Chapter 3 Airport Safety and Security Guidelines

In This Chapter
• What are WSDOT Aviation's safety directives? • What are pre-activity worker safety plan/hazard assessments? • How to operate safely in an on-airport environment. • How and when to issue a NOTAM. • How to respond to an emergency situation. • What is appropriate security on the airports?

It is a fundamental goal of the Washington State Department of Transportation (WSDOT) Aviation Division (WSDOT Aviation) that all maintenance activities, capital construction projects, and airport security measures within the state-managed airport system are conducted with the highest level of safety consistent with WSDOT-published safety directives. This chapter contains applicable safety and security guidelines for the state-managed airports.

WSDOT Aviation's *General Safety Plan* is referred to as a living plan in that it has been designed to be updated on a continuing basis as WSDOT Aviation activities and safety requirements evolve. Input from airport maintenance and construction personnel, volunteers, and pilots is critical to ensure the continued success of WSDOT Aviation's Airport Safety and Security Program.

Section Contents

Make Sure

- Check that the sections are current!
- Do they need to be updated?

Key Section Dates

Information is only as good as its current relevance. Therefore, it is important that the information contained within this chapter be updated on a regular basis to ensure that it remains appropriate to current conditions. The following table presents the dates that each section was formally adopted by WSDOT Aviation, as well as the scheduled date for the next internal review of each section to ensure its currency.

Section	Current Date	Scheduled Review Date
3.1 What Are the WSDOT Aviation Safety Directives	7/1/2010	6/1/11
3.2 What is a Pre-Activity Worker Safety Plan/Hazard Assessment	7/1/2010	6/1/11
3.3 What Are the Guidelines for Conducting Safe On-Airport Maintenance Activities and Construction Projects	7/1/2010	6/1/11
3.4 What Are the General On-Airport Activity BMP Guidelines	7/1/2010	6/1/11
3.5 What Are the Procedures for Issuing a NOTAM	7/1/2010	6/1/11
3.6 What is Airport Emergency Response	7/1/2010	6/1/11
3.7 What Are State Airport Security Plans	7/1/2010	6/1/11
3.8 What Are Communication/Mutual Aid Agreements	7/1/2010	6/1/11
3.9 Chapter References and Supporting Documentation	NA	

3.1 What Are the WSDOT Aviation Safety Directives

Providing all airport-related personnel (including WSDOT Aviation employees, maintenance crews, contractors, subcontractors, and volunteers) with a safe working environment is WSDOT Aviation's highest priority. To ensure that this commitment is met, it is standard policy for WSDOT to provide appropriate training and guidance about working in a safety conscious manner. With respect to this, WSDOT has established and maintains the WSDOT *Safety Procedures and Guidelines Manual* M 75-01 to formally document procedures and guidelines for promoting worker safety.

Consistent with the Transportation's Secretary's Executive Order E 1033.00, the WSDOT *Safety Procedures and Guidelines Manual* is written with this commitment to safety in mind. This publication is primarily intended for all employment levels within WSDOT, and provides guidance outlining responsibilities and procedures to ensure workplace safety.

In compliance with the requirements of the WSDOT *Safety Procedures and Guidelines Manual* and E 1033.01, WSDOT Aviation has also established its own Aviation Division's *General Safety Plan* that provides safety guidance for general WSDOT Aviation activities.

The primary components of the Aviation Division's *General Safety Plan* are listed below and in the Chapter References and Supporting Documentation tables at the end of this chapter. They can be obtained individually through the identified links.

Important
The primary components of the Aviation Division's *General Safety Plan* include the following: • Aviation Division Hazard Assessment Checklist – State Airports • Aviation Division Pre-Activity Safety Plan – State Airports • Aviation Division *Safety Procedures and Guidelines Manual* All are located on the WSDOT Aviation Safety website.

3.2 What Safety Guidelines and Plans Does WSDOT Provide for Airport Workers and Volunteers

To ensure its commitment of creating a safe working environment is fulfilled, WSDOT provides general safety training procedures and guidance through its WSDOT *Safety Procedures and Guidelines Manual*.

To specifically address aviation-related safety issues, WSDOT Aviation has also established two additional safety plans:

- Aviation Division *General Safety Plan*
- Aviation Division *General Airport Safety Plan*

Aviation Division General Safety Plan

The primary components of this *General Aviation Safety Plan* are the:

- Pre-Activity Safety Plan (PASP)
- General Hazard Assessment Checklist
- Associated specific safety plans (i.e., safety plans for a specific activity)

Make Sure
- Complete the required safety checklists!

The safety guidance provided in the *General Safety Plan* is largely general in nature and is currently broken down into three primary activity categories: office activities, driving activities, and field activities (including activities on-airport). This plan is a living document in that it has been designed to be updated on a continuing basis as WSDOT Aviation activities and associated safety requirements evolve.

These documents are available within the WSDOT Aviation office and are maintained by the WSDOT Aviation safety officer. They must be used by anyone working on a WSDOT Aviation-related project.

Aviation Division General Airport Safety Plan

The *General Airport Safety Plan* (see Supporting Documents and Resources section) supplements the *General Safety Plan* to address airport specific safety issues. WSDOT is currently in the process of establishing safety plans that are

specific to each of the state-managed airports. Once completed, these safety plans should be used by WSDOT employees, maintenance crews, contractors, subcontractors, and volunteers who perform any type of maintenance or improvement work at the state-managed airports. Since each of the state-operated airports offers its own unique and sometimes challenging working environments, these plans are necessary to provide additional direction and guidance to promote safety.

The airport-specific safety plans will also include pre-activity safety plans, hazard assessment checklists, and any associated specific safety plans. They will also be maintained by the WSDOT safety officer in the WSDOT Aviation office and must be used by anyone working on a WSDOT project or conducting activities at a state-managed airport.

Pre-Activity Safety Planning Through Hazard Assessments

It is critical that anyone working at a state-managed airport is aware of potential hazards that could compromise safety. Prior to conducting any new maintenance activity or construction project on state-managed airports, individuals must complete a site-specific hazard assessment. This tool will allow workers to identify and mitigate potential hazards through use of controls listed within the PASP. The following tables describe the actions that must be taken by all parties. (***Note:*** The supervisor-in-charge is defined as the person directly responsible for the activity. This person will frequently be the Airport Manager.)

Airport Manager Responsibilities	
1	Ensure that prior to any new activity, supervisors and work crews conduct an airport hazard assessment through use of a PASO consistent with all worker safety directives listed in the WSDOT *Safety Procedures and Guidelines Manual*.
2	Provide airport specific guidance and information on airport hazard assessments and pre-activity safety planning.
3	Issue Notices to Airmen (NOTAMs) as necessary or initiate Aviation Division airport web page safety updates.
4	Develop a review/update schedule consistent with established state practices that will allow for routine updates for each section.
5	Establish a regular review and update schedule for manual checklists, forms, and logs as required.
6	Establish a user web base for records, checklists, forms, and logs.

Supervisor-in-Charge Responsibilities	
1	Obtain a PASP from the Airport Manager prior to conducting that activity.
2	Ensure that a Hazard Assessment Checklist is completed and an activity specific safety briefing is conducted.
3	Ensure that all participants initial and date the hazard assessment checklist.
4	Coordinate with the Airport Manager as necessary to ensure work crews understand and adhere to airport specific safety instructions consistent with all worker safety directives listed in the WSDOT *Safety Procedures and Guidelines Manual*.
5	For any potential hazards as identified by the checklist, the Supervisor-in-Charge shall consult the airport's PASP hazard controls section to appropriately mitigate identified concerns.
6	If the Supervisor-in-Charge of the activity cannot locate an applicable safety plan to mitigate an identified hazard for the given activity and/or airport in the aforementioned sources, the supervisor shall consult the following sources for additional specific guidance: • Site-specific Safety Officer (*Note:* This could be the Airport Manager) • WSDOT *Safety Procedures and Guidelines Manual* • WSDOT Region Safety Officer • Director of Aviation
7	If the Supervisor-in-Charge of the activity is presented with new or updated safety guidance, the supervisor shall provide that guidance to the WSDOT Aviation Airport Manager for inclusion in the WSDOT Airports PASP and Hazard Assessment checklists.
8	The Supervisor-in-Charge shall ensure that all identified hazards are addressed using a PASP and additional resources as needed to mitigate the concern.

Volunteer Responsibilities	
1	Participate in and comply with activity specific airport hazards assessments through pre-activity safety planning as directed by the airport manager or onsite supervisor.
2	Obtain and wear all personal protective equipment applicable to the activity specific requirements as provided by the airport manager.
3	Read and sign the Adopt-An-Airport agreement and sign in on the activity specific participation roster.

The primary components of the Aviation Division's *General Safety Plan* are listed in the Supporting Documentation table at the end of this chapter and can be obtained individually through the identified links.

3.3 What Are the Guidelines for Conducting Safe On-Airport Maintenance Activities and Construction Projects

This section provides specific safety guidelines when conducting selected maintenance or construction activities at the state-managed airports. WSDOT Aviation has overall responsibility for any maintenance and construction activities at the state-managed airports. Therefore, it is important that contractors, construction and maintenance crews, and volunteers understand and comply with these general safety guidelines.

These guidelines do not supersede any of the guidance provided in Section 3.1, Pre-Activity Worker Safety Plan/Hazard Assessment. In fact, many of the guidelines within this section may be included in the airport-specific safety plans described in that section. Rather, the guidelines within this section should be viewed as supplemental in that they are specifically related to an airport environment.

General Safety Guidelines

The following table lists general safety guidelines set forth by the Federal Aviation Administration (FAA). In conjunction with WSDOT's safety guidelines, these requirements serve as a basis for standard operating practices.

General Safety Operating Practices	
1	Airport runways closures should be limited as much as possible.
2	Aircraft use near construction activity should be controlled to minimize disturbance of maintenance or construction operation.
3	Any airport personnel accessing areas of hazardous activities/materials shall receive appropriate safety training.
4	Maintenance and construction within a designated airport safety area should be performed when the runway is closed or restricted with prior permission from the Airport Manager.
5	The Airport Manager has the authority to suspend operations in order to move personnel, equipment, and materials (to ensure safe operations at the airport).
6	The Airport Manager shall have the authority for determining the issuance of a Notices to Airmen (NOTAMs).

Safety Clothing and Protective Devices

WSDOT Aviation employees and contractors are responsible for wearing all personal protective equipment (PPE) as detailed in the most current WSDOT *Safety Procedures and Guidelines Manual*, Chapter 5, necessary for the specific type of work being conducted. Unless otherwise stipulated by an individual airport project contract or safety plan, contractors are responsible for furnishing and using their own PPE.

Special selective PPE may occasionally be necessary to fit the specific airport project needs. Additional activity specific safety plan/s may be necessary to identify selective PPE.

Look For

- Applicable quick links in the references table at the end of this chapter.

Airport Manager Responsibilities	
1	Ensure all airport personnel utilize necessary PPE consistent with directives listed in the WSDOT *Safety Procedures and Guidelines Manual*.
2	Ensure all airport personnel read, understand, and utilize all necessary airport and activity site-specific PPE.

Supervisor-in-Charge Responsibilities	
1	Ensure compliance with airport specific safety requirement as directed by airport manager.
2	Ensure work crews have and utilize all applicable and necessary PPE identified on site-specific hazard assessments.

Employee Responsibilities	
1	Use all prescribed PPE at all times when performing maintenance activities at state airports as needed and identified by the site-specific hazard assessment checklist.
2	Comply with all safety instructions provided by the Airport Manager and Supervisor/s.

Volunteer Responsibilities	
1	Volunteers participating in limited minor airport maintenance activities shall be provided with and use all necessary PPE applicable to the specific maintenance activity being conducted with the exception of safety boots.
2	Use all prescribed PPE at all times when performing maintenance activities at state-managed airports.
3	Comply with all safety instructions provided by the Airport Manager.
4	Typical volunteer PPE includes: • Orange Safety Vest • Safety Goggles or Glasses • Gloves • Hearing Protection

General State Vehicle Operation Guidelines

All state vehicles used in conjunction with or support of state airport maintenance activities and capital construction projects shall comply with all instructions and rules listed in the WSDOT Fleet and Vehicle Operations Adopted Rules and Procedures Memorandums, WSDOT *Vehicle Operator's Handbook* M 3032.04, WSDOT *Use of State Provided Motor Vehicles* M 53-50.02, and other applicable directives.

General Vehicle Operations State Airport Rules

All airport personnel conducting airport maintenance or construction projects shall operate vehicles and equipment on state airport property in accordance with the all federal, state, and local laws, applicable contract provisions, and the additional state airport rules in the following table.

Look For

- Applicable quick links in the references table at the end of this chapter.

State Airport Rules for Vehicle Operations	
1	All vehicles shall yield right of way to aircraft in motion and emergency vehicles.
2	No vehicle except ground service and emergency vehicles shall approach too close to any aircraft with running engine(s) as to create a hazard.
3	All vehicles entering or exiting an operating airport access gate shall wait for or close the gate completely behind them before proceeding to their destination so as to not allow the entry of any other vehicle.

4	Vehicles or equipment working within the airport operations areas to include are required to display a rotating amber beacon, or flashing lights and the standard 36″ square orange and white checkered safety flag, as per FAA AC 150/5210-5C, *Painting, Marking, and Lighting of Vehicles Used on and Airports*.
5	All vehicles authorized to operate on taxiways or the runways are required to have and use either (1) an operable aviation, two-way radio (transceiver) with them at all times in order to monitor the published Common Traffic Advisory Frequency (CTAF), or (2) have a second person on site dedicated to spotting potential aircraft operations.
6	All vehicle operators shall coordinate through the onsite safety manager or supervisor to contact the airport manager to determine if work activities on or near the airport require publication of a Notices to Airmen (NOTAM). See NOTAM section for criteria for placing a NOTAM.
7	Parked vehicles must be moved off the runway, where they present the least possible traffic hazard. Vehicles parked overnight must be located as far from the runway as practicable. Vehicles shall not be parked overnight within a runway safety area.
8	When operating vehicles or equipment on runway and aircraft are attempting to land, pull completely off of the runway (or to the extreme side of the runway at a minimum) and give the aircraft the right of way.
9	If work activities are to occur on the runway itself, a NOTAM shall be issued (see Section). If the work is to be short-term, two days advance notice is adequate. If the runway will be disrupted or closed for a period of time, a minimum of two weeks notice should be given.

State Airport Radio Communications

The Airport Manager shall provide the appropriate training necessary to ensure that any contractors and related construction crews observe the appropriate radio communication and proper communication techniques. If available, a portable aviation two-way radio shall be used at all state-managed airports, to communicate ground vehicle and aircraft movements on a CTAF.

Typically, state maintenance crews are not supplied with two-way radios or airport specific radio communication standards training. The airport manager, if present during maintenance activities, shall obtain and utilize a two-way radio in addition to determining necessary airport closures or additional notices such as publishing Notices to Airmen (NOTAMs).

State Airport Electrical Equipment and Wiring

All electrical equipment and wiring shall conform to the latest version of the WSDOT *Standard Specifications for Road Bridge and Municipal Construction* M 41-10, Chapter 8-20, Illumination, Traffic Signal Systems, NFPA 70: National Electrical Code, and Washington State Department of Labor and Industries (L&I) rules pertaining to electrical installations or applicable FAA standards. All new electrical service, repairs, or modifications shall be inspected an approved by L&I.

State Airport Fencing and Gates

The Airport Manager shall ensure that maintenance activities and contract projects maintain clearly identified work zones whenever possible. (Per construction standards set out by FAA AC 150/5370-2E, *Operational Safety on Airports During Construction*.) Temporary construction fencing can be utilized to limit access to people and animals, especially during non-working hours.

All state-managed airport gates shall remain closed and locked at all times or immediately after entering or leaving the airport to ensure no unauthorized access occurs. All state-managed airport access requests shall be reviewed and approved by the Airport Manager using WSDOT approved processes for access approval to state-owned or managed property.

State Airport Foreign Object Debris (FOD) Management

Waste or loose materials commonly referred to as FOD are capable of causing damage to an aircraft. Maintenance and construction workers should not leave FOD in the vicinity of aircraft operating areas. It is also important to remove FOD that may attract wildlife.

All loose materials shall be stored in an approved facility capable of handling the material or secured in a location approved by the Airport Manager.

3.4 What Are the General On-Airport Activity (BMP) Guidelines

Operating in the on-airport environment can pose significant safety challenges and having a thorough understanding of that environment is critical to maintaining safety. The following sections provide some general best management practices (BMPs) for operating within the on-airport environment.

Runway Safety Area (RSA)/Runway Object Free Area (ROFA)/ Obstacle-Free Zone (OFZ)

Airport personnel must always be aware of and protect critical areas on the airport such as runway safety areas, obstacle free zones, and approach surfaces, even during construction operations. For additional details, review Chapter 5, Airport Construction Guidelines, and FAA AC 150-5370-2E, *Operational Safety on Airports During Construction*.

Critical Areas on an Airport
Runway Safety Areas (RSA)
An RSA is defined as the surface surrounding the runway that is capable of reducing the risk of damage to an aircraft in the event of an undershoot, overshoot, or excursion from the runway. For the state-managed airports, the typical RSA is 120 feet wide (centered on the runway centerline) by 240 feet off the runway end. These dimensions must be confirmed by reviewing the current Airport Layout Plan (if available), consulting with the agency airport planner, or directly reviewing FAA AC 150/5300-13, *Airport Design*.
Runway Object Free Area (ROFA)
A ROFA is generally defined as an area that must be kept free of objects, except for those that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes. For the state-managed airports, the typical ROFA is 250 feet wide (centered on the runway centerline) by 240 feet off the runway end. These dimensions must be confirmed by reviewing the current Airport Layout Plan (if available), consulting with the agency airport planner, or directly reviewing FAA AC 150/5300-13, *Airport Design*.
Obstacle-Free Zone (OFZ)
An OFZ is generally defined as an area 150 feet above the defined airport elevation, which is required to be clear of all objects, except for frangible and visible NAVAIDs. For the state-managed airports, the typical OFZ is 120 feet wide (centered on the runway centerline) by 200 feet off the runway end. These dimensions must be confirmed by reviewing the current Airport Layout Plan (if available), consulting with the agency airport planner, or directly reviewing FAA AC 150/5300-13, *Airport Design*.

The following graphic provides a generalized description of the runway environment and the location of these critical areas. ***Note:*** The sizes of these areas can vary depending on the airport. Therefore, personnel operating on an airport must consult with the airport-specific safety plan or the Airport Manager to determine the location and sizes of these critical areas.

FAA AC 150/5370-2E, *Operational Safety on Airport During Construction*, shall be used as the standard to be maintained regarding operations on and around RSAs, ROFAs, and OFZs. In general, it should be stated that all on-airport maintenance and construction activities should remain clear of the RSAs, due to the possibility of aircraft operations. (***Note:*** This should be standard operating procedures even if a NOTAM has been issued and/or the runway closed. Even under such circumstances, aircraft activities could still occur.) Also personnel, material, and equipment may not penetrate the OFZ, as defined in FAA AC 150/5300-13, *Airport Design*.

Critical Areas on an Airport

Runway Edges

No maintenance or construction activities may occur within 200 feet of the runway centerline unless the runway is closed or aircraft operations are restricted. The Airport Manager should still issue a local NOTAM as it is the only means to notify pilots of possible obstructions to these imaginary surfaces surrounding the runway.

Runway Ends

Only if the runway is closed or restricted may an RSA's dimensions be less than pre- construction dimensions. Similarly to runway edge guidelines, all personnel, materials, and equipment must remain clear of applicable approach surfaces and may not penetrate the OFZ. WSDOT Aviation staff must be contacted if a NOTAM is deemed necessary for such a construction or maintenance activity.

Excavations

Maintenance and construction personnel are required to mark excavations or open trenches at a construction site with red or orange flags and light them during hours of restricted visibility. While the runway is open, no open trenches or excavations are permitted within 200 feet of a runway centerline. Covering or backfilling the trenches to support the weight of the heaviest aircraft is the only alternative while keeping the runway open.

Closed Runway and Taxiway Marking and Lighting

In the event a runway or taxiway needs to be closed for maintenance, construction project, or other approved activities, operators should place Xs on or near the runway designation numbers on the runway ends to identify the closure. (At night, the use of lighted Xs is highly recommended.) The X should be placed at each end of the runway and only at the entrances for taxiways. Barricades, traffic cones, and stop bars are also acceptable visual devices to prevent aircraft access on a certain portion of a runway or taxiway. Additionally, see the specific recommendations in the following table.

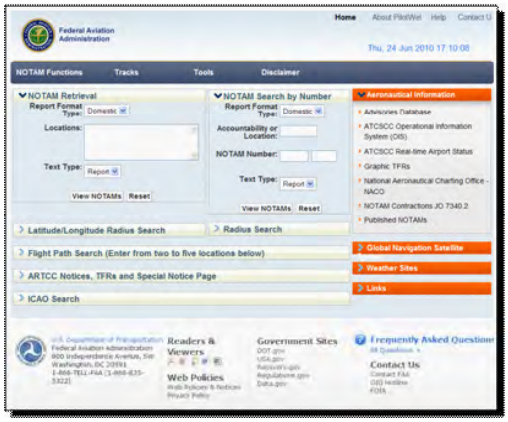
Closed Runway and Taxiway Marking and Lighting Recommendations	
1	Barricades must be of low mass, of low-height, be retro reflective orange/white in color, and be easily collapsible/frangible.
2	Use flags to mark barricades during the day. Use red lights at night, steady burning or flashing.
3	Non-frangible barricades, such as metal drums or concrete dividers, are prohibited in movement areas. Do not use wood railroad ties on runways.
4	Turn off runway lights and approach lighting on closed runways. Obscure lighting on closed portions of runways (i.e., displaced thresholds).
5	When runways are closed, operators should place Xs on the runway ends or just off the runway end when required by construction activity to identify the closure. At night, the use of lighted Xs is highly recommended. See FAA AC 150/5345-55 or 150/5340-IJ.

Runway Closure Marker Examples

Note: Xs can be placed just off the runway when required by construction activity to identify the closure.

Taxiway Closure Marker Example

3.5 What Are the Procedures for Issuing a NOTAM



The Notices to Airmen (NOTAM) system disperses information pertaining to unanticipated or temporary changes to components of (i.e., facilities, services, or procedures) or hazards within the National Airspace System (NAS). A NOTAM provides information that becomes available too late to publicize in associated aeronautical charts and other related publications, and they can remain effective until they are canceled or the associated aeronautical charts and related publications have been amended.

Note: A supplemental narrative has been provided in Appendix 3-1 that describes current practices for issuing NOTAMs.

Standards for Issuing NOTAM

NOTAMs can be issued for the state-managed airport by the Airport Manager, the WSDOT Aviation Director, and the Emergency Services Coordinator. It is at their discretion to determine if a NOTAM is necessary based on airport work activity or specific airport conditions. Additionally, WSDOT Aviation has adopted the following conditions that require the issuance of a NOTAM.

Conditions Requiring Issuance of a NOTAM	
1	Maintenance activities and construction projects occurring on a runway.
2	Maintenance activities and construction projects occurring within 200 feet of a runway centerline.
3	Maintenance activities and construction projects occurring within a Runway Safety Area (RSA).
4	Maintenance activities and construction projects occurring that penetrate an Obstacle Free Zone (OFZ).
5	Maintenance activities and construction projects that require closure of the runway or airport.

Primary Responsibilities for Issuing State Airport NOTAMs

Responsibilities for issuing NOTAMs are summarized in the following tables.

Airport Manager Responsibilities	
1	Coordinate with Maintenance/Construction Supervisor/s to assess activities and determine if NOTAMs should be published.
2	Prepare draft NOTAM information to include at a minimum: • Airport name. • Date and time activity starts. • Duration of activity. • Description of activity. • Location of activity on airport (runway, taxiway, apron, etc.). • Types of equipment involved with activity.
3	Coordinate with the FAA on issuing a NOTAM (within two days for start of minor activity and within two weeks for start of major activity).
4	Verify the establishment of the NOTAM immediately prior to the start of the activity.
5	Confirm the establishment of the NOTAM to the on-site activity Supervisor-in-Charge.
6	Ensure Maintenance or Construction Supervisor is briefed on specific published NOTAM coverage.

Maintenance or Construction Supervisor/s Responsibilities	
1	Contact Airport Manager prior to any work activity to review and determine if a NOTAM is to be issued.
2	Supply Airport Manager with activity specific information as requested.
3	Comply with NOTAMs.

Volunteer Lead Responsibilities	
1	Complete Volunteer activity forms by describing all work to be completed by volunteer group.
2	Assist Airport Manager to determine if NOTAMs is warranted.
3	Comply with NOTAMs.

Additional Process Instructions and Conditions Information for Issuing State Airport NOTAMs

Airport Management Responsibilities
Notification Process
Airport sponsors at public-use airports are expected to reveal, as soon as practicable, any existing or anticipated condition on or in the vicinity of the airport that would prevent, restrict, or endanger arriving or departing aircraft.
The public notification of this type of information is normally accomplished through the NOTAM system, and should be made not more than 48 hours before the expected condition is to occur. This same notification process should be conducted when the reported condition has been corrected or otherwise modified.
Notification Responsibility
With respect to the WSDOT Aviation state-managed airport system, airport facilities such as airfield pavements, runway lights, and airport guidance sign systems are the responsibility of the Airport Manager, as are airport services and airspace obstructions. Other airport facilities such as NAVAIDs and approach lights are the responsibility of the FAA.
The Airport Manager should initiate a NOTAM for a facility only when its operational and maintenance functions are clearly within their sphere of responsibility. The Airport Manager is also responsible for providing the appropriate air traffic facility, normally the associated FSS, with a list of individuals authorized to supply NOTAM information.

Air Traffic Control (ATC) Responsibility
Notification Process
FAA air traffic personnel must accept aeronautical information provided that the occurrence is no more than three days in the future. They are required to document the source of the information and then forward the data to the appropriate *Flight Service Station* (FSS) for NOTAM processing. *Note: Situations that present an immediate hazard should be reported to the ATC facility most concerned. Other situations should be reported on a first priority basis to the FSS.* FSS specialists are responsible for the classification, accuracy, format, dissemination, and cancellation of NOTAM information. All information submitted by FSS specialists is subject to verification with the US NOTAM Office (1-877-4US-NTMS (877-487-6867)) before distribution as a NOTAM. Flight Data Center (FDC) NOTAMs are issued by the US NOTAM Office/National Flight Data Center and pertain to changes such as navigational facilities, instrument approaches, and flight restrictions. FDC NOTAMs refer to information that is regulatory in nature. The FAA publishes NOTAM information that is expected to remain effective for extended periods (in excess of seven days) in Notices to Airmen, Class II, issued every other week. *Note: Although the airport operator has primary NOTAM origination responsibilities for the movement areas, the ATC facility managing the NOTAM system is responsible for and has the authority to ensure the systems compatibility of the format and content of the proposed NOTAM message.*

Composing the NOTAM

Airport Manager Responsibilities	
1	Compose NOTAMs using Appendix 3-1 guidelines.
2	See Appendix 3-1 for additional guidance on composing a NOTAM.

Recording the NOTAM

Airport Manager Responsibilities	
1	Keep a log of the state-managed airport NOTAMs and maintain their status so that airport officials can be made aware of the facility's representation in the aviation community.
2	Develop a NOTAM checklist to track NOTAMs as part of a routine schedule for managing the state-managed airports.
3	Obtain a copy of the NOTAMs for future reference to demonstrate the airport's regulatory compliance may be warranted.

Distributing NOTAMs

Although the Airport Manager is not responsible for the method of distributing NOTAMs, they should be familiar with the criteria used by the FSS in making the determination. The circulation of an airport condition report is based on the nature of the reported item and the NOTAM service qualification of the airport.

3.6 What is Airport Emergency Response

By FAA definition, an airport emergency is any occasion or instance, natural or man-made, that warrants action to save lives and protect property and public health.

This handbook shall address those emergencies that occur on or directly impact an airport or adjacent property that:

- Is within the authority and responsibility of the Airport Manager to respond.
- Presents a threat to the airport property, infrastructure, or airport personnel because of the proximity of the emergency to the airport.
- Where the airport has responsibilities under local/regional emergency plans and by mutual aid agreements.

At this time, WSDOT Aviation has not established individual state-managed airport formal emergency response procedures. WSDOT Aviation will establish formal relations with local authorities and detail those persons and agencies that must be contacted in all emergency situations. As comprehensive emergency response actions are developed through coordination with local authorities, this handbook and will be amended.

WSDOT Aviation has developed a *General State Airport Emergency Plan* for the state-managed airports that details general response actions and contacts.

Additional information, which includes industry best management practices for developing individual state airport emergency response plans, has been provided in the section supplement located in the Appendix 3-1.

WSDOT Standard Airport Emergency Response Procedures

There are a wide variety of emergency situations that can occur at or near one of the state-managed airports, including aircraft accidents, fires, HAZMAT response, medical emergencies, etc. The following sections shall be reviewed and consulted in order to mitigate aircraft accident situations on and off state airport property.

Aircraft Accident Policy Overview

Depending on the nature of the emergency, it is at the Airport Manager's discretion as to how to respond. However, in support of that, the following two sections provide specific actions that must by taken by the Airport Manager to inform appropriate personnel and agencies who also have a responsibility, interests, or jurisdiction over the state-managed airports.

WSDOT Aviation Responsibilities	
1	All aircraft accidents at state-managed airports shall be reported to the FAA and the National Transportation Safety Board (NTSB) for investigation.
2	Local state, county, and/or municipalities shall have the overall authority in the immediate handling of such accidents. While the FAA's and NTSB's involvement is in the interest of air safety, local law enforcement and emergency responders are trained to deal with emergency situations, including: crowd control, isolation and security of wreckage, and providing medical care for any injured persons until medical help arrives.

State Airport Emergencies and Aircraft Accidents

With respect to any emergency situation involving the state-managed airports, the WSDOT Airport Manager has an established list of responsibilities.

Airport Emergencies	
Airport Manager Responsibilities	
1	Contact the Aviation Emergency Services Coordinator to ensure he/she has been notified.
2	Coordinate with the Aviation Emergency Services Coordinator as necessary in support of handling response needs.
3	Ensure a chain of command has been established for managing the emergency.
4	Ensure role/duties of Airport Manager have been defined related to support needs of the emergency.
5	Provide all necessary support to the State Emergency Services Coordinator to ensure airport specific emergent needs are mitigated.
6	Coordinate with WSDOT Media Relations Officer as necessary.

Airport Emergency INCIDENT Actions (Non-Aircraft Accident)	
Airport Manager Responsibilities	
1	Contact the following persons/agencies
2	Local Emergency Services Provider/s
3	WSDOT Aviation Emergency Services Coordinator
4	WSDOT Director of Aviation
5	WSDOT Aviation Communications Manager
6	WSDOT Risk Management Office, Administrative Operations Division (within 24 hours, if required)

Airport Emergency INCIDENT Actions (Aircraft Accident)	
Airport Manager Responsibilities	
1	Contact the following persons/agencies
2	Local Emergency Service Provider/s
3	WSDOT Aviation Emergency Services Coordinator
4	National Transportation Safety Board (NTSB)
5	FAA NW Mountain Regional Operations Center
6	WSDOT Director of Aviation
7	WSDOT Aviation Communications Manager
8	WSDOT Risk Management Office, Administrative Operations Division (within 24 hours)

Use of State-Managed Airports for Forest Firefighting Operations

With respect to use of the state-managed airports for emergency forest firefighting operations, the Airport Manager has an established list of responsibilities.

Use of State-Managed Airports for Forest Firefighting Operations	
Airport Manager Responsibilities	
1	Establish, review, and amend State Aviation Policy as necessary for forest firefighting operations staged at state-managed airports.
2	Ensure forest firefighting operations are conducted to safety standards.
3	Ensure agencies using state-managed airports have established safety plans.
4	Review agency safety plans.
5	Ensure public is informed about state-managed airport being used for forest firefighting.
6	Establish user list of agency representatives who use state-managed airport for forest firefighting operations.
7	Ensure airports remain open to the public at all times unless public safety would be compromised by staged operations.
8	Inspect forest firefighting operations for safety compliance.
9	Assist agencies as needed in support of staged activity.
10	Initiate press releases through Aviation communications liaison.

Agency Aviation or Site Fire Officer Responsibilities	
1	Contact WSDOT Aviation Airport Manager.
2	Review state airport usage by forest firefighting operations to determine if NOTAMs are to be published.
3	Review and assist the Airport Manager to determine if airport can remain open to public.
4	Review published Temporary Flight Restrictions (TFRs) and impacts to public use at the airport.
5	Report number of, type/s of, and locations of staged aircraft at the airport.
6	Report support equipment and crews being staged at the airport to the Airport Manager.
7	Recommend airport operations restrictions or closures based on expected staging at the airport for forest firefighting activity.
WSDOT Communications Liaison	
1	Assist Airport Manager to publish public notice/press release.
2	Update WSDOT Aviation web page as needed to reflect current status.
3	Assist Airport Manager to answer questions from public and media concerning use of state airports for forest firefighting operations.

Aircraft Accident Media Relations

In the event of an aircraft accident or emergency incident on the airport, the airport manager or spokesperson should anticipate immediate and continued communication with the media.

Aircraft Accident Media Relations	
Airport Manager Responsibilities	
1	Coordinate with State Aviation Communications Manager.
2	Coordinate with the law enforcement agency and primary jurisdiction (i.e., State Police) and, when appropriate forward media calls to designated source.
3	Assist on media event security checks to ensure proper identification at media only events.
4	Project a professional image and remain calm, revealing neither fear nor frustration.
5	Focus the discussion on established facts only. There should be no speculative responses to questions.

WSDOT Communications Manager	
1	Coordinate with the Airport Manager on all incident/accidents on state-managed airports.
2	Prepare press releases and issue updated press releases to keep the media informed with key facts and messages about the incident.
3	Assist Airport Manager or spokesperson to prepare a short statement that includes key messages prior to arriving at the scene of an accident.
4	Assist the Airport Manager or spokesperson to select a suitable site to conduct media relations that is easily accessible to the media and preferably removed from the accident scene to avoid close video coverage of the accident.
5	Arrange to have press identification security checks.
6	Control media questioning during press briefings by calling on individuals rather than allowing everyone to shout questions.
7	Refrain from assuming responsibility – Culpability for aircraft accidents is determined at the conclusion of the investigations conducted by the local law enforcement, the FAA and the NTSB. Therefore, any admission of responsibility by the airport manager or spokesperson would be imprudent, premature and inappropriate.

Development of Emergency Response Plans for the State-Managed Airports

Generally, an airport emergency action plan should address emergencies that occur or directly impact property within the airport's authority and responsibility, or may present a threat to the airport because of the proximity of the emergency. The Airport Manager should include community and agency involvement in the development of an emergency response plan because it will include the assistance of local fire and EMS authorities in the response effort. At a minimum, this plan should address the following key guideless as outlined in FAA AC 150/5200-31, *Airport Emergency Plan*:

- Assign responsibilities to organizations and individuals carrying out specific actions in response to an emergency.
- Establish line of authority and organizational relationships in coordinating response actions.
- Describe how people and property will be protected in emergency situations.
- Identify personnel, equipment, facilities, supplies, and other resources available for use during response and recovery operations.

- Cite objectives and acknowledge assumptions from a legal basis.
- Facilitate response and short-term recovery for successful long-term recovery.

3.7 What Are State Airport Security Plans

It is the policy of WSDOT Aviation to meet the goals of the Transportation Security Administration's (TSA) Security Guidelines for General Aviation Airports to ensure public safety and security at all state-managed airports. Reflective of this policy, State Aviation, in 2003 established general state airport security plans for 16 of the state-managed airports. Generally, they provide guidelines with respect to the following topics:

- Detection and Prevention
- Reporting, Communicating, and Disseminating
- Unusual or Suspicious Activity
- Aircraft Security
- Airfield Security
- Flight Operations Security
- Flight Training Security
- Developing an Airport Security Plan
- Access Control, Monitoring, and Identification
- Security Signage
- Education

The individual Airport Security Plans are customized to the individual needs and environments of the airports that they represent. These plans are also confidential and maintained at the WSDOT Aviation administrative offices.

State Airport Security Plan Procedures	
Airport Manager Responsibilities	
1	Utilize and maintain all security documents and procedures related to the state-managed airports. *Note:* While this maintenance handbook is a public document, the individual Airport Security Plans are confidential and secured within WSDOT Aviation.
2	Establish State Airport Security Plan Review and Amendment Schedule.
3	Review and Amend State Airport Security Plans.
4	Assess and plan for State Airport Security measure improvements.
5	Administer State Airport Security Plan.

General State Airport Security Procedures

Aircraft

The main goal of enhancing GA airport security is to prevent the intentional misuse of GA aircraft for terrorist purposes. Proper securing of aircraft is the most basic method of enhancing GA airport security.

Aircraft Security Procedures	
Airport Manager Responsibilities	
1	Ensure pilots employ multiple methods of securing their aircraft to make it as difficult as possible for an unauthorized person to gain access to it.
2	Ensuring that door locks are consistently used to prevent unauthorized access or tampering with the aircraft.
3	Ensure aircraft have keyed ignitions where appropriate.
4	Promote pilot use of an auxiliary aircraft locking system to further protect aircraft from unauthorized use. Commercially available options for auxiliary locks include locks for propellers, throttle, and tie-downs.
5	Ensure that aircraft ignition keys are not stored inside the aircraft.
6	Account for and document all aircraft parking on State Airports through leases rental process developed through WSDOT Property Management Division process and procedures.
Pilot/User Responsibilities	
1	Report any unsafe acts to Airport Manager.
2	Report any suspicious activity at state-managed airports to Airport Manager.

Perimeter and Access Control

Perimeter and Access Control Security Procedures	
Airport Manager Responsibilities	
1	Conduct individual state airport assessments to determine threat level.
2	Coordinate with safety and security experts as necessary.
3	Determine cost benefit and prioritize additional security measures at state-managed airports.
4	Ensure home facility perimeter security with effective fencing, lighting, security patrols (as appropriate), gates, and limited access areas.
5	Ensure street-side gates and doors are closed and locked at all times.
6	Require positive access control for all external gates and doors.
7	Close and lock hangar doors when that area is unattended.
8	Secure all key storage areas (food and liquor, parts and tools, etc.).
9	Have an access control management system for keys and passes.
10	Post emergency numbers prominently around facility.
11	Ensure easy access to phones or panic buttons in various facility locations (break room, hangar bay, etc.).
12	Confirm security of destination facilities.
13	Be aware of your surroundings and do not be complacent—activate local law enforcement as needed, but do not challenge strangers or take the law into your own hands.

Hangar Facilities

To be developed.

Airport Tenant Facilities

Airport Tenant Facilities Security Procedures	
Airport Manager Responsibilities	
1	Develop State Aviation Standards for Tenant Facilities.
2	Document all tenant use of State Airport Facilities.
3	Establish lease and rental agreements.
4	Ensure airport safety practices and policy.
5	Establish and Implement Airport Security measures.
Airport Tenant Responsibilities	
1	Maintain airport security by exercising approved entry and exit protocol.
2	Report all non-compliant airport access.
3	Adhere to all tenant responsibilities set out in lease/s.

Aircraft and Vehicle Fueling Facilities

To be developed.

Lighting

Lighting Security Procedures
Airport Manager Responsibilities
Protective lighting is a primary means of providing a base level of protection from nighttime theft, vandalism, or other illegal activities that is generally inexpensive to maintain, and when properly employed, may provide airport personnel with added protection from surprise by a determined intruder. Since protective lighting requirements at airports depend upon the local conditions as well as the areas to be protected, a careful analysis of security lighting is needed. These requirements should consider the need for good visibility, employee recognition and badge identification, vehicle access identification and control, detection of intruders, and deterrent to illegal entry.
When developing any security lighting plan, care must be taken to ensure that lighting does not interfere with aircraft operations. However, considerations should be given to how installing outdoor security area lighting could help improve the security of aircraft parking and hangar areas, fuel storage areas, airport access points; and other appropriate areas.

Signage

The use of signs provides a relatively inexpensive deterrent by warning of facility boundaries as well notifying of the consequences for violation. Some of the basic considerations related to airport security signage include those listed in the following table.

Signage Security Procedures	
Airport Manager Responsibilities	
1	Signs along a fence line should be located such that when standing at one sign, the observer is able to see the next sign in both directions.
2	While signs for security purposes should be designed to draw attention, it also should be coordinated with other airport signs for style and consistency when possible.
3	Signs should be constructed of durable materials, contrasting colors, and reflective material where appropriate.
4	Use as concise language as possible.
5	Wording may include – but is not limited to – warnings against trespassing, unauthorized use of aircraft, tampering with aircraft, and reporting of suspicious activity.
6	Signage should include phone numbers of the nearest responding law enforcement agency.
7	Many locations with access control or Closed Circuit Television (CCTV) equipment may warrant signage for directional, legal, or law enforcement purposes.
8	Refer to FAA AC 150/5360-12D, *Airport Signing and Graphics*.

Airport Community Watch Program

One of the most effective deterrents in GA airport security is awareness. Typically, the airport user population is familiar with those individuals who have a valid purpose for being on the airport property, and consequently, unfamiliar faces are quickly noticed. Teaching an airport's users and tenants what to look for with regard to unauthorized and potentially illegal activities is essential to effectively utilizing this resource. Airport Managers can either utilize an existing airport watch program or establish their own airport specific plan. Some of the primary elements to be considered when establishing a watch program include those listing in the following table.

Airport Community Watch Program Considerations	
1	Coordinate the program with all appropriate stakeholders, including airport officials, pilots, businesses, and/or other airport users.
2	Hold periodic meetings with the airport community.
3	Develop and circulate reporting procedures to all who have a regular presence on the airport.
4	Encourage proactive participation in aircraft and facility security and heightened awareness measures. This should include encouraging airport and line staff to query unknowns on ramps, near aircraft, etc.
5	Post signs promoting the program, warning that the airport is watched. Include appropriate emergency phone numbers on the sign.
6	Install a bulletin board for posting security information and meeting notices.
7	Provide training to all involved for recognizing suspicious activity and appropriate response tactics. This could include the use of a video or other media for training.
8	Utilize local law enforcement for airport security community education.
9	Encourage tenants to make their staff aware of the airport watch programs.
10	Additional resources can be obtained through AOPA's Airport Watch program. Completed in partnership with the TSA, this program encourages pilots to be the eyes and ears for observing and reporting suspicious activity and includes warning signs for airports, informational literature, and a training video for pilots and airport employees.

Threat/Security Communication System

The development of a comprehensive contact list is recommended to be included in any airport security procedures with the list distributed to all appropriate individuals. The following phone numbers should be included on the contact list (include after hour contact numbers where appropriate):

Recommended Contact List	
1	Landing Facility Operator
2	Landing Facility Manager
3	Individual with responsibility for facility security
4	Local Police or County Sheriff Department (List all responding LEO Agencies)
5	State Aviation Director
6	County/City Emergency Manager
7	State Police
8	Fire Department
9	State Office of Public Safety/Homeland Security
10	FBI
11	Local FAA contact
12	Local TSA contact (that is, Federal Security Director or designee)
13	Any other appropriate organization

Additionally, in the event of a security incident, it is essential that first responders and airport management have the capability to communicate effectively. Where possible, common radio communication frequencies and procedures should be coordinated with local law enforcement.

Finally, the communication process by which all new security policies, procedures, and alerts are communicated to tenants and other airport users is of critical importance. One method of accomplishing this is to conduct regular meetings with airport tenants and the flying public to discuss security issues and challenges, establishing a centralized area for posting of security information, or even developing an email alert system.

3.8 What Are Communication/Mutual Aid Agreements

Communication or mutual aid agreements are typically established between an airport operator and local emergency service providers when that operator cannot provide such services in a reasonable or practicable manner. Such agreements will often include airport security support through local law enforcement agencies, airport emergency services support through local firefighting agencies, etc. While it is understood that many of these types of services would automatically be provided by local agencies due to the nature of a given condition or situation (i.e., fire, medical emergency), such agreements would establish formal plans and procedures for operating at an airport. This would ultimately help to establish expectations and maintain consistency of service from those service providers. ***Note:*** When established, these types of agreements will be integral components of Airport Emergency Response Plans (see Section 3.6).

Due to the limited size and levels of activity of the WSDOT Aviation state-managed airports, none of them have the need and/or the appropriate resources to warrant dedicated service providers. There is also no formal communication or mutual aid agreement currently established; these services are currently inherently provided by local governing agencies and emergency service providers. However, WSDOT Aviation intends to pursue establishing formal communication and mutual aid agreements with local governing and emergency service agencies as appropriate for each airport.

3.9 Chapter References and Supporting Documentation

Chapter References

The following tables include references for additional and/or supporting information with respect to the various sections of this chapter. This has been provided with the intent of providing the reader with a current listing of appropriate sources for additional information and research.

3.1 What Are the WSDOT Aviation Safety Directives
• Aviation Division Hazard Assessment Checklist – State Airports WSDOT Aviation Safety Web Page
• Aviation Division Pre-Activity Safety Plan – State Airports WSDOT Aviation Safety Web Page
• Aviation Division *Safety Procedures and Guidelines Manual* WSDOT Aviation Safety Web Page

3.2 What is a Pre-Activity Worker Safety Plan/Hazard Assessment
• WSDOT Aviation – Aviation Safety web page (WSDOT internal website) wwwi/aviation/aviationsafety.htm
• WSDOT *Safety Procedures and Guidelines Manual* M 75-01 www.wsdot.wa.gov/publications/manuals/m75-01.htm
• WSDOT Headquarters Safety Office web page (WSDOT internal website) wwwi.wsdot.wa.gov/employee/safety/
• WSDOT Eastern Region www.wsdot.wa.gov/regions/eastern/
• WSDOT North Central Region www.wsdot.wa.gov/regions/northcentral/
• WSDOT Northwest Region
• WSDOT Olympic Region www.wsdot.wa.gov/regions/olympic/
• WSDOT South Central Region www.wsdot.wa.gov/regions/southcentral/
• WSDOT Southwest Region www.wsdot.wa.gov/regions/southwest/

3.3 What Are the Guidelines for Conducting Safe On-Airport Maintenance Activities and Construction Projects
General Safety Guidelines
• FAA AC 150/5370-2E, *Operational Safety on Airports During Construction*. FAA. 17 January 2003
• FAA AC 150/5210-5C, *Painting, Marking, and Lighting of Vehicles Used on and Airports*. FAA. 31 August 2007
Safety Clothing and Protective Devices
• WSDOT *Safety Procedures and Guidelines Manual* M 75-01 www.wsdot.wa.gov/publications/manuals/m75-01.htm
• WSDOT Aviation – Aviation Safety web page (WSDOT internal website) wwwi/aviation/aviationsafety.htm
General State Vehicle Operation Guidelines
• WSDOT *Use of State Provided Motor Vehicles* M 53-50 www.wsdot.wa.gov/publications/manuals/m53-50.htm wwwi.wsdot.wa.gov/maintops/equipment/rules_procedures.htm
• TEF *Vehicle Operator's Handbook* M 3032.04 www.wsdot.wa.gov/publications/manuals/m3032.htm

3.4 What Are the General On-Airport Activity BMP Guidelines
• FAA AC 150/5370-2E, *Operational Safety on Airports During Construction*. FAA. 17 January 2003
• FAA AC 150/5210-5C, *Painting, Marking, and Lighting of Vehicles Used on and Airports*. FAA. 31 August 2007

3.5 What Are the Procedures for Issuing a NOTAM
• FAA AC 150/5200-28D, *Notices to Airmen (NOTAM) for Airport Operators*. FAA. 28 April 2009
• FAA Federal Aviation Order 7930.2, change 2, Notices to Airmen (NOTAM). FAA. 28 April 2009

3.6 What is Airport Emergency Response
• FAA AC 150/5200-31A, *Airport Emergency Plan*. FAA. 30 September 1999
• WSDOT Aviation Emergency Action Plan, June 2008. WSDOT Aviation
• WSDOT *Disaster Plan* M 54-11 www.wsdot.wa.gov/publications/manuals/m54-11.htm
• WSDOT *Emergency Relief Procedures Manual* M 3014.01 www.wsdot.wa.gov/publications/manuals/m3014.htm
• State Emergency Services Plan. WSDOT Aviation
• State Media Coverage Plan. WSDOT Aviation

3.7 What Are State Airport Security Plans
• Transportation Security Administration (TSA), Security Guidelines for General Aviation Airports, 2004 www.tsa.gov/what_we_do/tsnm/general_aviation/airport_security_guidelines.shtm
• Aircraft Owners and Pilots Association (AOPA), Airport Watch, 2009 www.aopa.org/airportwatch/

3.8 What Are Communication/Mutual Aid Agreements
• FAA AC 150/5200-31, *Airport Emergency Plan*

Supporting Documentation

The following tables include supporting WSDOT Aviation-specific documents and resources to support the implementation of the various sections of this chapter. The following table provides a listing of these documents and resources.

3.2 What is a Pre-Activity Worker Safety Plan/Hazard Assessment
• WSDOT Aviation General Pre-Activity Worker Safety Plan – Office Environment
• WSDOT Aviation General Hazard Assessment Checklists – Office Environment
• WSDOT Aviation General Safety Plans
• WSDOT Aviation Airport-Specific Safety Plans. Appendix 3-1

3.5 What Are the Procedures for Issuing a NOTAM
• General BMPs for Issuing NOTAMs. Appendix 3-1
• Standard NOTAM Template. Appendix 3-1

3.6 What is Airport Emergency Response
• State Emergency Services Plan. WSDOT Aviation
• State Media Coverage Plan. WSDOT Aviation
• State Aviation Division Media Coverage Procedures. WSDOT Aviation
• WSDOT Aviation Emergency Action Plan, June 2008. WSDOT Aviation

3.7 What Are State Airport Security Plans
• WSDOT Aviation Airport Security Plans for 17 State-Managed Airports (April 5, 2003 – confidential)
• WSDOT Aviation State-Managed Airport Security Plan Template (confidential)
• Current BMPs for Airport Security. Appendix 3-1

3.8 What Are Communication/Mutual Aid Agreements
• General BMPs for Establishing Letters of Agreement (LOA). Appendix 3-1

Appendix 3-1 General BMPs for Issuing NOTAMs

1. Airport Management Responsibility

Notification Process

Airport sponsors at public-use airports are expected to reveal, as soon as practicable, any existing or anticipated condition on or in the vicinity of the airport that would prevent, restrict, or endanger arriving or departing aircraft.

The public notification of this type of information is normally accomplished through the NOTAM system, and should be made not more than three days before the expected condition is to occur. This same notification process should be conducted when the reported condition has been corrected or otherwise modified.

Notification Responsibility

With respect to the WSDOT Aviation state-managed airport system, airport facilities such as airfield pavements, runway lights and airport guidance sign systems are the responsibility of the Airport Manager, as are airport services and airspace obstructions. Other airport facilities such as NAVAIDs and approach lights are the responsibility of the FAA.

The Airport Manager should initiate a NOTAM for a facility only when it is operational and maintenance functions are clearly within their sphere of responsibility. The Airport Manager is also responsible for providing the appropriate air traffic facility, normally the associated FSS, with a list of individuals authorized to supply NOTAM information.

2. Air Traffic Control (ATC) Responsibility

Notification Process

FAA air traffic personnel must accept aeronautical information provided that the occurrence is no more than three days in the future. They are required to document the source of the information and then forward the data to the appropriate Flight Service Station (FSS) for NOTAM processing.

Note: Situations that present an immediate hazard should be reported to the ATC facility most concerned. Other situations should be reported on a first priority basis to the FSS.

FSS specialists are responsible for the classification, accuracy, format, dissemination, and cancellation of NOTAM information. All information submitted by FSS specialists is subject to verification with the US NOTAM Office (1-877-4US-NTMS (877-487-6867)) before distribution as a NOTAM. Flight Data Center (FDC) NOTAMs are issued by the US NOTAM Office/ National Flight Data Center and pertain to changes such as navigational facilities, instrument approaches, and flight restrictions. FDC NOTAMs refer to information that is regulatory in nature.

The FAA publishes NOTAM information that is expected to remain effective for extended periods (in excess of seven days) in Notices to Airmen, Class II, issued every other week.

Note: Although the airport operator has primary NOTAM origination responsibilities for the movement areas, the ATC facility managing the NOTAM system is responsible for, and has the authority to ensure the systems compatibility of the format and content of the proposed NOTAM message.

3. Composing the NOTAM

Wherever possible, NOTAMs must use official contractions and abbreviations. Official contractions are in FAA Order 7930.2, Notices to Airmen (NOTAM) and are included at the end of this chapter. If those terms do not fit a specific situation, use clear and concise plain language for the text of the message, or consult with the FSS for preferred terminology. A NOTAM must always state the abnormal condition – do not state a normal condition. The only exception to the preceding is for data that is already published and is being replaced; for example, a runway that was previously closed and is now open.

Following are the general steps and elements required in the development of a NOTAM in order from left to right order: (***Note:*** For illustrative purposes only, XYZ is used where an accountability or location identifier would normally appear in a NOTAM message.)

General Steps for the Development of a NOTAM	
1	**ADP code.** This will be an exclamation point "!"
2	**ACC LOC.** Three letter identifier code, XYZ, for the accountability (i.e., the responsible party) location.
3	**AFF LOC.** Three letter identifier code, XYZ, for the affected facility (i.e., airport, ILS) or location. For certain airspace NOTAMs, it will be the identifier of the nearest VOR/DME or VORTAC.
4	**Location Identifier.** One of the following twelve keywords must be entered to identify the location of the condition. (*Note:* A full explanation of these identifiers are included at the end of this chapter.) • AD (Aerodrome) • AIRSPACE • APRON • COM (Communications) • NAV (Navigation Aids) • OBST (Obstructions, including obstruction lighting outages) • RAMP (synonymous with APRON) • RWY (Runway) • TWY (Taxiway) • SVC (Services) • (U) (Unverified Aeronautical Information) • (O) (Other)
5	**Surface Identification.** Optional - this must be the runway identification for runway-related NOTAMs, the taxiway identification for taxiway related NOTAMs, or the ramp/apron identification for ramp/apron-related NOTAMs.
6	**COND.** Identifier describing the condition of the affected facility that prompted the NOTAM. Airspace NOTAMs shall begin with either the identification of the airspace, or with the activity type requiring the NOTAM.
7	**TIME.** Identifies the effective time of the NOTAM condition or date/time of return to service or return to normal status. The absence of a return-to service time indicates that the condition will continue indefinitely. The month, day, time, and time zone for the beginning and end of the condition should be included in the NOTAM. If a continental time zone (such as EST for Eastern Daylight Time) is provided, the FSS will convert to Coordinated Universal Time (UTC) prior to the transmission.

Examples

Following are several examples of various NOTAMs:

- !XYZ XYZ VOR OTS WEF 0004281600
  Explanation: The VOR is expected to go out of service at 1600 on April twenty-eight, 2000, and remain out until further notice.
- !XYZ XYZ VOR VOR OTS TIL 0004281800
  Explanation: The VOR is expected to remain out of service until 1759. At that time, this NOTAM will be cancelled automatically by the USNS.
- !XYZ XYZ AP CLSD 1100-1900 DLY WEF 0006011100-0006151900
  Explanation: The airport is closed from 1100 to 1900 daily from June 1, 2000, at 1100 until June 15, 2000, at 1900. This NOTAM will be automatically cancelled by the USNS on June 15, 2000, at 1900.

4. Submitting the NOTAM

As mentioned previously, NOTAMs may be submitted through a local FAA air traffic facility or mailed directly to NFDC. The former method is the most commonly practiced; however, the latter is preferred if the condition is known well in advance.

The local air traffic facility is normally the airport's associated FSS, which is identified in the Airport Facilities Directory (AFD). FSS facility managers are required to ensure that lists of airport employees with authorization to issue NOTAMs are available and current. To avoid potential delays in NOTAM dissemination, airport sponsors are encouraged to assist the FSS with keeping the authorization lists up to date. (***Note:*** If there is difficulty in contacting the FSS identified in the AFD, contact the US NOTAM Office at 877-4US-NTMS (877-487-6867) and they will route the call to the proper flight service center.)

Whatever the method of filing, make certain that the FAA facility in receipt of the NOTAM is provided with the appropriate contact information (name, title, address, and telephone number) of the responsible airport official. This will allow the FSS to confirm the NOTAM when required. If the information is reported over the telephone, the operating initials of the FSS specialist who is handling the NOTAM should be requested to simplify any follow-up or other reference.

5. Recording the NOTAM

The Airport Manager should keep a log of the airport's NOTAMs and maintain its status so that airport officials are aware of the facility's representation in the aviation community. This should be a checklist item on the daily routine of managing the airport. Additionally, obtaining a copy of the NOTAM for future reference and to demonstrate the airport's regulatory compliance is recommended.

6. Distributing NOTAMs

Although the Airport Manager is not responsible for the method of distributing NOTAMs, they should be familiar with the criteria used by the FSS in making the determination. The circulation of an airport condition report is based on the nature of the reported item and the NOTAM service qualification of the airport.

Class (D) NOTAMs

Distant (D) NOTAMs distribute information for all public use airports, seaplane bases, and heliports listed in the Airport/Facility Directory (AFD) and all navigational facilities that are part of the NAS when one of the following conditions is reported:

General Steps for the Development of a NOTAM	
1	The commissioning or decommissioning of landing areas or portions thereof.
2	Airport closure (either complete closures or closures for certain types of aircraft).
3	Conditions restricting or precluding the use of any portion of a runway or waterway.
4	Breaking action is poor or nil.
5	Snow, ice, slush, or standing water.
6	The Runway Friction Measuring System is inoperable.
7	Change of runway identification.
8	Rubber accumulation on the runways.
9	Aircraft Rescue Fire Fighting (ARFF) response restrictions.
10	The commissioning, decommissioning, or outage of the following lighting aids: • ALS • SFL/RAIL • RWY LGTS • RCLS • TDZL • LDIN

11	The commissioning, decommissioning, or outage of the following NAVAIDs:
	• DME
	• ILS – GS
	  • LOC
	  • MARKERS
	• LDA
	MARKERS – IM
	  • LOM
	  • MM
	  • OM
	  • FM
	• SDF
	• RVR
	• MLS/ISMLS – AZM
	  • ELEV
	  • GP
	• NDB
	• VOR – DME
	  • VOICE
	• TACAN AZM

7. Conditions With Special Reporting Requirements

Following are conditions that require special attention when composed and reported in order to receive the maximum benefit of the NOTAM system, or to avoid misleading statements.

Breaking Action

The condition of breaking action as reported by airport management personnel is good, fair, poor, and nil, or some combination of these terms. A breaking action report from a landing aircraft should be processed by the FSS as a Pilot Report (PIREP). Combining airport management and PIREP information should occur only when authorized by the airport management.

Winter Conditions

When reporting winter runway conditions, the following sequence should be used to assist the FSS with the NOTAM format: affected runway, coverage, depth, and condition.

Depth of Precipitation

When reporting the depth of winter precipitation, it should be expressed in terms of thin (less than ½ inch), ½ in, and 1 in. For accumulation greater than 1 inch, multiples should be reported in whole numbers only. If a variable depth exists, such as 3 to 5 inches, the greatest depth should be reported. If a depth in excess of 35 inches is reached, multiples should be reported in whole feet only.

Plowed Runways

When reporting a portion of a plowed runway (PLW), the width plowed and its condition, if not entirely cleared, should be expressed. Describing the plowed portion of the runway in terms of percentages or fractions of the surface is likely to be confusing and should be avoided. A report for plowed conditions is used only when a runway has been partially plowed; PLW is not used for runways that have been completely plowed. However, in such cases other surface conditions may apply.

Treated Runways

When it is reported that runways have been treated with sand, salt, or other substances, it is assumed that the entire published surface dimensions have been treated unless otherwise specified. When de-icing activities are reported the materials used should be indicated as either solid or liquid, as this may have operational significance to the pilot.

Obscured Runway Lights

If reporting runway lighting that is obscured by snow and ice, only those lights that are completely obscured should be reported. It should be explicitly clear which lights are affected.

Runway Thresholds

If reporting the relocation or displacement of a threshold, avoid language that confuses the two. Standard NOTAM phraseology includes a temporary threshold displacement. Report threshold relocation as closure of a portion of the runway until the actual physical appearance is altered so the closed runway segment no longer looks like a landing area. If appropriate, request the FSS to insert a reopening date, and remember that you are obligated to track that date and revise or cancel it as necessary.

Personnel and Equipment Working

Any NOTAM associated with Personnel and Equipment Working (PAEW) on or adjacent to a runway, taxiway, ramp, or apron must begin with one of the following keywords: RWY, TWY, RAMP, or APRON. Additionally, the appropriate direction should be specified. These criteria are used for runway checks and other events of short durations; otherwise the runway should be closed.

8. Facilities and Their Contractions

Movement Area – Airport Surfaces	
Aerodrome (keyword)	AD
Airport	AP
Apron (keyword)	APRON
Safety Area	---
Ramp (keyword)	RAMP
Runway (keyword)	RWY
Taxiway (keyword)	TWY
Movement Area – Surface Composition	
Asphalt/tar	ASPH
Concrete	CONC
Gravel	GRVL
Turf	TURF
Movement Area – Lighting Aids	
Airport Beacon	ABN
Airport Beacon	ABN
Light	LGT
Obstruction	OBST
Obstruction Light	OBST LGT
Omnidirectional Approach Lighting Systems	ODALS
Pilot Controlled Lighting	PCL
Runway End Identifier Lights	REIL
Communicate and Services	
Aeronautical Advisory Station	UNICOM
Aircraft Rescue and Firefighting	ARFF
Airport Traffic Control Tower	TWR
Automatic Terminal Information Service	ATIS
Common Traffic Advisory Frequency	CTAF
Automated/Flight Service Station	FSS
Low Level Wind Shear Alert Systems	LLWAS

Landing Area	
Bird Activity, Landing Area or Approaches	BIRDS ON AND IN VC ARPT
Braking Action Fair	BA FAIR
Braking Action Nil	BA NIL
Braking Action Poor	BA POOR
Closed Commissioned	CLSD
Decommission	DCMSN
Decommissioned	DCMSND
Displaced	DSPLCD
Except	EXC
Runway Friction Value	MU
Friction Measuring Equipment Out of Service	MU OTS
Frozen	FRZN
Ice On Runway(s)	IR
Inches	IN
Light	LGT
Lighted	LGTD
Loose Snow on Runway(s)	LSR
Obscured, Obscure or Obscuring	OBSC
Over	OVR
Packed Snow on Runway	PSR
Packed or Compacted Snow/Ice on Runway(s)	SIR
Patchy	PTCHY
Personnel and Equipment Working	PAEW
Plow, Plowed	PLW
Rough	RUF
Rubber Accumulation	RUBBER ACCUM
Sand or Sanded	SA
Slush on Runway(s)	SLR
Snow	SN
Snowbank(s) Containing Earth/Gravel	BERM
Snowbank(s) Caused by Wind Action	DRFT
Snowbank(s) Caused by Plowing (Windrow/s)	SNBNK
Takeoff	TKOF
Thin	THN
Unlighted	UNLGTD
Water on Runway(s)	WTR
Wet Snow on Runway(s)	WSR

Lighting Aids	
Commissioned	CMSND
Decommission	DCMSN
Decommissioned	DCMSND
Obscured, Obscure or Obscuring	OBSC
Out of Service	OTS
Return to Service	RTS
Unlighted	UNLGTD
Air Navigation Aids, Comm, and Services	
Commissioned	CMSND
Decommission	DCMSN
Decommissioned	DCMSND
Operating Normally	OK
Out of Service	OTS
Return to Service	RTS
Unavailable	UNAVBL
Unmonitored	UNMNT
Unusable	UNUSBL
Special Data Facilities, Situations	
Avoid	AVOID
Except	EXC
Temporary	TEMPO
Unavailable	UNAVBL
Unreliable	UNREL
With Effect From or Effective From	WEF

This supplement has been included to provide general guidance and descriptions of current industry best management practices with respect to airport safety and emergency response. It is strictly informational in nature and should not be interpreted as being standard WSDOT Aviation policy and/or procedures. As noted previously, WSDOT Aviation intends to establish Airport Emergency Plans for the state-managed airports. Plans may vary depending on the specific needs of the airports; however, the following criteria should be used to help develop those plans.

1. Airport Emergency Plan Development

The ultimate objective of accident/incident reporting and investigation is prevention. Delays in reporting, due either to ignorance, confusion, or inadvertence, hamper the investigative process and may prevent timely resolution of significant issues. WSDOT Aviation can make a positive contribution to accident prevention by ensuring that Airport Emergency Plans and notification procedures are understood by airport personnel and prominently displayed for those operating at the airports.

Specifically, per FAA AC 150/5200-31, an Airport Emergency Plan is a document that:

a. Assigns responsibility to organizations and individuals for carrying out specific actions at projected times and places in responding to an emergency.

b. Sets forth lines of authority and organizational relationships, and shows how all actions should be coordinated.

c. Describes how people and property will be protected in emergencies and disasters.

d. Identifies personnel, equipment, facilities, supplies, and other resources available—within the airport or by agreement with communities—for use during response and recovery operations.

e. As a public document, cites its legal basis, states its objectives, and acknowledges assumptions.

f. Facilitates response and short-term recovery to set the stage for successful long-term recovery.

For WSDOT Aviation, the Airport Manager shall be responsible for developing and maintaining airport emergency plans for each state airport. The plan must be comprehensive and meet the functional operational needs of the airport. The Airport Manager is charged with a proactive mission, to work toward the resolution of issues to avoid the occurrence of avoidable problems.

Additionally, it should be understood that virtually no airport has sufficient resources to respond to every emergency situation independently. Each airport must depend to some degree on the resources from its surrounding communities. For this reason, airport operators are encouraged to involve local communities in the development of Airport Emergency Plans and use the collective expertise and resources for the mutual benefit of all parties. Interested parties with respect to the WSDOT Aviation airports would include local police, fire, and other emergency services providers, as well as the FAA, local governmental establishments and any other related agencies, including airport property owners such as the United States Forest Service, the Washington State Parks Department, the United States Army Corps of Engineers, the Bureau of Land Management, and the National Parks Service.

Likewise, airport resources may be incorporated into local/regional emergency plans. For example, airports may be identified as evacuation staging sites or reception sites for outside specialists.

Relationships between on-airport emergency services and all other mutual aid entities should be defined in Memorandums of Understanding (MOUs) and Memorandums of Agreement (MOAs) (see Section 3.5 for additional details). ***Note:*** The airport operator maintains the primary responsibility for all airport emergency response, and airport access should be in accordance with applicable MOUs and MOAs.

As appropriate, consideration should also be given to mutual assistance and coordination between local/regional resources with airport resources. In addition to law enforcement and firefighting aid, contingencies such as, mass evacuation with the airport being the staging and exit point or staging areas for arriving rescue teams should considered. The plans should include designated assembly areas, crowd control, shelter, sanitation, feeding, etc. In all cases, an accurate record of emergency/security contacts and discussions shall be kept.

2. Normal and Emergency Operating Procedures

Due to the unique characteristics exhibited by every airport, normal and emergency operational procedures may vary widely. Normal procedures for one airport may be strange to an itinerant pilot accustomed to different procedures that are considered normal at his home base. For this reason, prominent display of operating rules and procedures facilitates the safe and efficient operation of aircraft under all conditions. These rules and procedures can be made available to pilots through a variety of mediums, including through posting them on a bulletin board at the airport, as well as by posting them on pilot resource websites.

For example, under federal regulation, security procedures are only required at certain airports. A pilot that is unaccustomed to these procedures is more likely to operate within these guidelines if they are posted. This provides proper notification to allow operators to avoid citations for noncompliance. A periodic

review of operating procedures by the Airport Manager will promote efficient airport management and minimizes noncompliance. All safety plans should be reviewed annually and after an incident or accident.

A thorough and critical appraisal of emergency procedures is of equal or greater importance than that of normal procedures. Accident records support the common belief in the familiar axiom that aircraft accidents and incidents always happen to someone else in that those involved are invariably surprised and commonly incapable of rational post-accident actions. Many incidents have developed into accidents because of a lack of planning, preparation, and training. For instance, an accident can easily evolve into a fatality when a rescue vehicle can not find immediate access or is unfamiliar with access points to the final approach and departure paths, both locations where accidents frequently occur.

The Airport Manager is responsible for reviewing accident statistics and trends to identify foreseeable and potentially preventable emergency situations at each of the state-managed airports and to institute preventative measures in coordination with the emergency/security contacts identified for the specific airport and where possible, establish appropriate emergency procedures. The Airport Manager is also responsible for logging and maintaining a record of all known incidents and accidents that occur at the state-managed airports.

A. **Safety Improvement Report** – The Safety Improvement Report (SIR) (FAA Form 8740-5) is widely utilized as a means of preventing accidents. Specifically, the SIR is a postage-free form for suggesting accident prevention program improvements and for reporting any kind of aviation hazard to the nearest Airport District Office. All reports are investigated by an FAA Accident Prevention Specialist, and continued review of these reports is a means of identifying trends indicating the need for preventative action.

   As an example of how the system operates, at one particular airport, four gear-up approaches were prevented within a week's time by alert air traffic control personnel. None of these were reported to the Accident Prevention Specialist and no action was taken to alert Fixed Base Operators to this alarming trend until a gear-up landing occurred the following week. This trend was halted when operators were alerted to reemphasize the importance of pre-landing check lists and proper checkout procedures.

B. **Bulletin Board/Location and Use** – A large bulletin board, conspicuously located in an area where transient operators will likely pass it from the parking ramp, is a useful tool for displaying information of routine or emergency nature. Telephone service near the bulletin board is also helpful for pilots. Items that should be depicted on a bulletin board are telephone numbers, location, and availability where appropriate. Additional information may include the following:

   - Names of Airport Manager and Airport Safety/Security Committee
   - Names of all resident airport activities

- Airport rules and procedures
- Flight planning facilities
- FAA facilities
- Emergency services
- Ground transportation services

The Airport Manager can use an additional bulletin board to promote aviation safety, such as postings from the Accident Prevention Specialist at the FAA Flight Standards District Office or the airport's safety record.

3. Aircraft Accidents

While airports can differ greatly in their complexity, particular environments, and operational levels, the one thing they all have in common is that they are all subject to emergencies and incidents. At any given airport, emergency situations can occur at a moments notice. To facilitate the appropriate handling of and response to such emergencies, a detailed Airport Emergency Plan (AEP) containing the procedures to be followed in such an event should be formulated. For this plan to be effective, it must be not only thoroughly understood by key personnel and agencies (i.e., airport employees, outside officials or agencies with responsibilities at the airport, WSDOT Aviation), the plan should be designed with their input as well.

The following chapter presents a broad overview of what elements an effective AEP should include and the topics that it should address. Since every airport is its own unique entity, each facility should maintain an AEP that is tailored to its specific needs.

It is important to note that WSDOT Aviation has an extensive program for search and rescue operations, many of whose components are directly related to aircraft accident situations.

A. **Overview** – There are two important points to consider when dealing with emergency situations (and specifically aircraft accidents):

(1) All airport accidents will be thoroughly investigated by the FAA and the National Transportation Safety Board (NTSB) to determine causes of the accident.

(2) Local state, county and/or municipalities will have the overall authority in the immediate handling of such accidents. While the FAA's and NTSB's involvement is in the interest of air safety, local law enforcement and emergency responders are trained to deal with emergency situations, including: crowd control, isolation and security of wreckage, providing medical care for any injured persons until medical help arrives, etc.

An airport emergency is any occasion or instance, natural or man-made that warrants action to save lives and protect property and public health. The AEP should address those emergencies that occur on or directly impact, an airport or adjacent property that:

(1) is within the authority and responsibility of the airport to respond; or

(2) may present a threat to the airport because of the proximity of the emergency to the airport; or

(3) have responsibilities under local/regional emergency plans and by mutual aid agreements.

(***Note:*** Throughout this supplement, the terms emergency, incident, accident, disaster, hazard, and crisis are frequently used interchangeably to represent any situation which presents a threat to public health and safety.)

B. **Aircraft Accident Situations** – The overarching approach of an Airport Emergency Plan should be to address two general emergencies: off-airport accidents and on-airport accidents. While some procedures will be similar in both instances, there are different considerations involved in an on-airport plan simply because airport personnel will likely be the first to arrive at the scene of the accident. Both plans should include the following steps.

Step 1 – Establish a Chain of Command for Managing an Emergency

As mentioned previously, the authority at an airport accident is the local law enforcement agency with primary jurisdiction. The Washington State Patrol has law enforcement authority anywhere in the state of Washington, with caveats for federal property and may have limited authority on Indian reservations. For this reason, that agency must be notified promptly after the occurrence of any aircraft accident. Local county and municipal police as well as the Washington State Emergency Management Division should also be notified. Based on the particulars of an accident, notification of one agency first may be preferable, especially if one is located closer to the scene of the accident.

After notifying those agencies which are responsible for managing the accident scene, the FAA should then be informed of the emergency. To facilitate the orderly management of the accident, one individual should be recognized as primary operational commander at all times. This person should remain at the scene until all injured parties have been treated and transported, fires extinguished, and the crowd is dispersed. In some instances, the FAA may request that the accident scene should remain under surveillance to prevent unauthorized tampering with aircraft or facility wreckage until FAA representatives arrive.

Step 2 – Define the Roles/Duties of Participating Agencies and Departments

In the event that an accident occurs on the airport and the scene is immediately accessible by persons not identified in the established chain of command, certain procedures or guidelines should be followed. These procedures are as follows:

- Disturbance of the accident scene should be avoided, except to provide aid to injured parties.
- Control of any crowd should be a priority and should follow methods previously outlined in the AEP.
- A complete record of all accident and response details should be made, such as the time of occurrence, the time notification was given, along with the sequence of events that follows. The location of any part of the wreckage that had to be moved should be identified, as well as the first individual to arrive at the scene. These details will aid in the investigation and may also prove to be of value to the airport in any litigation that may result from an accident.
- Upon the arrival of the law enforcement agency with jurisdictional authority (i.e., State Police), all pertinent information must be transferred to them and continued assistance should be offered at their direction. All individuals and agencies involved should be informed of the chain of command and communications across or between agencies should be encouraged so that the overall effort is efficient and effective.

Step 3 – Informal Impacted Parties of the Plan

A primary focus during the development of an airport emergency plan is to ensure that all concerned parties are aware of the plan. Representatives from the state police, county sheriff, local police, civil defense, local fire departments, and local hospital and ambulance service should be involved in the formulation of emergency procedures to be followed. Written copies of the final plan should be distributed to each of these agencies as well. Additionally, the state must be sure that all airport personnel are aware of the plan and be familiar with their individual roles and responsibilities.

Contact information for the State Police, County Sheriff, local police, local hospital, etc. should be readily available, along with a list indicating the specific emergency response steps that need to be taken. This information should be posted where all employees can quickly reference it in times of emergency. The plan should also be included in any operational handbook for the airport's employees. Ideally, the emergency procedures, the plan document, and all pertinent contact information should be reviewed and revised as appropriate at least once each calendar year.

C. **Media Relations** – In the event of an aircraft accident or emergency incident on the airport, the Airport Manager or spokesperson should anticipate immediate and continued communication with the media. Following are several tips on appropriate methods to deal with the media:

- Coordinate with the law enforcement agency and primary jurisdiction (i.e., state police) and, when appropriate forward media calls to designated source.
- Send Press Release – WSDOT should issue update press releases to keep the media informed with facts and key messages about the incident.
- Be Prepared – Airport Manager or spokesperson should prepare a short statement that includes key messages prior to arriving at the scene of an accident.
- Select a Suitable Site – Airport Manager or spokesperson should conduct media relations in an appropriate location that is easily accessible to the media and preferably removed from the accident scene to avoid close video coverage of the accident.
- Arrange to Have Press Identification Checked – Airport Manager or spokesperson should check for proper identification at media only events.
- Control the Questioning – During the briefings, Airport Manager or spokesperson should call on individuals rather than allow an uncontrolled barrage of questions.
- Project a Professional Image – Airport Manager or spokesperson should remain calm, revealing neither fear nor frustration. Efforts should be made to focus the discussion on established facts only. There should be no speculative responses to questions.
- Refrain From Assuming Responsibility – Culpability for aircraft accidents is determined at the conclusion of the investigations conducted by the local law enforcement, the FAA and the NTSB. Therefore, any admission of responsibility by the airport manager or spokesperson would be imprudent, premature and inappropriate.

4. Accident Prevention and Preparedness

A. **Common Indicators of Incidents and Accidents** – The Airport Manager should be aware of common indicators and contributing factors that will likely result in incidents or accidents if they are not corrected. Each of the items listed below continues to be a contributing factor associated with accidents, and all have resulted in serious injury or fatalities.

- An aircraft must make numerous attempts at a landing before succeeding.
- An aircraft flies a disorganized or erratic traffic pattern.
- An airplane, on either departure or arrival, appears to be improperly loaded.

- Chocks and other material/debris are on runways, ramps, and parking areas.
- Fast and/or erratic taxiing occurs.
- Hand starting or "propping" aircraft with no one at controls and no chocks.
- A display of ignorance or incompetence when obtaining weather briefings or filing flight plans.
- A lack of familiarity with proper radio procedures (COM/NAV) at terminals or en route.
- The observation of damaged or apparent un-airworthy aircraft that are being operated, or which are likely to be operated.
- Questionable aircraft servicing procedures.
- VFR operations in dangerously marginal weather conditions.
- Uncontrolled vehicular traffic in the airport's air operations areas.
- Wind indicators that are inoperative.
- Lights that are inoperative on airport runway, beacon, etc.
- Animals that are on airport operating areas.
- Broken runways, taxiways, ditches, etc.
- Attempting to operate aircraft when physically incapacitated by alcohol or drugs.
- Inadequate or no preflight of aircraft.

B. **Common Types of Aircraft Accidents**. A review of a list of 239 incidents, covering a three-year period, in two New England states shows that over 75 percent of these pilot error mishaps occurred during the approach to land, on the airport, or during the departure phase of flight. In many instances, competent airmen witnessed the numerous aircraft incidents and did nothing to prevent or report them, leading many to understand that these incidents would ultimately result in an accident at one time or another. Reluctance of the individual to take preventative action, concerning another pilot's action or behaviors is common among airmen accustomed to risk and insistent on pilot-in-command responsibility. The irony of this attitude is often expressed by pilots during accident investigations when the question "why didn't somebody tell me before it happened?" is frequently asked.

   However, it is also understood that an individual will take responsibility for preventative action if he acts with known group support. An individual must recognize that most of these incidents are preventable, provided that somebody is willing to accept responsibility for preventative action. Taxi accidents, for example, occur rarely, if ever, at certain airports. At other locations, conditions invite taxi accidents, and they happen with regularity until the conditions are corrected.

The following are several examples of incidents that are most commonly caused by pilot error. The examples are listed in order of frequency of their occurrence, from most common to least common.

- Lost Control – Crosswind (Landing or Ground Collision – Taxi Takeoff)
- Hard Landing
- Ground Collision
- Failed to Extend Landing Gear
- Lost Control – Slick Runway
- Land Long
- Inadvertent Gear Retract
- Misused Engine Controls
- Hit Object – While Airborne
- Unsuitable Terrain
- Fuel Exhaustion
- Improper Preflight
- Land Short
- Hit Ground Object – Taxi
- Mid-air Collision – Two Aircraft
- Spin

C. **Aircraft Disaster Drills** – Disasters require the immediate response of numerous community resources. While community agencies and departments pledge their support in times of emergency need, it remains possibly the most difficult objective to accomplish. As such, it is important that all participating agencies develop similar emergency plans and establish procedures so that each plan may be executed in concert with the others. Once all parties have established emergency plans, disaster drills should be conducted regularly to gauge the effectiveness of established procedures and overall agency readiness.

Drill Guidelines – The following guidelines for aircraft disaster drills and preparedness should be considered:

- Determine practical scope of local disaster planning organizational structure.
- Establish communications network among all participating agencies.
- Designate command authority (an individual) for exercises on-airport and off-airport, along with an alternate and a succession of authority.
- Develop police and/or other law enforcement coordination access to airport, drill scene, and hospital.

- Establish security at the scene and a procedure for the escort of vehicles on the airport.
- Coordinate fire fighters, rescue workers, and emergency medical technicians.
- Designation of a local physician that is oriented to airport activities. Local medical societies and governmental health organizations may also be helpful in carrying out the drill. Medical considerations include the following:
  - Determine hospital capabilities.
  - Designate registrar and recorders to advise hospitals.
  - Designate command post medical director.
  - Establish triage area (on airport only).
  - Establish procedure for stabilizing and classifying casualties.
  - Organize medical supplies.
  - Familiarize drill participants with the local hospital disaster plan.
  - Coordinate so that ambulance and EMTs are familiar with airport.
  - Familiarize those participating in the drill with local laws regarding the coroner's role and procedure for evacuating casualties and fatalities.
- Others with whom advanced coordination is desirable include the following:
  - Control tower
  - Airline personnel
  - News media
- For the drill to minimize public concern, prepare a news release several days prior to exercise and designate a sole media spokesman for the entire exercise.
- There are some items necessary to cope with an aircraft accident that are not normally stocked in a community, or at least in the quantities necessary. These include, but are not limited to the following:
  - Triage kits – Professional guidance in assembling these kits is a necessity.
  - Backboards – must have restraining straps and handles.
  - Body bags – nearby military bases may have an adequate inventory.
  - Identification – ID cards for direct participants; vests, helmets, or arm bands to designate participants.
  - Casualty tags – they should be waterproof.
  - Cordoning materials – these materials are secondary only to personnel.

Emergency Triage – Defined as "the sorting and first aid treatment of casualties in collecting stations before their evacuation to hospitals," triage is critical to any drill or disaster because of its overwhelming impact on the success or failure with respect to life-saving efforts. Persons operating an emergency triage are responsible for determining the severity of injuries, which can include those parties who are critical and in immediate need of transport to a hospital, those who will remain stable for transport after those in most serious condition, and those not experiencing any serious medical problems. Additionally, a triage area should be divided and marked for appropriate categories.

Accident Simulation Guidelines – In order to determine readiness, simulated aircraft disaster drills should be conducted under realistic conditions. To accomplish this, airport operators or managers should use the following suggestions as a guide:

- Attempt to have a realistic number of crash victims. A local amateur theater group or high school and college students would be ideal participants. Volunteers should be informed of the nature of the drill to achieve a realistic scenario.
- The requirements of National Transportation Safety Board (NTSB) Part 430, Subpart C should be considered as an adjunct to the exercise. Evidence should be preserved.
- Determine and safeguard radioactive material on board the downed aircraft.
- Evacuate victims from aircraft to prevent further injuries by an explosion.
- An actual aircraft provides the best prop for the "crash" scene; however, acquiring an aircraft may be difficult as the Air Transport Association (ATA) is sensitive to potential for negative publicity associated with disaster drills.
- Communications are the weakest segment in the alerting phase as well as during the rescue and life-saving operations. Portable public address systems and hand held radios are recommended.
- Adequate perimeter security at the scene should be provided.
- Doctors should be encouraged to use terminology that lay personnel can easily comprehend.
- Command post should be conspicuously marked.
- Alternative planning for adverse weather conditions should be considered.
- Adequate vehicle control and escort capability should be provided.
- Specific duty assignments, particularly for medical personnel, should be considered.
- Information concerning the availability of hospital beds should be available.

Appendix 3-3 Current BMPs for Airport Security

This supplement has been included to provide general guidance and descriptions of current industry best management practices with respect to airport security. It is strictly informational in nature and should not be interpreted as being standard WSDOT Aviation policy and/or procedures. As noted previously, WSDOT Aviation has appropriate airport security guidance and plans currently established. The intent of the information below is that it be utilized as a reference at the time of the next update to those WSDOT Aviation airport security documents.

1. Overview

Airport security has undergone a significant change over the past nine years with security claiming increased significance at all levels of government in the post-9/11 world. As part of the reaction to security priorities, actions were taken by the federal government, the aviation industry, and WSDOT Aviation to significantly increase the level of aviation security. While the most visible of the new security of initiatives has occurred at commercial service airports with respect to commercial aviation, there has been an ebb and flow of calls to regulate the general aviation community. National regulations have been promulgated by both the FAA and Transportation Security Administration (TSA) to the extent of their legislative authority; however, very little other regulatory activity has occurred with regard to general aviation airport security.

However, as reflected above, WSDOT Aviation established a *General Aviation Security Guidelines* manual and Airport Security Plans for all of the state-managed airports in 2003. These plans continue to be utilized and updated by WSDOT Aviation.

A. **Federal Security Requirements** – To date, other than a selected few, general aviation airports have not been subjected to direct federal security regulations. Most regulations affecting general aviation security have been issued within the already established scope of authority by the FAA, which is through the regulation of pilots, flight rules, and airspace. Additional means of restricting activity at airports is through NOTAMs (Notices to Airmen) and Temporary Flight Restrictions. Besides these means, general aviation airports do not fall within the security purview of either the FAA or TSA. The biggest step toward federal involvement in general aviation airport security was the publication of the TSA's Security Guidelines for General Aviation Airports (2004).

B. **State Security Requirements** – While in the immediate post-9/11 wave of legislation and regulation, many state aviation laws applicable to airports were intended to criminalize certain offenses, most state laws enacted since 2002 have not been designed to have applicability for general aviation airports, but to strengthen the security of commercial service airports.

Generally, only a limited number of state laws have been passed that impact general aviation airports. Again, the state of Washington is one of those states that has taken the initiative to establish airport security guidelines and plans for its airports. WSDOT also provides special airport grants strictly for security initiatives, including security cameras, fencing, etc.

2. General Aviation Industry Security Initiatives

A brief summary of material provided by the Transportation Security Administration (TSA), the National Association of State Aviation Officials (NASAO), American Association of Airport Executives (AAAE), and the Aircraft Owners and Pilots Association (AOPA) is provided below.

A. **Transportation Security Administration (TSA)** – Published in May 2004, the TSA's Security Guidelines for General Aviation Airports was developed by representatives from various general aviation groups as members of the Aviation Security Advisory Committee (ASAC). The publication provides a set of federally-endorsed security enhancements and a method for determining which enhancements are appropriate. The purpose of the document is, "to provide owners, operators, sponsors, and other entities charged with oversight of GA airports a set of federally endorsed security enhancements and a method for determining when and where these enhancements may be appropriate."

B. **National Association of State Aviation Officials (NASAO)** – NASAO developed and submitted to state and federal agencies a set of recommendations, which included securing aircraft, the need for the development of a security plan, and the need for a means for reporting suspicious activity. Recommendations also included that airports develop a public awareness campaign, perform regular inspections, and control the movement of vehicles and persons in the aircraft operating area. Also recommended is a new pilot identification card, a means to cross-reference the identity of persons requesting flight lessons with a government watch list, establish a process for categorizing airports, and ensure adequate federal funding for airport security needs.

   Additionally, several state aeronautics departments have established their own security initiatives, including Security Planning for General Aviation Airports (2004) developed by the Florida Airports Council and the Terrorism Protective Measures Resource Guide (2005) assembled by the state of Colorado's Office of Preparedness and Security.

C. **American Association of Airport Executives (AAAE)** – The AAAE General Aviation Airport Security Task Force developed a set of recommendations based on established categories of airports determined by runway length and based aircraft. The recommendations addressed the securing of aircraft, establishing a system for communicating levels of threat, the development of a new pilot license, and the expansion of the FAA contract tower program.

D. **Aircraft Owners and Pilots Association (AOPA)** – AOPA developed the Airport Watch Program, a nationwide aviation watch system that takes full advantage of the nation's pilots as a resource for monitoring activities at airports. Supported by the TSA's toll-free hotline and system for reporting and acting on information from pilots and others at airports, the Airport Watch Program uses warning signs, informational materials, and a training video to make pilots, airport administrators, managers, and staff more aware of ways to improve airport security.

E. **WSDOT Security Program** – WSDOT Aviation currently has not established an airport security program that is comprised of Airport Security Plans for all of the state-managed airports. Generally, the manual provides guidelines on the following topics: Detection and Prevention; Reporting, Communicating, and Disseminating; Unusual or Suspicious Activity; Aircraft Security; Airfield Security; Flight Operations Security; Flight Training Security; Developing an Airport Security Plan; Access Control, Monitoring, and Identification; Security Signage; and Education.

   The individual Airport Security Plans are customized to the individual needs and environments of the airports that they represent. These plans are also confidential and maintained at the WSDOT Aviation administrative offices.

3. Current Security Practices at GA Airports

This section provides a summary of selected security practices currently being pursued at many of the nation's general aviation airports. It should be understood that the degree to which these practices are established at a given airport is largely dependant upon the activity level of that airport. Specifically, larger and/or more active airports typically exhibit a greater need for these security practices and tend to have greater resources for implementing them, as opposed to smaller, less active airports.

Note: The selected practices identified below are taken from the TSA's Security Guidelines for General Aviation Airports (2004) and the Airport Cooperative Research Program's (ACRP) General Aviation Safety and Security Practices reports. Additional information is available in the reference section at the end of this chapter.

A. **Security Planning** – The TSA reports that "the most efficient and cost-effective method of instituting security measures into any facility or operation is through advance planning and continuous monitoring." This advance planning is typically accomplished through the establishment of a security plan specific to the airport. While security plans can vary in size and complexity depending on the airport and threat, they will typically include communications, access control, perimeter control, procedures, and other site specific requirements.

Most airports designate security planning and monitoring responsibilities to an individual or small group to ensure consistency and diligence. However, consideration should also be given to establishing an Airport Security Committee, which could be composed of airport tenants and users drawn from all segments of the airport community, as well as local law enforcement. The main goal of establishing this group is to involve airport stakeholders in developing effective and reasonable security measures and disseminating timely security information. Meetings should be held regularly for the purpose of giving coordinated direction to the overall airport security program.

Depending on the level of complexity required, a security plan can be created through a variety of means, ranging from internal resources to external consultants. Additionally, use of external local law enforcement agencies is advisable in that they can not only bring their own security expertise to the planning effort, but they can also help define the airport's threat environment in comparison to the surrounding community existing crime and incident levels. Typically, at a minimum, a security plan will include an emergency locator map, identifying gates, hydrants, emergency shelters, buildings and hazardous materials sites on a grid map, as well as establishing procedures for handling bomb threats and suspect aircraft.

Once the security plan has been established, an airport should share their plan with appropriate local law enforcement agencies, as well as with their primary tenants (i.e., FBO), the TSA, and the local fire department. Other entities with which airports could share their plans could include federal law enforcement agencies (i.e., Federal Bureau of Investigation, Drug Enforcement Agency, Immigration and Customs Enforcement, etc.), the FAA, state DOTs, Homeland Security representatives, city councils, and airport board members, as appropriate.

B. **Aircraft** – The main goal of enhancing GA airport security is to prevent the intentional misuse of GA aircraft for terrorist purposes. Proper securing of aircraft is the most basic method of enhancing GA airport security. Pilots should employ multiple methods of securing their aircraft to make it as difficult as possible for an unauthorized person to gain access to it. Some basic methods of securing a GA aircraft include the following:

- Ensuring that door locks are consistently used to prevent unauthorized access or tampering with the aircraft.
- Using keyed ignitions where appropriate.
- Storing the aircraft in a hangar, if available, and locking hangar doors.
- Using an auxiliary lock to further protect aircraft from unauthorized use. Commercially available options for auxiliary locks include locks for propellers, throttle, and tie-downs.
- Ensuring that aircraft ignition keys are not stored inside the aircraft.

C. **Perimeter and Access Control** – Similar in purpose, perimeter control keeps unauthorized individuals from the airport itself, while access control methods ensure that only authorized personnel can gain access to airport facilities. Perimeter control mechanisms generally include fencing and other physical barriers, while controlling access to an airport is accomplished through a variety of different means. The National Business Aviation Association (NBAA) developed a series of best practices for their members that provide good guidance for securing buildings on the airport, including the following:

- Ensure home facility perimeter security with effective fencing, lighting, security patrols (as appropriate), gates, and limited access areas.
- Ensure street-side gates and doors are closed and locked at all times.
- Require positive access control for all external gates and doors.
- Close and lock hangar doors when that area is unattended.
- Secure all key storage areas (food and liquor, parts and tools, etc.).
- Have an access control management system for keys and passes.
- Confirm the identity and authority of each passenger, vendor, and visitor before allowing access to facilities and aircraft.
- Escort all visitors on the ramp and in the hangar area.
- Use a government issued photo ID to verify the identity of any visitor or vendor.
- Post emergency numbers prominently around facility.
- Ensure easy access to phones or "panic buttons" in various facility locations (break room, hangar bay, etc.).
- Confirm security of destination facilities.
- Be aware of your surroundings and do not be complacent—challenge strangers.

D. **Hangar Facilities** – Aircraft hangars are one of the most effective means of ensuring aircraft security. However, their level of security is maintained only to the degree that the hangar/personnel doors are secured and monitored when unattended. Some of the basic considerations related to hangar security include the following:

- Hangars should be properly marked and numbered for ease of emergency response. These areas are also a good place to install security and informational signs.
- Hangar locks that have keys that are easily obtained or duplicated should be avoided. Hangar locks should be re-keyed with every new tenant.
- Proper lighting around hangar areas should be installed.
- Additional security measures include alarm and intrusion detection systems.

E. **Airport Tenant Facilities** – Even for those airports with a perimeter fence, nearly all airport tenant facilities have points of access to the airport's aircraft parking and movement through their facilities. While the tenant leasing the facility is typically responsible for maintaining airport security, their access controls may also need to be incorporated into the airport's security procedures and/or alarm and reporting system. Airport operators should coordinate with these tenants to ensure that they maintain airport access and security standards at all times. For example, airport management should coordinate and ensure security procedures exist and are harmonized with maintenance facilities that have access on both the public side of the fence and the aircraft parking and movement areas.

F. **Aircraft and Vehicle Fueling Facilities** – Fuel farms are typically located in remote areas of airports for safety and convenience purposes. If feasible, security fencing, lighting, and access controls should be utilized whenever possible to control movement in these areas. Trucks used to transfer fuel to aircraft should be secured when not in use, including controlling fuel truck keys and not leaving keys in trucks while unattended. Fuel trucks should also be marshaled in easily monitored locations when not in use.

G. **Lighting** – Protective lighting is a primary means of providing a base level of protection from nighttime theft, vandalism, or other illegal activities that is generally inexpensive to maintain, and when properly employed, may provide airport personnel with added protection from surprise by a determined intruder. Since protective lighting requirements at airports depend upon the local conditions as well as the areas to be protected, a careful analysis of security lighting is needed. These requirements should consider the need for good visibility, employee recognition and badge identification, vehicle access identification and control, detection of intruders, and deterrent to illegal entry.

   When developing any security lighting plan, care must be taken to ensure that lighting does not interfere with aircraft operations. However, considerations should be given to how installing outdoor security area lighting could help improve the security of aircraft parking and hangar areas, fuel storage areas, airport access points; and other appropriate areas.

H. **Signage** – The use of signs provides a relatively inexpensive deterrent by warning of facility boundaries as well notifying of the consequences for violation. Some of the basic considerations related to airport security signage include the following:

   - Signs along a fence line should be located such that when standing at one sign, the observer is able to see the next sign in both directions.
   - While signs for security purposes should be designed to draw attention, they also should be coordinated with other airport signs for style and consistency when possible.

- Signs should be constructed of durable materials, contrasting colors, and reflective material where appropriate.
- Use as concise language as possible.
- Wording may include – but is not limited to – warnings against trespassing, unauthorized use of aircraft and tampering with aircraft, and reporting of suspicious activity.
- Signage should include phone numbers of the nearest responding law enforcement agency.
- Many locations with access control or Closed Circuit Television (CCTV) equipment may warrant signage for directional, legal, or law enforcement purposes.
- Refer to FAA AC 150/5360-12D, *Airport Signing and Graphics*.

I. **Airport Community Watch Program** – One of the most effective deterrents in GA airport security is awareness. Typically, the airport user population is familiar with those individuals who have a valid purpose for being on the airport property, and consequently, unfamiliar faces are quickly noticed. Teaching an airport's users and tenants what to look for with regard to unauthorized and potentially illegal activities is essential to effectively utilizing this resource. Airport Managers can either utilize an existing airport watch program or establish their own airport specific plan. Some of the primary elements to be considered when establishing a watch program include the following:

- Coordinate the program with all appropriate stakeholders, including airport officials, pilots, businesses, and/or other airport users.
- Hold periodic meetings with the airport community.
- Develop and circulate reporting procedures to all who have a regular presence on the airport.
- Encourage proactive participation in aircraft and facility security and heightened awareness measures. This should include encouraging airport and line staff to query unknowns on ramps, near aircraft, etc.
- Post signs promoting the program, warning that the airport is watched. Include appropriate emergency phone numbers on the sign.
- Install a bulletin board for posting security information and meeting notices.
- Provide training to all involved for recognizing suspicious activity and appropriate response tactics. This could include the use of a video or other media for training.
- Utilize local law enforcement for airport security community education.
- Encourage tenants to make their staff aware of the airport watch programs.

- Additional resources can be obtained through AOPA's Airport Watch program. Completed in partnership with the TSA, this program encourages pilots to be the "eyes and ears for observing and reporting suspicious activity" and includes warning signs for airports, informational literature, and a training video to teach pilots and airport employees.

J. **Threat/Security Communication System** – The development of a comprehensive contact list is recommended to be included in any airport security procedures with the list distributed to all appropriate individuals. The following phone numbers should be included on the contact list (include after hour contact numbers where appropriate):

- Landing facility operator.
- Landing facility manager.
- Individual with responsibility for facility security.
- Local Police or County Sheriff Department (List all responding LEO Agencies).
- State Aviation Director.
- County/City Emergency Manager.
- State Police.
- Fire Department.
- State Office of Public Safety/Homeland Security.
- FBI.
- Local FAA contact.
- Local TSA contact (that is, Federal Security Director or designee).
- Any other appropriate organization.

Additionally, in the event of a security incident, it is essential that first responders and airport management have the capability to communicate effectively. Where possible, common radio communication frequencies and procedures should be coordinated with local law enforcement.

Finally, the communication process by which all new security policies, procedures, and alerts are communicated to tenants and other airport users is of critical importance. One method of accomplishing this is to conduct regular meetings with airport tenants and the flying public to discuss security issues and challenges, establishing a centralized area for posting of security information, or even developing an email alert system.

Appendix 3-4 General BMPs for Establishing Letters of Agreement (LOA)

A Letter of Agreement (LOA) is a written contract between an airport sponsor and another entity. Since WSDOT Aviation's state-managed airports rely on emergency medical services from local communities, an LOA would serve an important function in providing safety assurance for operators at the airports. The following categories should be included in an LOA.

1. Purpose

The purpose defines the intent of the LOA. For airport emergency support, the LOA set forth procedures between an airport and a local entity on emergency response and recovery. ***Note:*** For the state-managed airport system, it is anticipated that these LOAs could include agreements at a state level (for civil/community disaster response) and at a local level (for individual airport requirements).

2. Scope

The scope outlines specific actions that should be taken to alert emergency medical equipment. For some situations, an aircraft operator may be the only witness on-site to report an actual or potential emergency situation.

3. Responsibilities

Since there are no air traffic control towers at the state-managed airports, WSDOT Aviation would be responsible for airport personnel and aircraft operators who may be involved with the emergency situation. Proper communication should be the primary focus during the initial stages of an emergency situation to reduce any other potential risks.

4. Procedures

Since each emergency situation requires a different response, the proper procedures should be communicated through the LOA prior to an actual incident or accident. For example, the FAA classifies aircraft emergencies into Alert I, Alert II, and Alert III based on the magnitude of the emergency. Each alert should have a defined set of procedures in the LOA making for a quick and efficient response and recovery.

5. Emergency Response Information

Information pertaining to the emergency should be provided to the appropriate emergency response personnel. Such information may include:

- Aircraft identification.
- Aircraft type.
- Nature of emergency.
- Estimated time of arrival.
- Landing runway.
- Number of persons on board.
- Amount of fuel on board.
- Type and location of dangerous cargo on board.

A template for a LOA may be found in FAA AC 150/5200-31, *Airport Emergency Plan*, Appendix 7.