

NORTHWEST MOUNTAIN RUNWAY SAFETY PROGRAM

REGIONAL ACTION PLAN



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FAA Northwest Mountain Region
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Introduction and Background

The FAA has identified runway incursions as a serious aviation safety issue. Decreasing runway incursions and improving airport surface operations is a “Top 5” agency safety initiative. Countrywide, there are more than 65 million aircraft operations (take-offs and landings) at over 460 towered airports by 650,000 certified pilots. Many of those operations take place within the FAA’s Northwest Mountain Region.

The Northwest Mountain Region provides leadership to the aviation community to initiate and implement positive safety enhancements at the region’s airports designed to increase runway safety and reduce runway incursions. For that reason, this plan was developed and full-time staff was assigned to the regional Runway Safety Program office.

In coordination with the national Runway Safety Program and with other regional program offices, the Northwest Mountain Runway Safety Program office will improve runway safety through the reduction of runway incursions and surface incidents by developing and implementing initiatives throughout the region. These initiatives will target issues and problem areas at the airport and organizational levels. They will be specific and will be tailored to each operating environment so as to gain maximum results.

Runway safety activities have been underway for many years in the Northwest Mountain Region. The region has recognized the serious safety issue of runway incursions and has had people in the regional office, at Flight Standards District Offices, at Airport Traffic Control Towers, and at airports working to improve safety on the airport surface. Activities range from fencing and access control projects to improved signage, marking, and lighting at the region’s airports. Efforts are underway at the national level to expand the regional program by providing additional full-time resources that will focus on activities at the local airport level.

This plan ties together the broad national runway safety strategy with locally developed airport surface safety plans. The regional plan outlines how resources will be used to address regional and airport safety needs. It identifies activities that will take place over the next year to counter the trend of increasing runway incursions. The plan establishes a framework for current and future activities designed to improve safety throughout the region by focusing on local solutions to local problems.

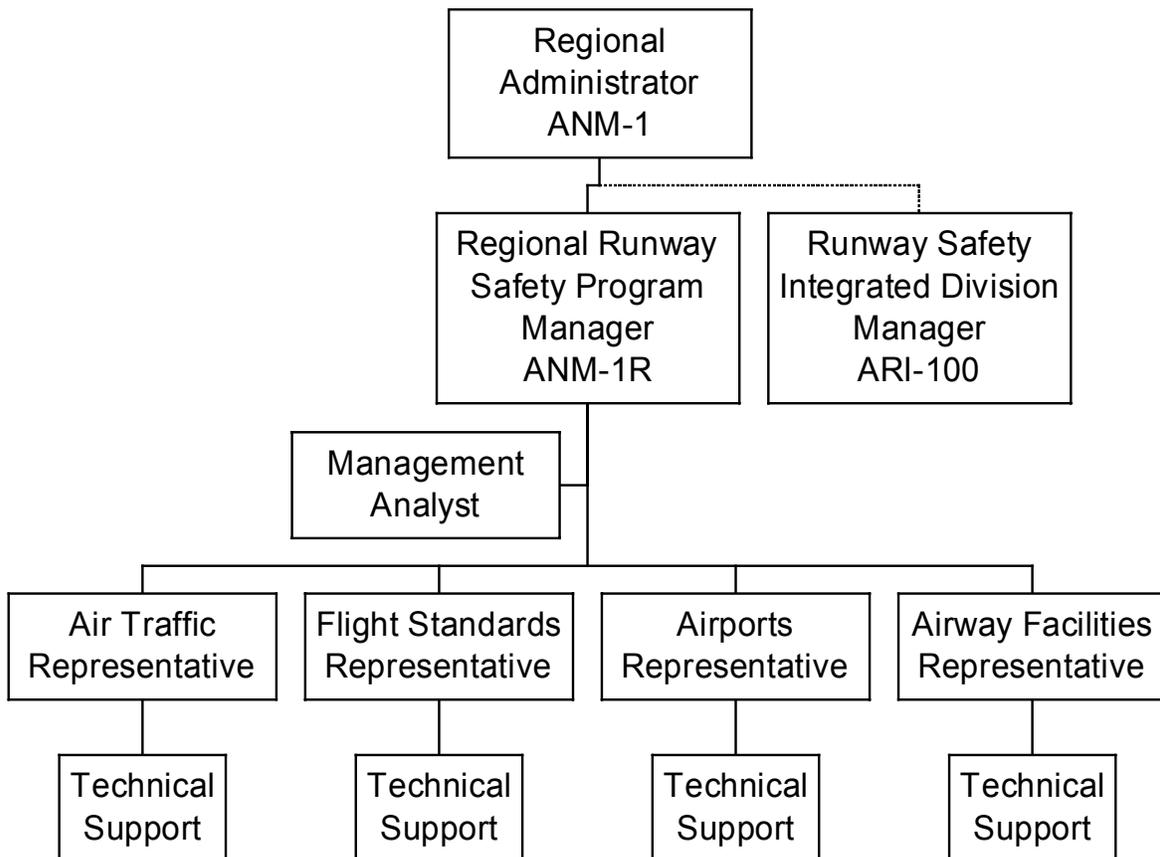
Action Plan

Structure

The regional Runway Safety team will mirror the national program office. There is a full-time Regional Runway Safety Program Manager who provides a single focal point for activities throughout the region. This manager is supported by a team of representatives from the major lines of business: Air Traffic, Flight Standards, Airway Facilities, and Airports. This core team provides leadership and direction to agency and industry partners.

Additional team members may be added in the future to provide increased technical and administrative support. These resources will be funded by the national program office and will be obtained on contract from external organizations. These resources will be added to the team incrementally over time.

The Northwest Mountain runway safety organizational structure is:



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Complementing the structure shown above is the Runway Safety Management Group that meets monthly to review program goals, accomplishments, shortfalls, and requirements. The members of the Runway Safety Management Group are the Regional Administrator, ANM-1; the Regional Runway Safety Program Manager, ANM-1R; the Flight Standards Technical Standards Branch Manager, ANM-230; the Airports Safety and Standards Branch Manager, ANM-620; and the Air Traffic Operations Branch Manager, ANM-530.

Roles and Responsibilities

The Regional Runway Safety Program Manager provides regional level program oversight and direction for runway safety activities and initiatives. The manager reports directly to the Regional Administrator, who provides executive level direction and assistance as required. Runway Safety Program policy is established by the national office. The Runway Safety Integrated Team Division Manager, ARI-100, coordinates policy and funding with the Regional Manager. The Regional Runway Safety Program Manager is responsible for coordinating Runway Safety Program activities and initiatives and for ensuring program effectiveness at the regional level.

The Regional Runway Safety Program Manager is responsible for providing program management and direction for all activities that have been funded and implemented at the regional level.

Each major line of business has runway safety activities that have been initiated at the national level. These programs are funded through line of business and through runway safety specific funds. The lines of business are responsible for implementing and managing these programs. The Regional Runway Safety Program Manager is responsible for providing oversight and coordination for these programs.

Regional Line of Business Representatives provide expertise and experience to the regional Runway Safety Program. These individuals execute specific regional programs to improve runway safety and provide program coordination and communication between their respective areas and the regional program. The representatives will work with their Division Managers to monitor ongoing line of business programs and to identify additional activities that may be initiated.

As funds become available, technical support will be provided through a support contract. These individuals will possess operational experience as an air traffic control specialist, pilot, or in airport operations. The Regional Runway Safety

Program Manager and the lines of business representatives will assign their responsibilities.

The Runway Safety Management Group was formed to have the management resources in place, focused on the problem, with the means and ability to implement solutions. These individuals are accountable and responsible for the actions taken to support the Runway Safety Program within their respective lines of business. They are responsible to dedicate the tools and other resources needed to make changes happen: i.e., to act as quickly as possible on the recommendations made by the Runway Safety Action Teams.

Activities

Regional and national initiatives are the “tools” used to reduce runway incursions. National initiatives are broad in scope and those activities that require significant funding. Regional initiatives are activities that target specific environmental and local airport configuration runway safety issues. These activities are a combination of national initiatives that are modified (as necessary) to fit the regional requirement and locally identified activities that address specific needs.

In some cases, certain national initiatives provide detailed guidance that will be consistently applied in every region. Two examples are the Runway Safety Action Team (RSAT) site visit and the Runway Safety Action Plan (RSAP).

Runway incursions take place at airports. While there may be broad causal factors for incursions, most incursions result from unique airport characteristics such as airport layout, local procedures, and traffic mix and complexity. Finding common causes at each airport is important to improving safety at each airport. To have a significant impact on incursions, they must be addressed at the airport level.

Program activities fall into several broad categories. These closely match those at the national level and are:

- Training
- Technology
- Communications
- Procedures
- Airport signs, markings, and lighting
- Data analysis
- Local solutions

Across these categories, these activities are targeted to reach pilots, controllers, vehicle operators and airport operators.

Key to all activities is communications. Communicating clear concise information to the aviation community promotes broad awareness and begins the process to reduce incursions. For that reason, many activities involve meeting with aviation professionals throughout the region.

Resources are required to support regional activities. These resources – people, technology, and educational materials – are employed to increase awareness, support training, and improve airfield conditions.

Activities that will be accomplished in the Northwest Mountain Region will include:

Runway Safety Action Plans

Each towered airport within the region will develop a Runway Safety Action Plan (RSAP). Details of this plan, including the contents and process for creation, are contained in the national Office of Runway Safety Order (7210.XX). The plan will list comprehensive safety activities that will be implemented and tracked at each airport. Development of this plan will be accomplished through a collaborative effort that includes airport management, the air traffic manager, airport tenants, and pilots who utilize the airport.

Coordination With Industry and Associations

The regional Runway Safety Program will establish relationships throughout the aviation community. The program will work closely with organizations within the region to support and promote runway safety activities. These activities may be initiated and conducted by either the government or an external organization. The program office will provide resources and materials, based on availability, to support these efforts.

Coordination With the National Program Office

National Runway Safety Program initiatives have an impact on regional activities. These broad programs address training, procedures, technologies, and other areas that are best coordinated at the national level. The regional program will participate in and influence these initiatives to insure they are appropriately targeted to meet operational needs at the region. The regional program will be responsible for implementing or overseeing the implementation of these programs at the regional level.

On a periodic basis, the Regional Runway Safety Program Manager will provide a program review to the Director of Runway Safety. This review will update the national office on program activities, status, and progress.

Expansion of Line of Business Activities

The regional Runway Safety Program office, through the direct participation of Regional Line of Business Representatives, will promote and support activities by the Lines of Business at the regional level. The national Runway Safety Program will coordinate national initiatives with Associate Administrators and their Directors. Many initiatives will be identified and implemented by the lines of business and their regional Division Managers. At the regional level, the regional program will support these activities. Additional activities, identified at the regional level by the lines of business will also be implemented. The regional program will coordinate and monitor these activities to provide a cohesive regional safety effort.

Data and Trend Analysis

The regional program will collect data from a variety of sources, including the national program office, to monitor runway incursions and surface incidents. The purpose will be to identify trends and assess corrective activities. Data analysis at the regional level allows application of local knowledge to better understand the importance and impact of events that take place on the airport surface. Additionally, targeted preventative activities can be evaluated through the analysis of incident data to provide feedback, allowing adjustment to increase effectiveness.

Publication and Distribution of Airport “Hot Spot” Charts

Airport “Hot Spot” charts are being developed at the national level for the larger airports. These charts will be made available to the region for distribution to the aviation community. The regional program will devise and implement a process for making these charts available to a wide population of the aviation community. This process may involve publication on the region’s web site; in local aviation periodicals; creation of flyers, posters, and other materials; mass mailings; and other methods. For airports that are not included in the national program, the regional program will develop and distribute similar charts. The regional program will coordinate the national and regional charts with local airport management and users to insure accuracy and usability.

Runway Safety Action Team Site Visits

Runway Safety Action Team (RSAT) site visits are formal evaluations that are conducted at airports to assess surface safety. This activity is defined in the national Office of Runway Safety Order (7210.XX). The RSAT will include regional Runway Safety Program representative(s), airport management, air traffic management, airport tenants, airport users, labor organizations, and others as appropriate. RSAT site visits will produce a Runway Safety Action Plan that identifies specific activities that will be taken at that airport to address surface

safety and the reduction of runway incursions. These visits will be scheduled in advance and will be managed by the Regional Runway Safety Program Manager.

Runway Safety Airport Assessments

The regional program as necessary and upon request will conduct Runway Safety Airport Assessments (RSAAs). RSAAs are similar to RSATs, but are conducted in a less formal method. The purpose of an RSAA is to provide feedback to air traffic management, airport management, and others regarding the airport's safety plan. These assessments may be requested by either air traffic or airport management or can be initiated by the regional program. They may be a follow-up to an RSAT.

Runway Safety Program Proposal for the use of STOPBARs above 1200 Runway Visual Range (RVR)

Currently when RVR readings are below 1200 and a Surface Movement Guidance Control System (SMGCS) plan is in effect, the STOPBARs provide a redundant capability to assure that human error in the form of miscommunication does not lead to a runway incursion.

During times of higher visibilities, on the order of one or more statute miles (depending on airfield geometry), pilots, ground vehicle operators, and controllers can verify visually that a runway is clear of traffic before a crossing occurs.

Our Runway Safety Program proposal is to reach a consensus at a specific airport between Air Traffic, Air Carriers, Pilots, and Airfield Management on an RVR visibility which is sufficient to allow pilots to use the 'see and avoid' concept to assure a runway is clear and also sufficient for controllers to look out the tower window to confirm compliance with their instructions. Below that specific visibility, system redundancy is needed. We propose a one-year demonstration program that utilizes STOPBARs above 1200 RVR at a specific airport to demonstrate the runway incursion prevention that such a system should provide. The demonstration period should also verify what capacity changes and costs are associated with the use of STOPBARs above RVR 1200. The demonstration program could quantify the numbers of runway incursion and surface incidents that occurred both with and without the use of the system redundancy that STOPBARs provide.

Airport User Meetings and Seminars

Awareness, education, and training are important tools to reduce runway incursions. Whenever possible, the regional program will initiate or support user meetings and seminars. The regional program may establish a schedule

independently or in conjunction with another organization (e.g.; Aircraft Owners and Pilots Association, Aviation Safety Foundation, et cetera) for these meetings. The regional program will encourage and support lines of business participation in these meetings whenever practical.

Dissemination of Runway Safety Information

The regional program will disseminate pertinent information regarding regional activities, national initiatives, trends, and other data related to runway safety. This information will further expand awareness and education throughout the aviation community. Dissemination will take place through the internet, mass mailings, publications, and other methods.

It is important to note in this plan that these activities listed are those that will be undertaken by the regional Runway Safety Program. There are many other agency and external programs, activities, and initiatives underway now and in the future that provide additional opportunities for outreach, education, awareness, and communications. This plan is not, by any means, all-inclusive of efforts to improve safety on the surface of our airports.

Analysis and Data

The regional Runway Safety Program will conduct analysis of runway incursions and surface incidents that take place within the region. Data will be compiled and analyzed for each towered airport to monitor activities and trends that impact surface safety.

The regional program provides a more knowledgeable ability to analyze and interpret information concerning specific airports within the region. This “local knowledge” will be used to develop activities for individual airports and to tailor national initiatives to provide more effective results.

Airport folders will be established that contain all information and data for each towered airport. These folders will be used to support RSAT site visits, to keep RSAPs, and to track initiatives and activities.

Regional analysis will verify national data to ensure accuracy and completeness.

Reporting

The Regional Runway Safety Program Manager reports directly to the Regional Administrator. On a weekly basis, the regional manager will submit an activity

and status report to the Administrator. That report will be further distributed to the ARC organization.

On a periodic basis, the regional manager will report activities and status to the national Runway Safety Program office during a program review.

A budget report will be prepared and submitted on a quarterly basis to the national Runway Safety Program office.

The Regional Runway Safety Program Manager will forward all Runway Safety Action Plans to the national office and will provide follow-up status information on activities contained in those plans.

All airport information will be available for review and audit. This information will include reports, plans, activities, status, analysis results, and all other collected information for each towered airport in the Northwest Mountain Region.

Appendix – CY2001 Activities

Jan 25	SEA	NTSB Hearing
Feb 12	PAE	Paine Field (Everette, WA) Lessons Learned
Feb 23	SEA	SeaTac SMGCS Meeting
Feb 23-25		NW Aviation Conference
Mar 5	BOI & GEG	Boise and Spokane Pilot Safety Seminars
Mar 14	TTD	Troutdale RIAT & Pilot Safety Seminar
Mar 22	SGU	St. George, UT – Utah Airport Operators Assn.
Apr 18	Seattle	NW Region Runway Safety Workshop
Apr 19-20	Seattle	NW Region Airports Conference
Apr 27	SLC	Salt Lake City Stopbar Meeting
May 1	BJC	Broomfield/JeffCo RIAT
May 21-22	BFI	King County International Airport / Boeing Field Airport Certification Visit
May 24	BFI	King County International Airport / Boeing Field Pilot Safety Seminar
Jun 12	IDA	Idaho Falls SIPT Meeting
Jun 13	SEA	SeaTac SMCGS Meeting
Jun 25	RNO	Western States Runway Safety Meeting
Jun 25-27	DC	Congressional Hearings on Runway Safety
June 29	SLC	Salt Lake City Pilot Safety Seminar
July 9-13		Runway Safety Program Quarterly Review
July 17	BFI	King County International Airport / Boeing Field RIAT
Aug 9-12	MYL	McCall, ID, Northwest Mountain Region Family Fly-In
Aug 30	BOI	Boise RSAT
Sept 6-7	SEA	Seattle-Tacoma International Airport RIAT
Sept 18	GEG	Spokane RSAT
Oct 24	PDX	Portland International Airport RIAT
Nov 5-9		Runway Safety Program Quarterly Review & Meeting with Regional Safety Program Managers

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Nov 27	RDM	Redmond / Roberts Field RIAT
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