

### 3.2.5.1 Aircraft Firefighting Operations



YOUR ORGANIZATION  
STANDARD OPERATING PROCEDURES/GUIDELINES

**TITLE:** Aircraft Firefighting Operations

**SECTION/TOPIC:** Special Fire Suppression

**NUMBER:** 3.2.5.1

**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 responding to and operating at fire suppression incidents involving aircraft.

This procedure identifies guidelines and safety requirements for the use of helicopters for brush fire fighting water drop operations.

#### 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 Responding to and operating at fire suppression incidents involving aircraft:**

The Department has arranged for water drop fire fighting services with a local helicopter service. The helicopter has the capability of applying 120 gallons of water per drop. The drop can be from a hover to concentrate on a specific hot spot or by a running pass over a fire area at varying speeds and altitudes. The speed and altitude of the helicopter will change the length and width of the water drop as well as the water concentration on the fire area. More than one helicopter is available for support if needed. Average flying time per fuel load is 1-1/2 to 2 hours.

#### **REQUEST FOR WATER DROP SUPPORT**

When requesting air support, Command must identify the location of the fire incident, and designate a landing zone and the incident radio channel to be assigned to the helicopter. Command must also assign an engine company to the landing zone.

#### **LANDING ZONE**

The landing zone for helicopters involved in water drop support must meet the following criteria:

- Be located near the fire incident but isolated from the Command Post, Rehab, or Staging Areas.
- The approach and departure paths to and from the landing zone must be free of obstructions for one hundred yards in both directions.
- The landing approach and departure must be into the wind whenever possible.
- A hydrant must be located within the hose lay reach of an Engine Company.
- The landing area must be kept wet to minimize dust during landing and take-off.

#### **HELICOPTER DEPLOYMENT**

When Command requests helicopter support, Dispatch Services will notify the appropriate helicopter service. Dispatch Services will request helicopter support in the following order:

1. Phoenix Police
2. Ranger 41
3. Private Enterprise Service

Dispatch Services will advise the helicopter service of the incident location, the landing zone location, the fire unit identity at the landing zone, and the fire radio frequency assigned to the incident. Dispatch Services will assign P.D. helicopter(s) a FIREBIRD radio designation (i.e. Firebird 1, 2 or 3, etc.) and advise the helicopter service of Command's radio designation (i.e., Mummy Mountain Command). Dispatch Services will advise Command of the Firebird radio designation and ETA to the scene.

#### **HELICOPTER RESPONSE**

The helicopter will provide Dispatch Services an ETA to the incident. On approach to the incident

area, the pilot will advise COMMAND of arrival on the assigned radio channel. It is important that the pilot advise Command if the helicopter has a water load at that time or needs to fill up prior to commitment. All radio communications from helicopters will be to COMMAND and the Landing Zone Officer unless otherwise advised by Command.

### **HELICOPTER WATER TANK REFILL**

Refill of the helicopter water tank will proceed as follows:

- A supply line from a hydrant must be available.
- Upon landing, crew members will approach the helicopter from the front of the helicopter or at 45 degree angles to the front of the helicopter.
- Approach will be made when motioned by the pilot only.
- The tank must be re-armed prior to filling.
- Use of two hose lines from opposite sides of the tank will fill the tank quickly.
- Upon total refilling and re-arming, crews will withdraw from the helicopter by the same path used to approach the helicopter, taking the hose lines with them.
- Once clear of the helicopter, and off to the sides, clearance for take-off will be at the direction of the landing zone officer.

### **HELICOPTER SAFETY**

- Landing zone personnel are to wear their orange safety vests.
- Do not approach the helicopter without pilot approval after landing.
- Always approach from front or 45 degree angles to the front.
- Keep all personnel and equipment AWAY FROM TAIL ROTOR.
- Keep spectators clear of the landing zone, as well as approach and departure paths.
- Remove any light objects or debris from landing area prior to the helicopter landing.
- Be aware that rotor wash from helicopters is very strong. Small objects and clothing (caps, jackets, etc.) can be blown around easily.
- Wetting down the landing zone will minimize dust production.
- Eye and ear protection is required in landing zone
- Personnel in the water drop area must leave the area or take cover. The force of the water drop can be severe, resulting in serious injuries.

### **PROGRESS REPORTING TO COMMAND**

Progress reports on the effectiveness of water drops on the fire from Sectors to Command are essential. Sectors will advise Command of the need for water drops and provide specific locations. Unless otherwise directed by Command, Sectors and crews do not communicate directly with the helicopter pilot.