**CHAPTER 50 - AIRCRAFT**

**AIRCRAFT**

Aircraft may be used for a wide range of activities, including point-to-point transport of personnel, equipment and supplies. Tactical use may include applications such as retardant delivery, helicopter logistical and tactical support, air tactical and leadplane operations, suppression or preparedness reconnaissance, helitorch operations, etc.

**AIRCRAFT SOURCES**

Sources for aircraft include agency-owned aircraft (Fleet), exclusive-use (EU), call-when-needed (CWN), or Department of Interior (DOI) On-Call contract aircraft.  Rental aircraft are signed up by the DOI under an Aircraft Rental Agreement (ARA), or by state agencies through Cooperative Agreement or letters of authorization.  Cooperator and military aircraft may be utilized provided an agreement and approval are in place.  Use of active duty military aircraft by federal agencies is rare, and is coordinated by the NICC.

The State of Idaho may obtain Canadian aircraft through the Northwest Compact via the agreement with Idaho Department of Lands (IDL)

National Guard (NG) resources may be mobilized in accordance with current agreements.

When ordering long term NG resources, each state has identified a single dispatch center and state liaison who will coordinate and serve as the liaison/contact for any request for NG assets.

> IDAHO: All units in Idaho will order through the Boise Interagency Dispatch Center (BDC) utilizing established dispatch channels. BDC will work with the IDL duty officer and the GBCG contact for notification and mobilization of NG resources. The ordering dispatch center will then notify GBCC regarding the order. BDC will contact the IDL Fire Bureau Duty Officer to place the order.

> NEVADA: All units within Nevada will order through the Sierra Front Interagency Dispatch Center (SFC) utilizing established dispatch channels. SFC will work with the NDF duty officer and GBCG contact for notification and mobilization of NG resources. The ordering dispatch center will then notify GBCC regarding the order. SFC will contact the Nevada Division of Forestry (NDF) Duty Officer to place the order.

> UTAH: All units within Utah will order through the Northern Utah Interagency Dispatch Center (NUC) utilizing established dispatch channels. NUC will work though the Utah Division of Forestry's duty officer and GBCG contact for notification and mobilization of NG resources. The ordering dispatch center will then notify GBCC regarding the order. Dispatch centers shall not contact the NG directly to order aircraft.

> ARIZONA: All requests for Arizona National Guard resources will be ordered through the Arizona Dispatch Center to the Arizona State Forestry. An informational copy of the resource order must be sent through the normal dispatch channels to Southwest Coordination Center.

> WYOMING: At certain times the National Guard has available helicopters, equipment and personnel that are useful in the suppression of forest and range fires on Federal and State lands. The National Guard units may be ordered through the State for state incidents or the RMACC for federal incidents. Only helicopter resources have been identified in a preseason agreement.

- **Carding and Approval**

  All aircraft and pilots under DOI and USFS operational control must be approved and carded by either DOI or USFS.  Aircraft and pilots requiring "special use or mission" endorsement require inspection by a USFS or DOI authorized inspector.  Typically special use or mission flights are defined as anything other than point to point transport.

**AIRCRAFT MOBILIZATION** See <u>National Interagency Mobilization Guide</u>

Local units requiring aviation services other than those currently assigned within their dispatch boundaries must order additional services through the established dispatch channels. When aviation resources are in high demand, the GACC will coordinate aircraft assignments and utilization within the Great Basin. In situations where a GB MAC group has been formed, the MAC will coordinate with GBCC and local units on allocation and prioritization of resources.

All BLM aircraft, exclusive use, CWN or On Call are national resources and are subject to movement and/or reassignment by BLM National Office and/or BLM State Office and will be coordinated through the GBCC and relayed to the local dispatch center.

State aircraft may be moved within each State's area of responsibility with coordination through the local dispatch centers. When movement of aircraft by the States will be crossing GACC boundaries, communication to each geographic area is requested.

The closest forces concept should be followed by all agencies for Initial Attack (IA), and is defined as:
The resource that has the shortest timeframe to reach a predetermined incident location. Established dispatch channels will be followed at all times.

Agency aircraft identified below will be configured using a roster when mobilized to an incident:

Aerial Supervision Modules (ASM 1) and agency pilots and the assigned aircrew
Lead Planes and agency pilots
Agency owned Air Attack platforms and the assigned aircrew
Agency exclusive use Air Attack platforms and the assigned aircrew
Agency exclusive use helicopters and the assigned module members
Agency owned helicopters and the assigned module members

**AIRCRAFT DEMOBILIZATION**
See <u>National Interagency Mobilization Guide</u>

**FLIGHT MANAGEMENT PROCEDURES / FLIGHT FOLLOWING**
See <u>National Interagency Mobilization Guide</u>

- **FLIGHT CREW / AIRCREW ORIENTATION**

    The local unit is responsible for providing an aviation briefing to:

    IMT aviation staff
    Incoming aviation resources
    Aviation Safety Assistance Teams (ASAT)

    The briefing of non-local aviation resources should include, but is not limited to, the following:

    Local administrative procedures, meals, lodging, time, flight payment document procedures, etc
    Airport procedures, base security policy, and plan
    Specific fire, fuel, and fire behavior conditions and information
    Aerial hazards maps for the local area
    Contact procedures prior to entering a SUA, TFRs, Airspace Letters of Agreement (LOA), and Memorandum of Understanding (MOU)
    Weather (current and forecast)
    Crew/aircraft information sheets (see agency specific guide)
    Aircraft status summary
    Flight following procedures
    Local information, fueling, water sources, sunrise/sunset times, etc.
    Radio frequencies, map sets, and warehouse supplies

- **AIRCRAFT DISPATCH FORM REQUIREMENTS**

  The Aircraft Dispatch Form is required for all non-local (outside of the ordering dispatch area) requests for the following:

    Airtanker, Lead Plane, and ASM requests in initial attack, extended, and complex incidents.

    Helicopters and Air Attack requests in initial attack or upon request of the sending unit or the GBCC.

    *For resources coming from outside the GACC (or leaving the GACC), contact the GBCC to see if the form is required.*

  If multiple aircraft are being ordered, or they are ordered within reasonably close timeframes of each other, one submission of the form to the GBCC or an adjacent neighbor dispatch will suffice. This form provides many benefits over the ROSS resource order for both dispatch and the aviation community such as readability of incident locations, elevations, frequencies, hazards, contacts, and flight following information. A ROSS request must then follow to the sending dispatch office as soon as practical. With the exception of neighborhood agreements across GACC boundaries, all requests not filled within the Great Basin must be in ROSS for placement to the NICC. Requesting units shall ensure that ROSS incident information is accurate to include current frequencies, reporting locations, and contacts.

- **TYPES OF FLIGHTS**

  - **Point-to-Point**
    Point-to-Point flights originate at one developed airport or permanent helibase, with a direct flight to another developed airport or permanent helibase. A point-to-point flight is conducted higher than 500 feet above ground level (AGL) except for takeoff and landing. OMB Circular A126 requires justification and a cost comparison calculation for administrative flights, however, the resource order is sufficient for tactical prepositioning of aircraft. Refer to specific agency policy for guidance and required forms. The following are examples of point-to-point and/or administrative flights:

    - Prepositioning
    - Attending training
    - Giving a speech
    - Functional assistance trip
    - Attending a workshop

    If a vendor is moving an aircraft under their own volition (non-revenue), it is not considered mission or point-to-point and is technically outside of any dispatching responsibility of flight tracking and/or flight following and will not have a flight schedule form. If a vendor requests flight tracking and/or flight following, it may be given as a courtesy, but is not required.

  - **Mission**
    Mission flights are defined as flights not meeting the definition of a point-to-point flight.  A mission flight requires work to be performed in the air (retardant or water delivery, fire reconnaissance, smokejumper delivery) , or through a combination of ground and aerial work (delivery of personnel and/or cargo from helibase to helispot or unimproved landing sites, rappelling or cargo letdown, or horse herding).

- **FLIGHT MANAGER**

  There will be a flight manager designated on all passenger flights originating within the Great Basin. GBCC will use the "National Mobilization Guide" direction for flight manager duties and responsibilities.

The flight manager is responsible for ascertaining the most efficient means of transportation to meet the criteria/schedule. The dispatch office will provide assistance in estimating aircraft costs but is not responsible for completing the cost comparison/justification worksheets/forms. The responsible party (flight manager or authorizing authority) must complete and sign (certify) the cost comparison/justification worksheets.  Agencies are responsible for compiling documentation of the cost comparison/justification form and the flight invoice for each administrative flight.

- **FLIGHT PLANS**

  All flights must be on a flight plan. There are two appropriate types of flight plans: FAA Flight Plan and Agency Flight Plan. The type of flight plan (method of flight following) is normally documented on the Flight Request/Schedule Form.

  - **FAA Flight Plan**

    FAA flight plans **are required** when a flight proceeds beyond a geographic boundary (Exception: Initial Attack that requires crossing a geographic area border) or those flights within the Great Basin not on an Agency Flight Plan.

    There are two types of FAA Flight Plans:

    - Instrument Flight Rules (IFR) - FAA flight following is automatically provided by Air Traffic Control (ATC) on this type of flight plan.

    - Visual Flight Rules (VFR) - The pilot must request FAA flight following. ATC may or may not provide it. It is the pilot's responsibility to confirm with dispatch which type of FAA flight plan will be used. The pilot shall close out the flight plan with the FAA once the flight is completed.

  - **Agency Flight Plan**

    Agency flight plans **are required** when an FAA Flight Plan is not filed. Agency Flight Plans are most often used for flights taking place within the Great Basin. The responsibility of ensuring the safe completion of a flight (flight following) lies with the originating dispatch office, unless a positive, documented handoff occurs.

    There are two types of Agency flight following:

    - Automated Flight Following (AFF) - AFF is the preferred method of agency flight following (once radio communications have been confirmed). If the aircraft and flight following office have AFF capability, it shall be utilized. Periodic radio transmissions for flight following reasons are acceptable but should be short and infrequent when utilizing AFF.

    - Radio Check-in/Check-out – This requires verbal communication via radio every 15 minutes through the duration of the flight. The dispatcher logs the aircraft call sign, location, and heading.

  At the conclusion of the flight, the flight manager/pilot will ensure that the receiving dispatch office is notified of their arrival. The receiving dispatch office is responsible for notifying the originating dispatch office. If an aircraft is overdue, it is the receiving dispatcher's responsibility to initiate aircraft search and rescue actions. The flight following dispatch office shall be continually staffed while an aircraft is airborne. Flight following problems should be documented in the SAFECOM system.

  Federal/state agencies and cooperators utilizing aviation resources for non-fire projects are not automatically tracked and/or flight followed on Agency Flight Plans. Any requests for the Great Basin dispatch centers to perform this function must be part of a Project Aviation Safety Plan and coordinated well in advance of the project and will have a flight request schedule form completed. Requests for flight following, is a courtesy, and is at the discretion of the dispatch office.

  Vendors performing "End-Product" contracts will not be flight followed by Great Basin dispatch centers.

- **AIRCRAFT FLIGHT REQUEST/SCHEDULE FORM**

  Used for documenting aircraft, pilot, passenger, itinerary, and type of flight plan. Required information on this form includes (but is not limited to):

  Incident Name/Number and Request Number

  FAA Registration, "N" number and Call Sign

  Aircraft Make/Model/Color

  Pilot and Vendor Name and Contact Information

  Mission Description

  Passenger/Cargo Information

  Flight Itineraries

  Flight Plan Type/Method of Flight Following


- **AIRCRAFT FLIGHT REQUEST/SCHEDULE FORM REQUIREMENTS**

  The Aircraft Flight Request/Schedule Form is **required** to be completed (regardless of the type of flight plan filed) for those flights that are:

  Point-to-Point

  Mission flights with fuel stops or passenger pickup (not direct to an incident)

  Flights leaving the geographic area

  Dispatch centers/aircrews will only utilize an approved agency Aircraft Flight Request/ Schedule form.

  In accordance with the guidelines above, the sending dispatch office is responsible for initiating a flight schedule form. This should occur before the aircraft begins flight. Dispatch offices should communicate with pilots and/or flight managers to coordinate the completion of a flight schedule form as accurately as possible. The type of flight plan must be documented as this information is critical for initiating search and rescue actions. Once the flight schedule form is created by the sending office, it must be faxed to GBCC. If the GBCC is the hiring/sending office, a form will be created and faxed to the receiving dispatch office. The GBCC will fax the form to all the affected dispatch offices when Agency Flight Plans are filed. The form will be faxed to the NICC by the GBCC for those flights leaving the geographic area.

  ○ **Responsibilities of the Sending Unit**

    Obtain actual time of departure (ATD) and estimated time of arrival (ETA) from the initial departure airport from pilot/vendor.

    Relay the ATD, ETA, and type of flight plan/flight following being utilized (FAA or Agency, AFF or Radio check-in) to the GBCC.

    Notify the GBCC of known delays/advances of a flight plan exceeding 30 minutes.

    Assist with search procedures for overdue aircraft. Utilize the Interagency Aviation Mishap Response Guide and Checklist.

    On any flight requiring stops enroute to a destination within the Great Basin, instruct the pilot-in-command or flight manager to contact the GBCC at 801-531-5320. Aircraft support vehicles should contact the GBCC at fuel stops.

    On any flight proceeding beyond the Great Basin, instruct the pilot-in-command or flight manager to contact the NICC at 800-994-6312. Aircraft support vehicles should contact the NICC at each fuel stop

- ○ **Responsibilities of the GBCC**

  Relay the flight itinerary and type of flight plan/flight following being utilized to the requesting unit or NICC via phone/fax.

  Notify the requesting unit or the NICC in delays/advances of a flight plan exceeding 30 minutes.

  Assist with search procedures for overdue aircraft. Utilize the Interagency Aviation Mishap Response Guide and Checklist.

- ○ **Responsibilities of the Receiving Unit**

  Confirm arrival of all tactical aircraft by telephone to the GBCC.

  Notify the GBCC of any delays of a flight plan exceeding 30 minutes; notify the GBCC of any aircraft overdue by more than 30 minutes.

  Initiate/assist with search procedures for overdue aircraft. Utilize the Interagency Aviation Mishap Response Guide and Checklist.

- **AUTOMATED FLIGHT FOLLOWING (AFF)**

  Automated flight following is the preferred type of Agency Flight Following. Automated flight following provides the dispatcher with a wide range of information on the flight, airspace, and other data that may be pertinent to the flight. This reduces pilot workload, clears overloaded radio frequencies, and provides the dispatcher with much greater detail and accuracy on aircraft location and flight history. AFF does not eliminate hand-off procedures.

  - ○ **Requirements to Utilize Automated Flight Following (AFF)**
    Automated flight following does NOT reduce or eliminate the requirement for aircraft on mission flights to have FM radio capability and for the aircraft to be monitoring appropriate radio frequencies during the flight.

    When utilizing AFF, periodic "ops normal" radio checks may be desirable. These should be very brief and less frequent than the 15-minute radio check-in procedures.

    Procedures for flight requests, ordering aircraft, requirement for a flight manager, etc., are the same as radio check-in procedures.

    The aircraft must be equipped with the necessary hardware (transmitter and antenna).

    When a flight will cross "boundaries" (example: A flight will originate on Unit A, fly on Unit A, then continue on to Units B and C), coordination between dispatch offices of Units A, B, and C must be accomplished. If an aircraft is being dispatched, it is the responsibility of the sending unit to ensure that receiving dispatch centers responsible for flight following during any portion of the flight must be open.

  - ○ **Procedures for Utilizing AFF**
    When an aircraft is ordered, or an aircraft requests flight following from a dispatch office and the above listed requirements are met, automated flight following shall be initiated.

    Other standard information shall be communicated to the dispatch office, such as route of flight, passengers, purpose of flight, radio frequencies to monitor, known flight hazards, TFR information, ETD, etc. (no change from radio check-in procedures).

    If the flight will cross dispatch boundaries, the originating dispatch office must coordinate with affected units, and establish that the aircraft will be handed off when the border is crossed.

    When an aircraft is initially airborne and outside of sterile cockpit environment, a radio call shall be made to the flight following dispatch office to initiate AFF. This is required to positively verify that both the aircraft and the dispatch office are utilizing automated flight following, radios are operational, and that the dispatcher can "see" the aircraft on AFF. If there is a problem at this point, revert to normal radio 15-minute check-in procedures until the problem is resolved.

When the aircraft has completed the flight and landed, the pilot or passenger (observer, flight manager, ATGS, etc.) shall contact the flight following dispatch office via radio or telephone informing them that they are on the ground.

o **Responsibilities of Pilot/Flight Manager**
Contact dispatch with a request to utilize AFF (preferably via phone prior to flight).

Provide dispatch with appropriate flight information (same as radio check-in procedures).

Obtain appropriate FM frequencies and tones to be monitored during flight and brief on radio calls you will make and what response is expected.

Shortly after takeoff and outside of sterile cockpit environment, contact dispatch via radio to initiate AFF.

If radio contact is not made with dispatch office, return to airport/helibase.

If radio contact is made and AFF is verified by dispatch office, monitor assigned frequencies, including guard, for duration of flight.

If a deviation from planned and briefed flight route occurs, contact dispatch office via radio with the change.

If AFF capability is lost at the dispatch office, or the signal is lost during the flight, flight following will revert to 15-minute radio check-in procedures.

Although not required at any time during the flight, it is acceptable to check in via radio with dispatch to confirm positive AFF.

Inform dispatch upon landing that the aircraft is on the ground.

o **Responsibilities of Aircraft Dispatcher**
When AFF is requested, ensure AFF program access is available and request standard flight information from the pilot/flight manager. Document using existing dispatch forms and logs.

Provide pilot/flight manager with appropriate frequencies to monitor during the flight (dispatch frequency, national flight following, etc.). Ensure these frequencies are monitored during duration of flight.

If flight following will be handed off to another dispatch office during the flight, brief this with the pilot, flight manager, providing frequency change, call sign, and other appropriate information.

Check AFF system to ensure icon for the aircraft is shown.

Shortly after takeoff, pilot, flight manager will call via radio to initiate AFF. Check aircraft icon color and verify time and date.

Ensure the AFF system remains operating on your computer during the entire flight.

Set 15-minute timer and check flight progress as appropriate during the flight. Document using existing forms and logs.

An "ops check" radio call is acceptable at any time during the flight.

If the icon turns RED, it means the signal has been lost. Immediately attempt contact with the aircraft via radio and follow normal lost communication, missing aircraft, or downed aircraft procedures as appropriate.

If radio contact is made after a lost signal, flight may continue utilizing 15-minute radio check-ins for flight following.

Use standard contact procedure if computer system goes down during flight.

o **Procedures for Handoff Between Dispatch Offices**
When a flight crosses dispatch boundaries, flight following will be handed off from one dispatch office to another; a positive radio handoff must be made. This must be coordinated between the affected dispatch offices and the aircraft.

o **Coordination Requirements**
Flight following handoffs must be coordinated when using AFF. Affected dispatch offices will monitor appropriate frequencies, and if frequency changes are required, when and where they should be made.

Whenever possible, utilize national flight following frequency (168.650, Tone 110.9, both transmit and receive) for entire flight.

Ensure pilots/flight managers are briefed on any handoffs anticipated (call signs, frequencies and when to switch) and if a combination of AFF and radio check-ins will be required (when and where).

**NOTE**: Air Guard (168.625) is available to make contact with an aircraft or dispatch office if contact can't be made on established frequencies. Once contact is initiated, an alternative frequency will be assigned to continue flight following.

- **OVERDUE AND MISSING AIRCRAFT**

At 30 minutes past the last scheduled check-in, or the filed ETA, the dispatch office currently responsible for flight following will confer with intermediate and/or destination dispatch office(s) to determine the aircraft's location or whether the aircraft can be contacted by radio or located by other means. For mission flights, the aircraft is considered overdue at the scheduled check-in time. Refer to the Interagency Aviation Mishap Response Guide and Checklist for procedures to follow in the event of an overdue and/or missing aircraft.

**AVIATION FREQUENCY MANAGEMENT**

- **NATIONAL AIR GUARD FREQUENCY - 168.625 MHz (Tone 110.9 TX and RX)**

A National Interagency Air Guard frequency for aircraft will be used for emergency aviation communications. Continuous monitoring of this frequency in narrowband mode is mandatory by agency dispatch centers. Rx and TX tones are required nationally.

This frequency, 168.625 MHz, is restricted to the following use:

Air-to-air emergency contact and coordination.
Ground-to-air emergency contact.
Initial call, recall, and redirection of aircraft when no other contact frequency is available.

- **NATIONAL FLIGHT FOLLOWING FREQUENCY 168.650 MHz (tone 110.9 TX and RX)**

The national flight following frequency is used to monitor agency and contract aircraft. This frequency is used for flight following; it is not to be used during mission flights or incident operations.
All dispatch centers/offices will monitor the national fight following frequency at all times.

This frequency, 168.650 MHz, is restricted to the following use:

Flight following, dispatch, and/or redirection of aircraft
No other use is authorized

- **PREASSIGNED INITIAL ATTACK FREQUENCIES**

  Initial attack AM and FM frequencies are issued annually by the National Incident Radio Support Cache (NIRSC) to a pre-identified geographic area which corresponds to the Great Basin dispatch zone boundaries. The frequencies issued are intended for initial attack incidents on any jurisdiction(s) within that zone. Often there are not enough frequencies available for individual units to always specify a particular I.A. frequency.

  - **FM Frequencies (Air-to-Ground, VHF-FM)**
    A standard air-to-ground (A/G) naming convention has been implemented in the Great Basin. This naming convention utilizes a standardized frequency identifier (or name system) for initial attack zone air-to-ground frequencies. Air-to-ground frequencies are assigned a numerical name (example: a given frequency, 1xxx.xxx, will be designated as "A/G 1" and all other air-to-ground frequencies will get an ascending numerical name. The standard naming of the air-to-ground frequencies **will not** dictate the priority usage of a frequency.

    Each zone has pre-assigned air-to-ground frequencies. These frequencies have been assigned considering geographical locations to avoid as much interference as possible. If conflicts arise, a request for an additional or new frequency will be placed through GBCC to NIRSC for a temporary frequency.

  - **AM Frequencies – Air Tactics (Air-to-Air)**
    Each zone has pre-assigned Air-to-Air frequencies. Frequencies allocated to zones for initial attack are not to be dedicated for project fire use. These frequencies may be used for All-Hazard incidents, Search and Rescue, etc. with the coordination through NIFC CDO.

    Each dispatch center will receive their assigned Primary Air-to-Air by April. The Secondary and Tertiary are held at the GACC and will be ordered as needed through ROSS. All preassigned Air-to-Air frequencies should be ordered and held at the local dispatch on a GACC Preposition order. Throughout the fire season they should be assigned in ROSS to the fires they are used on and will be released to the GACC at the end of the season or when no longer needed.

    Temporary frequency assignments will be requested for project fire use. Temporary frequencies cannot be reassigned when the incident is completed or no longer needed, they must be released to NIFC CDO.

  - **Additional Frequencies**
    The following are some reminders before ordering, and during use, of these frequencies:

    - Are all assigned frequencies being used?
    - Is the operation of all aircraft on one victor frequency?
    - Has the traffic decreased enough so that the frequency can be released?

**SUNRISE/SUNSET TABLES**

Aviation bases and dispatch centers shall have official sunrise and sunset tables at their locations in order to determine start up and cut off times for the local areas. For aircraft dispatch, use the official sunrise and sunset tables for the aircraft base nearest the fire.

Official sunrise and sunset tables are published with standard times.  During Daylight Saving Time add one hour to all times in the table.  The term civil twilight refers to a point 30 minutes prior to official sunrise or 30 minutes after official sunset.

Sunrise/sunset tables can be accessed on the internet at the following address:

 http://aa.usno.navy.mil/data/docs/RS_OneDay.html

**SPECIAL FLIGHT CONDITIONS**

- **INSTRUMENT FLIGHT CONDITIONS – FSM 5716.12**

  Instrument Flight Conditions are for multi-engine or turbine powered single-engine aircraft for flights in Instrument Meteorological Conditions (IMC) that meet the applicable Instrument Flight Rules (IFR) requirements in Federal Aviation Regulations (FAR) Part 135, Part 91 and Part 61 as referenced in FSH 5709.16 or applicable contracts.

  Low level (FSM 5716.3) fixed wing flight operations will be conducted only in daylight Visual Flight Rules (VFR) conditions (30 minutes prior to official sunrise until 30 minutes after official sunset).

- **NIGHT FLYING - 5716.2**

  Night flying use is for multi-engine or turbine powered single-engine aircraft for night flights that meet the applicable requirements in FAR Part 91 and Part 61 as referenced in FSH 5709.16 or applicable contracts.

  Pilots flying night missions shall land at airports or heliports that meet Federal Aviation Administration (FAA) lighting standards, except:

  > This restriction does not apply to helicopter flights utilizing Night Vision Goggles (NVG).

  > Low level helicopter flight operations will only be conducted using NVG. Helicopters will be approved for such an operation.

  > Reciprocating engine powered single-engine aircraft flights at night are authorized only for ferry and cargo-carrying missions at pilot-in-command discretion and in accordance with FAR Part 91.

**STERILE COCKPIT PROCEDURES**

Sterile cockpit procedures for all aircraft with agency communication radios will only monitor FAA VHF air traffic frequencies and agency guard frequency (for emergency only) within 5 miles of an uncontrolled airport. On departure, large air tankers and very large air tankers will cease operation on agency radios after reporting "rolling." All other aircraft (including SEATs) will cease operation on agency radios before taxiing onto the active runway, or lifting off for helicopters. After reaching 5 miles from the airport, or outside class B, C, or D airspace, routine check-in and communication on agency radios will resume. On arrival, all aircraft will cease operations on agency radios (except for emergencies) at least 5 miles from the airport or when in contact with approach control or tower. The pilot will radio the dispatcher and advise they are either under FAA flight control or 5 miles from landing. After landing and when clear of the active runway, communication with dispatch or the base may resume.

**AIRSPACE BOUNDARY DISPATCHING**
See the Great Basin Interagency Airspace Boundary Management Plan and Checklist, Chapter 80—4.

**STAGED / PREPOSITIONED AIRCRAFT**

All aircraft prepositioned at the request of the GBCC on Staging/Preposition charge codes are available for local Initial Attack, following national commitment guidelines.  Any assignment of these resources to large/project fires will have GACC concurrence prior to assignment.

Prior to prepositioning aircraft to local dispatch bases, coordination will be made through the local center manager/aircraft dispatcher. The local center will then create an incident in ROSS for the aircraft to be assigned to for dispatch and tracking purposes.

Suggested example: 2016 BDC GBC Preposition/Staging. This incident can also include GACC prepositioned crews, equipment, overhead and supplies.

Extended staffing of GACC prepositioned resources are to be made available for geographic wide IA response.

Any extensions of local resources on the GACC charge code are considered available for GACC wide response. Local units need to determine which resources are to be extended following this requirement.

Local units that have aircraft assigned to the GACC preposition code may utilize the code for additional airbase staffing as needed with the concurrence of the GBCC.

**AIRBORNE THERMAL INFRARED (IR) FIRE MAPPING**
See National Interagency Mobilization Guide.

- **INFRARED (IR) FIRE MAPPING REQUESTS**

  Each request for an infrared flight will be ordered by 1500 daily. An infrared aircraft order form must be completed and a new request number will be assigned each day. An infrared scanner form needs to be completed on the NIROPS Web site at https://fsapps.nwcg.gov/nirops/users/login.

  This webpage will give the user step by step instructions on how to order and IR flight.
  User accounts can be requested by webpage or by contacting NIROPS directly 505-842-3845.

  If the website is unavailable, an Infrared Aircraft Scanner Request form (Chapter 80) will be submitted for each request.  A new scanner request form must be completed and forwarded to NICC when scanning criteria or parameters change.

  When competition exists for resources within their area, NIROPS will set priority for airborne thermal infrared fire mapping aircraft.

**AERIAL SUPERVISION AIRCRAFT** See National Interagency Mobilization Guide.

Aerial supervision aircraft will be ordered through established dispatch processes and the GBCC will advise the ordering unit of aircraft availability.  The unit shall then advise the GACC whether or not to keep the order for a leadplane, ASM and/or air attack active in ROSS, or to UTF the order.

When competition for leadplanes, ASM and/or air attack aircraft exists between dispatch centers the GBCC shall coordinate priority assignments, reassignments, and diversion of these resources.  Replacement of an incident's leadplane or air attack aircraft reassigned to another incident will be negotiated between the center and the requesting unit.

For incidents on which significant flight time may accrue, dispatch centers and the GBCC should mutually anticipate the need for relief air attack or leadplane resources.

**This table summarizes interagency aviation supervision policy, but individual agency policy must be consulted for currency and consistency.**

**Incident Aerial Supervision Requirements**

When aerial supervision resources are co-located with retardant aircraft, they should be launched together on an initial order to maximize safety, effectiveness, and efficiency of incident operations. Incidents with 3 or more aircraft over/assigned to them should have aerial supervision over/assigned to the incident. Federal policy dictates additional requirements as listed below.

| Situation | Lead/ATCO/ASM | ATGS |
|---|---|---|
| Airtanker not IA rated | Required | ***** |
| MAFFS | MAFFS Endorsed Lead / ASM | ***** |
| VLAT | VLAT Endorsed Lead / ASM | ***** |
| When requested by Airtanker, ATGS, Lead, ATCO, or ASM | Required | Required |
| Foreign Government Airtankers | Required if no ATGS | Required if no Lead/ATCO/ASM |
| Multi-Engine Airtanker:  Retardant drops conducted between 30 minutes prior to, and 30 minutes after sunrise, or 30 minutes prior to, and 30 minutes after sunset | Required if no ATGS | Required if no Lead/ATCO/ASM |
| Single-Engine Airtanker (SEAT):  SEATs are required to be on the ground by 30 minutes after sunset | See Level 2 SEAT requirements. | See Level 2 SEAT requirements |
| Level 2 SEAT requirements:  Level 2 rated SEAT operating over an incident with more than one other tactical aircraft on scene | Required if no ATGS | Required if no Lead/ATCO/ASM |
| Retardant drops in congested / urban interface areas | Order | May use if no Lead/ATCO/ASM |
| Periods of marginal weather, poor visibility or turbulence | Order | Order |

**Definitions of key words used in the Aerial Supervision Requirements chart:**

**Required** - Aerial supervisory resource(s) that shall be over the incident when specified air tactical operations are being conducted.

**Ordered** - Aerial supervisory resources that shall be ordered by the controlling entity. Air tactical operations may be continued while the aerial supervision resource is enroute to the incident. Operations can be continued if the resource is not available.

**\*An aerial supervision module, leadplane or air tactical group supervisor must be ordered any time it is requested by any aircraft regardless of number or type of resources assigned.  If aerial supervision is available within the local unit, it is recommended it be dispatched any time other aerial resources are being sent.**

USFS FSM 5716.32 requires an order for aerial supervision if there are 2 or more airtankers over a USFS incident.

Incident that have 2 or more branches, or smokejumper or para-cargo aircraft with 2 or more air tankers: The Interagency Aerial Supervision Guide references ordering an ATGS only for these missions. FSM 5716.32 classifies these missions as complex.

For USFS incidents an ATCO and/or HLCO should be ordered as appropriate in addition to the ATGS.

- **AIR TACTICAL GROUP SUPERVISOR (ATGS) AIRCRAFT**

  ATGS aircraft is a fixed or rotor wing aircraft that is comprised of a pilot and ATGS for initial and extended attack response to enhance safety and efficiency of aerial and ground operations.

  When requested, nationally sponsored ATGS aircraft and personnel will be dispatched for initial and extended attack fire when they are available.  This includes responding to incidents outside of assigned dispatch center and GACC boundaries when requested.  Normal dispatch procedures will be followed and local dispatch centers will place orders to the GACC when the neighborhood policy is not applicable.

  The status of nationally sponsored exclusive use ATGS aircraft and personnel will be updated daily as "Available GACC", in both the Tactical Report and ROSS.

  Call when needed ATGS aircraft will be ordered using normal dispatch procedures.

- **LEADPLANES / AERIAL SUPERVISION MODULE (ASM)**

  The ASM is a fixed wing platform that has a leadplane qualified air tactical pilot (ATP) and an air tactical supervisor (ATS). ASMs may act as either a lead or ATGS depending on incident requirements.

  When available, they will be dispatched to support large air tanker assignments according to agency policy. Leadplanes/ASM are multi-engine and the pilots are IFR qualified. Flight before/after civil twilight is allowed for non-tactical flight. Some leadplanes/ASM pilots are qualified to direct MAFFS, and some to direct VLATs – very large airtankers.

  Leadplanes assigned to a unit may be dispatched direct to meet the unit's mutual assistance areas of influence with notification to the coordination center within **15** minutes of commitment, followed by a resource order.

  The GBCC will coordinate with the appropriate dispatch center concerning leadplane availability and crew assignment.

  During periods of low fire probability it is permissible for leadplanes to be used for other missions. Release of leadplane for non-suppression assignments is contingent upon the following conditions:

  - Airtanker pilots at the base to which the leadplane is assigned are initial attack qualified.

  - A backup leadplane is available within 1 hour or the released leadplane can be back on base within the same time frame.

  - The release is approved by the GBCC.

**SMOKEJUMPER AIRCRAFT and REQUESTS**   See National Interagency Mobilization Guide

- **SMOKEJUMPER INITIAL ATTACK (IA) REQUESTS**

  Initial Attack smokejumpers should be launched immediately upon receipt of order via phone, fax, resource order or aircraft dispatch form.  When the order is generated in ROSS the request will be for an A-#, "Load, Smokejumper, Initial Attack".   As soon as possible after the jumpship is airborne, the sending dispatch unit shall provide a manifest by email/fax to the receiving unit per established dispatch channels.  Notification to GBCC will be made within 15 minutes of dispatch.

  Aircraft delivering smokejumpers should return to a designated airport or return to the sending base before the end of the pilot's daily flight or duty limitations.  The aircraft will be released in ROSS at the

end of its duty day to the dispatch center that is responsible for that given base. Any new requests will be ordered via ROSS through established dispatching channels.

- **SMOKEJUMPER PREPOSITION REQUESTS**

  Smokejumper preposition requests will be ordered in ROSS on an Aircraft request as, "Load, Smokejumper, Initial Attack", on an order. The sending unit will fill the request with a roster in ROSS. The duration of preposition may be negotiated prior to launch between the requesting unit, sending unit and GBCC.  Preposition loads should be released within a reasonable time frame if they are not utilized or otherwise negotiated with management (i.e. long term spike base, etc.).

- **SMOKEJUMPER BOOSTER REQUEST**

  When a long term commitment is requested and cannot be met through a preposition or IA load, a booster of jumpers can be ordered by individual Overhead requests. The request may be filled using jump ships, driving, charter aircraft or commercial travel and can be negotiated between the requesting unit and the GACC. If smokejumper aircraft are used to deliver boosters, the load should travel in a jump ready configuration.

**LARGE TRANSPORT AIRCRAFT**   See National Interagency Mobilization Guide

**HELICOPTERS**   See National Interagency Mobilization Guide

- **ITEMS TO CONSIDER WHEN ORDERING A HELICOPTER**

  - **Helicopter Types and Mission Capability**
    | | |
    |---|---|
    | Type I Standard | Cargo, Water, Passengers |
    | Type 1 Restricted/Limited | External Cargo, Water – **No Passengers** |
    | Type 2 Standard | Cargo, Water, and Passengers |
    | Type 2 Restricted/Limited | External Cargo, Water – **No Passengers** |
    | Type 3 Standard | Cargo, Water and Passengers |
    | Type 3 Limited | See *IHOG, Chapter 2, Section III*. |

  - **Helicopter Configuration:**
    Helicopter with bucket or longline
    Helicopter should be initial attack ready
    Tank or bucket only

  - **Helicopter Capability:**
    Operating environment (temperature and altitude)
    Minimum passenger load consideration
    Minimum internal/external load requirement

  - **Special Mission Capability:**
    Longline
    Aerial firing
    Helicopter retardant
    Rappelling
    Short-haul
    Medical evacuation

  - **Personnel Needs:**
    Identify type of module needed and should it be standard configuration

Agency considerations with regard to personnel
Specialized Mission Qualifications:
- Helitorch mixing/loading crew qualifications
- PSD Operator qualifications
- Medical personnel (EMT) qualifications
- Rappel or Short-haul qualifications

o **Equipment Needs**
Sphere dispenser with spheres
Helitorch and fuel source
Handheld Infrared equipment
Port-a-tank
Litter or other specialized rescue items
Nets, slings & swivel (specify if non-standard)

- **EXCLUSIVE USE HELICOPTER CONTRACTS**
  See National Interagency Mobilization Guide

  Exclusive use and agency owned helicopters must be ordered through normal dispatch channels.

  Whenever an exclusive use helicopter fills a ROSS request outside of IA, the sending unit will send a fuel truck, support vehicle, manager and a **minimum** of 3 crew personnel. The helicopter order will be placed on an Aircraft order form with all the support/module information documented on that Aircraft request order form.  Any specialty or other personnel qualification requirements (ICT4, PLDO, etc.) must also be specified.

  o **Type 1 Exclusive Use Helicopters- Standard/Limited Category**
    See National Interagency Mobilization Guide

    Outside of initial attack, whenever a type 1 exclusive use helicopter fills a helicopter request the administrating/sending unit will send a fuel truck, support vehicle, and manager. Consideration should be given to logistical concerns (i.e. road access for large support vehicles, accommodations for large contract crew, etc.).

- **CALL WHEN NEEDED (CWN) / ON-CALL HELICOPTERS**

  When placing an order with the GBCC, the following information should be included: altitude, temperature and intended use for the incident or project.  Helicopter performance, cost, configuration and location shall be considered when filling orders.

  Prior to being sent to the incident or project, helicopter(s) and manager/module(s) shall be joined at a staging area away from, but convenient to, the incident/project (e.g. the nearest airport).  The helicopter manager will conduct a pre-use inspection verifying that all is in order and brief the pilot on the details of the assignment.

  All incident assignments require that a qualified helicopter manager and module be assigned.

  During active fire season local dispatch offices must advise the GBCC of all CWN/On-Call requests/assignments made by their offices.

  Contract administration shall be accomplished through the helicopter manager.  The helicopter manager is responsible for conducting inspections, briefing prior to use and on scene contract administration.  Helicopter managers shall verify to the using unit that these inspections and briefings have been accomplished.  Specific procedures are contained in the Interagency Helicopter Operations Guide (IHOG).

DOI agencies can only order helicopter services from DOI contract sources for non-emergency use (prescribed fire, resource management projects, etc.). See DOI - OAS, OPM-39 at http://oas.doi.gov/library/opm/index.htm for exceptions and procedures for use of USFS procured aircraft.

Reference the Interagency Tech Bulletin 2015-01 to assist in determining what agency initially hired the aircraft and if/when this should change to a different agency payment system. The helicopter/flight manager and vendor are the responsible parties in determining the initial path to take, depending on the original resource order and contract jurisdiction.

Interagency Technical Bulletin 2015-01:
https://www.doi.gov/sites/doi.gov/files/migrated/aviation/tech/upload/IATB_2015-01.pdf for further information.

For ordering CWN modules to staff CWN helicopters see Chapter 20 of this guide.

o **Type 1 and 2 Call-When-Needed (CWN) Helicopters**
Type 1 and 2 CWN helicopters are available under national contract and, with the exception outlined below, shall be ordered through the NICC via established dispatch channels. Definitions of categories (standard, restricted, or limited), as well as additional information on CWN helicopters, can be found in the National Interagency Mobilization Guide, and the Interagency Helicopter Operations Guide (IHOG, chapter 2.

Exception: Any national forest with a type 1 helicopter operating locally on a timber sale contract may use the helicopter for initial attack missions per the contract requirement in the timber sale contract. The following must occur:

▪ The helicopter can only be used for initial attack on incidents within or adjacent to the timber sale that the helicopter is working on.

▪ Coordination must occur between the local dispatch offices, the timber sale COR, and any other resources assigned to the incident.

▪ A resource order shall be submitted for documentation purposes to the coordination center.

▪ For any request/assignment other than initial attack on or adjacent to the timber sale procedures in the National Interagency Mobilization Guide must be used.

o **Type 3 CWN / On-Call Helicopters**
There are two federal procurement methods used for acquiring Type 3 CWN/On-Call helicopters within the Great Basin for federal agencies. These methods are:

▪ The Forest Service CWN contract- coordination center and local dispatch offices must have a written delegation of authority from the contracting officer to order under this contract.

▪ The DOI On-Call Small Helicopter contract- administered by DOI-Acquisition Services Directorate (AQD) in Boise, Idaho.

State agencies may have state CWN procurement policies. State Annual Operating Plans (AOP) describes the use of state resources on federal incidents. Helicopters will meet Interagency Fire Helicopter Standards for operation on federal incidents.

For projects, a cost comparison must be completed by the ordering office when deciding which procurement method to use.

- **HELICOPTER RAPPELLING / CARGO LETDOWN**

  Helicopter rappelling and cargo letdown operations are approved for use on all Great Basin agencies' lands, provided the agency personnel and pilot have been trained, certified and approved in accordance with the Interagency Helicopter Rappel Guide.   Helicopter rappellers shall be ordered through normal dispatch channels.

- **EXCLUSIVE USE HELICOPTER RAPPELLERS AND AIRCRAFT**

  Outside initial attack, whenever an exclusive use helicopter fills a helicopter request the administrating/sending unit will send a fuel truck, support vehicle, manager/spotter and a **minimum** of 5 crew personnel.  Orders for rappellers with aircraft within the Great Basin shall be on an Aircraft resource order.  Orders for rappel capable aircraft should be placed as immediate need, IA or for preposition planning purposes.

- **RAPPELLER PREPOSITION**

  Rappellers and aircraft may be ordered and mobilized for preposition purposes when multiple starts are occurring or are predicted.  Preposition request will be on an A-#, as "Load, Rappellers, Initial Attack", and identified as preposition in special needs.  The sending unit will assign all personnel as subordinate A-#s under the aircraft request.  The duration of preposition will be negotiated between the ordering and sending units. Preposition loads should be released within a reasonable timeframe if they are not utilized or otherwise negotiated.

- **HELICOPTER SHORT- HAUL RESCUE / INSERTION**

  Short-haul is approved as a rescue method for use on all Great Basin agencies' lands provided that:

    The mission is a life or death emergency.

    The rescue is conducted by qualified personnel trained in accordance with agency policy and standards.

    The individual operation has been approved by the appropriate line officer.

  Agency short-haul helicopters are available from the Payette Dispatch Center and Teton Dispatch Center. Agency short-haul aircraft are ordered through normal dispatch procedures.

  National Guard helicopter units in Idaho, Nevada, Utah, and Intermountain Life Flight in Utah have rescue hoist capabilities.

  Requests for service are routed through the Air Force Rescue Coordination Center and/ or through State Emergency Service dispatch/ communications center.

  Boise Interagency Dispatch Center has an agreement with the Idaho National Guard for emergency Short-haul rescue missions. The nature of these missions require the timely deployment of resources to preserve life. This is not to be confused with the regular or long term deployment of National Guard resources.

- **NATIONAL GUARD HELICOPTERS**

  When ordering long term NG resources, each state has identified a single dispatch center and state liaison who will coordinate and serve as the liaison/contact for any request for Guard assets.

  **IDAHO**: All units in Idaho will order through the Boise Interagency Dispatch Center (BDC) utilizing established dispatch channels. BDC will work with the IDL duty officer and the GBCG contact for notification and mobilization of NG resources.

The ordering dispatch center will then notify GBCC regarding the order. BDC will contact the IDL Fire Bureau Duty Officer to place the order.

**NEVADA**: All units within Nevada will order through the Sierra Front Interagency Dispatch Center (SFC) utilizing established dispatch channels. SFC will work with the Nevada Division of Forestry (NDF) duty officer and GBCG contact for notification and mobilization of NG resources. The ordering dispatch center will then notify GBCC regarding the order. SFC will contact the NDF Duty Officer to place the order.

**UTAH**: All units within Utah will order through the Northern Utah Interagency Dispatch Center (NUC) utilizing established dispatch channels. NUC will work though the Utah Division of Forestry's duty officer and GBCG contact for notification and mobilization of NG resources. The ordering dispatch center will then notify GBCC regarding the order. Dispatch centers shall not contact the NG directly to order aircraft.

**ARIZONA**: All requests for Arizona National Guard resources will be ordered through the Arizona Dispatch Center to the Arizona State Forestry. An informational copy of the resource order must be sent through the normal dispatch channels to Southwest Coordination Center.

**WYOMING**: At certain times the National Guard has available helicopters, equipment and personnel that are useful in the suppression of forest and range fires on Federal and State lands. The National Guard units may be ordered through the State for state incidents or the RMACC for federal incidents. Only helicopter resources have been identified in a preseason agreement.

**IMPORTANT NOTE:** In an emergency situation requiring rescue aircraft, dispatchers should follow local established ordering protocol for immediate and efficient dispatching of aviation resources. For more information see: http://wildfireslessons.net/documents/Emergency_Extraction.pdf

- **AERIAL IGNITION**

There are two aerial ignition devices approved for Forest Service and DOI use; the helitorch and the plastic sphere dispenser (PSD). See Interagency Aerial Ignition Guide.

There are specific training and certification requirements for aircraft, pilots, helitorch modules and PSD operators. Qualified and current individuals must be assigned when filling aerial ignition orders for helitorch modules or PSD operators.

Orders for these resources for fire, or project use, may involve several different resource orders. Example: helicopter ordered on an A#, helicopter manager and helitorch module or PSD operator ordered on an O#, helitorch or PSD machine ordered on an E# and plastic spheres, ethaline glycol, gasoline, etc. ordered on an S#.

To alleviate workload, resource tracking problems, and confusion, order an exclusive use helicopter and crew who have all the components (aerial ignition equipment, supplies and qualified personnel) whenever possible. This can be accomplished on one A# that specifies the aerial ignition capability needed in Special Needs.

Note: The identification of equipment at bases does not necessarily mean qualified personnel are available to operate the equipment.

USFS, NPS and BLM helitack bases which have aerial ignition equipment are:

| Unit - Base | Aerial Ignition Capability |
|---|---|
| Arizona Strip BLM | Plastic Sphere Dispenser |
| Twin Falls BLM | Plastic Sphere Dispenser |

| Boise NF (Lucky Peak, Garden Valley) | Plastic Sphere Dispensers |
|---|---|
| Salmon/Challis NF (Challis) | Helitorch / Plastic Sphere Dispensers |
| Salmon/Challis NF  (Salmon) | Plastic Sphere Dispenser |
| Sawtooth NF (Hailey) | Plastic Sphere Dispenser |
| Payette NF (Price Valley, Krassel) | Helitorch, Plastic Sphere Dispensers |
| Caribou/Targhee NF (Swan Valley, Pocatello) | Helitorch, Plastic Sphere Dispenser |
| Bridger/Teton NF (Jackson) | Helitorch, Plastic Sphere Dispensers |
| Elko BLM | Plastic Sphere Dispensers |
| Ely BLM | Plastic Sphere Dispenser |
| Humboldt/Toiyabe NF (Bridgeport) | Plastic Sphere Dispenser |
| Southern Nevada District BLM/ FS | Plastic Sphere Dispenser |
| Canyon Country District BLM | Plastic Sphere Dispenser |
| West Desert District BLM | Plastic Sphere Dispenser |
| Uintah-Wasatch-Cache NF | Helitorch / Plastic Sphere Dispensers |

**AIRTANKERS**
See National Interagency Mobilization Guide

 For airtanker status see: http://gacc.nifc.gov/egbc/logistics/tactical/tactical.php

- **VERY LARGE / LARGE AIRTANKERS**    See National Interagency Mobilization Guide

- **MODULAR AIRBORNE FIREFIGHTING SYSTEMS (MAFFS)**
  See National Interagency Mobilization Guide and the MAFFS Operations Guide

- **SINGLE ENGINE AIRTANKERS (SEATS)**
  See National Interagency Mobilization Guide and the Interagency Single Engine Airtanker Operations Guide (ISOG). The guide can be found at the following link below:

  http://www.nwcg.gov/sites/default/files/products/pms506.pdf

  Single engine airtankers may be used under the following conditions:

  o **USDA-Forest Service**
     The Forest Service may use SEATs contracted by cooperators (for example, DOI or State agencies) provided that they meet the requirements in FSM 5713.44.

  o **DOI**
     DOI contracted SEATs are a national resource and their primary mission is initial attack. Mobilization is managed by dispatch centers with support from the national SEAT coordinator and aviation managers. Operational considerations concerning SEATs can be referenced in the DOI

Exclusive Use SEAT SOPs, ISOG and the IASG.

Nationally sponsored SEATs will be dispatched for initial and extended attack fire when they are available. This includes responding to incidents outside of assigned dispatch areas and GACC boundaries when requested. Normal dispatch procedures will be followed and local dispatch centers will place orders to the GACC when the neighborhood policy is not applicable.

The pilot shall be carded as either a level 1 or level 2 single engine airtanker pilot based on the following criteria:

- **Level 1-** Allows pilot to perform initial attack within the fire traffic area (FTA) without aerial supervision.

- **Level 2-** Requires aerial supervision when more than **one** other tactical aircraft are within the fire traffic area (FTA).

o **State Agencies**
State agencies shall adhere to the Interagency Single Engine Airtanker Operations Guide when using SEATs on federal fires. **SEAT's contracted by state agencies will be released back to the home unit upon request.**

Orders for CWN/On-Call and exclusive use SEATS will be done through normal dispatch channels. DOI On-Call SEAT contracts are organized by geographic area based on the contractors' home base. To order a SEAT from a contractor that is based outside of the Great Basin requires an order to the servicing GACC through NICC. See web page at:

https://www.doi.gov/aviation/aqd/contracts for contract and ordering information.

Aircraft performance and limitations should be considered when ordering SEAT's. The SEAT support truck is a required component of the On-Call contract; the plane can be used while the truck is in transit from the contractor's base to the incident operating base.

DOI suppression contract SEATs work 6 days on 1 day off schedule with no relief crew required and no permanent designated base.

DOI suppression contract SEATs will be statused as available national at the end of each day.

During busy fire activity a national SEAT coordinator position will be activated at the BLM National Aviation Office and will work with NICC and the GACC in coordinating SEAT issues.

o **SEAT Base Hours of Operation**
During the core fire season period (June- September) all Great Basin SEAT bases typically operate on a 0900-1800 local schedule. Based on local activity or at the discretion of the GBCC, SEAT base hours of operation may be adjusted. When aircraft are required to come on early or extend due to local need, the Dispatch Center will coordinate with GBCC.

Dispatch centers will coordinate with the GBCC regarding extended staffing based on GBCC need prior to 1730 each day.

o **SEAT Manager**
A SEAT manager (SEMG) is required to provide contract administration and SEAT Base oversite. The SEMG is allowed to manage up to three SEATs. Airtanker base managers (ATBM) are allowed to oversee SEAT operations without the presence of a SEMG.

- **WATER SCOOPING AIRTANKERS**

   CL-415 and Air Tractor 802 Fire Boss. Each Great Basin agency should have a water scooping operations plan developed (at the appropriate management level) that describes suitable water sources, public safety and invasive species control. Ordering of scoopers is through normal procedures through the GACC.

- **AIRTANKER OPERATIONAL PROCEDURES**

   o **Rotation**
   The policy found in the Interagency Airtanker Base Operations Guide shall be followed. The guide can be found at the following link below:

   http://www.blm.gov/style/medialib/blm/nifc/av.Par.65799.File.dat/IABOG.pdf

   o **Ordering of Airtankers**
   Movement/ordering of the airtankers will be through normal dispatching channels only.

   During periods of sustained or multiple fire activity each unit shall take the necessary measures to manage pilot time and remain cognizant of both flight time and duty day limitations. Unit dispatch offices will notify the GBCC as airtanker(s) within their control reach a point at which they have 2-hours of flight time remaining.

   When airtankers are ordered, as much information from the field as possible shall be provided with the initial order. This information should include but not be limited to: public and firefighter safety, types of structures at risk, fire behavior and other pertinent concerns.

   o **Airtanker Release Locations**
   When airtankers are released, they should return to the current base of operations or the closest airtanker base to the incident when the mission is accomplished unless prior arrangements or coordination has been done.  Aerial supervision should release aircraft to the local dispatch center that will coordinate with the GBCC as to the release location or other instructions for assignment.

   o **Airtanker Diversion**
   Diversions will be coordinated through the coordination center. The priorities for airtanker and leadplane use are: (1) human life or property or resource values (2) new starts (3) other priorities established by management. Situations may develop necessitating the prompt and direct reassignment of airtankers and leadplanes enroute to an incident or diverting them from a going fire.

   o **Airtanker Base Hours of Operation**
   During the core fire season period (June- September) all Great Basin large airtanker bases typically operate on a 0900-1800 local schedule. Based on local activity or at the discretion of the GBCC, airtanker base hours of operation may be adjusted when aircraft are required to come on early or extend past 1800.  Airtanker base hours of operation will be coordinated through normal dispatch channels. Dispatch centers will coordinate with the GBCC regarding early or extended staffing prior to 1730 each day.

   o **Airtanker Dispatch Limitations - Start-Up/Cut-Off**
   Multi-engine airtankers shall be dispatched to arrive over a fire not earlier than 30 minutes after official sunrise and not later than 30 minutes before official sunset. Retardant operations are permitted after sunset, but must have concurrence by involved flight crews. In addition, aerial supervision (lead/ ASM or ATGS) is required. Single engine airtankers shall comply with all single engine VFR requirements (30 minutes before sunrise, 30 minutes after sunset).

   Note that the limitations apply to the time the airtanker arrives over the incident/completes its dropping activity, not the time the aircraft is dispatched from its base.  The air tactical group

supervisor, airtanker coordinator or air tanker pilot in command (PIC) will determine that visibility and other safety factors are suitable for dropping retardant and notify the appropriate dispatcher of this determination.

### Airtanker Dispatch Limitations - Start-up/Cut-off Times
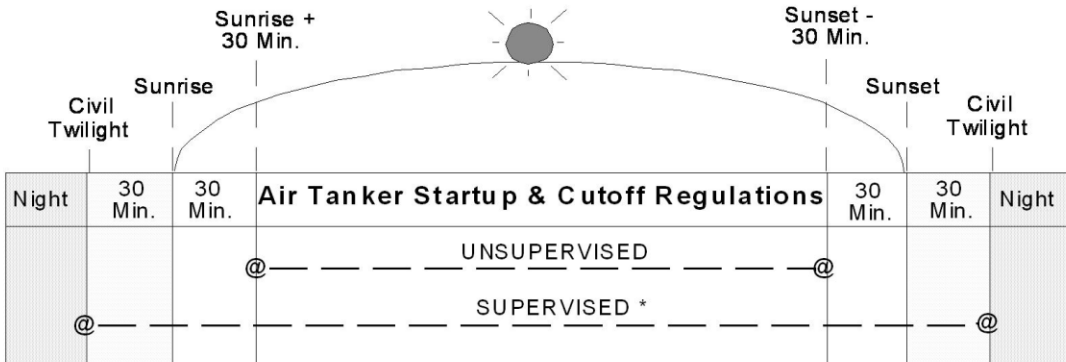


@ = Arrival Over the Fire (No earlier in the morning or later than in the evening).
* = SUPERVISED (Defined as Air Tanker Coordinator or Air Tactical Group Supervisor)
Note: Sunrise & Sunset are determined by the Official Sunrise and Sunset Tables of the nearest reload base

Reference the incident aerial supervision requirements table for additional information.

- **RETARDANT AVOIDANCE AREAS**

    There are specified areas on each national forest in the Great Basin Area where the use of retardant/fire chemicals has been determined to adversely affect terrestrial and aquatic species. These areas are identified on the individual retardant avoidance maps located at all regional airtanker bases, dispatch offices, permanent helibases, and supervisor's offices and on the GBCC webpage:

    https://sites.google.com/site/aerialsuper/home/maps-data/avoidance-areas-by-usfs-region

    If a misapplication of retardant occurs, follow the reporting and monitoring guidance found on the USFS Aerial Application of Retardant Web site: http://www.fs.fed.us/fire/retardant/index.html

### UNMANNED AIRCRAFT SYSTEMS (UAS)

Unmanned Aircraft Systems are considered aircraft and therefore must adhere to USFS/DOI policy (including approval and carding of aircraft and pilots). UAS include everything from hand operated devices weighing less than a pound to aircraft the size of commercial airliners.  UAS include any aircraft used, or intended to be used, for flight in the air with no onboard pilot.

UAS missions must be approved in advance by DOI (OAS) or the U.S. Forest Service, Washington Office and Regional Aviation Officer prior to use on any USFS/DOI agency projects (to include fire/incidents/prescribed fire, BAER, etc.).

When UAS are flown for USFS/DOI work or benefit, FAA, USFS, and DOI regulations apply.

Units wishing to utilize UAS must have a plan in place for how they are going to collect, process, and disseminate data gathered by a UAS.  Consult with your Unit Aviation Officer or the Regional/State aviation staff to assist in selecting and ordering the aircraft best suited for the mission.

The following minimum standards apply:

All aircraft (to include UAS) purchase, lease, or acquisition must follow agency procurement policy and procedures.

**DOI and USFS UAS policy and operational Guidelines for use of UASs is dynamic and there are differences in agency policies**

- **USFS**

  UAS flights under USFS operational control must adhere to USFS policy and regulations regarding their use.  Guidance can be found in FSM 5713.7, the USFS National Aviation Safety and Management Plan and at http://www.fs.fed.us/science-technology/fire/unmanned-aircraft-systems

- **DOI**

  UAS flights under DOI operational control must adhere to DOI policy and regulations regarding their use. Guidance can be found in 350-353 Departmental Manuals and Operational Procedures

  Memoranda 11: https://www.doi.gov/aviation/library/opm

**Key Points for all agencies**:

The use of any UAS (including model or remote controlled aircraft) for compensation is considered a "commercial" operation per the FAA. Commercial UAS operators must have a Section 333 Exemption and COA or Part 107 certification issued by the FAA. A list of companies with valid 333 Exemptions can be found here: https://www.faa.gov/uas

IMTs must notify the agency administrator prior to use of UAS. A modification to the Delegation of Authority should be considered.

Personally owned UAS or model aircraft may not be used by federal agencies or their employees for interagency fire use.

An emergency COA can only be issued by the FAA if the proponent already has an existing COA for their aircraft. The request must be accompanied with a justification that no other aircraft exist for the mission and that there is imminent potential for loss of life, property, or critical infrastructure, or is critical for the safety of personnel.

Cooperators, pilot associations and volunteer aviation groups or individuals may offer to fly unmanned aviation missions (i.e. aerial surveys, fire reconnaissance, infrared missions, etc.) at no charge to the IMTs. Although these offers seem very attractive, we cannot accept these services unless they meet FAA, USFS and/or DOI policy.

The FAA has established guidelines for hobbyists who fly model and remote controlled aircraft via Advisory Circular 91-57.  Model aircraft are to be flown only for recreation or hobby purposes. For further information, refer to:http://www.faa.gov/about/initiatives/uas/model_aircraft_operators.

Additional information can be found on the FAA website:

http://www.faa.gov/about/initiatives/uas/uas_faq/

**AIRSPACE**

- **TEMPORARY FLIGHT RESTRICTIONS (FAR 91.137)**.

  o **Policy**
    The policies and procedures found in the Interagency Airspace Coordination Guide have been adopted for all agencies' use and implementation.

- o **Procedures**

  It is <u>essential</u> that both local dispatch center and the GBCC dispatchers are trained in the policies and procedures found in the <u>Interagency Airspace Coordination Guide</u> "Interagency Request for Temporary Flight Restriction" and "Documentation of Contacts Requesting Deconfliction of Airspace by the Military."

  Local dispatch centers are responsible for:

  - Coordinating with military units for deconfliction of Special Use Airspace (SUA) and Military Training Routes (MTR's)

  - Submitting requests for temporary flight restrictions to the appropriate FAA air route traffic control center through the NOTAM Entry System (NES).  Documenting the request on an A#.

  - Informing the coordination center of temporary flight restrictions granted by FAA

  The coordination center upon request from a local unit, may assume the responsibility for requesting flight restrictions and/or assisting local units in deconflicting airspace with the military.

  For non-fire deconfliction of airspace, refer to the <u>Interagency Airspace Coordination Guide</u> or a local agreement (i.e., BLM and Air Force: Mountain Home, Hill, or Nellis).

  If a dispatch center is experiencing high workload with airspace coordination they may order an airspace coordinator. Additionally, military representatives to the FAA and agency airspace program managers (See <u>Interagency Airspace Coordination Guide</u>) are also available to assist.

- **MILITARY TRAINING ROUTES AND SPECIAL USE AIRSPACE**

  See the <u>Interagency Airspace Coordination Guide</u>. "Documentation of Contacts Requesting De-confliction of Airspace by the Military."

  Local dispatch centers are responsible for coordinating with military units for deconfliction of Special Use Airspace (SUA) and Military Training Routes (MTRs).  The GBCC, upon request from a local dispatch center, may assume this responsibility and/or assist local units.

- **AIRSPACE CONFLICTS**

  All airspace conflicts including accidents (mid-air collision), incidents (near mid-air collision), hazards (intrusions into airspace restricted under <u>Part 91.137 Temporary Flight Restrictions</u>) and other occurrences involving airspace shall be reported <u>immediately</u> by the individual involved with or observing the conflict to the local dispatch center or aviation manager.

  Upon notification of a conflict, the local dispatch center shall immediately notify the local aviation manager and/or airspace coordinator if in place.

  The local aviation manager/dispatch center shall immediately attempt to gather all pertinent details and report the occurrence to:

    The appropriate regional, state, or area aviation manager
    The coordination center

  These individuals shall take all necessary action to further report the occurrence according to agency requirements (e.g. in the case of an accident or incident with potential) and shall coordinate on the immediate follow up and investigation of the conflict.

  If the conflict involves a serious aviation accident involving injury or loss of life or property the coordination center shall immediately notify the NICC and the appropriate agency aviation manager.

If an airspace conflict occurs that involves UAS, local units and/or dispatch centers will follow the NWCG UAS Incursion Protocol (NWCG Memorandum 16-006) and report each incident to the affected ARTCC.

See the Interagency Airspace Coordination Guide for further information on airspace conflict reporting and follow up.

- **FAA TEMPORARY CONTROL TOWER OPERATIONS**

Temporary control tower assistance is available through the FAA's Western Service Area Agreement (AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA, and WY). (Reference Chapter 11 Interagency Airspace Coordination Guide). All requests for temporary control towers are ordered through GBCC on an Aircraft resource order.

FAA temporary towers should be activated when conditions of visibility or level of activity at an uncontrolled airport are such that FAA control will enhance safety. Airport managers should be consulted, as well as pilots and aircraft managers. When an agency requests that an FAA temporary tower be brought in due to complex aviation activity for an air base or incident, the following procedures must be followed:

Local dispatch center submits a resource order and Temporary Tower Request form to the GBCC for an FAA tower as an A#.

The FAA has requested additional information be provided when requesting FAA temporary control towers information and the FAA Temporary Tower Request form can be found at the following website: www.airspacecoordination.net

Provide the following when placing the order:

- o Site Location- does a facility exist? (consider ordering air ops/helibase trailers, office trailers, etc., via an equipment order form) Does the facility have a good field of view for taxi, takeoff, and approach paths? Does the facility have electrical and/or phone capability?

- o Estimated times of operation (sunrise to sunset)

- o Estimated duration of incident

- o The names, telephone numbers and e-mail/internet addresses of the local unit contacts.

**NOTE:** FAA personnel are not committed to 14 day assignments. The FAA will handle personnel switch outs as needed and may request assistance with travel arrangements.

The FAA will be responsible for staffing appropriately to meet the request and any internal requirements. (Agency will be responsible for providing total subsistence for FAA personnel).

The local unit aviation manager is responsible for providing a thorough briefing to the FAA controllers and assist the controllers in presenting their own briefing to pilots and other interested personnel.

Ensure that adequate radio equipment is available for use. These must be 760-channel VHF-AM radios. Note that the air ops/helibase trailers come with complete radio packages.

Be aware that the FAA will issue a NOTAM (Notice to Airmen) for the airport informing the public of the change in status from uncontrolled to controlled and identifying radio frequency for contact with the tower.

Additional Needs- since the FAA does not have the support equipment necessary to establish a temporary tower, the incident should order support equipment through established ordering channels.

See the National Interagency Mobilization Guide and the Interagency Airspace Coordination Guide, Chapter 11, for a list of support equipment.

When the incident no longer needs the tower, ensure that release procedures occur through the appropriate channels and payment documents are completed.

## AIRCRAFT IDENTIFICATION SYSTEM

- **ORDERING / RESOURCE TRACKING**

Units, in order to perform timely search and rescue must have a record of the complete FAA registration number of aircraft involved, including those designated below which are allowed to utilize a call sign other than the FAA registration number ("N"). Units shall use the established FAA aircraft registration ("N") number for logistical ordering/resource tracking through ROSS. **Resource orders must include the full FAA registration number for all aircraft**.

- **Tactical Aircraft Call Signs**
  Local or incident tactical aircraft must use the following call sign system for radio transmissions. Abbreviation to the last 3 numbers of the FAA registration number is permitted, provided there is no duplication of the call sign with that of another aircraft.

  - **Airtankers**
    Nationally assigned tanker number, for example call sign "Tanker 63."

  - **SEATs**
    Nationally assigned tanker numbers, for example call sign "Tanker 830."

  - **Aerial Supervision Module**
    Normally assigned pilot's lead number. State of Alaska will assign "A-Alpha" and all federal ASMs will assign a "B-Bravo" as their identifier. If the aircraft is flying with only a pilot the call sign will be "Lead".

  - **Leadplanes**
    Nationally assigned pilot's lead number, for example call sign "Lead 47".

  - **Air Attack**
    FAA registration number, abbreviation to the last 3 digits is permitted. For example, call sign "Air Attack 0TC." When assigned and over the incident, the air attack uses the fire name. For example, call sign "Pioneer Air Attack".

  - **Reconnaissance**
    FAA registration number, abbreviation to the last 3 digits is permitted. For example, call sign "Recon 51P."

  - **Helicopter**
    FAA registration number, abbreviation to the last 3 digits is permitted. For example, call sign "Helicopter 3HP."

  - **Smokejumper**
    FAA registration number, abbreviation to the last 2 digits is permitted. For example, call sign "Jumper 31."

## AIRCRAFT ACCIDENT AND INCIDENT/HAZARD/MAINTENANCE DEFICIENCY REPORTING

Any deviation from aviation policy or procedures, either on the ground or in the air, shall be reported through use of the SAFECOM report at: https://www.safecom.gov/, along with notification to the local unit aviation manager.

The agency with operational control of the aircraft at the time of the occurrence is responsible for ensuring timely submission by the observing or involved individual (i.e. flight manager) of the SAFECOM report. For aircraft enroute to an incident which are involved in an accident or incident/hazard/maintenance deficiency prior to arrival, the scheduling/sending dispatch office shall be the unit with reporting responsibility.

- **NOTIFICATION PROCEDURES FOR ACCIDENT AND MISSING AIRCRAFT**

  Reference the unit Aircraft Emergency Response Plan
  Notify agency aviation managers
  Notify the GBCC and the NICC

- **GREAT BASIN AIRSPACE CONFLICT INCIDENT REPORTING PROCESS**

  Any individual, regardless of agency, who observes any action that they feel has potential safety implications, should report such action on a SAFECOM.  The report must be timely and factual. The report should be submitted within 24 hours of occurrence, or sooner, if immediate action is needed.

  Agency Aviation Safety Manager(s) from the agency that had operational control of the incident will review and investigate the SAFECOMs. Discrepancies will be handled per agency direction. The agency on which the incident occurs will bear the cost of the investigation.

## AIRFIELD / AIRSTRIP CLASSIFICATION

Classifications of airfield/airstrips are contained in the USDA Forest Service Airfield/Airstrip Directory.  This directory is available at: http://www.fs.fed.us/fire/aviation/av_library/AAD2000.pdf

- **AIRFIELD / AIRSTRIP CATEGORIES**

  Category 1
  These are major airports that have paved, lighted, multiple runways served by FAA approved instrument approach procedure(s). These airports are generally limited by their weight bearing capacity.

  Category 2
  These airports generally serve small communities. They are equipped with at least one paved, lighted runway and services vary.

  Category 3
  These are airfields with limited or no services. They may be unpaved, unlighted and seasonally maintained. They are located either on federal, state, county, municipal or private land. Use approval must be obtained from the appropriate NF dispatch office.

  Category 4
  These are mountain/remote airstrips and are restricted by the FS to day VFR flight only. Use authorization must be obtained from the appropriate NF dispatch office. Pilots must have an endorsement on their Pilot Qualification Card and meet specific currency requirements.

- **BACKCOUNTRY AIRFIELDS**

  Backcountry airfields are identified as Category 4 in the Airfield/Airstrip Directory. Criteria for their use and pilot qualifications for Category 4 airfields are contained in the directory.

  Air operations into any airfield/airstrip should be coordinated with local dispatch and regional aviation personnel.

- **GREAT BASIN AIRPORT INFORMATION SOURCES**

     FAA airport/facilities directory
     Western States Flight Guide
     AirNav.com
     http://skyvector.com/

**SPECIAL USE AIRSPACE (SUA)**.  See the Interagency Airspace Coordination Guide for procedures.

Dispatchers unfamiliar with the military units with whom they are dealing should refer to the Geographical Location column, then locate the applicable Special Use Airspace for the area of operations.

Points of contacts, with specific procedures for each base/scheduling agency are as follows:

| Scheduling Agency | Special Use Airspace | Contacts |
|---|---|---|
| NELLIS Air Force Base | Desert MOA<br>RA 4806 East/West<br>RA 4807 Alpha/Bravo<br>RA 4808 North/South<br>RA 4809 | Range Scheduling:<br>Blackjack / Fire Reporting: 702-653-4707<br>Next day schedules: 702-653-7403<br>Weekend/Holiday: 702-653-5480<br><br>Nellis Air Traffic Control Facility:  702-652-2953 4222<br><br>Airspace Manager: 702-652-7891 |
| FALLON Naval Air Station | Austin MOAs<br>Gabbs MOAs<br>Ranch MOAs<br>Reno MOAs<br>RA 4802<br>RA 4804<br>RA 4810<br>RA 4812<br>RA 4813<br>RA 4816 North/ South | Range Scheduling: 775-426-2416 or 775-426-3643<br><br>Desert Control: 775-426-2419<br>Weekend/Holiday: 775-426-2419<br><br>Ops Duty Officer: 775-426-2200 |
| NEVADA Air National Guard | Low Altitude Tactical Navigation Area | Scheduling: 775-788-4595 |
| HILL Air Force Base | Barren MOA<br>Gandy MOA<br>Lucin MOA<br>Sevier MOA<br>RA 6402 Alpha<br>RA 6404 - Alpha/Bravo/Charlie<br>RA 6405<br>RA 6406 Alpha/Bravo<br>RA 6407 | **Hill AFB** 807-777-4404<br><br>**Clover Control:**  801-777-7575<br><br>**Scheduling**:  801-777-4401 or  801-777-9385<br><br>**Command Post**:  801-777-3007<br><br>**Airspace Manager**:  801-777-6926 |

| Scheduling Agency | Special Use Airspace | Contacts |
|---|---|---|
| MOUNTAIN HOME Air Force Base | R-3202<br>3204<br>Owyhee MOAs<br>Jarbidge MOAs<br>Paradise E & W MOAs<br>Saddle MOAs<br><br>**MHAFB 366th will also schedule all routes for IDANG 190th** | **366th Wing Scheduling**:<br>208- 828-4607 / 4631 / 2172<br>FAX: 208-828-4573<br>E-Mail: 366oss.ososas@us.af.mil<br><br>**MHAFB RAPCON**: Chief Controller Office<br>208-828-2854 / 2077<br><br>**Cowboy Control** (MHAFB):<br>Operations Floor: 208-828-1379<br><br>**MHAFB** Airspace Manager: Byron Schmidt<br>(use only when other coordination sources fail):<br>byron.schmidt@mountainhome.af.mil<br>208-828-4722 (W)    208-631-1958 (C)<br><br>MHAFB Command Post (use only when scheduling is not available): 208-828-5800 |
| IDAHO Air National Guard | Saddle MOA<br><br>Saddle MOA (Oregon)<br><br>R-3203<br><br>Triangle<br>Saylor Creek R-3202<br>NOE (Danskin Mts) | **IDANG 190th Wing Scheduling**:<br>** All scheduling for IDANG 190th will be done by MHAFB 366th Wing Scheduling. See above.*<br><br>**DNG 266TH RANS (Cowboy Control)**<br>Airspace Scheduling: 208 828 1614<br>FAX: 208 828 4041<br><br>**Orchard Training Range**<br>Scheduling/ Operations: Charles Ake<br>208 272 8224        Cell: 208 559 1587<br>FAX: 208 272 4462<br><br>**Range Officer**: CW2 Nathan Spaulding<br>208 272 8225        Cell: 208 841 1134<br><br>**Firing Desk**: 208-272-4444<br>OTA Security: 208-866-2620<br><br>**Army Aviation 183rd AVN BN (Helicopters)**<br>Idaho only: Operations Officer: 208-272-3976<br>FAX: 208-272-4046<br>E-Mail: granger.amthor@us.army.mil<br><br>**Joint Operations:**<br>208-272-5755    FAX: 208-422-6262 |

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