

# INDIANA WING, CIVIL AIR PATROL

## Radio Equipment Frequency Certification

1. Tactical Call Sign: Red Fire 2. Licensee: \_\_\_\_\_

3. CAPID \_\_\_\_\_ 4. Unit ID GLR-IN-

5. Unit Name: \_\_\_\_\_

6. Type of Transmitter:  HF-SSB  VHF-AM  VHF-FM (Wide Band)  VHF-FM (Narrow Band)  ISR  ELT  
 Other (Specify) \_\_\_\_\_

7.  Check if Corporate Owned

8. Make \_\_\_\_\_ 9. Model: \_\_\_\_\_ 10. Serial Number: \_\_\_\_\_

Indicate the CAP Frequency Band(s) for this Transmitter *(All frequency bands for multi band must meet NTIA standards for the CAP Frequency Band being used, otherwise only those bands that meet NTIA standards may be certified)*

	Frequency Band	Frequency Stability Standard Used <sup>(1)</sup>	Measurement Error	Maximum Permitted Output Power	Actual Measured Output Power <sup>(2)</sup>
1.	HF-SSB				
2.	VHF-AM				
3.	VHF-FM WIDE BAND				
4.	VHF-FM NARROW BAND				
5.	INRA-SQUAD RADIO				
6.	E.L.T.				
7.	OTHER (Specify)				

Special conditions (if any): \_\_\_\_\_

NOTE: if the NTIA standard calls for specific part(s) or components to be installed (tuner, crystal oven, etc.) the part(s) must be installed for this certification to be valid. Only authorized individuals/shops may work on corporate owned equipment

Does the NTIA specification/standard for this equipment require the installation of specific parts?  Yes  No

Have these parts been installed at the factory or by a qualified service individual/ or facility?  Yes  No

### Frequency Band

### Maximum Allowed Power

HF-SSB	400 Watts PEP (Wing Staff Stations 1500 Watts PEP)
HF AM (specific indicated frequencies)	5 watts
HF-SSB (specific indicated frequencies)	1500 watts PEP
VHF-FM (Non aircraft frequencies)	50 watts
VHF-FM (Aircraft frequencies)	10 watts
Practice ELT	100 milliwatts

1. Use the NTIA Frequency Stability Code on the back of this form

2. All power is measured at the antenna feed point. If the feed point is not used, indicate where the measurement was taken

\_\_\_\_\_  
Name of Technician or Engineer
Date of Certification

Equipment used for Frequency Certification or Frequency Check			
Make	Model	Serial Number	Date of Last Calibration

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## NTIA Equipment Frequency Standards

<b>Equipment Type – VHF-FM WIDE BAND</b>			
<b>Base – Mobile Transceivers</b>	<b>Equipment Code A</b>	<b>Portable Transceivers</b>	<b>Equipment Code B</b>
Frequency Stability	5.0 PPM	Frequency Stability	5.0 PPM
TX Unwanted Emissions	-29LOG(Fd <sup>2</sup> /11) dB or 50, whichever is less	TX Unwanted Emissions	-29LOG(Fd <sup>2</sup> /11) dB or 50, whichever is less
RX Selectivity	-80dB	RX Selectivity	-70dB
RX Intermod Rejection	-70dB	RX Intermod Rejection	-50dB
RX Spurious Rejection	-85dB	RX Spurious Rejection	-60dB
RX Unwanted Emissions	-50dBm	RX Unwanted Emissions	-50dBm

<b>EQUIPMENT TYPE – VHF-FM NARROW BAND</b>			
<b>Band Base-Mobile Transceivers</b>	<b>Equipment Code C</b>	<b>Portable Transceivers</b>	<b>Equipment Code D</b>
Frequency Stability	2.5 PPM	Frequency Stability	2.5 PPM
TX Unwanted Emissions	50+100LOG(Pz) or 70, whichever is less	TX Unwanted Emissions	50+100LOG(Pz) or 70, whichever is less
RX Selectivity	-70dB	RX Selectivity	-60dB
RX Intermod Rejection	-70dB	RX Intermod Rejection	-50dB
RX Spurious Rejection	-70dB	RX Spurious Rejection	-60dB
RX Unwanted Emissions	-57dBm	RX Unwanted Emissions	-57dBm

<b>HF-SSB Transceivers</b>	<b>Equipment Code E</b>	<b>HF-SSB – AM 26.620 MHz</b>	<b>Equipment Code F</b>
Frequency Stability	±20 Hz	Frequency Stability	±30 PPM
TX Unwanted Emissions	-38dB	TX Unwanted Emissions	-40dB

<b>Sunset Dates for Non-Compliant Equipment</b>	
<b>VHF-FM</b>	
31 December 2004	Only NTIA Narrow Band equipment may be purchased, screened or donated. Personally funded equipment must be NTIA Narrow Band Compliant
31 December 2005	Civil Air Patrol must be ready to new narrow band channels when directed by AF Frequency Management Office
1 January 2008	Transition to the new NTIA Narrow Band Channels must be completed by law.
<b>HF-SSB</b>	
31 December 2001	Only NTIA Compliant Equipment may remain in service. All non-compliant equipment must be removed from service.