



PURPOSE

The purpose of this policy is to provide guidelines for safe and efficient operations at emergencies involving aircraft. This policy includes operations occurring at airport facilities and emergencies occurring in the open environment.

POLICY

The fire department shall respond to all reports of downed aircraft outside of the Russellville Regional Airport, including ELT (Emergency Location Transmitter) activations.

For incidents occurring at the Russellville Regional Airport, the RFD will respond for all impending alerts, fluid spills, fires or possible accidents. The director of the Russellville Regional Airport shall have the authority to respond the fire department for any perceived or impending emergency.

Initial Deployment – Russellville Regional Airport

The On Duty Battalion Chief shall evaluate incidents dispatched that may have the potential of being an aircraft emergency. Besides the BC, any company officer may call for an aircraft emergency response in the event they find themselves in a situation requiring additional resources and expertise. The 1st alarm assignment for an aircraft emergency located at the airport includes the following:

- 2 Closest Engine Companies
- Ladder 1
- Battalion 1

All companies should stage near the gate at the terminal.

Initial Deployment – Open Areas, Non-Airport Facility

There are a vast variety of areas for aircraft to land if they experience an emergency and must immediately land. These areas could include any paved surface, open fields, bodies of water, and parking lots. The initial assignment for open area aircraft emergencies is the two closest engines, one ladder, and the Battalion Chief. The incident commander should strongly consider responding a brush pumper if the crash could be located well off a paved road, making access difficult. If an aircraft is uncontrolled, then any area of land could be a possible crash site. Responding units must realize that the address or location initially provided may not be close to the actual address and alternate routes must be examined and considered. In situations where a general location is given for a plane crash, initial response apparatus must consider other routes of entry to the area and not allow for all apparatus to “bottleneck” at an area.

Approved

Fire Chief



Tactical Considerations

Phase 1 – Arrival

1. The first arriving company should establish command and assist escaping passengers. The scope of the incident must be determined early. Ask witnesses whether the aircraft broke apart and try to determine how “wide” the incident is.
2. An initial size-up of the situation should involve:
 - Number of victims in the aircraft
 - Number of victims on the ground (casualties of debris or multiple impacts)
 - Current fire size-up
 - Fuel hazard
 - Potential for extrication
 - Need for additional EMS response (MCI Incident)
 - Type of aircraft and contents
3. A Safety Officer shall be assigned prior to the deployment of any resources.
4. The mode of operation, rescue or recovery, should be decided based on the information available.
5. It is essential that law enforcement have a presence at the scene. All debris must be secured and civilians must be immediately removed from the area.

Phase 2 – Fire Suppression and Rescue Operations

1. If the aircraft is on fire, immediate action should be taken to utilize foam to suppress the fire and allow for an escape route for any trapped occupants. If foam is not available, large amounts of water will have to be utilized. Consider the use of ground monitors or the deck gun if a large amount of fire is present. Currently, fire hydrants are present at both entry points.
2. If a fire is present and the aircraft is large enough to accommodate several passengers in the fuselage, then positive pressure ventilation should be considered to evacuate the main cabin area of any smoke.
3. In basic jet commuter aircraft, it is common to have fuel tanks throughout the fuselage, wings and in rear portions under the tail.
4. If fires appear to be burning in concealed spaces, consider the use of piercing nozzles to minimize risk to firefighting crews.
5. A Medical Group, Fire Attack Group should be established at a minimum. Consider branches (Fire Suppression Branch, Medical Branch, Rescue Branch) if the incident is large.
6. All flammable liquids present should be blanketed in foam to prevent ignition.
7. Some larger aircraft carry oxygen cylinders. If these cylinders are present then they can explode and quickly accelerate fires already burning.

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8. The incident command system for aircraft emergencies must be capable of expanding quickly since the size of aircraft and number of victims will dictate the scale of the incident. If the incident commander suspects more than a few victims, a MAJOR EMERGENCY shall be declared and appropriate resources sent by the dispatch center

Ballistic Parachute Systems

Ballistic Recovery Parachutes are mounted on many ultralight and light general aviation aircraft. The system was developed to recover an aircraft that has suffered an in-flight catastrophic event. It is a large, rapidly deploying parachute that maintains the proper aircraft attitude (upright) while providing a survivable descent. These recovery systems can be found as part of some aircraft manufacturers' factory-installed safety features like those on the Cirrus Aircraft, or they can be retrofitted into other general aviation aircraft like Cessna model aircraft.

A solid-fuel rocket is used to deploy the parachute from its storage housing and open the canopy fully within seconds. Typically on ultra-light installations, the rocket is mounted directly on the parachute container. On larger aircraft installations the rocket may be remotely mounted. The system includes a red tee handle to deploy or secure the system, and the parachute has straps that are hard mounted to the aircraft frame.

Emergency responders must establish a "NO GO ZONE." This would be the area aft, or behind, the cockpit and directly above the window or blast panel. Typically the parachute will deploy either out of a rear window area or through a hatch in the rear portion of the aircraft fuselage. Note that when deployed, it will come out at an extremely high rate of speed with a tremendous amount of force. You do not want to be in front of this when it is deployed. This creates a unique personal safety hazard for emergency responders operating on the scene. Therefore this area must be respected by all personnel working on scene. This area MUST remain clear until the ballistic parachute recovery system is secured to avoid an unexpected deployment of the system.

Aircraft that have landed safely with the assistance of their ballistic parachute system may have a new problem in high winds. Emergency responders may have to deal with the parachute itself if your response is during high winds. The force of the wind has the ability to move or drag the aircraft that has already landed safely on the ground. In cases like this the manufacturer recommends placing a heavy object on top of the parachute. One suggestion would be parking a vehicle on top of the deployed parachute.

If the emergency aircraft is on the ground and positioned upright (on its landing gear) the NO GO ZONE can be easily established, but if the emergency aircraft comes to rest laying on its side, then the blast path of the parachute may be in the area of responders who are working to assist the occupants. The incident commander, operations officer, and the safety officer must establish and maintain a safety no go zone. Using safety cones or fire line tape to restrict foot traffic in the projected blast path of the parachute is recommended. Should you encounter an aircraft emergency with a non-deployed ballistic parachute, the pilot of the aircraft will be your first resource on how to normally pin or secure the deployment handle.

Phase 3 – Termination

1. When terminating the scene of an aircraft emergency, the Incident Commander shall ensure that all equipment and personnel are properly accounted for.
2. All vehicles shall be restocked upon return to the fire station.

Approved

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