

2007 Regional Airports Plan





FAA Alaskan Region
Airports Division

Message From The Division Manager

Welcome to the 2007 Regional Airports Plan (RAP). The RAP serves as an instrument for the Federal Aviation Administration (FAA) Airports Division to address the challenges facing the Alaskan airport system and provides the framework to guide investment and development needs at our airports while providing a link between national and regional objectives. The plan develops initiatives and establishes priorities for the expenditure of funds while providing for the safe and efficient operation of our aviation facilities.

Since we published our last RAP in 2000, the FAA has adopted a more performance-based outlook with the publication of the 2008-2012 Flight Plan http://www.faa.gov/about/plans_reports. Alaska continues to enjoy a position of increased focus and relevance in the FAA's "big picture". The Flight Plan includes several Alaska initiatives from expanding the ADS-B (Automatic Dependent Surveillance Broadcast) program and weather cameras to improving rural airports (which is funded under our Airport Improvement Program (AIP)). As we link our performance in the region to the national initiatives, the RAP gives us a very clear road map to follow in assessing our performance as well as establishing a framework for the future.

The RAP initiatives include:

- Improve Runway Safety Areas (RSA)
- Fund Surveys for LPV Approaches
- Improve Rural Access and Safety
- Preserve Pavements
- Reduce Noise

The document is divided into 2 Sections: Section One provides an overview of the Alaskan Region mission, purpose for the RAP, the Alaskan Region airports system, historical distribution of AIP funds and types of projects funded in FY2007. Section Two describes each of the RAP initiatives and progress made since our initial RAP in FY2000. These initiatives are an integral part of the national Airports Business Plan and the Alaskan Region Annual Work Plan (http://www.faa.gov/airports_airtraffic/airports/regional_guidance/alaskan/about_airports/index.cfm?Section=workplans). As we provide an update on the accomplishments made over the past several years, we wish to extend our appreciation to those within the State of Alaska Department of Transportation, local sponsors, and aviation and consultant community who assisted with these accomplishments.

Byron K. Huffman

Manager, Airports Division

SECTION ONE

OUR MISSION

- To provide our customers with guidance and leadership in the planning, development and operation of the Alaska airport system
- Enable air transportation services to be delivered in a safe and efficient manner, incorporating community and environmental needs

REGIONAL AIRPORT PLAN (RAP) PURPOSE:

- To develop initiatives and establish priorities for the expenditure of funds while providing for the safe and efficient operation of our aviation facilities
- Document and share our performance with the airport community

ALASKAN REGION AIRPORT SYSTEM

The Alaskan Region airport system is comprised of a total of 687 airports. Of those, 260 airports are listed in the National Plan of Integrated Airports System (NPIAS) and are eligible for federal funding. These 260 airports are further divided into primary, commercial service and general aviation airports. Primary airports are large hub, medium hub, small hub or non-hub airports. Table 1 shows the number of NPIAS airports by service level:

Airport Types	Number
Primary	27
Large Hub	0
Medium Hub	1
Small Hub	2
Non-Hub	24
Commercial Svc	65
General Aviation	168

Table 1: NPIAS Airports

Our geographic region encompasses a flight area of over 3 million square miles. The distance from east to west (approximately 2000 miles) is equivalent to flying coast to coast across the United States. Within this vast region, nearly 85% of the communities rely solely on air transportation for year round access for transportation, medical supplies, food, and mail. Aviation plays a critical role in these communities. Ted Stevens Anchorage International Airport also serves as crucial cargo link to international markets (one of the largest cargo handling airports in the nation). Figure 1 shows the location of NPIAS airports by service type:

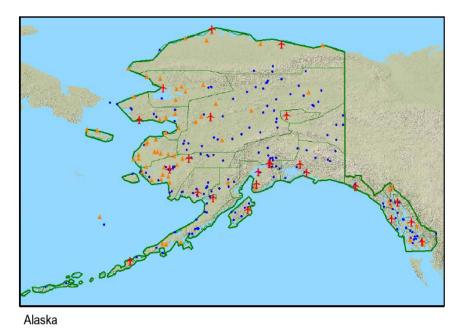


Figure 1. Alaska Airport Types



Maps are not to scale.

AIRPORT IMPROVEMENT PLAN (AIP) OVERVIEW

AIP funding continues to be the main source of funding for airport infrastructure development in Alaska. Figure 2 shows the historical distribution of AIP funding per year from FY2000 through FY2007. Figure 3 shows the types of projects funded in FY2007.

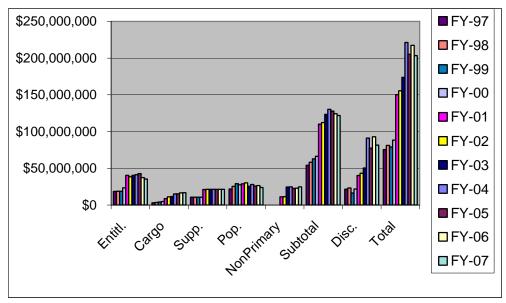


Figure 2. AIP Funds Distribution

Note: FY-02 total does not include the DOD appropriation totaling \$1,786,209 for Alaskan Region for security related operation costs. FY-03 non-primary allocation does not include carryover \$13,061,540 from FY-02.

Entitl. (Entitlement)-Based on passenger enplanements-primary airports

Cargo (Cargo Entitlement)- Based on cargo service

<u>Supp. (Alaska Supplemental)</u>-Based on improving access to Alaskan communities-available to all airports in Alaska

Pop. (State Apportionment)- Based on area and population of each state-includes general aviation, reliever and non-primary commercial service airports

<u>Non P (Non Primary)</u>-Based on improving infrastructure at non-primary airports-includes general aviation, reliever and commercial service airports

<u>Disc. (Discretionary)</u>- Based on national priority system.

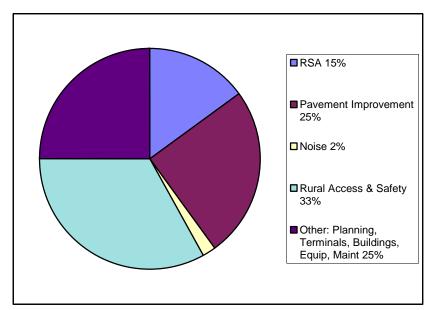


Figure 3. Types of Projects Funded Under AIP, FY2007

SECTION TWO

REGIONAL AIRPORT PLAN INITIATIVES

1. IMPROVE RUNWAY SAFETY AREAS (RSA)

Fiscal Year 2007 Runway Safety Area Goal: Complete 2 Runway Safety Area projects in 2007 at Part 139 certificated airports (Cordova-CDV, Kenai-ENA). **The Cordova project was completed in June 2007 and Kenai was completed in September 2007.**

Through the runway safety area program Alaskan Region identified 29 Part 139 Runways that needed runway safety area improvements and could be improved. Of those 29 runways, 8 have been completed (Bethel 18/36, Cold Bay 8/26, Deadhorse 4/22, Sand Point 13/31, Valdez 6/24, Yakutat 11/29, Cordova 9/27, and Kenai 1L/19R). There are 4 projects under construction and several others in environmental or design stages.



Cordova, AK EMAS (Engineered Material Arresting System) block laying in progress-June 2007

Marine environments and terrain constraints make constructing safety areas in Alaska particularly challenging and costly:



Sand Point, AK RSA under construction 05



Sand Point, AK RSA complete 05



Kodiak, AK- marine and terrain challenges for constructing RSA (Environmental Impact Statement (EIS) currently underway)

The following RSA projects are under construction and expected to be completed within the next several years:

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Location	Cost
Barrow (BRW)	\$20.0M
King Salmon (AKN-PH1)	\$7.5M
Wrangell (WRG)	\$24.5M
Ketchikan (KTN)	\$30.0M

Alaskan Region typically funds 2-4 runway safety area projects each year and plans to complete all remaining runways by 2015.

2. FUND SURVEY FOR LPV (LATERAL PRECISION PERFORMANCE WITH VERTICAL GUIDANCE) APROACHES

Fiscal Year 2007 Survey for LPV Approaches: Fund 4 runway projects to survey for LPV approaches. Four runways have been funded (Tetlin, Stevens Village, Mountain Village and Clear).

As part of the effort to help pilots operate aircraft as safely as possible the FAA has continued the development of LPV approaches to runways where possible. This allows for improved minimums and ultimately improved service to these communities.

3. IMPROVE RURAL ACCESS AND SAFETY

Fiscal Year 2007 Goal: Direct funding to a minimum of 3 rural airports by September 2007(Nightmute, Nunapitchuk, Kongiganak). These airports have been funded and we exceeded this goal by funding 2 additional rural airport projects in 2008 (Alakanuk and Minto).

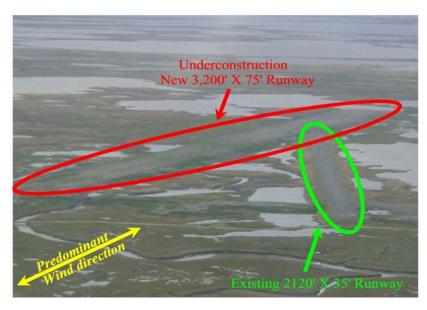
Airports in rural Alaska serve as the lifeline to the communities providing the only year round access for essential transportation of people, supplies, and medical services. Unfortunately many rural airports do not meet FAA standards. Many are too short/narrow, unlit and are poorly aligned with the prevailing wind direction. General aviation airports in rural Alaska are typically gravel strips with an apron and snow removal equipment building. A new airport can cost between \$8-\$20 million to construct and take several years to complete. Remoteness of these locations, short construction seasons and difficulty locating suitable building materials all contribute to higher construction costs and longer construction timeframes.



Rural Alaska Village



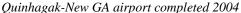
Contractor Mobilization By Barge



Rural Airport under construction (Kipnuk-Phase I)

Since FY 2000 AIP has funded 55 rural airports improvements (new airports, airport rehabilitation/extensions and seaplane bases) totaling over \$365 million.







Hoonah -New SPB completed

Although not specifically identified in the Alaska Airports Division Work Plan for 2007 (but identified in past Work Plans), we continue to take an active role in implementing the Rural Alaska Lighting Program (RALP). RALP was initiated in response to a 2001 FAA report to congress (Aeromed Study) on the role of Aviation Access to medical facilities from remote Alaska locations. The Aeromed Study identified 63 remote Alaska locations which needed improved medivac access. RALP is a program funded through a Facilities & Equipment (F&E) appropriation aimed at addressing aeronautical lighting at remote unlit communities throughout the State of Alaska. There has been \$38 million appropriated for this initiative since FY 2002.

Through this appropriation all of these 63 locations identified in the study are now equipped with either an interim or permanent lighting solution that provides for full 24-hour visual flight rule (VFR) aviation access by emergency medical aircraft. Furthermore, of the target 63 locations, 31 have been implemented with permanent lighting solutions. The remaining 32, although equipped with a highly-effective interim solution, are awaiting a permanent lighting solution via an aggressive implementation schedule as follows:

- 14 of the 32 subset locations are expected to be within an airport improvement/development stage prior to year 2010.
- 18 of the 32 subset locations have extreme airport improvement/development challenges whereby permanent airfield lighting solutions would be realized beyond year 2010.

The interim lighting solution involves the use of Portable Emergency Landing Zone (LZ) Lights or Portable Emergency Runway Edge Lights. Permanent lighting includes MIRL (Medium Intensity Runway Lights), PAPI (Precision Approach Path Indicator) and REIL (Runway End Identifier Light) systems. The goal is to provide permanent lighting solutions to all of these airports.





Portable Runway Lights, Pac-Rat ATV Trailer System



Portable Runway Lights



Portable Landing Zone (LZ) Lights

4. PRESERVE PAVEMENTS

Fiscal Year 2007 Goal: Fund runway pavement rehabilitation for FAI (Fairbanks) and KTN (Ketchikan), to ensure that 93 percent of runways at eligible airports in the National Plan of Integrated Airport System (NPIAS) are maintained in good or fair condition; within 30 days after appropriation, fund the following runway pavement projects for Atka, Kenai, Nome and Palmer. All of these projects have been funded with the exception of Atka. Atka was deferred to 2008 due to funding constraints.

Approximately 20% of the Alaska airports eligible for AIP funding are paved. The remaining are either gravel surfaced or seaplane facilities. Typically, these paved airports are located in the larger communities or along the road systems within the state. Extreme variations in temperatures in some northern Alaska locations (-50F to 85F) present challenges for maintaining and preserving pavement.

Pavement capital improvements include runway, taxiway or apron construction, reconstruction, rehabilitation, strengthening, and seal coats. These improvements are normally funded under individual airport projects identified in the CIP.

Over \$380 million in AIP funds have been obligated since 2000 to support capital improvements/maintenance projects that include pavement improvements.



Ted Stevens Anchorage International Airport, N/S taxiway construction, 2004



Valdez Airport Runway Reconstruction, 2006

5. REDUCE NOISE

Fiscal Year 2007 Goal: Within 30 days after appropriation, fund AIA noise compatibility residential sound project to reduce the number of people exposed to significant aircraft noise (65 DNL or more). 200 residents will benefit from the project. **This project has been funded**.

AIA (Ted Stevens Anchorage International Airport) Sound Insulation Program

In 1999 Ted Stevens Anchorage International Airport completed a Federal Aviation Regulation (FAR) Part 150 Noise Compatibility Study to identify sensitive land use impacted by incompatible noise levels surrounding the airport, evaluate abatement and mitigation measures to reduce noise impacts and recommend a Noise Compatibility Program (NCP) for consideration by the FAA. The NCP identified approximately 900 residential units (homes and apartments) for inclusion in a Residential Sound Insulation Program. The FAA approved the NCP in January 2000 and the airport formed an advisory group to help develop a program that adhered to FAA guidelines and also met the needs of the local community that was impacted.

The Residential Sound Insulation Program recommended architectural and mechanical modifications to homes located within the airport's 65 db DNL contour. Architectural treatments included acoustical windows, new prime doors and acoustical storm doors. Mechanical treatments included ventilation system upgrades (outside air ducts or heat recovery ventilators), combustion air intakes and closed combustion boilers. Funding started in 2002 under a pilot program and construction began in 2003. So far 387 units have received sound insulation improvements and approximately 168 units are scheduled for 2008. The program is expected to take approximately 7-10 years to complete.



Ted Stevens Anchorage International Airport, Residential Sound Insulation Program

YEAR IN REVIEW/OUTLOOK

Although we have made significant progress over the years in several initiatives identified in this RAP, particularly in the areas of improving rural airports, runway safety areas and reducing noise we still have work to do. The upcoming FAA reauthorization may bring with it additional initiatives for us to focus on. As we develop our Alaskan Region Annual Work Plan for 2008 from the recently released FAA National Flight Plan for 2008-2012 we will continue to focus on improving rural airports and runway safety areas, continue funding the noise program at Ted Stevens Anchorage International Airport and look at other ways to improve the safety and efficiency of the system of airports in Alaska. We look forward to working with the State of Alaska Department of Transportation, local sponsors, and aviation and consultant community on these future projects.