

	<b>AIRCRAFT RESCUE FIREFIGHTING (ARFF)</b>		<b>2014revA</b>
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## Procedure:

### Size-Up Considerations

The size-up is one of the most critical components for the development of an incident action plan. The size-up essentially provides an evaluation of the situation confronted by the first arriving unit or member. The first arriving officer, unit or member shall consider the following questions when preparing for an “On Scene” radio report and ensuing Incident Action Plan (IAP):

- What has happened?
- What is happening now?
- What is likely to happen?

The first arriving officer, unit or member shall consider the following factors when preparing for an “On Scene” radio report while only committing to what can be seen from the cab:

### Declared Emergency

**Aircraft Ground Emergency:** Anything outside of normal operations that is/has happened to an aircraft that is on the ground without a crash

**Aircraft In-Flight Emergency:** Anything outside of normal operations while an aircraft is in flight that requires and emergency response.

**Aircraft Crash:** Anything outside of normal operations with an aircraft that was moving and has struck something causing damage or injury.

These declarations will affect the setup of the response resources, how they deploy and the basis of the IAP.

### Description of Event

The first arriving officer, unit or member shall consider the location of the aircraft, the type of aircraft, the size of aircraft, possible number of victims/occupants, exposure problems, fire location, fuel leaks, armaments or other special hazards that help describe the conditions being faced by the first arriving officer, unit or member.

### Staging Location

The first arriving engine, support company and battalion chief shall respond directly in to the scene. However, the first arriving officer, unit or member may recommend a different placement for apparatus based on terrain or location of the involved aircraft.

All other units assigned to the incident shall stage at Fire Station 4 if the incident occurs on the airport property. If the aircraft is known to be on the west side of the airport property, the northwest gate to the airfield off County Road 9 may also be used as an access point, but should not be used to cross the airport property for an incident on the east side of the runway.

If the incident occurs off the airport property, incident command will either establish a staging area near the incident or all units shall stage themselves at the last tactical option (i.e., hydrant, key intersection, parking area).

### Establishment of Command

The first arriving officer, unit or member shall assume and name command based on street address or location. The first arriving officer, unit or member can retain command or pass command to the battalion chief if determined to be a working incident.

Verbalization of passing command to the battalion chief can occur during the "On Scene" report or during the "Follow Up" radio report. The actual upgrade of command will occur when the battalion chief arrives on scene of the working incident; however, the initial incident commander still has command until the battalion chief formally accepts it upon arrival.

### Action Taken

If the emergency occurs on airport property, the LFRA officer, unit or member other than the battalion chief that is closest to LFRA Fire Station 4 shall respond there and deploy the 1500 gallon ARFF unit (ARFF 4) to the incident. ARFF 4 may be deployed with one or two personnel and the original apparatus for water supply or support purposes. If ARFF 4 is not available then ARFF 44 will be deployed.

The first arriving officer, unit or member will complete a 360 if no immediate life safety actions are required and transmit that they will be conducting a 360 during the "On Scene" report. If the first arriving officer, unit or member recognizes that this cannot be accomplished upon arrival, the member shall transmit that a 360 cannot be completed or announce that a 360 was not completed during the "Follow Up" radio report.

### Resource Needs

The first arriving officer, unit or member may address any immediate resource needs based on current conditions or events. Some examples of immediate resource needs are as follows:

- ARFF vehicle response
- Fire suppression
- Victim/occupant rescue
- EMS personnel/patient transport resources
- Type of water supply needs or ability to obtain own water supply
- Law enforcement

### "On Scene" Report

As mentioned earlier, the "On Scene" report is a description of what the first arriving officer, unit or member encounters. LFRA has adopted and modified the Blue Card Certification program to establish a standard method of initiating command. Therefore, the following is an example of the standard method of transmitting an "On Scene" report:

*"200, ARFF 4....ARFF 4 is on scene of a four-passenger small frame aircraft that has crashed on runway 15 and has a fully involved engine*

*compartment fire. There are two people standing near the plane off the runway. Have all units continue and stage. This will be "Airport Command". I'll be extinguishing the fire, 360 not complete."*

### **Incident Action Plan (IAP) Considerations**

The development of the Incident Action Plan (IAP) is based on the conditions, actions and resources available to the incident commander. In reference to ARFF incidents, it is imperative that the first arriving unit or member understand the need for established strategies and tactics to be used at the incident as they relate to the Incident Priorities.

The development of the IAP begins with the initial dispatch information but does not get communicated until after the first arriving officer, unit or member arrives on scene and completes their 360 and transmits their "Follow Up" report. The "Follow Up" report shall serve as the foundation of the IAP along with the Incident Priorities.

The first arriving officer, unit or member shall consider the following factors when preparing for a "Follow Up" radio report and developing the IAP:

#### **360 Complete**

The 360 shall be completed by first arriving officer, unit or member if possible. This may not be possible due to the need for immediate rescues or fire suppression. The 360 serves as a benchmark and indicates that an Incident Action Plan is about to follow.

#### **Aircraft Type**

This is a critical component of the IAP as it will assist with the tactics to be used for the first arriving unit as well as incoming resources. This includes the size of aircraft and whether commercial or private, if apparent.

#### **Location and Description of Emergency**

The first arriving officer, unit or member shall provide greater detail on the type of emergency encountered and relay that information to incoming units during the "Follow Up" report.

### Actions

The actions of the first arriving officer, unit or member shall be described in simple terminology. This provides incoming resources a quick briefing on the course of action being taken by the first arriving officer, unit or member.

For example, the first arriving unit may state, *“ARFF 4 is attacking the engine compartment fire with the roof turret and will then deploy the handline for extended fire attack”*.

### Assignments

The relay of fire ground tasks to incoming units is the final step of the IAP. Incoming resources have either been assigned to staging or they have been given tasks in alignment with the IAP and Incident Priorities.

It has been determined that the tasks for the first arriving truck or support company, if applicable, would be to begin making access to trapped occupants or begin rescues of accessible victims.

It has been determined that the tasks for second arriving fire units are generally to staff and deploy the second ARFF vehicle if needed and to assist with victim rescue as well as triage, treatment and transport.

The first arriving unit or member shall have the ability to deviate from these predetermined functions based on fire conditions, victims or other potential hazards.

### Communications

Once assignments have been given by the incident commander, the assigned units or members shall complete the communication loop upon arrival. If arriving units fail to complete the communication loop, the incident commander shall repeat any needed information for clarification or to confirm that the message has been received.

### “Follow Up” Report

The “Follow Up” report is a description of what the first arriving unit or member encounters upon completion of a 360. LFRA has adopted and modified the Blue Card Certification program to establish a standard method of initiating command. Therefore, the following is an example of the standard method of transmitting a “Follow Up” report:

*“All incoming units... 360 complete with an engine compartment fire in a small frame four-passenger aircraft. Both occupants are out of the aircraft and with P-351. ARFF 4 and Engine 6 will be offensive with fire attack. Next due engine/truck/squad... assist with making access to the engine and passenger compartment. Battalion 1 assume command upon arrival.”*

## Company Level Functions

### First Arriving Engine

In most circumstances, respond to LFRA Fire Station 4 and respond with ARFF 4. If trained airport staff are on duty during the time of the incident, they may respond with ARFF 44 to the incident for purposes of fire suppression only and only from the cab of the truck.

The following are some of the responsibilities of the first arriving apparatus:

- Position the (ARFF) vehicle in manner for the best tactical advantage in accordance with the aircraft position and terrain as well as consideration for future anticipated needs. On a civilian small-frame aircraft, the ARFF vehicle will typically be directly in front of the nose of the aircraft or to the rear of the tail of the aircraft to achieve the most coverage with the foam agent from the turrets. In all circumstances, leave enough room to turn the ARFF vehicle so that it can modulate around the aircraft while spraying agent.
- On large-frame aircraft, the ARFF vehicle should be placed to cover the primary exits: typically off the pilot’s left side of the aircraft at a 45 degree angle and off the nose of the aircraft.
- Military aircraft, position the ARFF vehicle at a 45 degree angle off the front and outside of the line of fire for the armaments.

- Consider additional air traffic wanting to use the runway and continue to use the airfield rules.
- Develop initial “Incident Action Plan” and modes of operations (e.g., offensive or defensive, rescue or recovery) with Incident Priorities as the main focus.
- Provide and secure an adequate water supply if needed (consider nursing operation from 2<sup>nd</sup> due as an option) and additional foam concentrate.
- Provide a safe area for other responders to work.

### Second Arriving Engine

The second arriving apparatus’ responsibilities will be determined by the initial incident commander. These responsibilities may include the following:

- Place the second ARFF apparatus for fire suppression and rescue
- Provide for rescue of victims
- Provide and secure an adequate water supply (if needed)
- Place handlines into service (if needed)
- Access engine and/or passenger compartment

### Truck and/or Support Companies

The first arriving truck or support company’s responsibilities, if assigned, will be determined by the incident commander. Truck and/or support companies may be assigned or accomplish the following responsibilities:

- Extrication and rescue of victims
- Access engine and/or passenger compartment
- Set up and staff triage, treatment and transport area
- Medical care of victims

### Benchmarks

The following benchmarks are utilized with aircraft incidents to ensure that the incident priorities are being obtained as well as to ensure that life safety objectives are being met:

#### 360 Complete

The 360 should be completed by first arriving officer or member.

#### Fire Under Control

“Fire Under Control” shall be determined when the main body of fire is knocked down, concealed spaces opened (if needed) and there is no fire extension. Overhaul work is still needed, but the fire is not going anywhere.

#### All Victims Extricated/Rescued

“All victims extricated/rescued” shall be determined when all viable victims have been removed from entanglement and have been turned over to medical triage, treatment and/or transport.

#### All Patients Transported

This benchmark will be determined when all victims have been transported by EMS or POV if treatment refused or not needed.

#### “Incident Turned Over To...” Law Enforcement or Other Governing Jurisdiction.

This benchmark shall be determined when all fire department operations that preserve life, property and possibly the environment have ceased or can be transitioned to an operation working with or under an outside agency.

### Revision History:

**3/20/15** Update to current format, no changes in content.

### References:

No references cited.