

COMMITTED TO CONTINUOUSLY
IMPROVING SURFACE SAFETY.

Great Lakes Region (AGL) Runway Safety Plan FY19

2018-2019

RSC #42



**Federal Aviation
Administration**

www.faa.gov

Executive Summary

The Federal Aviation Administration's (FAA) top priority is maintaining safety in the National Airspace System (NAS). The Runway Safety Program's goal is to improve safety by decreasing the number and severity of runway incursions (RI), runway excursions (RE) and serious surface incidents. The FAA's National Runway Safety Plan (NRSP) outlines the FAA's strategy to adapt its runway safety efforts through enhanced collection and integrated analysis of data, development of new safety metrics, and leveraged organizational capabilities in support of meeting this goal.

In concert with the agency's stated runway safety goals, the Great Lakes Region (AGL) has developed this Regional Runway Safety Plan (RRSP) to provide a roadmap with regional emphasis for FY2019.

The objective of the NRSP is to reduce serious runway safety events by identifying, mitigating and monitoring factors that combine to create risk before serious events occur. This proactive process is defined under the FAA's Safety Management System (SMS). The AGL RRSP endeavors to align its activities with the principles and components of the SMS to the greatest extent possible. The RRSP also incorporates risk-based decision-making, one of the FAA Administrator's Strategic Initiatives.

REBECCA MACPHERSON

AGL Regional Administrator, Great Lakes Region

MARGIT MCKEE

AGL Runway Safety Program Manager (A), Great Lakes Region

TIMOTHY W. SHAVER

Director, Office of Safety Standards, AFS-1

DENISE KNIGHT

Director, Technical Operations, Central Service Area

SUSAN MOWERY-SCHALK

Director, Airports Division, Great Lakes Region

DAVID W. WASHINO

Director, Air Traffic Operations, Central Service Area

ANDY ATHCHLEY

Director, Central Service Area

TABLE OF CONTENTS



4

FAA Safety Management System (SMS)

6

Regional Runway Safety Plan (RRSP)
Methodology

7

FY19 RRSP Initiatives

8

1. Safety Assurance

10

2. Safety Risk Management (SRM)

12

3. Safety Policy

14

4. Safety Promotion

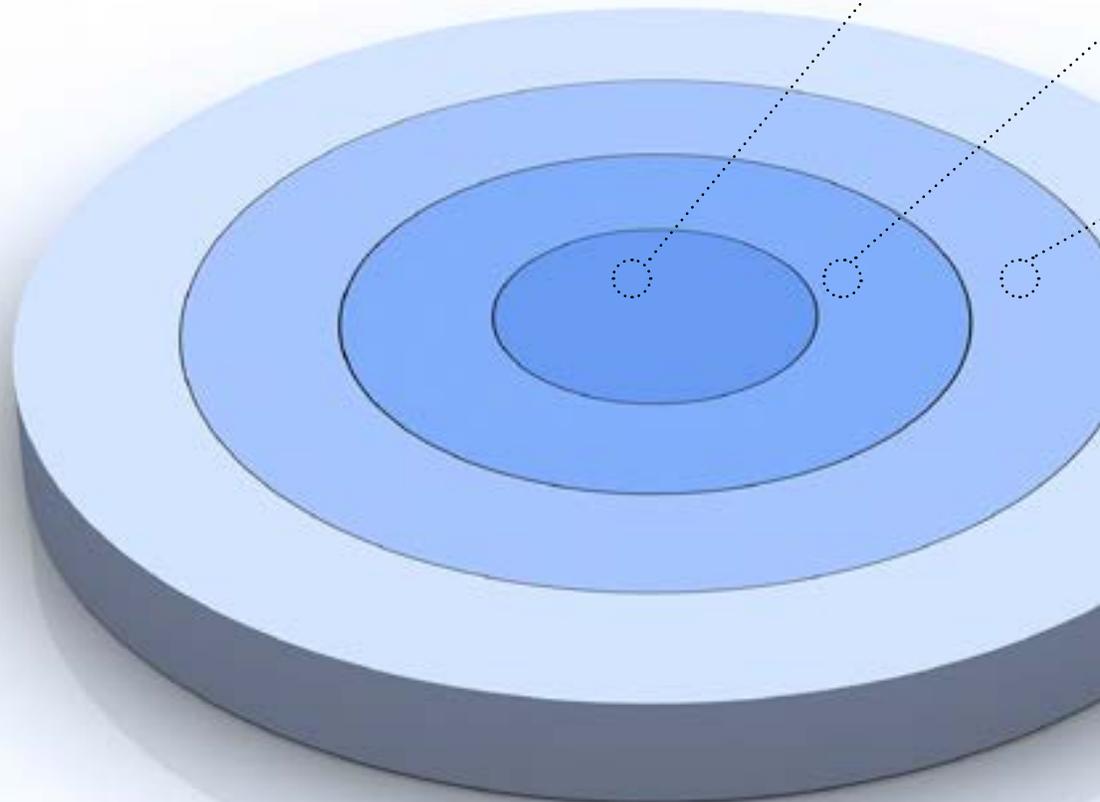


FAA Safety Management System (SMS)

The [FAA ORDER 8000.369C](#), Safety Management System, advances safety management by moving toward a process-oriented safety system approach with an emphasis on risk management and safety assurance. [FAA ORDER 8040.4B](#), Safety Risk Management Policy, formalizes the use and communication of Safety Risk Management (SRM) across the FAA. Together, these two orders define current National Policy for the development of the FAA SMS and outline the architecture of the current SMS to align with the Administrator's Strategic Policies.

A main function of the SMS is to collect and analyze relevant data that identifies the factors that constitute acceptable risk. Through the NRSP, Runway Safety is transitioning to assimilate runway safety activities into FAA's SMS.

The AGL Regional Runway Safety Initiatives are grouped according to the FAA's four pillars of SMS: Safety Policy, Safety Risk Management, Safety Assurance, and Safety Promotion.



FY19-FY20 NRSP Objectives

SAFETY ASSURANCE

Remain the global leader in assuring runway safety enhancement initiatives are effective in maintaining an acceptable level of safety at U.S. airports with an air traffic control tower.

- Identify Operating Hazards
- Program Data
- Voluntary Safety Reporting
- Investigations
- Safety Risk Monitoring
- Data Analysis
- Partnership for Safety
- Audits and Evaluations

SAFETY RISK MANAGEMENT

Implement Runway Safety Enhancement Initiatives that manage or reduce the risk of airport operations.

- Analyze, Assess, Mitigate, and Accept Risk
- Develop Monitoring Plan
- Safety Risk Management Documents

SAFETY POLICY

Establish and maintain policies and procedures to ensure adequate resources are available to accomplish the FAA's near-term and strategic objectives.

- SMS Orders
- Safety Guidance
- FAA/ATO Safety Orders
- SMS Manual

SAFETY PROMOTION

Relentlessly promote best practices, lessons learned, and actionable information obtained from data analysis to our global runway safety stakeholders.

- Outreach and Education
- Products
- Lessons Learned
- Workshops
- Safety Communication

Regional Runway Safety Plan (RRSP) Methodology

To determine the FY2019 AGL priority airports, the Regional Runway Safety Program Manager (RSPM) evaluated surface event data for FY2018 along with trends from the previous three years for each of the airports containing an FAA or Federal Contract Airport Traffic Control Tower (ATCT). In addition, other criteria such as upcoming construction,

poor inspection records, and other factors that may contribute to additional surface risk were also considered in decision-making. Each of the AGL Priority Airports has a unique driver behind the number and type of surface events at that location that may indicate an increased “exposure” to surface risk.

AGL Priority Airports

Runway Safety requests support and attendance from each Regional Governance Council (RGC) line of business (LOB), either physically or telephonically, at the Local Runway Safety Action Team (RSAT) meetings at the AGL Priority Airports listed below. More detail regarding the data and selection of priority airports is located in [APPENDIX A](#).

- Minneapolis – St. Paul International, Minneapolis, MN (MSP)
- Flying Cloud, Minneapolis, MN (FCM)
- Detroit Metro Airport, Detroit, MI (DTW)
- Cleveland-Hopkins International, Cleveland, OH (CLE)
- Purdue University Airport, Lafayette, IN (LAF)
- Dane County Regional, Madison, WI (MSN)
- Chicago Executive Airport, Wheeling, IL (PWK)
- Terre Haute Regional, Terra Haute, IN (HUF)
- La Crosse Regional, La Crosse, WI (LSE)
- O’Hare International, Chicago, IL (ORD)
- Midway International, Chicago, IL (MDW)
- University of Illinois-Willard Airport, Champaign-Urbana, IL (CMI)

AGL Monitored Airports

The RSPM has also identified airports that may warrant additional attention due to upcoming construction, changes to airfield operations, or other activities that may lead to runway incursions. The RGC intends to monitor these airports, participate in SRM panels, planning meetings and other activities to the extent practical. If runway safety related issues arise during FY2019, the RGC may determine that other measures or on-site activities may be warranted at the AGL Monitored Airports listed below. More detail regarding the data and selection of monitored airports is located in [APPENDIX B](#).

- Grand Forks International, Grand Forks, ND (GFK)
- General Mitchell International, Milwaukee, WI (MKE)
- Oakland County International, Pontiac, MI (PTK)
- Minneapolis – Crystal Airport, MN (MIC)
- Duluth International, Duluth, MN (DLH)
- John Glenn Columbus International, Columbus, OH (CMH)

Plan Updates

This plan covers the runway safety related activities within the current fiscal year (FY2019). However, the Runway Safety Governance Council (RSGC) will monitor additional airports of interest which may not have risen to the level of an AGL Priority Airport at the time this plan was developed. This is a living document and the RGC reserves the right to update the plan if deemed necessary.

FY19 Regional Runway Safety Plan Initiatives

To support the National Runway Safety Plan (NRSP) objectives, the AGL RGC has developed Regional Runway Safety Plan (RRSP) initiatives as outlined in this document.

The RSGC will undertake these initiatives during FY2019. No specific completion dates are provided for each activity in this plan, but all are expected to be completed by the end of FY2019. The RSPM will work with the Runway Safety Group within ATO Safety and Technical Training to identify the resources necessary to accomplish these initiatives within the framework of the

national program budget and available personnel. The RSPM will monitor progress and coordinate any updates to this plan as appropriate throughout FY2019. This plan will be updated annually by the RSPM, with concurrence from the RSGC.

SMS is a formalized and proactive approach to system safety that combines four components to create a systemic approach to managing and ensuring safety. For continuity with the NRSP, the AGL RRSP has aligned its initiatives with these four components.





1. Safety Assurance

O Hare International Airport, Chicago, IL (ORD)

FY18-FY20 NRSP Safety Assurance Objective: Remain the global leader in assuring Runway Safety enhancement initiatives are effective in maintaining an acceptable level of safety at U.S Airports with an air traffic control tower.

Activity 1.1 – Increase Awareness of Surface Event Trends

The RSPM will analyze surface events, evaluate performance, identify trends and present findings quarterly to the RGC. Runway Safety will monitor and analyze current performance metrics including severity, number and rate of runway incursions. This data will provide management with information to make informed decisions aimed at reducing risk to the NAS and also provide feedback regarding risk mitigations already in place.

Action Items:

1.1a Runway Safety will process all Great Lakes Region surface events for evaluation by the HQ Runway Incursion Assessment Team (RIAT). The RSPM will participate in RIAT meetings as necessary to provide more detailed information on Great Lakes Region events for the RIAT team's evaluation.

1.1b Runway Safety will provide current RI and surface incident (SI) data monthly to RGC members.

1.1c The RSPM will track the effectiveness of past runway safety related mitigations during Local RSAT participation and /or the review of resulting RSAPs. An increase in RI activity or “unintended consequences” from a recent change to the NAS will be forwarded to the RGC for consideration of additional mitigations.

Activity 1.2 – Incorporation of Surface Trends into the RRSP

Using Runway Safety Tool (RST) data and input from subject matter experts, the RGC will recommend and implement adjustments to the AGL Regional Runway Safety Plan as warranted.

Action Item:

1.2a The RGC will review the RRSP throughout FY2019 and provide recommendations for updates as needed.

Activity 1.3 – RSAT Scheduling and Coordination

Runway Safety will ensure RGC awareness of upcoming RSAT meetings and encourage participation by team members.

Action Item:

1.3a The RSPM will provide a list of upcoming RSAT meetings at the quarterly RGC meetings.

Activity 1.4– Hot Spot Validation

An airport surface “Hot Spot” is a location on an airport movement area with a history or potential risk of collision or runway incursions, and where heightened attention by pilots/drivers is necessary. Using data and risk-based decision-making, the Runway Safety Group is the focal point for establishing and deleting designated airport Hot Spots and monitoring their effectiveness.

Action Items:

1.4a The RSPM will approve the addition or deletion of Hot Spots at Great Lakes Region Airports.

1.4b The RGC will monitor Hot Spots (and recently removed Hot Spots) for runway incursion trends and make recommendations for any warranted Hot Spot changes and/or mitigations.

MILESTONES

2019

Runway Safety will process all Great Lakes Region surface events for evaluation by the HQ Runway Incursion Assessment Team (RIAT)

2019

The RSPM will track the effectiveness of past runway safety related mitigations during Local RSAT participation and /or the review of resulting RSAPs.

2019

The RGC will recommend and implement adjustments to the AGL RRSP using RSAT data and input from subject matter experts

2019

The RGC will monitor Hot Spots in the Great Lakes Region for runway incursion trends and make recommendations for any warranted Hot Spot changes and/or mitigations

2. Safety Risk Management (SRM)

FY18-FY20 NRSP Safety Risk Management Objective: Implement Runway Safety Enhancement Initiatives (RSEI) that manage or reduce the risk of airport operations.

Activity 2.1 – Local RSAT Support at AGL Priority Airports

Local Runway Safety Action Team (RSAT) meetings provide the foundation for the Runway Safety Program at FAA and Federal Contract Towered airports. The Local RSAT is the primary means to identify and address site-specific risk at the local level. Runway Safety Action Plans (RSAP) are developed during these meetings and updated annually at a minimum. ATO Terminal Services is responsible for conducting these meetings with support of the local airport. Other FAA lines of business are encouraged to participate in all Local RSAT meetings but will give emphasis to Priority Airports.

Action Item:

2.1a At a minimum, the RSPM will attend LRSAT meetings at AGL Priority Airports in person or telephonically. The RGC lines of business will participate in the RSAT meetings of AGL Priority Airports to the extent possible to provide advanced in-depth technical knowledge and experience of the NAS to support the reduction of risk at the airport. The RGC member or designee will be the subject matter expert for runway safety related issues pertaining to their respective LOB and will proactively solicit input from field managers to obtain locally possible solutions to mitigation efforts. Attendance may be in person or telephonically.

Activity 2.2 – Runway Safety Action Item Tracking and Prioritization

The Regional Governance Council will work together to monitor existing and future action items that are developed during RSAT meetings to ensure that all action items are addressed

appropriately. These action items are voluntary, consensus driven and are not regulatory. Action items must have agreement from the party who will be responsible for implementation. If the responsible party is not present at the meeting, coordination must be established prior to finalizing the action plan.

- The RSPM will work with any LOB needing assistance with the coordination of action items.
- Action items are updated, closed or extended based on direct communication and concurrence with the responsible party.

Action Item:

2.2a Overdue and Soon Due Action items will be addressed quarterly prior to the RGC meetings to ensure status updates are entered and estimated completion dates reflect current estimates.

Activity 2.3 – Participate in Safety Risk Management Activities

Runway Safety, Airports Division, Flight Standards Service and Terminal Services will work together to raise awareness of changes to airport surface operations and to ensure thorough review of Safety Risk Management documents related to airport geometry, air traffic procedures and other NAS changes as it relates to runway safety.

Action Item:

2.3a Runway Safety will review and offer comments and exchange information with Airports Division and Terminal Services on airport geometry and operational changes and

participate as requested in SRM panels and SRM document reviews on issues relating to surface safety initiatives.

Activity 2.4 – Runway Incursion Mitigation (RIM)

The FAA Airports Division has developed an inventory of airport locations where runway incursions (RI) have occurred and is now working with airport sponsors on mitigation strategies. The data collected from 2007-2014 indicates airport locations where three or more peak annual runway incursions have occurred in a given year or more than seven runway incursions cumulate have occurred during this period. This information is subject to change as the FAA works with the airport sponsors. As projects proceed and additional data is collected on RIs, the FAA will update this inventory annually.

Action Item:

2.4a Runway Safety will work with the AGL-600 RIM program manager to track the status of RIM projects and monitor the effectiveness of improvements once they are implemented.

Activity 2.5 – Flight Standards (AFS) Pilot Deviation Trend Analysis

As an organization, Runway Safety is aware of what happened during an incursion, but there is often a missing link as to why it happened. AGL AFS has committed to provide Runway Safety with an analysis report on pilot deviation runway incursions upon request. This analysis will be used by the RGC to better understand possible causal factors related to incursions, and to potentially help in identifying mitigations.

Action Item:

2.5a AFS will provide a trend report on regional or airport specific pilot deviations upon request of the RGC.

MILESTONES



2019

Local Runway Safety Action Team (RSAT) meetings will be conducted with the participation of the RSPM and RGC LOBs at AGL local airports



2019

Overdue and Soon Due Action Items developed from RSAT meetings will be addressed quarterly at RGC meetings



2019

Runway Safety will review, offer comments and exchange information with Airports Division and Terminal Services on airport geometry and operational changes and participate as requested in SRM panels and SRM document reviews on issues relating to surface safety initiatives



2019

Runway Safety will work with the AGL-600 RIM program manager to track status of RIM projects and monitor effectiveness of improvements



2019

Upon RGC request, AFS will provide trend reports on pilot deviations



3. Safety Policy

O'Hare International Airport, Chicago, IL (ORD)

FY18-FY20 NRSP Safety Promotion Objective: Establish and maintain policies and procedures to ensure adequate resources are available to accomplish the FAA's near-term and strategic objectives.

Activity 3.1 – FAA Directives and Planning Documents

Runway Safety Program Order [7050.1](#) prescribes the FAA Runway Safety Program (RSP). This directive establishes policy, assigns responsibility, and delegates authority for ensuring compliance with this order within each FAA organization.

Runway Safety activities are governed by and/or have connectivity to several orders and documents, including but not limited to:

- FAA Order 7050.1
- JO 7110.65
- JOs 7210.632, .633 and .634
- JO 1030.1
- 14 CFR Part 139, and applicable Advisory Circulars
- National Runway Safety Plan
- ATO Safety and Technical Training Business Plan

Activity 3.2 – Regional Governance Council

The Runway Safety Regional Governance Council (RGC) is chaired by the Regional Administrator and composed of the Regional Runway Safety Program Manager (RSPM) and executives from the Regional

Airports Division, Flight Standards Service, and the Air Traffic Organization. The RGC meets quarterly to discuss current runway safety trends, regional activities and the status of pending action items. [APPENDIX C](#) lists the offices that represent the RGC.

Activity 3.3 – Regional Runway Safety Team

The RRST functions as a working level team in support of Runway Safety efforts within the region. The RSPM and LOB subject matter experts will brief the RRST on current safety data, trends and issues, and solicit input from the other RRST members. The RRST will identify and address specific issues as well as systemic problems to reduce surface risk at regional airports and elevate critical issues to the RGC. The RRST is tasked with identifying regional priorities and working through their executive representative to ensure that issues are properly vetted through their respective LOBs for prior coordination before each RGC quarterly meeting.

For the purposes of the Great Lakes Region, the Regional Governance Council and Regional Runway Safety Team are one and the same.

How We Are Collaborating





4. Safety Promotion

Detroit Metropolitan Wayne County Airport, Detroit, MI (DTW)

FY18-FY20 NRSP Safety Promotion Objective: Promote best practices, lessons learned, and actionable information obtained from data analysis to our global runway safety stakeholders.

Activity 4.1 – Internal Executive Communication

Improving the level of safety on the airport surface is an FAA cross-organizational priority. Executive attendance at quarterly Runway Safety Regional Governance Council meetings and other Regional Management Team functions is one of the keys to fostering a proactive runway safety culture within the agency. Having all key members present for RGC meetings ensures the LOB executives within AGL are aware of runway safety related information and initiatives, and effectively relay pertinent details to their points of service delivery in the field.

Action Items:

4.1a The AGL Regional Administrator will host quarterly Regional Governance Council meetings and will work to obtain continued executive

support and engagement from director level management from each LOB represented.

4.1b The AGL Regional Management Team conducts public listening sessions, congressional outreach, and other public service events. The RSPM will support these activities whenever possible and will participate in a minimum of two of these RMT sponsored events in FY2019.

Activity 4.2 – Pilot/Controller Forums

General aviation (GA) pilot deviations are the leading cause of runway incursions in the National Airspace System (NAS). Pilot/controller forums offer an excellent opportunity to reach out to local pilots and discuss operations at towered airports with the GA community.

Action Item:

4.2a The FAAS team will host one Pilot/Controller Forum in each Great Lakes Region

Flight Standards District Offices (FSDO) in conjunction with local Air Traffic Management. Runway Safety will participate in these events to the extent possible and will provide runway safety data and pilot information for the events they are not able to attend.

Activity 4.3 – University Flight School Outreach

To reduce pilot and vehicle deviations in the NAS, it is imperative to reach out to new pilots, controllers, and airport operators as they first enter the system to provide runway safety awareness education.

Action Item:

4.3a The RSPM will conduct a minimum of one runway safety educational presentation on current trends and runway incursion avoidance to Great Lakes Region university flight school students.

Activity 4.4 – Outreach to Aviation Stakeholders

Education and awareness are key to long term success in reducing surface events in the NAS. Collaborating with industry fosters the exchange of information and increases public participation. AGL Runway Safety will work with Air Traffic Services, Flight Standards Service, and Airports Division in the region to determine appropriate venues in which to participate. Event selection will be determined by the Runway Safety Group, considering recommendations from Regional Governance Council members. Such events and educational opportunities may include: trade shows, flight instructor refresher courses, Designated Pilot Examiner briefings, pilot/controller forums, and outreach to pilot and mechanic schools. Runway Safety will work with Air Traffic Services, Flight Standards Service, and Airports Division to assist in the review of training materials and provide support where able.

Action Items:

4.4a AGL Runway Safety will contact regional representatives from organizations such as AOPA, NBAA, AAAE and NASAO. AGL Runway Safety will work with these organizations to find opportunities to assist and/or collaborate on their activities within the region. The RSPM will conduct

a minimum of one presentation at industry events and participate in these regional activities to the extent practical.

4.4b AGL Runway Safety will support the Experimental Aircraft Association's (EAA) AirVenture airshow in Oshkosh, Wisconsin by staffing a booth in the FAA hangar and presenting on Runway Safety topics in the FAA's safety forum. The event is scheduled in July 2019 and will require planning and preparation as early as January 2019.

MILESTONES**2019**

The RSPM will participate in a minimum of two RMT sponsored events such as public listening sessions, congressional outreach and other public service events

2019

The FAAS team will host one pilot/controller forum in each Great Lakes Region FSDO

2019

The AGL RSPM will conduct a minimum of one runway safety educational presentation on current trends and runway incursion avoidance to university flight school students.

2019

AGL Runway Safety will contact regional representatives from organizations such as AOPA, NBAA, AAAE and NASAO

2019

AGL Runway Safety will support the Experimental Aircraft Association's (EAA) AirVenture airshow in Oshkosh scheduled in July 2019

For More Information:

Federal Aviation Administration
Great Lakes Region
2300 East Devon Avenue
Des Plaines, IL 60018

Published by AGL Regional Runway Safety Team



U.S. Department
of Transportation
**Federal Aviation
Administration**

www.faa.gov

APPENDIX A (cont.). AGL Priority Airports

All runway incursion figures are based on information current as of October 2018.

Airport	Total RI	RI Rate	Operations	OI	PD	V/PD	SI	A	B	C	D	P
ORD	22	2.46	893,497	11	8	3	26			11	8	2
MSP	19	4.66	409,982	8	8	3				10	7	2
FCM	17	18.67	91,060	2	13	2	1			5	12	
MDW	13	5.3	245,178	4	6	3	3			7	4	2
PWK	12	15.09	79,504	5	4	3				5	6	1
CLE	11	8.78	125,284	1	1	6	1			7	2	2
LSE	11	57.39	19,166		9	2				2	8	1
CMI	10	22.03	45,385		8	2				2	5	3
MSN	9	10.48	85,893	2	6	1				6	3	
HUF	8	13.81	57,924		6	2				2	5	1
LAF	8	7.01	114,148	1	6	1	2			2	6	
DTW	8	2.03	394,807	2	4	2	38			2	5	1

APPENDIX A. AGL PRIORITY AIRPORTS

All runway incursion figures are based on information current as of October 2018.

Minneapolis, MN – Minneapolis-St. Paul International Airport (MSP)

Recent history of runway incursions. Complex layout. Heavy volume. Taxing on runway operations.

Minneapolis, MN – Flying Cloud Airport (FCM)

Wrong runway landing risk I history. Runway Incursion increase.

Detroit, MI – Detroit Metropolitan Wayne County Airport (DTW)

Recent history of runway incursions. Complex layout. Heavy volume. Communication ramp control & tower. Construction

Cleveland, OH – Cleveland-Hopkins International Airpon (CLE)

Recent runway incursion history.

Lafayette, IN – Purdue University Airport (LAF)

Heavy flight training activity.

Madison, WI – Dane County Regional Airport (MSN)

Complex layout and mix of traffic. Increasing Runway Incursions.

Wheeling, IL – Chicago Executive Airpon (PWK)

Increase in Runway Incursions.

Terre Haute, IN – Terre Haute Regional Airport, (HUF)

Increase in Runway Incursions

La Crosse, WI – La Crosse Regional Airport (LSE)

History of wrong-runway events, communication issues, confusion on airfield, Runway Incursion increase.

Chicago, IL – O'Hare International Airport (ORD)

Heavy volume, complex layout, on-going construction.

Chicago, IL – Chicago Midway International Airport (MOW)

Heavy volume, complex layout. Construction.

Champaign-Urbana, IL – University of Illinois-Willard Airport (CMI)

Flight training activity. Increase in Runway Incursions.

APPENDIX B. AGL MONITORED AIRPORTS

All runway incursion figures are based on information current as of October 2018.

Grand Forks, ND – Grand Forks International Airport (GFK)

Heavy flight training activity. High Number of PD.

Milwaukee, WI – General Mitchell International Airport (MKE)

Complex layout and mix of traffic. Wrong Surface.

Pontiac, MI – Oakland County International Airport (PTK)

Increase in Runway Incursions.

Minneapolis, MN – Crystal Airport, (MIC)

Runway Incursions VP/D's.

Duluth, MN – Duluth International Airport (DLH)

Increase in Runway Incursions. Construction.

Columbus, OH – John Glenn Columbus International Airport (CMH)

Increase in Surface Incidents.

Airport	Total RI	RI Rate	Operations	QI	PD	V/PD	SI	A	B	C	D	P
GFK	8	2.2	363,794	1	5	2	2			3	5	
PTK	8	5.92	135,185	1	7		5			2	6	
DLH	7	11.31	61,886	4	3		1			2	3	2
MIC	6	16.16	37,118	1	1	4	4			1	5	
MKE	3	2.68	112,111		3		5			2	1	
CMH	2	1.5	132,941	1		1	8				2	

APPENDIX C

REGIONAL RUNWAY SAFETY GOVERNANCE COUNCIL / REGIONAL RUNWAY SAFETY TEAM

- Regional Administrator's Office
- Airports – Regional Office
- Runway Safety – AGL
- Runway Safety – CSA
- Runway Safety – HQ
- Air Traffic – System Operations
- Air Traffic – Cleveland District
- Air Traffic – Indy/Memphis District
- Air traffic – Minneapolis District
- Air Traffic – Chicago District
- Tech Ops – Central Service Area
- Tech Ops – Cleveland District
- Tech Ops – Indianapolis District
- Tech Ops – Chicago District
- Tech Ops – Minneapolis District
- Flight Standards Service

APPENDIX D. KNOWN FAA PROGRAMS AND DEFINITIONS

Airport Construction Advisory Council (ACAC): ACAC is dedicated to ensuring the safety of all stakeholders operating in the Nation Airspace System (NAS) during all runway and taxiway construction projects. The ACAC is tasked with developing strategies and risk mitigations, for Air Traffic Managers (ATMs) to employ, that will enhance surface safety and ensure that communication is complete and consistent. The ACAC strives to serve as a conduit for sharing good operating practices between managers throughout the NAS. The ACAC is responsible for transforming appropriate strategies and best practices into future Air Traffic Organization policy to perpetuate operational safety during all construction projects.

Airports Division: The Airports Division is involved in a number of programs and initiatives focused on improving airport and runway safety and reducing the number and severity of runway incursions. Provide below is a brief synopsis of these programs:

- **Airport Improvement Program (AIP):** Airport Improvement Program (AIP) and Passenger Facility Charge (PFC) Program: The Airports Division administers both of these funding programs. Not all Runway Safety Action Plan action items are eligible for these two types of funding. The Airports Divisions must make an eligibility determination (AIP and PFC eligibility rules are normally the same). However, if an action item is determined to be AIP eligible, the Airports Division will determine if or when AIP funding would be available. If AIP is not available, the airports always has the option to use their own funding.
- **Part 139 Airport Certification Safety Program:** The Airports Division certifies airports serving air carriers utilizing aircraft over nine passenger seats. Part 139 contains a number of regulations relevant to runway safety. These include requirements and minimum standards for airport pavement: runway safety areas; airfield marking, lighting, and signage; limiting access to airport movement areas; and airfield driver training. Airport Certification Safety Inspectors conduct airfield inspections on a regular basis to ensure compliance with these and other applicable requirements. In addition, all Runway Incursions involving ground vehicles or pedestrian deviations (V/PDs) are formally investigated by the Airports Division
- **Local Runway Safety Actions Teams (LRSAT):** The Airports Division strives to participate in as many RSAT meetings as possible. Airports Division monitors Airports Division Action items contained in Runway Safety Action Plans.
- **Runway Incursion Mitigation Program (RIM):** In 2014, the Office of Airports launched the Runway Incursion Mitigation (RIM) Program to address non-standard geometry at airports. RIM initially mapped the location of all runway incursions occurring in 2007 through 2013. The data for 2014 has since been

added. This information was then overlaid upon locations where airfield geometry appeared to not meet current FAA design standards. Locations with multiple runway incursions and non-standard geometry were identified as priority RIM locations and discussions were initiated with the airport operators regarding possible changes to the airfield to address the runway incursion risks. The RIM is a dynamic and continuing program using Risk- Based Decision Making to focus resources on the planning and construction of projects to reduce the potential for runway incursions where airfield geometry may be a contributing factor.

- **Vehicle/Pedestrian Deviation (V/PD) Prevention:** The Airports Division continuously monitors V/PDs at all airports within the Region. Upon notification of a V/PD, the Airports Division completes an investigation and provides the RSPM with a copy of the findings and works with the RRST to address any known systemic issues. The Airports Division also develops educational materials highlighting these events to assist airport operations in V/PD prevention and best practices.

Air Traffic Organization Technical Operations: Technical Operations is responsible for maintaining and repairing National Airspace System (NAS) equipment. This may include but is not limited to Instrument Landing Systems (ILS), approaching lighting systems and other navigational aids located on the airfield. The Airway Transportation System Specialists (ATSS) attend required instruction annually to operate in those areas. If a deviation has occurred involving the Technical Operations, a System Service Review (SSR) is conducted to investigate the deviation. If warranted, briefing or additional training may take place.

Air Traffic Services (ATS): The primary purpose of the ATC system is to prevent a collision between aircraft operating in the system and to provide a safe, orderly, and expeditious flow of traffic. ATS provides safe, efficient, and secure air traffic control and traffic management services to system stakeholders.

Air Traffic Services Quality Control Group (QCG): The purpose of quality control, as defined in the ATO, is to assess the output (whether a product or service) of a particular process or function and identify any deficiencies or problems that need to be addressed. Within this quality control concept, it is a primary responsibility to take actions, particularly at the Service Delivery Point (SDP), to ensure that these products or services meet the requirements of the SDP and the ATO organizationally. Quality Control directives outline the processes and steps utilized to ensure the quality of products and services provided at the SDP level on an ongoing basis.

Runway Incursion Device (RID): Any device that is used to provide a reminder to a controller that the runway surface is in use and therefore not safe to be crossed, landed upon, used for takeoff, etc.

Compliance Philosophy: The FAA relies on voluntary compliance with aviation safety regulations by certified airmen and organizations operating in the NAS. The FAA Flight Standards Service investigates reports of noncompliance and has a statutory responsibility to take appropriate corrective action up to and including punitive enforcement when necessary to ensure that certified entities are meeting regulatory safety standards. In FT16, the FAA adopted a program called Compliance Philosophy which, for Flight Standards Service, mandates that Aviation Safety Inspectors finding any airman or organization not meeting the minimum regulatory requirements related to their certificate evaluate underlying cause, airman/organizational attitude, and implement corrective action that promptly and effectively restores full compliance. Such actions are taken in a cooperative process involving specific compliance actions such as airman counseling, remedial training, or other specific program related to the problems(s) identified in the investigation. Airmen or organizations who demonstrate chronic noncompliance, inability to perform, or who have noncompliant attitudes are ineligible for Compliance Philosophy. Beyond Flight Standards, Compliance Philosophy exists throughout the FAA and is supported by the Safety Management System (SMS) approach to aviation safety.

Comprehensive Electronic Data Analysis and Reporting Tool (CEDAR): Refers to the Comprehensive Electronic Data Analysis and Reporting Tool used by ATO to report occurrences in the National Airspace System (NAS).

FAA Safety Team (FAAST): The FAASTeam supports the Administrator's Runway Safety initiatives by participating at LRSATs and providing Runway Safety outreach to pilots. FAASTeam employees working within Flight Standards District Offices (FSDOs) are engaged in the following efforts related to Runway Safety:

- Carry out tasks in the FAASTeam National Performance Plan (NPP) related to Runway Safety.
- Coordinate FAA outreach with airmen and aviation organizations in association with local ATC facilities and airport operators.
- Assist FSCO Inspectors in root cause analysis and identification of corrective actions for FDs to the extent that useful safety information is discovered and acted upon.
- Assist in drafting formal Safety Recommendations if applicable.
- Assist in drafting educational programs and/or products appropriate to local Runway Safety issues.
- Utilize volunteer FAASTeam Representative including CFIs and DFEs in all aspects of Runway Safety Promotion.

- Assist FSDO Inspectors in implementation of airmen remedial training and counseling pre the Compliance Philosophy.
- Report and analyze local safety issues and trends as a section of the annual FSDO Report to the FSDO Manager.

Flight Standards District Office (FSDO) and Certificate Management Office (CMO):

The Flight Standards Service does business through Flight Standards District Office (FSDO) and Certificate Management Offices (CMO) located strategically throughout the Central Region. On August 20, 2017, the Flight Standards Service was reorganized from a regionally (geographically) based organization to a functionally based organization employing the Safety Management System (SMS) principles of safety assurance, safety standards, Safety Risk Management (SRM), and safety promotion. Flight Standards Service has four offices (1) Office of Air Carrier Safety Assurance; (2) Office of General Aviation Safety Assurance; (3) Office of Safety Standards; and (4); Office of Foundational Business.

FSDOs are aligned with the Office of General Aviation Assurance and CMOs with the Office of Air Carrier Safety Assurance. The Office of General Aviation Safety Assurance is comprised of functionally aligned divisions, which share responsibilities and balance the level of work identified below: (1) Provides all certifications and oversight activities of all aviation entities that are not under the purview of the Office of Air Carrier Safety Assurance's purview. (2) Ensures consistency and standardization in application of oversight activities by the workforce, applies RBDM for enhanced and focused utilization of certification and surveillance resources, and works across the Service to ensure stakeholder and public needs are proactively and expeditiously met. (3) Conducts or assists in investigating accidents, incidents, and possible violations of 14 CFR and ensures the adequacy of operators' flight procedures, operating methods, airmen qualifications and proficiency, and aircraft maintenance not under the Office of Air Carrier Safety Assurance's purview.

Each FSDO Office Manager has been assigned direct responsibility for managing all matters relating to Runway Safety within the scope of Flight Standards oversight as it concerns his or her geographical area of responsibility. These include:

- Oversight of certified airmen and aviation organizations including certification, surveillance, accident/incident investigation, and enforcement.
- Safety Promotion and Educational Outreach utilizing the FAASTeam employees who report directly to each office manager.
- Collaboration with FAA LOBs and Stakeholders to identify aviation hazards and associated risks and to implement corrective action within the area of responsibility to reduce the potential of aviation accidents and incidents.

- Oversight of Flight Standards Programs at the local level intended to improve runway safety within the area of responsibility and to coordinate this with the RRST through Flight Standards Service Management.

FSDP and CMO Offices are engaged in the following specific efforts related to Runway Safety:

- Prompt response and investigation of occurrences, incidents, and reported pilot deviations.
- Creating high-quality reports documenting all investigations
- Identification of system problems and forwarding recommendations and proposed mitigations for appropriate FAA action/response.
- Implementation of the most effective corrective actions through the FAA Compliance Philosophy which emphasizes a cooperative approach with airmen and stakeholders.
- Upholding minimum regulatory standards as applied to airmen and organizations operate in the NAS.

Hotspot: An airport surface hot spot is a location on an airport movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers/controllers is necessary.

Incorrect Presence: Presence inside the movement or protected area caused by non-compliance with a requirement or instruction.

Mandatory Occurrence Report (MOR): An occurrence involving air traffic services for which the collection of associated safety-related data and conditions is mandatory. CEDAR is the preferred method of submitting MORs.

Movement Area: The runways, taxiways, and other surface areas of an airport/heliport which are used for taxiing/hover taxiing, air taxiing, and/or takeoff and landing of an aircraft, and which are under control of the operating ATCT. The movement area is typically defined in a local letter of agreement between the ATCT and the airport operator.

NASAO Runway Safety Initiative (FAA/NASAO Runway Safety Initiative): As put forth in a Memorandum of Understanding (MOU) between FAA and NASAO (National Association of State Aviation Officials) both parties will explore methods of working collaboratively to provide and disseminate information on runway safety in order to reduce both incursion and excursions at towered controlled airports. The focus will be on providing educational outreach and subject expertise to the aviation community regarding Runway Safety operations, regulations, and related issues. The MOU is

considered an ongoing commitment, until both FAA and NASAO determine the objectives of the MOU have been satisfactorily achieved.

Protected Area: The protected area of a surface intended for landing or takeoff includes the area inside the runway hold position markings (e.g., hold line) or paved taxiways or ramps and the designated safety area.

Regional Runway Safety Governance Council (RGC): Chaired by the Regional Administrator or designee and composed of the RRSPM and executives or designees from Airports, Flight Standards, and ATO Terminal Operations. Each region may choose whether to establish such a council, based on the needs of the region and judgment of the Regional Administrator. If established, the council is responsible for ensuring that regional initiative and actions are being accomplished in the appropriate manner and timeframe. In the Great Lakes Region, considered to be one and the same as the Regional Runway Safety Team (RRST). Appendix C lists the members of the RGC,

Regional Runway Safety Programs Managers (RSPM): Represents the Runway Safety Group in activities within the region, chairs the RRST, and develops and implements the Regional Runway Safety Plan. For a complete description of responsibilities please see Order 7050.1B

Regional Runway Safety Team (RRST): The RRST is comprised of Runway Safety staff and at least one designated representative of ATO Terminal Operations, ATO Technical Operations, Flight Standards Service, Airports Division, and the office of the Regional Administrator. In the Great Lakes Region, considered to be one and the same as the Regional Governance Council (RGC).

Runway Excursion (RE): A veer-off or overrun off the runway surface.

Runway Incursions (RI): Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and takeoff of aircraft.

Runway Safety Action Team (RSAT): An RSAT convenes to discuss surface movement issues and concerns at a particular airport and formulate a Runway Safety Action Plan (RSAP) to address those concerns. Local RSATs must include personnel from the ATCT and airport operator and may include personnel from various FAA lines of business (including Runway Safety) and interested users of the airport. Composition of special focus teams may vary. All attendees at the RSAT meeting are considered to be part of the RSAT. A Regional RSAT is led by Runway Safety and a local RSTAT is led by the ATCT manager.

Runway Safety Service Area Manager: Located in the Central Service Area office in Fort Worth, Texas the Service Area Manager oversees the CSA Regional Runway

Safety Program Managers and interacts with the ATO Service area offices, Regional LOBs Managers, and Regional Administrators. For a complete description of responsibilities please see Order 7050.1B.

Runway Safety Group (RSG): RSG is the focal point for runway safety initiatives in the NAS. RSG works with other FAA organizations and the aviation community to improve runway safety by reducing the frequency and severity of Runway Incursions (RI) Runway Excursions (RE) and Surface Incidents (SI). RSG responsibilities are set forth by FAO 7050.1B, Runway Safety Program.

Runway Safety Program (RSP): RSP is a cross lines of business program focused on improving runway safety by decreasing the number and severity of runway incursion, runway excursions, and other surface incidents. The FAA lines of business are guided by FAA Order 7050.1B, Runway Safety Program. The order establishes policy, assigns responsibilities and delegates authorities for ensuring compliance with this order within each organization.

Runway Safety Tracking System (RSTS): The RSTS is a web-based database application employed by the RSG to track events, action items, documents, and other information pertinent to FAA's runway safety mission. The primary data sources are regional and local Runway Safety Action Team meetings.

Severity Classifications: Runway Incursions are assessed by Runway Safety and classified by the severity of the event. The Severity Classifications are:

- **Accident.** An incursion that results in a collision. For the purposes of tracking incursion performance, an accident will be treated as a Category A runway incursion
- **Category A.** A serious incident in which a collision was narrowly avoided.
- **Category B.** An incident in which separation decreases and there is a significant potential for collision, which may result in a time-critical corrective/evasive response to avoid a collision.
- **Category C.** An incident characterized by ample time and/or distance to avoid a collision.
- **Category D.** An incident that meets the definition of a runway incursion, such as incorrect presence of a single vehicle/person/aircraft on the protected area of a surface designated for the landing and take-off of aircraft, but with no immediate safety consequences.
- **Category E.** An incident in which insufficient or conflicting evidence of the event precludes assigning another category.

Surface Event: An occurrence at an airport involving a pedestrian, vehicle, or aircraft on the defined airport movement area that involves either a runway excursion, or an incorrect presence, unauthorized movement, or occurrence that affects or could affect the safety or flight of an aircraft.

Surface Incident (SI): Unauthorized or unapproved movement within the designated movement area (excluding runway incursions) or an occurrence in that same area associated with the operation of an aircraft that affects or could affect the safety of flight.

Types of Surface Events. Surface events are classified into the following types:

- **Operational Incident (OI).** A surface event attributed to ATCT action or inaction.
- **Pilot Deviation (PD).** A surface event caused by a pilot or other person operating an aircraft under its own power (see FAA Order 8020.11, Aircraft Accident and Incident Notification, Investigation and Reporting, for the official definition).
- **Vehicle or Pedestrian Deviation (V/PD).** A surface event caused by a vehicle driver or pedestrian (see FAA Order 8020.11, Aircraft Accident and Incident Notification, Investigation and Reporting, for the official definition).
- **Other.** Surface events which cannot clearly be attributed to a mistake or incorrect action by an air traffic controller, pilot, driver, or pedestrian will be classified as “other.” These events would include incursions caused by equipment failure or other factors.

APPENDIX E. ACRONYMS

AAAE.....	American Association of Airport Executives
ACAC.....	Airport Construction Advisory Council
AFS.....	FAA Flight Standards Service
AGL.....	Great Lakes Region
AIP.....	Airport Improvement Program
AOPA.....	Aircraft Owners and Pilots Association
ARP.....	FAA Airports Organization
ATCT.....	Air Traffic Control Tower
ATM.....	Air Traffic Manager
ATO.....	FAA Air Traffic Organization
ATS.....	Air Traffic Services
ATSS.....	Airway Transportation System Specialists
CED.....	Comprehensive Electronic Data Analysis and Reporting Tool
CFI.....	Certified Flight Instructor
CFR.....	Code of Federal Regulations
CMO.....	Certificate Management Office
DPE.....	Designated Pilot Examiner
EAA.....	Experimental Aircraft Association
FAA.....	Federal Aviation Administration
FAASTeam.....	FAA Safety Team
FSDOs.....	Flight Standards Districts Offices
FY.....	Fiscal Year
ILS.....	Instrumental Landing System
JO.....	Joint Order
LOB.....	Line of Business
LRSAT.....	Local Runway Safety Action Team
MOR.....	Mandatory Occurrence Report
MOU.....	Memorandum of Understanding
NAS.....	National Airspace System
NASAO.....	National Association of State Aviation Officials
NBAA.....	National Business Aviation Association
NPP.....	National Performance Plan
NRSP.....	National Runway Safety Plan
OI.....	Operational Incident
PD.....	Pilot Deviation
PFC.....	Passenger Facility Charge
QCG.....	Quality Control Group
RE.....	Runway Excursion
RGC.....	Regional Governance Council
RI.....	Runway Incursion
RIAT.....	Runway Incursion Assessment Team
RID.....	Runway Incursion Device
RIM.....	Runway Incursion Mitigation
RMT.....	Regional Management Team
RRSP.....	Regional Runway Safety Plan
RRST.....	Regional Runway Safety Team
RSATs.....	Local Runway Safety Action Team Meetings
RSAP.....	Runway Safety Action Plan

RSGC.....	Runway Safety Governance Council
RSG.....	Runway Safety Group
RSP.....	Runway Safety Program
RSPM.....	Runway Safety Program Manager
RST.....	Runway Safety Tool
RSTS.....	Runway Safety Tracking System
SI.....	Surface Incident
SDP.....	Service Delivery Point
SME.....	Subject Matter Expert
SMS.....	Safety Management System
SRM.....	Safety Risk Management
SRMGSA.....	Safety Risk Management Guidance for System Acquisitions
SSR.....	System Service Review
VPD.....	Vehicle or Pedestrian Deviation

Federal Aviation Administration
Great Lakes Region
2300 East Devon Avenue
Des Plaines, IL 60018