

CHAPTER 50

AIRCRAFT

AIRCRAFT MOBILIZATION

For all aircraft orders, documentation of special needs, threats, or specific reporting instructions are critical for the proper and timely processing of each aircraft request. All aircraft should be dispatched by closest resource, regardless of Geographic Area boundaries. When a Geographic Area has depleted local and available aircraft resources, request(s) will be placed with NICC. Aircraft assigned will remain in the Geographic Area until released or reallocated by the NICC.

The following selection factors will be considered when ordering aircraft:

- Initial Attack vs. Large Fire Support.
- Closest resource, regardless of Geographic Area boundary.
- Timeliness.
- Cost effectiveness.
- Performance specifications for density/high altitude operations.
- Airtanker Type (T1 & T2 LATs, VLAT, or SEAT).
- Special flights/capabilities, to include short-haul, STEP, aerial ignition, rappel, hoist, etc.
- Special equipment, bucket vs. tank, tundra pads, floats, etc.

The following terminology will be used when requesting aircraft through NICC:

- Knots (kts.) will be the standard term used to reference airspeed.
- VORs (Very High Frequency Omnidirectional Range) will be used to reference direction.
- Latitude and longitude must be provided in Degrees Decimal Minutes (DDM), utilizing GPS Datum WGS84 degrees and minutes.
- Aircraft registration numbers will be used when referencing helicopters, lead planes, and air attack aircraft.
- Airtankers and SEATs will be referenced by the airtanker number, e.g., T-40.

TYPES OF FLIGHTS

Point-to-Point

A “Point-to-point” flight is one that originates at one developed airport or permanent helibase, and flies directly to another developed airport or permanent helibase with the sole purpose of transporting personnel or cargo (this term does not apply to commercial air travel). These types of flights are often referred to as “administrative” flights and only require the aircraft and pilot to be carded and approved for point-to-point flight. A point-to-point flight is conducted higher than 500 feet above ground level (AGL).

Mission Flights

Mission flights (also known as FS Special Use Mission flights) are defined as flights not meeting the definition of point-to-point flight. A mission flight requires work to be performed in the air

(retardant or water delivery, fire reconnaissance, smokejumper delivery), or through a combination of ground and aerial work (delivery of personnel and/or cargo from helibases to helispots or unimproved landing sites, rappelling or cargo let-down, horse herding). Special Use Mission Flights may require special pilot endorsements, flight evaluations, training, and/or specialized aircraft equipment.

Flight Manager

A Flight Manager will be designated for point-to-point flights transporting personnel. The Flight Manager is a government employee that is responsible for coordinating, managing, and supervising flight operations. The Flight Manager is not required to be on board for most flights.

For those flights that have multiple legs or are complex in nature, a Flight Manager should attend the entire flight. The Flight Manager will meet the qualification standard for the level of mission assigned as set forth in the *Interagency Aviation Training Guide* found at:

https://www.iat.gov/docs/IAT_Guide.pdf

The Flight Manager is supervised by the Sending Unit dispatcher until the destination is reached. The Flight Manager duties are:

- Brief passengers and personnel providing an overview of the purpose, final destination, route of travel, intermediate stops, if applicable and estimated time(s) of arrival (ETAs).
- Ensure the passenger manifest is accurate and contains the correct names and weights of the passengers. Note: The pilot is ultimately responsible for ensuring correct weights, balance, and power computations. The Flight Manager will provide one copy of the manifest to the pilot-in-command and ensure that additional copies are available for the receiving unit and the sending dispatcher.
- Ensure proper Resource Tracking procedures are met.
- Ensure passenger aircraft safety briefing is conducted.
- Maintain a current list of telephone numbers for the sending and receiving units. The Flight Manager will contact the sending unit dispatch when the flight plan has deviated more than 30 minutes from the original flight plan.
- Have all personnel within the weight limitations, assembled, and ready to board in the designated staging area.
- Ensure the pilot and aircraft are currently authorized for the intended mission and the pilot – in-command can verify the aircraft is within weight and balance limitations.
- Responsible for signing the Daily Flight Report – Invoices (Form 6500-122 or AMD-23) for all flights (except for domestic air carriers, airlines, and NIFC contract aircraft).
- For Canadian travel, the Flight Manager will ensure proper documentation is included.

FLIGHT FOLLOWING MANAGEMENT

FAA Flight Plans

FAA flight plans and flight following are generally used for point-to-point flights and the pilot or flight manager will contact dispatch with an estimated time of departure, estimated time enroute and close out with dispatch once the aircraft is on the ground to accomplish resource tracking. The pilot shall close out the flight plan with the FAA once the flight is completed.

All flights conducted under FAA Instrument Flight Rules (IFR) are automatically provided FAA flight following. Administrative flights conducted under Visual Flight Rules (VFR) flight plans require the pilot to file a flight plan with the appropriate FAA facility. The pilot must request FAA flight following. Air Traffic Control (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. Automated Flight Following (AFF) or Verbal flight following is not required enroute when an FAA flight plan has been filed.

Agency Flight Plans

Agency flight plans are the responsibility of the pilot, to be distributed through the originating dispatch office and are documented on an Aircraft Flight Request/Schedule. All aircraft operating on Agency Flight Plans shall monitor Air Guard.

Flight Following

For mission flights, there are two types of Agency Flight Following:

- Automated Flight Following (AFF). AFF is the preferred method of agency flight following. If the aircraft and flight following office have AFF capability, it shall be utilized. Periodic radio transmissions are acceptable when utilizing AFF. (See AFF procedures below for more information).
- Radio Check-in. Radio Check-in/Check-out flight following requires verbal communication via radio every 15 minutes. The dispatcher will log the aircraft call sign, latitude, longitude, and heading.

Agency flight following is used for all mission flights but is not required when an FAA flight plan has been filed for a point-to-point flight. Helicopters conducting mission flights shall check-in prior to and immediately after each takeoff/landing per the *NWCG Standards for Helicopter Operations, PMS 510*:

<https://www.nwcg.gov/publications/510>

For point-to-point flights, AFF flight following may be used as well. The pilot or flight manager will, as a minimum, contact dispatch prior to the flight with an estimated time of departure, estimated time enroute, souls and fuel on board and will close out with dispatch once the aircraft is on the ground.

Flight following is the responsibility of the originating dispatch office and will remain so until transferred through a documented, positive handoff. The flight following dispatch office shall be continually staffed while an aircraft is airborne. Confirmation of an aircraft's arrival at a specified destination is required to ensure that a flight has been completed safely. It is the pilot's responsibility to close out a flight plan.

If an aircraft is overdue, it is the receiving dispatcher's responsibility to initiate aircraft search and rescue actions.

Flight following problems are documented through the SAFECOM system.

Flight Following for Demobilization

Flight Following will be performed on all Government or Exclusive-Use contract aircraft being demobilized. NICC will release charter and CWN aircraft to the vendor without flight following provided no government personnel or cargo is on board. All aircraft release information will be entered in to IROC.

National Flight Following Frequency (168.6500 MHz)

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

Automated Flight Following (AFF)

AFF is an online government application that automatically tracks the location and velocity of specially equipped aircraft and mobile assets and provides this information in near-real-time to dispatchers, aviation managers, and other authorized users. AFF reduces the requirement to “check-in” via radio every 15 minutes and 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 congested radio frequencies, and provides the dispatcher with much greater detail and accuracy on aircraft location and flight history.

Requirements to Utilize AFF

AFF 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. Dispatch office(s) responsible for flight following shall be staffed for the duration of the flight.

Procedures for utilizing AFF:

- When an aircraft is ordered, or a user requests flight following from a dispatch office.
- The dispatch office will verify the aircraft icon is visible on the screen and be able to quickly monitor the page at any time during the flight.
- The dispatch office will provide the pilot with FM frequencies and tones that will be monitored for the duration of the flight.
- When aircraft is initially airborne, and outside of sterile cockpit environment, the pilot will contact the dispatch office via radio stating call sign, departure location, number on board, fuel on board, ETE, destination, confirmation of AFF location. This is required to positively verify that both the aircraft and the dispatch office are utilizing AFF, radios are operational, and that the dispatcher can “see” the aircraft on the computer screen. If there is a problem at this point, change to radio check-in procedures until the problem is resolved.
- If radio contact cannot be established the pilot will abort the mission and return to the airport/helibase.
- If there is a deviation from the planned flight route, the pilot will contact the dispatch office via radio with the changed information.

- The dispatch office will keep the AFF system running on a computer for the entire flight and will set a 15-minute timer and document the location for the duration of the flight.
- If the aircraft 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. (During tactical operations below 500' a periodic red indication is normal and does not necessitate an 'immediate' contact especially if flight following has been established with the incident. This should be addressed during the pre-flight briefing.)
- If radio contact is made after a lost signal, the flight may continue utilizing radio check-ins for flight following.
- When the aircraft has completed the flight and landed, the pilot or flight manager (Flight Manager, ATGS, etc.) shall contact the dispatch office via radio or telephone informing them that they are on the ground.

Additional information about AFF can be found at: <https://www.aff.gov/>

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 method of flight following (Agency or FAA) to the Sending Unit's GACC.
- Notify the GACC of any route changes, and of any delay or advances of a flight plan exceeding thirty (30) minutes.
- Assist with search procedures for overdue aircraft. Utilize agency aircraft search/rescue guides, as appropriate.
- On any point-to-point flight crossing Geographic Area boundaries, instruct the Pilot-In-Command or Flight Manager to contact NICC Flight Tracking at each stop enroute. Aircraft support vehicles should contact NICC Flight Tracking at fuel stops.

NICC Flight Tracking: (800) 994-6312

Responsibilities of Sending GACC:

- Sending GACC will relay the Aircraft Flight Request/Schedule to NICC.
- Notify NICC of any route changes, and of any delay or advances of a flight plan exceeding thirty (30) minutes.
- Assist with search procedures for overdue aircraft.

Responsibilities of NICC:

- Relay Aircraft Flight Request/Schedule to the receiving GACC.
- Notify receiving GACC of any route changes, and of any delay or advances of a flight plan exceeding thirty (30) minutes.
- Resource track aircraft to specified destinations.
- Monitor flight plans for additional utilization.

Responsibilities of Receiving GACC:

- Relay Aircraft Flight Request/Schedule to the Receiving Unit.
- Notify Receiving Unit of known delays/advances of a flight plan exceeding thirty minutes.
- Confirm arrival of all aircraft to NICC.
- Notify NICC of any aircraft overdue by more than thirty minutes.
- Assist with search procedures for overdue aircraft.

Responsibilities of Receiving Unit:

- Confirm arrival of all aircraft to Receiving GACC.
- Notify Receiving GACC of any delays of a flight plan exceeding thirty minutes; notify receiving GACC of any aircraft overdue by more than thirty minutes.
- Initiate/assist with search procedures for overdue aircraft.

COOPERATOR AIRCRAFT

Refer to the *Interagency Standards for Fire and Fire Aviation Operations (NFES 2724)* for additional information regarding cooperator aircraft.

<https://www.nifc.gov/standards/guides/red-book>

Cooperator-contracted aircraft also on an existing federal contract with federal aircraft and pilot cards may be utilized on federally protected lands when cooperative agreements are in place and the aircraft have been approved by USDA Forest Service/DOI letter.

Cooperator-contracted, exclusive-use aircraft not on an existing federal contract may be considered for approval on a case-by-case basis when cooperative agreements are in place. Approval will be by USDA Forest Service/DOI letter.

Cooperator-owned/-operated aircraft may be utilized on federally managed fires when cooperative agreements are in place and the aircraft have been approved by FS/DOI letter. Cooperator-owned/-operated aircraft meeting requirements of the *NWCG Standards for Interagency Cooperator Type 2 and Type 3 Helicopters, PMS 525-1* or other applicable NWCG standards may be utilized on federally protected lands when cooperative agreements are in place and the aircraft have been approved by FS/DOI letter.

<https://www.nwcg.gov/sites/default/files/publications/pms525-1.pdf>

All cooperator aircraft used on federally protected lands must be approved by FS/DOI letter. Utilization of approved, cooperator aircraft shall be limited based on 49 UNITED STATES CODE §40125.

- All approved cooperator aircraft used on federally managed fires shall be released when federal aircraft become reasonably available.
- The use of cooperator aircraft must involve a “significant and imminent threat to life or property” documented daily on the Cooperator Aircraft Use Validation Worksheet ([chapter 80](#)) to document the justification for aircraft utilization.

Non-Federally Approved Cooperator Aircraft

Cooperator-contracted, exclusive-use aircraft not on an existing federal contract may be considered for approval on a case-by-case basis when cooperative agreements are in place.

The following conditions apply for non-federally approved aircraft:

- No federal employees are allowed to ride on board the aircraft.
- No federal employee may be assigned to a position that exercises contractual control.
- Federal personnel may load retardant at federal airtanker bases, regardless of jurisdiction.
- Federal personnel may provide aerial supervision (ATGS, ASM, HLCO, Leadplane) under existing standard operating procedures and agreements.
- The aircraft remains under State operational control regardless of the agency affiliation of the firefighters directing the aircraft on an incident with State jurisdiction.
- The aircraft are approved to interact with federal dispatch personnel as long as the aircraft remains under the operational control of the State or for safety reasons.

Under emergency circumstances, where human life is immediately at risk by wildland fire on lands under federal protection, a Federal Line Officer can approve the use of non-federally approved aircraft. This exemption must only take place when sufficient federal firefighting aircraft are not readily available to meet the emergency need. Federal line officers are encouraged to consult with agency aviation management personnel to aid in decision making.

Approving Federal Line Officer must document exemptions in accordance with agency guidance to include submitting a SAFECOM within 24 hours.

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

HELICOPTERS

All Type 1 and 2 federally contracted helicopters are National Resources. There are two categories of helicopters:

- Standard: Government personnel/passenger and cargo hauling.
- Restricted: No government personnel/passenger or internal cargo transport, lift only.

For standard category helicopters, a module must be assigned. See *NWCG Standards for Helicopter Operations, PMS 510* for additional information.

<https://www.nwcg.gov/sites/default/files/publications/pms510.pdf>

For information on helicopter module staffing, reference *The Interagency Standards for Fire and Fire Aviation Operations (NFES 2724)* <https://www.nifc.gov/standards/guides/red-book>

There are two contractual types of helicopters:

- Exclusive-Use (EU) Contract helicopters are mobilized complete with an assigned module.
- Call-When-Needed (CWN) helicopters require the requesting unit to provide a module.

When processing requests for helicopters, the NICC will inform the requesting GACC of the contract type of the assigned resource.

CWN Helicopters

NICC is the sole source for Type 1 and 2 federally contracted CWN Helicopters. GACCs will obtain approval from NICC prior to reassigning federally contracted CWN Type 1 or 2 Helicopters to another incident.

NICC is also the sole source for all FS Type 3 CWN Helicopters.

All DOI Agency Type 3 CWN Helicopters are ordered through normal ordering channels and are dispatched either locally, or through GACCs.

For all CWN Helicopter Aircraft, the following apply:

- The requesting unit must provide a Helicopter Manager (HMGB) name and contact information, documented in the “Special Needs” of the resource order, before NICC will assign the helicopter. The exception is Alaska, due to the extended mobilization time of the aircraft.
- It is preferred that CWN Helicopter Managers and/or modules meet with their assigned helicopter off-site from the incident prior to performing work.
- The specific reporting location should be identified on the resource order, such as a Fixed Base Operator (FBO) or other easily located site.

Exclusive-Use Helicopters

All FS EU Type 1 and 2 Helicopters are contracted by the FS Procurement and Property Services, Incident Procurement Operations (IPO ISB) located at in Boise at the NIFC.

All Exclusive-Use Contract Helicopters for DOI Agencies are solicited, inspected, and contracted by DOI AQD and OAS.

For all EU Helicopter Aircraft, the following apply:

- Exclusive-Use Contract Helicopters are dispatched locally by the Administrative Unit.
- When requested by NICC, National Resources will be dispatched by the dispatch center hosting the resource at the time of request.

US Forest Service Type 1 and Type 2 Helicopters

All Type 1 and 2 US Forest Service (FS) Helicopters will be initially ordered through the NICC. All FS CWN and EU Type 1 and Type 2 Helicopters and their modules (both helitack and rappellers), are National Resources prepositioned and allocated by NICC and the FS National Aircraft Coordinator, in alignment with NMAC and Agency prioritization and direction.

Periodically, FS Type 1 and Type 2 EU Helicopters not within their Mandatory Availability Period (MAP) are hired under their EU Contract for optional use periods for incidents or projects. A modification to the EU Contract is required for the duration of the incident assignment. The EU Contract designates the Contracting Officers Representative (COR). If an FS EU Helicopter Manager is not immediately available, the requesting Geographic Area will assign a Helicopter Manager. The designated Helicopter Manager will then manage the helicopter thereafter. The COR will be notified that the EU Helicopter is being dispatched.

FS EU Helicopter utilization is closely monitored. In some cases, underutilized resources will be reallocated nationally, to higher priority incidents or Geographic Areas. When requested by the NICC, GACCs will make these aircraft available. If a GACC has a need to backfill behind a Forest Service EU Helicopter, that GACC will show the need by placing a request to the NICC. In no situation, will a GACC remove a FS EU Helicopter from another Geographic Area, without coordination with the NICC and the FS National Aircraft Coordinator.

The standard 14-day assignment applies to the crew and not the helicopter platform. Module leaders are expected to rotate their crew to maintain helicopter availability. Extenuating circumstances will be honored and coordinated with the FS National Aircraft Coordinator.

For additional direction please reference the *FSM 5700* and *NWCG Standards for Helicopter Operations, PMS 510*.

BLM Type 1 Helicopter

The BLM Type 1 Helicopter's primary mission is initial attack. While most effective at providing rapid initial response, the crew is well equipped to respond to extended attack incidents and critical need missions on large fires.

To retain this helicopter and crew beyond initial attack for extended attack incidents, a request will be made to the GACC. Extended attack incidents that utilize the crew to fill critical positions, should immediately order replacement personnel for those positions in case the aircraft and crew are reassigned.

Short-haul

Helicopters ordered specifically for short-haul capability, will be ordered as either "HE2S – Helicopter, Type 2 Standard" or "HE3S - Helicopter, Type 3 Standard" with the "Short-haul capability" feature in IROC. The capability should also be defined in the "Special Needs" block of the resource order as short-haul capable.

RAPPELLERS

The Forest Service National Helicopter Rappel Program's primary mission is initial attack. When rappellers are needed for initial attack with aircraft, they are to be requested in IROC as "RPIA – Load, Rappeller, Initial Attack" on an Aircraft request. All initial attack orders will be honored, regardless of Geographic Area boundary, when rappellers are available. The NICC, in conjunction with the FS National Aircraft Coordinator, may determine situations when closest resource is not applicable.

Please refer to Chapter 20 for specific guidance for ordering helicopter module personnel and booster orders.

The sending unit will fill the request with a roster in IROC by ordering the aircraft with subordinates, with name and agency identification, through the established ordering channels. This information can be acquired after the aircraft is airborne. Any intent to retain rappellers which have not been utilized as an IA load, will be negotiated between the sending, and receiving rappel base in concurrence with NICC and the GACCs.

GACCs prepositioning rappellers when multiple starts are occurring or predicted will specify the anticipated duration. If not deployed during this period, rappellers will be made available for

higher priorities, unless longer duration is negotiated between the sending and receiving rappel bases in concurrence with NICC and the GACCs.

Rappellers held as boosters after release from the first IA assignment will be placed on an Overhead order using individual “O” requests. Rappellers recovered and mobilized to another assignment, internally or across Geographic Area boundaries, will also be placed on an Overhead order.

Rappel crews may be utilized for large fire support, all-hazard incident operations, and resource management objectives. Rappel crews are well equipped to respond to extended attack incidents and critical need missions on large fires. Extended attack incidents that utilize rappel crews to fill critical positions, should order replacement personnel for those positions in case the aircraft and crew are reassigned.

Helicopters ordered with rappel capability for preposition and/or large fire support, will be ordered as “HE2S – Helicopter, Type 2 Standard”, with the “Rappel Capability” feature in IROC. The capability should also be defined in the “Special Needs” block of the resource order as rappel capable.

Rappeller Numbers

Planned staffing includes 285 Rappellers at the following locations (actual fire season numbers may vary):

Great Basin	Boise, ID	15
	Price Valley, ID	30
	Salmon, ID	45
Northern Rockies	Gallatin, MT	17
	Libby, MT	16
	Northwest	Grants Pass, OR
Northwest	John Day, OR	28
	Prineville, OR	27
	La Grande, OR	38
	Wenatchee, WA	27
	Southern California	Trimmer, CA

Rappeller Aircraft

Aircraft delivering Initial Attack Rappellers will return to the sending base or a designated location before the end of the pilot’s daily flight or duty limitations. Any intent or necessity to retain the aircraft will be negotiated between NICC and the GACCs. If the aircraft is retained past the first operational period, it will be placed on an Aircraft request through established ordering channels.

SMOKEJUMPERS

Smokejumpers primary mission is initial attack. All initial attack orders will be honored when smokejumpers are available. While most effective at providing rapid initial response, smokejumpers are well equipped to respond to extended attack incidents and short-term critical need missions on large fires. Smokejumpers are normally configured by planeload, with each load ranging from eight to ten smokejumpers depending on aircraft type and smokejumper availability.

When smokejumpers are needed jump-ready for initial attack with aircraft, they are to be requested in IROC as “SMIA - Load, Smokejumper, Initial Attack” on an Aircraft request.

BLM smokejumper initial attack aircraft may be launched within its current dispatch zone to new incidents after having been provided location, bearing, distance, and flight following frequency. All other pertinent information will be provided to aircrews while enroute.

Specifying the delivery system is not permitted. The sending unit will fill the request with a roster in IROC or by forwarding a manifest form, with name and agency identification, through the established ordering channels. This information can be acquired after the smokejumper aircraft is airborne. Any intent to retain Smokejumpers which have not been utilized as an IA load will be negotiated between the sending and receiving smokejumper base in concurrence with the NICC and the GACCs.

GACCs prepositioning smokejumpers when multiple starts are occurring or predicted will specify the anticipated duration. If not deployed during this period, smokejumpers will be made available for higher priorities, unless longer duration is negotiated between the sending and receiving smokejumper bases in concurrence with NICC and the GACCs.

Smokejumpers held as boosters after release from the first IA assignment will be placed on an Overhead order using individual “O” requests. Smokejumpers recovered and mobilized to another assignment, internally or across Geographic Area boundaries, will also be placed on an Overhead order.

Smokejumpers may be configured as crews (hand crew, engine crew, or helitack crew) or as single resource overhead for Incident Command System positions. Concurrence with NICC must be obtained prior to configuring smokejumpers as crews or modules for extended attack operations.

Please refer to Chapter 20 for specific information on ordering smokejumper boosters.

Smokejumper Numbers

Planned staffing includes 480 smokejumpers at the following locations (actual fire season numbers may vary):

BLM Alaska	(Fairbanks)	75
BLM Great Basin	(Boise)	75
FS Northern Rockies	(Missoula)	70
	(Grangeville)	30
	(West Yellowstone)	30
FS Great Basin	(McCall)	70
FS North Ops	(Redding)	50
FS Northwest	(N. Cascade)	30
	(Redmond)	50

Satellite bases may be activated based on fire activity.

Daily availability is updated throughout the fire season and is posted at the following link:

<https://www.nifc.gov/smokejumper/reports/smjrp.php>

Smokejumper Aircraft

Aircraft delivering Initial Attack smokejumpers will return to the sending base or a designated airport before the end of the pilot's daily flight or duty limitations. Any intent or necessity to retain the aircraft will be negotiated between NICC and the GACCs. If the aircraft is retained past the first operational period, it will be placed on an Aircraft request through established ordering channels.

A list of all Smokejumper Aircraft can be found at:

<https://www.nifc.gov/nicc/logistics/aviation/aviation.htm>

AERIAL SUPERVISION AIRCRAFT

Leadplanes, Exclusive-Use Air Tactical Aircraft, and Aerial Supervision Modules (ASM(s)) are National Resources. Areas administering these aircraft will make them available for wildland fire assignments when requested by NICC and approved by the parent agency. Requests for leadplanes may be filled with an ASM.

Aerial Supervision Module

The ASM is a fixed-wing platform that utilizes two (2) crew members to perform the functions of traditional air attack and low-level lead operations. The ASM requires both crew members to be trained to work as a team, utilizing Crew Resource Management (CRM) skills and techniques to enhance safety, efficiency, and effectiveness.

Leadplane

A Leadplane is a fixed-wing platform that provides low-level lead operations for airtankers. Lead planes are required for non-IA rated airtankers, such as VLATs and MAFFS. Leadplanes may also be requested for congested airspace situations, by any airtanker pilot, or to determine adequate visibility for airtanker operations on an incident. Leadplanes are limited and specialized resources, therefore missions may need to be prioritized for non-IA rated airtanker missions.

Please contact the USFS National Fixed-Wing Coordinator, or appropriate agency program manager for any lead plane needs or for planning purposes.

A list of all Leadplanes/Aerial Supervision Modules can be found at:

<https://www.nifc.gov/nicc/logistics/aviation/aviation.htm>

Air Tactical Aircraft

Air Tactical Aircraft are on agency Exclusive-Use Contracts and/or Call-When-Needed (CWN) Agreements. They are available for interagency use and will be requested through established ordering channels. Federal agencies have developed Air Tactical specific contracts and agreements that add performance capabilities and radio configurations specific to the role of aerial supervision.

To ensure consistent utilization, rotation, and management of the exclusive-use Air Tactical Aircraft fleet, refer to the *Interagency Standards for Fire and Fire Aviation Operations (NFES 2724)*.

UNMANNED AIRCRAFT SYSTEMS (UAS)

Incident UAS missions may be conducted on a small scale by agency owned UAS and an agency crew or on a larger scale by vendor owned and operated UAS with agency support.

There are three federal UAS ordering scenarios:

- Agency UAS for situational awareness (SA)/ Infrared (IR)/mapping.
- Agency UAS for aerial ignition (also capable for SA/IR/mapping).
- CWN contract UAS for large fire

For specifics on how to order UAS, please see:

<https://uas.nifc.gov/uas-ordering>

There is an on-call UAS Coordinator available to answer questions regarding UAS capabilities and to help determine the type of UAS (1-4) and overhead (UASP, UASD, UASM, or UASL) to order. UAS personnel are in high demand. Please order trainees when approved/possible.

Cooperators wishing to fly UAS on federally managed incidents must have a Cooperator letter issued by DOI or FS.

UAS Coordinator: (208) 387-5335

AIRTANKERS

Airtankers are National Resources, their primary mission is initial attack. NICC will prioritize and allocate federal airtankers by positioning them in areas of current or predicted high wildfire danger or activity.

Geographic Areas managing these aircraft will make them available for wildland fire assignments when ordered by NICC. This will be accomplished by ensuring that all support functions (i.e., Airtanker Bases, GACCs, and local dispatch centers) that are required for the mobilization of National Resources are staffed and maintained to support mobilizations. The following criteria apply to all airtankers:

- Airtankers should be dispatched by closest resource, regardless of Geographic Area boundaries.
- When a Geographic Area has depleted available VLAT or Large Airtanker (Type 1 or 2) resources, or the closest available resource is outside of the GACC, request(s) will be placed with NICC.
- All airtanker movement, regardless of existing border agreements, will be communicated to the NICC.
- There are five types of airtankers based on payload capacity:
 - VLAT = 8,000 gallons or more
 - Type 1 = 3,000 to 5,000 gallons
 - Type 2 = 1,800 to 2,999 gallons
 - Type 3 = 800 to 1,799 gallons
 - Type 4 = Up to 799 gallons

To ensure consistent utilization, rotation, and management of the national airtanker fleet, please refer to the following publications:

- *Interagency Standards for Fire and Fire Aviation Operations (NFES 2724)*
- *Forest Service Standards for Airtanker Operations.*
<https://www.fs.usda.gov/sites/default/files/2022-11/Standards-for-Airtanker-Ops.pdf>

Airtanker Use in Optional and Post Season Periods

Post Season and Optional Use airtanker activations are processed by the Contracting Officer (CO), via a signed modification. The following process is used to activate airtankers during the Post Season and Optional Use periods:

- The requesting GACC will place request(s) for airtankers with NICC.
- NICC will notify the National Fixed-Wing Coordinator (NFWC) or designated representative of request(s).
- NFWC or designated representative notify the National Aviation Program Manager (NAPM), who will determine the availability of airtankers. Airtanker/vendor selection will be communicated back to the NICC. NICC will notify the GACC of the airtanker activation.
- NICC will request the airtanker from the appropriate vendor once approved by the CO.

MODULAR AIRBORNE FIREFIGHTING SYSTEMS (MAFFS)

MAFFS provides emergency capability to supplement commercial airtankers on wildland fires. MAFFS are National Resources and are used as a reinforcement measure when contract airtankers are committed or not readily available. MAFFS will be made available to assist foreign governments when requested through the Department of State or other diplomatic Memorandum of Understanding (MOU). Geographic Areas are responsible for ascertaining all suitable commercial airtankers are assigned to wildland fires or committed to initial attack before placing a request for a MAFFS Mission to NIFC.

US Forest Service and NICC Responsibility (for MAFFS)

The NICC is responsible for ascertaining nationally that all suitable commercial contract airtankers are committed to wildland fires, initial attack, or cannot meet timeframes of requesting units. When this occurs, NICC will notify the FS Assistant Director for Operations, NIFC. Once approval is given, the NICC activates the request through proper Department of Defense (DOD) channels. After the initial contact has been made, NICC will submit a Request for Assistance (RFA) to the DOD Liaison at NIFC.

The Governors of California, Nevada, and Wyoming may activate their respective Air National Guard Units having MAFFS equipment and qualified crews for State-controlled fires. Approval for use of MAFFS equipment must be obtained from the FS Assistant Director for Operations, NIFC, prior to this activation. When MAFFS are activated by a governor, the FS Regional Office for that State will assign an accounting code for the incident.

MAFFS Ordering Criteria

MAFFS domestic requests will be placed through established ordering channels to NICC. NICC will place a RFA to the Region X Defense Coordinating Officer (DCO).

The requesting Geographic Area needs to order the following support for MAFFS Activation:

- One each MAFFS Liaison Officer (MLO aka MAFF) and one each MLO trainee.
- One each Airbase Radio Kit (NFES 4660).
- One each MAFFS Communications Specialist (THSP).
- One each Assistant MAFFS Liaison Officer (AMLO).
- One each MAFFS Airtanker Base Manager (MABM) and one each MABM trainee.
- Logistics, Finance, and Information personnel.

MAFFS Operations must also include a MAFFS qualified Leadplane.

For MAFFS activations, the Receiving Unit must be prepared to provide administrative support (procurement, motel rooms, phones, office space, clerical and timekeeping support, transportation) to accommodate as many as twenty-six people per two (2) aircraft.

For additional information, see the *MAFFS Operating Plan*:

https://www.nifc.gov/nicc/logistics/references/MAFFS_Operations_Plan.pdf

WATER SCOOPERS

Water scoopers are National Resources, and their primary mission is initial attack operations. The NICC will prioritize and allocate federal water scoopers by positioning them in areas where they can be tactically effective and where current or predicted high wildfire danger or activity is occurring. Geographic Areas managing these aircraft will make them available for wildland fire assignments when ordered by NICC.

Water Scoopers will be ordered as a “ATM3 - Airtanker, Type 3 (Multi-Engine)” with Water Scooper capability feature in IROC. The capability should also be defined in the “Special Needs” block of the resource order as scooper capability.

SINGLE ENGINE AIRTANKERS (SEATS) AND FIRE BOSSES

Federal and/or State contracted SEATs are managed under either an Exclusive-Use, On-Call, or CWN contract. A list of DOI Nationally funded SEATs is maintained and information can be requested through the National SEAT Coordinator. The national contract SEAT module includes the option for a support vehicle with batch mixing capability for wet and dry retardant. They are available for Interagency use and will be requested through established ordering channels. A SEAT or Fire Boss can be managed by an on-site SEMG or an ATBM.

Fire Bosses may only be managed remotely for 24 hours to allow time for assigned SEMG/ATBM to relocate to the aircraft’s operating location. Requests for a DOI On-Call SEAT or Fire Boss must have a SEMG or ATBM identified with contact information, and the airbase/airport reporting location documented in the “Special Needs” block before NICC assigns a SEAT.

Orders for SEATs placed to NICC are coordinated with the National SEAT Coordinator. Local Units or Geographic Area Coordination Centers hiring or releasing SEATs will notify the National SEAT Coordinator regardless of jurisdiction. Consistent with the DOI authorization (see the BLM National Aviation Plan), DOI Nationally funded SEATs will be managed as DOI National shared resources. As National assets, these SEATs can and will be moved to areas of greatest need. Geographic Areas and Fire Staff on an Interagency basis will provide direction to the dispatch system on the mobilization and demobilization of SEATs to meet existing or forecasted fire loads within their jurisdiction.

DOI Nationally funded SEATs will have their IROC status set as available nationally. When assigned to an incident, DOI Nationally funded SEATs will be released back to the GACC/Hosting unit at the end of each shift and shown as available “National” in IROC. Mobilization for incident response will occur via resource order; however, once a decision to reallocate a DOI Nationally funded SEAT to another GACC is made, the receiving GACC will place a request for the mobilization, and the resource item will be transferred after mobilization is complete.

Nationally, when competition for SEATs exists, NMAC will provide SEAT allocation direction to NICC based on intelligence developed by the National SEAT Coordinator. The National SEAT Coordinator position is responsible for coordinating the allocation and reallocation of SEATs Nationwide as well as maintaining current status, location, and utilization of federal and State contracted SEATs throughout the Nation.

National SEAT Coordinator: (208) 387-5419 blm_fc_seat@blm.gov

For additional SEAT and Fire Boss information please see the following publications:

- *NWCG Standards for Airtanker Base Operations (SABO), PMS 508*
<https://www.nwcg.gov/sites/default/files/publications/pms508.pdf>
- *Interagency Standards for Fire and Fire Aviation Operations (NFES 2724)*

MOBILE RETARDANT BASES (MRBS)

Mobile Retardant Bases can be ordered to service Very Large Airtankers, Large Airtankers, helicopters and SEATS. Orders should be placed through normal dispatch channels to NICC.

Units should identify physical location and any limiting factors affecting access to the area of planned use. Use the “Special Needs” block to identify type of aircraft utilizing the service:

- Helicopter
- SEAT
- LAT
- VLAT

INFRARED (IR) SUPPORT TO FIRE OPERATIONS

Aircraft systems configured with infrared (IR) camera systems are available from agencies and private sector to provide support to wildland fire operations in three mission areas:

- **New Fires.** Use IR imagery to detect and map locations of new fires, typically following a lightning storm.

- Large Fire Perimeter Mapping: Use IR imagery to map the heat perimeter of large fires, typically the role of National Infrared Operations (NIROPS).
- Tactical Incident Awareness and Assessment (IAA): Use IR imagery to provide near real-time situational awareness, spot fire detection, over watch of ground operations, and map the heat perimeter of smaller fires or active portions of large fires. This can be conducted during the day or night.

Infrared camera systems can be categorized into two primary categories:

- Line Scanner / Step-stare camera systems. Line scanners and step-stare systems can quickly scan and map large fires and are best used when the fire is actively burning with open flame.
- Gimbal mounted electro-optical / infrared (EO/IR) camera ball. EO/IR camera balls are best used to provide over watch of a specific area and are more sensitive to detecting smoldering heat sources, however scan volume to map large fires is typically lower than line scanners or step-stare systems. Aircraft equipped with gimbal mounted EO/IR camera balls are typically better suited to detection or tactical IAA missions.

Aircraft assigned to NIROPS are predominantly equipped with line scanners or step-stare camera systems. NIROPS will consist of agency as well as contracted aircraft. NIROPS aircraft are National Resources. To order, use the IR Online Scanner Request Form on the NIROPS website no later than 1530 hours Mountain Time

The form is located at:

<https://fsapps.nwccg.gov/nirops/users/login>.

Aircraft from federal, state, National Guard, and Contractors are available. Ordering procedures varies depending on the aircraft. To order, contact the ordering GACC to discuss options. The following guidelines can help select the right tool for the task:

- Identify what the IR imagery is needed for, what information it is intended to provide, the desired products, and time of day.
- If the fire is actively burning and a once per 24-hour perimeter map is sufficient, submit request for NIROPS.
- If the fire is experiencing significant spread and additional day-time mapping and/or over watch is needed to monitor fire progression, consider requesting an aircraft equipped with thermal sensors for day-time flights in addition to nightly NIROPS.
- If the fire is no longer actively spreading and IR imagery is needed to inform mop-up decisions, consider requesting an aircraft equipped with a gimbal mounted camera ball instead of NIROPS.
- Following a lightning storm consider requesting an aircraft equipped with gimbal mounted camera ball to conduct a detection flight over the lightning affected area.
- Most crewed aircraft systems are only capable of providing “periodic” over watch of an incident, limited by fuel, for more “persistent” coverage of an incident, consider requesting a large UAS.

Visit the *Fire Imaging Technologies for Wildland Fire Operations* user guide for more detailed information. The guide can be found at:

<https://www.nifc.gov/nicc/logistics/references.htm>

LARGE TRANSPORTATION AIRCRAFT

NICC is the sole source for large transport aircraft holding 14 CFR PART 121 Certificates. Large transport aircraft are National Resources and will be requested through NICC. Large transport aircraft arranged by NICC are requested on a per mission basis. Flight Following ATD/ETE will be relayed by the NICC Aircraft Desk for each flight leg. When requesting a large transport aircraft, the following information is required:

- Number of passengers and/or cargo weight per destination and combined total weight for the flight. Pick-up point at jetport and time passengers and/or cargo are available to load.
- NICC requires 48-hour lead time to plan and schedule aircraft for demobilization flights.
- Pick-up point at the jetport is the Fixed Base Operator (FBO) or gate at the airport terminal where the aircraft will park.
- Passengers must be weighed and manifested prior to boarding the aircraft.
- Government or contractor support available at each airport, including contact name and telephone number.
- All personnel listed on the manifest and flight crew members should be provided at least one sack lunch.

FREQUENCIES

All documents containing USDA Forest Service (FS) and/or Department of Interior (DOI) frequencies must have the following statement on the top and bottom of each page containing frequencies, “CONTROLLED UNCLASSIFIED INFORMATION//BASIC.” This requirement is in accordance with direction from the Washington Office Frequency Managers for both Departments.

FM, VHF, and UHF Frequencies

NIICD issues dedicated FM frequencies in conjunction with communication equipment assigned to incidents. NIICD will order additional FM frequencies from DOI and FS, Washington Office, as conditions warrant. To ensure proper frequency coordination, the ordering office must include the Latitude and Longitude of the incident on the resource order.

AM Frequencies

Initial attack AM air-to-air frequencies will be assigned by the NIICD Communications Duty Officer (CDO) after annual coordination with the FAA. All available AM assignments will be published at the beginning of the fire season and will be available for use by the dispatch zones.

When the tertiary assignment (if applicable) is used the NIICD CDO will be notified by phone or email. VHF AM assignments are used for air-to-air communications and are authorized only within the zone to which they are assigned. IA frequency assignments are not to be used on project fires. To utilize the initial attack AM assignments to their fullest capabilities they should only be

used on TFRs for the initial burning period, after that a dedicated AM frequency should be ordered from the CDO through IROC.

FM Air-to-Ground Frequencies

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

Requests for the use of dedicated Air-to-Air and Air-to-Ground frequencies will be made through established ordering channels from the incident host GACC, directly to the NIICD, followed by a call placed to the CDO. The CDO coordinates all National Cache FS and DOI frequencies as well as any additional frequencies released by other agencies for wildland fire support. Frequencies are ordered on an Aircraft “A” request.

AIRSPACE

Temporary Flight Restrictions (TFR) FAR 91.137

Temporary airspace restrictions will be established when incident related aviation activities present potential conflict with other aviation activities. The Federal Aviation Administration (FAA) requires that latitude/longitude information for TFRs must be provided in degrees, minutes, seconds, including reference to north latitude and west longitude. If seconds’ information is not available, add two zeroes to the description. Do not use spaces, commas, or other symbols in the description. Example: ddmmsN/ddmmssW or 450700N/1175030W. The corner points should be listed in a clockwise sequence around the requested TFR to avoid “bow tie” depictions.

For further information on how flight restrictions are requested and implemented, please reference the *NWCG Standards for Airspace Coordination, PMS520* located at: <https://www.nwcg.gov/publications/520>

Participating Aircraft

Internal procedures for requestors to participate in the hazard relief effort and work within incident TFRs will be coordinated to ensure the utmost safety. Please reference the *NWCG Standards for Airspace Coordination, PMS520* for standard procedures for Participating Aircraft.

Military Training Routes and Special Use Airspace

Military Training Routes (MTR) and Special Use Airspace (SUA) that present conflicts with incident related aviation activities will be identified by local units. One source for this information is the *AP/1B, Flight Information Publication, Military Training Routes*. Each dispatch office should download a current edition of the AP/1B. Special Use Airspace may be found on Sectional Aeronautical Charts. Critical Airspace information pertinent to flight operations should be organized for easy and rapid utilization (i.e., displayed on local unit aviation hazard maps).

Further direction may be obtained in the *NWCG Standards for Airspace Coordination, PMS520*.

Airspace Conflicts

Aviation personnel have a responsibility to identify and notify the FAA and report conflicts and incidents through the Interagency SAFECOM (Safety Communication) System to assist in the resolution of airspace conflicts. Notification to the FAA should be timely. When a conflict or incident occurs, it may indicate a significant aviation safety hazard. Conflicts may include Near Mid Air Collisions, TFR intrusions, and Fire Traffic Area (FTA) communication non-compliance. Further guidance is available in the *NWCG Standards for Airspace Coordination, PMS520*.

The Aircraft Conflict Initial Report can be accessed at: <https://www.nwcg.gov/tags/iasc>

FAA Temporary Control Tower Operations

Geographic Areas within the FAA's Western Service Area (which includes the following states: 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 becomes complex or unsafe at uncontrolled airports or helibases.

Geographic Areas within the FAA's Central Service Area (which includes, either entirely or portions of the following states: AR, AZ, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, ND, NM, NY, OH, OK, PA, SD, TX, WI, WY) may request FAA Air Traffic Control support through the Central Service Area Agreement when air operations in support of an incident becomes complex or unsafe at uncontrolled airports or helibases.

FAA Temporary Control Towers are ordered on an Aircraft Order. A lead time of 48 hours is desirable when ordering. Ordering procedures are outlined within the current agreement. The GACCs do not need to forward the request to NICC.

The Interagency agreement with the FAA requires that a resource order and a Temporary Tower Request form be forwarded to the FAA. The forms may be forwarded when the request is made by the GACC to the FAA's Regional Operations Center (ROC). For additional information on requesting a temporary tower, please reference the checklist found in the *NWCG Standards for Airspace Coordination, PMS520*.

When procuring a Temporary Tower with an EERA for Forest Service incidents, The Buying Team or a purchaser will need to begin with the At Incident Management Support (AIMS) process to set up an EERA with a contractor to provide Temporary Tower Services. All other agencies will need to follow their local procurement process.

NOTE: The contractor will need to have a Letter of Agreement (LOA) and the Controllers need to be certified for the specific location. The FAA will send a certifier to the location where the Temporary Tower Services are being requested once the contracted Mobile Temporary Control Tower is in place.

The contractor cannot provide services until the LOA is in place and the Controllers have been certified by the FAA. If the EERA route is utilized, please notify the National Airspace Coordinator. Please follow your local and Geographic Area protocols.