

Fairbanks North Star Borough

Joint Land Use Study

United States Army, Fort Wainwright

United States Air Force, Eielson Air Force Base

Fairbanks North Star Borough, Planning Department

June 2006

Produced by

ASCG Incorporated of Alaska

Fairbanks Joint Land Use Study

This study was prepared under contract with Fairbanks North Star Borough with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of Fairbanks North Star Borough and does not necessarily reflect the views of the Office of Economic Adjustment.



Historical Hangar, Fort Wainwright Army Base



Eielson Air Force Base

Table of Contents

1.0	Study Purpose and Process.....	1
1.1	Introduction.....	1
1.2	Study Objectives	2
1.3	Planning Area.....	2
1.4	Participating Stakeholders.....	4
1.5	Public Participation.....	5
1.6	Issue Identification.....	6
2.0	Background Information	8
2.1	Chronology of Events	8
2.2	Economic Impacts of the Installations	10
2.3	Military Mission and History	13
2.4	Current and Future Military Operations.....	15
2.5	Regional Demographics and Growth Trends.....	20
3.0	Technical Information.....	23
3.1	Compatible Use Zones.....	23
3.2	Analysis of Existing Land Uses	35
3.3	Existing Noise/Land Use Policies.....	47
3.4	Analysis of Future Land Uses.....	52
4.0	Recommendations	54
4.1	Compatibility Tools	54
4.2	Local Jurisdiction Recommendations	57
4.3	Military Recommendations.....	60

Figures

Figure 1 Study Area Map	3
Figure 2 FNSB Population Breakdown	11
Figure 3 Fairbanks North Star Borough Historical Population Data 1960 – 2004.....	21
Figure 4 Fairbanks North Star Borough Population Forecast 1990 – 2025	22
Figure 5 Common Sounds and Noise Levels, A-Weighted.....	24
Figure 6 Fort Wainwright Noise Zones.....	28
Figure 7 Eielson Noise Zones.....	30
Figure 8 Eielson AFB Accident Potential Zones.....	33
Figure 9 Fort Wainwright Accident Potential Zones.....	34
Figure 10 Existing Land Use around Fort Wainwright	39
Figure 11 Existing Land Use around Eielson AFB	41
Figure 12 Training Areas and Game Management Units.....	44
Figure 13 Number of Hunters that Reported Hunting in Tanana and Yukon Flats 1994-2004 ...	45
Figure 14 Number of Moose Reported Harvested in Tanana and Yukon Flats 1994-2004	46

Tables

Table 1.1 JLUS Advisory Committee Members	4
Table 2.1 2003-04 Military Personnel Statistics	11
Table 2.2 2005 Payroll Amounts at Alaska Bases.....	12
Table 3.1 CZ and APZ Dimensions for Eielson and Wainwright Airfields.....	32
Table 3.2 Noise Levels and Land Use Compatibility.....	36
Table 3.3 Air Safety Compatibility Guidelines	37
Table 3.4 Fort Wainwright Existing Land Use Acreage within Noise Contours	38
Table 3.5 Eielson AFB Existing Land Use Acreage within Noise Contours	42

Table 4.1 Compatibility Tools and Recommendations 67

Appendices

Appendix A - Meeting/Interview Reports

Acronyms

AAF	Army Airfield
ADF&G	Alaska Department of Fish and Game
ADNL	Adjusted Day-Night Average Sound Level
ADOT&PF	Alaska Department of Transportation and Public Facilities
AFB	Air Force Base
AICUZ	Air Installation Compatible Use Zone
ANSA	Airport Noise Sensitive Area
ANSI	American National Standards Institute
APZ	Accident Potential Zone
ARRC	Alaska Railroad Corporation
BLM	Bureau of Land Management
BRAC	Base Realignment and Closure
BX	Base Exchange
CTS	Combat Training Squadron
CWF	Civil Works Facility
CZ	Clear Zone
dB	Decibel
DNL	Day-Night Average Sound Level
DoD	Department of Defense
EIS	Environmental Impact Statement
FNSB	Fairbanks North Star Borough
GMU	Game Management Unit
IENMP	Installation Environmental Noise Management Plan
INRMP	Integrated Natural Resources Management Plan
JLUS	Joint Land Use Study
mm	Millimeter
MOU	Memorandum of Understanding
NAF	Non-appropriated Fund
NLR	Noise Level Reduction
PACAF	Pacific Air Force
PAO	Public Affairs Office
SAC	Strategic Air Command
SBCT	Stryker Brigade Combat Team
STC	Sound Transmission Class
USARAK	United States Army Alaska
USFWS	United States Fish and Wildlife Service

1.0 Study Purpose and Process

1.1 Introduction

The Fairbanks North Star Borough (FNSB) is known for its vast open spaces, which provide an ideal setting for two local military installations, Fort Wainwright Army Post and Eielson Air Force Base (AFB). Air operations at both bases have increased since their founding in the 1940s, as has the population of the Fairbanks area. In 1950, the U.S. Census reported that 19,409 people, including about 1,000 military personnel, lived in the area that would become the FNSB in 1964. By 2000, area population had increased to 82,840 with about 24,000 military residents. Major reasons for the growth included a Cold War military buildup after World War II and construction of the Trans-Alaska Pipeline which began in the mid-1970s. Planners anticipate another growth spurt as the Alaska Gas Pipeline construction begins.

Alaskans have watched in the last few years as civilian development adjacent to military bases has contributed to the closure of some bases and the realignment of others in the lower-48 states. Land use conflicts near Fort Wainwright and Eielson Air Force base are generally limited at this time. New access across the Chena River may intensify development of land east of Fort Wainwright in the Secluded Acres area. Residents have voiced other concerns about restriction of civilian land uses (particularly hunting) on the nearby military ranges. There are also concerns regarding communication between the military and the public about current and future operations. Additionally, the Base Realignment and Closure (BRAC) that threatened Eielson AFB in 2005 spotlighted the important role that both installations play in the Fairbanks area economy, and it renewed civilian support for the long-standing presence of the military bases in the community.

In 1985, the Department of Defense (DoD) initiated the Joint Land Use Study (JLUS) program to create a participatory, community-based framework for land use planning around military airfields. The objectives of the JLUS program are two-fold:

- To encourage cooperative land use planning between military installations and the surrounding community; and
- To seek ways to reduce the operational impacts of military bases on adjacent private land.

The FNSB has partnered with the U.S. Department of the Army and the U.S. Air Force to conduct the Fairbanks JLUS. The study explores opportunities to accommodate necessary growth and to maintain the regional economic sustainability associated with Fort Wainwright Army Post and Eielson AFB.

The JLUS process encourages residents, local decision-makers and installation representatives to study issues of compatibility in an open forum, balancing both military and civilian interests. The resulting recommendations are intended to guide the local government and the military in the implementation of appropriate land use controls around military installations as well as other mitigation measures.

1.2 Study Objectives

The purpose of the Fairbanks JLUS is to provide recommendations regarding land development policies and to present a compatible implementation strategy that supports the military's mission in the Fairbanks area. Specifically, the study objectives are, at a minimum, the following:

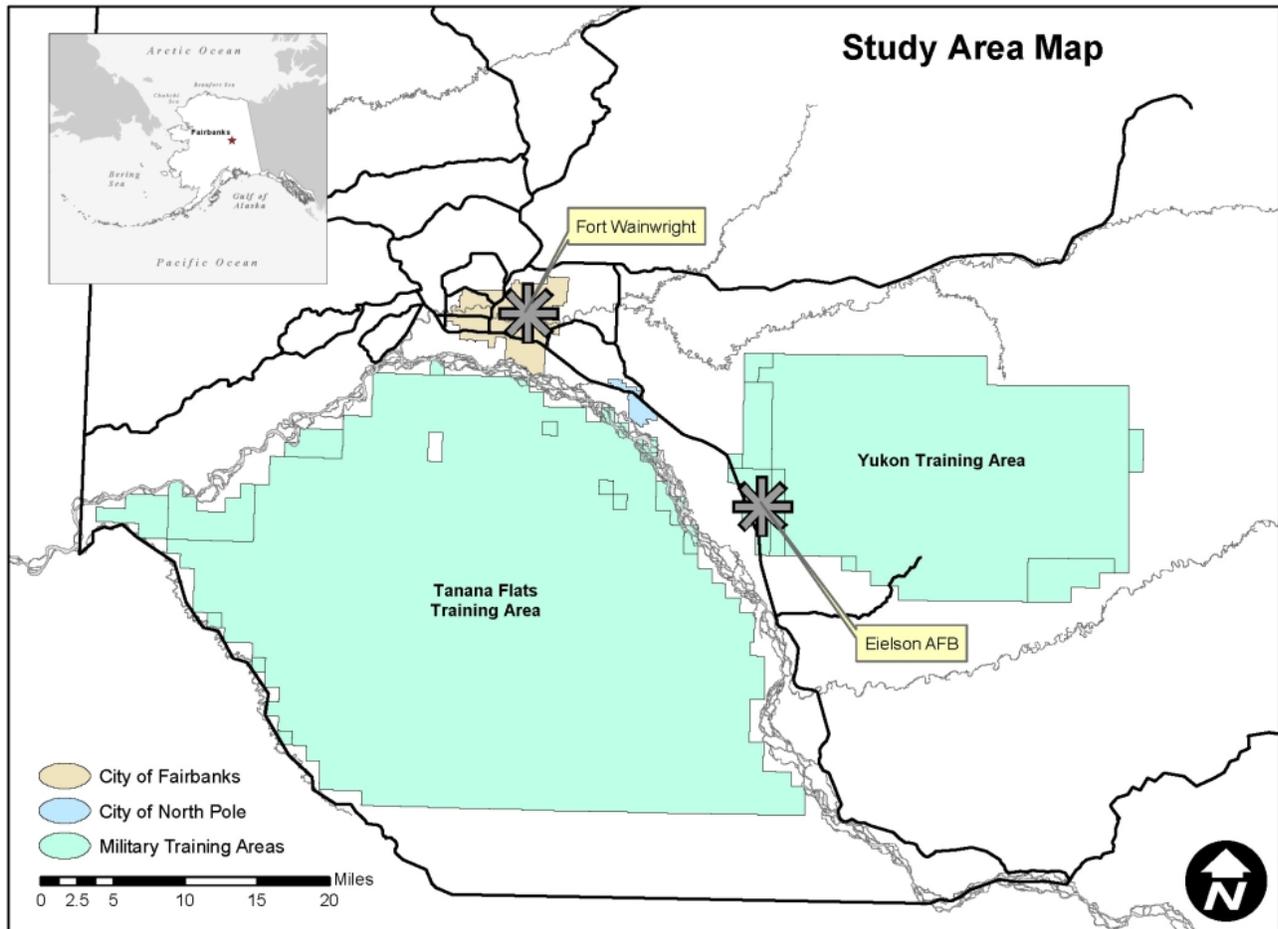
- Identify land use issues that may impact the operational utility of Fort Wainwright and Eielson AFB as well as the surrounding areas.
- Identify actions the FNSB can pursue to ensure compatible development.
- Create an action plan that DoD and FNSB can follow that will serve both military and community interests.
- Identify mechanisms, planning process and communication channels to ensure positive dialogue and thus minimize the potential for conflicts.

These specific objectives balance the primary goal of achieving long-term compatibility between military operations and important economic and social growth of the surrounding area.

1.3 Planning Area

The Fairbanks JLUS addresses the airfields and lands in the immediate vicinity at Fort Wainwright and Eielson Air Force Base (Figure 1). The military facilities included in the study area are:

Figure 1 Study Area Map



- Fort Wainwright** lies 120 miles south of the Arctic Circle and encompasses approximately 917,000 acres. The main post consists of 13,700 acres, Tanana Flats Training Area is over 655,000 acres and the Yukon Training Area totals 247,952 acres. Fort Wainwright is home to the 172nd Stryker Brigade Combat Team and its supporting units. The Fort Wainwright Airfield, also known historically as the Ladd Army Airfield (AAF), is located entirely within the boundary of the City of Fairbanks. The Bureau of Land Management is a major user of the AAF, with the Alaska Fire Service and the Alaska Smoke Jumpers stationed on the airfield.
- Eielson Air Force Base** is located 22 miles southeast of Fairbanks and includes 19,789-acres. It hosts the 354th Fighter Wing along with a number of supporting units. Since its early days, Eielson has also been home to weather reconnaissance aircraft, tactical units from Alaskan Air Command, aerial tankers and, most recently,

F-16s, A-10s and OA-10s, flying close air support and forward air control missions for nearby ground units.

A brief history and description of current air operations at each of these bases is provided in Chapter 2.

1.4 Participating Stakeholders

An essential element of the JLUS process is the involvement of key stakeholders and community perspectives in developing the final recommendations. The Fairbanks JLUS used one primary committee for decision making throughout the process and augmented this with interviews with other key stakeholders. The committee is described below.

Advisory Committee

The JLUS Advisory committee members included city officials from North Pole and Fairbanks, military installation leaders, FNSB Planning and Land Management departments, State of Alaska Department of Transportation and Public Facilities (ADOT&PF) and military planners. The committee provided the overall policy direction, project oversight, technical review and monitoring. Committee members are shown in Table 1.1.

Table 1.1 JLUS Advisory Committee Members

JLUS Advisory Committee Members	
Steve Lundgren	Member, Board of Directors, Fairbanks Chamber of Commerce
Lt. Col. Ronald M. Johnson	Garrison Commander, Fort Wainwright
Colonel Davis J. Scott	Commander, Eielson AFB
Jeff Jacobson	Mayor of North Pole
Steve Thompson	Mayor of Fairbanks
Bernardo Hernandez	Planning Director, Fairbanks North Star Borough
Jim Blizzard	Community Planner, 354th CES/CECB, Eielson AFB
Tom Hancock	Land Officer, FNSB Land Management
Chris Miller	Chairman, FNSB Planning Commission
Jeff Roach	Transportation Planner, ADOT&PF

The Advisory Committee met in person twice during the course of the study and corresponded by e-mail throughout the project. Members of the committee also attended the public meetings.

- September 29, 2005 – Project Kick-off meeting
- April 4, 2006 – Review draft JLUS study

1.5 Public Participation

In addition to the JLUS Advisory Committee, planners provided numerous other opportunities for the public and stakeholders to get involved in the JLUS process including public open houses, targeted interviews and a project web site. These are described below and the results are summarized in Appendix A.

Public Open Houses

The JLUS team conducted Open House meetings at key milestones in the planning process. They were held at the Salcha Senior Center, North Pole City Hall and the Fairbanks Pioneer Park Civic Center. These meetings gave residents an opportunity to discuss the existing issues, review draft recommendations and provide input on implementation strategies. Representatives of the Advisory Committees also attended some of the public meetings and project consultants were available to answer questions and make a brief presentation when requested. The meeting summaries are included in Appendix A.

Public Open Houses were held on:

November 7-10, 2005 – Planners provided an overview of the JLUS purpose and goals and a brief summary of existing conditions. Issue identification was a main topic of discussion.

May 1-3, 2006 – Planners presented the draft recommendations and discussed ways to modify them to ensure they addressed participants' issues.

June 12-15, 2006 – Planners presented final recommendations and final draft report.

Interviews

In addition to the JLUS public meetings, a series of interviews with interested groups and stakeholder organization was conducted in November, December, and May to solicit

pertinent information, to inform, and to engage community interest in the project. Interview summaries are included in Appendix A.

Interviews were conducted with the following groups:

- Tanana Chiefs Conference
- Greater Fairbanks Chamber of Commerce Military Affairs Committee
- Chena Riverfront Committee
- Tanana Valley Sportsman Association
- Recreational User groups (Nordic Ski Club, Runner's Club, etc....)
- Northern Alaska Environmental Center
- Alaska Department of Fish and Game

Website

A public website was established to provide information about the planning process, contact information, history of military bases, meeting dates, committee members, interview and meeting summaries and draft documents for public review. During the course of the study the website could be accessed at: <http://projects.ascg.com/jlus/>.

1.6 Issue Identification

At the meetings, several land use and related military/community issues were identified. These are briefly described below.

Noise - noise from low-flying aircraft, both airplanes and helicopters was a concern, particularly the Salcha area.

Land Use Compatibility - Current zoning regulations do not prevent development of current and future incompatible uses in areas near the bases. This is now a potential land use concern in the Secluded Acres subdivision adjacent Fort Wainwright and the community of Moose Creek adjacent Eielson AFB. In the future, it could potentially become an issue in the gravel extraction areas adjacent Fort Wainwright.

Transportation - Slow-moving convoys on the Richardson Highway slow traffic. A new railroad alignment and bridge over the Chena River may alter land use patterns. Residents are concerned about possible loss of major travel routes in case of emergency road closure due to base activities.

Information Dissemination - The public does not always believe they are adequately notified of potential land use or operational changes. The need to improve communication was commonly expressed. Members of the public also appear unaware of the appropriate channels for registering specific complaints regarding noise, low-flying aircraft, and the like.

Recreational Land Use Conflicts - These issues first emerged in 2003 when the Army proposed changes to allowable land uses in the U.S. Army Tanana Flats Military Range. This area provides habitat for a large moose population and has been popular with hunters and other recreational users for many years. The Army has tried to respond to many of the concerns but also has a growing need to use this area. Much frustration was expressed at the constantly changing nature of the management of this area which is considered by the military to be highly sensitive or out-of-bounds. Airboaters and some other recreational users believed closure of the Tanana Flats Military Range for protection of natural resources was excessive and unnecessary. They supported improvements to the process for obtaining permits and improving access for hunting on military-controlled lands. The Army, in turn, has concerns about the potential for recreational trespass on firing ranges at Fort Wainwright.

2.0 Background Information

2.1 Chronology of Events

The Fairbanks JLUS represents a coordinated effort between the Army, Air Force and the local jurisdictions to develop sound land use policies which enable the military to continue to successfully operate in the area with a minimum of community impacts. Below is a brief narrative highlighting the chronology of events leading to the development of this JLUS.

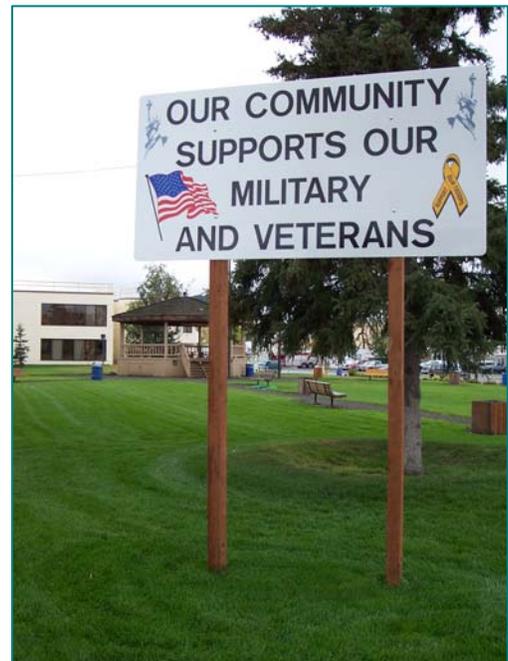
- **1903** – City of Fairbanks established.
- **1939** – Ladd Field, now Fort Wainwright, is created primarily as a site for cold-weather testing of aircraft and equipment.
- **April, 1940** – The first Army Air Corps troops arrive at Ladd Field.
- **1941** – The military begins to fly planes to Ladd Field where they are turned over to Soviet aircrews for the continued flight to Soviet airfields where they are put into action against Germany. To provide a weather alternate, needed in times of ice fog, the Army builds an auxiliary field south of Ladd Field, known as 26-Mile Strip.
- **1946** – The military builds a 14,500-foot-long runway at the 26-Mile Strip. They later renamed the field the Eielson AFB.
- **July 1953** – U.S. Army Alaska combat units officially reorganize into 171st Infantry Brigade (Mechanized) at Fort Wainwright.
- **1961**– Ladd Airfield renamed Fort Wainwright after General Jonathan Wainwright.
- **January 1, 1964** – The Fairbanks North Star Borough is classified as a second-class Borough and is incorporated under the provisions of the State of Alaska Borough Act



Development around Fort Wainwright over time

(1963), as amended.

- **1969** – 171st Infantry Brigade at Fort Wainwright re-designated as a light-infantry brigade.
- **1973** – 171st Infantry Brigade at Fort Wainwright inactivated.
- **December 31, 1974** – The 172nd Infantry Brigade headquartered at Fort Richardson, assumed command and control of the U.S. Army in Alaska.
- **1984** – FNSB adopts the first Borough Regional Comprehensive Plan.
- **1986** – 6th Infantry Division (Light) activated.
- **1990** – 6th Infantry Division headquarters moved from Fort Richardson to Fort Wainwright.
- **August 1995** –Alaska Military Operations Areas, Final Environmental Impact Statement, Department to the Air Force 11th Air Force, Elmendorf AFB, Alaska is published.
- **May 2001** – Dena’Nana’Henash, Tanana Chiefs Conference, Inc., Tribal Environmental Restoration Program’s 1999 Final Report on Military Impacts to Tribes In Interior Alaska is published.
- **August 2002** – DoD nominated Fort Wainwright for a Joint Land Use Study.
- **July 2003** - DoD, Office of Economic Adjustment staff visited Military and Borough officials in Fairbanks to discuss the JLUS process and encouraged Borough officials to apply for funding.
- **February 2004** - Transformation of U.S. Army Alaska, Final Environmental Impact Statement is published.
- **September 2004** – DoD nominated Eielson AFB for a Joint Land Use Study to be



Sign in downtown Fairbanks

done in by the FNSB in conjunction with the Fort Wainwright JLUS.

- **May 2005** - Defense Secretary Donald H. Rumsfeld forwarded the Defense Department's recommendations to the Base Realignment and Closure Commission which included a recommendation to withdraw 2,821 uniformed personnel and to transfer the aircraft from the 354th Fighter Wing to Nevada, Georgia and Louisiana due to high operational and infrastructure costs at Eielson Air Force Base.
- **September 2005** – FNSB adopts a revised Regional Comprehensive Plan.
- **Fall 2005** – Decision to move the active-component combat aircraft from Eielson Air Force Base, Alaska reversed.

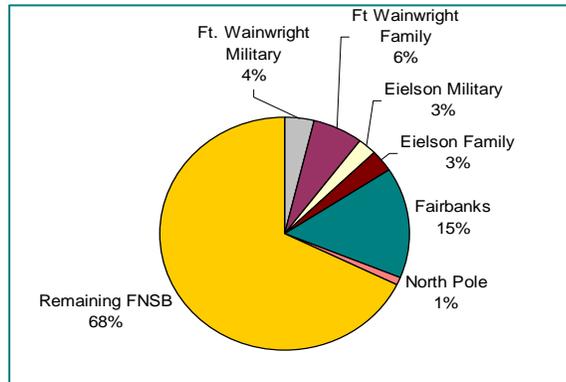
2.2 *Economic Impacts of the Installations*

Over years of operation, the military facilities and the surrounding area have developed a complex and interdependent web of economic links. In 2005, Eielson Air Force Base was on the list of potential base realignments that, according to DoD analysts, could have resulted in a maximum potential reduction of 4,721 jobs (2,821 military personnel and 1,900 direct and indirect jobs) over the 2006-2011 period in the Fairbanks, AK, Metropolitan Statistical economic area (8.6 percent).¹ While this did not occur, it did bring to light the interdependence that the bases and the community have.

The military and its dependents represent roughly 16 percent of the Fairbanks area's population (see Figure 2). Fort Wainwright has approximately 4,900 soldiers and 5,200 family members. Eielson AFB has approximately 2,950 soldiers and 3,550 family members.

¹Brigitta Windisch-Cole, *Base Realignment and Closure*, Alaska Economic Trends, August, 2005.

Figure 2 FNSB Population Breakdown



The military is the area’s second-largest employer of civilians (University of Alaska, Fairbanks is the largest employer). Table 2.1 shows the number of jobs, both military and civilian, associated with Ft. Wainwright and Eielson AFB.

Table 2.1 2003-04 Military Personnel Statistics

PERSONNEL	Military Members	Civil Service	NAF Employees*	TOTAL
Ft. Wainwright	4,490	877	418	5,785
Eielson AFB	2,993**	379	410	3,782
TOTAL	7,483	1,256	828	9,567

*Non-appropriated fund (NAF) employees are those paid through sources other than congressional appropriations such as with profits from the Base Exchange.

**Active duty plus Alaska Air National Guard personnel

Source: Ft. Wainwright: Fairbanks Economic Development Corporation website. <http://www.investfairbanks.com>. Eielson AFB: Economic Impact Statement FY 2005, 354th Fighter Wing Public Affairs Office (PAO), Eielson AFB.

Military and civilian payrolls associated with the base are substantial. According to the FY 05 Alaska Military Economic Impact/Personnel Data annual report released by the Alaska Command², the annual combined military and civilian payroll for Fort Wainwright in fiscal year 2005 was \$267.9 million. Military construction expenditures at Fort Wainwright of about \$278.5 million also contributed to the local economy. Eielson AFB’s combined payroll totaled \$189.3 million in 2005, with construction expenditures of approximately \$125.1

² The Alaska Command is the unified command of U.S. military forces in Alaska, and is staffed by Army, Air Force, and Navy officers.

million including \$50 million in runway upgrades. Payrolls for Fort Wainwright, Eielson AFB and other Alaskan bases are shown in Table 2.2.

Table 2.2 2005 Payroll Amounts at Alaska Bases

Base	Military & Civilian Payroll
Ft. Richardson	\$196.6 Million*
Ft. Wainwright	\$267.9 Million*
Ft. Greely	\$5.7 Million
Elmendorf AFB	\$481.1 Million
Eielson AFB	\$189.3 Million

Source: FY 05 Alaska Military Economic Impact/Personnel Data annual report, Alaska Command

Base pay for lower-ranking military personnel, while relatively low, has many included benefits that help to augment military paychecks, such as free housing, health care, subsidized recreational services, grocery, and travel costs. All of these benefits expand a soldier’s purchasing power. Many of the employees live within the community and infuse additional

benefits into the local economy, primarily through spending and spousal employment salaries. As consumers, military personnel in the FNSB and their dependents represent a substantial portion of the local economy.

There is also a big economic boost to the Fairbanks economy due to the Red Flag Alaska (formerly Cope Thunder) exercises. Red Flag Alaska will host an average of 2,050 visiting personnel each year, flying an average of 959 sorties for 1,414 flight hours, and using about 2,828,000 gallons of jet fuel. To support the Red Flag Alaska exercises, the Air Force has a \$10 million operations and maintenance contract, with 80 permanent employees and an additional 10 to 20 temporary seasonal hires. Between FY02 and FY06, Cope Thunder/Red Flag Alaska has sponsored \$162 million in range infrastructure and civil aviation upgrades including:

- Two long-range radars to aid Homeland Defense and civil aviation traffic
- Power and fiber optic line installations
- Bombing range target modernization and enhancement
- The most capable aircraft instrumentation suite in the world to real-time track and debrief exercise events

- Radio site expansion that aids military and civil aviation connectivity throughout interior Alaska

Alaska Congressman Don Young described the impact of Red Flag Alaska, “This project can only mean economic stability, job growth, and a more stable military presence for Alaska and particularly in the Fairbanks area.”³

2.3 Military Mission and History

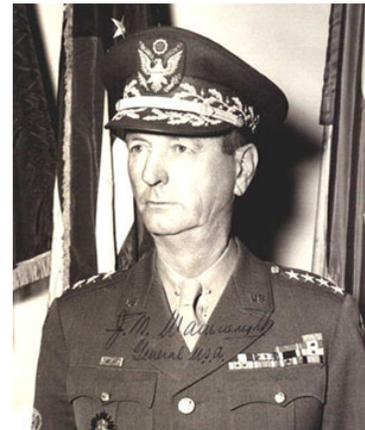


B-29 Bombers at Ladd Airfield, June 1946

Many political and military leaders advocated building military bases in Alaska several years prior to World War II. Finally, in 1939, when war threatened, Congress granted \$4 million to construct an Army cold-weather experimental station at Fairbanks. This was the beginning of the military presence in the Interior that has lasted into modern days.

Fort Wainwright

The purpose of the cold weather station at Fairbanks, named Ladd Field, was to test aircraft operations in arctic conditions. However, after the war broke out with Japan in late 1941, the military put a temporary halt on testing. Instead, American crews flew almost 8,000 aircraft to Ladd Field and turned over the planes to Soviet aircrews for the continued flight to Soviet airfields where they were put into action against Germany. To provide a weather alternate to Ladd Field, needed in times of ice fog, the Army build an auxiliary field south of Ladd Field, known as the 26-Mile Strip. The reason for the name was that the gate to the base was constructed at the south end of the runway, so people traveling from Fairbanks would have to go to the south end. That drive measured out to be exactly 26 miles.⁴ This airstrip would later be expanded to become the nucleus of Eielson AFB.



Fort Wainwright was named after General Jonathan Wainwright who received the Congressional Medal of Honor for his service during World War II.

³ Fairbanks Daily News-Miner, March 30, 2006

Ladd Field, renamed Fort Wainwright in 1961 after General Jonathan Wainwright, is now the home of the 172nd Stryker Brigade Combat Team and its supporting units. The mission at Fort Wainwright is as follows⁵:

- Plan and execute on-order deployment support, force protection, contingency operations
- Plan and execute transformation of the installation garrison that supports Stryker and other mission units
- Provide quality installation support and services to our customers
- Maintain and improve infrastructure and training areas
- Provide proper stewardship of all resources and the environment
- Sustain strong community relations
- Provide for the well-being of the Army Family into the 21st Century

Eielson Air Force Base



Carl Ben Eielson 1897-1929
The first pilot to fly over the North Pole.

The histories of Eielson Air Force Base and Fort Wainwright are inextricably linked. In 1946, with the onset of the Cold War looming, attention turned toward building a large bomber base in the interior. The runway at Ladd, restricted by an oxbow in the Chena River, proved too short for the large jet aircraft coming into the Air Force inventory at the time. A site was identified and surveyed 29 miles south of Nenana. After a series of earthquakes threatened the runway, they abandoned that site and used the remaining funds to expand the Army's 26-Mile Strip. The airport was

later turned over to the Air Force who renamed the field the Eielson Air Force Base in honor of famed Arctic aviation pioneer Carl Ben Eielson.

⁴ <http://www.globalsecurity.org/military/facility/eielson.htm>

⁵ <http://www.wainwright.army.mil/sites/about/mission.asp>

The Alaskan Air Command activated the 5010th Composite Wing on June 4, 1949 to provide base support to the Strategic Air Command (SAC) units. SAC assigned the 6th Strategic Wing to Eielson AFB March 25, 1967, to manage the growing strategic reconnaissance and aerial refueling efforts.

The mission of the 11th Air Force is first defined in the Commander-in-Chief, United States Pacific Command Instruction S3050.6 (Pacific Command Strategy) as follows:

"to maintain the security of and defend the United States against attack throughout the Pacific Theater; to support and advance the national policies and interests of the United States;...and to prepare plans, conduct operations, and coordination activities of Pacific Air Force (PACAF) forces in consonance with higher authorities' directives."

Further, their mission is to include offensive and defensive counter air, air interdiction, close air support and forward air control, suppression of enemy defenses, electronic combat, air refueling and theater airlift. This variety of missions coupled with the number and types of aircraft and their related weapons systems requires large and varied airspace, approved for both subsonic and supersonic operations.”⁶

2.4 Current and Future Military Operations

Current operations at both bases have a focus on tasking, composition, capabilities, numbers, weapons system, training programs and airspace requirements that support complex and world-wide operations. Details about current and future military operations at each installation are listed below.

Alaska is the most central place in the world for aircraft, and that is true of Europe, Asia or North America. I believe in the future, he who holds Alaska will hold the world, and I think it is the most strategic place in the world.

- Brig. Gen. Billy Mitchell, appearing before House Committee on Military Affairs in early 1935, which was holding hearings regarding the strategic needs of the fledgling U.S. Army Air Corps and the establishment of new bases for frontier defense.

⁶ Alaska Military Operations Areas, Environmental Impact Statement, Department of the Air Force, 11th Air Force, August 1995.

Fort Wainwright

Fort Wainwright facilities provide year-round support for live-fire exercises, maneuver training for mechanized/armored vehicles, attack helicopter gunnery, small arms, mortar and artillery firing exercises and maneuver training for almost all weapons systems in the Army. They specialize in conducting operations in cold regions and mountainous terrain. The installation uses its 917,000 acres of land intensively to accommodate the wide range of mission-related activities. Maneuver areas equal more than 90 percent of post land. Fort Wainwright personnel also work with the Coast Guard and/or Navy when they have ships in Alaskan ports such as Valdez and Homer. They also practice helicopter deck landings when possible – such as during Exercise Northern Edge.

Northern Edge is an annual exercise held for about one week in the summer that is designed to simulate joint operations, techniques, procedures, command and control relationships, and enhance interoperability. On even years, Northern Edge is organized by the Pacific Command from Hawaii and is focused primarily on air to air training among the military services. In 2004, approximately 9,000 Soldiers, Sailors, Airmen, Marines and Coast Guards personnel practiced tasks associated with the joint operations, with over 160 aircraft and 9 ships, including the carrier USS John C Stennis, participating. On the odd years, the exercise is organized by the U.S. Northern Command and involves numerous state and federal partners as well as the military and focuses on Homeland Security and defense.

Currently, soldiers from Fort Wainwright conduct military exercises in the following areas:

- Fort Wainwright Post – 13,700 acres located in central Alaska, north of the Alaska Range in the Tanana River Valley, adjacent to the City of Fairbanks.
- Tanana Flats Training Area – 655,000 acres located just south of the main post.
- Yukon Training Area - 247,952 acres located east of Eielson Air Force Base.
- Donnelly Training Area – 624,000 acres located 100 miles southeast of Fairbanks.

Per Public Law 87-327 and AR 200-3, portions of the Training areas are open to civilians and off-duty military personnel for outdoor recreation such as hunting, fishing, trapping, berry picking, hiking and nature photography.

The United States Army is in the process of transforming the current armed forces at Fort Wainwright to a Soldier-centered integration of ground, air and space systems operating across the entire spectrum of combat operations. This transformation is affecting training, leadership development, organizations, installations, material and Soldiers. This transformation also includes construction of support training facilities such as a new barracks and company operations facilities which are currently underway.



Stryker Vehicle and typical contents

http://www.wainwright.army.mil/172_SBCT/Images/Galleries/Stryker_Layout/index.htm

As part of this action, the Army recently transformed the Light Infantry Brigade at Fort Wainwright into the 172nd Stryker Brigade Combat Team (SBCT). The mission of the Stryker Brigade, or Arctic Wolves, is to develop a well-trained team that can deploy rapidly to a designated contingency area of operation by air and conduct operations either as a separate Brigade Combat Team or under the control of a contingency force headquarters. Compared to a

light infantry brigade, a SBCT has about 29 percent more personnel which primarily affect the reconnaissance platoons.

To meet the military objectives of the SBCT, the army plans to eventually increase the number of Soldiers stationed at Fort Wainwright, to obtain additional combat vehicles, increase arms and maneuver air requirements and escalate the use of the range and training facilities. Fort Wainwright is also scheduled to get a new company of OH-58D Kiowa Warrior helicopters from Hawaii this summer (2006).

The Bureau of Land Management, Alaska Fire Service operates out of Fort Wainwright. They have ten fixed wing and five to seven helicopters which generally fly between May 1st and approximately September 15th (depending on fire season). Their logistical aircraft, which provide support for fire fighting, training and surveillance operations fly at least five days a week or more during fire season. These aircraft are also used for transporting BLM field research staff. Their fire fighting aircraft fly primarily during fire activity and often fly continuously for 2-3 weeks during extensive fire activity. Approximately 10,000 hours are

put on the all of the Alaska Fire Service aircraft⁷. The State of Alaska, Fire Operations also occasionally base aircraft at the Fort Wainwright Airfield and during fires, tanker, lead or air attack aircraft use the field.

Eielson AFB

The 354th Fighter Wing is the host unit at Eielson AFB. The 353rd Combat Training Squadron (CTS), stationed at Eielson, controls and maintains Eielson's vast aerial ranges which are used to provide air-to-ground training for Eielson pilots and visiting aircrews during Red Flag Alaska exercises. The 353rd Range Division reports to Elmendorf Air Force Base near Anchorage and oversees scheduling, operation and maintenance of three impact areas. They also provide maintenance support for aircraft deploying to Eielson for any testing purposes.

All the activities on Alaska's three weapons training ranges – incorporating 28 threat systems, and 235 targets for range and exercise operations – are planned and controlled by 353rd CTS personnel. Tactical ranges supervised by the squadron's range division include Blair Lakes, Yukon and Oklahoma Ranges. The Blair Lakes Conventional Range is located approximately 26 miles southwest of Eielson AFB. The Yukon Tactical and Electronic Warfare Range is located 15 miles east of Eielson and the Oklahoma Range is located 20 miles west of Delta Junction. Accessible most of the year, this mountainous complex is only manned as necessary to provide electronic warfare training. The entire airspace is made up of 17 permanent military operations areas and high altitude training areas, plus three restricted areas, for a total airspace of more than 66,000 square miles.

In 2006, an Air Force training exercise called Red Flag Alaska replaced Cope Thunder, which was the largest aerial exercise in the Pacific Command area, and was held three to four times a year. Red Flag Alaska broadens the participants to encompass more Air Force Units including the 64th Aggressor Squadron from Nellis Air Force Base in Nevada. The Alaska exercise is unique among most U.S. training exercises in that it offers about 67,000 square miles of air space in which to train; this is the largest training area of its kind in the nation.

⁷ Interview between Nicole McCullough, ASCG and Jim Truitt, BLM, Alaska Fire Service, April 26, 2006.

The basic mission of the training exercise remains the same: a realistic, 10-day air combat training exercise designed to bring Pacific Rim nations to Alaska to train and fight together. This exercise showcases multi-national airlift operations combined with interdiction, personnel recovery and counter-air missions. Some of the participating countries have included the United Kingdom, Australia, Singapore, Korea, India, France, Spain, Malaysia and Japan. These countries bring transport, fighter and ground teams to add to the diversity of combat employment. On an average, more than 700 people and up to 60 aircraft deploy to Eielson, and an additional 500 people and 40 aircraft deploy to Elmendorf Air Force Base, for each Alaska exercise. At the height of the exercise, up to 70 jet fighters can be operating in the same airspace at one time. The exercise also brings support personnel such as maintenance crews. All Red Flag Alaska exercises take place over Alaskan and Canadian airspace. Red Flag Alaska, unlike Cope Thunder, will host a dedicated aggressor fighter squadron for the war games.

In response to complaints of high-speed, low-altitude jet traffic, the military established no-fly zones and altitude restrictions in parts of the airspace to minimize the noise impact on humans and wildlife.

Eielson personnel have also participated in the Northern Edge exercise discussed previously. In 2006, their participation in the Northern Edge exercise is expected to be minimal.



A moose loose on the Eielson tarmac.

Due to the recent BRAC Commission decision, Eielson AFB is expected to lose its A-10 units (about 18 aircraft). However, the closure of the Galena Air base (also due to the recent BRAC Commission decision) may result in an increase in some aircraft at Eielson.

Overall, there will be no net increase and actually, military planners expect a slight decrease in overall based aircraft.

Several construction projects are planned and taking place at Eielson. Proposed projects include a large multi-million dollar (\$45M) rehabilitation project on the Ordnance Storage Area. The Chapel is being replaced with a Base Exchange (BX) /Commissary complex. The front gate is also being relocated near the existing gate.

There are also transportation projects that impact Eielson AFB. The Alaska Railroad is currently studying a new rail line to Fort Greely, which will be constructed to operate between Eielson AFB and the Delta Junction/Fort Greely area. The project would involve the construction and operation of approximately 80 miles of new main line track and could include an approximately 19-mile rail spur to the U.S. Air Force's Blair Lakes training area.

Additionally, the ARRC is currently in the environmental documentation stage of a realignment of its tracks through Fort Wainwright from Trainor Gate to 3-Mile Gate on the Richardson Highway.

In 2006 the Department of Transportation and Public Facilities has a project scheduled to construct a new Eielson access road (including an overpass) off the Richardson Hwy. The base is rebuilding the main gate as part of the project, which is called the "Richardson Highway Milepost 341 Eielson Access Ramps". The Department of Transportation and Public Facilities is scheduled to complete the Richardson Highway intersection project in 2006.

2.5 Regional Demographics and Growth Trends

Historical and forecasted population data for the FNSB were obtained from the 1960- 2000 US Census, the Alaska Department of Labor and Workforce Development and the Fairbanks Metropolitan Area Transportation Plan. The data indicates that the FNSB has experienced steady growth over the past decades, with an average growth between 1960 and 2000 of 1,050 people per year.⁸ Current indications are that this trend will continue into the future.

In the 1970s, the construction of the Trans-Alaska Pipeline resulted in local population increases. By 1980, the State and local economies were boosted with the startup of State oil royalties and record level energy prices. State revenues were used to support many government and private sector jobs and projects. There was a build up of new retail development in the Fairbanks area during this time, which in turn brought increased competition and availability of goods and services, improved transportation, and new jobs. In the mid-1980s, the price of oil plummeted, which caused drastic cuts in State spending and the loss of many jobs. Between 1990 and 2000, the national economy was generally thriving,

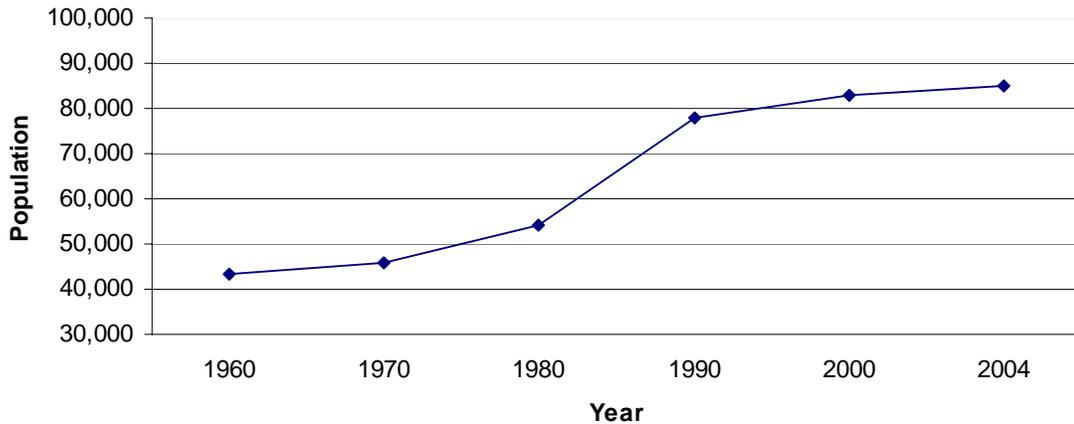
⁸ FMATS Long Range Transportation Plan, July 2005, p. 44.

with low inflation and low interest rates. Alaska also benefited from increased federal spending on programs, public works, and the military during this time.

In 2004, Fairbanks was the fastest growing economic area in the state. Fairbanks employers added more than 900 jobs, and the 2.5 percent rate of growth was the most robust since 1998. Retail development produced the largest single gain among the individual industry sectors. Employment gains also took place in the healthcare, professional services, manufacturing, and leisure and hospitality sectors.

Figure 3 shows the historical population for the FNSB between the years 1960 and 2004. The Borough population increased by approximately 105 percent during this period.

Figure 3 Fairbanks North Star Borough Historical Population Data 1960 – 2004



Source: US Census 1960-2000, State of Alaska Labor Alaska Department of Labor and Workforce Development

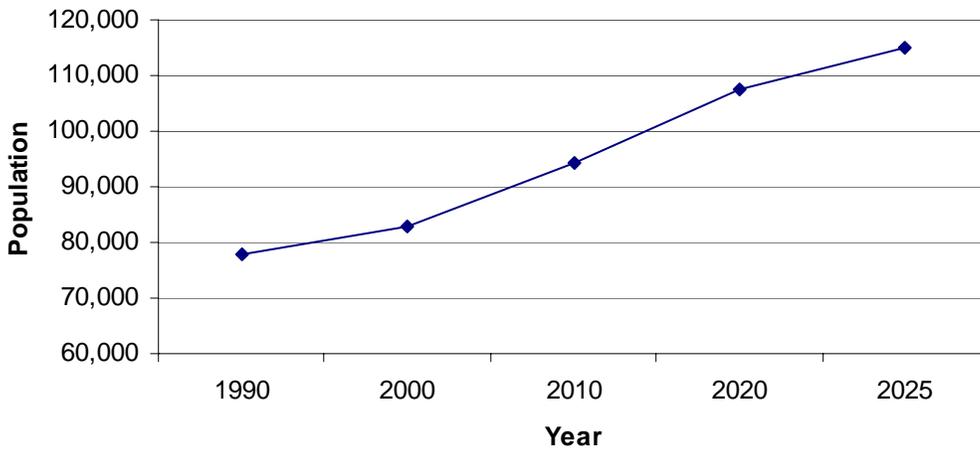
The military presence in the Fairbanks North Star Borough accounts for a significant portion of the communities and economic base as outlined in Section 2.2. According to the Environmental Impact Statement for the Stryker Brigade, the Army estimates that the added personnel, dependents, civilian jobs, and economic impacts will increase the total Borough population by approximately 4 percent.⁹ In addition, training areas available to both the Army

⁹ Transformation of U.S. Army Alaska: final environmental impact statement, United States Army Alaska, Department of the Army, Colorado State University, 2004.

and the Air Force in Alaska will likely support a strong military presence for many years to come.

In 1998, the Research and Analysis Section, Demographic Unit of the Alaska Department of Labor, updated three 20-year population growth scenarios (high, medium and low) for Alaska. These numbers were generated primarily from estimated birth rates, death rates, natural increases, and net migration. The high range estimate was 114,875 for the Fairbanks North Star Borough by 2025. The Fairbanks Metropolitan Area Transportation Plan population forecast is 115,000 by the year 2025 as shown in Figure 4.

Figure 4 Fairbanks North Star Borough Population Forecast 1990 – 2025



Source: Fairbanks Metropolitan Area Transportation Plan, 2005.

3.0 Technical Information

3.1 *Compatible Use Zones*

Eielson AFB conducted the first Air Installation Compatible Use Zone (AICUZ) study in 1978 with updates in 1992 and 1996. Fort Wainwright completed an Environmental Noise Management Plan in 2001. These documents examined the noise typically associated with flight operations at the airfields and evaluated noise management tools such as land use compatibility guidelines and policies, establishment of a noise complaint management process, pilot education about noise policies and regulations.

The purpose of the AICUZ Program is to promote compatible land use patterns around air installations. The AICUZ Program was initially established by DoD in response to the Noise Control Act of 1972 to promote an environment free from noise that jeopardizes public health or welfare. AICUZ also serves to protect Air Force, Army, and Navy airfields from encroachment and incompatible land development. It provides a means to balance the need for aircraft operations with community concerns. The goal of the AICUZ Program is to protect the health, safety, and welfare of those living near a military airport, while preserving the airport's defense-flying mission.

The AICUZ recommendations also include height and obstruction criteria for flight safety, as well as recommended land uses for areas exposed to noise and accident risk. The AICUZ process identifies areas that are exposed to noise using a computerized simulation of aircraft activity at the installation. The exposure varies based on site-specific operational data; e.g., flight tracks, type and mix of aircraft, aircraft profiles (airspeed, altitude, power settings), and frequency and times of operations.

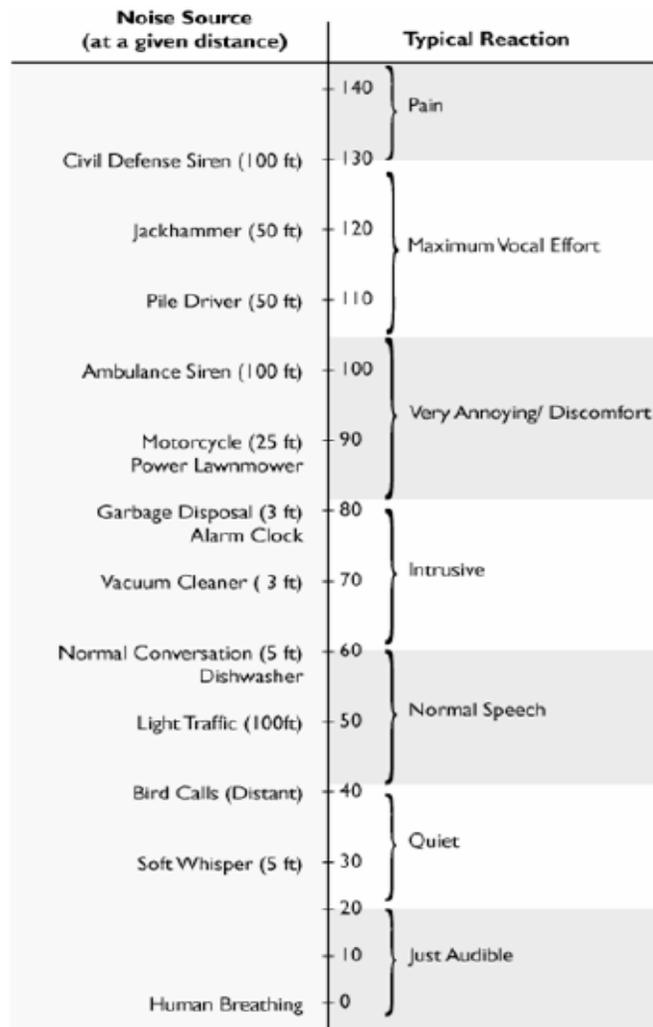
Noise Zones

The AICUZ expresses noise around the military airfield using a Day-Night Average Sound Level (DNL). The DNL descriptor indicates average decibels (dB) as measured over a 24-hour time period. When the military measures noise in decibels (dB) it assigns a weighting based on the noise frequency and source. A-weighting, expressed as dBA, depicts higher frequency noise caused by small arms firing, aircraft use, and vehicle operations. C-weighting shows the low frequency noise and vibration associated with the firing of larger weapons systems (dBC). Though the impulsive noise produced by large arms weaponry can cause

vibration and the shaking of nearby buildings, the noise is air-borne. Sound is not transmitted through the ground as a result of mortar or artillery impact on the post, but instead travels through the air. Noise in excess of 55 dB can become intrusive and continued exposure to noise above the 85 dBA threshold can, over time, cause hearing loss. Figure 5 shows the common sounds and noise levels with the sound of everyday activities.

The contours around Fort Wainwright and around Eielson AFB reflect an annualized noise measure that converts noise varying from peak bursts to relative quiet into a steady measure of acoustic energy over a 24 hour period. The contours essentially take all operations that occur at the military bases over the year and divide by 365 days, producing the DNL.

Figure 5 Common Sounds and Noise Levels, A-Weighted



The Army depicts noise based on a computer simulation that processes data such as the type of weapons fired from each range or firing point including demolitions, the number and type of rounds fired from each weapon, the location of targets for each range or firing point and the amount of propellant used to reach the target. The DNL is the standard, accepted methodology for modeling the noise impacts of military activity on surrounding lands. The modeling takes into account variables such as:

- maximum loudness;
- how long the sound lasts; and
- the number of annoying sounds

The measure further “penalizes” or places a higher decibel value on noise that occurs at night because it is more disruptive to the surrounding population. In addition to operational characteristics, such as the type of weaponry used, a variety of meteorological factors, including wind, air temperature, humidity and cloud cover, can affect the path and the intensity of noise as it travels from its source. For example:

- wind moves the air and thus carries noise farther;
- humid air has more density, thus carrying noise farther from the source; and
- low, dense cloud cover can reflect more noise back to the ground, thus increasing sound intensity.

Atmospheric temperature gradients also affect aircraft noise propagation. During periods of normal temperature gradients, where air temperature steadily decreases with increasing altitude, aircraft noise is, for the most part, deflected upward, thereby producing areas of little or no noise on the ground at certain distances from the aircraft. During periods of atmospheric temperature inversion which often occurs in the winter in the Fairbanks area, the reverse situation is true and aircraft noise tends to be deflected downward, thus increasing ground noise levels.¹⁰ This factor is not part of a typical noise analysis so actual noise may be higher during inversion periods than shown in the noise zones.

¹⁰ Gladwin, D.N. 1978. A*E*I*S: an airport environmental information system for Virginia. M.S. Thesis, Virginia Polytechnic Institute and State University, Blacksburg.

Experts at the Environmental Noise Program, US Army Center for Health Promotion and Preventive Medicine, created the noise zones shown below. The zones and corresponding land use guidance as identified are as follows:

Noise Zone 1 - Noise Zone 1 has an exposure of less than 65 DNL. In general, noise levels of less than 65 DNL are thought to be low enough to be compatible with sensitive and residential uses.

Noise Zone 2 - Noise Zone 2 exposes people to noise between 65 and 75 DNL. Some land use controls are therefore appropriate for this area. Noise exposure within this area is deemed to be significant and limiting use of land to non-sensitive activities such as industry, manufacturing, transportation, and agriculture is recommended. Examples of sensitive land uses include housing, schools, medical facilities, and places of worship. If the community chooses to allow these uses it is recommended that the design and construction of the buildings incorporate noise level reduction (NLR) features to minimize the annoyance experienced by residents.

Noise Zone 3 – Noise Zone 3, with noise in excess of 75 DNL, is the most severely affected area around the airfield and should be subject to the most restrictive land use controls. Noise in this zone is indicated to be severe enough to cause conflicts with almost all activities, particularly sensitive land uses, such as housing, schools, medical facilities, and places of worship, and these uses should not be allowed.

In addition to these zones, the AICUZ may identify areas of concern where noise levels do not exceed 65 DNL, but operational characteristics, such as repetitive flying patterns, may be objectionable. Noise exposure appears on AICUZ maps as contours that spread outward from the runways.

Fort Wainwright

Noise Zones

Noise zones on Fort Wainwright range from Noise Zone 1 to Noise Zone 3 and follow the same parameters as defined in the Air Force's AICUZ program. Noise sources on Fort Wainwright include traffic, airplanes, helicopters and large and small caliber weapons. For the purposes of this study we have broken Fort Wainwright's noise environment into three areas: the Main Post, Tanana Flats Training Area and Yukon Flats Training Area. The Noise Zones for Fort Wainwright are shown in Figure 6.

Main Post

Noise Zone 3 contours are all contained within the installation as shown in Figure 6. Generally Noise Zone 1 and Noise Zone 2 are also mostly limited to the Main Post with the exception of Approach Hill.¹¹ Special conditions such as unfavorable winds could result in negative impacts on residences in this location.

Approach Hill - Noise Zone 1 contours extend slightly off Post to include a small portion of Approach Hill located just east of the runway and outside of the city limits. A subdivision known as Secluded Acres is located there. Approximately 6.25 acres lie within Noise Zone 1, as shown in Figure 6. The potential noise is due to aircraft operations.

Tanana Flats Training Area

Existing operations that generate noise in the Tanana Flats Training Area are primarily maneuver training, occasional large caliber (>22 mm) weapons fire, and demolition activity. There is one area outside of the training area along the Richardson Highway Corridor that falls within Noise Zones 1 and 2. That area has the potential to be impacted by impulse (blast) noise from artillery training south of the airfield. Potential uses in the area may include residential, commercial, industrial and institutional.

Yukon Flats Training Area

The Noise Zones for the Yukon Flats Training area are concentrated towards the center of the training area and away from potentially sensitive areas off-post. The noise sources include demolition activity and artillery firing.

¹¹ *Installation Environmental Noise Management Plan, Fort Wainwright Alaska, US Army, Montgomery Watson Harza, October, 2001.*

Note: The Installation Environmental Noise Management Plan, Fort Wainwright Alaska, referenced above also refers to a noise conflict due to small arms firing in the area of Hamilton Acres. But discussions on April 4, 2006 with military personnel at the Technical/Policy Committee meeting indicate there are no small arms firing ranges in this area.

Figure 6 Fort Wainwright Noise Zones

Eielson AFB

Most of the noise associated with Eielson AFB results from aviation activity that takes place between April and September. These noise contours should be viewed as a planning tool, not as a series of discrete lines that sharply divide noise-affected land from non-noise affected areas. But, the contours are a useful framework for identifying those areas off post in which noise exposure may be high enough to generate annoyance among a certain percentage of people. In addition to assigned aircraft, transient aircraft from other military installations routinely take-off and land at Eielson AFB. Average daily flight operations increase from about 160 to 330 during Cope Thunder (now Red Flag Alaska) Exercises.¹² The noise zones for Eielson are shown below in Figure 7. Portions of the Richardson Highway fall within the 80-65 DNL.

¹² Eielson AFB, United States Air Force, *AICUZ Study*, Volume 1, November, 1992.

Figure 7 Eielson Noise Zones

Accident Potential Zones

Communities near airports are exposed to the possibility of aircraft accidents even with well-maintained aircraft and highly trained personnel. Despite stringent maintenance requirements and extensive training, the potential for aircraft accidents exists at both Eielson AFB and Fort Wainwright's airfield and the surrounding areas. DoD provides Accident Potential Zones¹³ (APZs) around its airfields as a planning tool to local land use agencies and the Department of Defense. APZs identify areas where an aircraft accident is more likely to occur. The determined accident potential is based on historical accident data. Areas at risk for accidents are classified in three zones:

Clear Zone (CZ). The Clear Zone is the area of highest aircraft accident potential and is located at the immediate ends of the runway. By definition, a CZ should have no buildings, structures, or other surface use that could impair takeoff and landing of aircraft. The only DoD recommended land use is agriculture, provided that a crop does not attract birds.

Accident Potential Zone I (APZ I). APZ I is less critical than the CZ, but still possesses significant potential for accidents. A wide variety of industrial, manufacturing, transportation, open space and agricultural uses can exist safely within this area just beyond the CZ. However, uses that concentrate people in small areas, such as higher density housing pose a conflict with the safety risks of this zone.

Accident Potential Zone II (APZ II). APZ II is the least critical of the three air safety zones, but still carries a moderate potential for an accident. Compatible land uses include those of APZ I, as well as low density single family residential, and lower intensity commercial activities. High density functions such as multi-story buildings and places of assembly (e.g., theaters, schools, churches and restaurants), however, raise compatibility issues.

APZs follow arrival, departure, and flight track patterns. The shape of the APZ reflects the takeoff and landing patterns of the aircraft. The dimensions of APZ vary to accommodate the operational characteristics of the aircraft flown at the installation. The CZ and APZ dimensions for Eielson AFB and Fort Wainwright's Ladd Field are shown in Table 3.1.

¹³ *Airfield and Heliport Planning and Design*, Air Force Manual 32-1123 (I), Army Technical Manual TM 5-803-7

Table 3.1 CZ and APZ Dimensions for Eielson and Wainwright Airfields

Military Facility	CZ	APZ I	APZ II
Eielson AFB (Class B Air Force)	3,000 feet wide by 3,000 feet long	3,000 feet wide by 5,000 feet long	3,000 feet wide by 7,000 feet long
Ft Wainwright Ladd Field (Class B Army)	1,000 feet wide by 3,000 feet long	1,000 feet wide by 5,000 feet long	1,000 feet wide by 7,000 feet long

Source: *Airfield and Heliport Planning and Design TM 5-803-7*, Office of the Chief of Engineers, United States Army. <http://www.usace.army.mil/inet/usace-docs/armym/tm5-803-7/c-3.pdf>

DoD standards recommend against the presence of any structures in the clear zone, and residential structures in APZ1. Military guidance suggests low density residential uses of 1 to 2 dwelling units per acre in APZ2. As with noise zones, a variety of other commercial, industrial, and service uses can exist safely within APZs. Figure 8 shows Accidental Potential Zones for Eielson AFB and Figure 9 shows the APZs for Wainwright.

Figure 8 Eielson AFB Accident Potential Zones

Figure 9 Fort Wainwright Accident Potential Zones

3.2 Analysis of Existing Land Uses

The following analysis assesses the compatibility of existing civilian land uses around Fort Wainwright and Eielson AFB. When compatible, land uses can exist next to each other without causing interference or exposing people to risk or nuisance. In the JLUS context, the following land uses are generally deemed inconsistent when near military aircraft operations as delineated in DoD Instruction 4165.57, Air Installation Compatible Use Zones.

- uses that concentrate people in a compact area (certain residential densities, schools, churches, hospitals)
- vertical uses that encroach on air space (communications towers)
- uses that may draw birds/animals near airfields creating a strike hazard for aircraft (retention ponds)
- uses that may interfere with radio frequency
- uses that throw off excessive lighting and may impair a pilot's vision
- uses that throw off smoke, dust, and steam and may impair a pilot's vision.

The American National Standards Institute (ANSI) has published guidelines for assessing the compatibility of various types of land uses with different levels of sound exposures. Table 3.2 shows specific land use compatibility with yearly day-night average sound levels at a site for building as commonly constructed (i.e. without special sound barriers).¹⁴ ANSI S12.40 should be viewed as a recommended guideline and is not an enforceable regulation.

¹⁴ American National Standards Institute, *Sound Level Descriptors for Determination of Compatible Land Use*, S12.40-1990.

Table 3.2 Noise Levels and Land Use Compatibility

Land Use	Yearly Day-Night Average Sound Level (dB)							
	<55	55-60	60-65	65-70	70-75	75-80	80-85	95-90
Residential – single family (extensive outdoor use)	Compatible	Marginally compatible	Marginally compatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Residential – multiple family (moderate outdoor use)	Compatible	Compatible	Marginally compatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Residential – multistory (limited outdoor use)	Compatible	Compatible	Marginally compatible	Compatible with sound insulation	Compatible with sound insulation	Incompatible	Incompatible	Incompatible
Transient lodging (indoor use)	Compatible	Compatible	Compatible	Marginally compatible	Compatible with sound insulation	Incompatible	Incompatible	Incompatible
School classrooms, libraries, religious facilities (indoor use)	Compatible	Compatible	Marginally compatible	Compatible with sound insulation	Compatible with sound insulation	Incompatible	Incompatible	Incompatible
Auditoriums, concert halls (indoor use)	Compatible	Compatible	Marginally compatible	Compatible with sound insulation	Compatible with sound insulation	Incompatible	Incompatible	Incompatible
Music shells (outdoor use)	Compatible	Compatible	Marginally compatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Sports arenas, outdoor spectator sports (outdoor use)	Marginally compatible	Marginally compatible	Marginally compatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
Neighborhood parks (outdoor use)	Compatible	Compatible	Marginally compatible	Marginally compatible	Incompatible	Incompatible	Incompatible	Incompatible
Playgrounds, golf courses, riding stables, water recreational areas, cemeteries (outdoor use)	Compatible	Marginally compatible	Marginally compatible	Marginally compatible	Incompatible	Incompatible	Incompatible	Incompatible
Office buildings, personal services, business and professional (indoor use)	Compatible	Compatible	Marginally compatible	Marginally compatible	Compatible with sound insulation	Incompatible	Incompatible	Incompatible
Commercial (indoor use)	Compatible	Compatible	Compatible	Marginally compatible	Compatible with sound insulation	Incompatible	Incompatible	Incompatible
Livestock farming, animal breeding (outdoor use)	Compatible	Compatible	Compatible	Marginally compatible	Compatible with sound insulation	Incompatible	Incompatible	Incompatible
Agriculture (except livestock) (outdoor use)	Compatible	Compatible	Compatible	Compatible	Compatible	Marginally compatible	Marginally compatible	Incompatible
Extensive natural wildlife and recreation areas (outdoor use)	Compatible	Compatible	Marginally compatible	Marginally compatible	Compatible with sound insulation	Incompatible	Incompatible	Incompatible

Compatible  Marginally compatible  Compatible with sound insulation  Incompatible 

Source: ANSI S12.40, 1990. Appendix

In general, guidance states that housing is compatible with noise exposure up to DNL 55 dB. Standards indicate that with exposure between DNL 65-75 dB, additional protective measures, such as indoor noise reduction for residential and certain other types of indoor uses may be warranted.

In considering compatible residential land uses, the following guidelines should be considered:

- Is there a demonstrated community need for residential use that would not be met if development were prohibited in these zones?
- Where the community determines that residential uses are desired, structures should incorporate noise level reduction measures of at least 25 dB (65-75 DNL) and 30 dB (70-75 DNL).
- Noise level reduction criteria will not eliminate outdoor noise problems. However, building location and site planning, design, and use of berms and barriers can help

mitigate outdoor noise exposure particularly from ground level transportation sources. Measures that reduce noise at a site should be used whenever practical in preference to measures that protect only interior spaces.

Guidelines deem noise exposure that exceeds DNL 75 dB to be incompatible with all residential uses. Many uses, such as manufacturing, retail, government facilities, and agriculture can be suitable even within a relatively high noise setting.

In addition to ensuring that land uses should be compatible with noise levels, safety issues must also be considered. Certain uses are not permissible within the APZs described in the previous section because of safety considerations. Table 3.3 recommends compatible land uses within the various air safety zones around Fort Wainwright and Eielson AFB.

Table 3.3 Air Safety Compatibility Guidelines

Land Use	APZ II	APZ I	Clear Zone (CZ)
Households	Yellow	Red	Red
Industrial	Green	Green	Red
Retail	Green	Red	Red
Personal Services	Green	Red	Red
Public Services	Yellow	Red	Red
Outdoor Recreation	Green	Yellow	Red
Agriculture	Green	Yellow	Yellow

Compatible  Conditionally Compatible  Not Compatible 

Source: DoD Instruction 4165.57, Air Installation Compatible Use Zones

Fort Wainwright

About 13,000 acres of land within the main post are available for troop housing, maintenance, administration, community support facilities and open space. However, much of this land is unsuitable for housing development because of environmental issues such as wetlands. The

remaining land within the installation boundaries is dedicated to training use.¹⁵ This includes lands in the Yukon Flats and Tanana Valley Training area.

In the land surrounding Fort Wainwright, land uses vary from residential, commercial, industrial and institutional uses to the west and Undeveloped/Vacant or sparsely populated areas to the north, south and east. (See Table 3.4 and Figure 10).

Table 3.4 Fort Wainwright Existing Land Use Acreage within Noise Contours

Use	57-62 dB	62-70 dB	70+ dB	Total
Commercial	4	6	0	10.0
Industrial	>0.01	0	0	>0.01
Military	135	111	47	293
Other (misc.)	52	0	1	53
Residential	16	1	0	17
Vacant Land	1,097	779	421	2,297
Grand Total	1,305	897	468	2,670

Source: Fairbanks North Star Borough, Geographical Information System

¹⁵ *Installation Environmental Noise Management Plan, Fort Wainwright Alaska, US Army, Montgomery Watson Harza, October, 2001.*

Figure 10 Existing Land Use around Fort Wainwright

As mentioned previously, there are two areas off-post that fall within Noise Zone 1 or 2 and could be potentially impacted by noise. One is at Approach Hill near the end of the runway at Fort Wainwright and another along the Richardson Highway corridor. There is currently no land use designated as noise-sensitive at Approach Hill.

No noise sensitive land uses currently exist in the area along the Richardson Highway corridor; but potential uses in the area may include residential, commercial, industrial and institutional.

The Fort Wainwright CZs are located entirely within post boundaries. According to Fort Wainwright's Land Use Plan, although some activities occur within the CZ, the majority is training activity and is therefore acceptable because the activity is temporary. The Land Use Plan concluded that there are no incompatibilities in the CZ. However, *Airfield and Heliport Planning and Design, Army Technical Manual TM 5-803-7* indicates that while roads are allowable in the CZ, railroads are not. The Alaska Railroad tracks lie in the CZ to the west of the runway.

APZ I, to the east of the runway overlays land designated "Urban Area" in the FNSB Regional Comprehensive Plan, while APZ II overlays land designated "Urban Area" and a small area designated "Preferred Residential Land." On the west end of the runway, APZ I overlays residential land on base as well as in Fairbanks city limits. APZ II on the west, overlays existing residential and commercial land uses within the city limits.

Eielson AFB

In the land surrounding Eielson AFB, land uses vary from open/agriculture/low density, recreational and publicly owned military reservation land uses.¹⁶ The exception to this is the residential land located in the community of Moose Creek northwest of the base. (See Figure 11) The majority of land impacted by noise from Eielson AFB greater than 70 dB is contained on the base. Only 30 acres of vacant land falling in the 70-75 dB range are located off base. (See Table 3.5)

¹⁶ AICUZ Study, Eielson AFB, Volume 1, November 1992. Page 24.

Figure 11 Existing Land Use around Eielson AFB

Table 3.5 Eielson AFB Existing Land Use Acreage within Noise Contours

Use	65-70 dB	70-75 dB	75-80 dB	80+ dB	Total
Commercial	163	0	0	0	163
Farm Land	1,935	0	0	0	1,935
Military Land	19,571	11,658	6,781	4,221	42,232
Public Land	224	0	0	0	224
Residential	803	0	0	0	803
Vacant Land	752	30	0	0	781

Source: Fairbanks North Star Borough, Geographical Information System

The community of Moose Creek is not impacted by the noise zones, but a portion is located within APZ II of the approach end of runway 13 as indicated in Figure 8. Mobile homes and multi-family dwellings are located within the APZ II, both of which are incompatible uses.

The Old Richardson Highway and the New Richardson Highway, major four-lane arterials, merge together on Eielson AFB and extend through the base to the west of the runway. The highway is located within the CZ, and APZs I and II.

South of the base is an area designated by the FNSB as a rural settlement area; however, current residential density is less than one unit per acre. Land adjacent to the western boundary of the base was designated as preferred agricultural land in FNSB's Regional Comprehensive Plan.

Training Areas

The training areas, particularly the Tanana Flats Training area, are known for their prime habitat, particularly for moose, and are used extensively by hunters, trappers, airboaters and other recreational users. The Alaska Department of Fish and Game area biologist speculated that approximately one-third of the hunters in the training areas were military personnel.

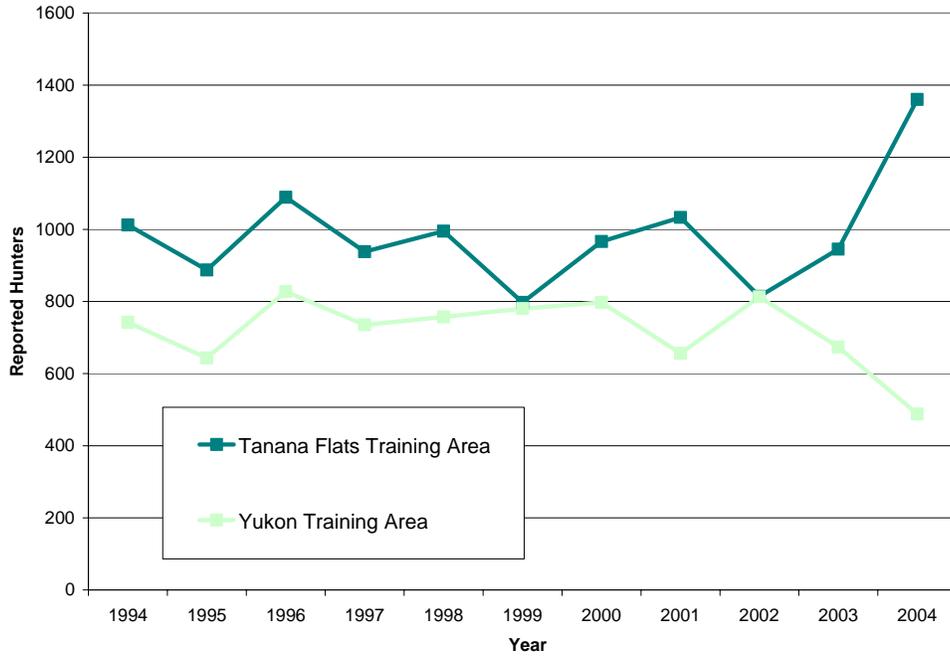
Tanana Flats and Yukon Training areas are part of two larger game management units (GMU) managed by the State of Alaska Department of Fish and Game (ADF&G) and designated as GMU 20A and 20B (see Figure 12). ADF&G keeps records for the GMUs but generally does not specifically keep records pertaining to the training area. As a special request for this project, the ADF&G used their data from GMU 20A and 20B to calculate the number of hunters and the number of harvested moose in Tanana Flats and Yukon Training areas from 1994 to 2004. Their data shows annual fluctuations but generally the harvest overall increased (see Figure 13 and Figure 14).

The area biologist indicated that fluctuations from 2001-2004 likely resulted from changes to moose management including an antlerless hunt being initiated in the Tanana Flats Training Area.¹⁷ The antler-less hunt was initiated because of the large moose population in the Tanana Flats Training Area and is very popular, bringing hunters from other parts of the state to participate. Troop deployment to overseas locations may also cause fluctuations in the moose harvest and number of hunters in these area but these statistics were not available.

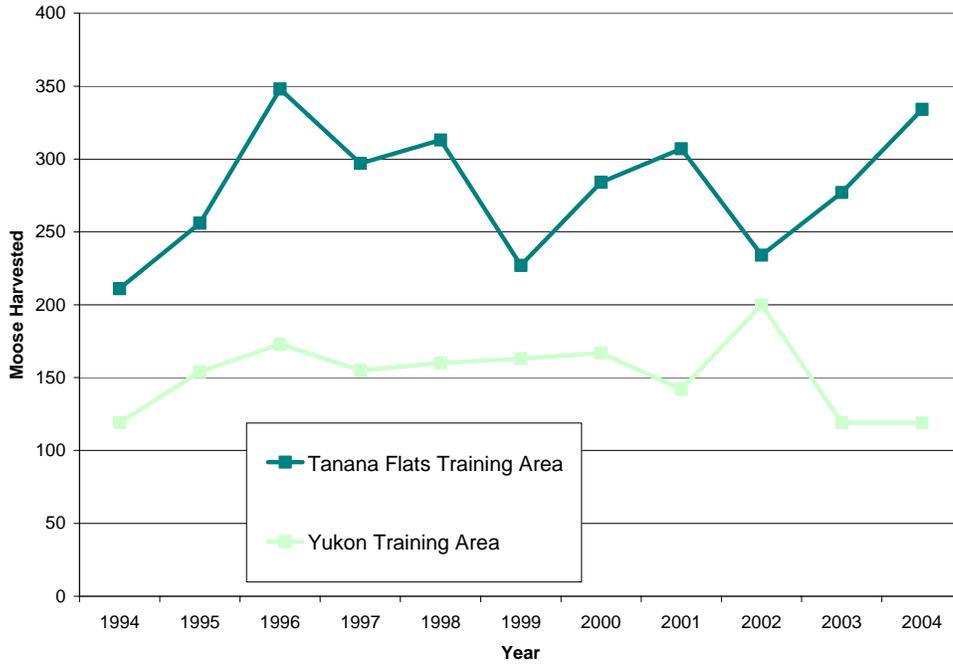
¹⁷ Telephone conversation between Nicole McCullough, ASCG and Don Young, Alaska Department of Fish and Game, Area Biologist, Fairbanks, Alaska.

Figure 12 Training Areas and Game Management Units

**Figure 13 Number of Hunters that Reported Hunting in Tanana and Yukon Flats
1994-2004**



**Figure 14 Number of Moose Reported Harvested in Tanana and Yukon Flats
1994-2004**



3.3 Existing Noise/Land Use Policies

Army

Noise Management Regulations

The Army's current noise management practices are laid out in Army Regulation 200-1.¹⁸ Its stated goals are to:

1. Control environmental noise to protect the health and welfare of people, on- and off-post/Civil Works Facility (CWF), impacted by all Army-produced noise, including on- and off-post/CWF noise sources.
2. Reduce community annoyance from environmental noise to the extent feasible, consistent with Army training and materiel testing activities.

Ten policies based on land use compatibilities set out guidelines for the Army's noise program. These policies focus on continual evaluation of noise produced by ongoing or proposed Army actions/activities. Compliance with Federal laws and noise regulations is stressed and equipment modifications recommended when possible to reduce noise. The policies state that every effort should be made to plan for compatible land use, but that all practical means of achieving acceptable noise levels should be exhausted and the operational integrity of the mission threatened, before considering acquiring property rights solely on the basis of incompatible noise levels.

Environmental Noise Management Plan

Fort Wainwright adopted an Installation Environmental Noise Management Plan (IENMP) in October 2001. As of the time of the plan, there were few complaints made with Fort Wainwright regarding noise concerns, and those complaints that were logged tended to be questions about what the noise was and when it would end. According to base personnel, the

¹⁸ Final Transformation Environmental Impact Statement, US Army Alaska. Appendix H, p.3-159. 2004.

practice of providing advance notice of training schedules to the community significantly reduced the number of such calls received.

Recommendations provided in the IENMP, which were provided as a range of possible preventative measures to minimize future noise problems, fall into several categories:

- ***General recommendations.*** These deal primarily with ways to disseminate information to the community regarding unusual noise generating activity, ways to respond to noise-related complaints, and suggestions about locating noise-generating activities (such as firing ranges and training exercises) away from noise-sensitive receptors.
- ***Specific considerations for airfield-related noise disturbance or safety-related issues.*** These recommendations are designed to minimize noise conflicts through land use planning in the areas surrounding the airfield, pilot education and flight path modifications.
- ***Weapons-training related considerations.*** These present recommendations about time of day, climatological considerations, and noise barriers.
- ***Additional options for case-by-case issue resolution.*** These options include the development of a JLUS, among many other recommendations.

The Army's responsibilities were summarized in the IENMP as:

- Respond quickly to complaints.
- Successfully resolve complaints.
- Monitor the number and nature of complaints.
- Review training patterns that could change noise contours.
- Remain involved in FNSB's land use planning process.

Since the number of noise complaints is currently low, the IENMP did not identify specific desired actions for the public to take. However, the IENMP did recommend that Fort Wainwright staff be included in FNSB land use planning, development and regulation processes dealing with the area surrounding the base.

Transformation of U.S. Army Alaska: Final Environmental Impact Statement

In 2004, the U. S. Army published an Environmental Impact Statement (EIS) that provided information about the changing army mission in Alaska. In it, there were many existing and proposed recommended mitigation tools.

- ***Natural Resources.*** Several mitigation measures were recommended to respond to new or increasing impacts on wildlife and fisheries. It also recommended continuing updates to the Integrated Natural Resource Management Plan.
- ***Communication.*** The EIS had several recommendations about continuing or improving communication practices such as public notification of nighttime firing, and automated check-in phone system with information about daily closures.
- ***Recreational.*** Mitigation measures included several recommendations focusing on recreation such as monitoring recreational vehicle use, streamlining public recreational access permits, holding public informational meetings about recreational use on US Army lands.
- ***Transportation.*** The EIS describes the existing system of splitting convoys into smaller groups, staggering departure times and getting permits. The report also proposes considering alternate travel routes, such as rail and developing rail capability, as well as expanding the public notification of convoy activity.

Air Force

DoD Instruction 1465.57 sets forth DoD policy on achieving compatible use of public and private lands in the vicinity of military airfields. This instruction also describes the procedures for defining Air Installation Compatible Use Zones. A summary of Eielson's AICUZ guidelines is presented in section 3.1.

Section of DoD Instruction 1465.57 states that “As a first priority step, all reasonable, economical and practical measures will be taken to reduce and/or control the generation of noise from flying and flying related activities.” Typical measures might include situating engine test and runup facilities in remote areas whenever possible, provision of sound suppression equipment, and adjustment of air traffic patterns to avoid populated areas where this can be accomplished safely and without impairing operational effectiveness. Even after

these measures are taken, there often remain areas where total noise exposure will be incompatible with certain uses.

The DoD policy is to strive to achieve compatibility with civilian communities in areas around bases through joint land use planning and control processes conducted by the local community. Compatibility guidelines are those defined for Clear Zones, APZs, and Noise Zones described earlier in this chapter.

The method of control and regulation of land use in each zone is to be locally; however, in all cases the Air Force is available to assist with identification of planning areas and provide reasonable land use guidelines to the appropriate entities in control of planning in the affected areas.

Eielson Air Installation Compatible Use Zone Study

The AICUZ Study for Eielson AFB reviewed compatible land uses within the noise zones at Eielson AFB. The study made several recommendations to strengthen the relationship between the FNSB and the military. Its recommendations included modifying existing zoning ordinances and building codes, adopting height and obstruction ordinances, incorporating AICUZ policies into the FNSB Regional Comprehensive Plan. It also recommends formation of a working group to meet quarterly to discuss AICUZ concerns.

FNSB

Fairbanks North Star Borough Regional Comprehensive Plan

Existing planning policies in the FNSB Regional Comprehensive Plan recognize the importance of the military presence to the community and the need for a mutual relationship between community growth, goals, and the military's mission. Policies in the Regional Comprehensive Plan¹⁹ that work to this end include:

- *Economic Development Goal 1: To strengthen and expand the existing economy - Strategy 5: Recognize and promote the economic importance of the military's presence.*

¹⁹ Fairbanks North Star Borough Regional Comprehensive Plan, 2005 update

- *Land Use Goal 4: To enhance development opportunities while minimizing land use conflicts* - Strategy 11, Action C: Encourage cooperative military/community solutions to land use issues of mutual concern. Specific issues include the realignment of the Alaska Railroad Corporation (ARRC) route to meet the needs of both the military and the Borough; pursuit of joint land use studies such as this JLUS between the military and the Borough; and creation of alternative access to private land east of Fort Wainwright.
- *Community and Human Resources Goal 3: To embrace the cultural and historic heritage of the community* - Strategy 7, Action A: Foster social interactions among diverse cultures of the population by implementing an “Adopt-a-Service Member” program and encouraging the integration of the military population into the local community.

Fairbanks North Star Borough, Title 18

In Title 18, the FNSB Borough code, there are overlay designations that are applied to certain geographic areas in addition to their zoning districts. These provide for additional, unique regulations on land use development necessary for the public health, safety and welfare that are difficult or impossible to implement because of the standardized regulations of the underlying conventional zoning district(s). Overlay designations impose restrictions in addition to, not in replacement of, the restrictions of the underlying zoning district.

One such overlay designation that can be applied in relation to areas affected by noise from military aircraft is 18.48.080 ANSA – Airport Noise Sensitive Area. The purpose of this designation is “to provide information and notice to property owners, developers, public officials and others that the designated properties may be affected by aircraft noise.”²⁰ This designation is specifically intended to encourage airport compatible land uses in the area surrounding Fairbanks International Airport, but could be applied near Eielson AFB and the airfield at Fort Wainwright. This overlay designation may be applied to properties where the estimated 24-hour average aircraft noise levels may reach or exceed 60 DNL. While noise zone regulations generally use 65 DNL as the lower threshold as described in Section 3.1, when this overlay zone was created by the FNSB, the decision was made to adopt the more

²⁰ Fairbanks North Star Borough Code, page 18-37

conservative level of 60 DNL. The intent was to provide additional notification to potential and existing property owners in areas near local airports, primarily near the Fairbanks International Airport.

3.4 Analysis of Future Land Uses

The Fairbanks Metropolitan Area Transportation Plan included a review of existing land use and population information in eleven districts within the Fairbanks North Star Borough. An assessment was made of vacant subdivided residential land, undeveloped land suitable for residential uses and proximity to road access in more rural areas. From this analysis, planners concluded that within the core urban area there is a diminishing capacity for new residential development. However in the outlying areas, such as in the Badger Road area, there is great overall residential growth potential as land use pressure increases and property is cleared and developed.

Future land use patterns and growth trends within this area could raise compatibility issues with installation operations in the foreseeable future. The Transportation Plan and FNSB Regional Comprehensive Plan, in conjunction with the AICUZ and other military documents detailing incompatible areas and interviews conducted early in the process were used in this analysis.

Fort Wainwright

It appears that the most likely future land use conflict associated with Fort Wainwright will occur in the area east of the runway, in the Secluded Acres area. Access to this area was previously hindered by the lack of a bridge across the Chena River. The construction of a new bridge is scheduled and development of this property for residential purposes is likely. Figure 6 shows the location of Secluded Acres.

The other area of potential future land use conflicts is in the training areas. These areas provide important areas for recreational activities, such as hunting, fishing, boating, snowmachining, and dog mushing as well as other means of enjoying the outdoors. These areas include stocked lakes and significant game populations in relatively close proximity to a more highly populated area of Alaska. Because these lands are restricted to all recreational users – both military and civilians – and access is provided generally via permit, some data is available on recreational use. These permits are in addition to required State of Alaska licenses and permits for hunting, fishing and trapping. Data on recreational use indicate the

area is heavily used by hunters and is also proposed for increased military training activity. This could lead to continued conflict with hunting seasons.

Eielson AFB

The most probable future land use conflict associated with Eielson AFB is in the Moose Creek area. A portion of the community lies within the runway 13 APZ II with current uses in conflict with Air Force recommendations as described in section 3.2. (See Figure 8) Many uses are permitted in APZ II designated areas, with the exception of high density housing, industrial uses that would include hazardous or flammable chemicals, and public use facilities such as restaurants, churches, and cultural or educational centers that might cause a high-density gathering of people in the area.

Current zoning regulations do not protect these areas from development of future incompatible uses because the area is zoned general use allowing for almost any use as long as minimum lot size requirements are met.

4.0 Recommendations

4.1 *Compatibility Tools*

This section contains a series of tools that the military and the local governments can choose to adopt during the implementation phase of the JLUS process. All of the entities participating in the JLUS, including the Army, Air Force, cities and borough, retain the prerogative of selecting the compatibility tools that best reflect the specific issues, concerns, and needs of each stakeholder.

The JLUS Advisory Committee discussed the issues currently present and those that could be anticipated in the foreseeable future and developed this list of compatibility tools to address the issues. The JLUS project team also held public meetings in Salcha, North Pole and Fairbanks and additional small group meetings with community stakeholders to gather feedback on possible land use strategies. It is their intent that these options promote collaborative regional decision making and provide a means to balance community and military interests.

The resulting set of tools seeks a balance among these diverse interests by stressing:

- the feasibility of implementation;
- the ability to sustain the economic health of the region and protect individual property rights;
- the awareness of the value to the community of current recreational access to military lands;
- protection of the critical military missions performed by personnel at Fort Wainwright and Eielson AFB; and
- the protection of the health, safety, welfare, and overall quality of life of those who live and work in the FNSB and surrounding region.

This section lists the most promising options identified for reducing current and future conflicts between civilian and military land uses. The tools include measures that are designed specifically for local governments in the FNSB and tools specifically for military implementation.

Communications/Information

These tools establish clear mechanisms for information exchange among residents, local governments, and the military. Increased communication raises overall awareness of military activities and their associated impacts, and assists in identifying possible approaches to reduce use conflicts with surrounding communities.

Coordination/Organization

One of the most critical outcomes of the JLUS study is the process itself. Stakeholders from the community and military have the opportunity to build collaborative relationships, identify mutual interests, and work toward reasonable solutions that protect both civilian and military goals. Coordination and organization tools create the institutional capacity to support ongoing implementation.

Real Estate Disclosure

Prospective developers, buyers, and renters, particularly those new to an area, may be unaware of the special conditions that are part of living near active military airfields. A strong Real Estate Disclosure Ordinance educates individuals about the potential hazards and nuisances of aircraft operations and it allows them to make well-informed decisions about property investment around military installations.

Planning and Public Policy

Planning and public policy tools are intended to guide overall growth patterns within local jurisdictions in ways that support future military/civilian compatibility. In general, these strategies encourage new development in already developed areas away from military installations as a means of reducing future land use conflicts.

Sound Attenuation

One of the concerns expressed during public involvement activities is that noise generated by aircraft can diminish the quality of life for residents living near Fort Wainwright and Eielson AFB. This strategy seeks to reduce the intrusiveness of aircraft noise by protecting vulnerable land uses, particularly houses and schools. Sound attenuation refers to special construction practices designed to lower the amount of noise that penetrates the windows, doors, and walls of a building. Sound Transmission Class (STC) ratings measure the effectiveness of these building materials at blocking noise. Noise Level Reduction (NLR) represents the difference

between outside and inside noise levels. Materials with higher STC ratings reduce more outdoor noise, making indoor areas quieter and increasing the NLR. Generally in the FNSB, residents employ northern construction techniques, such as double-pane windows, that result in a higher NLR.

Acquisition

Acquisition refers to a series of tools designed to eliminate land use incompatibilities through voluntary transactions in the real estate market and local development process. Acquisition strategies are particularly effective tools because they advance the complementary goals of shifting future growth away from the airfields, while protecting the environment, maintaining agriculture, and conserving open spaces and rural character. A critical first step in implementing acquisition tools is to identify areas of conservation interest. Laying out protection priorities around airfields is of value in exploring possible partnerships with non-profit conservation groups and in requesting future acquisition funds.

Land Management Practices

These include provisions or regulations that control development densities and land use activities within established noise and safety zones around the airfields to protect the health, safety, and welfare of the public and maintain compatibility with military operations. These measures are intended to accommodate future growth, while minimizing the concentrations of people and activities that may trigger conflicts with noise and other operational impacts. Since local jurisdictions exercise land use control through tools such as zoning, any regulatory tool or revisions to current zoning would be implemented through the established FNSB Planning Department.

Military Operations

Just as the spread of growth from nearby jurisdictions can threaten the viability of Fort Wainwright and Eielson AFB military operations, changes in planned military missions, aircraft, and land use activities at the bases can affect the livability of surrounding communities. The purpose of operational modifications is to minimize the impacts experienced by communities around the bases, while protecting the viability of the military mission.

Resource Management

Resource issues are very important to residents in the FNSB and across Alaska. For many years, local residents have enjoyed virtually unlimited access to Tanana Flats and Yukon Training areas. This is a unique circumstance among the military bases that have or are currently in the process of creating JLUS documents. The tools that have been developed to address the resource management issues primarily revolve around improving communication and developing a forum for recreational users and the military to collaborate and adopt acceptable solutions that minimize impacts to recreational users and allow the military to use the ranges for the purposes for which they were intended.

The sections that follow identify the specific compatibility tools that would be available to the local jurisdictions of FNSB, City of North Pole, City Fairbanks and to Fort Wainwright and Eielson AFB.

4.2 Local Jurisdiction Recommendations

The JLUS identifies the following communication, coordination/organization, real estate disclosure, planning/public policy, and sound attenuation tools for all of the jurisdictions within the FNSB. (See Table 4.1).

1. Establish review procedures

To help ensure that the military is informed about any land use designation or action that might impact lands within the 65 DNL contour, the FNSB planning department would contact appropriate personnel to discuss and invite participation in actions pertaining to projects that may occur within the military's 65 DNL contour. The FNSB planning department would take the lead and work with the military leaders to identify the appropriate military contacts and establish review procedures.

2. Create a JLUS Natural Resources Working Group

To continue the momentum created by this effort, the local jurisdictions, in collaboration with the Army and the Air Force, would establish an FNSB Joint Land Use Natural Resources Working Group to address issues of recreational access and resource management. The group would focus on issues around training ranges, including civilian recreational access and natural resource management. The group would include a full range of stakeholder

organizations that have an interest in hunting, fishing, recreation access, and habitat management on military training ranges. This Committee could also be expanded to include the Delta Junction community and military representatives in that area. FNSB Planning Department is suggested as the organization to provide staff support, meeting space and other logistical support in a similar manner as for other FNSB-sponsored committees.

3. Continue meeting with community leaders for informal information sharing

Maintain regularly scheduled meetings in FNSB Mayor's office to informally and candidly share mutually beneficial community and military information. This would help to ensure ongoing sharing of information about changes on military operations, community impacts and community needs. These meetings could also be used as a forum for periodic review of the implementation of the overall JLUS recommendations.

4. Strengthen construction codes

Only the City of North Pole and the City of Fairbanks have building codes. These codes would be reviewed and modified as needed to ensure proper standards are in place related to noise attenuation. This action would make sure that new language within codes related to AICUZ areas would be added to direct that construction within the AICUZ area has the recommended noise level reductions. It is assumed that the current weatherization measures in the code will meet many noise attenuation needs.

5. Amend Title 17 to require note on plat for subdivisions within 65 DNL contours.

Amend FNSB Title 17 to require platting board review of each preliminary subdivision layout to determine if a documented noise impact exists. If so, apply note to plat notifying potential owners of the proximity to 65 DNL contours and offer sound attenuation recommendations. This will ensure that new construction within the AICUZ area has the recommended noise level reductions on the plat and that owners will be given notice of potential noise impacts.

6. Publicize established legal requirements for full disclosure in real estate transactions

Alaska Statute (AS 34.70) requires full disclosure by the seller. This existing tool can and should be used to ensure all buyers of property around military bases understand the potential

noise environment. This tool requires working with the local real estate community to ensure they understand and comply with this requirement.

7. Incorporate military noise contours into FNSB Regional Comprehensive Plan and Development Codes

Amend the FNSB Regional Comprehensive Plan and Zoning Code as necessary to ensure that local land use decisions are compatible with existing civilian and military aviation patterns. Expand the use of the current overlay zone to include areas within the 65 DNL contour identified by the military.

8. Increase military awareness of civilian land use issues around installations

Invite military representatives to the FNSB planning and platting boards on an as-needed basis to serve as two-way communicators on land use issues. This will help to educate Planning Commission members on impacts of their land use decisions on the military installations so they can make more fully informed decisions.

9. Adopt encroachment prevention measures

This would modify existing ordinances and regulations, such as Titles 17 and 18 to prevent encroachment on military lands that could compromise missions; work with military planners to obtain assistance in monitoring for enforcement purposes. This tool will help to prevent development near military lands that could compromise missions, to support development of compatible land uses outside the installation fence lines, and to bring existing uses into compliance.

In this context, “encroachment” is used to signify those uses of land closely surrounding Fort Wainwright or Eielson AFB that would impinge on the military’s ability to safely carry out their mission.

10. Adopt zoning ordinances to limit the height of objects around military airports.

While Federal Aviation Administration does not have the authority to restrict heights and obstructions, they do make recommendations and have a model (sample) ordinance (FAA Advisory Circular 150/5190-4) that communities can use to promote safety. The FNSB

would adopt a similar ordinance that prevents the obstruction of imaginary surfaces around military airports, as defined in 14 Code of Federal Regulations, Part 77, Objects Affecting Navigable Airspace. This would help to prevent obstructions to airspace on land outside the military installation that could compromise aviation missions. Amend local and/or regional comprehensive plans and zoning codes as necessary. The FNSB would coordinate with military installation staff to ensure the proper criteria are used for defining the imaginary surfaces.

11. Enforce Compatible Use Zoning

Establish a land use policy against re-zoning land to any category that permits permanent residential development, when such land lies within the existing or future 65 DNL contour. This will prevent development of incompatible residential uses within air operations areas.

12. Enforce mobile home and noise sensitive compatibility

This tool would restrict mobile home development within the existing and future 65 DNL contour. This action would prevent development of incompatible residential uses within air operations area. It would require review and amendments to the Regional Comprehensive Plan and zoning codes as necessary.

13. Maintain residential densities within existing and future noise sensitive areas

Adopt policy forbidding an increase of residential density for existing residential areas within the existing and future 65 DNL contour. This will prevent increased development of incompatible residential uses within air operations areas. This tool requires amending the comprehensive plan and zoning codes as necessary.

4.3 Military Recommendations

1. Monitor and provide input on land use

The military would monitor proposed land use development that might impact current or future military impact operations. Military staff would make a commitment to attend FNSB Planning Commission meetings as necessary to provide military perspective on civilian land use decisions. This tool would serve to give important input to local planning authorities on existing or proposed noise-sensitive land use issues (such as residential development).

2. Coordinate training schedules

The military would work with local and state government natural resources managers to communicate training schedules. This would help to minimize the impacts of training activities on wildlife populations and wildlife management particularly during hunting season. This information would be presented before the proposed JLUS Natural Resources Working Group.

3. Continue noise complaint management process and night time firing notification

Currently each base has a Noise Complaint Management Process handled through its public affairs office (PAO). This process would continue to operate and would allow for feedback from civilians on noise issues to assist with minimizing conflicts. The PAOs also have a process to notify the public of night time firing exercises, which would continue, and would serve to minimize conflicts through positive communications.

4. Strengthen public outreach efforts and communication of significant operational changes

The military would provide three days notice to the public for noise generated by unusual flight patterns or training operations, atypical use of munitions, convoys and atypical or new use of areas. This public outreach effort would expand to consider incorporating multimedia options (such as radio, television, and newspaper) and post-event notifications.

In order to minimize conflicts through positive communications, the military would maintain an active presence in the Chamber of Commerce and attend and support the informational needs of the Chamber's Military Affairs Committee. The PAOs would be tasked with disseminating appropriate information. This would include contributing articles related to operations and land use to such new outlets as News-Miner, North Pole mayor's newsletter, Salcha Community Council and ADF&G newsletter.

5. Develop an information and education program for Natural Resource management and continue and improve hunter awareness education

The military would develop and implement an information and education program for personnel using military lands. The program would emphasize conservation of wildlife and natural resources; develop protocol to reduce wildlife disturbance and negative wildlife-human interactions. It would provide recreational information such as hunting closures and

recreational restrictions in a timely manner. The natural resources managers would develop the program and work with JLUS Natural Resources Working Group and PAOs.

The military would continue to hold and expand hunter safety education courses and partner with ADF&G and other hunter safety groups to provide educational opportunities to the military community. This will help to promote awareness of the Alaska outdoors environment to interested military personnel who are new to Alaska. Classes would be programmed around seasons: fall and spring hunting season, spring/summer fishing seasons. This would minimize conflicts and maximize safety and enjoyment through positive education.

6. Build information kiosks

To provide information opportunities outside secure perimeters for ease of access, the military would build kiosks at all primary entrances to recreational areas on military lands and provide visitors maps and information geared towards that area. This would improve communications with civilian users of military lands.

7. Post local military noise contour maps and related information on the web and publish in local papers

The military would make the AICUZ and the Installation Environmental Noise Management plan and related maps available on publicly accessible website(s). This would be a task for the Fort Richardson PAO office to implement.

At the beginning of the spring, the military would publish a lay-public-friendly summary of noise related information in the local newspapers. It would include information about current and proposed changes to operations that might impact noise generation.

Both of these actions would help to minimize conflicts through positive communications.

8. Consider identification and acquisition of land that may be needed to protect military operations from encroachment.

The military would conduct an internal review to determine if there is a need to purchase or otherwise obtain ownership to lands that may be needed in the future to prevent encroachment that represents a threat to mission-essential military operations. This would remove key land use conflicts. A potential candidate might be Secluded Acres.

9. Pursue funding for DoD conservation land purchases

Consider partnering with local, state and non-profit entities to acquire land around military installations to prevent encroachment and allow for compatible recreational activities including hunting and fishing. This would minimize conflicts by purchasing land when a potential exists for recreational conflicts.

10. Augment noise management program

Establish (or activate) temporary noise monitoring stations when a complaint remains unresolved. Evaluate potential effects of any type of unusual noise on drivers along nearby or transecting roadways. Consider installing signs along the Richardson Highway to alert drivers to potential noise impacts. Integrate with existing PAO noise complaint process.

11. Maintain up-to-date noise contours in GIS

Installations would maintain up-to-date noise contours for both air traffic and firing ranges on installations in a GIS database. This information would be provided to the FNSB for integration into the Borough's data base and would be available to the public. This would assist in the review of air operations and major flight paths for conflicts with existing residences. It would also serve as a resource for individuals considering purchase of land in the impacted area.

12. Avoid flying over residential areas to the extent practicable.

To minimize noise-related conflicts the military would review flight operations on an ongoing basis and include civilian land use patterns into that review. To the most practical extent possible, the military would avoid flying low over residential areas. They would maintain a database of noise-related complaints, and incorporate that information into operations review.

13. Study the potential to locate or relocate firing areas

This would locate future firing and artillery ranges and training exercises away from noise-sensitive receptors and noise-sensitive areas. Military planners would review civilian land uses in siting facilities, and meet with the Planning Commission to solicit their input.

14. Continue ongoing convoy permitting

Continue to use the convoy permitting process with ADOT&PF. As part of the permit process, consider alternate travel routes and methods for military convoys, including line

haul, split convoys (per Army Regulation 55-2), airlift, and rail to avoid traffic risks and impacts on civilian emergency response. This would help to minimize conflicts between civilian traffic and military convoys on highways. This is currently a serious issue on the Richardson Highway between Fairbanks and Delta Junction.

15. Consider establishment of formal MOU with state and federal resource management agencies.

Use the Sikes Act amendments as a model to formalize cooperative land management responsibilities with USFWS and ADF&G. This will allow for resource sharing and improved communications between Federal and State agencies. Task the natural resources managers to develop the memorandum of understanding (MOU) and work with JLUS Natural Resources Working Group.

16. Access cards permit system for snowmachiners

Currently the military has a successful program for allowing snowmachiners access to military lands via an access card permit system. This would maintain this system and continue community goodwill through use of a proven ongoing program.

17. Study longer term lease agreements

Consider longer term lease agreements with local governments or recreational user groups for outlying military lands. This will provide a climate of certainty for ongoing public support and investment in those lands, e.g. Birch Hill ski area and the skeet area. Have legal staff review and determine issues. Work with congressional delegation to modify statutory requirements, if necessary.

18. Strengthen implementation of INRMPs as a means of enforcing of JLUS recommendations

Integrated natural resources management plans (INRMPs) contain specific actions to inventory, maintain, and improve wildlife habitat, as well as proper management of natural resources and recreation resources on military installations. They also guide civilian use of military training ranges and other lands, thus minimizing conflicts between civilian and military use.

By strengthening the implementation of the INRMP, there is potential for improving or maintaining good habitat and wildlife conditions. Some of the types of recommendations of the INRMP process include:

- monitor the effects of military training on select wildlife species (especially herd animals and waterfowl) during critical seasons such as breeding, rearing of young, and migration
- Conduct a detailed study to assess impacts of recreational vehicles to vegetation and continue to enforce recreational vehicle use policies
- Continue the use of environmental limitations overlays that indicate areas where maneuver training is and is not allowed.
- Provide appropriate training to MPs and land managers.

The INRMP process involves regular reviews and updates. During this process, coordination with JLUS Natural Resources Working Group would be required.

19. Maintain / initiate two-year renewal duration

Maintain the extended two-year renewal duration on the FWA and DTA Recreational Access Permits. A two-year permit duration would simplify public access to military lands. It would also help to guide civilian use of military training ranges and other lands, thus minimizing conflicts between civilian and military use.

20. Maintain USARTRAK automated phone check-in system. Use system to monitor recreational usage of training areas through USARTRAK phone system

Continue to implement the USARTRAK automated phone check-in system, using it to monitor recreational usage of each training area. Continue to inform military and ADF&G about use patterns, which should help to improve management for public access and recreation.

21. Fund conservation officers

Fully fund conservation officers to enforce state and federal game laws, and military rules and restrictions. This would help to guide civilian use of military training ranges and other lands, thus minimizing conflicts between civilian and military use.

22. Partner with ADF&G to create a one-stop permitting shop

Partner with ADF&G to establish a one-stop hunting and fishing permitting station at the ADF&G offices in Fairbanks. This eliminates potential problems related to access to the permit office on the bases.

Table 4.1 Compatibility Tools and Recommendations

Appendix A - Meeting/Interview Reports

Interview Summaries

Project: Fairbanks Joint Land Use Study
Date: November 7-10, 2005

Reporter: Nicole McCullough
Location: Fairbanks

Purpose: To conduct interviews with key stakeholders for the Fairbanks Joint Land Use Study. Interviews included interested parties from Tanana Chiefs Conference, Eielson Air Force, Chena Riverfront Commission, Tanana Valley Sportsmen Association, Military Affairs Committee, Northern Alaska Environmental Center and military personnel from Eielson Air Force Base and Fort Wainwright.

Interview Summaries: Doug Braddock, FNSB Project Manager, Nicole McCullough, ASCG Incorporated, Joe Cloud, EDAW Inc. and Kelley Hegarty, Hegarty and Associates conducted interviews with the various entities. Nicole McCullough and Joe Cloud were present at every interview.

Doug Braddock explained that this is the first JLUS in Alaska and that about 45 have been conducted for military installations outside. Doug said that the study was funded by the Office of Economic Adjustment, Department of Defense. It is the intent of the studies to try and reduce or eliminate land use conflicts between the military and the neighboring communities. The study may not solve or address completely all of the concerns but in some cases just provides the tools that the community and military can use in an ongoing fashion to reduce conflicts.

Nicole McCullough explained that the process included two advisory groups, a policy and a technical committee. These committees met jointly about six weeks previously. The study includes three rounds of public meetings and this was the first. The study is intended to be completed by around June. Comments collected at this meeting will be sent to all of those who attended and participants will be provided the opportunity to correct the meeting notes prior to a wider distribution. She also said that the notes will be provided on the web site.

Joe Cloud said his firm has completed many of these studies, four of which he had available for review. He said that generally the study results in identification of planning tools for use in four summary areas: planning, military operations, real estate and data development.

Planning actions examples are

- establishing a mechanism for further dialogue
- memorandum's of understandings,
- overlay zones,
- incorporation of findings in local Comprehensive Plan and Zoning codes
- further studies such as compatibility studies, or
- creating or reinforcing joint planning or coordination committees

Military operation actions examples given included:

- adjusting the number, frequency or seasonality of operations
- developing a new facility
- altering flight patterns

Real estate actions could include:

- working with the Multiple Listing Services to insure full disclosure on potentially affected properties
- Establishing local ordinances requiring full disclosure with property sale

- Land acquisition, conservation easements
- Noise proofing, noise retrofits, establishing local construction standards with regards to noise-proofing
- Establishing web sites for better communication

Data development actions could include:

- Better mapping, Geographic Information System development
- Creating maps for noise and air operations
- Creating APZ maps

Tanana Chiefs Conference (TCC): Doug, Nicole, Joe and Kelley met with TCC staff on November 7th, at 9:00 am at the TCC building. Present were TCC president Buddy Brown, TCC anthropologist Bob Sattler, Tom Gamza, TCC Archaeology/Environmental Quality staff, Paul Mayo, Acting Natural Resource Director and Thomas O'Brien, Environmental Restoration Program Manager.

General - Thomas explained that there were recent EISs that should be reviewed including the: Stryker Brigade Combat Team Transportation, U.S. Army, 2002; Donnelly Training Area EIS; Yukon Training Range EIS, and National Missile Defense EIS. Another good source of information is the TCC Tribal Environmental Restoration Program's (TERP) 1999 Final Report on Military Impacts to Tribes in Interior Alaska.

Thomas said that they have been told that there will be a higher level of training than in the past. Army and Air Force are expected to expand their current uses. More congested airspace is expected. TCC expressed a desire to have a clearer picture of overall intensity of USAF and Army activity: Ops tempo, scale of operations, mobilization issues, etc. Also what does "Army transformation" mean?

There was a question about the JLUS process and Nicole said she will send the link for the JLUS guidelines to the TCC participants. The guidelines might help to explain the purpose of the JLUS. [Note: the site is:
http://www2.co.yuba.ca.us/yubacomdev/planning/beale/jlus/JLUS_program_guidance_manual_Aug_2002.pdf]

Training Areas – There was a question about the study area and whether it included the training areas. These areas were of a larger concern than the bases proper. The Tanana Flats training area is 650,000 acres, the Yukon Flats is 250,000 acres and the Donnelly training area is 650,000. From a Native perspective increased use of the military training area will impact current traditional uses. Buddy wanted to know if it was possible to enlarge the study area. Doug agreed that those areas may actually be more of a concern to residents.

Communication - It is important for economic planning to understand future military increases, not only of soldiers but families as well and to be informed of it early. Is there a way to "nudge" the military to provide information about operations in advance? There was some communication between the military and TCC when the Stryker Brigade was coming to Fairbanks but there has not been much follow-through. The military that Thomas has met are very approachable but often their hands are tied and it is hard to know who can solve the problem. Thomas shared some resources including the DoD American Indian and Alaska Native Policy brochure. He also suggested looking at the recent EISs completed for Wainwright and the training areas as well as the EIS for the National Missile Defense system. Paul Mayo suggested coordinating with the Fairbanks Native Association during the course of the study.

The EIS for the Stryker Brigade and other military documents are often too large to be reviewed by Tribal entities that do not have the resources needed to provide meaningful input in a timely manner. Other ways of communicating are needed.

There is a history of mistrust between the Native communities and the military based on treatment that goes back to the 1940's when the military first arrived.

1/9th of the FNSB population is Native. There are no Tribes within the FNSB. There are 42 villages in TCC subdivided into several subregions. Primarily the eastern interior part of the Doyon region is affected by military activity. Eight different Athabascan dialects are spoken in an area about the size of Texas.

There was some concern about consulting with TCC since they were not a "Tribe". However, most villages have given formal permission for TCC to act on their behalf. The spirit of the government to government relationship should be there, based on village authorization. There are concerns about issues with the Army that occur outside of the organized borough.

Transportation – Tribal members in the Doyon Region are concerned about increased ATV and air boat use and airspace congestion due to the growing military population. There is also a concern about more traffic on the roads due to the increased military presence. There is a need to train new soldiers about driving in winter conditions.

Encroachments – There have been encroachments onto some archaeology sites. Young soldiers see the land as open and assume it is public land and trespasses occur. Nenana area was mentioned.

Social issues – There are social concerns, particularly with young soldiers. Orientation and cultural sensitivity training for new American and foreign soldiers could be improved. They expressed concern that the newcomers receive proper training about use of Alaskan lands for hunting and fishing.

Military Affairs Committee: Doug, Nicole, Joe and Kelley met with the Military Affairs Committee after the Fairbanks Chamber of Commerce luncheon on November 7th at 1:00 pm. Committee Chair Billy Blanchard and Althea St. Martin, Special Aide to Senator Murkowski attended.

Communication – Billy explained that they have an e-mail tree that helps them to inform members about issues. There is also the Mayor's Military and Civilian Committee that meets once a month to discuss specific issues of concern to both the military and the community. In addition to military and local government participation there are members from the military affairs committee and the school district, and the press is not allowed so people can speak freely. Billy thought that communication between the military and the community was good. Fairbanks stands up for its military. They mentioned the "Sound of Freedom" campaign related to publicizing noise issues around the Cope Thunder ops. They publicize actions in local papers – felt that was adequate. There is a military page in the newspaper. They mentioned that the Chamber was the main conduit for information flowing out of the Mayors Commission.

Military Affairs Committee members help to train each new commander about specifics to Fairbanks and assist them in their learning process.

Hunting – There were trespass cabins in the military ranges but those were removed. Some continue to “pop back up”. Some of the trespass cabins were elaborate. Sometimes the military closes hunting areas and hunting access. This is usually done by Fort Richardson with short notice and lack of understanding on the impacts to the hunters. There is limited coordination done with the AF&G on hunting closures and there is a lack of working with the community on that issue.

Encroachment – Mention was made of potential encroachment issues at Moose Creek (Eielson) and Secluded Acres (Wainwright). Secluded Acres was seen not as an encroachment, but an inholding of private residences surrounded by the Army lands. There have been many security issues since the families, their services (fuel, water, pizza deliveries, etc.) must go through gate security and travel on military property before reaching their private property.

Operations - Fort Wainwright may become a Garrison in the future (two years was suggested), like Fort Richardson. If this occurs more decisions will be made locally which will be good. The source of training increase in the future – probable 2nd Air Wing in Eielson to replace A-10’s, and 2nd Brigade (Kiowas) at Ft Wainwright)

We will be seeing an increase in training which makes this study even more critical.

Rotations can affect military operations and how things are done which can affect the civilian population.

Timing of rotations affects school enrollments and the reimbursements schools receive based on student count at the beginning of the year.

Transportation –Building the railroad to Delta Junction would relieve pressure on roads as large numbers of the Stryker vehicles will be traveling to the training areas there.

Eielson Air Force Base – On November 8, 9:00 am, at Eielson Air Force Base, Nicole and Joe met with Jim Blizzard and Joe Nolin, 354 Civil Engineers Squadron and William Farrow, the Public Affairs officer.

General – There are about 3,000 military on Eielson and about 5,000 or 6,000 if you count dependents and civilians.

Eielson infrastructure is independent – they have their own power source, sewer and water system. The heat is generated from steam from the power plant. They mentioned that concerns about ice fog are from Ft Wainwright power plant, not EAFB.

Housing can be a problem during the Cope Thunder exercises, particularly in the summer months when the tourists occupy the majority of the hotel rooms. Hotels are always full up during CT exercises.

Eielson is in the midst of a large multi-million dollar (\$45M) rehabilitation project on the Ordnance Storage Area, Quarry Road Automated Training Ranges. Also, they are rehabbing

the Chapel/BX/Commissary complex. They have opened up a temporary gate for transporting material. This gate will act as an emergency gate.

Operations – The AICUZ is old but was reevaluated in 2003 and was determined still accurate. There will probably be an additional Cope Thunder exercise in the winter which may warrant a new AICUZ. (If not, swap-out of the A-10 wing with replacement next summer will require new AICUZ). Cope Thunder was moved to Eielson from Clark Air Base in the Philippines in 1992, when the eruption of Mount Pinatubo forced the curtailment of operations there. Currently there are 3 or 4 Cope Thunder exercises a year which last for about 2 weeks and bring in military personnel from around the states and other countries. During these exercises, airspace restrictions are applied. Major Brewer is the best contact to learn more about Cope Thunder exercises.

With the closure of the Galena Air base, operations may increase at Eielson. The Combat Alert Cell could come to EAFB and would change AICUZ realities. Eielson is losing its A-10 units (about 18 aircraft).

Range training includes a manned strafing pit at Blair Lakes area.

The front gate is going to be relocated and improved. There is also a project to relocate military ordinance storage areas to one location (on base).

The Air National Guard presence at Eielson will be increasing, with KC 135 tankers arriving.

Encroachment – Moose Creek housing is located in APZ 1. Many residents of Moose Creek work on base. Moose Creek area is growing, increasing encroachment issues. There are potentially some encroachment issues developing in the direction of Salcha as well.

There is a policy regarding noise complaints (Air Force Instruction 35-101, Chapter 9, AICUZ/Noise Complaints – downloadable from www.af.mil). When the military affairs office gets a noise complaint they forward the complaint to the Operations office to investigate. It is the responsibility of the Military Affairs officer to get back with the complainant within 72 hours. If they are still not satisfied they repeat the procedure. The policy states that they can not refer the complaint to Fort Wainwright or elsewhere, even if the noise was not generated from Eielson.

In 2003 there were 11 noise complaints. In 2004, 16 noise complaints and so far in 2005, they have received 12 noise complaints. Complaints are typically low-flying aircraft or sonic booms – always increase during Cope Thunder.

Hunting – Only military personnel can hunt or trap on Eielson. They need to take a Hunter safety course. Some of the areas experience closures due to military exercises.

The Alaska Railroad is using land off of the Eielson Farm Road as a storage yard.

They recently built a Joint Mobility Center to assist transportation of munitions and Army and Air Force personnel although it is mostly personnel, not assets. Munitions are moved between April and November. Munitions come by truck trailer from Valdez.

Occasionally, commercial planes land at Eielson. Sometimes, Eielson planes land at Fairbanks International Airport.

The Eielson junior and high schools are used by students from Salcha.

The public affairs office is currently at only 20 percent of approved staffing levels.

FNSB/City Chena Riverfront Commission – At noon, November 8th in the FNSB Mayor’s conference room, Nicole, Joe, Kelley and Doug met with officials from the FNSB Planning Commission, Parks and Recreation Commission and Chena Riverfront Commission. Participants included the following: Deborah Horner, Judith Schiffler, Bill Bubbel, Franklin Eagle, Debbie Tilsworth, Paul Barrett, Michelle Calvillo, Cameron Leonard and Doug Sims.

Encroachments – The addition of the bridge over the Chena River will encourage development in Secluded Acres. There was a question about whether the study would consider only actual encroachments or those within the proximity to the bases but not actually encroaching onto base property. The study considers those within proximity as well. Loriann Quakenbush, the Borough platting officer, apparently studied the APZ issues with regards to Secluded Acres. Recommendation made to discuss these issues.

Recreation – The 100 mile loop trail also crosses military lands. Suggest talking to Trails Commission.

It is easy now to float along the Chena River through Fort Wainwright. Maybe it would be good to get public lease along river to ensure continued access. Suggestion was made to discuss the legal status of the submerged lands on base with the State – Suggested contact is Chris Milles, acting DNR Northern Region Manager, 451-2711.

General - If any gates are closed, like was done recently in Anchorage at Elmendorf AFB, it could have negative affects.

Fort Wainwright has done several good beautification projects but Eielson has not. Eielson maintains a new RV campground on the base. Additionally, there is a gravel bar that could be cheaply developed.

You can ride your bike right on to base. There are rumors of a gated fence around base that could prevent bicycles and river access. This would not be good. Access to the bike path along the south bank of the Chena River through Ft Wainwright is an important regional non-motorized transportation connection.

Concern was expressed over long-term status of Birch Hill Park. Significant federal \$\$ has gone into improvements recently. Trail system there relies heavily on access to the base. There is concern that a change of command could result in arbitrary closure of access to that portion of the base. Current status – defined by 5 year license. Parks would prefer an actual lease arrangement that would give more certainty.

The gravel bar on Eielson is accessed via Transmitter Road. The road needs to be improved if the gravel bar is to be utilized to its potential.

Tanana Valley Sportsmen Association (TVSA) – Nicole, Joe and Kelley met with the TVSA on November 8th at 7:00 p.m. at the TVSA facility. Participants included Bud Burris, Bruce Campbell, Eddy Graser, Roger Penrod and five other members also attended.

Hunting/Recreation – Concerned with not being able to carry loaded weapons on military lands. Heard that someone may have been cited by a MP for having a loaded weapon on a military range.

Use of the military shooting range at Birch Hill for trap and skeet is done on a regular basis. The fee is \$12/year. 1/3 of the shooters are civilian.

Hunting access and regulations are changing. Every time it changes, we lose. The base commander can close ranges to hunting. It seems to be done at whim. Fort Richardson sometimes orders the closing.

Although we understand the need for the mission, more relaxed access would be better. It is hard to understand how this restricted access is needed for National Security. Sometimes the military restricts lands when there is no activity going on.

Airboats are now restricted from some areas due to “environmental” issues.

Some trails through Eielson that once were used to access state lands to the east are no longer open to civilians, making access much more difficult.

Fishing is generally not interrupted by military maneuvers.

Eddie Grasser with ADF&G is trying to develop mentoring program for hunters. Special efforts could be made to include military personnel.

The military can take game without a hunting license on military lands, although they still need moose harvest ticket. There are areas where the military can hunt and non-military cannot and it should not be this way.

Communication – Communication is a concern. We are often not given enough notice of closures. The military tends not to listen to history, very transitory. We used to have military members which facilitated our communication. It seems like the military doesn’t make much effort to know what is going on.

General - It is difficult to know where the military boundaries are.

We currently are concentrating our training efforts on the youth. We train youth for competitive shooting. There is also a 4H military shooting group. We have had hunter education in the past with military personnel.

Sometimes military, particularly younger military, don’t know enough about how to get game back to “civilization”. They could perhaps use more and better orientation to the peculiarities of hunting big game in Alaska.

Recreational Users Group – At noon on November 8th, Doug, Nicole, Joe and Kelley met in the Mayor’s conference room with a wide variety of recreational user groups including, the Nordic Ski Club, Wilderness Search and Rescue, Running Club North, Trail Riders, Air Boaters, TVSA, Fairbanks Snow Travelers, ADF&G. Participants included: Mike Kramer, Oliver Burris, Roger Penrod, Cathie Harms, Jennifer Yuhas, Dick Bishop, Mary Bishop, Dean Allen, Gerry Richards, Rod Arno, Phil Berrian, Perry Schneider and Nick Nugent.

Recreation – The Snow Travelers are working with the military for events and have had good luck. The Sonot Khaazoot ski race held in March includes portions on Fort Wainwright. The base personnel have made getting permission fairly easy. It has become a popular race. Generally, getting permission to hold a single event is easy at Fort Wainwright. It is not as easy at Eielson AFB. The Wilderness Search and Rescue group could get a permit to practice Search and Rescue operations on base if they wanted.

Birch Hill and the biathlon range is a great asset to the community but is partially owned by the Army. It has a five year renewable lease which has been fairly easy to obtain. Would like land transferred or a long term lease issued to FNSB to ensure access. Worried that access could be taken away. A new commander could come in and close it without realizing its significance. There is lots of investment at Birch Hill, with many lighted trails and new central building.

Tanana Flats is also used by trappers, dog mushers, skiers, and others as a year-round playground. It is not only hunters that are stakeholders. Policies that would allow greater dispersal of recreational users rather than concentration would be preferable. When all the various recreational users are funneled into one corridor it creates conflicts between the motorized and non-motorized users that do not exist when a wider use corridor is allowed.

Alaska Trappers should be contacted. They have been harassed by the M.P.s.

Access through Fort Wainwright has occasionally been a problem. There is some concern that in the future an unsightly fence may go in along the banks of the Chena River.

The running club used to run a race on Manchu Road but that has been closed off and is no longer used due to the access restrictions. It is unclear how closing this road is needed for security.

Lions Club has a drag race on base.

Hunting/ Range Access – this was a source of many concerns, as follows:

Statements were made such as “Seems like there are slowly more and more restrictions to lands that have been traditionally hunted all our lives. We are concerned about incremental closing of military lands and access to surrounding state lands”.

There was concern raised by a non-air boater, that the military funneled Air Boaters into a narrow channel “Air Boaters alley”. For those hunters that needed quiet this became a problem. Conflict would be greatly reduced if they promoted policies that allowed the air boat activity to disperse. This includes both conflicts between airboaters, and between airboaters and other users.

It was noted that moose, bear and waterfowl are species hunted on military lands, especially moose. The moose season is August 28th to September 28th. The Tanana Flats has the greatest moose density anywhere in Alaska. The ADF&G have to manage the moose in order to keep the population in balance. It was recognized that access restrictions during moose calving times was expected and understandable.

It was noted that a letter is about to be issued that will allow loaded firearms on the military ranges (not on base proper). This would help eliminate a major sore spot for hunters.

There is a web-based check in system to hunt on military lands but you must have a permit first. There is also a call-in system. Don't like the fact that you have to take a hunter education class to hunt on military lands. A suggestion was made that perhaps individuals could get permits printed out via web site, rather than having to make the trip on-base to pick up pass in person.

Attendees felt it would be helpful to have a simple check list that lets hunters know what you need to do to get permission to hunt on base. This list should be widely publicized.

Hunter education classes are a mandatory requirement for hunting on any military land anywhere. This was stated in a regulation that passed a couple years ago, since 9-11. Alaska got away without enforcing this requirement because the state doesn't require such a class. That is changing.

There is concern that the military automatically get resident privileges unlike civilian newcomers.

If the military needs to close an area, they should open another.

Communication – Many of the conflict issues raised appear to be related to lack of communication, or perhaps could be somewhat alleviated by better communication, as documented below.

ADF&G staff often find out about hunting closures in the paper. Many times closures are announced only three weeks before the closure. This makes it very difficult for hunters who must plan their hunts far in advance. It also makes it tough for ADF&G to manage wildlife, particularly moose populations. ADF&G would like no surprises. For the past 2 years, short notice closures during moose season have created many loud complaints from hunters. It was suggested that this seems to come from orders being issued from a centralized Anchorage command rather than through a local command that understands local land use issues.

ADF&G representative present was unaware of the existence of the Mayor's MCC committee.

There really isn't a direct communication link between the military and the ADF&G. A standard "Welcome to Alaska" class that includes introduction to Native Alaska would be good. This should include information about hunting and fishing, but also general acculturation, including native peoples, trespassing issues, lands issues, etc.

Policies sometimes change radically with a new commander at the Fort. This appears to be very arbitrary, and can be a potential source of local resentment. It was suggested that if there was a standardized orientation at the command level that each new commander received it could help to eliminate this problem and the bad reputation that the military receives as a result.

There could be more military participation in hunting and trapping education classes put on by the state. It would be good to know more about their training programs.

The recreational community would find it helpful to have a quick review of federal laws that pertain to natural resources and military lands (such as Sykes Act). It was noted that these are contained in CFR 40

A participant suggested www.usarak.army.mil as an excellent web site for information about Army activities in Alaska.

The Army and the AF have different regulations – it would be useful if they coordinated their policies more closely, or perhaps had a joint permitting process, rather than a separate process.

Operations – Expect more, not less, restrictions in the ranges due to increased military use.

General - There was an Integrated Natural Resource Management Plan done by the Army about five years ago. It is updated every five years; the current update is expected to be completed by next October. The INRMP includes 1.5 million acres. The Air Boating organization met with Fort Wainwright personnel this week. Many of the recommendations from the previous study were not based on accurate information and will be changed to allow increased access. Gary Larson, at Fort Richardson is a good contact. This INRMP Process could be a very useful vehicle to facilitate the debate about access to ranges by recreational users. A draft of the next 5-year Plan should be available for comment in June 2006. Preliminary results from research on lands closed to airboats over the past few years indicate that impacts from airboats may be less than thought. For example, tundra swan production was higher in areas used by airboats. It is hoped that this may result in relaxing certain restrictions. Participants noted that communication for the revisions to the INRMP to date have been good.

A good 8.5” x 11” map of the bases and military ranges relative to recreational use areas would be very useful. It would also be good to show where the emergency cabins located in Tanana Flats are, along with GPS coordinates. Someone noted that Gary Larson at the DNR had a very good map of the trails on the Flats.

Search and Rescue efforts often spill over to military lands. There is good cooperation between military and civilians during rescue operations. A common area for search and rescue operations is along Chena Hot Springs Road, like at Granite Tors. There are many interconnecting trails into military lands where rescues might be needed.

Fort Wainwright: On November 9, 9:00 am, at Fort Wainwright, Nicole and Joe met with Lieutenant Colonel Ronald M. Johnson and Master Sergeant Todd Wentland. They also were introduced to Linda Douglas, the Public Affairs officer, and an e-mail list of land use issues that she is aware of are incorporated below.

Hunting/Recreational – The INRMP is being revised and it will provide increased access for users like air boaters. Some of the information in the old INRMP was inaccurate. The only time for limited access to moose and waterfowl habitat will be April through July during calving/nesting season.

There are many areas of the ranges that are best accessed (least environmentally damaging) by the air boaters. However, it is arduous to reach some of the far reaching areas of the ranges and it is only attempted by a few. It appears that access to these more remote areas is self-limiting.

Some areas of the ranges are off limits. An area of Salchakat Slough is off limits due to UXO's.

Colonel Johnson reacted positively to the idea of an internet permit system where hunters can print tickets.

The special assistant to Mayor Whitaker stated at the last meeting that it was her goal to "stop training during moose season". This issue is likely to be raised again.

The air-boaters are a vocal group that has lost several recreational areas over the years, the last notable one a large area near Nenana. They will continue to be concerned if the Army prohibits them from the Flats. We had several meetings with them the last time the issue arose, and we seem to have reached a compromise agreeable to all.

The ORV group also has concerns. They are becoming more vocal as their recreation areas diminish.

The Biathlon Club and Nordic Skiers want full use of the facilities. There are not a lot of problems at present, but this could change. There have been complaints from these groups about noise when the brigade used the range to train and we have received calls about soldiers tearing up the trails. We addressed this by working with the unit to use another route that kept them off the trails except to cross into the range and we made it clear that if units tore up the trails, they were responsible to repair them. We also reiterated that vehicles were prohibited from the trails.

Operations - There is no summer training in Tanana Flats due to the wetlands. Winter training occurs after completion of the ice bridge.

Lakloey Airstrip (private strip) is an airspace concern.

40 new Kiowa helicopters are anticipated from Korea in June. This will increase helicopter traffic. The air traffic flies low over the Salcha River and Richardson Highway due to training reasons. This is not likely to change. Battery C is used by the Air force. This is in the Yukon Training area. They use it to practice evasive actions, ingress and egress routes.

A new airborne brigade is being stood up at Ft Richardson. They will be training up here. Will fly combat profile (low over river) out of Ft Wainwright down to Greeley.

Johnson would like control of the ranges but says that sometimes changes come from Fort Richardson.

Mike Meeks at DPW may need to redo noise contours for the new Helo squad and increasing ops tempo.

There are ongoing complaints about low flying aircraft which increase during training exercises. Regular calls are received from Happy Valley near Mile 20 Chena Hot Springs Road, Salcha and Lakloey Hill. The callers have requested we stop flying there or fly higher. The procedure is to take the information and call the aviation battalion. Either a representative from the battalion returns the call, or the public information officer does. The purpose of the call back is to explain what was going on, how long it will likely continue and

tell the caller we will try to “fly friendly.” It is expected that a few more calls will occur when the 4-123 returns, as the number of aircraft has increased with the 1-52’s arrival. The average calls a year about low flying aircraft is about 12 or less.

Range Noise – There are sporadic complaints about range noise. They increase depending on range activity, type of munitions and cloud cover. On some days, the sound travels faster and complaints increase. Most of complaints from the Lakeview Trailer Court, just down the road from the range, but there are also complaints from other parts of town. This spring, several complaints came from Birch Hill area when the brigade used the biathlon range to train. There was a jump in the number of complaints this year when the brigade trained for Iraq. In an average year, these probably don’t exceed 25 complaints. There were at least that many in July alone this year. The number of complaints is expected to drop over the next 12 months with the brigade deployed.

Communication – New soldiers receive about 18 hours of training about the community called the Newcomers training. The trainers come for various areas of the base. They like the idea of inviting TCC and TVSA to provide information during Newcomers training. Cabin etiquette would be a good thing to add to the training.

Transportation – Convoys occur about 2-3 times a year.

Encroachments- Concerned about Secluded Acres Subdivision. Like the idea that the bridge will bring better access but concerned that it will increase development in the area. It would be nice if the military could buy the land but with the bridge the land is likely to have increased in value. Some sort of noise overlay zone in this area could be a good idea. Colonel is in favor of requiring full disclosure before purchase.

General - There are four illegal trespass cabins left in the Tanana Flats training area. There are 5 survival cabins. The USFWS also has information about their location.

They have decided to allow loaded weapons on military lands, just not within the cantonment areas. This will be formally announced soon.

Michael Meeks has a copy of the Stryker Brigade EIS.

With regards to concerns about Birch Hill, under army policy, if you remove a recreational area, you have to replace it with another. Birch Hill is a money maker, so they want to keep it.

Meeting Report

Project: Fairbanks Joint Land Use Study
Date: November 7-10, 2005

Reporter: Nicole McCullough
Location: Salcha, North Pole, Fairbanks

Purpose: To conduct public meetings in Salcha, North Pole and Fairbanks where Doug Braddock, Fairbanks North Star Borough project manager, and consultants Nicole McCullough, ASCG Incorporated, Joe Cloud, EDAW Inc. and Kelley Hegarty, Kelley Hegarty and Associates introduced and provided background about the Joint Land Use Study (JLUS) process and listened to citizens' concerns about land use issues as they relate to the military and the community.

Meeting Summaries: At all of the meetings, Doug Braddock explained that this is the first JLUS in Alaska and that about 45 have been conducted for military installations outside. Doug said that the study was funded by the Office of Economic Adjustment, Department of Defense. It is the intent of the studies to try and reduce or eliminate land use conflicts between the military and the neighboring communities. The study may not solve or address completely all of the concerns but in some cases just provides the tools that the community and military can use in an ongoing fashion to reduce conflicts.

Nicole McCullough explained that the process included two advisory groups – a policy committee and a technical committee – which met jointly about six weeks previously. The study includes three rounds of public meetings of which this was the first. The study is intended to be completed by around June. Comments collected at this meeting will be sent to all of those who attended and participants will be provided the opportunity to correct the meeting notes prior to a wider distribution and that the finalized notes will be posted on the website.

Joe Cloud said his firm has completed many of these studies, four of which he had available for review. He said that generally the study results in outcomes in four areas: planning, military operations, real estate and data development.

Planning actions examples are

- establishing a mechanism for further dialogue
- memorandum's of understandings,
- overlay zones,
- incorporation of findings in local Comprehensive Plan and Zoning codes
- further studies such as compatibility studies, or
- creating or reinforcing joint planning or coordination committees

Military operation actions examples given included:

- adjusting the number, frequency or seasonality of operations
- developing a new facility
- altering flight patterns

Real estate actions could include:

- working with the Multiple Listing Services to insure full disclosure on potentially affected properties
- Establishing local ordinances requiring full disclosure with property sale
- Land acquisition, conservation easements
- Noise proofing, noise retrofits, establishing local construction standards with regards to noise-proofing
- Establishing web sites for better communication

•
Data development actions could include:

- Better mapping, Geographically Information System development
- Creating maps for noise and air operations
- Creating APZ maps

Kelley Hegarty helped to facilitate the meetings, transcribed notes on flip charts and helped to clarify citizens' concerns.

Salcha: Eight people attended the meeting in Salcha held from 6:00 pm to 8:00 pm on November 7th at the Senior Center. Attendees included:

Terry Reily

Tamara Fox

Dale Koester

Sharon Morrison

Carolyn Lincoln

Phyllis Stern

Margie Schwartz

Eric Comutto

Noise – Several comments regarding noise were voiced. Participants thought the helicopters and planes flew too low over the residences and that the military should disseminate more information to help residents understand when military operations were going to take place and should avoid flying so low over residential areas.

Operations – While there was acknowledgement of the importance of military training needs, there was concern that the pilots flew below minimums and this resulted in harassment of wildlife, excessive noise where people lived and rattling of windows. New night training maneuvers were especially of concern to residents. Some residents had seen a map of military lands and did not understand why the flight path had to go over residential areas when “their land holdings in the Interior are bigger than the state of Washington.” There was also a question about whether there are minimum flight elevations over the Tanana and if so, what they are. Someone said it would be nice to have a tactical map to understand where the flight patterns were. In addition to avoiding residential areas in general and the public school, attendees supported a comment that the military completely avoid 1) French Creek drainage and 2) the area west and south of Pump Station 8. They thought that some of the pilots from other parts of the world might need better orientation to the location of the residences and should be instructed to fly higher. It was acknowledged that Alyeska Security is also flying low. Someone also wanted to know when the new Eielson gate would be open and there was a comment expressing surprise about a new road just east of Eielson AFB. Despite the prevalence of complaints about noise, no one seemed to have complained to the military, or knew exactly how to go about filing a complaint. When asked if they had ever called the Eielson AFB PAO, they expressed that it was “just a waste of time”.

Transportation – Another concern was that large convoys of military vehicles travel on the Richardson Highway. Top speeds of the vehicles were often 30-to-45 mph. Because they left little room between vehicles, and the highway was only 2-lane, it was difficult and dangerous to pass. Sometimes a vehicle was broken down and there wasn't enough room for safe passing. Someone suggested that they space them out better, maybe five together with adequate spacing in between for passing. Smaller convoys were also suggested. Passing lanes were also suggested as well as better advertisement about when they would be on the road. There was also concern expressed about some individual military vehicles traveling at unsafe speeds of 65+ mph on a highway that “was never designed for these high speeds.” Concern over wear-and-tear on the highway was expressed.

“The Army might need to consider going back to its old ground safety policy of having fresh drivers to bring people back from the field, instead of some dog-tired dude at the wheel.

Case in point, a few summers ago, a humvee left the road and flipped near Orchid Drive. It resulted in 3 of the 5 soldiers sustaining broken bone injuries, as there are no safety restraints in the back, and their gear thrashed the crap out of them. One of them was bad enough to need a MAST back to Bassett. The driver had fallen asleep at the wheel, and was cited by the Troopers.

Needless to say, this gets a bit spendy in terms of resource expenditures, plus adding 3 vets to the disability list later on in life, plus loss of duty/manhours on the part of the Army. They typically pull 14 hour days minimum while in the field, and are out for 1-2 weeks, so you have some pretty tired members on your hands for the drive back to town.”

Residents also voiced concern about the extension of the Alaska Railroad to Delta. The route they had seen showed the railroad using the Old Richardson Highway. They explained that this was an alternate route to Fairbanks in case the Richardson Highway was closed. They felt it important to maintain this route for emergency services and evacuation purposes. The railroad will prepare an EIS for the rail extension project which will provide residents an opportunity to discuss this project in more detail.

It was suggested that the private Bradbury airstrip be cleared of brush to improve visibility of both military and civilian aircraft that use routes in this flight path. It was also suggested that it is unsafe at all times for aircraft to fly at treetop levels.

Hunting – There were concerns about hunting on military lands. Participants said that they needed to take a class and get a permit to hunt on military lands but this was not the case when military hunted on non-military land. They felt that some soldiers from other parts of the country needed more hunter education specific to Alaska. Someone said many of the soldiers needed better “cabin etiquette”. Someone said they had their hunting gas cache stolen and as a result had a 5 mile walk back in cold temperatures.

Permanent Fund Dividends – Participants said that military personnel were able to collect the Alaska Permanent Fund Dividends while they resided in Alaska. They were concerned that some military personnel kept collecting the funds after they were rotated out of Alaska even though they had no intention of returning.

Meeting advertisement – One resident was concerned with the low turnout of the meeting. There were suggestions about 1) putting flyers in mailboxes, and/or 2) doing a mailing to each household address in Salcha before the next meeting.

Implementation Ideas - Residents suggested that DoD representatives meet with Salcha residents on a regular basis to improve communications. It was suggested that a map of old ops areas such as Blair Lakes that include hazards (undischarged ordinances, environmental pollutants) be made widely available to inform and protect the recreating and hunting public. Residents wanted maps that showed both military flight paths and noise impact areas. It was suggested that cell towers not be allowed in military flight paths. Someone had attended the Eielson briefing for new military arrivals and said that the local land use orientation portion and the hunting orientation portion were outdated. The “Special Use Air Space Information Service” was cited as a good model for communication with the public about military flight ops.

North Pole: The public meeting in North Pole was held from 4:00 pm to 7:00 pm on November 8th, at the North Pole City hall. Participants included Mayor Jeff Jacobson, David Stoller, John Culp and Todd Boyce. Jim Remitz, Public Works Director, was also interviewed prior to the meeting.

Transportation – The Mayor explained that there are two railroad projects. One is scheduled for completion within the next couple of years. It will result in removing the tracks from the middle of North Pole and is supported by the city. The other project is a rail extension to Delta Junction. That project is several years away. The railroad extension will reduce or eliminate the convoys on the highway. Currently, the convoys are not considered a problem within the North Pole city limits because they travel on the four-lane Richardson Highway.

Jurisdiction – The mayor and public works director explained that there are about 1,700 people in North Pole but about 15,000 people within a five mile area that is considered greater North Pole. Moose Creek is not within the city limits. They look forward to completing a North Pole Comprehensive Plan to assist with future planning and development issues within the city limits.

Meeting advertisement – A good way to get the word to people in the North Pole area is to place an announcement on KJNP radio or TV. Jan Thacker, reporter could also conduct an interview and write an article for the paper. North Pole no longer has a regular column in the Fairbanks Daily News-Miner, but Jan Thacker’s column would be a good place to have an announcement for the next open houses.

Hunting – Participants did not feel that getting a permit to hunt in the military areas was onerous. They did not know of any access issues.

Operations – Residents hear about military operational changes from the newspaper. There is limited communication between the city and the military regarding military operations. BLM Fire Suppression crew also works out of Ft Wainwright and can be a source of complaints – e.g. accidental fire retardant dump!

Implementation – Because of the jurisdictional issues inherent in the limited municipal boundary, city officials are not able to address the conflicting military/civilian land use issues in the rapidly growing “suburbs” outside of the city core. The City works cooperatively with the FNSB which has the land use planning authority for the area, so any land use tools to mitigate conflicting uses would need to be implemented through the FNSB.

Fairbanks: A meeting was held in Fairbanks from 4:00 p.m. – 7:00 p.m. at the Pioneer Park Convention Center. Meeting participants included:

Paul Reusheu
Trevor White
Clark Hopp
Cherie Solie
Bill Gryder

John J. Megyesi
Gale Skaugstad
Cal Skaugstad
Steve Lundgren
Melissa Kellner
Tom Kakowski

Recreational/Hunting Access – There was concern that the military was increasing its control over access to the military ranges that have been used for many years for hunting. Some participants expressed fear that this was going to eventually lead to the exclusion of hunting in those areas. Someone commented that they did not have a problem with the hunting access restrictions and thought that the disgruntled ones were actually a relatively small group.

Someone commented that the change in command at the base can make a big difference in access closures and other rules that affect hunting.

One individual thought that while getting a permit was not an unreasonable expectation, that often the person at the guard station was uninformed about what was going on and this caused unnecessary delay and hassle. Someone suggested that the permits should be available on the internet. It was suggested that the military put an automated permit kiosk at the local Alaska Department of Fish and Game office where hunters and fishers have to go anyway.

“My issue is continual recreational access to the Tanana Flats. There is no problem now, but the Army is increasing its control over access. Is the intent to kick us all out?”

Communication – The Governor’s liaison said that she favored open communication between community interest groups and the military and that she would bring back information regarding the JLUS to the delegation.

Frustration was expressed by one attendee with public sector fisheries management responsibilities that the public and agencies did not know enough about what the military was planning. One attendee said that people sense that there is a big change coming in terms of operation, but that the public has no sense of what kind of change that might be. While it was acknowledged that there are strategic reasons that the military cannot do full disclosure, it was suggested that there could and should be more open communication about specific land use plans especially as they impact public recreational use of military lands.

The Army has several emergency shelters and someone said they would like to see them on a map. They would like to see the GPS coordinates.

Transportation - The Alaska Railroad representative said that they are starting the EIS process for the proposed rail extension to Delta Junction from Fairbanks. The first set of meetings is anticipated for December. The Surface Transportation Board is in charge of this process. Residents should get ample opportunity to comment.

Public Meeting Report

Project: Fairbanks Joint Land Use Study
Date: May 1-3, 2006

Reporter: Nicole McCullough
Location: Salcha, North Pole, Fairbanks

Purpose: To conduct public meetings in Salcha, North Pole and Fairbanks for the Fairbanks Joint Land Use Study, present the draft JLUS and solicit comments on the draft recommendations. Interviews were also conducted with staff from the Alaska Department of Fish and Game and Northern Alaska Environmental Center.

Salcha Summary: On May 1, 6:00- 8:00 pm, Doug Braddock, FNSB Project Manager, Nicole McCullough, ASCG Incorporated, Joe Cloud, EDAW Inc. and Kelley Hegarty, Hegarty and Associates held a meeting at the Salcha Senior Citizen's Center. All of the boxholders in Salcha (435) were notified twice by mail and Phyllis Stern sent out e-mail reminders. Ten residents attended. After a half hour Open House, the planners made a presentation followed by informal discussions.

Doug Braddock explained that this is the first JLUS in Alaska and that about 45 have been conducted for military installations outside. Doug said that the study was funded by the Office of Economic Adjustment, Department of Defense. It is the intent of the studies to try and reduce or eliminate land use conflicts between the military and the neighboring communities. The study was not intended to solve or address specific concerns but to provides the tools that the community and military can use in an ongoing effort to reduce conflicts. He briefly described the public involvement process to-date.

Nicole McCullough described the draft recommendations, explaining that they were formulated from public input, committee recommendations and reports done for Eielson and Fort Wainwright as well as FNSB and the Alaska Department of Transportation and Public Facilities.

Joe Cloud spoke briefly about other JLUS and said that the JLUS is not intended to solve the problems of land compatibility but to offer tools and a process for further discussion and ways to approach the problems. He said that the JLUS's are intended to provide action items and to identify the responsible parties whom must further carry out the recommendations.

Several concerns and comments were expressed by meeting participants:

- We understand that a residential area that is located between an air strip and a bombing range is going to have problems – the community just needs to be able to have better communication with the military about those problems.
- The military has forced civilian pilots into an air corridor that is too narrow.
- Known civilian airway should not be used by military pilots.
- Military aircraft noise interferes with our traditional uses of the land like fishing and trapping.
- Hunting permits should be issued at the guard station, but outside of the fence so hunters do not have to go on base and pass through the inconvenience of the security check.
- The military should distribute their base newsletter more to the public and have copies available, for example, at the Salcha Store
- The military should come out a couple times a year and talk to us about their plans and we could let them know of our concerns. This would be better than a

JLUS Planning committee. We would not go all the way to Fairbanks for a JLUS meeting.

- Things would be much better if there was at least some consistency – instead of policies and practices changing every couple of years when a new commander comes in.
- Who has jurisdiction over the Richardson Highway where it goes through Eielson? The military police currently issue tickets on that section of road.
- Recommending the military serve on the platting board or planning commission probably is not practical.
- The Alaska RR planner and a Real Estate representative should be part of a JLUS planning Committee.
- The military should attend the Fairbanks Fish and Game Advisory Committee meetings.
- There should be better communication with the community about capital construction projects like the gate improvements project, for example.
- Add information/trouble line to phone book blue pages regarding who to call to complain about noise or other issues.
- Low flying aircraft (skimming the treetops) on roads like Eric Street and Ingrid Street are startling and shake the whole house – frequency of these events is once or twice a year. If they have to fly low for training purposes, could they do it where there are no residences?
- It is understandable that the military has to use the bases for approaches, but could the training exercises be away from residential areas?
- Does the military have the right to shut down the Richardson Highway in the event of a 911-type event? If so, how would residents' emergency access needs be met? That is our only access out of the area.
- Military should teach their pilots about Civilian flight routes.
- We need a tool other than the 65 DNL noise overlay to capture single noise events. We need an obvious notification when we buy property that there may be low flying aircraft noise.

North Pole Summary: On May 2, 6:00- 8:00 pm, Doug Braddock, FNSB Project Manager, Nicole McCullough, ASCG Incorporated, Joe Cloud, ED AW Inc. and Kelley Hegarty, Hegarty and Associates held a meeting at the North Pole City Hall. Karen Washburn, who is a member of the Mayor's Military task force, and Althea St. Martin, aide to Senator Murkowski and active member of the Chamber of Commerce Military Affairs Committee attended. The planners briefly reviewed the status of the study and the recommendations and had a very informative informal discussion with participants.

- Military could make quarterly update presentations to Planning Commission.
- The FNSB Planning Department should establish a formal notification policy to inform the military when an issue related to one of the military installations is pending before Planning Commission or Assembly.
- The JLUS planning committee should just have recreational users. If you create more military interface committees you will get volunteer burn-out. Other issues are covered better elsewhere like the Mayor's weekly informal information sharing with military brass and the Planning Commission.
- The point at which a zoning permit is issued is a great public education opportunity – a time that the borough planners can let developers or land owners know that their property is close to a military base.

- The noise overlay for FAI and the military airstrips should be incorporated into the GIS system so that people researching a parcel of land can see the noise patterns in the area.
- The idea was proposed that twice a year the military should do a briefing with representatives of the recreational user groups. These should be scheduled to occur with planning lead time for the hunters and fishers. This should be a town meeting format.
- Response to the above idea - No, that's not the military culture. You can't set them up to take hits like that from the general public. You should select statesmanlike leaders of each of the different recreational user groups to attend the briefings and take responsibility for carrying the message back to their respective user groups.
- FNSB should examine their properties to determine if it is appropriate to sell for housing. An example is the land south of the Eielson airstrip - this land should be reserved as a buffer.
- The idea was proposed that the Army should consider acquiring the Secluded Acres, rather than using taxpayer funds to pay for a \$5 million dollar bridge to this residential area that will just continue to be the source of land use conflicts.
- There is a state statute (AS 34.70) that requires disclosure by sellers and real estate agents of potential concerns like noise in a detailed checklist format that must be filled out and signed by the seller. That should continue. It is good for both seller and buyer and can prevent lawsuits. The implementation responsibility in this statute is on the seller's shoulders.
- There is a narrow air corridor for pilots. Would hate to see this get more restricted.

Fairbanks Summary:

On May 3, 6:00- 8:00 pm, Doug Braddock, FNSB Project Manager, Nicole McCullough, ASCG Incorporated, Joe Cloud, EDAW Inc. and Kelley Hegarty, Hegarty and Associates held a meeting at the Pioneer Hall in Fairbanks. Participants included representatives from the Alaska Railroad, DOT&PF, Fort Wainwright Master Planning, Senator Ted Stevens office, Fairbanks North Star Borough Planning Commission and the Alaska Department of Transportation. Planners reviewed the status of the study with participants and listened to comments and issues.

- The railroad is moving forward with plans to relocate tracks on Fort Wainwright. The comment was made to the railroad that their NEPA EIS process would be a very important step, and the more public notification the better.
- The EIS for the railroad extension is being funded by Department of Defense. It is not clear when funding will be available for the construction of the preferred alignment.
- Currently there is an article in the Daily News Minor that reports on events on base. It is good but it would be even better to have an article about hunting regulations or information in the Outdoor section around hunting season.
- If the military ranges need to be closed, hunters should be given ample warning so they can make other plans. Two or three months warning should be a minimum.
- The Alaska Department of Transportation and Public Facilities will begin to develop a Transportation Plan for Interior Alaska which will include discussion of military impacts to the transportation system, including aviation as well as surface transportation.

- It would be good if a JLUS committee was formed and included representatives from Delta.
- Special hunter safety classes are required to hunt on base. Hunters sometimes think their current civilian hunting safety classes are adequate and when they find out they still need the specific military hunters training, it is too late to attend the military hunting class. More notification of this requirement should be given and there should be more opportunity to attend the classes.

Alaska Department of Fish and Game Interview: On May 2, 10:00- 11:15 pm, Doug Braddock, FNSB Project Manager, Nicole McCullough, ASCG Incorporated, Joe Cloud, EDAW Inc. and Kelley Hegarty, Hegarty and Associates met with Don Young, the area biologist. His area includes Tanana Flats and Yukon Training areas which are part of Game Management Area 20A and 20B.

- It would be useful to have military population by month that only includes those on base, not those stationed overseas. Currently, the JLUS team only has annual installation population figures and those can be misleading as they do not account for all of the active deployments. This is important for game managers as military personnel account for about 1 out of 3 licensed hunters, and can have a large impact on the number of animals taken in a season.
- There is no formal exchange of information between the military and ADF&G.
- An educational/informational clinic on local hunting practices and ethics could be held on the bases. If the soldier realizes that the clinic includes instruction on good locations to hunt or fish, he would be more likely to attend. These clinics have been held successfully in the past, usually in August.
- Lots of trappers complain because their trap lines are disrupted or their territories are not respected by military hunters and bear baiters. Education would help here.
- Publication of air ops area maps as an overlay over hunting areas would be a very good public education tool.
- Fish and Game used to include a habitat division but this was moved to Department of Natural Resources. The Habitat division used to comment on the military Integrated Natural Resources Management Plan (INRMP) that is currently underway. Now it is the responsibility of the area biologist to review the INRMP and there is less involvement because of staffing and time constraints.
- A recreation JLUS committee is a good idea. It should include hunting and also fishing interest. It could meet before each season gets underway such as: early May before fishing season, early August before caribou and sheep hunting season and after October for the ice fishing and winter caribou season.
- If a recreation JLUS committee is established, Fish and Game could attend in an technical advisory role.
- Consider informing the Fairbanks Fish and Game Advisory Group of actions affecting the military ranges. But this group would not be a good substitute for a JLUS Committee; they have too much on their plate already.
- One of the duties of ADF&G planner, Randy Rogers, is to work to reduce land use conflicts related to hunting and fishing. He may be a good technical advisor to a Fairbanks JLUS Committee.
- About 1/3 of the hunters are military. The percentage may be even higher for military use in the Yukon Training Area.

- The military hunters are often younger and more “gung-ho” than civilian hunters and there may be an element of local hunters’ jealousy when military personnel from outside are more successful.
- There are differences in military hunting practices. For instance, military hunters are more likely to be mechanized, and can therefore travel further and faster and cover more ground. They may also be more likely to do bear hunting, and they may not understand local hunting ethics, particularly when it comes to trapping.
- There is a Chena Recreational Advisory group that includes several recreational users groups but they focus only on the Chena River issues. Anna Plager from DNR is the contact.
- The Northern Alaska Aviation User Group (NAAUG) has a good informational interface with the military; they should retain their current ability to call up the military and obtain information about flight operations.

Northern Alaska Environmental Center: On May 2, 11:30- 12:15 pm, Doug Braddock, FNSB Project Manager, Nicole McCullough, ASCG Incorporated and Kelley Hegarty, Hegarty and Associates met with Nancy Fresco from the Northern Alaska Environmental Center (NAEC). Nancy has been the NAEC liaison for military matters.

- Many calls Nancy receives from military families are about where to do recycling. She believes that many of the military that come from other places are used to recycling and want to continue the practice.
- A recreational JLUS user group is a good idea. There is no existing group that would fulfill that role.
- There is no organized group for noise issues either. Generally people form an ad hoc group when there is a specific noise issue, like noise from mining at Ester.
- FNSB would be the best entity to facilitate a recreational JLUS group.
- It would be important to emphasize that it was the responsibility of each representative on the JLUS Committee to take the information shared back to their constituents.
- There are many recreational groups that should be considered if a committee is to be formed. There are both non-hunting and hunting groups, motorized and non-motorized. They all have valid points and it would be good to open channels of communication between them.
- Public meetings are not always the best forum to solve problems. Many times public meetings become opportunities for venting to take place.
- Alaska Outdoor Council is one group that might represent several interests and could be included on a recreational JLUS committee.
- Recreational users in the FNSB generally do more environmental damage than the military.
- The military base public information personnel have been very responsive and efficient when we call with research questions.
- In the last few years, the military has been very good to work with and seem to be trying to do the right thing. They understand that there is sometimes a need to restrict uses on land. In fact, the military takes more care to protect wetlands than do the recreational users.
- The Northern Center does not have regular contact with the military. The military culture is different and there is turnover in personnel that makes regular contact limited.

Public Meeting Report

Project: Fairbanks Joint Land Use Study

Reporter: Kelley Hegarty

Date: June 19-20, 2006

Locations: Salcha, Fairbanks

Purpose: To conduct public meetings in Salcha and Fairbanks for the Fairbanks Joint Land Use Study, present the final draft JLUS and solicit comments on the draft final recommendations as amended after the round of May meetings in Salcha, North Pole and Fairbanks.

Fairbanks Summary:

On June 19, from 6:00-to-8:00 pm, Doug Braddock, Fairbanks North Star Borough (FNSB) Project Manager, Bill Gryder, ASCG Incorporated and Kelley Hegarty, Kelley Hegarty and Associates set up for a public meeting at the Fairbanks North Star Borough Assembly Chambers. Displays included Noise and Land Use Maps and the final draft recommendations. Although the meeting was preceded by an announcement in the FNSB News Page Calendar in the Fairbanks Daily News Miner and two display ads prior to the meeting date, no members of the public attended the meeting.

Salcha Summary: On June 20, from 6:00-to-8:00 pm, Bill Gryder, ASCG Incorporated and Kelley Hegarty, Kelley Hegarty and Associates held a public meeting at the Salcha Senior Citizen's Center. All of the boxholders in Salcha (435) were notified by mail, two display ads ran in the Fairbanks Daily News Miner, and Phyllis Stern of the Salcha Senior Citizens Association sent out e-mail reminders to all Salcha residents with email access. Six residents attended. After a one-hour Open House, the planners made a presentation followed by informal discussions.

Bill Gryder explained that this is the first JLUS in Alaska and that the study was funded by the Office of Economic Adjustment, Department of Defense. It is the intent of the studies to try and reduce or eliminate land use conflicts between the military and the neighboring communities. The study was not intended to solve or address specific concerns but to provides the tools that the community and military can use in an on-going effort to reduce conflicts.

Kelley Hegarty provided a summary of the final draft recommendations, explaining that they were formulated from public input, committee recommendations and reports done for Eielson

Air Force Base and Fort Wainwright as well as FNSB and the Alaska Department of Transportation and Public Facilities. Special attention was paid to explaining why Salcha residents' request that meetings of the recommended formal JLUS Committee be scheduled every four months in Salcha was not a part of the final recommendations. It was explained that interviews conducted during the study suggested that in order to get active participation by policy level public and military officials it would be necessary to have only one committee and to meet in convenient locations. This was well received by the attendees as a compromise solution.

Many of the issues raised by the public and discussed had already been raised in previous meetings in Salcha (and recorded in previous meeting notes on this project). Ideas raised and discussed that were specific to the JLUS included:

- Ask the military to have a booth at the annual Salcha Community Fair because the attendance there is very good and it would allow for an informal interface on important issues once a year.
- Ask the military to use the community website at www.salcha.org as a means to notify residents of upcoming changes in operations that may impact them.
- Add the Alaska Railroad Corporation to the JLUS Planning Committee.
- Consider making the need for the military to hold a public meeting on land use conflicts in Salcha one-to-two times per year a “standing order”.
- Adopting an ordinance that would not allow mobile homes within the 65 Ldn would be “unfair in Salcha where the only housing that low income residents can afford is both within the 65 Ldn and mobile home construction.” Specifically, it was suggested that the language in the draft recommendation that states “restrict mobile home development” be changed to “inform mobile home owners”.
- The military and the Fairbanks North Star Borough should communicate and coordinate regarding air quality standards and enforcement of those standards to make sure that neither is impacting the other’s ability to meet standards.