National Interagency Incident Communications Division

July 30, 2025

To: Radio Users

From: Chief, National Interagency Incident Communications Division

Subject: Approved Radios

The following is a consolidated list of Fire Approved Radios for use by all federal employees and all personnel under contract with the federal government working on wildland fires, as well as Cooperator Aviation Radios and Radios Approved for Forest Health Protection. These are the only approved radios for interagency fire and Forest Health Protection use.

1. Fire Approved Radios

The following radios are approved for interagency fire use and are currently supplied by the National Interagency Incident Radio Support Cache (NIRSC).

VHF-FM

P25 Digital Portable Radios

BK Technologies	DPHX5102X
BK Technologies	KNG2-P150
BK Technologies	BKR5000

P25 Digital Aeronautical Radios

Technisonic Industries	TDFM-136B[6]
Technisonic Industries	TDFM-136B/NV[6]

UHF-FM

P25 Digital Portable Radios

BK Technologies	KNG2-P400
Midland	STP404A
Motorola	XTS 2500[4]

The following radios are currently approved for interagency fire use but not supported by NIICD. Users will likely need to configure their own code plugs when assigned to an incident.

VHF-AM

Any FCC approved VHF-AM radio is acceptable. VHF-AM radios do not receive fire approval. All VHF-AM radios used in aircraft shall meet the appropriate Technical Standard Order (TSO) category.

VHF-FM

Analog Portable Radios[1, 2]

B/K GPH5102X

Analog Mobile Radios[1, 2]

B/K GMH

P25 Digital Portable Radios

BK Technologies (formerly B/K)	GPH5102X upgraded to P25 digital[3]
BK Technologies (formerly Relm Wireless)	DPH5102X
BK Technologies (formerly Relm Wireless)	KNG-P150
BK Technologies (formerly Relm Wireless)	KNG-P150S
BK Technologies	BKR9000
Datron	Guardian G25PRV100
Midland	STP105B
Motorola	XTS 2500[4]
Motorola	XTS 5000[4]
Motorola	VX-P949
Motorola	APX 6000[12], APX 6000XE[12]
Motorola	APX 8000[12], APX 8000XE[12]
Motorola	APX 8000H[12], APX 8000HXE[12]
Motorola	SRX 2200[12]
Thales	25 PRC-6894

P25 Digital Mobile Radios

BK Technologies (formerly B/K)	GMH upgraded to P25 digital[3]
BK Technologies (formerly Relm Wireless)	DMH5992
BK Technologies (formerly Relm Wireless)	DMH5992X HP
BK Technologies (formerly Relm Wireless)	KNG-M150
Datron	G25RMV100
Datron	G25RMV110

Datron	G25ASU001
Kenwood	TK-5710
Kenwood	TK-5720
Kenwood	NX-5700
Midland	STM-1050B
Midland	STM-1055B
Midland	STM-1115B
Motorola	APX 6500
Motorola	APX 8500

P25 Digital Aeronautical Radios

Anodyne Electronics Manufacturing	MTP136D
Cobham (formerly Northern Airborne Tech)	NPX136D-000[5]
Cobham (formerly Northern Airborne Tech)	NPX136D-070
Technisonic Industries	TDFM-136
Technisonic Industries	TDFM-136NV
Technisonic Industries	TDFM-136A
Technisonic Industries	TDFM-136A/NV
Technisonic Industries	TDFM-136B[6]
Technisonic Industries	TDFM-136B/NV[6]

UHF-FM

P25 Digital Portable Radios

BK Technologies	KNG-P400
BK Technologies	KNG-P400S
BK Technologies	KNG2-P400
BK Technologies	BKR9000
Motorola	XTS 2500[4]
Motorola	XTS 5000[4]
Motorola	APX 6000[12], APX 6000XE[12]
Motorola	APX 8000[12], APX 8000XE[12]
Motorola	APX 8000H[12], APX 8000HXE[12]

P25 Digital Mobile Radios

BK Technologies	KNG-M400
Kenwood	TK-5810
Kenwood	TK-5820
Midland	STM-4040A
Midland	STM-4045A
Motorola	APX 8500

700/800

P25 Digital Portable Radios

BK Technologies	BKR9000
Motorola	APX 6000[12], APX 6000XE[12]
Motorola	APX 8000[12], APX 8000XE[12]
Motorola	APX 8000H[12], APX 8000HXE[12]
Motorola	SRX 2200[12]

P25 Digital Mobile Radios

Motorola	APX 8500

Multi-band

P25 Digital Portable Radios Capable of Operating in More Than One Frequency Band – 136-174 MHz, 380-520 MHz, 700-800 MHz, trunked

Thales	Liberty
BK Technologies	BKR9000
Motorola	APX 8000[12], APX 8000XE[12]
Motorola	APX 8000H[12], APX 8000HXE[12]

P25 Digital Mobile Radios

Motorola	APX 8500

P25 Digital Aeronautical Radios Capable of Operating in More Than One Frequency Band – 136-174 MHz, 380-520 MHz, 700-800 MHz, trunked

Technisonic Industries	TDFM-9000[7]
Technisonic Industries	TDFM-9100[7]
Technisonic Industries	TDFM-9200[7]
Technisonic Industries	TDFM-9300[7]

2. Cooperator Aviation Radios Accepted for Fire Use

Aviation is a dynamic environment and aviation radios are generally complex. Some basic guidelines are provided below so all parties can effectively communicate. These are:

- Contain at least one conventional P25 digital VHF-FM RF module/transceiver operating from 136 to 174 MHz with front panel programmability (FPP).

- Any of the following options are acceptable to meet the Air Guard requirement (TX & RX 168.6250 MHz, TX CTCSS 110.9 Hz):
    - A second conventional P25 digital VHF-FM RF module/transceiver operating from 136 to 174 MHz with FPP.
    - A non-FPP conventional P25 digital VHF-FM RF module/transceiver operating from 136 to 174 MHz with a preset channel dedicated to Air Guard.
    - A P25 digital trunked VHF-FM RF module/transceiver operating from 136 to 174 MHz with a non-trunked preset channel dedicated to Air Guard.

These aeronautical radios are acceptable for Cooperator Aviation Radios Accepted for Fire Use.

Cobham	RT-5000/C-5000[8]
Cobham	RT-7000[9]
Technisonic Industries	TDFM-6000 Series [10, 11]
Technisonic Industries	TDFM-7000 Series
Technisonic Industries	TDFM-7300 Series

3. Radios Approved for Forest Health Protection

The following analog aviation radios are currently approved for US Forest Service (USFS) Forest Health Protection (FHP). FHP may also utilize approved P25 Digital Radios listed under Section 1: Fire Approved Radios. The below analog radios are not allowed to be used in any aspect of interagency fire (reconnaissance or air tactical).

Analog VHF-FM Aeronautical Radios

AEM (formerly Northern Airborne Technology)	NTX138-050
Technisonic Industries	TFM-138 (serial number 1540 & up)
Technisonic Industries	TFM-138B/C/D
Technisonic Industries	TFM-500

Analog-only VHF-FM radios are not approved for DOI use unless a waiver is granted to the operating Bureau by the Telecommunications Systems Division (TSD) of the DOI Office of the Chief Information Officer (OCIO).

Questions concerning radios and requirements on this list can be directed to: Bill Forsyth (208-387-5720) william.forsyth@usda.gov (portable and mobile radios) or Ken Tillbrook (208-387-5648) kenneth.tillbrook@usda.gov (aeronautical radios).

Radio vendors may contact Bill Forsyth to submit products for evaluation for inclusion on the Fire Approved Radios list.

/s/
Mark Hilton
Chief, NIICD/NIFC

[1] Purchases of new analog radios are not recommended. At some point in the future, fire will require that only P25 digital radios be used.

[2] Several contracts specify that only P25 digital radios are acceptable. These "analog only" radios are not acceptable for contracts requiring P25 digital radios.

[3] When a P25 digital radio is required and a BK GPH/GMH radio with P25 digital upgrade is used, the user must provide proof that the radio has been upgraded prior to it being accepted.

[4] The Motorola XTS2500 and XTS5000 P25 digital portable radios are fire compliant when operating radio software R.15.00.05 or newer.

[5] The Cobham (formerly Northern Airborne Technology) NPX136D-000 is only acceptable for fire when used as a substitute for the AUX-FM provisions and an Air Guard receiver for this radio is not contractually required. The NPX136D-000 is not acceptable as a stand-alone radio.

[6] The Technisonic Industries TDFM-136B and TDFM-136B/NV are fire compliant when operating Radio Info: Main Code 1.1.4 or newer and has Modification #2 installed.

[7] The Technisonic Industries TDFM-9000/9100/9200/9300 radios are highly dependent upon settings in Motorola's CPS software. CPS software is very complex and settings should only be changed by a person trained in CPS use. TDFM-9000/9100/9200/9300 radios are fire compliant under the following conditions:

- Contain at least one conventional P25 digital VHF-FM RF module operating from 136 to 174 MHz with front panel programmability (FPP) enabled.
- Any of the following options are acceptable to meet the Air Guard requirement (transmit & receive 168.6250 MHz with a transmit CTCSS tone of 110.9 Hz):
    - A second conventional P25 digital VHF-FM RF module operating from 136 to 174 MHz with FPP enabled.
    - A non-FPP conventional P25 digital VHF-FM RF module operating from 136 to 174 MHz with a preset channel dedicated to Air Guard.
    - A P25 digital trunked VHF-FM RF module operating from 136 to 174 MHz with a non-trunked preset channel dedicated to Air Guard.
- Soft Keys (in order of use) (CPS = Menu Items):
    - Zone, FPP, Scan, Mute, Info.
    - The Zone containing FPP should be identified as "Zone 1 FPP" or similar. When only the Zone having FPP exists then the soft key "Zone" is not required.
- Function Keys (CPS = Buttons - General):
    - F1 – Set to Monitor.
- Keypad Keys (CPS = Switches):
    - M UP/M DN – Set as channel select.
    - TSW – Set as Blank (A)/PL Disable (B)/Blank (C).

- Power Knob:
    - Selections shall include Volume Adjust and Channel Changes.
- All features on the FPP screen shall be editable and have the ability to be saved to the selected channel.
- Other functions enabled:
    - DTMF operation
    - 90 second time-out-timer

[8] Recommended RT-5000 transceiver versions are only those with MODs 34, 36, or 38 installed using a C-5000 controller with Software Identification 12 (SWID 12) loaded.

[9] The Cobham RT-7000 radio, when using Motorola APX modules, is highly dependent upon settings in Motorola's CPS software. CPS software is very complex and settings should only be changed by a person trained in CPS use. At a minimum, the following FPP functions should be enabled: receive and transmit frequency edit, channel mode edit, receive and transmit CTCSS tone edit, receive and transmit network access code and talkgroup edit.

[10] A Technisonic AMS-6000 Audio Panel is highly recommended when using the TDFM-6000 series radio.

[11] The Technisonic TDFM-6148 radio does not meet the basic guidelines for single radio installations.

[12] These models are hazardous location approved. Refer to manual supplied with radio for hazardous location approved battery and accessories.