

**PHOENIX REGIONAL
STANDARD OPERATING PROCEDURES**

AIRCRAFT EMERGENCIES

M.P. 202.17

12/12-R

Page 1 of 3

PURPOSE

The purpose of this procedure is to establish guidelines for the response of Fire Department personnel and equipment to aircraft emergency situations. The procedure outlines responsibilities for an on-airport **and** off-airport Fire personnel. It identifies and defines the alarm terminology, airport alert response, airport staging areas, Aircraft Rescue and Fire Fighting (ARFF) standby locations, general aircraft fire fighting information, and the communication requirements.

GENERAL AVIATION FIRE FIGHTING RESPONSE PLAN

Since an aircraft crash can occur anywhere in the metropolitan area, off-airport units need to be informed of some basic tactical information and guidelines when dealing with aircraft crash incidents.

There are two types of aircraft crashes:

1. High Impact
2. Low Impact

TACTICAL BENCHMARKS

Below listed are tactical benchmarks to consider for any type of aircraft accident.

1. The first arriving unit should assume command and determine if the flight crew has initiated emergency evacuation procedures. Fire Department personnel should make every effort to prevent an unnecessary evacuation by immediately contacting the flight crew and reporting exterior conditions to them.
2. If emergency evacuation is in progress, assist evacuation of passengers and/or provide them a path of egress, by discharging **Class B foam only**, from apparatus. Create a path through the burning flammable liquid from the escape exit door to a safe area. If **Class B foam** is not available, use large volumes of water. Protect the aircraft fuselage from direct flame impingement since fire can burn through fuselage within 60 seconds. Ensure your own supply line. Master stream appliances (Stang Guns) utilizing fog patterns; provide quick water in large volumes to protect passengers during evacuation.
3. Deploy an attack line to the aircraft's interior, without inhibiting passenger egress. Fire intensity will require the use of 1-3/4" or 2" hand-lines, utilizing fog patterns.
4. Provide interior ventilation as soon as possible inside the aircraft. Fatalities in survivable aircraft crashes are usually due to smoke inhalation. Use wide angle fog patterns from hand-lines to ventilate. Positive Pressure Ventilation (PPV) is beneficial, however may not be initially expedient. Pressurize from unburned area and provide ventilation exit in fire area. Ventilation should be started at the same time as the attack lines are put into operation, if possible.
5. Aircraft have common attic spaces, large open cargo areas (in belly), and sidewalls that can have running fires in these confined spaces. Consider using penetrating nozzles to reach fire in confined spaces or any location where interior attack lines cannot be deployed.

**PHOENIX REGIONAL
STANDARD OPERATING PROCEDURES**

AIRCRAFT EMERGENCIES

M.P. 202.17

12/12-R

Page 2 of 3

6. Use ladders at the aircraft at the wing or other accessible points. Some aircraft may require aerial ladders to reach access points.
7. Obtain primary and secondary all clears. Never assume absence of survivors.
8. Provide for interior lighting.
9. Request Police Department secures the scene and provides a holding area to assist in the control of the ambulatory passengers.
10. Establish both fire and medical sectors as soon as possible. Designate sectors for both sides of the aircraft to protect the escape routes and manage the evacuated passengers. Assign sectors to address scene lighting, extrication, treatment, transportation and site safety.
11. Consider establishing a branch level command system to address Fire and Medical Operations separately.
12. Ensure necessary amounts of foam extinguishing agents to amounts of flammable liquids on fire.
13. Maintain effective foam blanket to prevent ignition / re-ignition of fuel.
14. Maintain awareness of electricity generated by large aircraft, aircraft generate sufficient electrical and hydraulic energy to seriously injure personnel and/or ignite fuel sources.
15. Jagged metal from aircraft can cut through protective clothing and hose lines.
16. To gain access into the fuselage, use the wing area or a platform ladder truck to work from. The optimum place to cut is around windows and roof area. Hydraulic powered tools (Hurst, Holmatro, etc.) and pry bars do not work well on aircraft metals due to the lack of solid supports to work against.
17. If saws are used for extrication or ventilation, arcing and sparking will need to be suppressed with water/foam from hand lines. Maintain integrity of foam blanket on flammable liquids. Be aware that aircraft have numerous high pressure hydraulic lines that operate at 3000 psi; these can cause serious injury if cut or broken under pressure.
18. Ensure back-up crew/s with charged hose lines in place to protect all personnel who will be working inside the spilled flammable liquid areas. All personnel working in these areas shall be fully turned out with protective gear and S.C.B.A. face piece on.
19. Have police secure a route of ingress / egress, to permit emergency equipment, particularly ambulances, unimpeded movement to / from the incident.
20. Do not allow any overhaul operations to take place until all investigative agencies are finished or unless needed to rescue victims or suppress fire.

**PHOENIX REGIONAL
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AIRCRAFT EMERGENCIES

M.P. 202.17

12/12-R

Page 3 of 3

21. Large aircraft have oxygen cylinders on board that can explode, become missiles, and/or accelerate the spread of fire.
22. Adopt a defensive mode of operation, as needed, to protect personnel and exposures.
23. Request the Alarm Room notify the National Transportation Safety Board (NTSB). Notification can be made contacting the FAA Air Traffic Control Tower at Sky Harbor Airport or by calling Sky Harbor Communications at 273-3311.
24. Request the Alarm Room notify area hospitals, Salvation Army, Red Cross, County Emergency Disaster Coordinator, C.I.D. Team and Sky Harbor Communication Center.
25. For off airport responses consider requesting ARFF foam trucks, Medical Support 19 or Foam 34 or 54, if they have not been dispatched. Off airport ARFF response from Sky Harbor has a 5 mile radius. Any other request for Sky Harbor Foam Trucks for off-airport response should be coordinated through BC19 or District 19 Chief. The airport must maintain an index of 3 foam trucks at all times.
26. Have an airline representative report to the Command Post along with the District 19 Chief, liaison from the Aviation Department, and any other agency that can assist with the incident.