

UNITED STATES FOREST SERVICE, MANTI LASAL NATIONAL FOREST, BUREAU OF  
LAND MANAGEMENT, MOAB BLM and STATE OF UTAH, DIVISION OF FORESTY  
AND FIRE

# INTERAGENCY AERIAL OBSERVER AVIATION OPERATION PLAN

PLAN\*ACT\*INFORM\*COORDINATE\*LOCATE

2015

## Table of Contents

<b>I. INTRODUCTION</b>	<b>Page</b>
Objectives	4
Scope	4
Review and Revision	4
Authority	5
General Information	5
Location	5
Period of Operation	5
Local Fuels and Fire Behavior	5
Local Flying Conditions	5
<b>II. ORGANIZATION AND RESPONSIBILITIES</b>	<b>5</b>
Agency Responsibilities, General	5
Personnel, General	6
Qualified MIFC Aerial Observers	6
<b>III. FORMS, REPORTS AND ADMINISTRATIVE PROCEDURES</b>	<b>6</b>
Aviation Management Forms and Reports	6
Timekeeping Responsibility	6
Flight Payment Documents	6
Pilot Responsibility	7
Aerial Observer Responsibility	7
Unavailability	7
<b>IV. COMMUNICATIONS, OPERATIONS, AND DISPATCH</b>	<b>7</b>
Communications	7
Airport Advisories	7
Air-To-Air Tactical Communications	7
VHF-FM Air-To-Ground	8
Ordering Procedures	8
Communication Issues	8
Flight Following	8
Unstaffed Incidents	8
Logistical Flights	8
Airspace Coordination	9
<b>V. SAFETY</b>	<b>9</b>
Aerial Hazard Maps	9
Aircraft Emergency Response Plan	9

Aircraft Activity around local airports	9
Incident/Hazard/Maintenance Deficiency Reporting	9
Duration of Flight	10
Weather	10
MIFC Aerial Observer Coordinator to do list	10
Fire Detection Flight Checklist	11

## **I. Introduction**

### **Objectives**

The intent of this operation plan is to provide guidance and direction to the MIFC Aerial Observer operation concerning local policy and procedures. Material contained in this document is supplemental to the following:

Interagency Air Tanker Base Operations Guide (IATBOG)  
Interagency Airspace Coordination Guide (IACG)  
Interagency Air Tactical Group Supervisor's Guide (IATGSG)  
Interagency Lead Plane Operations Guide (ILOG)  
Interagency Helicopter Operations Guide (IHOG)  
The MIFC Mishap Response Guide and Checklist  
The R4 Communications Guide  
The Airspace Guide  
The National USFS Aviation Plan  
The R4 Aviation Plan  
The Canyon Country BLM Aviation Plan  
The Manti-LaSal N.F. Aviation Plan

Additional documents to utilize are;

FAR Parts 91 and 135  
MIFC Hazard Map  
PMS 310-1  
FSH 5109.17\_27.2

Multiple copies of this document should be available for distribution and review by all agency personnel and flight crews.

Any deviations from federal, state or local policies and procedures should be reported immediately to the Unit Aviation Officer or alternate.

The intent of this operation plan is also to standardize Aerial Observer operational procedures within the MIFC boundary.

### **Scope**

The procedures contained in this operations plan apply to all Aerial Observer operations conducted by agency and contract personnel.

### **Review and Revision**

This plan will be reviewed and/or revised; every two years at the minimum or when significant changes and/or revisions to the Aerial Observer role are instituted or immediately as per local requirements.

## **Authority**

Authority for this Supplement is contained in a master Cooperative Fire Protection Agreement between the United States Department of the Interior, Bureau of Land Management (BLM), Utah, and the United States Department of Agriculture, Forest Service (USFS), Region 4.

## **General Information**

### **Location**

The location of the observation aircraft will be the Canyonlands Airport. The aircraft may be flown to another airport to pick up an aerial observer.

### **Period of Operation**

As a general rule, the Aerial Observer Program will be operational whenever there is fire activity or lightning activity.

### **Local Fuels and Fire Behavior**

Fuels in the MIFC jurisdictional area consist of a variety of sagebrush, juniper, pinyon pine, ponderosa pine, spruce and fir, tamarisk and annual grass plant associations. Common to the area are afternoon winds of 15-20 mph, which, when combined with relative humidity's of 5-15 percent, can cause extreme fire behavior and rapid rates of spread.

### **Local Flying Conditions**

The area is characterized by frequent daily afternoon thunderstorms and lightning activity with predominant winds from the west. High winds are common, along with updraft/down draft action during convective activity. High-density altitudes are common during the summer. Pilots are cautioned not to fly beyond their own capabilities or those of the aircraft. All flight and Air Crews are further forewarned to be aware of and attentive to Restricted Areas (RA), and Military Training Routes (MTR) that are found on the district.

## **II. Organization and Responsibilities**

### **Agency Responsibility, General**

DOI Aircraft Rental Agreement aircraft will be utilized regardless of ordering agency. All aircraft and pilots will be carded for aerial reconnaissance.

## **Personnel, General**

The Moab Fire Zone requires that all observers will be ICT5 qualified at a minimum. Each Aerial Observer will receive and will be expected to have acquired general training according to their agencies requirements. This would be the 5109.17 manual for the Forest Service and IQCS/IAT for Department of Interior employees. State employees will adhere to state requirements.

Current IQCS requirements for aerial observer are I-100 and IS-700.

The FS requires the fixed wing special use flight manager training from the IAT guide.

Additional training which would support performing as an aerial observer would include I 200-Basic Incident Command System and S-270 Basic Air Operations. For the BLM flight manager training in IAT would be useful.

Potential aerial observers shall have an orientation flight of the fire zone prior to going on solo missions.

## **Qualified MIFC Aerial Observers**

Ex-agency employees who are current in their qualifications as an Aerial observer may be utilized.

## **III. Forms, Reports, and Administrative Procedures**

### **Aviation Management Forms and Reports**

All required electronic agency forms and reports will be utilized. A daily diary will be kept for each day of flight. Required information in the diary will be Contract number, Contractor, Aircraft make/model and FAA Number, Pilot Name, Flight Time and a narrative of the day's events.

### **Timekeeping Responsibility**

It is the responsibility of each Aerial Observer (Flight Manager) to keep records of all flight activity and pilot duty times. This will be done on a daily diary form which will be turned in to the aviation dispatcher as soon as is practical.

### **Flight Payment Documents**

All Aerial Observers are responsible for submitting the hours of use to the aviation dispatcher after each flight. The AMS electronic payment system will be used to pay the vendor. Vendor will submit an OAS-23 form to the aviation dispatcher for signature and the dispatcher will compare the 23 with the daily diary to ensure accuracy. After ensuring accuracy the dispatcher will sign the form and return it to the vendor electronically. The vendor is responsible for inputting it into Aviation Management System (AMS). This is the Department of Interior electronic aviation payment system.

## **Pilot Responsibility**

All pilots are expected to stop an operation if safety could be compromised. Pilots should not try to “please the customer” at the expense of safety. The pilot will be supported for terminating a flight due to safety concerns.

## **MIFC Aerial Observer Responsibility**

The Aerial Observer (AO)/Flight Manager is responsible for the overall operation and to ensure all agency policies are adhered to. The AO shall work with the pilot as a team to accomplish agency objectives.

## **Unavailability**

This operation is on an ARA contract so there will be no issues with unavailability.

## **IV. COMMUNICATIONS, OPERATIONS AND DISPATCH**

### **Communications**

Primary communications during non-flight activities will be conducted via cell phones if possible.

Phone number for the Aircraft vendor is: Redtail Aviation, 259-7421

Dispatch may be contacted via FM radio on any of the main MIFC frequencies listed in the Communications Guide.

The frequency that aircraft may be contacted within a temporary flight restriction (TFR) is published on the TFR information sheet. It is the responsibility of the Aerial Observer to avoid the TFR's and Flight Traffic Areas (FTA's). If you have to enter or fly close to a TFR or FTA make initial contact 12 miles out with air attack or any aircraft over the incident. If you haven't made contact by 7 miles out do not enter the area. Make contact with ground resources if you can't contact aerial resources.

### **Airport Advisories**

Local airport Unicom:  
Airport frequency 122.8

### **Air-to-Air Tactical Communications**

The MIFC Air to Air initial attack frequency is 124.075.

National Flight Following can be utilized to flight follow with MIFC if all other command frequencies are in use, until another frequency is relayed and available. It is not to be used as a local flight following frequency during mission flights.

## **VHF-FM Air-to-Ground or Tactical Frequencies**

The VHF-FM frequencies for air-to-ground frequencies are:

Air to Ground 10: 166.9375 TX and RX

Air to Ground 44: 167.6250 TX and RX

In critical cases where immediate communications with other aircraft must be established, the AIR GUARD frequency of 168.625, Tone 110.9, will be utilized. However, use of this frequency should be limited due to the possible interference with nearby air tactical operations. Guard is for initial contact, change to alternate frequency once communications are established.

## **Ordering Procedures**

Care should be taken to record all the information transmitted by dispatch. If an item isn't correct, check with dispatch. It is critical that coordinates are crosschecked.

It is the responsibility of the Aerial Observer to verify the location of the incident by plotting coordinates (latitude and longitude), and relaying this information to MIFC.

Whenever practical, there will be a nightly reconciliation between the Moab Interagency Dispatch Center and the Aerial Observer concerning aircraft flight information, incident numbers, problems encountered, etc.

## **Other Communication Issues**

Mutual aid and on-scene frequencies may be used. Dispatch will inform the Aerial Observer of these frequencies.

## **Flight Following**

Upon departure from the airport and after clearance of all airport traffic, notify MIFC of departure and destination. All aircraft are required to check-in with local dispatch every fifteen (15) minutes, unless automated flight following (AFF) is functioning and MIFC has been notified and agreed to AFF tracking. After landing, notify dispatch and close out the flight.

## **Unstaffed Incidents**

If the fire is not staffed, check-in shall be made by the Aerial Observer with the local dispatch office upon incident arrival (and departure). Notify dispatch when leaving the incident and where you are headed next.

## **Logistical Flights/Point to Point (Airport to Airport Flights)**

For point-to-point flights, appropriate flight plans may be filed through FAA, notice given to dispatch prior to departure and a phone call back to the originating dispatch office upon arrival at the destination. Agency flight following may also be used.



## **Airspace Coordination**

All flight crews will be briefed on special procedures concerning airspace coordination as contained in the Interagency Airspace Coordination Guide (IACG). Airspace conflicts with military aircraft are a hazard for which crews must maintain vigilance.

All AO's should be familiar with the IACG to gain an understanding of the procedures dispatch will utilize to coordinate airspace for incidents along Military Training Routes (MTRs). MIFC will maintain current copies of DOD Area Planning AP/1b and AP/1A Publications.

Read IACG for Pilot and AO responsibilities en route and on-scene.

Ensure that NOAA Aeronautical Sectional (**not** World Aeronautical Charts) charts for Utah are on board the aircraft at all times. Ensure that no out-of-date sectionals are on-board any aircraft.

## **V. SAFETY**

### **Aerial Hazard Maps**

The local UAM is responsible for updating the local Hazard Maps. Pilot input of observed hazards will be posted on hazard maps immediately by the Aerial Observer and given to the UAM for inclusion on the district hazard map.

### **Aircraft Emergency Response Plan**

#### **Aircraft Mishap Response Guide**

Local Incident/Accident Plans will be developed according to the format issued by OAS/FS and displayed at each base and dispatch. Telephone numbers, contacts and appropriate personnel will be included in the plans. (Reference the Mishap Response Guide and Checklist.)

### **Aircraft Activity around all local Airports**

Southeastern Utah airports have light to moderate aircraft activity, which may create congestion in the vicinity of the airport. Caution should be exercised when departing and arriving at any airport. There is a skydiving business working out of the Moab airport.

### **Incident/Hazard/Maintenance Deficiency Reporting**

Follow SAFECOM instructions, with the following additions:

All airspace conflicts and major maintenance deficiencies must be reported **immediately** by telephone to the appropriate Unit Aviation Manager, with immediate follow up of the written SAFECOM.

Other Hazards may be reported within three (3) days through appropriate channels.

Pilots are encouraged to utilize the SAFECOM – Aviation Safety Communiqué concerning operational or procedural hazards observed, either on the ground or in the air, during the course of conducting any air operations.

### **Duration of Flight**

Although the aircraft may be capable of many hours of flight based on fuel capacity, 4 hours will be the maximum duration before a mandatory rest period. The rest period will consist of a minimum of 30 minutes on the ground.

### **Weather**

A weather briefing will occur each day. This information can be acquired each morning through the weather web sites or dispatch. No flight activity will occur near thunderstorm development. If thunderstorm activity precludes returning to the originating airport, land and remain at the nearest airport/city. If you need to remain overnight, do so. Costs can be charged to the fire you were observing. Do not push operations in marginal weather situations.

### MIFC Aerial Observer Coordinator to do list

Develop a map kit, local unit and surrounding units, aeronautical sectionals, hazard maps, etc.

Develop frequency kit, FM, AM, State, Municipal Fire, etc.

Develop a package for tracking daily diary, OAS-23's, pilot duty times, etc. (Thumb drive with electronic forms)

Develop a risk management overview; mission profile and objectives list for the pilot regarding fire missions. (The pilot may be new to fire operations)

Develop a daily weather briefing from web based data sites. Post and preserve as part of the daily diary.

Work with the local vendors prior to fire season to establish agency objectives, safety measures and agency policy.

## Fire Detection Flight Checklist

### Preflight:

- Check in with aircraft desk.
- Check TFR status.
- Get recent lightning map.
- Brief pilot on mission before departing. Where are you going, what basic route, how long will you be gone?
- Check pilot and aircraft OAS/FS cards to ensure they are qualified for the mission and it is current.
- Note Hobbs meter reading and/or clock time before departure.

### During Flight:

- Maintain sterile cockpit 5 minutes outbound and inbound from airport
- When outside sterile zone, call dispatch to let them know you are off, destination, “N” number of aircraft, people on board and hours of fuel.
- Confirm that the aircraft transponder is on and transmitting altitude.
- When working fires set the aircraft transponder to squawk 1255.
- Ensure that one of the aircraft AM radios is set to MIFC air-to-air frequency 124.075 and the volume is sufficient to be heard by the pilot.
- Check that Air Guard is “on”.
- Initiate 15 minute check-ins if aircraft is not AFF equipped. If AFF equipped, let dispatch know that.
- Do call dispatch when crossing radio coverage boundaries such as from Moab to Monticello.
- Communicate your flight path desires to the pilot clearly and in advance to your needs. For instance if you anticipate flying to an area that needs a couple thousand feet elevation gain, let the pilot know well in advance so he can avoid a slow/steep climb.

### Post Flight:

- Check-in “on ground” with dispatch.
- Note ending Hobbs meter and/or clock time.
- Inform the aircraft dispatcher of your status while at Recon base.
- If evening flight, assist pilot in completing electronic payment forms (OAS-23) for day’s activities.
- If using community equipment, ensure that the equipment is replaced where you found it and in good working order.