

# AIR TAP Briefings

A publication of the Airport Technical Assistance Program of the Center for Transportation Studies at the University of Minnesota

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## Planning for the worst: emergency preparedness for general aviation airports

An airport emergency is any occasion, natural or man-made, that threatens lives, property, or public health in and around the airport. An emergency situation could result from an aircraft incident or crash on land or water, storm or natural disaster, fire, chemical spill, or other accident. To prepare, every airport should develop and maintain an airport emergency plan (AEP) that covers responsibilities, local agency participation, and critical response criteria. An AEP ensures safety and service for an airport's users and the local community; it can also help limit the impact of these events by addressing liability and other post-emergency issues. This *Briefings* article will discuss the process and key considerations for creating an AEP.

FAA Advisory Circular 150/5200-31A outlines the process for developing and implementing an AEP. It states that an emergency plan should be functional, comprehensive, well coordinated, and—most important—easy to understand and implement. In addition, airport management staff and local emergency agency personnel must be familiar with the plan. As a resource, AC 150/5200-31A is available online at [www.faa.gov/airports\\_airtraffic/airports/resources/advisory\\_circulars](http://www.faa.gov/airports_airtraffic/airports/resources/advisory_circulars).

A systematic, comprehensive process to emergency management recognizes four separate but related phases: mitigation, preparedness, response, and recovery.

Mitigation prevents, alleviates, or diminishes the potential effects of a disaster. Mitigation actions include situation zoning, public education, budget

allocations, and construction considerations.

Preparedness enhances emergency response capabilities through actions such as emergency plans, training, drills, and exercises.

Response actions aim to save lives and property, reduce the possibility of secondary damage, and speed recovery operations by mobilizing emergency response personnel and equipment, conducting search and rescue, alerting the public, or evacuating affected areas.

The recovery phase attempts to restore the airport and/or the community to pre-emergency conditions. Recovery can include crisis counseling, long-term medical assistance, reconstruction, rehabilitation, public information programs, and hazard-reduction programs.

### Basic plan elements

A basic AEP provides an overview of the airport's approach to emergency operations and should include:

The **purpose**, which states generally what the AEP is meant to do.

**Situation and assumptions**, which narrow the scope of the AEP by outlining what hazards it addresses and what characteristics of the airport may affect response activities.

A description of **operations** that provides an overall sequence and scope of the planned emergency response.



**Organization and assignment of responsibilities**, which establishes the emergency organization responding to a situation and lists responsibilities of its staff and related tasks to be performed.

### Benefits of an AEP

General aviation airports are not required to have an AEP—so why would an airport need one? Legal responsibility for appropriate emergency action lies with elected officials of the communities that own and operate airports. A plan can protect those officials. It is in their best interest to get involved in developing an AEP and to provide the community's collective expertise and resources to comply with emergency preparedness responsibilities.

The primary benefits of having an up-to-date AEP are that during an emergency it will:

- Assign responsibility to organizations and individuals for quickly carrying out specific actions

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## Spill prevention, control, and countermeasures

One emergency that airports must be prepared to deal with is an oil spill. At the AirTAP 2006 Fall Forum, Roy Fuhrmann, director of environment for the Metropolitan Airports Commission, offered tips for dealing with the difficulties of spill prevention, control, and countermeasures.

Fuhrmann began by reviewing the Oil Pollution Prevention Regulation (40 CFR Part 112) as it pertains to airport operations. He noted how this regulation requires facilities to develop and implement a site-specific Spill Prevention, Control, and Countermeasures plan (SPCC) to address:

- Operating procedures to prevent an oil discharge
- Control measures to prevent an oil discharge from entering navigable waters
- Countermeasures to contain, clean up, and mitigate the effects of any oil discharge that affects navigable waters

The SPCC rule applies to a facility that uses, stores, manipulates, or consumes oil in most any form or poses a risk of discharging oil in harmful quantities. A spill plan must be in place to prevent an oil discharge, control a spill if it occurs, and mitigate any effects of a spill that reaches navigable waters. The Oil Pollution Prevention Regulation sets forth requirements for

prevention of, preparedness for, and response to oil discharges at specific non-transportation-related facilities.

Proximity to navigable waters and existing infrastructure that may act as a conduit for an oil spill are used to identify potential hazards. Active measures to prevent, contain, and mitigate an oil spill reduce the immediate impact oil can have on surrounding waters. These measures address treatments of drain covers, spill kits, spill response teams, and drainage gate controls.

Active secondary containment measures contain an oil discharge before it reaches navigable waters or adjoining shorelines. Such measures are put in place prior to or immediately upon detection of a spill. A contingency plan is a detailed response plan to limit the quantity of a discharge reaching navigable waters or adjoining shorelines when any form of secondary containment is impracticable. Fuhrmann also emphasized the importance of spill control because of the immediate impact fuel and oil could have on surrounding waters. Finally, he shared a number of slides related to methods of spill control and reclamation, which are covered in the Fall Forum proceedings (available online at [www.airtap.umn.edu/publications](http://www.airtap.umn.edu/publications)).

- Outline lines of authority and coordination of organizational relationships
- Describe methods for protecting people and property during emergencies and disasters
- Identify personnel and all available resources for use during response and recovery operations
- Cite its legal basis, state its objectives, and acknowledge assumptions
- Facilitate response and short-term recovery to set the stage for successful long-term recovery

### Developing an AEP

The process of developing the AEP may be as helpful to the airport and the emergency response community as the final plan itself. The process should bring together those critical members and community representatives that can lend expertise, insight, and resources to the plan.

Airport and aircraft emergencies may need to be treated as a security incident. As part of the AEP development, consider which security concerns might apply to your airport and coordinate with local law enforcement to incorporate airport security and incident response into the AEP.

Recommended steps for developing a plan are described below.

*Step 1. Establish an AEP team.* The team approach usually results in better involvement by all participants, more expertise being brought to the process, and closer professional relationships that may lead to better teamwork during an emergency. The AEP team should consist of people and organizations that have a potential role in the airport's emergency response program, including the airport manager or airport authority chair, all airport employees and customers, local rescue and medical personnel, government and military authorities, civil authorities, and local media sources.

*Step 2. Review other plans.* Have team members bring emergency plans that they're familiar with to your planning



meetings. Build on what exists in surrounding communities, such as an emergency operations plan (EOP). Review existing plans and borrow those elements that might work for your airport.

*Step 3. Develop the AEP.* Meet with team members and others in the community to develop the plan. Identify critical parties to review the plan and offer additional insight and feedback. Establish a timeline for developing documents for circulation to other organizations that will be part of the AEP review. Finalize the AEP and record and distribute responsibilities to appropriate parties.

*Step 4. Validate that the AEP meets required standards.* Check with local agencies regarding the plan review cycle and conformity to the applicable regulation(s) and standards to ensure that the plan is appropriate, practical, and complete.

*Step 5. Conduct training, drills, and exercises.* Key people must be trained for the plan to be successful. In addition, conduct drills and review assignments for all participants periodically, especially after staff turnover or if plan elements change.

Training should result in all parties having a thorough knowledge of the AEP and their roles as well as each organization's facilities, equipment, and vehicles. Take time to ensure that off-airport personnel are familiar with the unique operating environment of an airport. Provide for specialized and refresher training for certain airport and emergency response personnel.

During training, identify the location

of normal and emergency exit controls, communications equipment, and other safety and security features. Familiarize airport personnel with the location, protocols, and use of communication and other equipment.

Specialized emergency training could include training for air traffic control staff, procedures for passenger emergency care, and methods of crowd control and panic prevention.

Offer additional training in emergency response to local police, firefighters, water rescue teams, ambulance personnel, paramedics, emergency management agencies, the media, and other off-airport emergency response organizations.

It's important to conduct regular drills and exercises at the airport. When doing so, make the community aware of what's happening through periodic announcements before and during an exercise so as not to cause alarm. Inform the local media of upcoming exercises and invite their participation.

### Plan maintenance

Because personnel and conditions change frequently, the AEP must be kept up to date. At the airport, maintain personnel rosters and assigned leadership tasks. Analyze equipment or communication needs over time and review the AEP periodically, checking the accuracy of telephone numbers, radio frequencies, emergency resources, and personnel assignments. Also review mutual aid agreements and monitor off-airport activity.

Shaun Germolus, assistant director of the Chisolm-Hibbing Airport Authority, advised audience members at the AirTAP 2006 Fall Forum to come up with a summary of instructions for staff of what to do during the first 30 minutes of an emergency. He also recommended conducting regular exercises for emergency responders so they become familiar with the airport and know where to go. That's advice that will keep your airport well prepared for an emergency.

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