRR in 2000. As part of the NMD system, the Ballistic Missile Defense Organization (BMDO) is developing, testing, and integrating five major components or elements. These five elements include: the Ground Based Interceptor (GBI); Upgraded Early Warning Radars (UEWR); Forward Deployed and/or U.S.-based X-Band Radars (XBR); and Battle Management/Command, Control, and Communications (BM/C3). The Space Based Infrared System (SBIRS) in low earth orbit is another component of the mature NMD system, likely to be available after 2010.

Ground-Based Interceptor (GBI) - The GBI and its associated components provide the "weapon" of the NMD system. Its mission is to strike high speed ballistic missile warheads in the midcourse or exo-atmospheric phase of their trajectories and destroy them by force of impact. The GBI consists of:

- The missile payload called the kill vehicle. The kill vehicle has its own sensors, propulsion, communications, guidance, and

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FORGING AMERICA'S SHIELD

computing functions which all work together to complete the intercept.

- A booster that will propel the EKV toward an approximate intercept location so that the EKV can perform terminal maneuvers to impact the incoming warhead.

- Ground command and launch equipment that is needed to launch the interceptor. This consists of the hardware and software for interface with the BM/C3 system, human-in-control interfaces (consoles), and interceptor storage sites (silos) in order to accomplish daily maintenance and readiness functions and to launch the interceptor upon command.

X-Band Radar(s) (XBR) - The XBRs of the NMD program are forward deployed, ground-based, taskable, multi-function radars. In the NMD role, they perform acquisition, tracking, discrimination, and kill assessment of incoming warheads. XBRs use high frequency and advanced radar signal processing technology to improve target resolution, which permits the radar to perform more effectively against closely-spaced warheads, debris and penetration aids.

Upgraded Early Warning Radars (UEWR) - U.S. early warning radars are large, fixed, phased-array surveillance radars used to detect and track ballistic missiles directed into the United States. Upgrades to America's Early Warning Radar network will provide the existing forward-based radars with the capability to support the NMD surveillance function. Prior to deployment of the SBIRS (Low) satellites, the UEWRs will be used to detect and track objects during their midcourse phase, primarily to cue the more precise X-Band Radars.

Battle Management/ Command, Control and Communications (BM/C3) - The BM/C3 element is the "brains" of the NMD system. In the event of a launch against the United States, the Commander-in-Chief of the North America Aerospace Defense Command (NORAD) will control and operate the NMD system through the BM/C3. The BM/C3 element supports the Commander-in-Chief with extensive decision support systems, battle management displays, and situation awareness information. In this way, it supplies the means to plan, select, and adjust missions and courses of action;



and it disseminates defense engagement authorization (DEA) and other Command decisions to the NMD system elements. The In-Flight Interceptor Communications System (IFICS) is the BM/C3 communications link to the interceptors during flyout.

The *Space-Based Infrared System (SBIRS)* in low earth orbit is an additional element that future NMD systems will utilize. It is being developed by the Air Force as part of the Early Warning System upgrade which will replace the Defense Support Program (DSP) satellites with SBIRS (High) and SBIRS (Low). In its NMD mission, the SBIRS (Low) constellation of sensor satellites will acquire and track ballistic missiles throughout their trajectory. This information will provide the earliest possible trajectory estimate to the BM/C3 element. By providing this "over-the-horizon" precision tracking data to the NMD system, the effective NMD battle space is expanded to permit interceptors to be launched before the threats come within range of the XBRs, which is critical for effective National Missile Defense.

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FACT SHEET



BMDO FACT SHEET IN 99 04

NATIONAL MISSILE DEFENSE PROGRAM EVOLUTION

INTRODUCTION

The Ballistic Missile Defense Organization (BMDO) has designed the United States Nation Missile Defense (NMD) to be flexible and evolutionary. To execute the program, BMDO established an NMD Joint Program Office (JPO) to manage multiple-Service participation. Initial deployment of NMD is expected in 2005. This first deployment, Capability 1 (C1) will be a limited capability of only about 20 interceptor missiles in response to a threat which also is currently projected to be limited. However, the NMD JPO will continue to improve technologies and integrate improved elements into the system if the threat increases. This degree of program flexibility is essential in the present world situation; we do not know who will threaten us or with what kinds of ballistic missiles.

HISTORY

The need for this kind of defense program flexibility is nothing new. Since the 1970s, changes in defense missions and in the systems designed to implement them have occurred every few years. The evolution of the program through the last four changes, which took place from 1987 to 1999, is summarized below. During that decade, NMD missions evolved from a deterrence enhancing role against a massive threat, requiring large numbers of defense interceptors, to a protection role against small threats.

THE NMD PROGRAM

To meet the challenge of uncertainties about the threat characteristics and time scale extant in 1996, DoD established

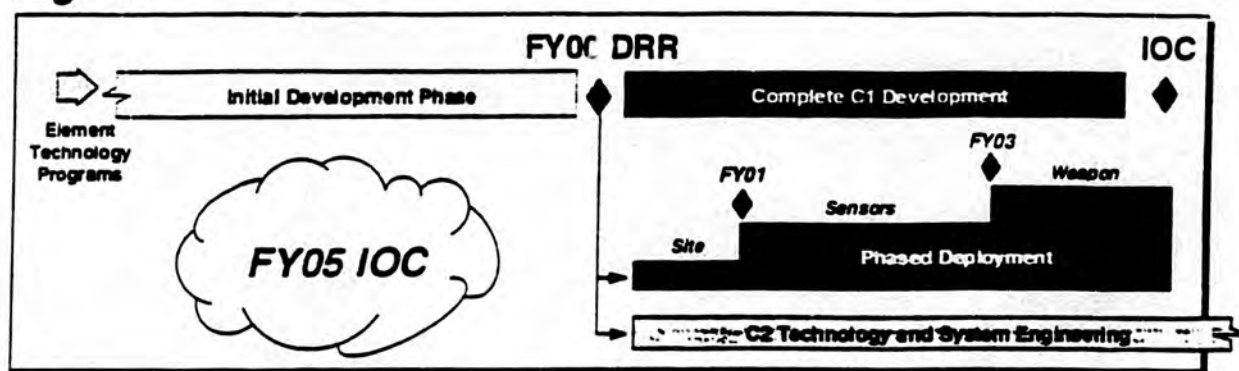
NMD Program	Mission	Defense
Phase I (1987-1989)	Enhance deterrence of a Soviet first strike	1000s of interceptors, ground and space based
Global Protection Against Limited Strikes (GPALS) (1989-1992)	Protect against accidental or unauthorized launch	100s of interceptors, ground and space based
Technology Readiness (1993-1995)	Prepare technology to reduce deployment time	Ground based system, deployment not considered
Deployment Readiness - "3+3" (1996-1999)	Integrate systems; prepare to deploy three years after a future decision	10s of interceptors, ground based only
NMD Acquisition (1999-2005)	Prepare for initial deployment in 2005	10s of interceptors, ground based only

The first four programmatic re-directions occurred three to four years apart and resulted in major program changes - but no deployment decision

MARCH 1999

FORGING AMERICA'S SHIELD

NMD Program



NMD as a Major Defense Acquisition Program and Deployment Readiness Program. The program, called "3+3," was to develop a NMD system capable of being deployed within three years after a deployment decision at a Deployment Readiness Review (DRR) in 2000. The DRR criteria are: existence of a threat and technological capability to proceed. In January 1999, the Secretary of Defense announced that the threat criteria would soon be met. Funds are now programmed to move NMD from the development phase to a deployment phase should we be directed to do so, as shown in Figure 1. To reduce program risks, the NMD now projects initial deployment in 2005 rather than 2003. As before, the decision to deploy will be made at the DRR in 2000.

ARCHITECTURE

Shown below is the initial architecture to be developed within the NMD program which is associated with the deployment decision in 2000. It will be deployed in a configuration that is designed specifically for the threat it will have to defend against.



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FACT SHEET



BMDO FACT SHEET IN 99-09

GROUND BASED INTERCEPTOR

INTRODUCTION

The Ground Based Interceptor (GBI) and its associated components provide the weapon element of the National Missile Defense (NMD) system. Its mission is to engage high speed ballistic missile warheads in the midcourse (exoatmospheric) phase of their trajectories and destroy them by force of impact. The GBI Element consists of:

- An interceptor component called a kill vehicle (EKV), to conduct the engagement;
- A booster, to propel the interceptor toward the approximate location to engage a warhead; and
- The ground command and launch equipment needed to fire the interceptor.

OPERATIONAL CONCEPT

The Ground Based Interceptor launches in accordance with a weapon tasking plan from the Battle Management, Command, Control and Communications (BMC3) element and flies toward the target's predicted location. Aided by one or more in-flight target updates (IFTUs) from the BMC3 element, the interceptor kill vehicle uses

onboard sensors to acquire the threat cluster. It then uses its onboard discrimination capability, alone or fused with a threat object map (TOM) obtained from the BMC3 element, to determine which object is the designated target. The GBI KV then adjusts its trajectory to collide with the target. Both the kill vehicle and the target are demolished in the collision.

SENSOR DEVELOPMENT

The EKV is the intercept component of the GBI. The EKV has its own seeker, propulsion, communications, guidance, and computers to support intercept targeting decisions and maneuvers.

The major EKV subsystem is a multiple-waveband infrared seeker that enables the interceptor to acquire and track targets. The seeker consists of a focal plane array(s) and a cryogenic cooling assembly at the end of an optical telescope. The seeker is supported by processing hardware and software to perform target acquisition, tracking, and discrimination.

Two competing EKV contractors, Boeing and Raytheon, using two different sensor approaches, integrated and tested their sensor hardware. The Boeing sensor successfully flew in Integrated Flight Test 1A (IFT-1A) on 23 June 1997. The Raytheon sensor conducted its successful fly-by on 16 January 1998. The data collected by the sensors was transmitted to the ground and used after the flight to validate EKV discrimination software and define any changes required prior to kill vehicle flights.



MISSION

**PROVIDE NON-NUCLEAR
HIT-TO-KILL INTERCEPT OF AN
INCOMING REENTRY VEHICLE**

DESCRIPTION

- WEAPON ELEMENT FOR NMD
- HIT-TO-KILL NON-NUCLEAR EXO-ATMOSPHERIC INTERCEPTOR OF ICBM REENTRY VEHICLES
- DORMANT, FIXED-BASED INTERCEPTOR

Role of Ground Based Interceptor

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**Boeing Sensor Flight Test
Payload HWIL Testing**



**Raytheon Sensor Flight Test
Sensor Integration and Test**

EKV DEVELOPMENT

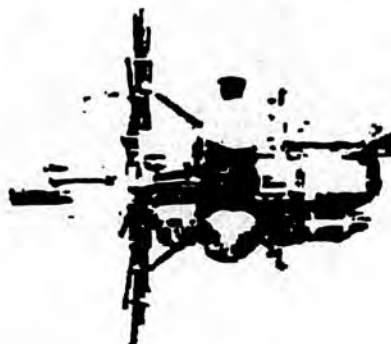
The EKV contractors also procured and fabricated kill vehicle hardware for intercept flights scheduled for FY99. The EKV's have undergone hardware-in-the-loop (HWIL) testing of the seekers and electronics, cold chamber testing and calibration of the seekers, and strap-down testing of the divert and attitude control system.

In December 1998, the NMD Lead System Integrator (LSI) contractor selected the Raytheon EKV to be the primary design for weapon element development. LSI will retain the Boeing EKV effort until the IFT-4 data reduction period is complete to reduce technical risk.

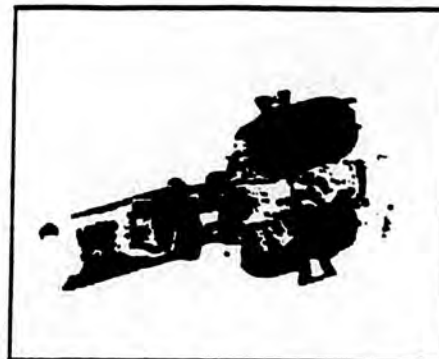
TEST PROGRAM

The assembled EKV's will be integrated with the Payload Launch Vehicle (PLV), a test surrogate for the dedicated booster,

for IFT-3 through IFT-6. Additional HWIL tests will be conducted before flight testing to ensure that the air vehicle (EKV integrated with PLV) will perform as intended. Beginning with IFT-7, the EKV's will be integrated with the dedicated, off-the-shelf booster and launch equipment.



Boeing EKV



Raytheon EKV

PAYLOAD LAUNCH VEHICLE

Until a ground based interceptor booster is available, which satisfies NMD requirements, flight tests are being conducted using the Lockheed Martin PLV.

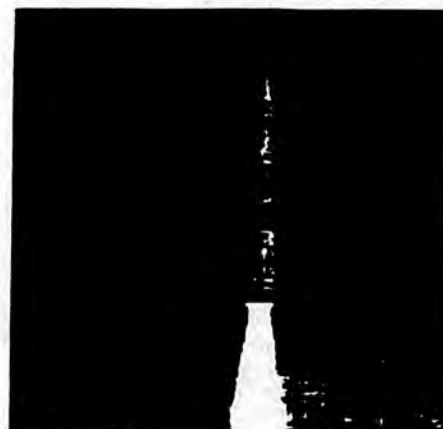
The PLV consists of the second and third stages of retired Minuteman II boosters, modified as necessary to function as first and second stages. PLV performance is adequate for testing, but is insufficient for single-site coverage of all 50 states.

BOOSTER DEVELOPMENT

In 1998, the LSI contractor began developing a dedicated booster using off-the-shelf motors. With slight modifications, the Graphite Epoxy Motor (GEM) will be used for the first stage, and the Orbus 1A will be used for the second and third stages. Performance of the GEM/Orbus/Orbus booster vehicle will be demonstrated in three booster verification flight tests scheduled for FY2000. Booster development will be complete in time to supply the booster for IFT-7."

SUMMARY

The evolutionary development of a GBI for NMD provides a low risk methodical approach to best address the technical and performance issues. The GBI Program provides for periodic demonstrations of increased defense capability as hardware, software, and supporting NMD elements become available.



PLV Launch at KMR

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NATIONAL MISSILE DEFENSE EXOATMOSPHERIC KILL VEHICLE

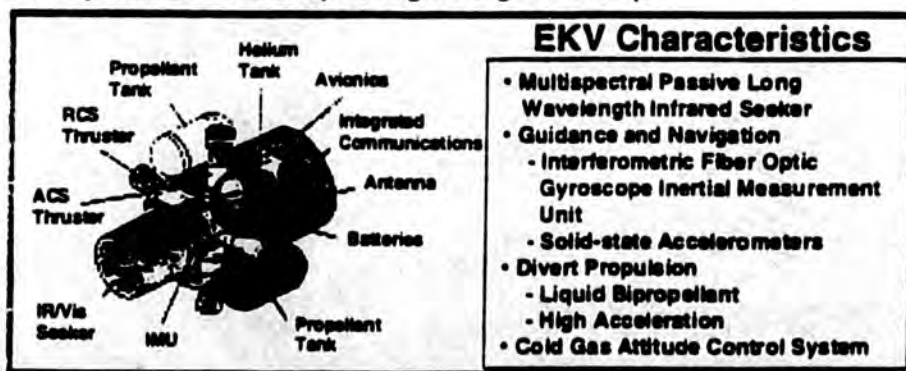
INTRODUCTION

In response to the call for a United States national missile defense (NMD) capability, the Ballistic Missile Defense Organization (BMDO) has initiated the NMD program. The plan calls for treaty-compliant development of a viable ballistic missile defense system over a three year period that can be ready for deployment five years after a deployment decision has been made.

Comprised of weapon, sensor, and command and control elements, the core of the NMD program is focused around the development of the Weapon System (WS). The critical element of this is the Exoatmospheric Kill Vehicle, or EKV. Mounted atop a long-range delivery booster, the KV is the component of the weapon system that will acquire, track and destroy incoming ballistic missiles while they are still in the midcourse of their trajectories, outside the Earth's atmosphere.

THE KV SYSTEM

The EKV must accomplish a variety of complicated tasks in its role as the intercept vehicle. Ultimately, the EKV will eliminate incoming targets through a hit-to-kill collision. Prior to this event, the EKV will use a 20/44 GHz communications system to communicate with earthbound battle management/command, control and communications elements. The EKV also includes an onboard multiple-waveband infrared seeker which it will use to acquire and track targets. This seeker is comprised of focal plane arrays and a cryogenic cooling assembly attached to an optical telescope, supported by processing hardware and software. The EKV may use a combination of onboard navigation and target selection capabilities as well as uplinked transmissions to zero in on a target and destroy it. The EKV is designed to withstand the rigors of the in-flight environment. A EKV designed by Raytheon has been selected for the intercept test, with a EKV by Boeing serving as a backup.



INTEGRATED FLIGHT TESTS (IFTs)

The NMD Program has successfully conducted two IFTs. These consisted of EKV sensor fly-bys of test targets. During the tests, operation of the EKV sensors was validated in the flight environment. Data was collected, transmitted to the ground, and used to exercise and refine target discrimination algorithms for subsequent intercept tests.

EKV hardware for intercept tests is currently being fabricated, integrated, and ground tested. This includes hardware-in-the-loop (HWIL) testing to validate the EKV's for flight testing. Once completed, the EKV's will be mounted on payload launch vehicles (PLVs) serving as surrogates for the dedicated booster. Current plans call for the use of the PLV in flight tests through IFT-6. The dedicated booster will be used for IFT-7 and subsequent flights.

CONCLUSION

WS development constitutes the crucial stage of the overall NMD system development. During this stage, seven integrated flight tests will be conducted. The EKV represents a concerted effort by the BMDO to develop a viable defense against a limited ballistic attack using existing technologies. Furthermore, the NMD system development will remain ABM Treaty-compliant, providing the U.S. with the ability to respond to emerging threats while adhering to existing international commitments.

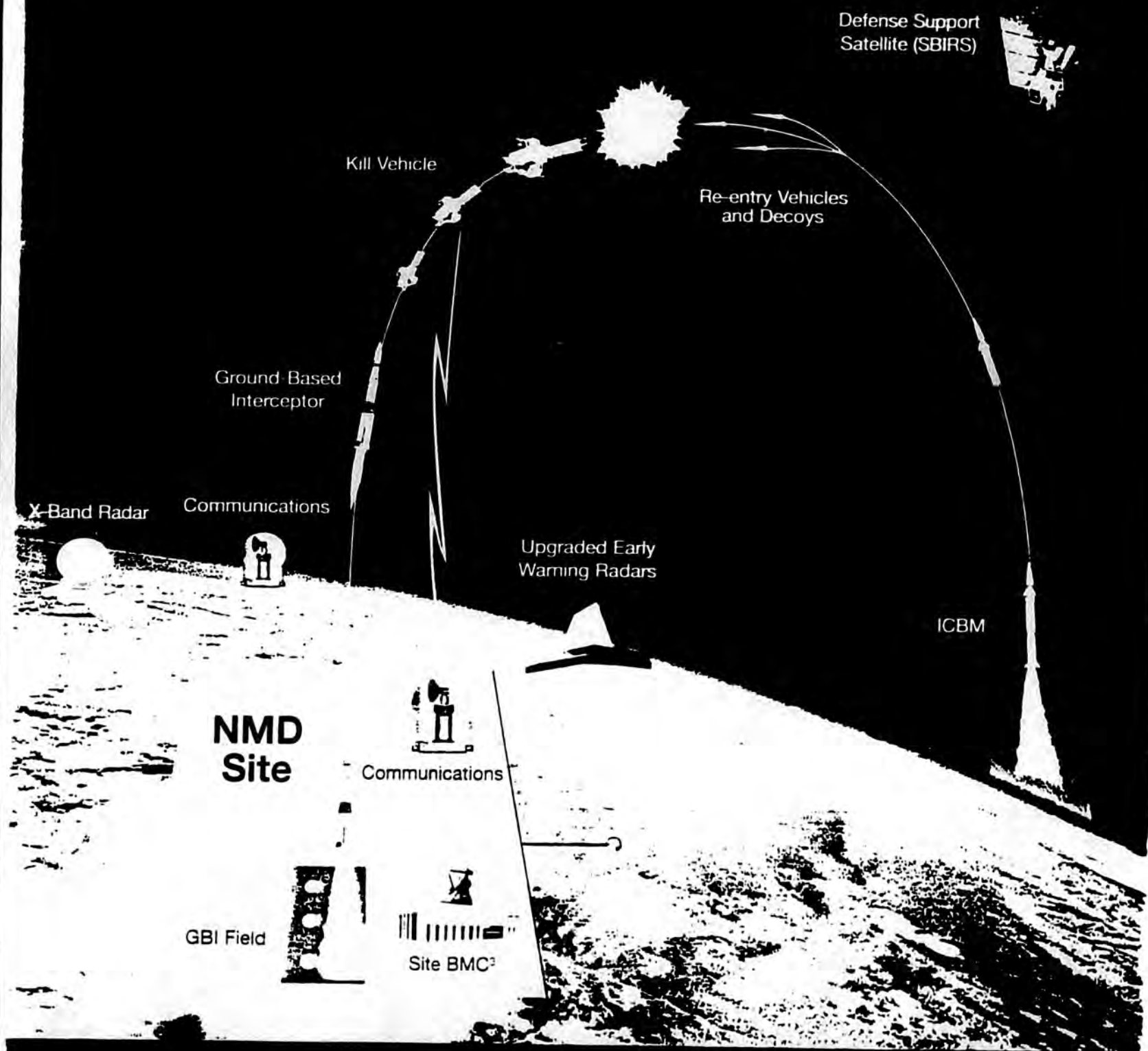
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JUNE 1999

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CLIPPING



NMD LSI

National Missile Defense Lead System Integrator

Forging America's Shield

THE
FOLLOWING
DOCUMENT(S)
ARE
POOR
ORIGINAL
COPIES

NMD LSI

Forging America's Shield

The Threat

Although the Cold War has ended, the threat of attack on the United States by long-range ballistic missiles remains real – and is growing. In addition to the recognized nuclear powers of the world, numerous other countries have ballistic missiles, some of which are working on weapons of mass destruction: nuclear, chemical or biological. If any of these weapons was ever launched, thousands or even millions of lives could be lost. Yet despite this growing threat, many Americans erroneously believe our nation has a super-secret device to shield our country from ballistic missiles.

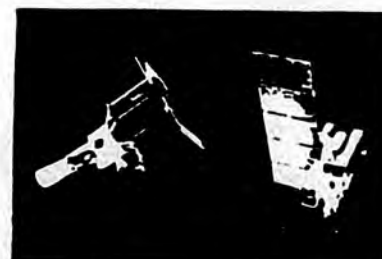
The Program

The Purpose of the Department of Defense's National Missile Defense (NMD) program is to develop and potentially deploy an efficient, effective system that detects, tracks and destroys incoming missiles before they enter our atmosphere. The program is in its development phase.

After the first three years of development, integration and testing, if the missile threat warrants it, the NMD system could be deployed and operational within five more years. If the missile threat does not warrant deployment, the development of an improved, more capable system would continue. If a decision is made to deploy during the continuing development, an NMD system can be deployed within three years.

The Team

The Boeing Company, as the NMD LSI prime contractor, is developing the NMD elements: Ground-Based Interceptor; X-Band Radars; Battle Management, Command, Control and Communications; Upgraded Early Warning Radars; and interfaces to Space-Based Infrared System satellites. Boeing has assembled a team of experienced companies to develop an effective and cost-efficient integrated NMD system for our nation.



DSP/SSIRS – High – Threat detection and warning



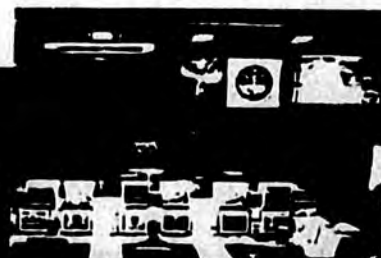
Upgraded Early Warning Radar – Threat tracking



X-Band Radar – Accurate tracking, imaging, discrimination



GB/IKV – Flyout, acquisition, tracking, discrimination, Hit-To-Kill



BMC3 – Flexible operations, assured Human-In-Control

Together with the DoD, we are planning a comprehensive NMD System that will protect America from limited ballistic missile attack in the 21st century.

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1999 114/001 (17407)
Rev 6/99 (JM)

Ground Based Radar - Prototype (GBR-P)



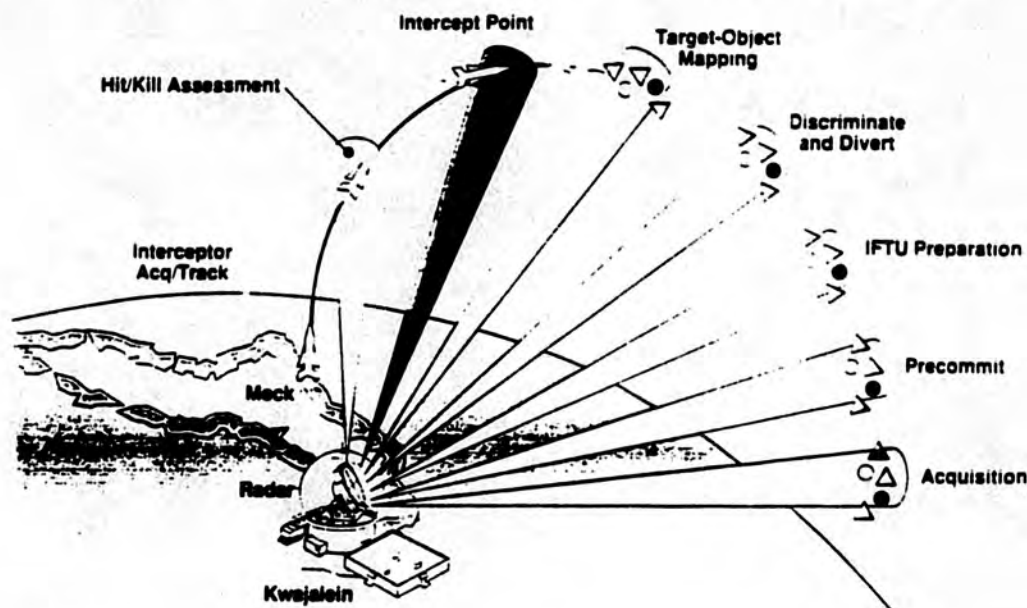
GBR-P System Features

The GBR-P will provide real-time operation of data via integrated tests with the EKV and BMC³ regarding precision target discrimination, target object mapping, kill assessment and simultaneous electro-mechanical scan and achieves maximum leverage from the concurrent THAAD radar program. The GBR-P is a critical, stepping stone toward cost effective and timely NMD development and potential deployment.

The GBR-P solid state array contains 16,896 X-band T/R modules that were originally developed for the THAAD radar. The production yield and performance of these modules has far exceeded expectations. This is an excellent example of dual-use technology and defense diversification. This T/R module technology is now a critical element in the IRIDIUMSM satellite communications network.

- 16,896 upgradeable to 78,848 T/R modules
- 123m² solid state array area (105 -123m² effective aperture)
- 2,000 - 4,000 km range
- Mechanical slew $\pm 178^\circ$ Az; 0-90° El
- Electronic FOV $\pm 12.5^\circ$ (3.1" lattice) or $\pm 25^\circ$ (1.55" lattice)

National Missile Defense... X-Band Radar Fire Control Sensor



Raytheon, using the GBR-P as the baseline, is designing and developing the X-Band Radar (XBR) for the NMD mission. The XBR is the X-band, mechanically steered, phased array radar fire control sensor which provides the precision discrimination and interceptor support necessary to the National Missile Defense mission success. With autonomous cued search to 4,000 km, the XBR provides the full fire control sensor function for the NMD interceptor including discrimination, in-flight target updates, target object mapping and kill assessment.

This system design utilizes maximum leverage from Raytheon's TMD radar designed for THAAD. The XBR is derived from the Ground Based Radar-Prototype (GBR-P) developed by Raytheon. The GBR-P reuses THAAD DEM/VAL radar hardware and software. The GBR-P will support the NMD integrated flight test program beginning in 1999.

- XBR provides surveillance, acquisition and tracking of threat missiles
 - The X-Band phased array allows all functions to occur simultaneously
 - The mechanical steering capability, coupled with electronic scanning, provides a broad field of regard
- After the interceptor is launched, an in-flight target update and target object map are provided to allow for on-board seeker acquisition, homing and end-game intercept
- Kill assessment is accomplished after the intercept point

The capabilities of the X-Band Radar are necessary for NMD because strategic targets are far more complex than theater targets.

For further information contact:

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Parameter: **Relative to TMD:**

Size	10x smaller
Speed	2x faster
Range	2x less sensitive
Altitude	2x higher
Communication	10x better (compared with current)