

### 3.2.4.5 Other Special Structures



YOUR ORGANIZATION  
STANDARD OPERATING PROCEDURES/GUIDELINES

**TITLE:** Other Special Structures

**SECTION/TOPIC:** Special Facilities - Target

**NUMBER:** 3.2.4.5

**ISSUE DATE:**

**REVISED DATE:**

**PREPARED BY:**

**APPROVED BY:**

X

Preparer

X

Approver

These SOPs/SOGs are based on FEMA guidelines FA-197

#### 1.0 POLICY REFERENCE

CFR

NFPA

NIMS

#### 2.0 PURPOSE

This standard operating procedure/guideline addresses fire suppression operations at any other special structures (arenas, stadiums, historically relevant structures, airports, schools, market places, etc.).

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.

#### 3.0 SCOPE

This SOP/SOG pertains to all personnel in this organization.

#### 4.0 DEFINITIONS

These definitions are pertinent to this SOP/SOG.

## **5.0 PROCEDURES/GUIDELINES & INFORMATION**

### **5.1 Fire suppression operations at any other special structures (arenas, stadiums, historically relevant structures, airports, schools, market places, etc.):**

#### **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. One with survivors on the aircraft.
2. One with no survivors on the aircraft.

The crashes that have no survivors usually are the easiest to manage, in terms of fire extinguishment, E.M.S. and extrication requirements.

#### **TACTICAL BENCHMARKS**

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

1. The first Engine Company should assume command and assist escaping passengers and/or provide an escape path for the escaping passengers by using foam to cut a path through the burning flammable liquid from the escape exit door to a safe area outside the burning flammable liquid. If 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. Lay your own supply line. Stang Guns provide quick water and large volume to extinguish fires and protect exposures.
2. Get an interior attack line inside the aircraft as soon as possible without interfering with the escape of the passengers. Fire intensity will require the use of 1-3/4" or 2" handlines.
3. Provide interior ventilation as fast as possible inside the aircraft. Most victims who die inside survivable aircraft crashes die of smoke inhalation. Use PPV fans or fog hose streams to ventilate. 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.

4. 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 interior where interior attack lines cannot be placed into position for whatever reason.
5. Use ladders at the aircraft at the wing or other accessible points. Jumbo aircraft may require aerial ladders to reach access points.
6. Obtain a primary and secondary all clears.
7. Provide for interior lighting.
8. Request that the Police Department secure the scene and assist in the control of the ambulatory passengers. Have the police provide a holding area for them until sectors can be assigned.
9. Initiate both fire and medical sectors as soon as possible. Establish sectors for both sides of the aircraft to protect the escape routes and manage the evacuated passengers. Establish sectors to address scene lighting, extrication, treatment, transportation and site safety.
10. Consider establishing a branch level command system to address fire and medical operations separately.
11. Large amounts of flammable liquids on fire require large amounts of foam extinguishing agents.
12. Keep all flammable liquids covered with a foam blanket to prevent ignition.
13. Be aware that large aircraft have enough electrical power running through the aircraft electrical lines to kill a person and/or ignite flammable liquids.
14. Jagged metal parts of the aircraft can cut through protective clothing and hose lines.
15. To cut into the fuselage of an aircraft, use the wing area to work from. A platform ladder truck may be necessary to work from. The best place to cut is around windows, doors and the roof area. Hurst tools and pry bars do not work well on aircraft metals due to the lack of solid supports to work against.
16. If saws are used for extrication or ventilation, arcing and sparking will need to be suppressed with water/foam from hand lines. A good blanket of foam must be maintained on the

flammable liquids area. Be aware that aircraft have numerous high pressure hydraulic lines that can cause serious injury if cut or broken.

17. Always have a safety back-up crew with charged and staffed 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, with S.C.B.A. facepiece on.
18. Have police secure a route in and out of the incident site to permit easy movement of emergency equipment, particularly for ambulances going to hospitals.
19. Do not allow any overhaul operations to take place until all investigative agencies are through, unless needed to suppress fire.
20. Be aware that large aircraft have oxygen cylinders on board that can explode, become missiles and/or accelerate the spread of fire.
21. Never assume that there are no survivors of the aircraft crash. Get primary and secondary all clears.
22. Consider adopting a defensive mode of operation, protect personnel and exposures.
23. Have the Alarm Room notify the National Transportation Safety Board (NTSB) by contacting the FAA Air Traffic Control Tower at City Airport or by calling City Communications at 555-1111.
24. Have the Alarm Room notify the area hospitals, Salvation Army, Red Cross, County Emergency Disaster Coordinator, C.I.D. Team and City Communication Center.
25. Consider requesting airport units such as Chemical 19, Foam 1, Foam 2, Foam 3, Medical Support 19 or Foam 34, if they have not been dispatched.
26. Have an airline representative report to the Command Post along with the liaison from the Police Department, Aviation Department, and any other agency that can assist with the incident.