Chapter 15
Communications

Policy

Agency specific policies for radio communications may be found in:


Dispatch Recording Devices

Recording of phone calls without all party’s prior knowledge and consent is not permitted. Recording of radio traffic is appropriate.


Cellular/Smartphone/Satellite Phone Communications

Cellular/smartphone/satellite telephones will not be used to communicate tactical or operational traffic unless no other means are available. Cellular/smartphone/satellite telephones will not be used for flight following in lieu of normal flight following procedures. Telephone/smartphone/satellite communications may be used for logistical purposes. Refer to chapter 7 for policy regarding use of mobile devices while operating a vehicle.

Radio Communications

Radio communications provide for the information needed for the command/control and safety of personnel and resources.

Radio Contracts

Radios used for fire and aviation activities must be approved by the National Interagency Incident Communication Division (NIICD). Information on contracts, software, hardware requirements and approved radios is available at https://www.nifc.gov/resources/NIICD, or contact your agency Telecommunications Department or the NIICD engineer at (208) 387-5720.
Radio Frequency Management

Under Executive Order 13556 and in accordance with DOI/USDA policies and guidelines, all documents which include DOI/USDA frequencies are considered to be Controlled Unclassified Information (CUI) and must be controlled and marked as such following the guidance of the National Archives CUI Marking Handbook Version 1.1. Therefore, any documents containing frequency information whose dissemination is not controlled with a password, must be labeled at the top and bottom of each page with CUI and controlled as such.

Frequency Modulated (FM) and Amplitude Modulated (AM) frequencies are approved and assigned by a designated Washington Office frequency manager and managed by state and local communications officers. Frequencies shall not be transmitted without written permission from formally appointed frequency management personnel at the local, state, regional, or national level.

Radio interference must be reported to NIFC CDO (or COMC when assigned) when adversely impacting incident communications. Minimum reporting information: location, radio frequency, time and date (including interference duration), and sound or source for interference.

Daily, Initial Attack and Airtanker Base Frequency Management

Frequency assignments for normal daily and initial attack operations are made on a permanent basis and are requested through the normal Radio Frequency Authorization process from the local, state, regional or national level designated frequency management personnel.

For air operations, the NIFC CDO coordinates annually with the Forest Service and Department of Interior (DOI) frequency managers to provide initial attack (IA) air-to-ground (A/G) FM frequencies, and with the Federal Aviation Administration (FAA) to provide IA A/A AM and Airtanker Base frequencies. IA A/G FM frequencies are carefully engineered for use by Forest Service and DOI frequency managers to ensure that the frequencies will not cause interference to, or receive interference from, other licensed users. These frequencies are authorized for use only within their assigned frequency zone boundaries. Any use of these frequencies outside of the frequency zone boundaries may cause interference with other authorized users and will be considered a safety violation in regards to the protection of life and/or property and could have major consequences. Therefore, any changes to dispatch areas that result in being responsible for areas outside of the existing frequency CUI.
boundaries must result in a coordinated effort between dispatch centers, ensuring that only frequencies assigned within the appropriate frequency zone are used. Updated frequency information is coordinated annually with the GACCs.

On an annual basis the FAA engineers Airtanker Base frequencies and IA A/A AM frequencies for use by the wildland fire community. The Airtanker Base frequencies are engineered for use within a 40 nautical mile radius (unless otherwise specified) from the base center point and the IA A/A AM frequencies are engineered for use only within their assigned frequency zone boundaries. Both are designed for use below 5,000 feet above ground level (AGL). These frequencies are engineered by the FAA to minimize the risk of causing interference with civilian aircraft or airports located within the same geographic areas. Any use of these frequencies outside of the provided service volume is considered a major safety violation by the FAA and may result in the removal of and/or denial of use for those frequencies.

All initial attack frequency assignments are depicted on maps disseminated annually by the CDO through the FTP site. For access to the FTP site contact the CDO Office.

**Mutual Aid Frequency Management**

Mutual aid frequency sharing agreements can be made at the local level. Agreements are only approved in the specific location where assigned.

Prohibited:
- Use of mutual-aid-frequency outside assigned area; and
- Formal agreements for mutual-aid using NIFC National Fire Frequencies.

Exception:
- Agency with Radio Frequency Authorization (RFA) approved by National Telecommunications Information Agency (NTIA) for frequency in NIFC Channeling Plan; notification and coordination with NIFC CDO required.

**Incident Frequency Management**

National level coordination and assignments of incident frequencies is the responsibility of the National Interagency Incident Communications Division (NIICD) and is performed by the NIFC CDO.

When communications requirements exceed normal operations, the NIFC CDO may request that GACCs assign a communication coordinator (COMC) to facilitate geographic area frequency management. Additional information is in the *National Interagency Mobilization Guide*.

- Frequencies for Type 1 and 2 incidents are assigned by the NIFC CDO and are managed by a qualified communications unit leader (COML). The
COML will request, assign, and report all frequencies used on the incident to the NIFC CDO/COMC. This will include the request and assignment of all aircraft frequencies. Frequency use will be documented on the ICS-205 (Incident Radio Communications Plan) and on ICS-220 (Air Operation Summary) forms. These completed forms will be made available to incident personnel in the incident action plan (IAP).

- Type 3 incidents, or other incidents that do not have an assigned COML, will coordinate and request all frequency and communication equipment needs through the COMC and/or the NIFC CDO.

If additional frequencies are required, the COML will order them through the established ordering process.

Additional frequencies may be available on a temporary basis, and may be requested by the NIFC CDO from the Washington Office spectrum managers when:

- The NIICD national frequencies are all committed within a specific geographic area; and/or
- New incidents within a complex create a need for additional frequencies; and/or
- The fire danger rating is extreme and the potential for additional new incidents is high; and/or
- There is frequency congestion due to incidents in close proximity.

**Aviation Operations Frequency Management**

- Air-to-Air – AM frequencies are requested via the NIFC CDO who then coordinates with the Federal Aviation Administration (FAA). Frequencies are engineered by the FAA with a service volume of 20NM radius with 5,000ft AGL from incident latitude/longitude or other provided center point. If the needs of the incident require a larger radius, a request should be made through the NIFC CDO to be coordinated with the FAA.

- Air-to-Ground – FM frequencies will be authorized by agency frequency managers and coordinated and assigned by the NIFC CDO. Frequencies are assigned for incident use with a service volume of 20NM radius from incident latitude/longitude or other provided center point and 3,000ft AGL per agency Radio Frequency Authorization (RFA).

- With the exception of an emergency, aircraft shall not transmit over NIICD command repeaters.

Both AM and FM aviation frequency assignments will be used on an interagency basis and a master record of these assignments is maintained by the NIFC CDO.
Pre-assigned National Frequencies

National Air Guard Frequency (168.6250 MHz)
A National Interagency Air Guard frequency will be used for emergency aviation communications. Continuous monitoring of this frequency is mandatory by agency dispatch centers and aircraft. A Continuous Tone Coded Squelch System (CTCSS) tone of 110.9 Hz must be used when transmitting on the National Air Guard Frequency. This frequency must be programmed into the last channel of every group in fire handheld radios.

This frequency, 168.6250 MHz is only used for:
- Air-to-air emergency contact and coordination;
- Ground-to-air emergency contact; and
- Initial call, recall, and re-direction of aircraft when no other contact frequency is available.

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 Automated Flight Following (AFF) on the National Flight Following frequency.

The National Flight Following frequency is to be used for flight following, dispatch, or redirection of aircraft. No other uses, including tactics and logistics, are authorized.

All dispatch centers/offices will monitor the national flight following frequency at all times. A CTCSS tone of 110.9 must be used when transmitting and receiving on the National Flight Following frequency.

Smokejumper and Rappel/RADS Air-to-Ground Frequency (168.5500 MHz)
Assigned to smokejumpers for DOI, USDA and other agencies. Specifically dedicated as a smokejumper national air-to-ground tactical channel. Secondary use is authorized for BLM and USFS rappel/rope Assisted Delivery System (RADS) aerial delivery operations. Channel must be toned on both transmit and receive for all smokejumper and RADS teams to insure that interference issues are avoided. Smokejumpers will use tone 123.0 and RADS will use 110.9. Use of this frequency other than for the delivery of aerial firefighters is prohibited.

Government-wide Area Common User Frequencies (163.1000 MHz, 168.3500 MHz)
These shared frequencies are used on a non-interference basis and are not exclusive to any user. These frequencies are not to be used for air-to-ground operations and are prohibited by DOI and USDA from use as a frequency during operations involving the protection of life and property.
NOTE: When traveling between incidents, be sure to monitor for incident radio traffic in the area before using these frequencies.

National Interagency Fire Tactical Frequencies (168.0500 MHz, 168.2000 MHz, 168.6000 MHz, 168.2500 MHz, 166.7250 MHz, 166.7750 MHz)

These shared frequencies are approved for ground tactical operations (line of sight) on incidents.

Prohibited Use:
- Air-to-air communications; and
- Air-to-ground communications.

Permission to use these frequencies requires prior approval from the NIFC CDO (or COMC when mobilized).

Incident Radio Support

All National Incident Radio Support Cache (NIRSC) communications equipment will be returned to NIFC immediately after the incident is turned over to the local jurisdictional agency unless otherwise coordinated with the NIICD CDO/COMC.

To meet the high demand for NIRSC communications equipment during peak fire seasons, please follow the following NIRSC Basic Operating Procedure when shipping communications equipment back to NIFC:

PL 1-2: Return communications equipment by lowest cost
- Return any unused or broken equipment to NIRSC

PL 3-4: Expedite communications equipment return by best means
- Return any unused or broken equipment to NIRSC
- Ground freight if possible
- Should arrive at NIRSC within 4-5 days

PL 5: Return communications equipment by fastest means
- Return any unused or broken equipment to NIRSC
- Overnight NIRSC equipment if possible
- Utilize local drivers for GACC’s within 8-hour drive time from NIRSC

Note: The ordering incident is responsible for returning and/or coordinating all NIRSC radio equipment directly back to Boise by; arranging shipping through the local buying team, arranging shipping through the local district office, or arranging shipping through the local supply caches.

NIRSC communications equipment shall NOT be moved from one incident to another without being first returned to NIRSC for refurbishment. Unused and sealed equipment may be moved, but only upon approval of the NIFC CDO or COMC.
Military Communications on an Incident

Military units assigned to an incident are provided NIRSC communications equipment. Each battalion is typically assigned 80 handheld radios. Intercrew communications within a military unit is provided by the military on their radios and frequencies. All incident frequencies are assigned by the COML using form ICS-205.

Some military units have aviation VHF-FM radios compatible with civilian systems. Other units must be provided VHF-FM radios prior to dispatch to an incident. Wiring harnesses and radios will be resource ordered by the incident. The resource order will include a request for qualified personnel from NIICD to perform the installation of the equipment. Equipment will not be sent without qualified personnel to install it.