

## CHAPTER 50 - AIRCRAFT

Aviation resources are used for preparedness activities, supporting emergency incident operations, burn area rehabilitation projects, resource management project work, and administrative movement of resources and personnel. Requests for aircraft will be for official use and within Agency policy guidelines.

NICC is the sole source for large transport aircraft holding Federal Aviation Regulations (FAR) Part 121 Certificates for Type 1 and 2 Call-When-Needed (CWN) helicopters. Units requiring aviation services other than those assigned are available through preapproved agreements. As well, units requesting aviation support must order additional services through the Eastern Area Coordination Center.

Cooperator aircraft (State contracted, State owned, State managed National Guard aircraft, county, city or other) may be used on federal fires under the following conditions:

- The pilot and the aircraft have been approved in writing for the mission by either the FS or the Office of Aviation Services (OAS).
- There exists a written MOU (Memorandum of Understanding), Interagency Agreement or other document that authorizes aircraft use and payment for use.
- The cooperator aircraft will be operated within any limits on its use established in the written approval.
- The cooperator aircraft will be used only in situations where federal aircraft are not reasonably available.
- The cooperator aircraft will be released when federal aircraft become reasonably available.
- Use of cooperator-owned aircraft prior to exhausting local contracted resources must involve a "significant and imminent threat to life or property".

### **AIRCRAFT MOBILIZATION (NMG, Ch.50)**

When an area has depleted local aircraft resources, requests for additional aircraft will be placed with EACC. National aviation assets fall under control of the regional coordination center.

All aviation operations conducted within the Eastern Area will comply with the host unit agency's manuals, guides and/or handbooks. Only approved aircraft and pilots (both USDA and USDI source lists) will be used for transporting federal employees.

All federal flights will be documented in the Aviation Business System (ABS) or OAS 23 Form. Aerial operations conducted by States will follow state regulations except in joint operations with federal resources or on a federal mission, then federal regulations apply.

### **ORDERING PROCEDURES**

- All aircraft orders are coordinated through the local dispatch center.
- Response times are the most critical aspect of IA resources. The target airtanker takeoff time requirement of 15 minutes must be adhered to without compromising preflight and flight

planning requirements. Note: The difference in arrival times between available lead planes and next generation jet engine airtankers needs to be planned.

- The use of air attack and/or lead planes is critical for safe and effective support and should be ordered.
- Between the hours of 2000 and 0600 local time, pilots shall not be dispatched or contacted to ensure crew rest requirements are met. Orders for charter aircraft should not be placed with vendors between these hours unless they have a separate dispatcher available. Pilots should ensure duty limitations are met.
- ROSS is the preferred system to order tactical aircraft. However, for initial attack requests, paper resource orders or the EACC Tactical Aircraft Request Form will still be acceptable if necessary during time critical mobilization and will be followed up with a ROSS order.
- When a local area has depleted local aircraft resources, requests will be placed with EACC. Assigned aircraft will become the receiving area's resource until released. Exception is the FS Regional Office prepositioned aircraft; they will be released back to EACC at the end of each operational period. Selection factors for hiring aircraft are in the National Mobilization Guide (NMG, Ch. 50).
- The following lists the minimum information needed to process an aircraft request. The remainder of the ROSS resource order blocks will be completed as soon as activity allows.
  - Lat/Long must be provided in degrees and minutes (enter via the Initial Incident screen)
  - Reload base (all bases automatically loaded onto screen after Lat/Long is entered: edit desired bases from Admin screen)
  - Hazards (enter via the Incident screen)
  - Frequency (enter via the Incident screen)
  - Mission Priority (for airtanker requests, this should be relayed via phone and will be entered in "Special Needs" via the New Request screen)
  - Air and Ground Contact (would like this info, if known, but should not hold up the order. Enter via the Incident screen)
  - Descriptive Location (would like this info, if known, but should not hold up the order. Enter via the Initial Incident screen)
  - Elevation (for Helicopters or SEATs, if known, but should not hold up the order. Enter in "Special Needs" via the New Request screen)
- Dispatch centers must notify EACC of the commitment and release of national and area resources by phone.
- Local Airport Operations

**Area Ramp Operations:** When fire related aircraft activity is anticipated at any airport, both mobilization and demobilization is the responsibility of the dispatch center to assign appropriate airport personnel (i.e. Airport Liaison, FWBM, RAMP, etc.). These personnel are logistical requirements. It is the responsibility of the assigned airport personnel to keep the dispatcher promptly informed of all aircraft activity. This includes aircraft arrivals, departures, resources status, personnel, and all other pertinent managerial information.

**ORDERING PROCEDURES FOR EASTERN REGION PREPOSITION TACTICAL AIRCRAFT**

- Call EACC Aircraft Coordinator for aircraft status.
- Dispatch centers requesting FS Eastern Region preposition tactical aircraft resources must fill out the EACC Tactical Aircraft Request Form via fax or email using the EACC request form. Requesters are encouraged to follow up with a phone call to the EACC Aircraft Coordinator. The Tactical Aircraft Request Form can be found on the EACC website under Aviation Forms or in EMG, Ch. 80, and Dispatch Forms.

EACC Phone: 414-944-3811

EACC Aviation Fax: 414-944-3593

EACC Email: wieacc@fs.fed.us

- In the event of competing requests for FS regional resources, FS Eastern Region Fire Operations and EACC will set priorities according to mission logistical policies and protocols.
- EACC Aircraft Coordinator will call to verify information on the Tactical Aircraft Request Form and discuss additional requirements or charges.
- EACC will fax or email the Tactical Aircraft Request Form to the appropriate tanker base or helibase for launch. EACC will then notify the local dispatch center.
- Flight Follow in accordance with AFF national standards. The local dispatch unit where the resource is stationed will flight follow the aircraft. The local dispatch unit will relay ATD and ETA to EACC Aircraft Coordinator. Information will be relayed by EACC to requesting unit.
- EACC will follow up with an email message to all Eastern Area units and neighboring Geographic Areas when the resource is committed and or released.
- Tactical Aircraft Request Forms must be followed up by completing a ROSS aircraft request to EACC.
- Aircraft will be released back to EACC at the end of each operational period.
- Requesting units will contact EACC when resources are released. EACC will then relay information to dispatch center, helibase and/or tanker base.

**GACC-TO-GACC INITIAL ATTACK ORDERING OF AIRTANKERS AND LEAD PLANES**

Initial attack incidents are controlled by initial attack forces without the need for major reinforcements and within the first operational period. Initial attack involves the commitment of resources across recognized dispatch boundaries. Units requesting initial attack support must comply with the following guidelines:

- The Eastern Area Coordination Center (EACC) may order initial attack airtankers and lead planes directly from the Southern Area Coordination Center (SACC) only when proximity of the fire allows the airtanker to respond loaded directly to the incident. All other requests will follow standard ordering procedures.
- The change of status of any airtanker or lead plane and flight following information will be communicated by the sending GACC using standard procedures established in the NMG, Ch. 50.

## **AIRCRAFT OPERATIONS**

Aircraft may be used for a wide range of activities, including the movement of personnel and equipment for suppression and preparedness, reconnaissance, helitorch and/or plastic sphere dispenser operation, delivery of retardant, etc.

There are four basic sources for aircraft:

- Agency aircraft
- Exclusive Use contracted aircraft
- Call-When-Needed (CWN) or aircraft rental agreement (ARA) through the Office of Aviation Services (OAS)
- Commercial Carriers

Aircraft on federal incidents or carrying federal employees must be carded by interagency partners, OAS or the Forest Service. Aviation managers assigned to rotor or fixed wing aircraft are responsible for assuring that both the aircraft and pilot are currently carded for the desired mission. Commercial airlines are exempt from the aircraft and pilot carding requirement.

*The Eastern Area Coordination Center maintains control of all heavy airtankers (Type 1, 2, and CL-415 Scooper Aircraft) operating from bases located within the Eastern Area. The priorities for airtankers are:*

- Life and property
- Initial attack
- Other priorities established by management.

During heavy national fire activity, the National Interagency Coordination Center will prioritize and relocate airtankers as needed.

## **FLIGHT CREW/AIR CREW ORIENTATION**

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

- Incoming aviation resources
- Aviation Safety Assistance Teams (ASAT)
- Fire and Aviation Safety Team (FAST)

## **OVER WATER FLIGHTS**

For over water flights, pilots and aircrew shall adhere to PPE requirements as outlined in the Aviation Life Support Handbook. (ALSE). Reference the Aviation Life Support Handbook (ALSE) 2008 for additional information: <https://www.doi.gov/aviation/library/guides>.

**INITIAL ATTACK LOAD** (NMG, Ch. 50)

**AIRCRAFT DEMOBILIZATION** (NMG, Ch.50)

**FLIGHT MANAGEMENT PROCEDURES (NMG, Ch. 50)****National Flight Following Frequency is 168.6500 MHz.**

The National Flight Following Frequency is used to monitor interagency and contract aircraft. All aircraft on point-to-point or mission flights should establish/terminate flight following. Dispatch will confirm Automated Flight Following (AFF) on the National Flight Following Frequency. All dispatch centers/offices will monitor the National Flight Following Frequency at all times. A Continuous Tone Coded Squelch System (CTCSS) tone of 110.9 must be placed on the transmitter and receiver of the National Flight Following Frequency. The National Flight Following Frequency is to be used for flight following, dispatch, or redirection of aircraft. No other use is authorized.

**Types of Flights:** Point-to-Point flights are defined as flights that originate at one developed airport or permanent helibase with a direct flight to another developed airport or permanent helibase. These types of flights are often referred to as “administrative” flights. These flights require point-to-point approved pilots and aircraft. A point-to-point flight is conducted higher than 500 feet above ground level (AGL) except for takeoff and landing.

**Mission flights:** Mission flights are defined as those flights that do not meet the definition of a point-to-point flight. These types of flights are often referred to as “tactical” flights. A mission flight requires work to be performed in the air (such as retardant or water delivery, reconnaissance, smokejumper delivery, sketch mapping), or through a combination of ground and aerial work (such as delivery of personnel and/or cargo from a helibase to an unimproved landing site, rappelling, cargo let down, or wild horse herding). The pilot and aircraft must be agency approved (carded) for the mission being performed.

**FAA FLIGHT PLANS AND FLIGHT FOLLOWING (NMG, Ch. 50)****AGENCY FLIGHT PLANS AND FLIGHT FOLLOWING (NMG, Ch. 50)**

Agency flight plans are the responsibility of the originating dispatch office and are documented on a Flight Request/Flight Schedule or an Aircraft Resource order for mission flights. For mission flights, there are two types of Agency flight following: automated Flight Following (AFF), and Radio Check-in. AFF is the preferred method of agency flight following. If the aircraft and flight following office have AFF capability, it shall be utilized. Periodic radio transmissions are acceptable when utilizing AFF. (See AFF procedures below for more information). Radio Check-in/Check-out flight following requires verbal communication via radio every 15 minutes. The dispatcher will log the aircraft call sign, latitude, longitude and heading. Agency flight following is used for all mission flights. All aircraft operating on Agency flight plans shall monitor Air Guard. Helicopters conducting Mission Flights shall check in prior to and immediately after each takeoff/landing per IHOG 4.11.E.2. For point-to-point flights, AFF flight following may be used as well. The pilot or flight manager will, as a minimum, contact dispatch prior to the flight with an estimate time of departure, estimated time enroute, souls and fuel on board and will close out with dispatch once the aircraft is on the ground. Flight following is the responsibility of the originating dispatch office and will remain so until transferred through a documented, positive handoff. The flight following dispatch office shall be continually staffed while an aircraft is airborne. Confirmation

of an aircraft arrival at a specified destination is required to ensure that a flight has been completed safely. It is the pilot's responsibility to close out a flight plan. If an aircraft is overdue, it is the receiving dispatcher's responsibility to initiate aircraft search and rescue actions. Flight following problems are documented through the SAFECOM system.

**Active FAA IFR Flight Plan:** IFR flight plans shall be filed, activated upon departure, and closed upon arrival. An FAA Instrument Flight Rules (IFR) flight plan is required when flying into known or forecasted Instrument Meteorological Conditions (IMC). An IFR flight plan may be filed at pilot discretion in other cases.

**Active FAA VFR Flight Plan with Check In:** VFR flight plans shall be filed, activated upon departure, and closed upon arrival at destination. If an FAA Visual Flight Rules (VFR) flight plan is used, then a radio check-in every 60 minutes or less to an FAA facility is required.

**Radio Check In with the Agency at Pre-Established Intervals:** The pilot/fixed wing manager must be capable of maintaining radio contact with an agency dispatch center at intervals specified in the flight plan, generally not to exceed the 15 minute maximum (alternate to AFF in a local area if AFF is down).

**Automated Flight Following (AFF) is an approved interagency method of flight following and as well as Radio check-in.**

**Telephone Departure and Arrival Times:** Confirmation is completed when an aircraft is contacted via radio or the receiving dispatch center is called via telephone upon arrival at the airport. Aircraft ordered as an "A" (aircraft) request on a resource order and which are not located on the local unit will be tracked by telephone/radio arrival confirmation.

**Operational Control Hand Off:** The receiving unit will notify the sending unit (via established channels) immediately when they have established radio contact with the incoming aircraft or otherwise obtained operational control of the aircraft.

**Overdue Aircraft:** Aircraft will be considered overdue when 30 minutes have elapsed from the ETA provided on the resource order and contact has not been established.

## **AUTOMATED FLIGHT FOLLOWING (AFF) REQUIREMENTS AND PROCEDURES (NMG, Ch. 50)**

### **FLIGHT MANAGEMENT PROCEDURES: POINT-TO-POINT FLIGHTS**

All Aircraft Flight Requests/Schedules must be completed prior to departure and relayed through appropriate dispatch channels.

- **Applicability:** These procedures apply to flights which meet the definition of point-to-point flight which are ordered through a coordination center. Flights that result from an order placed by a coordination center and which move across geographical area or unit boundaries require the following:

- Resource Order: Use ROSS to order an aircraft when the control of the aircraft is being relinquished to the ordering unit.
- Flight Request: Use an Aircraft Flight Request/Schedule Form (9400-1a) when the aircraft is remaining in the control of the sending unit, e.g. transport of personnel, supplies, and/or equipment to an incident and returning. Aircraft Flight Request/Schedule shall be sent to EACC when charter aircraft is being used.
- **Purpose:** The overall purpose is to clarify and standardize procedures for users in the Eastern Area, providing for the safety and welfare of the flight crew and passengers, resource tracking and utilization, and administrative processing.
- **Roles and Responsibilities:** The roles and responsibilities of various levels of the dispatch organization (local, EACC, NICC) relative to flight scheduling, flight following, and resource tracking may vary with each situation. However, basic responsibilities that are standard for the local unit dispatch office, EACC, the scheduling dispatch office, the pilot, and the destination dispatcher are detailed below.

Note: The decision as to which unit (local or coordination center) will be the scheduling dispatch office should be based on common sense that allows for the most effective coordination possible. This decision is negotiable between EACC and the local unit(s) involved.

**EACC:** Evaluates the most effective means of transportation in response to orders received and filled, EACC will attempt to meet ordered time frames except when excessive costs would be incurred or safety is compromised. When the role of the scheduling dispatch is being performed by a local unit, EACC receives the Flight Request/Schedule Form from the requesting unit and relays the schedule to all involved offices (enroute dispatch units, NICC, receiving unit dispatch) as appropriate. As well EACC, when appropriate, relays flight information (check-ins, updates) to units outside the Eastern Area through normal dispatch channels (for example, EACC to NICC). When assuming the role of the scheduling dispatch, EACC shall fulfill all responsibilities required of the scheduling dispatch office. The Coordination Center shall notify the local unit where an aircraft is located and EACC's intent to utilize that aircraft.

**Local Unit:** When the local unit dispatch office assumes the role of the scheduling dispatch office, they shall fulfill the role and responsibilities required of the scheduling dispatch office.

**Scheduling Dispatch Office:** This unit is responsible for the entire mission, including scheduling, documentation of flight following methods, resource tracking, negotiation of post-flight disposition of aircraft, and processing of payment documents. Specific duties and responsibilities are:

- Schedules the proper aircraft to perform the assigned mission safely and cost effectively.
- Maintains responsibility for all aspects of the flight unless confirmed hand-off to another dispatch occurs.
- Documents the aircraft hand-off in writing. Flights to locations outside the geographic boundaries of the Eastern Area shall, in all cases, be handed off to EACC.

- Completes preliminary Aircraft Flight Request/Schedule, hazard analysis, and dispatcher/aviation manager checklist prior to departure.
- Discusses preliminary Aircraft Flight Request/Schedule and manifest with vendor and/or pilot to make any necessary adjustments and ensure the flight will be accomplished as planned.
- For all flights, transmits the Aircraft Flight Request/Schedule to the Eastern Area Coordination Center prior to departure.
- Adjust the Aircraft Flight Request/Schedule as necessary over the course of the flight and relays pertinent information through dispatch channels.
- Determines the flight following method with the pilot.
  - If performing resource tracking: Determines resource tracking method with the fixed wing manager, the Coordination Center, and, if appropriate, the pilot (i.e. no passengers on board to serve as fixed wing manager).
- As identified on the Aircraft Flight Request/Schedule, receives resource status, information from the fixed wing manager prior to initial departure, at enroute stops, and at final drop-off point or remain overnight (RON).
- Relays significant (greater than 30 minutes) delays or advancements in the Aircraft Flight Request/Schedule to EACC. EACC will, in turn, relay information to the destination dispatch office and units outside the Eastern Area (for example, NICC).
- Receives notification of arrival at final drop-off point or remain overnight (RON) from fixed wing manager and negotiates future disposition of the aircraft with pilot and EACC.

**Pilot:** It is important to remember that the pilot is the pilot-in-command (PIC) and has the final say concerning the safety of the aircraft and its occupants. In addition, the pilot performs the following:

- Approves the agency preliminary Aircraft Flight Request/Schedule or provides information to the scheduling dispatcher so that the latter can generate an agency Aircraft Flight Request/Schedule.
- Initiates an FAA flight plan, unless the pilot and dispatcher agree on agency flight following.
- Identifies the scheduling dispatch office name and phone number as the point of contact in block 17 (Destination Contact/Telephone) on FAA form 7233-1, Aircraft Flight Plan.
- Makes enroute check-ins with FAA or agency facilities as required.
  - If no passengers are on-board, functions as fixed wing manager and performs resource tracking check-in tasks as identified on the Aircraft Flight Request/Schedule.
- Closes out the flight plan through FAA.
- Completes agency payment or flight record forms per agency requirements.
- Pilots flying aircraft equipped with a VHF-FM radio capable of monitoring guard channel shall do so while enroute. In addition, they should monitor the primary frequency of the unit being over flown at the time.

**Destination Dispatcher:** The destination dispatcher is assigned resource tracking responsibilities at the receiving end of a flight (final drop-off point). The destination dispatcher confirms flight arrival. The destination dispatcher is responsible for:

- Receiving the Aircraft Flight Request/Schedule from the scheduling dispatcher via established dispatch channels.
- Receiving known delays/advances of a flight plan exceeding 30 minutes.
- Monitors flight itinerary (ATD, ETE, ETA) and notifies scheduling and receiving unit, via established channels, of aircraft that is overdue more than 30 minutes.
- Makes notification of arrival to the scheduling dispatcher via established channels, if requested.
- Performs flight following responsibilities, if requested by scheduling unit or EACC.
- Coordinates with EACC and/or scheduling dispatch center on the future disposition of the aircraft after arrival.
- Assists in search procedures for overdue aircraft, if requested, utilizing unit's aircraft search/rescue guides, as appropriate.

**Fixed Wing Manager:** The fixed wing manager is the government representative on board the aircraft who works with the pilot to ensure safe and efficient flight management. If no government representative is on board, the pilot will assume the duties of the fixed wing manager. Refer to Interagency Aviation Training (IAT) Requirements for non-fire mission flights.

#### **PROCEDURES FOR FLIGHT REQUEST/SCHEDULE PREPARATION AND TRANSMISSION**

**The scheduling dispatcher is responsible for completing, in total, the Aircraft Flight Request/Schedule.**

Prior to departure, the pilot and scheduling dispatcher will mutually agree on an Aircraft Flight Request/Schedule and manifest. The pilot will specify type of flight following to be utilized; this shall be documented on the Aircraft Flight Request/Schedule. FAA flight following shall be utilized in most cases except those where it is not feasible, for example, terrain, communications, etc.

Prior to departure, the scheduling dispatcher and fixed wing manager will review the Aircraft Flight Request/Schedule and manifest. The scheduling dispatcher will also specify and review resource tracking requirements with the fixed wing manager.

Except in an emergency or at the direction of an air traffic control facility, there shall be no deviation from the submitted Aircraft Flight Request/Schedule while enroute unless the agency representative aboard the aircraft reports the amended Aircraft Flight Request/Schedule to a designated point-of-contact.

**The scheduling dispatcher will relay the Aircraft Flight Requests/Schedule to EACC or directly to the destination dispatcher if pre-negotiated with the Coordination Center.**

For flights coming into the Eastern Area from another geographic area, EACC will relay the Flight Request/Schedule to the appropriate offices. For flights leaving the Eastern Area enroute to another geographic area, the Coordination Center will relay the Aircraft Flight Request/Schedule to the appropriate offices (for example, NICC).

If significant (30 minutes or more) delays or advancements in the schedule are encountered, the pilot must relay the information through an FAA facility to the scheduling dispatcher or if equipped with a VHF-FM radio, to a dispatch office who will notify the scheduling dispatcher. Notification may also be made by the fixed wing manager at an enroute stop.

If an aircraft meets the overdue, missing, or crashed criteria, the current Interagency Aviation Mishap Response Guide and Initial Response Checklist Guide will be implemented by the dispatcher with resource tracking responsibility, or by the dispatcher who receives notification from the FAA of such an aircraft. (See Local Mishap Response Guides for amplifying information.)

### **FLIGHT MANAGEMENT PROCEDURES FOR TACTICAL/WORKING MISSION FLIGHTS**

Tactical aircraft or working missions are defined as helicopters, airtankers, reconnaissance/aerial observer/air attack, lead planes, smokejumper, cargo, infrared, survey, etc. and will be recorded on an agency flight plan or resource order.

Pilots will confirm Automated Flight Following (AFF) or transmit position to the appropriate unit dispatcher every 15 minutes while performing the mission. All GPS equipped aircraft will include latitude, longitude, and heading in their check-in reports.

Flights which anticipate entering areas where radio communications are inadequate or are conducting operations at low level are expected to notify the monitoring dispatch station of their location, intentions and when to expect the next check-in. In these instances, a flight may not be out of radio contact for more than thirty (30) minutes.

Pilots will monitor assigned frequencies at all times. When airtankers, lead planes, smoke jumper aircraft, or helicopters check in with an Air Tactical Group Supervisor over an incident, they are no longer required to give position reports to a dispatch office. Air Tactical Group Supervisors are expected to give status reports on all aircraft under their control over an incident. After aircraft are released from an incident and control of the ATGS, they must resume flight following with a dispatch office.

- **Local Unit Working Missions:**
  - Flight following within local units, or established zones with formal agreements, is the responsibility of the local unit/zone.
- **Roles and Responsibilities:**
  - **Dispatchers:**
    - Dispatchers who have flight following responsibility or tactical control over missions will remain on duty at their radio station until their involvement and responsibility has ended or the flight plan closed.
  - **Pilots:**
    - The pilot is the pilot-in-command and has the final say concerning the safety of the aircraft and its occupants.
    - Pilots of air attack, lead plane, or airtanker are responsible for completing the information on the aircraft resource order. Local units are responsible for providing

copies of this format to pilots. See the Interagency Airtanker Base Operations Guide for further information.

- Pilots will check-in with the ordering dispatch office on the radio frequency specified on the resource order ten minutes prior to arrival at the area of operation or ordered airport.
- **Procedures:**
  - **Ordering/Dispatching:**
    - The sending dispatcher is responsible for ensuring that tactical aircraft pilots are furnished with the aircraft information identified on the resource order (latitude, longitude, bearing, distance, air contact and frequency, ground contact and frequency, and other aircraft/hazards, including MTFs, TFRs, and SUAs). The Interagency Airtanker Base Operations Guide provides a format that pilots of tactical airplanes shall use to document information received.
  - Ensure enroute Flight Following
  - Initial Attack or Incident Support within a Unit's jurisdiction
  - While enroute on an initial attack or incident support mission within a unit's jurisdictional boundaries, tactical aircraft will check in with the unit dispatch office via radio every 15 minutes or, if agreed upon, will use AFF.
  - Alternative check-in schedules may be utilized if longer duration is necessitated by terrain or other factors provided these are identified and planned for in advance.
  - Positive hand off to the incident is essential when the aircraft has made contact prior to entering the Fire Traffic Area of the incident.
  - When over the incident, tactical aircraft will check in through the appropriate party (air tactical group supervisor, incident commander, lead plane, or if the tactical aircraft is the only resource on-scene, with dispatch).
  - Cross Jurisdictional Initial Attack or Incident Support
  - While enroute to an initial attack or incident support mission across jurisdictional boundaries, tactical aircraft pilots or aircraft managers will relay flight route and ATD/ETE/ETA information to the sending unit dispatcher, who will relay via established channels to the receiving dispatch office.
  - Sterile cockpit rules apply within a 5-mile radius of the airport. The flight crew will not perform radio or cockpit communication during that time that is not directly related to safe flight of the aircraft from taxiing to 5 miles out and from 5 miles out until clearing the active runway. Consider requesting a call after landing to confirm arrival.
  - Confirmation of arrival of tactical aircraft ordered via an "A" request on a resource order will be transmitted back to EACC.
  - Flight Following/Tracking Responsibilities (Tactical Aircraft)
    - The following procedures apply to all tactical aircraft moving across unit boundaries.
- **Responsibilities of the Sending Unit:**
  - Sending unit is the dispatch unit/coordination center which sends the aircraft responsible for ensuring the pilots are furnished with the aviation information identified on the resource order (latitude, longitude, bearing, distance, air contact and frequency, ground contact and

- frequency, and other aircraft/hazards including MTRs, TFRs, and SUAs). Obtain ATD (actual time of departure) and ETA (estimated time of arrival) from the pilot or aircraft manager and relay the ATD/ETA to the sending units via established ordering channels.
- Notify EACC of any delays/advances of the Flight Request/Schedule exceeding 30 minutes.
  - Coordinate/initiate search procedures for overdue aircraft. Utilize the agency search/rescue plan as appropriate. An aircraft is considered overdue one hour after the filed arrival time. Responsible aviation managers or coordination centers should initiate preliminary actions, such as a follow-up inquiry when no word has been received 30 minutes beyond the scheduled time of arrival.
  - On flight request documented stops enroute to the destination, instruct the pilot-in-command (PIC) or aircraft manager to call the phone number identified for enroute tracking. Fuel truck and support truck drivers should also be informed to contact the phone number identified for enroute tracking.
- **Responsibilities of the Receiving Unit:**
    - Receiving unit is the dispatch unit/coordination center that is receiving the aircraft.
    - Confirm arrival by telephone of all tactical aircraft ordered via a resource order to EACC.
    - Notify EACC of any delays in a Flight Request/Schedule or overdue aircraft exceeding 30 minutes.
    - Advise pilot of any changes/modification to the original order relating to the following:
      - Information regarding hazards in and around the incident (within 10 miles of the incident airspace) that were not identified on the resource order.
      - Information regarding other aircraft operating in or near incident airspace.
      - Information on Temporary Flight Restrictions requested or in effect.
      - Specify flight following methods while enroute to and from an incident or airport.
      - Coordinate and initiate search procedures for overdue aircraft with sending unit.
      - Utilize agency/center aircraft search and rescue guides as appropriate.
      - Provide pilot and crew briefing as soon as practical, no later than their first refueling opportunity.
      - Confirm arrival of all tactical aircraft ordered through proper dispatch channels with a phone call to EACC who will relay to NICC.
  - **Responsibilities of EACC:**
    - Relay Aircraft Flight Request/Schedule itinerary to the receiving/ordering unit (via established channels) by telephone, fax or email.
    - Notify receiving/ordering unit of known delays/advances of an Aircraft Flight Request/Schedule exceeding 30 minutes.
    - Confirm arrival of all tactical aircraft ordered through proper channels with a telephone call.
    - Notify sending unit (Eastern Area unit/NICC) of any aircraft overdue by more than 30 minutes.
    - Track all tactical aircraft to their final destination within the area.
    - Assist in search procedures for overdue aircraft when requested by the sending/receiving unit.

## AIRCRAFT SELECTION FACTORS

When selecting aircraft, several factors will be taken into consideration to determine the best aircraft for the mission. Factors may include but are not limited to:

- **Day/Night:** A multi-engine IFR approved aircraft and pilot are required whenever a flight will be conducted within the period commencing 30 minutes after official sunset to 30 minutes before official sunrise.
- **IFR/VFR:** Use an approved multi-engine, IFR rated aircraft and pilot whenever the flight will be or is expected to be in Instrument Meteorological Conditions (IMC).
- **Passengers:** Ensure the aircraft can transport the weight of the passengers and baggage. Remember that weight, and in some cases bulk, are usually the limiting factors not necessarily the number of seats.
- **Cargo/Cubes:** Ensure the aircraft is large enough to accommodate both the weight and cubes of the cargo. Ensure the cargo will fit through the aircraft door.
- **Distance/Speed:** If the trip is short, aircraft speed is less significant. As distance increases, speed becomes more important (i.e. a faster, more expensive aircraft may accomplish the mission at a lower cost).
- **Runway Length:** Ensure the runway surface and condition is adequate for operations.
- **Elevation/Temperature:** Density altitude must be taken into account. Airport elevation and temperature affect takeoff and landing distances and degrade aircraft performance.
- **Requests for High Performance aircraft.**

## AIRTANKERS (NMG, Ch. 50)

The primary mission of federally contracted large fixed-wing airtankers is initial attack operations. NICC will prioritize and allocate federal airtankers by positioning them in areas of current or predicted high wildfire danger or activity. For a list of the 2016 federally contracted airtankers, refer to the following website: <http://www.nifc.gov/nicc/logistics/aviation/aviation.htm>.

Airtankers are a national resource and require a 15 minute commitment notification. Geographic Areas administering these aircraft will make them available for wildland fire assignments when ordered by NICC. When a Geographic Area has depleted their available Large Airtanker (Type 1 or 2) resources, additional requests will be placed with NICC. Large Airtanker initial attack agreements between neighboring unit dispatch centers are valid only where proximity allows the airtanker to respond loaded direct to the incident.

There are five (5) types of airtankers:

<u>Type</u>		<u>Capacity (Minimum)</u>
Very Large Airtanker (VLAT)	-	8,000 gallons or more
1	-	3,000 to 7,999 gallons
2	-	1,800 to 2,999 gallons
3	-	800 to 1,799 gallons
4	-	Up to 799 gallons

- Rotation:
  - The policy found in the Interagency Airtanker Base Operations Guide, NFES 2271 <http://www.nwcg.gov/pms/pubs/pms508.pdf> shall be followed in all cases.
- Assignment to Incidents:
  - Normally, airtankers are not assigned to a specific incident, even though they may have been ordered on an incident/project order number. To avoid confusion on airtanker status, EACC is responsible for informing local units of developing fire situations which may preclude the local incident's use of airtankers. The local unit, in turn, is responsible for informing area operations personnel assigned to incidents of this potential.
- Dispatching Procedures:
  - See Interagency Airtanker Base Operations Guide, NFES 2271, for specific procedures.
- Movement/ordering of airtankers will be through normal dispatching channels only.
- Dispatch Rotation and Priority of Large Federally Contracted Airtankers:
  - To ensure a fair and equitable rotation of airtankers, the following policy will be followed by airtanker bases when operating federally contracted large airtankers. This policy is to ensure that contractors are treated uniformly regardless of the work site (federal, State, or jointly operated airtanker bases). When assigned to incidents managed by other agencies or state cooperators, federally contracted aviation resources remain under the direction of the Federal Contracting Officer and are bound only by their contract with the Forest Service. Hence, federally contracted aviation resources will be treated fairly and equitably during their assignment with other Federal or State agencies.
- Rotation of State Airtankers:
  - Rotation of State resources on State incidents at state airtanker bases is established by their agency. In cases where State resources are operated in conjunction with federal contract large airtankers on an incident primary on federal lands, airtankers shall be rotated per the national policy with the State resources being added to the rotation after the federal resources at the beginning of each day.
- Airtanker Diversion:
  - The priorities for airtanker use are:
    1. Life
    2. Property
    3. Other priorities established by management
  - Situations may develop necessitating the prompt and direct reassignment of airtankers enroute to an incident or diverting them from a going fire. To ensure these priorities are met, EACC maintains coordination of all airtankers that have been ordered through the Center.
- Portable Retardant Plants:
  - Portable retardant plants are available through several sources. Ensure that proper facilities, infrastructure, and personnel are in place prior to arrival. Contact EACC Aviation Coordinator, 414-944-3811, for information on ordering procedures.

- Portable Retardant Plant Locations: Please call EACC Aircraft Coordinator, 414-944-3811, for current locations.
  - Eastern Area: Minnesota State (1)
  - Southern Area: Southern Interagency Fire Cache (2)
  - Direct hire via FS contract: National Fire Retardant Chemicals Requirement Contract <http://www.fs.fed.us/fire/contracting/>.

### **AIRTANKER DISPATCH LIMITATIONS STARTUP/CUTOFF TIMES**

The using agency will make the decision whether or not these startup/cutoff times apply to SEAT operations (regardless of which agency furnishes the aircraft). To reduce the hazards to large airtanker operations posed by shadows in the early morning and late evening hours, limitations have been placed on times when airtankers drop on fires. Note that the limitations apply to the time the aircraft arrives over the fire and conducts its dropping activity, not the time the aircraft is dispatched from its base.

The air tactical group supervisor or airtanker coordinator will determine that visibility and other safety factors are suitable for dropping retardant and notify the appropriate dispatcher of this determination. Dispatchers and airtanker base managers, in consultation with airtanker coordinators or air tactical group supervisors, are mutually responsible for ensuring these limitations are not exceeded.

The following will apply:

- Aerial Supervision Optional:
  - Airtankers may be dispatched to arrive over the fire under normal agency aerial supervision policy, provided that the aircraft's arrival is between 30 minutes after official sunrise and 30 minutes before official sunset.
- Air Tactical Group Supervisor or Airtanker Coordinator Required:
  - A qualified air tactical group supervisor or airtanker coordinator is required on scene if the airtanker arrival over the fire and its dropping activity will occur during:
    - The period from 30 minutes prior to official sunrise to 30 minutes after official sunrise
    - The period from 30 minutes prior to official sunset to 30 minutes after official sunset
- Determinations of Time for Airtanker Dispatch:
  - For airtanker dispatch, use the official sunrise, start-up, cut-off, and sunset times of the airtanker base nearest the fire and comply with the start-up/cut-off times.

### **PORTABLE/MOBILE RETARDANT MIXING BASES**

Portable retardant bases are suitable for helicopter use in close proximity to the fire or at an airport that does not have an airtanker base.

Portable or mobile retardant bases are available through Basic Ordering Agreements (BOA) and are ordered directly from the companies currently under Agreement. For current vendors, reference the Long Term Fire Retardant Requirement contract <http://www.fs.fed.us/fire/contracting/retardant/retardant.htm>.

Order the appropriate retardant base and type of retardant depending on need, i.e. airtanker or helicopter. If the need is for helicopter operations, determine if a bucket or fixed tank will be used and order the appropriate qualified/approved chemical. Check with aircraft personnel for the type of product generally used in your area. Due to corrosion problems, only certain products are approved. Check for approved wildland retardants on the qualified products source list. Products are limited for fixed tank helicopters.

Resource requests for portable retardant plants are ordered via ROSS as Equipment, All Retardant Plant, portable. Portable retardant plants are not typically entered in ROSS as resource items. When ordering directly from the National vendors, use Fill with Agreement utilizing the current National Contract.

### **SUNRISE/SUNSET TABLES**

Airtanker bases and dispatch centers shall have tables showing the official sunrise, cut-off, and sunset times at their location. These tables are available through at the following website:

[http://aa.usno.navy.mil/data/docs/RS\\_OneDay.html](http://aa.usno.navy.mil/data/docs/RS_OneDay.html).

### **AIRTANKER USE IN OPTIONAL AND POST SEASON PERIODS (NMG, Ch. 50)**

#### **MODULAR AIRBORNE FIREFIGHTING SYSTEMS (MAFFS) (NMG, Ch. 50)**

MAFFS provides emergency capability to supplement commercial airtankers on wildland fires. MAFFS are to be used as a reinforcement measure when contract airtankers are committed or not readily available.

#### **SINGLE ENGINE AIRTANKERS (SEATS) (NMG, Ch. 50)**

The SEAT module will include a support vehicle with batch mixing capability for wet and dry retardant. They are available for interagency use and will be requested through established ordering channels. If the ordering office cannot provide a SEAT manager, one should be requested on an overhead order. For additional information, refer to the Interagency Single Engine Airtanker Operations Guide (ISOG, NFES 1844): <http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Airops/seat.html>

There are a number of SEAT contracts in the Eastern Area, mainly in Pennsylvania, New Jersey, Wisconsin, and Minnesota.

- USDA-FS: Forest Service may use a SEAT contracted by cooperators (for example, DOI or State agency) provided that they meet the requirements in FSM 5713.45.
- DOI: Pilot shall be carded as either a Level I or Level II SEAT.

#### **LEAD PLANES (NMG, Ch. 50)**

For a complete list of all Lead Planes/Aerial Supervision Aircraft, refer to the following website:

[http://www.nifc.gov/nicc/logistics/aviation/Lead\\_Planes.pdf](http://www.nifc.gov/nicc/logistics/aviation/Lead_Planes.pdf).

Separate "A" request numbers will be assigned for each lead plane/ASM/air attack order following requests for airtankers or other tactical air resources. EACC shall advise the ordering unit if a lead plane/ASM/air attack is not readily available. The unit shall then advise the Center on whether or not to keep the aerial supervision order active. The lack of a readily available aerial supervision resource shall not delay the dispatch of an airtanker piloted by an initial attack rated airtanker pilot.

When competition for lead planes/ASM/air attack aircraft exists within the Eastern Area, EACC shall prioritize reassignment of these resources.

Replacement of an incident's lead plane/ASM/air attack aircraft that has been reassigned will be negotiated between EACC and the using unit.

To ensure effective supervision and timely mission accomplishment of all aircraft over an incident, units shall adhere to the following guidelines and requirements for ordering and utilization of aerial supervision aircraft.

Under certain circumstances, the use of aerial supervision aircraft is essential to the safe and cost effective operation of airtankers. If available, they will be dispatched to all airtanker assignments according to agency policy. Additionally the startup/cut-off time policy shall be followed.

The use of air attack aircraft and air tactical group supervisors is important to the safe and cost effective supervision of aerial firefighting operations. Coordination, especially in congested airspace or in military training areas, is essential to safe flight. The policies and procedures found in the Interagency Airspace Coordination Guide have been adopted for all agencies' use and implementation. Tactical air supervision will be dispatched according to agency policy and/or as required by the startup/cut-off time policy.

#### **TACTICAL AND RECONNAISSANCE AIRCRAFT (NMG, Ch. 50)**

Air attack and reconnaissance aircraft are on Call-When-Needed (CWN) and Exclusive Use Contracts solicited and inspected by the Office of Aviation Services (OAS), FS and other federal agencies. They are available for interagency use and will be requested through established ordering channels. The ordering office may request the aircraft with specific avionics equipment.

Within the Eastern Area, contract or agency-owned dedicated air attack aircraft shall be dispatched with both a pilot and air tactical group supervisor on board when available. There are several air tactical aircraft under CWN contract in the geographic area. Contact the EACC Aircraft Coordinator for additional information.

### Eastern Area Aerial Supervision Requirements and Guidelines

SITUATION	LEAD PLANE/ASM1 REQUIREMENT/GUIDELINE	AIR ATTACK REQUIREMENT/GUIDELINE
Non-initial attack rated airtanker pilots	Required (must not drop unless lead plane is on scene)	None
Dropping of retardant in congested areas	Required	Must be ordered
Multiple aircraft operating in a congested area, 2 or more	None, unless airtanker operations	Must be ordered
Retardant operations conducted during the period ½ hour before sunrise to ½ hour after sunrise, and ½ hour before sunset to ½ hour after sunset	Airtankers must not be dispatched unless lead plane/ASM1 <u>or</u> air attack can be on scene during drop operations	
Modular Airborne Firefighting System (MAFFS)	Required (must not drop unless lead plane/ASM1 is on scene)	Must be ordered
CL-415	Must not drop unless lead plane/ASM1 or air attack is on scene	
Multiple airtanker operations	Automatically request the lead plane/ASM1; if not readily available, keep order active if extended attack is anticipated and lead plane/ASM1 can arrive in time to supervise operations	Optional, unless other criteria are met (i.e., mix of different tactical aircraft types and incident complexity dictates need)
Single airtanker operations where an lead plane/ASM1 is co-located with the airtanker	Automatically request the lead plane	Optional, unless other criteria met
Mix of different tactical aircraft types (e.g., airtanker, helicopter, smoke jumper) and the incident complexity dictates the need for air tactical coordination	Optional, unless airtanker operations dictate need	Must be ordered
Numerous resources of a single type	See Multiple Airtanker Operations	Optional, depending upon situation and complexity
Conditions of visibility and/or terrain create a serious hazard to ground or air resources	Mandatory	Must be ordered
National Exclusive Use, Forest Service contract, CL-415	Initial attack carded, none required	

**HELICOPTERS: CALL-WHEN-NEEDED (CWN) (NMG, Ch. 50)**

Before to being sent to the incident or project, helicopter(s) and modules must be joined up away from but convenient to the incident or project (at the nearest airport, for example). Prior to conducting operations, the Helicopter Manager or Forest Aviation Officer shall conduct a pre-use inspection verifying that all is in order, brief the pilot on the details of the assignment, and perform a power assurance engine check.

All incident assignments require that a qualified CWN helicopter module be assigned. Refer to NMG, Ch. 50 and the Interagency Helicopter Operations Guide, NFES 1885 (IHOG) for further information.

During active fire season, local dispatch offices must advise EACC of all CWN requests/assignments made by their offices. The Unit Aviation Officer is responsible to notify the Area Aviation Officers when CWN aircraft have been activated.

- Types 1 and 2 Call-When-Needed (CWN) Helicopters
  - Types 1 and 2 CWN helicopters are available under national contract and shall be ordered via established dispatch channels. The definition categories for limited or standard, as well as additional information on CWN helicopters can be found in the NMG, Ch. 50.
- Type 3 CWN Helicopters
  - Ordering:

There are two procurement methods normally used for acquiring Type 3 CWN/on-call helicopters within the Eastern Area.

    - Forest Service, CWN contract - Coordination Centers and local dispatch offices refer to section C-25 Authorized Ordering Activities in the CWN contract.
    - Office of Aviation Services (OAS) – On call small helicopter contract administration by OAS in Boise, Idaho. Source list includes 17% surcharge.

All Type 3 CWN/on call helicopters will be ordered following standard dispatch procedures. 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. See OAS OPM 06-21 & IHOG.

For incidents or projects on lands administrated by National Forests within the Eastern Area, CWN helicopters shall be ordered from either the Forest Service Type 3 helicopter contract or the OAS on call contract. A cost comparison must be completed by the ordering office when deciding which procurement method to use.

For incidents or projects on DOI administrated lands. Type 3 CWN helicopters shall be ordered from OAS source list.

- Fire Use:  
All requests/assignments must be reported to EACC, with subsequent notification outlined above to the agency's aviation manager. All other orders shall be submitted to the Coordination Center.
- Project Use:  
For Forest Service projects/orders, use the same procedures as listed above for fire use. For DOI Agencies, all orders for Type 3 helicopters may be placed directly with the vendor using state contracts or agreements. Note that OAS Source list Aircraft Rental Agreement (ARA) aircraft may be utilized by the state provided the state has been assigned or obtains an OAS Billee Code.

#### HELICOPTERS MODULES (IHOG, NFES 1885)

Helicopter Type	FAA Standard/Transport Category	FAA Standard Category Temporarily Designated for Limited Use	FAA Standard Category Permanently Designated for Limited Use <u>or</u> FAA Restricted Category
1	Manager plus Four (4) Helicopter Crewmembers	Manager only	Manager only
2	Manager plus Three (3) Helicopter Crewmembers	Manager only	Manager only
3	Manager plus Two (2) Helicopter Crewmembers	Manager only	Manager only

CWN Helicopter and Module must meet up away from Incident(s) or Fire Operations. The minimum required staffing levels must be filled with fully qualified personnel. Trainees may be ordered in addition to the standard module configuration. Trainees may be ordered in addition to the standard module configuration.

#### CWN FS CONTRACT vs. OAS CONTRACT HIRING

Some CWN aircraft vendors hold contracts with both OAS and the FS for each of their aircraft. For federal incidents, the dispatch center will document on the resource order which contract (OAS or FS) the aircraft is hired under, based on the host agency of the incident.

#### EXCLUSIVE USE CONTRACT HELICOPTERS (NMG, Ch. 50)

Prioritization for FS Eastern Region exclusive use helicopters will be accomplished by EACC through the Region 9 Fire Operations, Regional Aviation Officer, and the EACC Center Manager.

#### Type 3 Exclusive use Helicopters

The Forest Service (FS) Eastern Region has established a Type 3 Exclusive Use Helicopter Program for the 2016 operating period. The program provides regional guidelines for this shared resource between all Eastern Region National Forests. The two Exclusive Use Type 3 helicopters are contracted for initial attack, support of wildland fire suppression, and prescribe fire activities. The helicopters are hosted by

the National Forests listed below. These units provide administrative management support for the two helicopter contracts.

- Mark Twain National Forest  
Availability period: Feb. 7<sup>th</sup> to May 31<sup>st</sup>.  
Helibase Location: Rolla - Vichy, Rolla National Airport, Vichy, MO (VIH)
- Shawnee National Forest  
Availability period: Feb. 23<sup>rd</sup> to September 30<sup>th</sup>, will start out on the Shawnee NF  
Helibase Location: Williamson County Regional Airport, Marion, IL (MWA)  
It will start out on the Shawnee NF then move up to the Huron-Manistee approx. April 1<sup>st</sup> – 30<sup>th</sup>  
then move up to the Superior NF May 1<sup>st</sup> – Sept 30<sup>th</sup>.
- Superior National Forest  
Availability period: Feb. 23<sup>rd</sup> to Mar. 1<sup>st</sup>.  
Helibase Location: Ely Airport, St Louis Co, Ely, MN (ELO)

Other potential fixed wing or helibases:

- Wexford County Airport, Cadillac, MI (CAD)
- Rhinelander Airport, Oneida County, Rhinelander, WI (RHI)
- Tell City Airport, Perry County, Tell City, IN (TEL)

### **Type 1 Exclusive Use Helicopter**

The FS Eastern Region hosts a National Type 1 Exclusive Use Helicopter. Locations are not guaranteed and are subject to national prioritization.

- Oscoda, MI: April 10<sup>st</sup> to May 1<sup>st</sup>  
Helibase Location: Oscoda – Wurtsmith Airport, Oscoda, MI (OSC)
- Ely, MN: May 7<sup>th</sup> to June 15<sup>th</sup>  
Helibase Location: Ely Airport, St. Louis County, Ely, MN (ELO)

### **LARGE TRANSPORT AIRCRAFT (NMG, Ch.50)**

Large transport aircraft are National Resources and will be requested through NICC.

- Scheduling: Large transport aircraft arranged by NICC are requests on a per mission basis. Flight Following ATD/ETE will be relayed by the NICC Aircraft Desk for flight leg.
- Requests for Large Transport: When requesting a large transport aircraft, the following information is required:
  - Number of passengers and/or cargo weight per destination, and combined total weight for the flight.
  - Pick-up point at jetport and time passengers and/or cargo are available to load. NICC requires 48 hours lead time to plan and schedule aircraft for demobilization flights.
  - Pick-up point at the jetport is the Fixed Base Operator (FBO) or gate at the airport terminal where the aircraft will park.
  - Passengers must be weighed and manifested prior to boarding the aircraft.

- Government or contractor support available at each airport, including contact person and telephone number.
- All personnel listed on the manifest and flight crew members should be provided at least one sack lunch.

## **AERIAL IGNITION**

There are two aerial ignition devices approved for Forest Service and DOI use: the helitorch and the plastic sphere dispenser (PSD). There are specific training and certification requirements for aircraft, pilots, helitorch modules, and PSD operators. Only qualified individuals will be assigned when filling aerial ignition orders for helitorch modules or plastic sphere dispenser operators (PLDO).

Orders for these resources, for fire or project use, may involve several different resource orders.

Example: Helicopter ordered on an aircraft resource order, helicopter manager and helitorch module or PSD operator ordered on overhead resource orders, helitorch or PSD machine ordered on an equipment resource order, and plastic spheres, glycol, gasoline, etc. ordered on supply resource orders.

When possible, to alleviate workload, resource tracking problems and confusion, order an exclusive use helicopter and crew, who have all the components in one package (aerial ignition equipment, supplies, and qualified personnel). This can be accomplished on one aircraft resource order that specifies the module and aerial ignition capability needed.

## **AIRBORNE THERMAL INFRARED (IR) FIRE MAPPING (NMG, Ch. 50)**

All requests for infrared flights will be placed with NICC no later than 1530 Mountain Time, utilizing established ordering channels. Each IR flight will require a separate “A” number in utilizing established ordering channels. Each IR flight will require a separate “A” number in ROSS. Forms for infrared flights will be created at the National Infrared Operations (NIROPS) website at <http://nirops.fs.fed.us/rcr/scanner/index.php>.

User accounts can be requested by contacting NIROPS directly. It is highly recommended that user accounts be set up ahead of time as there can be a delay in activation of an account request. If the website is unavailable, a faxed Infrared Aircraft Scanner Request Form (EMG, Ch. 80) will be submitted for each request.

A qualified Infrared Interpreter (IRIN) must be confirmed or in place at the time of the infrared flight. IRINs will be ordered using an Overhead “O” request.

## **INFRARED AIRCRAFT (NMG, Ch. 50)**

### **AIRSPACE PROCEDURES**

Interagency Airspace Coordination Guide (IACG) can be found on the EACC Aviation webpage: <http://gacc.nifc.gov/eacc/logistics/aviation/aviation.htm>.

**TEMPORARY FLIGHT RESTRICTIONS, FAR 91.137 (TFR) (NMG, Ch. 50)**

Eastern Area units are responsible for submitting their own TFR requests to their respective Air Route Traffic Control Center (ARTCC). EACC is available to assist when needed. TFRs may be submitted to the unit's local ARTCC via fax on an agency TFR form or submitted electronically through the NOTAM Entry System (NES).

Check with the appropriate ARTCC to find out how they want the TFR requests submitted. An "A" number will be created by the requesting unit and filed with the TFR NOTAM number issued by the FAA.

TFRs in the USA may be found at <http://tfr.faa.gov/tfr2/list.html>. TFRs are not considered to be in effect until the FAA has issued a Notice to Airmen (NOTAM) regarding the specific TFR.

Typical TFRs are requested in a five (5) mile radius of a given point and 2000 feet above the highest point (MSL). However, TFRs may be requested in any configuration desired depending on the situation, topography, amount of air traffic, etc.

Reference 91.137: Placing a TFR over an incident area does not automatically eliminate non-tactical aircraft for the area. Note the exceptions for law enforcement and news media in the FAR. It is highly recommended that an Airspace Coordinator (THSP) be ordered in those cases where airspace is complex or numerous aircraft are deployed.

Contact the EACC Aircraft Coordinator for assistance.

**MILITARY TRAINING ROUTES AND SPECIAL USE AIRSPACE (NMG, Ch.50)**

Interagency Airspace Coordinator Information Guide (AP/1B, etc.) can be found on the EACC Aviation website, <http://gacc.nifc.gov/eacc/logistics/aviation/aviation.htm> and at the Interagency Airspace Coordination website, <http://www.airspacecoordination.org/guide/index.html>.

Local units are responsible for coordinating with military units for de-confliction of special-use airspace (SUA) and military training routes (MTRs). EACC, upon request from a local unit, may assist with this responsibility.

**AIRSPACE CONFLICTS (NMG, Ch. 50)**

All airspace conflicts including accidents (mid-air collision), incidents (near mid-air collision), hazards (intrusions into airspace restricted under Title 14 CFR part 91.137, Temporary Flight Restrictions), and other occurrences involving airspace conflicts shall be reported immediately by the individual involved with or observing the conflict to the local unit dispatch office or aviation manager.

The local dispatch office or aviation manager shall, upon notification of a conflict, immediately gather all pertinent information and documentation (TFR requests, dispatch logs, documentation of contacts with the military). They shall then report the occurrence and furnish the documentation of contacts with the military. They shall then report the occurrence and furnish the documentation to the appropriate

aviation officer at the state, regional, or area level. A courtesy call shall also be made to EACC Aircraft Desk. A SAFECOM shall be initiated for the record.

If the conflict involves a serious aviation accident involving injury or loss of life or property, EACC shall immediately notify NICC.

See Interagency Airspace Coordination Guide (IACG) for further information on airspace conflict reporting and follow up. <http://www.airspacecoordination.org>.

#### **FAA TEMPORARY CONTROL TOWER OPERATIONS (NMG, Ch. 50)**

Temporary control tower assistance is available through the FAA. Units may request this service on an aircraft resource order through EACC. See Interagency Airspace Coordination Guide (IACG) for guidelines, as well as personnel and equipment requirements.

#### **DEDICATED RADIO FREQUENCIES (NMG, Ch. 50)**

The National Incident Radio Support Cache (NIRSC) issues dedicated FM frequencies in conjunction with communication equipment assigned to incidents. NIRSC will order additional FM frequencies from DOI and FS, Washington Offices, as conditions warrant. To insure proper frequency coordination, the ordering office must include the Latitude and Longitude of the incident on the resource order.

Aviation frequencies will be ordered on an Aircraft order as an "A" request.

#### **AM Frequencies:**

Initial attack AM air-to-air frequencies will be assigned by the NIRSC Communications Duty Officer (CDO) after annual coordination with the FAA. The primary AM assignment is published at the beginning of the fire season. The secondary assignment of the zone, if pre-engineered, will reside under the control of the GACC. The secondary assignment can be quickly authorized for use by the zone through a request to the GACC. The tertiary assignment, if applicable, will remain with the CDO and its use authorized as conditions warrant.

VHF- AM assigned frequencies will be facilitated and coordinated by the NIRSC CDO in cooperation with the agency frequency managers with the intent to create permanent assignments. Both AM and FM assignments will be used on an interagency basis and master records of the assignments are maintained by the NIRSC CDO. Updated frequency information for initial attack air-to-air and air-to-ground is coordinated annually with the GACCs.

#### **FM Air-to-Ground Frequencies:**

Incident requests for the use of dedicated air-to-air and air-to-ground frequencies will be made through established ordering channels to NICC and are filled by the NIRSC CDO. The CDO coordinates all national cache FS and DOI frequencies, as well as any additional frequencies released by other agencies for wildland fire support.

Eastern Area airtanker bases will monitor 123.975 VHF AM for aircraft contact. This frequency is for national airtanker ramp use and is not to be used for tactical or flight following purposes. The frequency may be different for airtanker bases outside of the Eastern Area.

There are VHF-AM frequencies available in NFES #4390 Starter System/ICS Command/Logistics Radio System kits. Reference USDA/USDI Aircraft Radio Communications and Frequency Guide [http://gacc.nifc.gov/swcc/dc/azpdc/operations/documents/aircraft/links/2016\\_AFG\\_web.pdf](http://gacc.nifc.gov/swcc/dc/azpdc/operations/documents/aircraft/links/2016_AFG_web.pdf) and the National Incident Radio Support Cache Users Guide [http://www.nifc.gov/NIICD/docs/NIRSC\\_UG.pdf](http://www.nifc.gov/NIICD/docs/NIRSC_UG.pdf) for more information.

When existing aircraft radio frequencies become overloaded during an emergency, additional VHF AM frequencies in the 118 MHz to 136 MHz band can be obtained on a temporary basis.

Procedures to obtain additional frequencies:

- Dispatchers shall request additional frequencies through normal ordering channels to EACC, using an “A” number in ROSS for each separate frequency requested. The following information must be included:
  - Number of frequencies required.
  - Use of the frequencies (air-to-air or air-to-ground).
  - Number and type of aircraft (helicopters and/or airplanes) involved.
  - Latitude and longitude of incident or air operations center point.
  - Whether the aircraft are equipped to operate on narrow band or wide band.
- NIRSC will assign, as required, FAA frequencies. This process may take from a couple of hours or longer depending on what else is going on throughout the country.
- When no longer needed, units shall release frequencies back to NIRSC.

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

Any deviation from standard aviation policy or procedures, either on the ground or in the air, shall be reported. Regardless of individual agency reporting time frames, all accidents, incidents with potential to have caused an accident, as well as all airspace conflicts, shall be reported immediately.

The unit with operational control of the aircraft at the time of the occurrence is responsible for ensuring submission of the SAFECOM by the observing or involved individual(s) (i.e., fixed wing manager). The SAFECOM will be submitted through the operational control agency’s reporting system:

<https://www.safecom.gov/>.

For aircraft enroute to an incident which experiences an accident or incident/hazard/maintenance deficiency prior to arrival, the scheduling/sending dispatch office shall be the unit with reporting responsibility.

Aside from accident situations where reporting to another agency is required, an agency submitting a report which involves another agency’s aircraft shall forward a courtesy copy to the appropriate aviation officer of that agency.

**APPROVED PILOTS AND AIRCRAFT**

For DOI approved pilots and aircraft, see the Office of Aviation Services website: <http://oas.doi.gov>.

**ADDITIONAL LINKS CAN ALSO BE FOUND ON THE EACC WEBSITE UNDER AVIATION**

Aerial Ignition Guide: <http://www.nwcg.gov/publications/interagency-aerial-ignition-guide>.

Aerial Supervision Guide: <http://www.nwcg.gov/publications/interagency-aerial-supervision-guide>.