General Aviation Airport EMERGENCY

Planning Guidelines

MINNESOTA COUNCIL OF AIRPORTS
MCOA

MINNESOTA DEPARTMENT OF TRANSPORTATION

GENERAL AVIATION AIRPORT

EMERGENCY PLANNING

GUIDELINES

OFFICE OF AERONAUTICS

MINNESOTA COUNCIL OF AIRPORTS

DEVELOPED BY GENAVCON FOR THE MNDOT OFFICE OF AERONAUTICS IN COOPERATION WITH THE MINNESOTA COUNCIL OF AIRPORTS.
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PREFACE

This document was prepared to assist communities in developing an emergency response plan for their general aviation public use airport. The plan provides an emergency response notification checklist and suggested methods on how to react to certain emergency situations which could occur on or adjacent to airport property. A sample emergency exercise critique checklist and appendix containing reference material is provided. An emergency number placard, which can be posted in a prominent place, is also included for use for accidents or incidents that may occur during non-working hours. The plan has been prepared in generic format on a 3 1/2 inch diskette (Word Perfect 6.0, copy available from Mn/DOT Office of Aeronautics). The diskette may be used to tailor your plan to your specific airport based on airport size, number of operations, and community needs.

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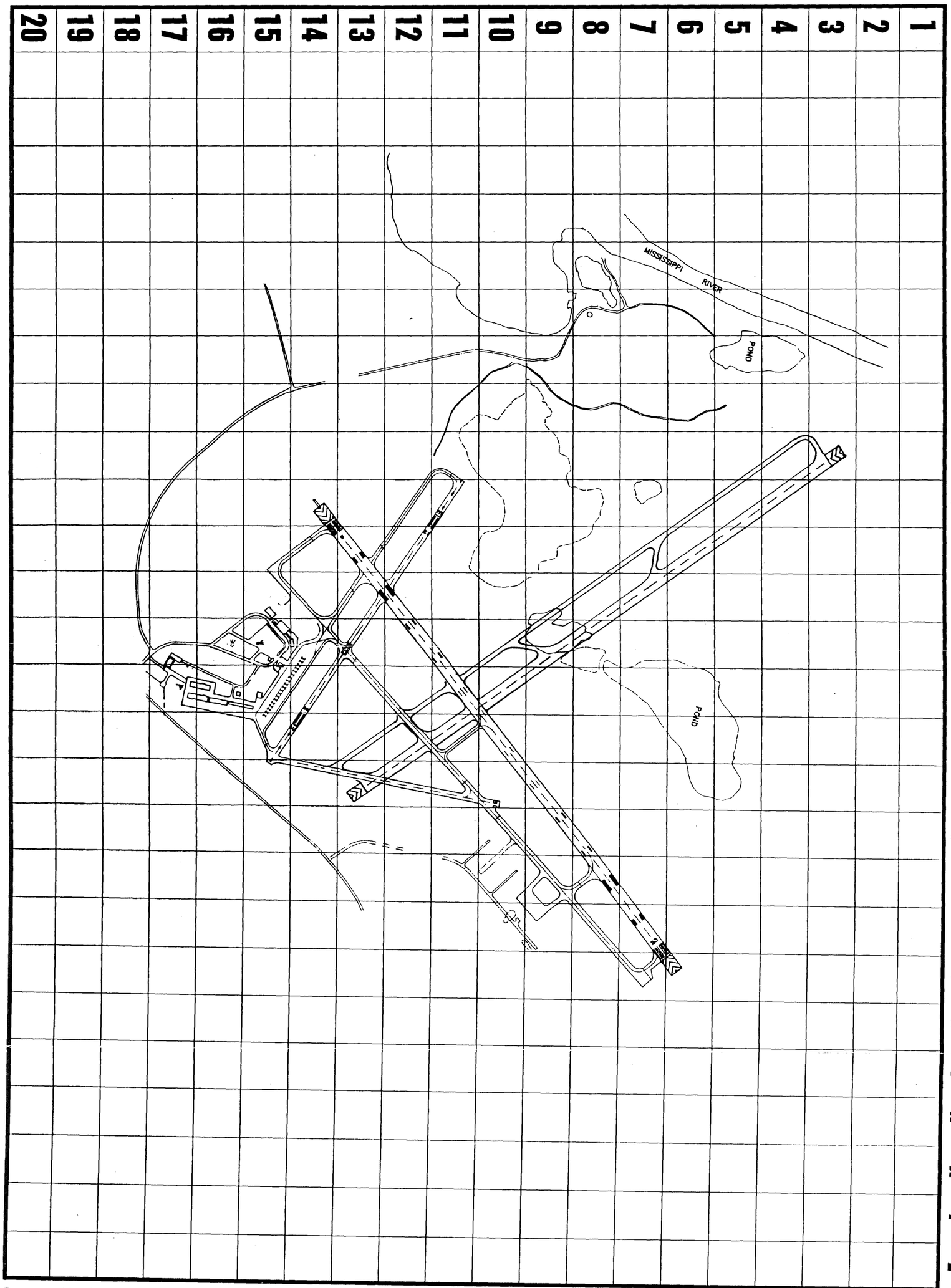

Developed by GenAvCon 1995
For MN/DOT Office of Aeronautics

Airport Grid Map

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AIRPORT GRID MAP

1.1 GENERAL The attached sample airport grid map depicts the airport layout and surrounding areas adjacent to airport property. Numbers and letters are listed on the edge of the grid and may be used to specify the location of an accident or incident. For example, using the sample grid map, if the accident is at the approach end of Runway 23, when notifying the emergency response team you would use the letter/number combination T-7 (tango - seven). The sample grid map displays a commercial service airport layout with transport capable runways. Recognizing the majority of airports in the state are 3,000 to 4,000 feet in length, you will have to adjust your grid scale to keep your airfield in proportion to the area being covered (each square is 1/2 inch). In preparing the grid map for your airport, the following features should be included, as a minimum:

A. All runways, taxiways, parking ramps, buildings, and driving routes.

B. Significant terrain features including ravines, ponds, dense stands of trees, etc.

C. Main access roads and alternate routes of entry.

D. Fencing (x-x-x-x) and gate locations.

E. Location of stored hazardous material, if applicable.

F. Other features which may impede access or could play a significant factor in hampering rescue efforts.

EMERGENCY NOTIFICATION CHECKLIST

1.2 GENERAL - The following notification checklist should be used by Airport Emergency Plan holders/Airport Managers (if assigned) upon notification that there has been an accident or serious incident on or near airport property. These are quick response numbers for key personnel only to initiate the response team. Additional numbers are contained in Section 1.3 and they should be used depending on the type and level of response desired.

NUMBER / NOTIFIED / TIME

SHERIFF/POLICE ..... **911** _____/_____

FIRE DEPARTMENT ..... **911** _____/_____

AMBULANCE SERVICE ..... **911** _____/_____

AIRPORT OWNER/MANAGER ..... _____/_____/_____

FLIGHT SERVICE STATION **1-800-992-7433**

PUBLIC INFORMATION OFFICER DESIGNEE _____/_____/_____

KEY EMERGENCY PERSONNEL

1.3 GENERAL - The following is an alphabetical listing of key personnel that may be involved in accidents or incidents at the airport. Telephone numbers listed are for home (H), office (O) or a cellular (C) when applicable. Pager numbers maybe substituted for cellular numbers, if applicable.

Airport Manager (If applicable)	H_____
	O_____
	C_____
Airport Owner (City/County etc.)	H_____
	O_____
	C_____
Ambulance Service	H_____
	O_____
	C_____
Bus Service	H_____
	O_____
	C_____
CISD (Local Contact)	O_____
	C_____
Civil Air Patrol (For Aerial Search)	H_____
	O_____
	C_____
Clergy	H_____
	O_____
	C_____
Coroner	H_____
	O_____
	C_____
Doctor(s)	H_____
	O_____
	C_____
Electrician	H_____
	O_____
	C_____
Emergency Management Office	H_____
	O_____
	C_____
Explosive Ordinance Disposal	O_____
	C_____
Federal Bureau of Investigation (FBI)	O_____

Fire Department	O_____
	C_____
Fire Department (Mutual Aid)	H_____
	O_____
	C_____
Fixed Base Operator	O_____
	H_____
Flight Service Station/FAA (Princeton)	1-612-389-2990
Flight Standards District Office, FAA (Mpls)	1-612-725-4288
Gas Company	O_____
	H_____
Governor's Office (For National Guard Assistance)	1-612-296-2100
Hazardous Materials Spills	O_____
	C_____
Hospital (S)	O_____
	C_____
Minnesota Department of Natural Resources (DNR)	O_____
	C_____
Minnesota Poison Control Center	1-800-222-1222
Minnesota Pollution Control Agency (Local)	O_____
	C_____
National Transportation Safety Board (NTSB)	1-312-827-8858
National Weather Service (Mpls)	1-612-725-6090
Police (State Patrol)	O_____
	C_____
Police (Local)	O_____
	C_____
Postal Inspector	O_____
Power Company	O_____
	C_____
Public Information Release Designee	O_____
	C_____
Radiological Assistance, Office for	1-312-972-2000
Sheriff	O_____
	C_____
Telephone Company (For Tracing Calls)	
8:00AM - 5:00PM Mon - Fri	1-612-344-4593
	1-612-344-6901
Other Times	1-612-344-5713

SECTION 2 - EMERGENCY PLAN INFORMATION

PRINCIPLES AND BASIC FACTORS

2.1 GENERAL - This manual has been written to assist non-commercial service general aviation type airports and adjacent communities in emergency planning techniques and procedures to provide for maximum delivery of emergency services to the airport and surrounding community. This manual describes the elements of an airport/community emergency plan which are to be considered before, during and after an emergency has occurred. The scope of such an emergency plan should include command, communication, and the necessary coordination functions for executing the plan. The four (4) basic principles to be considered when developing an effective emergency plan are:

Preparation - Those actions taken to improve the airport/community's capability to respond to an aircraft accident/emergency on or adjacent to the airport (eg: developing a detailed comprehensive plan, identifying available resources, and recognizing any special hazards unique to the community and airport environment including preventive measures).

Mitigation - Those actions to be taken which could prevent or diminish the effects of the disaster (eg: conducting training drills, executing the emergency plan as an exercise and public education).

Response - Those actions taken when reacting to an emergency by providing assistance and thereby reducing the probability of secondary damage occurring while expediting the recovery process (eg: initiating the response, mobilizing and dispatching the necessary equipment/personnel and conducting search and rescue operations).

Recovery - Those actions taken to restore the airport to pre-emergency conditions and place the airport back in an operationally safe condition (eg: removal of the wreckage, inspection and repair of damaged facilities, psychological and medical treatment for afflicted emergency response participants, and reconstruction of the facility).

The recommendations set forth in the emergency plan are predicated on the assumption that rescuing aircraft occupants and other affected victims has priority over other operations. Stabilization and emergency medical treatment, with speed and skill, is of paramount importance where life-threatening conditions exist. An effective rescue effort requires adequate preplanning for the emergency along with conducting periodic drills or practice exercises.

The recommended procedures contained in the emergency plan will cover most anticipated emergencies which could affect an aviation/aircraft accident and non-aviation related emergencies on airport property. It should not be the intent of the plan to cover every possible contingency that may occur. Nor should the plan be developed wherein conflicts with local/state regulations or jurisdictional boundaries become potential problems. The plan should contain recommended practices which will help resolve many of the anticipated problem areas.

The airport owner (Municipality) should maintain master records for the Airport and supporting community Emergency Plan, and distribute a copy to each of the participating agencies. The airport owner should also be responsible for distributing to the agencies any amendments, additions or deletions, as appropriate. The recommended structure of the emergency plan should be such that each section or appendix is severable to allow each agency to insert changes concerning its functional role on an on-going, as needed basis. At suitable intervals (two years), the entire emergency plan should be reviewed by the plan participants. The purpose of the review is to conduct a comprehensive analysis of geographical/physical changes due to construction, technical and legal changes, and changes in capability which may impact the current plan. Additionally, recurring training should be accomplished periodically to practice new and or established procedures.

Command and Coordination During Airport Facility Emergencies - In general, most emergencies which occur at general aviation airports (those not having scheduled air carrier service) will be dealt with by the local emergency service agencies that normally provide emergency services to the community and adjacent areas of responsibility. Statewide, although some communities may differ slightly, the initial notification that an emergency situation exists predominantly begins with a call to 911. The 911 dispatcher then notifies the appropriate agencies who respond accordingly. Law enforcement and fire rescue personnel arrive on the scene first because of their 24 hour duty schedule. Their actions are dependent on the severity of the situation with the basic responsibility of saving lives and protecting property. Regardless of which agency arrives first, once the senior fire chief arrives at the scene, he/she assumes overall responsibility as "On Scene Commander" for the emergency with the other agencies assuming their primary roles.

TYPES OF EMERGENCIES

2.2 GENERAL - The types of emergency situations that a general aviation airport can anticipate are categorized as aircraft related and non aircraft related. The most frequent emergencies will be of the non aircraft related type. Because of their nature and diversity, they will be discussed on an individual basis later in this section. Depending on the number of operations an airport may experience on a daily basis, the risk of having an aircraft accident will increase proportionately as operations increase. Unlike a major hub airport, general aviation airport accidents involve aircraft of the single or twin engine type with one or two to possibly ten passengers including the aircrew or pilots. Helicopter or agricultural spraying operations may also be occurring at the airport and should be considered in the plan when applicable. Of the many the aircraft operations being conducted near the airport, aircraft departures and arrivals are considered the most critical phases of flight. The Airport/ Community Emergency Plan should address and describe the coordination of the actions to be taken in an emergency occurring at the airport or in its vicinity, whether or not aircraft related.

2.21 Aircraft Related Accidents/Incidents

2.211 On Airport (Although the terms used to describe the various categories of aircraft emergency alerts are not standardized, the FAA recognizes and accepts the following three types of aircraft emergency alerts):

Alert One - Standby: An aircraft has a known or suspected operational problem or malfunction which is not serious in nature and a safe landing can be achieved. Aircraft arriving or departing with medical passengers are also considered in this category. Alert One procedures should be initiated also when certain types of aircraft that normally do not use the airport are arriving and departing.

Alert Two - Emergency: An aircraft is known to have or is suspected of having an operational malfunction that affects normal flight operations to the extent that there is the potential for an accident. Rescue personnel should be provided with detailed information regarding situation to prepare for likely contingencies. All necessary rescue personnel should respond with emergency equipment, emergency lighting operating, to arrive at the incident/accident site as rapidly as possible. Appropriate communication frequencies should be monitored for changes in the situation or conditions which could affect the controllability/touchdown point or the ultimate behavior of the aircraft. Fire department personnel should be able to initiate fire suppression within the shortest possible time after the aircraft comes to a stop. The senior fire chief at the scene is the "On Scene" Commander and should attempt to gain as much information possible about the potential emergency, to include type aircraft, fuel on board, number of passengers etc.

Alert Three - Aircraft Accident: An aircraft accident has occurred on or in the vicinity of the airport. Full fire and rescue response procedures should be put into effect. If possible, all pertinent information should be made available to the responding emergency units via radio from dispatch or the FSS. Included, as accurately as possible, the probable location of the accident, using the airport grid map coordinates and landmarks. If off airport, the nearest fire call number may be used. Rescue units should expect the worst possible situation if pertinent information cannot be received. The "On Scene" Commander should advise the ATC/FSS facility by telephone relay or radio if the accident will interfere with flight operations.

RECOMMENDATIONS:

1. Airports should have management policies for implementing Alert One, Two or Three procedures and local fire rescue personnel should be prepared to respond accordingly.

2. Personnel in standby or responding should also have the following information:
    a. Type aircraft/fuel on board/desired landing runway
    b. Number of passengers and crew
    c. Type/amount/location of dangerous goods
    d. Number of nonambulatory passengers, if any
    e. Estimated time of arrival (ETA)

2.212 Off Airport - There are situations where aircraft accidents occur in isolated areas away from the airport that require a similar response but under different procedures due to jurisdictional boundaries. If notified that there has been an aircraft accident off the airport, attempt to gain as much information as possible about the location (ie: fire call number or landmark etc), type aircraft, and number of passengers, extent of the injuries/casualties etc. Assuming the call would be received by the 911 dispatcher, this information may be relayed to the responding units while enroute. Additionally, the emergency notification checklist should be completed to the extent necessary and appropriate for the emergency.

2.22 Electrical Power Failures - Power failures can occur at any time and loss of power affects most airport operations unless a standby emergency generator is available and operational. If total electrical power failure is experienced, the following is a representative, but not all inclusive, list of equipment that can be lost:

1. Facility lighting, to include entrance roads and parking lots.
2. Heat/Ventilating/Air conditioning (HVAC) and Fire suppression capability.
3. Communications including UNICOM, telephone and non portable radios.
4. Approach NAVAIDS (ILS may operate for up to three hours on battery backup).
5. Runway/taxiway lighting/weather reporting systems (AWOS/ASOS/MNWAS).
6. Electrically operated doors on hangars, equipment storage buildings etc.
7. Sump/lift station pumps, well pumps etc.

8. Concessionaire equipment/miscellaneous electrically powered equipment.
9. FBO equipment.

RECOMMENDATIONS:

1. Have available a list of equipment prioritized in the order that it needs to be restored. (Shutdown all unnecessary electrical equipment and selectively turn it on when power is restored)
2. Have available a list of phone numbers to call to help restore the equipment to an operable condition (Pay phones may still work). FSS, FAA, Public Works, Power Company and 911 should be notified using the numbers listed in Section 1.

2.23 Criminal Activities - Although general aviation airports are less subject to criminal activities than large hub type or commercial service airports, there are several types of incidents that may require implementing special procedures.

2.231 - Bomb Incidents

Buildings - When a bomb threat is received that affects a structure, the person receiving the call should make every attempt to obtain as much information as possible. If in direct contact with the individual, attempt to establish the approximate location of the device and the time it is set to detonate. Also, attempt to keep the caller on the line as long as possible in order to trace the call.

RECOMMENDATIONS:

1. Individual receiving the call should notify the Fire/Police/Sheriffs departments by calling 911 and relaying any information received.
2. The airport manager or a designated representative/building manager should notify the building occupants (in a calm manner) that an emergency exists and direct them to exit the building immediately. Those exiting should be given direction as to where to assemble at a prearranged location. A thorough search of the building should be completed to insure there are no remaining occupants.
3. Fire/Police/Sheriff department personnel should notify the appropriate agency and provide security from access to the building (at a safe distance) until the bomb disposal (EOD) unit arrives.
4. Notify the airport manager, if applicable.

Aircraft - When a bomb threat is received concerning any aircraft, the person receiving the message should obtain as much information as possible. If in direct contact with the individual, determine aircraft location, intented destination and landing (if airborne), and time device is set to detonate.

RECOMMENDATIONS:

1. Aircraft should be directed to park in a pre-designated area that is farthest from any persons, vehicles or structures with entry/exit door facing up wind. Occupants should also be directed to evacuate the aircraft upwind.
2. Individual receiving the message should notify the Fire/Police/Sheriffs department by calling 911 and relay any information received.
3. Fire/Police/Sheriff department personnel should notify the agency responsible for bomb disposal, then from a safe distance, secure the area surrounding the aircraft to prevent access.
4. Notify the airport manager, if applicable.

2.232 Hijacking - Although highly unlikely, the possibility of a general aviation type aircraft being hijacked does exist, particularly if someone is fleeing to a foreign country. In most instances, hijacking occurs with persons or commercial carrier type aircraft. The following procedures are applicable in hijacking situations:

2.2321 - ANY PERSON receiving a hijack threat:

a. By telephone: Follow the same procedures as for bomb incidents.
b. By personal contact:
    1). Signal or ask for help.
    2). Keep under surveillance until relieved.
    3). Note features of the person for identification.
    4). Note license plate number and vehicle description.
    5). Attempt to get the individual to stay (DO NOT FORCE).
c. Report incident immediately by calling 911, airport manager or FAA/FSDO.

2.2322 - HIJACKING OF AN AIRCRAFT - Upon receiving information that a hijacking has taken place at the airport, contact the airport manager or his/her designated representative, or call 911 and request that the airport emergency notification checklist procedures be initiated.

a. Arrival of an aircraft at the airport under the control of a hijacker:
    1). Unless told otherwise, direct aircraft to park in an isolated area with the entry/exit door facing upwind. Ask the pilot to provide as much information as possible.
    2). Conduct overall operation until relieved by police or FBI.
    3). Police/Sheriff department personnel should oversee the operation including crowd control until relieved by the FBI.

4). Aircraft owner/operator should coordinate security, movement of cargo, baggage, aircraft, and notify postal authorities. If a bomb is involved, assist authorities in baggage/cargo search.
5). Federal law regulates the aircraft while it is in motion, and the FBI has jurisdiction when the aircraft is parked.

2.233 - Vandalism - Damage to airport property, aircraft and personal property does occur at all types of airports. Generally, at large facilities there is a security system and security patrols available to control the problem. General aviation airports are normally located in isolated areas without the advantage of such a security system or fencing. If you observe an act of vandalism taking place, call 911. If you discover an act of vandalism has taken place, attempt to secure the area for evidence, and call 911.

2.234 - Illegal Substances - If you observe that trafficking of illegal substances is taking place at the airport, attempt to gather as much information as possible about the situation such as a description of the aircraft, its registration number, individuals involved and their description, then call 911.

2.235 - Confrontational Situations - If you encounter a situation where a confrontation is about to or has occurred, do not attempt to physically intervene. If a peaceful settlement does not appear forthcoming, call 911.

2.236 - Civil Disturbances - There are certain situations where a physical plant such as a nuclear facility, large manufacturing plant or chemical storage building could generate a resentful crowd or picketing which could affect the airport or access to the airfield. In any case, attempt to secure all airport facilities, and call 911.

2.237 - Sabotage - If you know or suspect an act of sabotage has been committed against any airport facility, whether it be to the NAVAIDs or other airport property, call 911. If the act has rendered the airport unsafe for operations, notify the FSS to issue a NOTAM and call the FSDO in Minneapolis to report the incident.

2.24 FIRES - Fires, other than those directly related to an aircraft accident, can occur on an airport facility. Most general aviation airports do not have a fire department located on the airport and therefore must depend on the local fire department for fire suppression support. In most instances, the fire department has the capability to respond to fire emergencies with the approved equipment and extinguishing agents. The type of fire emergencies that can be expected on an airport are:

2.241 - Aircraft Aircraft fires can occur during refueling operations, while maintenance is being performed, while stored in a hangar or as a result of a collision with a fixed or moving object. Although the fuel quantity involved can be relatively small, the many components used in manufacturing aircraft often present unknown variables with regard to

toxic fumes or magnesium fires. Additionally, there is the possibility of fuel spills with a resulting ground contamination which may enter the drainage system. The types of fuels most commonly used at airports are Auto (80/87), 100 Low Lead (100/130), and Jet A.

RECOMMENDATIONS:

1. If available, attempt to use inplace fire extinguishing equipment only if the fire can be controlled or contained within your capability. In any event, call 911.
2. Follow the guidelines and Best Management Practice procedures in the Storm Water Pollution Prevention Plan (SWPPP) manual.

2.242 - Structural There are varied types of structures associated with airports. Structure fires are best controlled by fire department personnel. Information regarding the contents and hazards contained in airport structures should be investigated by the fire department. Public use facilities normally contain items familiar to the fire department. Aircraft storage (hangar) facilities should be inspected to determine if hazardous materials are present. If so, they should be removed in accordance with existing fire codes. The same is true for the Fixed Base Operator (FBO) facilities. Tenants leasing facilities or owning buildings on the airport should also be complying with the existing fire codes.

RECOMMENDATIONS:

1. Persons discovering the fire should first call 911, then another responsible individual or the airport manager, if applicable.
2. Airport manger or another responsible individual should, if people are present in the structure endangered by fire, direct all personnel to evacuate the building immediately and assemble upwind from the building.
3. Airport manager or his/her designated representative should:
   a. Request response from fire department by calling 911 and providing all pertinent information possible to the dispatcher (bldg type or number, location, extent of the fire and suspected location of the fire in the structure).
   b. Verify that no persons remain within the affected structure (s), or those adjacent to it, if possible.
   c. Turn off electrical power and gas to the structure(s) endangered by fire if there is no risk of personal injury in doing so.
   d. Assist in fire control operations, only as directed by the fire department.
   e. If a tenant facility is involved, notify the tenant.

2.243 Vehicular - Vehicular fires can create serious problems if they are parked in or near storage buildings. Whether a personal vehicle or airport vehicle is involved, call 911. The explosive nature of vehicle fires requires a safe distance be maintained. If possible, remove adjacent vehicles or combustible materials without risking personal safety.

2.244 Airport Land/Wild Fires - Wild fires can start at any time, however, during the spring season between snow meltdown and greenup the greatest potential for wild fires exists. Wild fires not only destroy timber land, but also endanger airport facilities and operations. Fires can also produce heavy smoke which reduces visibility for pilots.

RECOMMENDATIONS:

1. Any person discovering a wild fire on airport property should call 911
2. Attempt to give an accurate assessment the fire location, wind direction and immediate danger to the airport.
3. The 911dispatcher should notify the fire department and DNR units for assistance including the closest fire patrol bombers on station at various locations.
4. If airport property is threatened, determine which facilities may be damaged and provide the fire department/DNR with a prioritized list of property to be protected. If airport property or facilities are damaged or destroyed, prepare a prioritized repair/rehabilitation plan to return to safe operations.
5. Notify FSS of lost equipment affecting safety of flight (eg: NavAids, runway lights, instrument approach facilities etc.) and estimated time and date of return to service.

2.25 Natural Disasters - Natural disasters can come in different forms and levels of intensity. To an airport, natural disasters can cause widespread destruction and damage to the airport physical plant, disrupt operations and generally take time and considerable money to restore the airport to normal operations. There are three major types to consider in preparing for returning to normal operations.

2.251 - Tornadic/Straight Line Winds - High intensity and gusty winds can down power lines, destroy airplanes, unsheathe hangars or dismantle them, knock down antennas causing you to lose communications and in general leave debris scattered around the airfield. These conditions exist for a short period of time and may occur without warning.

RECOMMENDED ACTIONS:

1. Have an alerting system which will notify airport users, visitors and employees of the need to take cover in the designated storm shelters. If severe weather warnings have been issued, insure everyone is aware of the situation and the need to take precautionary measures, staying away from large glass windows.
2. If time permits, insure unsecured aircraft can be stored inside or turned into the wind and tied down securely. Store or secure any other airport equipment that could be easily be blown around by the high winds.

3. Once the "all clear" announcement has been made, be sure to determine if any injuries resulted from the storm and notify the appropriate agency. Assess and note the damage that has occurred and establish a prioritized repair plan to return the airport to operating status as quickly as possible.
4. If operations cannot be resumed immediately, notify the appropriate authorities the airport or portions thereof are non-operational and the estimated time/date the airport will return to operational condition, by NOTAM.

2.252 - Flooding - Although thunderstorms can cause temporary flooding conditions due to heavy runoff, most airports are graded to provide for adequate drainage under most circumstances. If the airport is near a river and on a flood plain, provisions should be made to protect equipment, particularly electrical components such as runway lights, instrument landing systems, power plants and stored materials which would be damaged by water and mud. Flash flooding can occur very quickly and the first priority should be to insure the safety of your personnel.

RECOMMENDED ACTIONS:

1. If the airport is located on a flood plain, determine what the 100 year high water mark is for the airport. DNR/City Engineer would be a good source for this information.
2. Determine what airport facilities and equipment would be affected if flooded to the high water mark.
3. Prioritize a list of facilities/equipment for removal (and reinstallation). If airport personnel are not qualified to perform these functions, insure the appropriate agencies (FAA, City Engineer, Utilities Company etc.) are aware of the situation and notified in sufficient time to complete the tasks.
3. Prioritize a list of facilities/equipment for removal (and reinstallation). If airport personnel are not qualified to perform these functions, insure the appropriate agencies (FAA, City Engineer, Utilities Company etc.) are aware of the situation and notified in sufficient time to complete the tasks.
4. If required to dismantle the airport and downgrade it to non-operational status, notify the appropriate agency by NOTAM of the situation. When the airport is returned to a safe operating condition, cancel the NOTAM.

2.253 - Lightning strikes - Lightning strikes are encountered normally in association with thunderstorm activity and can cause a loss of power, communications, fire and other damage to the airport. While most damage is readily visible, cloud to ground strikes may occur at or near navigational facilities, instrument approach facilities or make contact with the ground near runway and taxiway lighting systems.

RECOMMENDATIONS:

1. If experiencing frequent lightning strikes, insure airport personnel have taken appropriate safety measures to protect themselves.
2. If able, attempt to determine where the strikes have taken place and develop a prioritized repair program once the activity has ceased. If power or operational capability has been damaged, notify the appropriate agency (s) so repairs can be made as quickly as possible.
3. Notify the FSS of your operational status by NOTAM and estimated time of returning to service. NOTE: Telephone service may be interrupted also and an alternate means of communications may have to be used.

2.26 - Dangerous Materials - Dangerous materials/goods are any substances or materials which have been determined to be capable of posing an unreasonable risk to health, safety and property when transported in commerce. The volume of dangerous goods being transported (by air or ground methods) continues to increase dramatically and thus a strong vigilance must be maintained for safety reasons. Pilots and emergency response units should be aware of the hazards involved with carrying dangerous goods and when these goods are involved in an accident or consumed by fire. Since fuels and chemical materials and the proper response to accidents involving these materials are appropriately addressed in fire department directives and in the Storm Water Runoff Pollution Prevention Plan (spill containment etc.), this section will deal specifically with general information about dangerous goods, packaging, classifications and radiological events. Dangerous goods can be safely transported by air under the many complex regulations regarding packaging, labeling and storage. It is not the intent of this guide to cover all aspects of carrying dangerous goods, but to make you aware of the potential additional hazards that may be involved.

2.261 - Classifications There are nine classifications of dangerous goods.

1. Class one - Explosives
2. Class two - Gases: compressed, liquified or dissolved under pressure.
3. Flammable liquids
4. Flammable solids: Substances liable to spontaneous combustion; substances which on contact with water emit flammable gases
5. Oxidizing Substances; organic peroxides
6. Poisonous toxic and infectious substances
7. Radioactive material
8. Corrosives
9. Miscellaneous dangerous goods

2.262 - Packing Group Numbers - As to degree of potential danger

1. Great danger
2. Medium danger
3. Minor danger

2.263 - Radioactive Materials - Constitute a particular hazard in that they emit certain particles, rays or gases which may be hazardous and cannot be detected except by properly calibrated equipment or instruments. Radioactive materials carried by aircraft fall into three categories:

1. The material emits minimal radiation
2. The Transportation Index (TI) not to exceed 1.0 per package
3. The material does not exceed 10 TI per package

NOTE: The TI is the highest radiation dose rate expressed in millirem per hour at a distance of 1 meter from any accessible external surface of the package. The TI number is placed on the package to designate the degree of control to be exercised during transportation.

2.264 - Labels - Each package containing dangerous goods must carry an appropriate label or labels, which are 100mm x 100mm. Radioactive Materials labels must contain specific information to include the TI and must be affixed to opposite sides of the package. Subsidiary risk labels, when required, must also be affixed to the package.

2.265 - Transporting - The manufacture, sale and transportation of dangerous goods are carefully monitored and regulated. Shippers are required to package materials in approved containers, identify, document and label the materials. Carriers must inspect, document, handle, properly load the materials aboard the aircraft (normally in the lower section) and provide complete and timely information to the pilot in command. In the event of an incident, it is the pilots responsibility to notify ATC/FSS that they are carrying dangerous material and ATC/FSS are responsible for notifying emergency services (911 dispatcher) so they are aware of any possible additional hazards. If this information is not passed on by ATC/FSS, you should ask for a dangerous material report.

RECOMMENDATIONS:

1. Fuel Spills - Follow established fire department guidelines and airports should follow the guidelines/procedures in the Storm Water Pollution Prevention Plan.
2. Chemical Spills - Same as one.
3. Radiological Events - Fire department personnel should be aware of the information contained above and follow established emergency response unit procedures. If in doubt about a flight carrying dangerous materials, ask the ATC/FSS for more information.
4. Upon arrival at the scene, establish a safe upwind staging area for fire, rescue and HAZMAT equipment. After landing, do not allow other aircraft to land or takeoff or taxi through the contaminated area. Insure the airport manager has been notified.

5. The airport manager should insure the area around aircraft is secured, if not already accomplished. Call the Regional Coordination Office For Radiological Assistance. Close doors and windows of buildings in areas where smoke is flowing, if radioactivity is smoke borne; shut off all ventilation and air conditioning systems.
NOTE: If a container of radioactive material is found unbroken, protect until disposal instructions are received from the Atomic Energy Commission (AEC).
6. Sheriff/Police department personnel or the airport manager should evacuate personnel upwind from all buildings within 500 feet of the accident and provide traffic and crowd control.
7. Medical/decontamination services are normally provided by the nearest capable medical facility.
8. Clean up of the accident site should not be attempted by local authorities. Once the AEC team arrives, they are trained in and will accomplish the cleanup.

2.27 Water/Ice rescues - If the airport is located near a river, lake or large body of water, water/ice rescues are a distinct possibility and a water/ice rescue plan should be in place. Although the possibility of a fire exists, the probability is greatly reduced due to the fire suppression qualities of water or frozen snow covered surfaces. Special equipment may be needed such as water rescue boats, helicopters or air cushioned (ACV) vehicles may be needed. Most general aviation aircraft do not carry personal floatation devices (unless they are frequently engaged in over water flights) and they should be available if needed. Additionally, consideration needs to be given to unusual terrain with regard to access to the accident/incident scene.

RECOMMENDATIONS:

1. The airport manager or anyone observing an accident or incident involving a water/ice rescue should call 911 and give the approximate location using the grid map.
2. The sheriffs department should notify the sheriffs Water Patrol, the DNR and the fire department.
3. The Water Patrol, DNR and fire department shall work jointly in completing the rescue.

2.28 Wild Life Management - The presence of wildlife around airport operational areas poses a threat to flight safety. Since Minnesota is located on the north/south migratory flyway for many species of birds and numerous bodies of water provide a safe haven for waterfowl, the possibility of an aircraft experiencing a bird strike or ingesting a bird into the inlet of a turbine engine can create an emergency situation or accident. Seagulls are also very prevalent, tend to feed on nearby landfills and roost near airports on the warm pavement surfaces. While little can be done about the waterfowl population, airport owners/operators can take precautionary measures when large flocks of birds are present.

The most common method, if a radio (UNICOM) is present and the airport is manned during daytime hours, is to announce to arriving and departing aircraft that numerous birds are in the area. If the waterfowl are present on a consistent basis during the spring, summer and fall

seasons, a NOTAM should be issued to the FSS stating numerous birds in and around the airport. The NOTAM should be cancelled when the conditions no longer exist.

Seagulls are a constant hazard during the warm season and although no single method of control has proven totally effective, there are steps that can be taken which will reduce or control the seagull population.

RECOMMENDATIONS:

1. If there is a landfill nearby, contact the landfill manager and discuss your concerns with them. A permit can be issued to the landfill manager to terminate a specified number of birds on a daily basis. Netting over the landfill has also proven to be effective as well as using cracker shells periodically. Finally, keeping exposed garbage covered as much as possible also is effective.
2. On the airport, cracker shell use has proven effective and mounting dead seagulls on frangible posts also has been reported to work.

Land creatures can also be a hazard to aircraft landing, taking off or taxiing on the ground. In Minnesota, the deer population has grown and their presence around airports has consistently created a problem when they migrate across runways, especially at night. Even a small deer will cause an accident when struck by an aircraft. Trying to avoid a deer during takeoff or landing will put the aircraft into an unusual flight attitude which can be very difficult for the pilot to recover from safely. Many types of barriers and fencing have been designed to keep animals and deer from making runway incursions, each having some, but not total success. The DNR Wildlife Division is the best point of contact for assistance regarding designing and building animal control devices or fences to fit your needs. Wildlife does cause a safety hazard to airport operations and airport owners operators need to assess the seriousness of the problem at their airport and institute the necessary preventive measures.

AGENCIES INVOLVED, RESPONSIBILITIES AND FUNCTIONS

2.3 GENERAL - The following information contains a representative list of principal agencies which are or may participate in an emergency or disaster at the airport or at an off-airport aircraft accident. This list does not represent all the agencies that may be needed and those additional agencies are listed in section 1, paragraph 1.3. The responsibilities and functions are portrayed in general terms with no intent to be directive in nature.

2.31 Police/Sheriff Department - It is expected the first police or security officer to arrive on the scene will secure the site, request reinforcements, if needed, and continue to perform their duties until relieved by the jurisdictional authority. Responsibilities also include establishing a cordon around the accident site to prevent entry by unauthorized personnel. Congestion-free ingress/egress roads should be established for emergency vehicles for controlled access to insure only persons with specific tasks are allowed into the area. Traffic control procedures should also be instituted to route non-emergency vehicles away from the accident site concurrently with crowd control procedures. A mutual aid program, if applicable, should be activated when additional security personnel may be needed or when the site will need to be secured for extended periods of time. At times, it may not be practical to have all the emergency equipment at the accident site and a rendezvous/staging area may have to be established. If required, the staging area should be preplanned for all participants designated to support the emergency plan. All agencies participating in the emergency plan should have in their possession identification badges for clearance into the accident area. The security officer in charge should wear a readily identifiable garment signifying police chief.

2.32 Fire Department - Fire Department personnel will normally be notified by a 911 call or the ATC/FSS of an aircraft emergency or accident. While responding, it may be necessary to advise mutual aid participants of a rendezvous point, staging area, manpower and equipment needed and any additional information that may be pertinent. Upon arriving at the scene, establish an on-scene control/command post and, if the senior chief, assume the role of "On Scene Commander". Fire suppression and life saving duties are the principle role with overall responsibility of the accident until satisfied the situation is under control. Any transition of authority and command responsibility needs to be established previously in the emergency plan and exercised accordingly. Off airport accidents are under the direction and control of the jurisdiction in which the accident occurred or as previously arranged. If aircraft parts, or controls must be moved for life saving purposes, a record should be kept of their original condition, positions and location to preserve physical evidence which will be needed in conducting investigative proceedings by the NTSB or the FAA. Using a camera is a very effective means of recording evidence, time permitting.

2.33 Ambulance - Medical and ambulance services are an integral part of an airport emergency plan. It is essential that triage, stabilization, first aid, medical care and the transporting of the injured to the hospital (s) be carried out in the most expeditious manner possible. The medical aspects of the emergency plan should be integrated with the community plans, as agreed upon.

2.34 Airport Manger - Many airports have an individual assigned responsibility for the care and maintenance of the airport. This could be the FBO, an individual with full time managerial duties or a part time volunteer. Depending on the degree of authority given to the manager by the airport owner/authority, the airport manager is expected to carry out all the necessary administrative and operational duties spelled out in his/her position description, including duties associated with an accident on airport property. For off airport accidents, he/she should be ready to provide whatever assistance may be needed to the "On Scene Commander" on a non-interference basis.

2.35 Hospital (s)/Doctors) - Hospitals and doctors are an important element to the emergency plan for both the community and the airport. Participating hospitals should have a contingency plan to provide for mobilization of necessary medical teams in the shortest period of time. When notified there is an airport/aircraft emergency, they should activate their disaster plan, as appropriate, to meet the demands of the accident or incident. If need be, other hospitals supporting their disaster plan should also be notified in under a mutual aid agreement.

2.36 Air Traffic Control (ATC)/Flight Service Station (FSS) - Normally, these agencies are the first to know of an impending emergency or that an accident has occurred. Local authorities are then contacted, either the sheriff's department or by a 911 call to a communication center. ATC/FSS responsibilities include providing information on the type of aircraft, fuel on board, location of the accident, if known, and any other pertinent information that would assist in the emergency. Care must be taken when preplanning initial notification of the accident, to clearly specify the assignments to avoid duplication of the calling requirements.

2.37 Airport Authority/Owner - The airport owner/authority is responsible for establishing, promulgating and implementing the plan and designating a person to be in charge of overall operations. The plan should provide for keeping the plan current and distributed to all concerned, proper coordination of all participating agencies is carried out, and that key planning meetings are held. After the plan has been written and tested during an exercise, a post exercise meeting should be held to critique the plan and make changes based on the participants input. The airport authority/owner is also responsible for closing the airport and insuring that operations are resumed only when circumstances permit aircraft to operate safely without interfering with rescue activities.

2.38 Aircraft Operators/Owners - Aircraft operators are expected to provide any pertinent aircraft related information such as number of persons on board, fuel and carriage of any dangerous goods. They are also responsible for first arrangements for any uninjured survivors who may wish to continue their journey or need accommodations. They may also be responsible for notifying the next of kin. Removal of the wreckage is their responsibility, however do not allow wreckage to be removed without clearance from the NTSB and FAA.

2.39 Government Agencies - In order to avoid conflict and confusion between participants, the airport emergency plan should clearly define the obligation, controls and limitations placed on the airport authority by government agencies. Post accident investigation proceedings, unlawful seizure of aircraft, bomb threats and bombings may fall outside the authorities jurisdiction.

2.40 Central Communications Services - Since most of the airports involved with developing emergency plans from these guidelines use the 911 emergency notification system, there will be no attempt to address other central communications services. Airports/communities not under the 911 system should address communications based on their needs and local capabilities.

2.41 Airport Tenants - Airport tenants and their employees should be considered a prime source of readily available equipment and manpower who may have intimate knowledge of airport operations, aircraft, medical training or transportation in general. These persons may be deployed under supervision and assigned specific tasks to avoid duplication of effort if local resources are limited.

2.42 Emergency Management/Civil Defense Offices - The airport emergency plan should be integrated with the local community emergency/civil defense plan and with local search and rescue teams. Consideration should be given to the role the airport may have in support of any state and regional disaster plans such as supporting the efforts of the Red Cross.

2.43 Mutual Aid Participants - Airport emergencies may be of such a magnitude that local rescue and firefighting, security, law enforcement, and medical services are inadequate to handle the situation. A written mutual aid agreement should be considered to ensure the prompt response of these services, if needed. These mutual aid agreements are normally coordinated by the airport authority and the agencies involved.

2.44 Military - Where a military installation is located on or close by an airport, the installation may have additional emergency equipment/capabilities available to assist local agencies. A mutual aid agreement should be drawn up to identify the support available, including the communications interface required.

2.45 Harbor Patrol/Coast Guard - Harbor patrols and the Coast Guard are services which are vital to an airport located adjacent to or near a large body of water. Coordination with these agencies for such services usually interfaces with the rescue coordination centers and mutual aid police. Communication requirements to obtain the immediate response of these services is an essential ingredient to an airport emergency plan.

2.46 Clergy - Arrangements should be made to list all religious faith clergy to provide comfort to casualties and relatives and to perform religious services when and where appropriate. A designated place for gatherings should be preselected.

2.47 Public Information Officer/Media Management - The airport authority/owner should develop a policy to cooperate with all media representatives to make clear, accurate information available upon request in the belief that an informed public serves the best interests of the airport. Under no circumstances should the press or other personnel not involved with life saving or fire rescue operations be permitted inside the security lines until the area is declared safe by the senior fire chief. The NTSB/FAA have additional responsibilities and may request a continued period of time to conduct accident or incident investigative proceedings. The airport owner should also appoint a PIO/Media spokesperson through whom all airport related press releases should be released during the accident. The PIO should be assigned to a predesignated location known by the media. If the accident involves an air carrier aircraft, the PIO should coordinate all releases with the affected airlines public information officer. The following are recommended policies which may be adopted and should apply to all individuals and accredited members of the press requesting access to the accident or emergency sites on the airport:

1. Unauthorized access to airport accidents or emergency sites is strictly prohibited for safety and security reasons without the express permission of the airport owner or airport manager, if assigned.

2. Media requests for access to runways, taxiways and ramp areas shall be honored only with the permission of the fire/incident "On Scene" commander, the sheriff and the airport manger jointly, provided the press are escorted. Media requests for information while at the site should be deferred to the PIO.

3. Leasehold area access, if affected, should be denied except in such cases where the lessee gives permission for press entry into lessee's area. Media representatives must be escorted by an authorized representative of the lessee.

4. Access to any airport operational area in the event of a bomb threat should be denied until such time the suspected device is located, removed/defused and the area swept clean. If such a device is located, policies 1, 2, 3 listed above apply.

5. Only the PIO or a designated representative should be authorized to release information during the incident. Information that may be provided to the media should consist of but not be limited to:

   a. Time of event
   b. Location of event
   c. Aircraft type, company and number of persons on board
   d. Airport/community personnel efforts in response to the emergency

   (Note: All information requests relating to the cause of an accident should be referred to the National Transportation Safety Board (NTSB) or other agency with appropriate jurisdictional responsibility)

6. Off airport property commercial/private aircraft accidents should be responded to by the agency having jurisdiction. The agency having jurisdiction has responsibility for releasing information to the press or news media.

7. The airport authority/owner reserves the right to deny media access to restricted air operations areas if safety, personnel, equipment or airport operations are compromised.

SECTION 3 - AIRPORT/COMMUNITY EMERGENCY PLAN EXERCISE

EMERGENCY PLAN DRILLS OR EXERCISES

3.1 GENERAL - The purpose of conducting emergency plan drills or exercises is to test the adequacy of the Airport/Community emergency plan, response of the participants and personnel involved, the emergency equipment being used, and the communication system. The procedures contained in the plan should be tested to identify deficiencies and familiarize all personnel and participating agencies with their role in the plan in the airport environment.

3.2 TYPES OF DRILLS/EXERCISES - There are two basic types of drills or exercises that should be conducted:

3.21 Full-scale emergency exercises - This type of exercise involves all the facilities and associated agencies identified in the plan. A critique form should be used during the exercise so a full debriefing, critique and analysis of the event can be completed following the exercise. Representatives of all the organizations which participate in the exercise should also participate in the preparation phase of the exercise and the final critique. This type of exercise may be conducted on an annual basis, however, depending on changes in equipment, personnel or capability, it is suggested this exercise be conducted once every three years.

3.22 Table Top Exercises - This type of exercise is conducted on a more frequent basis and consists of involving those key agencies and their representatives in a roundtable discussion regarding a preselected emergency scenario. It is suggested this type of exercise be conducted on an annual basis.

3.3 EXERCISE PLANNING - Planning for a full scale exercise should begin approximately 120 days prior to the event. Prior to conducting the first planning session, each agency involved should be familiar with the general plan and their responsibilities associated with providing support. A realistic scenario should be selected which will test the agencies and their capabilities to the fullest degree. Special event detractors should be planned and introduced to evaluate the existing alternate or backup capabilities of the different agencies (ex: failure of the primary notification system; primary ambulance agency is involved in a vehicular accident while responding to the emergency). A suitable aircraft size, normally the largest type serving the airport, should be used (a bus or other reasonable facsimile may also be used) to familiarize participants with the problems associated with extracting casualties from an aircraft. Volunteers can be used as casualties and various degrees of serious injury may be simulated using moulage techniques for realism. These exercises should be held in locations which will provide the maximum realism while insuring minimum disruption to airport operations and community functions. The use of real names (other than exercise participants) must be avoided. In order to obtain the maximum benefit from a full scale exercise, an observer critique team should be deployed to evaluate the exercise. Evaluation items for each agency are listed in the example on separate sheets for ease of use. Each member of the critique team should observe the entire exercise and complete the appropriate emergency drill critique forms (example attached).

EMERGENCY DRILL CRITIQUE FORM
(Example)

Person performing critique . . . . . .

Organization . . . . . .

GENERAL

1. Date and time of emergency . . . . . .

2. Emergency location . . . . . .

3. Type of emergency . . . . . .

RESCUE OPERATIONS

Person performing critique . . . . . .

Organization . . . . . .

4A. Time of emergency notification/By whom . . . . . .

B. First agency or individual to arrive at emergency site . . . . . .

C. Time of arrival . . . . . .

D. Arrival time of rescue fire fighting service at emergency site . . . . . .

E. Approximate number of fire personnel at site . . . . . .

F. Time and type of first fire protection action (foam, dry chemical, etc) . . . . . .

G. Time first casualty evacuated from aircraft . . . . . .

H. How evacuated . . . . . .

I. Number of casualties evacuated from aircraft . . . . . .

J. Time last casualty evacuated from aircraft . . . . . .

Comments . . . . . .

K. Number of injured . . . . . .

L. Number of non-injured . . . . . .

M. Number of deceased . . . . . .

N. Time first casualty transported to triage area . . . . . .

O. Time last casualty transported to triage area . . . . . .

P. Name of other services participating in first aid . . . . . .

Q. Who was in charge of these services . . . . . .

R. How many persons involved . . . . . .

S. Name of other organizations participating in rescue operations . . . . . .

T. How many persons involved . . . . . .

U. Were the moulage treatments realistic . . . . . .

SECURITY

Person performing the critique . . . . . .

Organization . . . . . .

5A. Time of emergency notification to police/security . . . . . .

B. Who was the first police/security officer to arrive at the emergency site . . . . . .

C. Time of arrival . . . . . .

D. How many persons involved . . . . . .

E. Did command of security at emergency site change at any time . . . . . .

If so, give sequence of command change and agency represented . . . . . .

F. Was the traffic satisfactorily controlled . . . . . .

G. Were any provisions made for securing personal effects . . . . . .

H. Any special problems at accident site with security (spectators, media, etc) . . . . . .

. . . . . .

MEDICAL SERVICES

Person performing critique . . . . . .

Organization . . . . . .

6A. Who was the first medical officer to arrive at the emergency site . . . . . .

B. Medical facility associated with . . . . . .

C. Time of notification/By whom . . . . . .

D. Arrival time at emergency site . . . . . .

E. Who was the medical coordinator in charge of care/evacuation of casualties . . . . . .

F. How notified . . . . . .

G. Time of notification/By whom . . . . . .

H. Arrival time at emergency site . . . . . .

I. Number of physicians/nurses responding . . . . . .

J. Was triage designated at emergency site . . . . . .

K. Was triage area located to expedite the flow of casualties . . . . . .

L. Were the casualties properly classified and tagged . . . . . .

M. Were the casualties moved quickly to receiving hospitals . . . . . .

N. How were medical and first aid personnel identified . . . . . .

O. Were relief agencies notified (Red Cross, etc.) . . . . . .

P. How notified/By whom/Arrival time/Participants . . . . . .

AMBULANCES

Person Performing Critique . . . . . .

Organization . . . . . .

7A. Time of notification to ambulances . . . . . .

B. How notified/By Whom . . . . . .

C. Name of Ambulance Company . . . . . .

D. Time of arrival at accident site of first ambulance . . . . . .

E. How many casualties did ambulance handle . . . . . .

F. Time of departure . . . . . .

G. Hospital/Arrival time . . . . . .

H. Was ingress/egress to accident site a problem . . . . . .

Explain . . . . . .

I. Any special problems driving to/from accident site . . . . . .

Explain . . . . . .

HOSPITALS

Person Performing Critique . . . . . .

Organization . . . . . .

8A. Number of Physicians responding . . . . . .

B. Number of nursing personnel responding . . . . . .

C. Number of other hospital personnel responding . . . . . .

D. Number of casualties received . . . . . .

E. Kind of casualties received . . . . . .

. . . . . .

F. Time first alert was received . . . . . .

G. Time disaster message verified . . . . . .

H. Time first casualties arrived . . . . . .

I. Time first casualties were seen by a physician . . . . . .

J. Time last casualties arrived . . . . . .

K. Time last casualties seen by a physician . . . . . .

LEADERSHIP Person performing Critique . . . . . .

Organization . . . . . .

9A. Did leadership by on-scene commander cause people to take effective action . . . . . .

. . . . . .

B. Were there any problems in the coordination of medical, fire, police and other services

. . . . . .

C. Was the general spirit of the participants cooperative and conducive to the success of the exercise . . . . . .

PUBLIC INFORMATION/MEDIA ACTIVITIES Person Performing Critique . . . . . .

Organization . . . . . .

10A. Time of notification to airport public information officer . . . . . .

B. How notified/Arrival time . . . . . .

C. Who was the PIO . . . . . .

D. From what organization . . . . . .

E. What special problems were experienced . . . . . .

Explain . . . . . .

COMMUNICATIONS AND CONTROL Person Performing Critique . . . . . .

Organization . . . . . .

11A. Did the command post perform effectively . . . . . .

B. Did the emergency operations center perform effectively . . . . . .

C. Were the directions provided by the on-scene commander effective . . . . . .

D. Were all applicable agencies notified and their response within reasonable time limits . .

. . . . . .

E. Was the emergency message accurately received/from whom . . . . . .

F. Did additional information have to be requested . . . . . .

G. Were there any problems with internal communications . . . . . .

H. What kinds of communications systems were used . . . . . .

a) Two way radio . . . . . .

b) Telephone/Cellular . . . . . .

c) Hand - Held/Walkie - Talkie . . . . . .

d) Messenger/Runner method . . . . . .

e) Other . . . . . .

NARRATIVE: Please make any other comments you feel may be helpful in evaluating this exercise . . . . . .

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. . . . . .

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SECTION 4.0 APPENDIX

DEFINITIONS

4.1 GENERAL - Terms defined in this manual are standard usage terms in use to describe facilities, procedures, services, etc. related to airports and aviation in general. These terms are also used internationally and have the same relative significance.

Accident - An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft for flight until such time as all such persons have disembarked, in which:

1. A person is fatally or seriously injured as a result of being in or by direct contact with the aircraft or anything attached thereto, except when the injuries are from natural causes, are self inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers or aircrew members.

2. The aircraft incurs damage or structural failure which adversely affects the structure strength, performance or flight characteristics of the aircraft and which would require major repair or replacement of the affected component.

Airport Authority - The individual or group of individuals having responsibility for the overall functions of the airport.

Airport Manager - The individual charged with the responsibility for maintaining and operating the airport safely on a day-to-day basis.

Airport Owner (s) - The governmental agency or agencies, usually the city or the county or a combination of both through a joint powers agreement, responsible for the airport including the land and improvements made thereto. Airports can also be privately owned for private and or public use.

Airport Operator - A person, organization or enterprise engaged in or offering to engage in aircraft operations.

Airside - The movement area of an airport (runway/ramp) area, adjacent terrain and buildings or portions thereof having access to the ramp, access to which is normally controlled.

Air Traffic Service/Flight Service Station (FSS) - A generic term meaning, variously, flight information service, alerting service, air traffic advisory service, air traffic control service, area control service, approach control or aerodrome control service.

Airport Control Tower - A facility established to provide air traffic control service for airport traffic.

Airport/Community Emergency Plan - Establishment of procedures for coordinating the response of airport service with other agencies in the surrounding community that could be of assistance in responding to an emergency occurring on or in the vicinity of the airport.

Automatic Surface Observation System (ASOS)/Automatic Weather Observation System (AWOS) - Ground based weather reporting systems for aircraft which can be used by pilots to obtain current weather conditions.

Biological Agents - Living organisms which are used in medical research or "germ" warfare.

Care Area - Location where first medical care is given to the injured parties.

Collection Area - Location where seriously injured persons are collected initially.

Command Post - Point where responding agencies are briefed on the situation as they arrive to report and assume control of the individual aspects of the operation.

Drill/Exercise - Testing of the plan and reviewing the results in order to improve the effectiveness of the plan.

Emergency Medical Technician (EMT) - A person trained to administer emergency medical treatment more advanced than basic first aid.

Emergency Operations Center - A fixed designated area on the airport to be used in supporting and coordinating operations during airport emergencies.

Full-Scale Emergency Exercise - Assembling and using all the resources that would be available for use in a real airport emergency. This exercise is based on a realistic scenario and begins with activating the emergency notification checklist. The emergency plan procedures are followed and a critique of the exercise is rendered.

Grid Map - A vertical plan view of the airport and surrounding area depicting building locations, runways, taxiways and terrain features over which a system of squares (numbered and lettered) are superimposed to provide a fixed reference to any point in the area.

Holding Area - Location to where the apparently injured aircraft occupants are transported.

Incident - An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safe operation of the airport.

In-Flight Emergencies - Those emergencies that affect the operational integrity of an aircraft while in flight. The seriousness of these emergencies can be defined by using alert status guidelines stated in FAA terms.

Inner Perimeter - That area which is secured to allow effective command and control, communication and coordination control, and to allow for safe operations to deal with an emergency, including the ingress and egress needs of emergency response personnel and equipment.

Investigation - A process conducted for the purpose of accident prevention, which includes the gathering of data, analysis of the information and the drawing of conclusions, to include the determination of a cause or causes and, when appropriate, the making of safety recommendations.

Medical Transportation Area - That portion of the triage area where injured persons are staged for transportation to medical facilities under the direct supervision of a medical transportation officer.

Moulage - A reproduction of a skin lesion, tumor, wound, or other pathological state. Applied for realism to simulate injuries during emergency exercises.

Mutual Aid Emergency Agreements - Agreements established with agencies in the surrounding community, defining initial notification and response assignments.

NavAids - On the ground electronic devices which are used to guide an aircraft to and from an airport safely.

On-Scene Commander - Person designated to take charge of the overall emergency operation. Normally for smaller airports the senior ranking Fire Chief is the On-Scene Commander.

Outer Perimeter - That area outside the inner perimeter which is secured for immediate support operational requirements, free from unauthorized or uncontrolled interference.

Paramedic - A medical technician who has received extensive training in advanced life support and emergency medicine. These personnel are usually permitted to administer intravenous fluids and other drugs which can arrest a life threatening physiological condition.

Rendezvous Point - A pre-arranged reference point, i.e., road junction, cross road or other specified place, to which personnel/vehicles responding to an emergency situation initially proceed to receive directions to staging areas and/or the accident/incident site.

Secondary Notification Calls - Normally initiated by the On-Scene Commander when in his judgement the situation requires additional equipment or services.

Stabilization - All the medical measures used to restore basic physiologic equilibrium in a patient in shock, due to trauma, so that they may survive for future definitive care.

Staging Area - A pre-arranged, strategically placed area, where support personnel, vehicles and other equipment can be held in an organized state of readiness for use during an emergency.

Tagging - A method used to identify casualties as requiring immediate care (Priority 1), delayed care (Priority 2), minor care (Priority 3) or as deceased.

Transportation Area - Location where casualties are held after receiving medical care before being transported to hospitals, holding areas, etc.

Triage - Sorting and the classifying of casualties to determine the order of priority for medical treatment and transportation.

Triage Area - Location where triage operations are carried out.

REFERENCES

4.2 GENERAL - This list of references, although not a requirement of this document, is included as a ready reference to agencies involved in emergency planning. Information contained in these references was used in whole or part as resource material for the General Aviation Emergency Planning Guidelines document.

National Fire Protection Association (NFPA) Publications

NFPA 402M - Manual for Aircraft Rescue and Firefighting Operational Procedures
NFPA 403 - Recommended Practice for Aircraft Rescue and Firefighting at Airports
NFPA 406M - Manual on Aircraft Rescue and Firefighting Techniques for Fire Departments Using Structural Fire Apparatus and Equipment

Federal Aviation Administration (FAA) Publications

AC OO-2Y - Advisory Circular Checklist
AC OO-46 - Aviation Safety Reporting Program
AC 150/5200 - 12 - Fire Department Responsibility in Protecting Evidence at the Scene of an Aircraft Accident
AC 150/5200 - 13 - Removal of Disabled Aircraft
AC 150/5200 - 18 - Airport Safety Self-Inspection
AC 150/5200 - 28 - Notice to Airman (NOTAM's)
AC 150/5200 - 31 - Airport Emergency Plan
AC 150/5210 - 7A - Aircraft Fire and Rescue Communications
AC 150/5210 - 13 - Water Rescue Plans, Facilities and Equipment
AC 150/5220 - 10 - Guide Specification for Water/Foam-Type Aircraft Fire and Rescue Trucks
AC 150/5280 - 1 - Airport Operations Manual

For Additional Assistance, contact

Federal Aviation Administration, Great Lakes Regional Office
2300 East Devon Avenue
Des Plaine, IL 60018

24 hour emergency operator - (312) 694-7001
Airports Division (AGL 600) - (312) 694-7272
Accident Prevention Coordinator - (312) 694-7154

FAA Airports District Office (ADO)
6020 28th Avenue South Room 201
Minneapolis, MN 55450 - (612) 725-4221

FAA Flight Standards District Office
6020 28th Avenue South
Minneapolis, MN (612) - 725-4288

National Transportation Safety Board (NTSB), Chicago Office
2300 East Devon Avenue Suite 140
Des Plaine, IL 60018

State Aeronautical Agencies
Minnesota Department of Transportation
Office of Aeronautics
222 East Plato Boulevard
St. Paul, MN 55107 (612) - 296-8046

Aviation Agencies
Association of Airport Executives (AAAE)
4212 King Street
Alexandria, VA 22302 (703) - 824-0504

Minnesota Council of Airports (MCOA)
222 East Plato Boulevard
St. Paul, MN 55107 (612) - 296-0523

Minnesota Aviation Trades Association (MATA)
22100 Hamburg Avenue
Lakeville, MN 55044 (612) - 469-4414

Minnesota Agricultural Aircraft Association (MAAA)
Kenyon Farmers Elevator
Box J
Kenyon, MN 55946 (612) - 447-1187

Aircraft Owners and Pilots Association (AOPA)
P.O. Box 329
Hartford, WI (414) - 673-6501

Minnesota Business Aircraft Association (MBAA)
13988 88th Place North
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