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 lead plane operations, suppression or preparedness reconnaissance, helitorch operations, etc.

The four primary sources for aircraft are:

- Agency owned or leased
- Exclusive use
- Call-When-Needed (CWN) contracts, or On Call contracts and Aircraft Rental Agreements through the Department of the Interior Office of Aviation Services (OAS) and the U.S. Forest Service
- Cooperator Aircraft (USFS/DOI approved State and County aircraft/pilots)
- Commercial carriers

All aircraft and pilots, other than commercial carriers, must be approved (carded) by the Office of Aviation Services (OAS) or the USDA Forest Service. The flight manager or helicopter manager is responsible for ensuring both the aircraft and pilot are currently approved for the desired mission. See appendix 13 for flight manager duties and responsibilities. Commercial airlines are exempt from the aircraft and pilot approval requirements.

The Southwest Coordination Center, in coordination with the SWCG/ GMAC Group, has dispatching control of all large air tankers (LATs), very large airtankers (VLATs), nationally contracted SEATs, and lead planes operating from bases located within the Southwest Area. The priorities for LATs, VLATs, SEATs and lead planes are: (1) life and property; (2) initial attack; and (3) other priorities established by management. During periods of high fire activity nationally, the National Interagency Coordination Center will prioritize LATs, VLATs and lead planes, as appropriate.

Ordering Aircraft - All aircraft ordering will be done in accordance with agency fiscal regulations, agreements, and policies. Within specific agency regulations, the SWCC and dispatch centers will strive to use the most cost effective and safest aircraft in support of all flight missions to meet the time constraints of the request.

Agencies unable to meet flight requests and aircraft needs using their own contract aircraft will place the order through the dispatch center. Dispatch centers may order aircraft (except National Resource designated aircraft) from an adjacent center (see page 27).

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 SWCC
- *For resources coming from outside the GACC (or leaving the GACC), contact SWCC to see if 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 SWCC 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. All requests not filled within the Southwest must be in ROSS for placement to NICC. Units shall ensure that ROSS incident information is accurate to include current frequencies, reporting locations, and contacts.

Flight Management Procedures

Types of Flights

Mission - These types of flights are often referred to as “tactical” or “Special Use” flights.

A mission flight is a flight that <u>either</u>:

- Requires work to be performed in the air (e.g.,external loads, aerial supervision, retardant delivery, sizing up an incident, etc.)
- Initiates or terminates at a location other than a developed airport or permanent helibase.

The pilot and aircraft must be agency approved (carded) for the mission being performed. Mission flights may require an authorization or cost comparison form. The following are examples of mission flights:

- Retardant/water delivery
- Survey/aerial recon
- Lead plane
- Air attack
- Smokejumper delivery
- Delivery of personnel/cargo to unimproved landing sites (helispots)
- Videography/mapping

- Aircraft/pilot inspections

Point-to-Point – These types of 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.

Flight Manager - There will be a flight manager designated on all passenger flights originating within the Southwest Area. The Southwest Area will use the "National Mobilization Guide" direction for flight manager duties and responsibilities. See appendix 12.

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. These worksheets can be found in appendices 9, 10, and 11.

Agencies are responsible for compiling documentation of the cost comparison/justification form and the flight invoice for each administrative flight. Department of Interior documentation will be retained at the local agency level; Forest Service documentation will be submitted to the Regional Aviation Officer (FAM) as soon as possible following the flight.

Flight Plans

All flights (fixed wing or rotor) 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, however, certain types of flights may not require this form (see "Aircraft Flight Schedule/Request Form Requirements," page 113).

- **FAA –** Required when a flight proceeds beyond a geographic boundary (Exception: Initial Attack that requires crossing a geographic area border) or those flights within the Southwest Area not on an Agency Flight Plan. There are two types of FAA Flight Plans:
    1. Instrument Flight Rules (IFR) - FAA flight following is automatically provided by Air Traffic Control (ATC) on this type of flight plan.
    2. 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** – Required when an FAA Flight Plan is not filed. Agency Flight Plans are most often used for flights taking place within the Southwest Area. The responsibility of ensuring a safe completion of a flight (flight following) lies with the originating dispatch office, unless a positive, documented handoff occurs (see "Handoff Procedures," page 117). There are two types of Agency flight following:
    1. 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. See page 114, "Automated Flight Following Procedures," for more detailed information.
    2. 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 Southwest dispatch offices to perform this function must be part of a Project Aviation Plan and coordinated well in advance of the project and will have a flight request schedule form completed. Requests for flight following as a courtesy is at the discretion of the dispatch office. Vendors performing "End-Product" contracts for the USFS will not be flight followed by Southwest dispatch offices; however, dispatch offices should ensure that the appropriate deconfliction has occurred when these flights are occurring in their respective dispatch area.

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 (excludes preposition flights as directed by SWCC)
- Mission flights with fuel stops or passenger pickup (not direct to an incident)
- Flights leaving the geographic area

In accordance with the guidelines above, the sending dispatch office is responsible for initiating a flight schedule form. This needs to 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 the Southwest Coordination Center. If the SWCC is the hiring/sending office, a form will be created and faxed to the receiving dispatch office. The SWCC will fax the form to

all the affected dispatch offices when Agency Flight Plans are filed. The form will be faxed to the National Coordination Center (NICC) by the SWCC 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 SWCC.
- Notify the SWCC 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 Southwest Area, instruct the pilot-in-command or flight manager to contact the SWCC at 888-440-4333. Aircraft support vehicles should contact the SWCC at fuel stops.

On any flight proceeding beyond the Southwest Area, 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 SWCC

- 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 SWCC.
- Notify the SWCC of any delays of a flight plan exceeding 30 minutes; notify the SWCC 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) Procedures

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 transmission 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).
- The dispatch office responsible for flight following must have a computer connected to the Internet immediately available to them in the dispatch office. Dispatch office(s) responsible for flight following shall be staffed for the duration of the flight.
- Training: The flight following dispatcher must have a working knowledge of the automated flight following program and must have a current username and password for the automated flight following system.
- 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 in the later part of the day, it is the responsibility of the sending unit to ensure that 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 a user requests flight following from a dispatch office and the above listed requirements are met, automated flight following shall be utilized.
- 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).

- The dispatch office must log on to the automated flight following Web site, verify that the aircraft icon is visible on the screen, and be able to quickly monitor this page at any time during the flight.
- If the flight will cross “traditional 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 stating “Nxxxx off (airport or helibase name) AFF,” dispatch office shall respond “Nxxxx, (dispatch call sign) 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 the computer screen. If there is a problem at this point, revert to normal radio 15-minute check-in procedures until the problem is resolved.
- The dispatch office then sets a 15-minute timer and, at a minimum, monitors the computer at 15-minute intervals for the duration of the flight. Periodic radio check-ins are acceptable but should be very brief and infrequent.
- When the aircraft has completed the flight and landed, the pilot or passenger (observer, flight manager, ATGS, etc.) shall contact the dispatch office via radio or telephone informing them that they are on the ground.

Procedures for 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 stating “Nxxxx off (airport or helibase name) 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 they can still “see” you.
- Inform dispatch upon landing that you are on the ground.

Procedures for 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.
- Brief with pilot/flight manager on radio calls expected and responses you will provide.
- Check AFF system to ensure icon for the aircraft is shown.
- Shortly after takeoff, pilot, flight manager will call via radio stating “Nxxxx off (airport or helibase name) AFF.” Check aircraft icon color and verify time and date. Respond to the radio call, stating “Nxxxx, (dispatch call sign) AFF.”
- Keep the AFF system running 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. These should be brief and infrequent.
- 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 same procedure if computer system goes down during flight.

Handoff Procedures for Dispatch Offices

- When a flight crosses “traditional 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.

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: Remember that Guard (168.625) is always available to make contact with an aircraft or dispatch office, and then move off guard to the appropriate frequency.

Aviation Frequency Management

National Air Guard Frequency - 168.6250 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, 168.6250 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 168.6500 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, 168.6500 MHz, is restricted to the following use:

- Flight following, dispatch, and/or redirection of aircraft.
- Air-to-ground and ground-to-air administrative traffic.
- Not authorized for ground-to-ground traffic.

Interagency Use of I.A. Preassigned Frequencies - Initial attack AM and FM frequencies are issued annually by the National Incident Radio Support Cache (NIRSC) to pre-identified geographic areas in the Southwest. These areas are referred to as Initial Attack Zones and correspond to the Southwest Area Zone boundaries. In certain instances, there are two or more dispatch centers within a given zone, thus requiring close communication between these affected centers when multiple incidents are occurring. The frequencies issued on these maps 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. Pre-programming of these frequencies annually is encouraged, but individual units and dispatch centers must realize these frequencies may not always be available if other incidents are occurring within that zone.

FM Frequencies (Air-to-Ground, VHF-FM) — A standard air-to-ground (A/G) naming convention has been implemented in the Southwest. This naming convention utilizes a standardized frequency identifier (or name system) for initial attack zone air-to-ground frequencies. Air-to-ground frequencies will be 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. Please reference the Southwest Area Aviation Contacts and Communications Guide.

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 temporary reassignment of frequencies can be arranged through coordination with the SWCC. For the current year’s frequencies, reference the “Southwest Area Aviation Contacts and Communications Guide.”

VHF-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.

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

- Need?
- Operate all aircraft on one victor frequency?
- Has the traffic decreased enough so that the frequency can be released (or one if you originally had two)?

*These are for Initial Attack Only***.** Once the primary and secondary air-to-air frequencies have been assigned, the dispatch coordination center will then send an aircraft resource

order to the SWCC on an as-needed basis for additional VHF-AM frequency (to "fill behind" the primary for that zone). This new frequency will then be used for any other initial attack within that zone. Once an incident goes beyond the initial attack stage (the next day or operational period), the dispatch coordination center will place new VHF-AM frequency orders with the SWCC for that incident. The primary VHF-AM frequency for that zone will then become available for initial attack and the secondary ("fill behind") frequency will be released. For the current year's frequencies, reference the "Southwest Area Aviation Contacts and Communications Guide."

Unit Frequencies – For the current frequencies, reference the "Southwest Area Aviation Contacts and Communications Guide."

Instrument Flight Conditions – FSM 5716.12 - Use only 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 – Use only 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 – 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.

Overdue and Missing Aircraft

At 30 minutes past the last scheduled check-in time or the filed ETA, the dispatch office currently responsible for flight following the aircraft will confer with intermediate and/or destination dispatch office(s) involved 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.

Airborne Thermal Infrared Fire Mapping

Infrared Thermal Mapping Operations Manual - Users of infrared services should be familiar with the contents of the Infrared Thermal Mapping Operations Manual available from the Infrared Operations Specialist at NIFC.

Ordering Infrared Mapping Services - Each request for an infrared flight will be ordered by 1500 daily and under a separate "A" request number after the original resource order form and infrared aircraft order form are completed. See appendix 5. A new request number needs to be assigned for each day. An infrared scanner form needs to be completed on the NIROPS Web site at http://nirops.fs.fed.us/rcr/newScanner

Airborne Thermal Infrared Fire Mapping Unit - This unit is available through the National Interagency Fire Center.

Equipment is mounted in an aircraft and, when ordered, the equipment, aircraft, and an infrared crew are sent as a package. Each IR crew consists of the pilot, copilot, and operator/technician. When ordering this unit, refer to and fill out the online "Infrared Scanner Order" at http://nirops.fs.fed.us/rcr/scanner/ and Appendix 5.

An infrared interpreter with incident provided (or approval to bring) transportation, cell phone, and laptop computer with GIS software should be ordered to meet the incoming IR aircraft at the airport specified or acquire the data by remote means. This individual will work under the Situation Unit Leader or Planning Section Chief.

Other Aerial Assets

All other unconventional aerial assets (including experimental aircraft) must follow agency policy processes (inspection, approval, risk management, etc.) prior to use.

Large Transport Aircraft

Ordering Information - When requesting large transport aircraft, the following information is required:

- Number of passengers or number of hand crews.
- Time needed at pickup point, departure time, terminal, and gates for all intermediate stops and final destination.

Lead Plane/ASM

Incidents will place orders for lead/ASM aircraft with the local dispatch. Local dispatch may mobilize lead/ASM aircraft based at airports under its control. All requests for lead/ASM aircraft located/based outside the zone where the incident is located will be placed through the Southwest Coordination Center. Dispatch centers will notify the SWCC immediately of lead/ASM aircraft commitments.

The Southwest Area has one lead/ASM pilot, Tom French. If flying as Lead, the call sign is Lead 33. If flying as an ASM the call sign is Bravo 33.

Air Attack

Five Exclusive Use Air Attack platforms and ATGS are located throughout the SWA. The aircraft begin their contracts in mid-April to May 1 and end at the end of June to mid-July. The aircraft and ATGS' do not "belong" to any particular unit and will be dispatched throughout the SWA based on current/predicted fire conditions. They may also be assigned for IMT use as the need dictates.

Additional Fixed Wing Air Tactical aircraft are hired through a USFS Regional Light Fixed Wing contract or the DOI On-Call contract. The Government does not guarantee the placement of any orders for use under these contracts and is obligated only to the extent of authorized orders actually placed. Units may request specific aircraft capabilities (such as pressurization, air-conditioning, etc.), based on current and forecasted weather conditions, operating altitudes, incident proximity, airspace, terrain, and other local considerations or concerns as appropriate. The aircraft dispatcher will then make hiring determination by considering the following:

- Aircraft capabilities and performance based upon individual mission factors.
- Date time needed.
- Cost considerations.

The receiving unit must provide approval for these capabilities if not on the original order. For out of area assignments it is important to note that the ATGS can request specific capabilities (such as pressurization and air-conditioning only); however, it must be approved in advance by the receiving unit.

Aircraft Replacement

If an aircraft is due for scheduled (planned) maintenance or requires maintenance to correct any deficiencies to the aircraft, the contractor may substitute or replace the aircraft with a carded aircraft equal to or greater than the awarded performance at no cost to the government to include positioning of replacement aircraft. Flight time, availability or standby shall not be paid to facilitate replacements or substitutions. The vendor is required to give 3 days' notice for substitution of aircraft for required maintenance. Other substitutions or replacement requests will be on a case by case basis.

All requests for substitutions or replacements shall be coordinated with the Contracting Officers' Representative (COR). The COR will coordinate substitutions and replacements with the Regional Aviation Maintenance Inspector and the Contracting Officer (CO). The CO is the only person with legal authority to approve substitution of aircraft. Once approval is obtained, the vendor shall notify the ordering dispatch office of the substitution or replacement. The dispatch office shall notify SWCC. If the vendor cannot provide an aircraft equal to or greater than the awarded performance the ordering dispatch office shall initiate a new resource order for a replacement aircraft from other vendors holding a valid Regional Call-When-Needed agreement.

Relief Pilots

The Contractor may furnish a relief crew to meet the days off requirement in accordance with the 'Flight Hour and Duty Limitations' clause. Approval to furnish relief crews and costs for transporting relief crews must be approved (per the terms of the contract) in advance by the CO. Approval will be noted on the payment invoice in the remarks section.

Mission Supervision Over an Incident - The lead plane, Aerial Supervision Module (ASM), Air Tactical Group Supervisor (ATGS), and Helicopter Coordinator (HLCO) mission(s) is to ensure effective supervision and timely mission accomplishment of all aircraft over an incident.

Economics and Safety of Operation - In most cases, it is more effective and safer to dispatch an airtanker with lead plane/ASM rather than an airtanker alone. The flight time required for the airtanker to establish communications, recon the fire, look for hazards, set up approach and exit routes, and make the required dry run(s) exceeds the

combined cost of airtanker and lead plane/ASM where the latter performs these operations. See page 125 for the Incident Aerial Supervision Requirements table.

Order an Air Tactical Group Supervisor (ATGS) or ASM to direct operations involving multiple aircraft when a lead plane is not available. Federal policy dictates additional requirements as listed on the following page (Reference Interagency Aerial Supervision Guide):

Incident Aerial Supervision Requirements

Situation	Lead/ATCO/ASM	ATGS
Airtanker not IA rated.	Required if no ATGS	Required if no Lead/ATCO/ASM
MAFFS	**MAFFS Qualified** LEAD/ASM	
VLAT	VLAT Qualified Lead/ASM	
When requested by airtanker, ATGS, Lead, ATCO, or ASM	Required	Required
Foreign Government airtankers	Required if no ATGS	Required if no Lead/ASM
Multi-engine airtanker: Retardant **drops** conducted between 30 minutes prior to and 30 minutes after sunrise, or 30 minutes prior to sunset to 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 ½ hour 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/ASM.
Retardant drops in congested areas.	Order	May use if no Lead/ASM
Periods of marginal weather, poor visibility or turbulence.	Order	Order

Permanently assigned "call signs" will be used for pilots on Lead Plane missions. The word "lead" will precede the pilot's call sign. The pilots' call signs will remain the same, regardless of location or the aircraft being flown. "Bravo" is the designator for ASMs. For example, when Lead 33 is teamed with an ATS, they become Bravo-33. The State of Alaska ASM designator is A, Alpha. The CalFire ASM designator is C, Charlie.

Incidents with three or more aircraft over or assigned to them should have aerial supervision over or assigned to the incident. Additionally, aerial supervision (ATGS/Lead/ASM/HLCO) should be ordered if the following conditions exist:

- Periods of marginal weather, poor visibility, or turbulence.
- Two or more branches of the fire organization associated with an incident.
- Request for a lead plane/ASM by an airtanker pilot.

***Definitions of key aerial supervision terms**

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

b) **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.)

c) **Over**: The air tactical resource is flying above or is in a holding pattern adjacent to the incident.

d) **Assigned**: Tactical resource allocated to an incident. The resource may be flying enroute to and from, or on hold at a ground site.

Note: VLATs, MAFFS, the USFS C-130 and some "Next Gen" LAT's require an ASM/lead plane.

Airtankers

Airtanker and tanker base information can be found in the Airtanker Base Directory.

ICS Airtanker Types - Airtankers are typed by the amount of retardant carried.

Type	Minimum Capacity
VLAT	10,000+ gallons
1	3,000 gallons
2	1,800 gallons
3	800 gallons
4	100 gallons

Managing Airtanker Use

Dispatch offices may mobilize airtankers based at airports under its control. All requests for airtankers located or based outside the zone where the incident is located will be placed through the SWCC. Exceptions to this are requests for initial attack. The NICC has the final decision of the placement of large airtankers and VLATs.

Minimum Information Required by the Airtanker Base for Initial Attack Dispatch

- Latitude and longitude (degrees, decimal minutes), bearing, and distance
- Ground contact and FM frequency

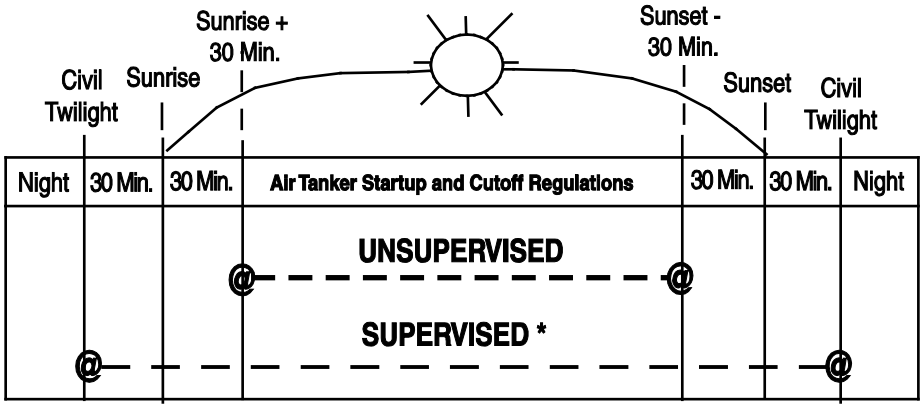
- Other aircraft assigned and VHF frequency
- Known hazards or obstacles and airspace deconfliction concerns

Dispatch Rotation and Priority - Airtanker base managers must be particularly sensitive to maintaining fair and equitable procedures. To this end, the following guide has been nationally adopted:

- Airtankers at a tanker base normally will be dispatched on a "first in–first out" except when:
  - Upon receiving dispatch to a different base, the next aircraft in rotation has an operating restriction at the new base; or,
  - A demonstrable benefit to the Government would be realized by changing the rotation.
- Aircraft coming on after days off will go to the end of the rotation.

Regulations for Large and Very Large Airtanker Dispatch

Airtanker Dispatch Limitations - Startup/Cutoff Times - 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 may drop on fires. Note that the limitations apply <u>to the time the aircraft arrives over the fire and conducts its dropping activity.</u> Dispatchers and airtanker base managers, in consultation with Airtanker Coordinators or Air Tactical Group Supervisors, are <u>mutually responsible</u> for ensuring these limitations are not exceeded. The following shall apply (refer to the chart):



@ = 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 and sunset are determined by the official sunrise and sunset tables of the nearest reload base.

Aerial Supervision Optional - Airtankers may be dispatched to arrive over the fire under normal agency aerial supervision policy, <u>provided that</u> the aircraft's arrival is between 30 minutes after official sunrise and 30 minutes before official sunset.

Air Tactical Group Supervisor or Lead Plane, or ASM Required - A qualified Air Tactical Group Supervisor Lead Plane or ASM is required on scene if the airtanker's arrival over the fire dropping activity shall occur during:

- The period from 30 minutes **prior to** official sunrise to 30 minutes **after** official sunrise,

  or

- The period from 30 minutes **prior to** official sunset to 30 minutes **after** official sunset.

The priorities for airtanker and lead plane/ASM use are: (1) life and property, (2) initial attack, and (3) other priorities established by management. To assure these priorities are met, the SWCC will manage and coordinate all airtankers and lead planes/ASMs operating within the Southwest Area. Situations may develop necessitating the prompt and direct reassignment of airtankers and lead plane/ASMs en route to an incident or diverting them from an established project fire.

The SWCC requires nightly release of large airtankers. New requests need to be placed using established channels the next morning if an incident anticipates airtanker usage the following day (see the "Interagency Airtanker Base Operations Guide" and "Aerial Supervision Guide").

When aircraft and/or flight crews become unavailable for any reason, the SWCC shall be notified immediately. Notify the SWCC when the aircraft returns to service.

Over Weight Agreements

Grant County Airport (Silver City, NM), White Sands-Alamogordo, NM, Winslow-Lindbergh, AZ and Prescott, AZ airports have provided overweight agreements to allow for the operation of C-130 airtankers from those respective airtanker bases. The airport authority may rescind these agreements anytime damage occurs to the runway.

Dispatching Airtankers Outside of the Southwest Area

Mandatory information when sending an airtanker out of the Southwest Area:

- Aircraft call sign and FAA "N" number.
- Pilot/copilot name and passenger names.
- Mandatory day(s) off.
- Amount of retardant on board. Specify if full load, partial load, or empty.

Unless otherwise requested on the order, the following guidelines will apply when dispatching airtankers outside the Southwest Area.

Airtankers will be sent empty when:

- On a move up and cover assignment
- Being released to a specific base
- En route fuel stop required
- More than 2 hour flight time to the incident

In all instances the pilot has the final word on capability and flight.

Very Large Airtankers

Albuquerque NM, Roswell NM, Mesa-Gateway AZ and Sierra Vista AZ are the only approved VLAT bases in the Southwest Area.

Advanced notice through the local dispatch offices is required to activate the Albuquerque (7-10 days) and Roswell (24-48 hours) VLAT bases. The Southwest Coordinating Group must approve all activations and deactivations for Albuquerque (notification to the USFS Regional Aviation Officer) and Roswell (notification to the NM BLM State Aviation Manager) VLAT bases. Approved lead planes or ASM are required for all VLAT missions.

Large Airtanker Operations

In accordance with the LAT and VLAT contracts, do not load aircraft with retardant unless dispatch is imminent.

Single Engine Airtanker (SEAT) Operations and Limitations

BLM Exclusive Use SEATs are pre-positioned in the SWA starting in mid-May annually. The SWCG Aviation Committee will advise the SWCG regarding placement of the SEATs based on current and predicted fire activity. These aircraft should be dispatched to incidents in the same manner as other national aviation resources.

SEATs shall be ordered and managed at the local (unit) or zone level. Orders for SEAT Managers need to be placed at the same time as the SEAT order if not already in place. (Reference ISOG for more information.)

Ordering of fire suppression chemicals (retardant, foam, gel) is the responsibility of the ordering unit.

SWA SEAT Base Operating plans shall be in place by April 15 annually.

Preparations for utilizing a SEAT at an airport (non-established SEAT Base) need to be made well in advance of operations (i.e. agreements, use of water, payments, etc.) See ISOG Chapter 6.

All SEAT operations will be conducted in accordance with the Southwest Area SEAT Operations Plan and the Interagency SEAT Operations Guide (ISOG).

As single engine aircraft, SEAT operations are limited to flight during the official daylight hours and under VFR conditions only.

In order to realize the full economic and operational effectiveness of the SEATs and to optimize their self-sufficient capabilities, SEAT fire operations should be established as close to the incident as possible using available airports/airstrips. Use of roads will require prior approval by State, area, or regional aviation management who must coordinate with state and local transportation departments and law enforcement.

SEATs may operate from the same facility as large airtankers, provided the base has been trained in SEAT use and SEAT operational procedures and specifics have been incorporated into each base's operating plan.

Airtanker Base Managers (ATBM) are authorized to oversee the SEAT operations without the presence of the SEAT Manager (SEMG) while SEATs are assigned to work out of their base. The ATBM will oversee the SEAT operations when the assigned SEMG is en route, or for a specified amount of time that has been agreed upon between the SEMG and the ATBM.

Modular Airborne Firefighting Systems (MAFFS) - The SWCC will ascertain that all suitable commercial airtankers under contract within the area are assigned to fires or pledged to an initial attack need before placing a specific request for a MAFFS mission to the NICC. The NICC will ascertain that all suitable commercial contract airtankers nationally are committed to incidents, initial attack, or are unable to meet the timeframe requirements of the request.

Ordering Criteria - Requests for MAFFS will be placed through established ordering channels to the SWCC. When ordering MAFFS, a minimum of 24 hours lead time is requested by the Air Force.

A MAFFS liaison officer shall be assigned and shall be present at the designated operating base a minimum of 8 hours before the MAFFS aircraft are scheduled to arrive. The liaison officer shall ascertain the following equipment is readily available before the first aircraft arrives:

- Forklift, minimum 6,000-pound capacity.

- Battery charger, power cert, 28 volt, aircraft.
- Jet fuel, JP-4 or Jet A.

Approved SWA MAFFS Bases

- ABQ Albuquerque, NM
- IWA Phoenix-Mesa Gateway, AZ
- PRC Prescott, AZ
- ROW Roswell, NM Reload only

NOTE: Operating MAFFS and DC-10 from the same base may result in difficult logistical issues and/or a delay in launching either type of aircraft, check with the base manager.

Releasing MAFFS Units - MAFFS units will be released from the fires before commercial airtankers and will not continue to make retardant drops if those airtankers have been shut down. The MAFFS units will not be held on standby without prior permission from the NICC. When release is contemplated, the NICC shall be informed for determination of possible redeployment to other fires.

Note: For more complete information, consult the current MAFFS Operational Guide.

Retardant Avoidance Areas

There are specified areas on each national forest in the Southwest 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 SWCC website: http://gacc.nifc.gov/swcc/dispatch_logistics/aviation/avoidance_maps/retardant_avoidance_maps.htm.

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

Smokejumpers

The Southwest Area has historically prepositioned smokejumpers in the Region with the Gila National Forest hosting a crew of 20 at the Aerial Fire Base, Grant County Airport (Silver City, NM). Smokejumpers are typically ordered May-July (timeframes may vary). The smokejumpers primary mission is initial attack but may be utilized on for multiple objective fires and extended attack anywhere within the SWA.

Although smokejumpers may be ordered initially to Silver City, they may be utilized anywhere in the Southwest Area using established ordering channels. Smokejumper capability in the Southwest is usually achieved by ordering detailers on "O" numbers initially along with an aircraft on an "A" number. Once the resources are in place, they may be ordered to an incident via an "A" request number and a completed Smokejumper Request Form (can be found in appendix 8 of this document).

Helicopters

ICS Helicopter Types

- Type 1 5,000 pounds cargo capacity
- Type 2 helicopters have 10 to 15 passenger seats or 2,500 pounds cargo capacity
- Type 3 helicopters have 4 to 9 passenger seats or 1,200 pounds cargo capacity
- Type 4 helicopters have 4 or less passenger seats or 600 pounds cargo capacity

Dispatching Helicopters Outside the Southwest Area

<u>Mandatory</u> information required when sending a helicopter outside the Southwest Area:

- Helicopter "N" number
- Make and model of aircraft
- Pilot's name <u>and names of ALL passengers flying in the helicopter</u>
- Helitack foreman's name and total number of crewmembers
- Helitack truck, ATD, and ETA. Chief of Party and crewmembers' names. (Document route of travel, if needed.)
- Service truck, ATD, and ETA.

Flight Planning/Resource Tracking - Helicopters on incidents from the Southwest Area to another geographical area must file an FAA flight plan and will also be given resource tracking by the NICC. Pilots must call the NICC toll-free at 1-800-994-6312 at each en route stop to close out the previous leg of flight and file the next leg. Service truck and

helitack truck drivers shall be instructed to check in with the NICC at each fuel stop and overnight location in the event of a reassignment or cancellation. Zones may request service truck/helitack trucks to check in; however, this does not exempt them from calling the NICC.

High Density Altitude Operations

Caution must be used when ordering helicopters for use in high density altitude (DA) conditions. Typical elevations and temperatures occurring within the SWA often dictate the use of aircraft with high density altitude performance capability (i.e. above 8000 ft. MSL). Be aware some specific models of helicopters may have operating limitations below typical hot day DA conditions occurring in SWA. Furthermore, though a helicopter may be able to operate at a high DA, its effectiveness and efficiency may be of low value to the user. At high DA all aircraft are negatively affected; controllability, payload and airspeed are reduced.

Performance capability and/or limitations for the conditions must be requested.

For Forest Service orders, the Regional Aviation Duty Officer or Helicopter Specialist will be advised of the request prior to the SWCC placing the order to the NICC, it is recommended contact be made with any host agency Regional Aviation Manager/Specialist for this type of order. This will enable the specialist to contact the incident and determine the most appropriate helicopter to request.

Off Unit Assignments - The manager and crew on duty for initial attack response at time the order is received will be dispatched with the helicopter. Specialized equipment, e.g., long line, sphere dispenser, etc., will be sent. The helitorch must be specifically requested by the ordering unit in order for the helitorch module to be sent.

When ordering a helicopter, provide fuel and support vehicle directions to incident base camp.

Helicopter Rappelling - Rappellers must be currently proficient, have approved and inspected equipment, and all appropriate log books must be up-to-date before rappel operations begin. Rappelling is currently limited to fire management operations, rappel training/proficiency, or approved project operations. Rappelling crews may work on other agency lands.

Proficiency Rappels for Exclusive Use Crews When Assigned - Rappel resources are a critical initial attack resource and must maintain their proficiency and readiness at all

times. Normally proficiency is an agency responsibility, but DOI and USFS have agreed to the following common proficiency guidance for rappel resources assigned to incidents:

- Proficiency rappels will be allowed on DOI and USFS fires in accordance with the requirements in appendix N of the Interagency Helicopter Rappel Guide (http://www.nifc.gov/PUBLICATIONS/ihrg/Appendix_N.pdf).
- Incident commanders will determine an acceptable time and location for proficiency rappels.
- Costs associated with proficiency rappels will be the responsibility of the agency contracting the helicopter.

Short-Haul Capable Helicopters

The SWA has three Type III exclusive use short-haul capable helicopters available for emergency medical extraction. Two are located at Grand Canyon National Park, one is located on the Coronado National Forest in Tucson. Short-haul capable aircraft will still be considered primarily firefighting resources; they will continue to perform typical fire missions such as water drops, cargo and personnel transport while being available for short-haul missions if needed.

Emergency medical short-haul will be just one of a number of options for treating and extracting injured or ill personnel. All such options must be considered and included in pre-incident emergency medical planning.

Short-haul proficiency operations will be allowed on DOI and USFS fires in accordance with the requirements in the Forest Service Emergency Medical Short-haul Operations Plan or the Department of Interior Helicopter Short-haul Handbook.

- Incident commanders will determine an acceptable time and location to meet proficiency schedules.
- Costs associated with proficiency operations will be the responsibility of the agency contracting the helicopter.

Call-When-Needed (CWN) Helicopters - After dispatch has determined that an exclusive use helicopter cannot be obtained, a CWN helicopter may be ordered. Helicopter management modules will be assigned to each helicopter when ordered. Module members and helicopter shall be joined at a staging area away from but convenient to the incident base, such as the nearest airport, to inspect the helicopter, check communications, and confirm operational procedures prior to being sent to the incident.

Type 3 helicopters may be ordered from operators within the Southwest Area. Helicopter managers must ensure that helicopters and pilots are properly carded prior to being put into service. CWN Type 3 helicopter lists are available from the SWCC. Interagency dispatch centers shall notify the SWCC when hiring CWN helicopters. The user unit is responsible for ensuring data is entered into ABS for USFS procured aircraft and AMS for DOI. The helicopter manager and vendor are the responsible parties in determining the initial path to take, depending on the original resource order and contract jurisdiction. When hired on the DOI On-Call Contract or USFS Regional Call When Needed Contract, stay with respective system until resource is "RELEASED"(demobilized), no matter how many reassignments take place to other land ownerships. Helicopter Manager and/or dispatch office is responsible to notify SWCC prior to hiring CWN helicopters for project work so a determination can be made and communicated to the vendor when hired under an established project rate.

There are two categories of Type 3 helicopters:

- Standard Category: passenger hauling, etc.
- Limited Use: must comply with IHOG requirements (Chapter 2 Personnel)

The Southwest Area Coordination Center is the main office authorized to place orders under the contract. However, dispatch centers may place orders for resources based within their zone. Contractors may not accept orders from any other source.

All CWN Type 1 and Type 2 helicopters must be ordered through the NICC and the manager must be identified on the ROSS order.

There are three categories of Type 2 helicopters:

- Standard Category: passenger hauling, etc.
- Restricted Category: no passenger carrying, lift only, seats removed.
- Limited Use: complies with IHOG requirements (Chapter 2 Personnel)

All Type 1 helicopters are in the restricted category. No passengers are allowed onboard the aircraft.

Information on CWN helicopters may be found in the schedule of items in the agency contracts. These schedules show hourly cost, minimum daily guarantee, and home bases.

The NICC assumes that CWN orders are for standard category helicopters unless stated otherwise.

Helicopter Modules

Units requesting modules for call-when-needed (CWN) and On-Call helicopters will utilize Overhead requests, using a separate "O" number for each member. Module members shall be joined with the helicopter away from the incident, to perform the pre-use contract inspection, confirm operational procedures, check communications, etc. before proceeding to the incident.

Call-when-needed (CWN) helicopters and On-Call will be managed by a qualified module (see IHOG):

- Type 3 Helicopters – Manager (HMGB) and two crew persons (HECMs)
- Type 2 Standard Helicopters – Manager (HMGB) and three crew persons (HECMs)
- Limited Use Helicopters - Manager (HMGB) and other personnel as needed

Approval may be obtained to manage two limited use helicopters with one qualified manager (HMGB). All of the following criteria must be met (see IHOG):

- An order for a second manager has been placed.
- The helicopters are physically located side by side.
- A qualified helibase manager is assigned.
- Aerial supervision is being provided.
- The appropriate agency Aviation Manager at the State, Area, or Regional level must grant approval on a case-by-case basis.

Exclusive Use Contract Helicopters

- FS Exclusive Use Type III Helicopters are solicited, inspected, and contracted at the Regional level.
- All Exclusive Use Contract Helicopters for DOI Agencies are solicited, inspected, and contracted by DOI AQD and OAS.
- Exclusive Use Contract Helicopters are dispatched locally by the Administrative Unit.
- Exclusive Use Module members are "rostered" with the helicopter, therefore they will be assigned an A dot number.

Military Helicopters (DoD) - For the use of military helicopters on incidents:

- During a fire emergency, the use of military aircraft in the firefighting mission will be governed by the MOU for DOD helicopter use signed and approved on Oct 21, 1990.

- See National Interagency Mobilization Guide Chapter 50 for the ordering process.
- See Military Use Handbook, NFES 2175, for guidelines on the use of the military on incidents.

National Guard Helicopters - Requests for the use of National Guard helicopters within the Southwest Area will be processed following established requesting procedures through each respective State Forestry office. The use of these helicopters and crews is determined by Agency manual direction and approval letters issued at the Regional level. For more information, refer to the operating plans for the New Mexico and Arizona National Guard units and the IHOG.

Temporary Airport Control Tower Operations

Requesting FAA Air Traffic Control Support - When aviation operations becomes complex at uncontrolled airports or helibases, the FAA may be requested to provide air traffic control support. Units should contact the SWCC to obtain this service. When ordering, lead time of at least 8 hours is desirable. Requests should specify the following:

- Ground/takeoff control problems.
- Approach control/landing problems.
- Where it is needed.
- Approximate duration of use.

GACCs within the FAA's Western Service Area (AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA, and WY) may request FAA air traffic control support through the Western Service Area Agreement when air operations in support of an incident. FAA temporary control towers are ordered on an aircraft order.

Ordering procedures are outlined within the current FAA agreement located at www.airspacecoordination.net. The SWCC will not need to forward the request to the NICC. Note – The FAA's WSA agreement covers Arizona and does NOT include New Mexico. The SWCC will contact the FAA's WSA Regional Operations Center (ROC) at 425-227-1999 and ask to speak to a duty officer regarding a temporary tower order. The ROC will connect the SWCC with the appropriate FAA duty officer. The ROC is the primary point of contact for the FAA for this request.

If the request is for New Mexico, a financial agreement will have to be prepared.

The FAA has requested additional information be provided when requesting FAA temporary control towers, (see FAA Temporary Tower Request Form, Appendix 15). The

Temporary Tower Request Form along with the aircraft resource order will be forwarded to the FAA at the time of the request. In addition, there is a helpful checklist in chapter 11 of the Interagency Airspace Coordination Guide that aids in the ordering and set-up process of a temporary tower.

National Airspace Coordinators - When airspace operations in support of an incident becomes complex a National Airspace Coordinator can be requested. Units will use normal dispatch channels through the SWCC to process the resource order.

Temporary Flight Restrictions (TFR) 14 CFR 91.137

Criteria for Establishing Restrictions - Temporary flight restrictions will be established when incident related (e.g. wildfire) aviation activities present potential conflict with other aviation activities and sustained air operations are anticipated over a specific incident. A Notice To Airmen (NOTAM) may be filed with the FAA Flight Service Station for non-emergency aviation activities. Complete information regarding TFRs can be found in the Interagency Airspace Coordination Guide: http://www.airspacecoordination.org/guide/Chapter06.pdf.

Temporary flight restrictions for wildfires are generally issued 14 CFR 91.137 (a) 2. This type of restriction allows certain exceptions into the TFR. When requesting a TFR, fill out the TFR request form in addition to the resource order. The following is to be included:

- The FAA requires that latitude/longitude information for TFRs must be provided in degrees, minutes, and seconds, including a reference to north latitude and west longitude. If seconds information is not available, add two zeros to the description. Do not use spaces, commas or other symbols in the description. Example: ddmmssN/dddmmssW or 450700N/1177005W.
- The standard is a 5 NM radius circular TFR. If a polygon shape is used, the corner points must be listed in a clockwise sequence around the requested TFR to avoid a “bow-tie” depiction.
- Wildfire TFRs are daily light hours only (1200 UTC to 0500 UTC).
- VOR bearing and distance descriptions should be to the closest VOR. Do not use NDB or T-VOR information in the description.
- The Southwest Area standard altitude guidance is 3,000 feet above the highest elevation on the incident. Altitude must be given to the FAA as MSL.
- Temporary flight restriction requests shall be placed with the zone dispatch office, which will place it with the SWCC. The SWCC will place the temporary flight restriction request with the appropriate FAA Air Route Traffic Control Center (ARTCC). The NOTAM number assigned will be relayed to the requesting unit when received from the ARTCC.

- Dispatchers should keep in mind that it takes from 30 minutes to 2 hours (or longer) for this NOTAM to be broadcast and disseminated throughout the aviation system. This delay is not reason to delay the mission. A NOTAM does not mean the TFR will not be penetrated by unadvised or uninformed aircraft.
- Airspace restrictions involving military training routes (MTR) require additional notification of the temporary flight restriction to the controlling military base. Military aircraft may be operating outside an MTR and be unaware of NOTAMs/TFR.
- Dispatch shall ensure the airspace restriction is canceled as soon as it is no longer required. This is done by cancellation of the request with the SWCC through normal dispatch channels.

Note: TFRs and Airport Closures - The FAA does not manage airports and cannot request closure of an airport. If incident aviation activities create potential conflicts with adjacent airport operations, the local unit may contact the airport manager to discuss the potential hazard. The actual closure is at the discretion of the airport manager.

Procedure for Incident Aircraft Entering Temporary Flight Restriction Area:

- Incident dispatch in which the wildfire is burning must be contacted and permission requested to fly over the fire.
- Dispatch will need the aircraft type (fixed wing or rotor wing) and identification ("N") number. Dispatch will contact the incident to coordinate a convenient time, radio frequency(s), and contact point for news media aircraft entry into the temporary flight restriction area.
- PERMISSION FOR INCIDENT AIRCRAFT IS GRANTED/DENIED BY THE AIR ATTACK SUPERVISOR, THE LEAD PLANE PILOT, OR THE AIR OPERATIONS BRANCH DIRECTOR <u>ONLY</u>. Entry into the temporary flight restriction area will be granted/denied upon reaching the contact point and establishing radio contact with on-scene air operations personnel.
- On the designated frequency, the incident aircraft must contact the AIR ATTACK SUPERVISOR, LEAD PLANE PILOT, and/or AIR OPERATIONS BRANCH DIRECTOR. Contact may not be immediate due to other communications or priorities. TEMPORARILY RESTRICTED AIRSPACE MAY NOT BE ENTERED UNTIL CONTACT IS ESTABLISHED AND PERMISSION GIVEN. The only exception to this general rule is law enforcement aircraft. Law enforcement aircraft have unrestricted (authorized) entry into a temporarily restricted area and are not required to provide communication with the incident.
- If radio contact is not established, permission is NOT granted to enter the area. Dispatch must be contacted to reschedule.

Law Enforcement and News Media

Media

Media access to this type of TFR may be the most misunderstood aspect of aircraft allowed into a TFR. According to 91.137(a)(2), the following circumstances apply to media entry:

- The aircraft is carrying properly accredited news representatives.
- Prior to entering the TFR, a flight plan is filed by the media aircraft with the appropriate FAA or ATC facility specified in the TFR NOTAM.
- The operation is conducted above the altitude used by the disaster relief aircraft, unless otherwise authorized by the official in charge of on-scene emergency response activities (i.e. the Air Tactical Group Supervisor).

The FAA interpretation is that <u>media aircraft are allowed inside a TFR as long as they maintain an altitude above disaster relief aircraft.</u> If the disaster relief aircraft happen to be on the ground, then the media has been known to fly at any altitude within the TFR.

<u>No parameters are set that require communication by the media with either dispatch or the disaster relief officials in charge prior to flight.</u> Air Tactical Group Supervisors are reminded that if the media have met the above criteria, they are allowed inside the TFR area. Air Tactical Group Supervisors have the right to allow the media to fly at lower altitudes when it can when it can be safely accomplished, but do not have the authority to remove the media from the TFR if they have met the criteria stated in 91.137(a)(2).

Law Enforcement

Law enforcement officials are allowed into the TFR area. There is no caveat that requires prior notification or communication during their flight. Agency personnel are strongly recommended to coordinate frequency sharing and TFR information with local law enforcement agencies that may utilize aircraft.

ATGS, Leadplanes, dispatch or HLCOs have <u>no legal authority to waive 14 CFR 91.137</u> and allow nonparticipating aviation into the TFR, which do not meet the following criteria:

1. The aircraft is participating in hazard relief activities and is being operated under the direction of the official in charge of on-scene emergency response activities.
2. The aircraft is carrying **law enforcement** officials.
3. The aircraft is operating under the **ATC approved IFR flight plan**.
4. The operation is conducted **directly to or from an airport** within the area, or is necessitated by the impracticability of VFR flight above or around the area due to

weather, or terrain; notification is given to the Flight Service Station (FSS) or **ATC facility** specified in the NOTAM to receive advisories concerning disaster relief aircraft operations; and the operation does not hamper or endanger relief activities and is not conducted for observing the disaster.

5. The aircraft is carrying **properly accredited news representatives**, and prior to entering the area, a flight plan is filed with the appropriate FAA or ATC facility specified in the Notice to Airmen and the operation is conducted above the altitude used by the disaster relief aircraft, unless otherwise authorized by the official in charge of on scene emergency response activities.

Airspace Deconfliction

Airspace deconfliction is a term used to describe the process of reducing the risk of a near mid-air collision or TFR intrusion by sharing information regarding flight activity with military units, general aviation, and other agency aviation programs.

Military Deconfliction

Procedure - Pre-fire season preparation contacts by the responsible unit must be made with military bases in charge of special use airspace (SUA) and military training routes (MTRs) to obtain key phone numbers and personnel names to aid in timely communications. The Sectional Aeronautical Charts provide information on SUA and the AP/1B Flight Information Publication provides detailed information on MTRs. Additional information about SUA and MTRs may be found in chapter 3 (Airspace Basics) of the "Interagency Airspace Coordination Guide" (July 2006).

All units must review the SUA and MTR route structure (AP/1B and sectionals) for any conflict with established helibases, helispots, or airtanker bases under their control. The unit aviation officer should work to resolve any conflicts.

Confirm the individual(s) who will be the point of contact for all military bases in charge of SUA and/or MTRs. Obtain and provide key phone numbers and personnel names to aid in timely communications. The appropriate unit aviation officer will contact all military bases with SUA/MTR responsibility and will distribute a complete mailing list by separate correspondence.

Units must ensure that dispatch centers, airtanker bases, helibases, and aviation project managers are provided with the SUA information and MTR structure within the Southwest Area. Also, each unit must produce and distribute aviation hazard maps that include all military airspace impacting the area.

When aircraft operations associated with a project, wildfire, or prescribed fire are expected to conflict with military aircraft operations, dispatch centers are required to

notify the responsible military scheduling office. At times, it may be necessary to request the interruption of a MTR or to request entry into SUA. When requesting the interruption of a MTR, provide the following information:

- Military training route number and segments that are affected.
- Notification that a temporary flight restriction (91.137) is being requested with the FAA.
- Request that the route be closed or altitude changed to accommodate FAR 91.137 TFR.
- Hours the restriction/change is to be in effect.
- List of military commands and current routes are found in the DOD AP/1B. Address requests to the commanding officer of military organizations.

Boundary Deconfliction

Procedure - Potential for airspace conflict exists along each boundary between neighboring dispatch centers. When aircraft are operating on or near these boundaries, it is required that the affected dispatch centers communicate to reduce the hazard. The requirement for coordination is due to the possibility of two or more units conducting simultaneous aviation operations within these areas. Reference the “Interagency Airspace Coordination Guide,” chapter 7.

Each dispatch center must first identify where aircraft conflict could occur between adjacent dispatch center areas.

Contact information must be shared and made available between the dispatch centers.

It is the responsibility of the dispatch center where the aircraft operation originated to make initial contact with each neighboring center that is affected.

Ensure Air-to-Air frequencies are communicated to all aircraft associated with boundary operations.

Hazard maps must be produced and distributed that display all known aviation hazards including boundary areas for the unit.

Violations of Temporary Flight Restrictions

Violations of temporary flight restrictions should be reported to an FAA facility as rapidly as possible. If reported immediately, the FAA may be able to locate the offending aircraft on radar and track it to its destination. If information is passed quickly to the FAA, the flight plans can be pulled and it will be easier to find the aircraft. Initial

reporting will be by telephone, followed up with a written report by an appropriate government official to the FAA within 15 days.

Information Needed - Provide as much of the following information as possible:

- Time of violation
- Location
- Type and model of aircraft involved
- "N" number, any identifying markings
- Color(s)
- Altitude
- Direction of flight
- Nature of violation

When a TFR violation is reported, notify the SWCC immediately and submit a SAFECOM.

See the "Interagency Airspace Coordination Guide" (2006) for further guidance and checklists.

Unmanned Aircraft Systems (UAS)

UAS are considered aircraft and therefore must adhere to USFS/DOI policy (including approval and carding of aircraft and pilots). UAS (also referred to as drones) 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 the Department of the Interior 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, Federal Aviation Administration (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.

• All aircraft and pilots employed by the USFS or DOI agencies shall be approved. Federal use of cooperator agency UAS may be authorized by a Cooperator Aircraft Letter of Approval, valid under the parameters of the FAA's Certificate Of Waiver or Authorization (COA).

• 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

• 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 Memoranda: http://oas.doi.gov/library/opm/CY2014/OPM-11.pdf

• All government agency use or takeoff and landing on federal land of UAS require prior notifications and approval. Some agencies have issued internal direction regarding UAS use. Agency aviation managers must be consulted prior to commencing UAS operations to ensure compliance with individual agency policy that may be more stringent than FAA requirements. A Project Aviation Safety Plan (PASP) is required for all missions or projects, to include UAS missions on fires.

• All government and commercial applications require an FAA "Certificate of Waiver or Authorization" (COA) which specifies the location and operating parameters for flying the UAS. A COA also requires the requesting agency to certify the airworthiness of the proposed aircraft and definition of the standards used to make that determination. For federal fires, the DOI or USFS would be the lead agency for obtaining a COA depending on the jurisdiction of the fire. In the event of a multi-jurisdiction incident the DOI UAS specialist, the USFS UAS advisory group chair, or

State or local representative will determine who should obtain the COA.

• Incident Management Teams 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.

<u>Key Points:</u>

• 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 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 issued by the FAA. A list of companies with valid 333 Exemptions can be found here: https://www.faa.gov/uas/legislative_programs/section_333/333_authorizations/

- 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/

Aircraft Operations in the Grand Canyon Area - The Grand Canyon National Park Special Flight Rules Area (GCNP SFRA), 14 CFR Part 93 Subpart U, extends from the surface to 17,999 feet MSL and affects all aircraft operations. This includes tour, general aviation, airline, military, and other government agency aircraft. The Federal Aviation Administration (FAA) has issued the U.S. Department of the Interior (DOI) a FAA Form 7711-1 "Certificate of Waiver or Authorization" which allows aircraft engaged in official government flight operations for DOI (or their interagency partners) to operate within the Special Flight Rules Area. DOI may re-issue this authorization to each pilot-in-command (PIC) upon the successful completion of the GCNP SFRA training and testing program at http://www.iat.gov. THIS AUTHORIZATION MUST BE RE-ISSUED ANNUALLY. DOI OAS Operational Procedures Memorandum 56 and an internal memo from the U.S. Forest Service National Aviation Operations Officer require the use of this waiver for <u>all</u> DOI and USFS flight operations in the SFRA. Flight crews operating in the GCNP SFRA should have a thorough understanding of Federal Aviation Regulation 93 Subpart U and must successfully complete online training and testing prior to entering this special use airspace. The information in the online training program continues to meet FAA training standards. The training and testing can generally be accomplished in about 45 minutes, and is required for legal <u>and</u> safety purposes. This program meets the requirements of the waiver for training, testing, and recordkeeping. To access and run the online GCNP SFRA training and testing module, you will need a current copy of the Grand Canyon VFR

Aeronautical Chart. FAA Form 7711-1 will be issued electronically to each PIC after successful completion of the training and testing. These credentials must accompany pilots whenever they are operating aircraft in the SFRA. Each PIC is responsible for complying with the DOI-issued FAA Form 7711-1 and its "Special Provisions." FAA Form 7711-1 does not constitute a waiver to deviate from other applicable Federal Aviation Regulations, such as "see-and-avoid" responsibilities and other portions of Part 91, Part 135, etc. If you are scheduled to fly within the Grand Canyon National Park Special Flight Rules Area, you must successfully complete the online module and be in possession of a current authorization before proceeding. Pilots are reminded to check the expiration date of their FAA 7711-1 "Special Provisions" to insure that the flight will be conducted within the effective dates of that authorization.

Persons conducting flight operations must contact the Williams Dispatch Center in Williams, AZ, at (928) 635-2601 in accordance with the special provisions of the DOI waiver.

For questions regarding the online training process, contact IAT training at (208) 433-5058, Office of Aviation Services, Boise, ID, or visit www.iat.gov.

Transmitting Aircraft Costs within the Southwest Area

Agencies involved in the shared use of aircraft must transmit information to each other for the completion of flight invoices and fire costs.

Required Information - It is the responsibility of aviation managers and/or dispatchers to transmit the following information between using and paying agencies or organizations. The information will be transmitted by the close of business for ALL associated aircraft costs, i.e., flight times for airtankers, lead planes, helicopters, retardant costs, landing fees, overtime, extended standby, etc.

- Flight date, name, and number of the fire(s)
- Type aircraft and call sign of each aircraft
- Flight time(s) and costs associated with each aircraft
- Retardant amount dropped and retardant cost for each aircraft
- Miscellaneous costs (service truck mileage, RON charges, landing fees, fuel cost, etc.)
- Grand total cost

Light Aircraft and Pilot Inspections

Forest Service Carded Aircraft - Regional aviation personnel will conduct carding of contract light fixed wing aircraft and pilots.

OAS Carded Aircraft - The Department of the Interior, OAS inspects and approves aircraft used on contracts and rental agreements.

Forest Service units may use an aircraft approved by the OAS for specific missions without re-inspection if it has one of the following OAS Cards:

- Form OAS 36-A, Aircraft Data Card (Fixed Wing).
- Form OAS 36-B, Aircraft Data Card (Helicopter).
- Form OAS 47, Aircraft Data Card (Fixed Wing).
- Form OAS 36-C, Aircraft Data Card (Airtanker).

CWN/On Call Charter Aircraft - When charter aircraft are ordered, the type of aircraft, aircraft identification ("N" number), and pilot's name with the company providing the service will be obtained and documented on the flight schedule. It may be necessary for the aircraft charter company to substitute a different aircraft or pilot. These substitutions may take place at the last minute. If the company substitutes another aircraft or pilot, the traveler or flight manager is responsible for the following actions prior to the flight:

- Check the aircraft data card, Form 5700-21 or OAS 36A, OAS 36B, or OAS-47 to confirm the aircraft being substituted is approved for use.
- Check the pilot's card, Form 5700-20, OAS 30-A, or OAS 30-B, to confirm the pilot being substituted is approved for use.
- Determine if there is a difference in price and, if so, how much.
- Notify the dispatch office of substitutions/changes prior to departure.

Aircraft Radio Equipment and Frequency Management

See the "USDA/USDI Aircraft Radio Communications and Frequency Guide" (updated annually and distributed by NIRSC) or the Aviation Contacts and Communications Guide produced annually by the Southwest Area.

Aviation Accidents and Incidents

Reporting Procedures - All accidents and incidents with potential shall be reported to the Agency Aviation Safety Manager. The Interagency Aviation Mishap Response Guide and Checklist should be followed, including the notification process.

For incidents of all severity, units will immediately complete a SAFECOM via hard copy or the Internet at https://www.safecom.gov. The national accident reporting number is 1-888-4MISHAP (1-888-464-7427)

Examples of incidents that airtanker base managers, lookouts, or other ground personnel may see or be involved in include: aircraft running over hoses, engines or rotors ingesting items from off the ramp, low passes at lookout towers, near misses of obstacles or other aircraft on the ground, violation of pilot duty limitations, flight following, or any violation of policy or normally safe operating procedures.

Examples of in-flight incidents pilots must report include precautionary or emergency landings, engine malfunction resulting in an emergency landing or in-flight shutdown, potential failure or loss of a system or component essential to safe flight, smoke in cockpit or fire in flight, jettisoning or loss of cargo, sling loads, retardants, or other chemicals, bird strikes, or near misses of obstacles or other aircraft in flight or on the ground, etc.

Personnel shall not ride in, or place back into contract availability, an aircraft involved in an accident or incident until the aircraft is declared airworthy by a certified A and P mechanic and approval has been received as per agency policy.

All pilots involved in an accident or incident with potential will be removed from all flight duty until returned to flight status per agency policy.

Approved Airports, Special Procedures, and Restrictions

Airport Use – Airports listed in the commercially available RGR Publication's "Pilot's Guide to Southwestern Airports" may be used for USFS missions without prior approval. Other agencies require no special approval for airport landings.

CROSSING WHITE SANDS MILITARY RANGE (WSMR) AND HOLLOMAN AIR FORCE BASE (AFB), & FORT BLISS, TX (FTB).

RESTRICTED AREAS: R-5107B, R-5107C, R-5107D, R-5107E, R-5017F, R-5107G, R-5107H, R-5107J

R-5111 A, B, C, D FT. BLISS R-5103 A, B & C / R-5107A & K

An aircraft on an emergency incident mission for the Pecos Zone (PEZ) or the Department of
Defense (WSMR), Holloman AFB, & FTB) **MUST BE GRANTED CLEARANCE PRIOR TO ENTERING**
RESTRICTED AIR SPACE. The PILOT should use the following established protocol:

While airborne, the pilot should contact Cherokee Control on VHF frequency 126.95 or UHF frequency 305.5. Cherokee Control maintains total control of the air spaces listed above. Range activities will dictate request approvals. Cherokee Control is not staffed on a 24-hour basis.

If there is NO response from Cherokee Control, then coordination then the pilot is advised to contact Holloman Approach (RAPCON) on VHF frequency 120.6 or UHF frequency 269.225. Holloman Approach can grant clearance to cross White Sands Missile Range or Holloman Air Force Base. If there is no response from either of those agencies prior contact telephonically with Range Control can grant access through the restricted areas.

If clearance is not granted to the pilot through the direct use of the radio frequencies listed above, requests through the Alamogordo Dispatch Center MAY NOT OVERRIDE THE DECISION. **A MISSILE FIRING SCHEDULING CANNOT BE INTERRUPTED UNTIL THE MISSION IS COMPLETE.**

If the pilot cannot establish contact with either Cherokee Control, Holloman Approach (RAPCON) by radio, or Range Control via landline they may then contact the Alamogordo Interagency Dispatch Center on Forest Net North 170.5000 or Forest Net South 173.7750 RX/TX tone 103.5 or Air Guard 168.6250 RX/TX tone 110.9 for assistance.

If the Alamogordo Interagency Dispatch Center cannot be reached, the pilot should contact the nearest dispatch center or the Southwest Coordination Center in Albuquerque for assistance. The dispatch office should contact the following telephone number for accessing range clearance.

- CHEROKEE CONTROL (575) 678-8000
- RANGE CONTROL (575) 678-2222/2221

Once contact has been established by the pilot or dispatch office with either Cherokee Control, Range Control, or Holloman Approach (RAPCON), identify the aircraft, give the FAA number, purpose for crossing, and current position. CHEROKEE CONTROL, Holloman Approach (RAPCON), or Range Control will advise the pilot or dispatch office with information regarding frequency assignment for communication and tracking while crossing the restricted areas. **CLEARANCE MAY BE DENIED**, in this case the aircraft may not enter the airspace.

Hazardous Material Special Permit 9198 - Refer to the DOI and USFS Hazardous Material Special Permit 9198. Some commercial airlines may refuse to transport chain saws or hazardous material; be prepared to provide alternative shipping. For more information, see the “Interagency Aviation Transport of Hazardous Materials Handbook.

Large Transport - Contract and Charter Aircraft

Airports Approved for Large Transport Aircraft - Landing and taking off from any airport is left to the discretion of the pilot or aircraft company. Those airports most used by the Southwest Area are:

Arizona	New Mexico
Phoenix-Mesa Gateway	Albuquerque International
Phoenix Sky Harbor International	Roswell Industrial Park
Tucson International	

Texas	Oklahoma
El Paso International	Will Rogers International

Contract Airtankers

Large Airtanker Base Locations

Arizona

Airport	Latitude N/ Longitude W	Manager	Retardant Contract Date
Winslow	35 01'20" / 110 43'20"	J. Sullivan	5/3-7/12
Ft. Huachuca	31 35'00" / 110 20'00"	G. Gil	4/15-7/18
Prescott	34 39'05" / 112 25'18"	C. Matthews	5/1-7/29
Phoenix-Mesa Gateway	33 18'15" / 111 39'45"	M. Huse	4/15-7/31

New Mexico

Airport	Latitude N/ Longitude W	Manager	Retardant Contract Date
Albuquerque	35 02'31" / 106 36'18"	R. Beal	4/29-7/16
Silver City	32 37'55" / 108 09'14"	B.Gomez	Govt. Operated Base
Alamogordo	32 50'24" / 105 59'26"	B. Pearson	Govt. Operated Base
Roswell Air Ctr.	33 18'06" / 104 31'50"	J. King	As needed

Note - For airtanker base restrictions, refer to the Interagency Airtanker Base Directory.

Exclusive Use Contract Helicopters

Arizona

Unit Number	Base	Contractor	Type	Period	Tail
Apache-Sit.	Round Valley	Minuteman	B-407	4/6 – 7/14	N181MA
Coronado	BDI	Summit Helicopters	B-205++	4/01– 8/28	N2773H

Coronado	Tucson	TBD	AS-350B3	4/3 – 7/11	TBD
Kaibab	Pittman	Helicopter Express	AS-350B3	5/1 – 7/29	N20HX
Prescott	Prescott	Trans Aero	AS-350 B3	5/1 – 7/29	N98TE
Tonto	Payson	Trans Aero	AS-350 B3	5/1 – 8/8	N350TA
Fort Apache	Whiteriver	Mountain Air	AS-350 B3	5/15 – 7/23	N118MB
Navajo	Window Rock	JR Helicopters	AS-350 B3	5/1 – 8/1	N350VR
Grand Canyon	Grand Canyon	Papillon	MD-900		N368PA
Grand Canyon	Grand Canyon	Papillon	AS-350B3	5/1 – 7/30	N838PA
AZ Strip BLM	St. George	Mountain Bladerunner	AS-350B3	6/6 – 9/3	N14HX
Phoenix BLM	Weaver	Hillsboro	B-407	5/1 – 7/22	N928CM

New Mexico

Unit Number	Base	Contractor	Type	Period	Tail
Cibola	Sandia	TBD	AS-350 B3	4/6 – 7/20	TBD
Gila	Silver City	Helicopter Exp.	AS-350 B3	4/14 – 7/30	N7HE
Mescalero	Apache Summit	Mountain Air	AS-350 B3	4/25 – 7/25	N127DE
Santa Fe	Los Alamos	TBD	AS-350-B3	5/7 – 7/5	TBD

Arizona Base Locations

Unit	Base Name	Latitude N/ Longitude W	Township/Range/ Section
Apache-Sitgreaves NFs	Round Valley	34 07'42" / 109 18'48"	09N 29E 31,SW
	Heber	34 23'50" / 110 33'55"	12N 17E 32,NW
Coconino NF	Mormon Lake	34 55'50" / 111 20'50"	18N 09E 21
Coronado NF	Douglas-Bisbee	31 28'06" / 109 36'12"	22S 27E 33
	Portal	31 54'30" / 109 09'45"	17S 31E 34,SE
	Rucker	31 46'00" / 109 21'00"	19S 29E 23,NE
	Safford	32 51'00" / 109 42'30"	07S 26E 08,SW
	Sollers Point	32 24'20" / 110 42'20"	12S 16E 09,NE
	Tucson	32 03'01" / 110 51'03"	16S 15E 7

Kaibab NF	Pitman Valley	35 16'30" / 112 03'30"	22N 03E 22
Prescott NF	Prescott	34 39'26" / 112 25'45"	15N 02W 25,NE
Tonto NF	Young	34 05'38" / 110 56'23"	09N 14E 29,NW
	Roosevelt	33 39'33" / 111 07'01"	04N 12E 27,NE
	Payson	34 15'24" / 111 20'24"	11N 10E 33,NW
Ft. Apache BIA	Whiteriver	33 23'14" / 110 27'24"	05N 22E 26,NE
	Limestone	34 10'50" / 110 16'30"	09N 19E 13,NE
	Cibecue	34 00'11" / 110 26'49"	07N 18E 16,SW
San Carlos BIA	San Carlos	33 23'11" / 110 27'23"	01S 18E 01,SE
Navajo BIA	Window Rock	35 39'45" / 109 03'15"	26N 31E 17,NW
AZ Strip BLM	St. George	37 05'30" / 113 35'36"	42S 15W 21
Phoenix BLM	Weaver Mountain	34 03'40" / 112 48'51"	08N 05W 06,NW
Grand Canyon	North Rim	36 11'36" / 112 03'24"	32N 03E 03,SE
	South Rim	36 02'24" / 112 07'48"	31N 02E 25,SW
Saguaro NP	Saguaro Base	32 10'44" / 110 44'23"	14S 16E 32
Gila District BLM	Safford Air	32 51'12" / 109 38'06"	17S 26E

New Mexico Base Locations

Unit	Base Name	Latitude N/ Longitude W	Township/Range/ Section
Carson NF	Taos	36 24'00" / 105 33'05"	25N 13E 16,SE
Cibola NF	Sandia	35 04'16" / 106 22'48"	10N 05E 23,SW
Gila NF	Silver City TB	32 38'19" / 108 09'39"	19S 31W 23
	Negrito	33 31'00" / 108 31'20"	09S16W 19,NE
Lincoln NF	Capitan	33 32'50" / 105 34'30"	09S 14E 09,NE
	Weed	32 48'20" / 105 33'55"	17S 13E 25,NE
	Guadalupe	32 12'20" / 104 41'30"	24S 22E 22,NW
Santa Fe NF	Fenton Hill	35 53'00" / 106 41'00"	19N 02E 13

	Los Alamos	35 49'38" / 106 19'04"	19N 06E 33
Mescalero BIA	Mescalero	33 13'28" / 105 41'18"	13S 12E 27,NW
Jicarilla BIA	Dulce	36 55'55" / 106 59'20"	31N 02W 01,NE

Single Engine Airtanker Bases

Arizona

Unit	Designated Base
Ft. Apache, BIA	Show Low, AZ
Arizona State Forestry	Wickenburg, AZ
Arizona State Forestry	Marana, AZ
Arizona State Forestry	Wilcox, AZ
Gila District, BLM	Safford, AZ
Colorado River District, BLM	Kingman, AZ

New Mexico

Unit	Designated Base
BIA-SW Region	Double Eagle (AEG)*
Las Vegas, N4S	Las Vegas, NM*
Jicarilla BIA	Dulce, NM *
Lincoln NF	Sierra Blanca, NM*
Pecos District BLM	Carlsbad, NM
New Mexico State Forestry	Raton, NM*

**Contact the appropriate unit and allow 1-5 days lead time for base activation*.

Helitorches

Location of Helitorches in the Southwest Area

Unit	Location
Phoenix District	Weaver Mountain, AZ
Fort Apache	Whiteriver, AZ
Gila NF	Silver City

Plastic Sphere Dispenser (PSD)

Locations of Plastic Sphere Dispensers in the Southwest Area

Unit	Location
Carson NF	Taos, NM
Phoenix BLM	Weaver Mountain, AZ
Cibola NF	Tijeras, NM
Coronado NF	Tucson, AZ
Coronado NF	Douglas, AZ (BDI)
Safford District BLM	Safford, AZ
Socorro District BLM	Socorro, NM (2)
Gila NF	Silver City
Kaibab NF	Pittman Valley, AZ, and Grand Canyon NP
Navajo Region BIA	Window Rock, AZ
Prescott NF	Prescott, AZ
Tonto NF	Payson, AZ
Fort Apache	Whiteriver, AZ
Apache/Sitgreaves NFs	Springerville, AZ
Santa Fe NF	Los Alamos, NM

Coronado NF – Tucson Helitack - When dispatched within the Southwest Area, the helicopter will be dispatched with the dispenser and at least 5,000 spheres, unless requested otherwise. Tucson helitack will have at least 1 gallon of ethyl glycol with the helitack truck.

Gila NF – Helitack crew will take the PSD and 5,000 spheres with them when dispatched to any incident within the Southwest Area.

Kaibab NF – Normal dispatch will have the PSD and 5,000 spheres in the support truck.

Tonto NF – Normal dispatch will have the PSD and 5,000 spheres in the support truck.

Lincoln NF – Spheres available if requested with order.

Santa Fe – Not available off unit.

Navajo Region BIA – Normal dispatch will have 5,000 spheres (dragon eggs). Dragon eggs cannot be ordered from the cache, they must be ordered from the vendor.

Note: All units require an operator ordered with the machine.

All PSD Machines are Premo Mark III with one exception; Navajo Helitack has a Red Dragon PSD Machine.

Dispensers will not be dispatched without a certified operator. The operator will be responsible for proper transport and handling of the dispenser and spheres throughout the entire assignment.

Loaded spheres are not flammable and can be shipped in the cardboard container by UPS, etc. Commercial air carrier may still refuse to transport the spheres.

Note - Guidelines governing organization, position requirements, etc., are found in the "Interagency Aerial Ignition Guide."

Simplex Seeder Bucket

The Prescott and Gila National Forests have a SIMPLEX SEEDER BUCKET, Model 6300 available for seeding operations as needed. Specifications as follows:

- 200 lbs. empty weight
- 23 cubic foot capacity
- Approximately 450 lb. capacity
- 11 horsepower gas engine to power seeder
- Maximum swath width - 120 feet
- Electric/hydraulic control system
- Pilot activated switch on helicopter collective/cycle.

Operator must go with seeder and is ordered through normal dispatch channels.

Emergency Helicopter Extraction Source List

An emergency helicopter extraction source list has been developed to facilitate the location of helicopter extraction resources within each GACC. ***It is important to note that this is a source list only, assets listed in the list may not be available at the time of request.***

Grand Canyon, AZ – National Park Service

Make & Model	*MD-900/207El*
Perform @ 7000'/90° F.	*Yes*
Cruise Speed	*138 mph*
VFR	*Yes*
IFR	*No*
FM Radio Programmable	*Yes*
Night Vision Goggles (NVG)	*No*
Order Response Time	*1 – 1.5 Hours*
Hoist Type:	*None/Short-Haul*
Fuel Cycle:	*2 Hours (280 Miles)*
Refueling:	*Can refuel @ FBO's (Jet-A). Contract fuel truck available.*
Medical Personnel:	*EMT/Paramedic (includes Helitack support personnel)*
Paid Extended Staffing:	*Determined by flight request.*
Paid Relocation:	*Yes. Case by Case basis.*
Notes:	*This is a national fire resource helicopter. Available for long term assignment for national/regional incidents. Procurement can be initiated by MOU or incident "P" number. Check availability, may already be assigned to an incident. Both helicopters are not available simutaneously.*
Ordering Procedure:	*Contact Williams Dispatch Center (WDC), 928-635-8356, Helicopter Program Manager Robert Dauphinais at 928-266-5633 or 928-638-7823.*

1 **Grand Canyon, AZ – National Park Service**

Make & Model	*AS-350 B3*
Perform @ 7000'/90° F.	*Yes*
Cruise Speed	*126 mph*
VFR	*Yes*
IFR	*No*
FM Radio Programmable	*Yes*
Night Vision Goggles (NVG)	*No*
Order Response Time	*30 Minutes*
Hoist Type:	*None/Short Haul*
Fuel Cycle:	*2.5 Hours (340)*
Refueling:	*Can refuel @ FBO's (Jet A). Contract fuel truck available.*
Medical Personnel:	*EMT/Paramedic (includes Helitack support personnel)*
Paid Extended Staffing:	*Determined by flight request.*
Paid Relocation:	*Yes. Case by Case basis*
Notes:	*This is a national fire resource helicopter. Available for long term assignment for national/regional incidents. Procurement can be initiated by MOU or incident "P" number. Check availability, may already be assigned to an incident. Both helicopters are not available simultaneously.*
Ordering Procedure:	*Contact Williams Dispatch Center (WDC), 928-635-8356, Helicopter Program Manager Robert Dauphinais at 928-266-5633 or 928-638-7823.*

Arizona Department of Public Safety

Aircraft are located in the following locations:

Flagstaff, AZ **Kingman, AZ** **Phoenix, AZ** **Tucson, AZ**

Make & Model	*5 – Bell 407's*
Perform @ 7000'/90° F.	*Yes*
Cruise Speed	*126 mph*
VFR	*Yes*
IFR	*No*
FM Radio Programmable	*Yes*
Night Vision Goggles (NVG)	*Yes*
Order Response Time	*5 – 10 minutes*
Hoist Type:	*None/Short Haul*
Fuel Cycle:	*2 Hours (250 miles)*
Refueling:	*Can refuel @ FBO's (Jet A) Fuel trucks and fuel trailers available.*
Medical Personnel:	*Paramedics*
Paid Extended Staffing:	*24/7*
Paid Relocation:	*No*
Notes:	*Arizona State Emergency Response helicopters. Available for medical, SAR, and LE missions. Immediate short term fire suppresssion (Bambi Bucket).*
Ordering Procedure:	*Contact Arizona State Dispatch @ 800-309-7081. Dept. of Public Safety Dispatch 800-247-6337. Aviation Bureau 602-223-2535 during business hours.*

1 **Tucson, AZ – Active Military – Air Force (Davis-Monthan Air Force Base)**

Make & Model	*Sikorsky HH-60 Pavehawk*
Perform @ 7000'/90° F.	*Yes*
Cruise Speed	*156 mph*
VFR	*Yes*
IFR	*Yes*
FM Radio Programmable	*Yes*
Night Vision Goggles (NVG)	*Yes*
Order Response Time	*1 2 Hours*
Hoist Type:	*Breeze Eastern/Lucas Western (Rated 600 lbs. / 200 ft. cable*
Fuel Cycle:	*300 miles*
Refueling:	*Can refuel @ FBO's (Jet A) Possible in-flight refueling*
Medical Personnel:	*Paramedics*
Paid Extended Staffing:	*Exended staffing provided 24/7*
Paid Relocation:	*No*
Notes:	*Direct contact: 305 RQS, Lt. Col Beatty, phone # 520-228-5290 or 520-228-2316 or 520-228-2168.*
Ordering Procedure:	*Contact Tucson Dispatch 520-202-2710. Air Force Rescue Coordination Center (AFRCC) 800-851-3051.*

1 **Santa Fe, NM – New Mexico National Guard**

Make & Model	*Sikorsky UH-60A Blackhawk's*
Perform @ 7000'/90° F.	*Yes*
Cruise Speed	*150 mph*
VFR	*Yes*
IFR	*Yes*
FM Radio Programmable	*Yes*
Night Vision Goggles (NVG)	*Yes*
Order Response Time	*1 – 2 Hours*
Hoist Type:	*Goodrich (Rated-600 lobs. / 250 ft. cable*
Fuel Cycle:	*350 miles*
Refueling:	*Can refuel @ FBO's (Jet A)*
Medical Personnel:	*medics*
Paid Extended Staffing:	*No*
Paid Relocation:	*No*
Notes:	*Contact CPT Kevin Doo 505-474-1158 or cell 505-699-2122*
Ordering Procedure:	*Contact Santa Fe Dispatch 505-438-5600*

1 **Albuquerque, NM – Active Military – Air Force (Kirtland Air Force Base)**

Make & Model	*Sikorsky HH-60 Pavehawk*
Perform @ 7000'/90° F.	*Yes*
Cruise Speed	*150 mph*
VFR	*Yes*
IFR	*Yes*
FM Radio Programmable	*No*
Night Vision Goggles (NVG)	*Yes*
Order Response Time	*1 – 2 Hours*
Hoist Type:	*Goodrich or Lucas Western (Rated 600 lbs./ 200 ft. cable*
Fuel Cycle:	*300 miles*
Refueling:	*Can refuel @ FBO's (Jet A). Possible in-flight refueling*
Medical Personnel:	*medics*
Paid Extended Staffing:	*Extended staffing provided24/7*
Paid Relocation:	*No*
Notes:	*Direct contact 512 RQS, Lt.Col Nicklaus Dipoma 505-846-6414. For expedited dispatch call direct 505-846-9482 or 505-846-3777 before call to AFRCC.*
Ordering Procedure:	*Contact Albuquerque Dispatch 505-346-2660. Air Force Rescue Coordination Center (AFRCC) 800-851-0351..*

Southwest Area Aircraft Emergency Transport Sources

Helicopter Transport

Note: Basic information (if possible) needed from personnel on scene before placing order for medivac helicopter.

- Elevation of landing site
- Latitude and longitude (degrees minutes, decimal minute)
- Temperature
- Wind speed and direction
- Weight of patient
- Is there a landing site, brief description of size, hazards, tall trees, uneven ground etc.?
- General location
- Is Helitack qualified person available?

Air Ambulance Helicopter Transport

Arizona

Company	Contact	Base Locations
Native Air/LifeNet	1-800-642-7828	Florence, Marana, Rio Rico, Wilcox, Safford, Gilbert, Globe, Parker, Payson, Lake Havasu City, Show Low, Prescott, Kearny, Springerville, Sun City West
AirEvac	1-800-321-9522	Showlow, Globe, Safford, Phoenix, Mountain Vista, Buckeye, Glendale, Casa Grande, Sierra Vista
Guardian Air	1-800-523-9391	Flagstaff, Cottonwood, Winslow, Kingman, Tuba City, Page
Tri-State Care Flight	1-800-800-0900	Bullhead City, Kingman, Parker, Yuma, Quartzsite, Fort Mojave
Lifeline	1-800-949-7173	Saint David, Douglas, Nogales

New Mexico

Tri-State Care Flight	1-800-800-0900	Taos, Raton, Santa Fe, Bernalillo, Gallup, Truth or Consequences, Tucumcari, Portales, Roswell, Artesia, Carlsbad, and one in Durango, CO
Native Air	1-800-242-6199	Silver City, Deming, Las Cruces, Roswell, Alamogordo, Hobbs, Carlsbad
PHI Air Medical	1-800-633-5438	Grants, Albuquerque, Socorro
Gallup Med Flight	1-877-488-8148	Gallup
AeroCare	1-800-627-2376	Clovis, Lovington

Texas

AeroCare	1-800-627-2376	Lubbock, Seminole, Odessa and Ft. Stockton

Air Ambulance Fixed Wing Transport

Arizona

Angel Medflight	1-877-264-3570	Scottsdale
Native Air	1-800-642-7828	Deer Valley, Showlow
AirCare 1 International	1-877-760-7760	Scottsdale
Tri-State Careflight	1-800-800-0900	Yuma, Parker
Air Ambulance America	1-800-262-8526 #3	19 lear jets operating nationwide

New Mexico

Tri-State Careflight	1-800-800-0900	Gallup, Roswell
Gallup Med Flight	1-877-488-8148	Gallup
AirCare 1 International	1-877-760-7760	Albuquerque
Med Flight Air Ambulance	1-800-842-4431	Albuquerque, El Paso
Air Ambulance America	1-800-262-8526 #3	19 Lear Jets operating nationwide
Native Air	1-800-242-6199	Carlsbad, Roswell

Texas

Native Air	1-800-642-7828	El Paso, Midland, Snyder

Colorado

Tri-State Care Flight	1-800-800-0900	Durango