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Communications-Computer Systems

**RADIO FREQUENCY SPECTRUM
MANAGEMENT**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This regulation outlines procedures for radio frequency (RF) management at Pope AFB. It applies to all organizations; including tenant units, and civilian contractors who utilize Air Force radio frequencies at Pope AFB. This includes, but is not limited to the following uses: Ground radio and radar stations (fixed or portable), mobile radio communications equipment, marine vessels with mobile radio communications equipment, airborne devices such as guided missiles, instrument balloons, and pilotless aircraft, airborne radio communications and any other devices that emit electromagnetic radiation into free space.

SUMMARY OF REVISIONS

Revises and updates outdated information. Aligns the publication with required format.

1. References:

- 1.1. AFI 33-118, Radio Frequency Spectrum Management.
- 1.2. AFI 10-707, Spectrum Interference Resolution (SIR) Program.

2. Background. The radio frequency spectrum encompasses frequencies from 3KHz to 300GHz. The Air Force can only use a small portion of this spectrum, as assigned by the agencies responsible for assignment and control of frequencies in the United States - The Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NITA). The need for radio frequency management arises from the fact that the Air Force continually wants to use more than its assigned portion of frequencies.

3. Responsibilities:

- 3.1. The installation commander (43 AW/CC) is responsible for all electromagnetic radiation emanating from Pope AFB and all outlying activities hosted by Pope AFB. The base communications-com-

puter systems staff officer (CSO), on behalf of the installation commander, appoints a staff member to serve as the installation frequency manager.

3.2. The Installation Frequency Manager will:

- 3.2.1. Serve as single point of contact for frequency management matters for host-base and tenant units.
- 3.2.2. Obtain and maintain frequency management guidance and other applicable regulations from HQ AMC and other sources.
- 3.2.3. Maintain a current radio frequency authorization (RFA) for radiating devices on the installation and outlying activities.
- 3.2.4. Establish a frequency management education program IAW HQ AMC guidance. As a minimum, ensure users understand the parameters of their assigned frequencies and have a copy of their frequency assignments.
- 3.2.5. Assist installation units with frequency actions.
- 3.2.6. Assist in reporting and resolving local interference problems according to AFI 10-707.
- 3.2.7. Coordinate on base OPLANs containing or requiring frequency appendices and assist in obtaining frequency support through command channels.
- 3.2.8. When an RF device is involved, or likely to be involved, make sure tenant support agreements state, "A list of frequencies (including bandwidth, emission characteristics, and power) used by the tenant activity will be provided to the installation frequency manager and kept current to reflect new, deleted or modified frequency assignments."
- 3.2.9. Maintain a point-of-contact list for all frequencies used on the installation.
- 3.2.10. Provide HQ AMC a copy of the letter appointing the installation frequency manager.

3.3. Each organization authorized to use frequencies will:

- 3.3.1. Appoint a unit point-of-contact for assigned frequencies and submit the appointment letter to the installation Frequency manager (43 CS/SCXI).
- 3.3.2. Operate equipment radiating RF energy in compliance with authorized limitations and tolerances.
- 3.3.3. Act promptly to resolve frequency interference.
- 3.3.4. WILL NOT ORDER ANY EQUIPMENT THAT RADIATES RF ENERGY PRIOR TO RECEIVING A FREQUENCY ASSIGNMENT.
- 3.3.5. Route all OPLANs that mention frequencies or RF devices through the installation frequency manager prior to publication.

3.4. Each unit point-of-contact will:

- 3.4.1. Keep an authorization document for each frequency used.
- 3.4.2. Obtain, maintain and comply Twenty-first Air Force frequency management directives.
- 3.4.3. Act promptly to resolve frequency interference.
- 3.4.4. Inform the installation frequency manager immediately of frequencies no longer required.

3.4.5. Coordinate frequency requests IAW para **5**, with the installation frequency manager.

3.4.6. Report (SIR) incidents, IAW para **7**, to the installation frequency managers.

4. General Rules and Conditions. Any person or persons communicating by radio frequency on Pope AFB must have a valid assignment or license to operate on that frequency. A copy of this authority must be on file with the installation frequency manager. The point-of-contact for each using organization must also keep a copy in their files. Radio frequencies used at Pope AFB are governed by the following rules:

4.1. International, government, and service regulations apply.

4.2. Operation of a frequency may be authorized as long as it does not interfere with users who are already authorized to operate on the same or adjacent frequencies.

4.3. DO NOT ORDER ANY EQUIPMENT THAT RADIATES RF ENERGY PRIOR TO RECEIVING A FREQUENCY ASSIGNMENT.

4.4. "On-the-Air" testing will be kept to an absolute minimum.

4.5. Each frequency assignment has a maximum power parameter; under NO circumstances will it be exceeded. Users will hold power to the absolute minimum necessary to operate.

4.6. Emissions must conform to the frequency assignment authorization.

4.7. The using organization is responsible for the proper operation of all radio frequencies used within Pope AFB and off-base operating locations. Violators risk the loss of their frequency, equipment, disciplinary action or all three.

4.8. Frequency assignments will be constantly reviewed. Frequencies no longer required will be deleted.

5. Frequency Request Procedures:

5.1. The installation frequency manager uses the Standard Frequency Action Format (SFAF) for all frequency actions (**Attachment 1**). Start your request with a call to the installation frequency manager and follow instructions provided.

5.2. Types of Frequency Actions.

5.2.1. New Requests. This action is for the assignment of new frequencies and can take up to a year for approval. DO NOT ORDER ANY EQUIPMENT THAT RADIATES RF ENERGY PRIOR TO RECEIVING A FREQUENCY ASSIGNMENT.

5.2.2. Modifications. This is a change to a frequency already assigned to you. You can modify anything except the transmitter/antenna location. Once again it can take up to a year.

5.2.3. Deletions. This will drop your requirement for any further use of the frequency. Lead time is not required, but be prepared for fast action.

5.2.4. Temporary Requests. Temporary frequencies are used for 90 days or less, for exercises, training or awaiting permanent frequencies. Submit temporary frequency requests at least 60 days in advance for training or exercise use and ASAP upon notification of a real world tasking. UNDER NO CONDITION SHOULD YOU USE A FREQUENCY THAT HAS NOT BEEN COORDINATED WITH THE INSTALLATION FREQUENCY MANAGER.

5.2.5. Emergency Communications/Real World Deployments. Contact the installation frequency manager by phone if less than 24 hours lead time and in person when more time is available.

6. Radio Frequency Coordination. Frequency coordination is required in two areas: Air Traffic Control (ATC) and areas near test ranges. The installation frequency manager will do the coordination.

6.1. Coordination for ATC Frequencies. All frequency requests will be coordinated with the Federal Aviation Administration (FAA) through the applicable Federal Aviation Sector (FAS) region frequency manager.

6.2. Coordination for areas near test ranges. Each area frequency coordinator (AFC) is responsible for frequency management and protection of a test range. Any frequency requests that will be used near a test range must be coordinated with the applicable AFC prior to submission.

7. Spectrum Interference Resolution (SIR) Program. The SIR program has replaced the Meaconing, Intrusion, Jamming, and Interference (MIJI) Program since almost 100% of all MIJI incidents are unintentional or accidental interference.

7.1. Report interference incidents to the installation frequency manager when it is assumed to be from a foreign or hostile source.

7.2. Correct the problem locally with the assistance of the installation frequency manager if you can identify the interference is coming from a friendly source. In these cases, keep a log or record of such interference including dates, times, frequency, audible call signs and other sounds that will help target the source of interference more quickly.

7.3. Do not report interference caused by:

7.3.1. Natural sources

7.3.2. Interference only affecting training frequencies

7.3.3. Interference experienced by Civilian Military Affiliate Radio System (MARS) stations

DAVID L. JOHNSON, Colonel, USAF
Commander

ATTACHMENT 1

FREQUENCY FORMAT

The following is the information required by the installation frequency manager for all frequency requests. This is a general list of information and specific needs will be addressed on an as required basis.
Information on the person requesting the frequency:
Name and rank
Organization and office symbol
Duty phone
MAJCOM
Joint Agency (if applicable)
General information on the frequency:
Classification (unclassified, confidential, secret, top secret)
Type of request (New, Modification, Retrieval, Deletion, Temporary)
Specific frequency or frequency band
AM or FM modulation
Station type (fixed, mobile, airborne, land mobile radio, etc.)
Maximum transmit power
How much you want to use the frequency (weekends only, regular workweek, continuous, etc.)
Start date, and stop date (if temporary)
Transmitter location
Country (if outside CON-LJS)
State
Antenna location
Base (Pope AFB for example)
Antenna coordinates (down to the second)
For requests at Pope the installation frequency manager has a map with grid coordinates down to the second, just give the bldg number.
For units deploying elsewhere, contact the civil engineering squadron at the location and request this info for your location there.
How far you would like to talk (Radius from transmitter location)
Specific transmitter information:
The official nomenclature of your transmitting equipment.
How many pieces of equipment will be used on the net
The antenna name

Antenna gain
Antenna elevation (site elevation)
Antenna feed point height (how tall the antenna mast is)
Antenna Orientation and polarization
Specific receiver information:
Same information as transmitter information
Include receiver location if different from above