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**Communications and Information**

**RADIO FREQUENCY SPECTRUM  
MANAGEMENT IN THE KOREAN THEATER**

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This instruction outlines the responsibilities and provides policy, guidance, procedures and information concerning the USAF management of the radio frequency (RF) spectrum in the Republic of Korea (ROK), and wartime and armistice support of the Command and Control Warfare (C2W) and the Integrated Tasking Order (ITO) process. It assists in systems planning and explains the procedures for obtaining RF support in the ROK. It applies to all USAF activities using the RF spectrum within the ROK and its territorial waters and to all US Forces when operating at any USAF installation within the ROK. This instruction implements AFD 33-1, *Command, Control, Communications, and Computer (C4) Systems* and AFI 33-118, *Radio Frequency Spectrum Management* and AFMAN 33-120, *Radio Frequency Spectrum Management*. Refer technical and procedural questions and comments on the content of this instruction to the 7 AF Spectrum Management Office (607 ACOMS/SCCX)

**SUMMARY OF REVISIONS**

Office symbols were corrected to show relationship between 607 ACOMS Spectrum Management and 7 AF Office of Spectrum Management. Organizational relationships and operational procedures were clarified. Additional guidance provided on select operational procedures. A “[” indicates revised material since the last edition.

**1. Background** . Congestion of the frequency spectrum in Korea is serious. Therefore, it has becoming increasingly difficult to assign new sole-user frequencies. The ROK Ministry of Information and Communications (MIC) is the assignment authority for all RF requirements in the ROK. The MIC manages the RF spectrum in Korea very closely and requires strong justification for permanent frequency assignments. As a steadfast rule, the RF spectrum is sovereign to the host nation. With this in mind, commanders must be extremely critical in their review of requirements and requests for new frequency assignments. Every effort should be made to share existing resources and to ensure the continued use of currently assigned frequencies is absolutely necessary to accomplish the mission.

**2. General Authority.** CINCPAC has delegated wartime and armistice RF spectrum assignment authority and host government coordination authority regarding frequency matters to the Joint Frequency Management Office, Korea (JFMO-K). The JFMO-K is a member of the Commander, US Forces Korea (USFK), Assistant Chief of Staff for Communications (J-6). As such, it is the only US office authorized to contact the ROK government concerning RF and Electromagnetic Compatibility (EMC) and Electromagnetic Interference (EMI) matters.

**3. Responsibilities:**

3.1. The 607th Air Communications Squadron (ACOMS) Commander is the executive manager of the USAF RF Spectrum Management program in the ROK. Additionally, the 607 ACOMS Commander **serves as the 7 AF Senior Communicator (SC) and the Air Component Command AA-6.**

**3.2. 607 ACOMS, Office of Spectrum Management (OSM):**

3.2.1. The 607 ACOMS/SCCX has been designated as the PACAF subordinate Command Office of Spectrum Management (OSM) and represents the 7 AF Commander and 607 ACOMS/CC for all USAF RF spectrum management issues in the ROK. The 607 ACOMS OSM serves as the single point of contact between, the JFMO-K, the Joint Military Frequency Committee, PACAF, and all USAF units in the ROK on RF and EMC matters. 607 ACOMS OSM is synonymous with 7 AF OSM.

*3.2.1.1. Local wing units attempting to secure spectrum support should route their requests through the Installation Spectrum Manager. 7 AF direct reporting units (DRU's) will submit their requests directly to 7 AF OSM i.e., 607 AOG, 607 ASOG.*

3.2.2. C2W Support.

3.2.2.1. All USAF agencies will process Joint Restricted Frequency List (JRFL) requests (i.e., Electronic Attack) through 607 ACOMS OSM to prevent interference with non-participating ROK and US military and civilian agencies. The 607 ACOMS OSM coordinates frequency requirements with JFMO-K. Authorization is given by the Chief, C3 Plans Division.

3.2.2.2. The 607 ACOMS, OSM provides USAF requirements to the JFMO-K for inclusion in the Joint Communications-Electronics Operating Instruction (JCEOI). The JCEOI is managed by the JFMO-K.

3.2.2.3. Validates that systems brought into the ROK have been through the foreign disclosure process and have been given the authority to operate in the ROK by the Ministry of Information and Communications (MIC).

3.2.2.4. Ensures an EMC study has been performed before a frequency proposal is submitted for a new communications system. A new system is one that is unique to the installation, or one that exceeds the basic parameters of a current frequency assignment, i.e., bandwidth, power, frequency or location. The Joint Spectrum Center, Washington, DC, or the 738 EIS, Keesler AFB, MS, can perform this study.

3.2.2.5. Provides EMC analysis for specific frequencies, deconflicting existing users of the RF spectrum. Assists subordinate units in resolving EMI incidents.

3.2.2.6. Coordinates and seeks resolution with local ROK agencies when interference occurs between US and ROK systems. Provides communications system engineering assistance in

the development of USAF communications plans in the ROK. Responsible to review all USAF communications plans in the ROK.

3.2.3. ITO Support: In wartime and armistice, deconflicts and validates frequencies used in the Air Operations Center (AOC) ITO. Ensures Tactical Air Designator (TAD) numbers and associated frequencies have been given authorized frequency assignments.

**3.3. Osan and Kunsan AB, Installation Commander's Responsibilities.** Responsible for all electromagnetic radiation's emanating from the installation and from those outlying activities hosted by the installation. The installation C4 systems officer appoints a primary and an alternate Installation Spectrum Manager for the installation commander. The appointment letter will contain the name, rank, organization, office symbol, phone number and DEROS of the individuals appointed this duty. This letter will be updated any time the information changes. Appointment letters will be sent to 607 ACOMS/SCCX . Electronic submissions via e-mail are permissible.

**3.4. Osan and Kunsan AB, Installation Spectrum Manager's Responsibilities:**

3.4.1. Implements the installation RF spectrum management program as outlined AFI 33-118 and AFMAN 33-120.

3.4.2. Ensures that interservice support agreements, Memorandums of Agreement (MOA) and Memorandums of Understanding (MOU) (where applicable) with all host and tenant activities contain the following provision:

“A listing of all radio frequencies, including bandwidth, emission designator, and power, used by the tenant activity will be provided to the installation frequency manager and will be kept current to reflect any new, deleted, or modified frequency assignments. In cases where the USAF is tenant, a listing of all unclassified and classified, (RELROK only if on a ROK installation) frequencies will be provided to the host.”

3.4.3. Attends base C4I planning meetings to ensure RF spectrum support is considered for all radiating devices.

**3.5. Collocated Operating Base (Taegu, Suwon, Kwang Ju, Chung Ju, and Kimhae AB) Responsibilities:** The 607 ACOMS, OSM is the primary agency responsible for spectrum support at collocated operating bases (COB's). The Communications Electronics officer for a deployed wing appoints a primary and alternate frequency monitor to work RF spectrum management issues directly with the 607 ACOMS, OSM.

**3.6. Using Activity Commander's Responsibilities:** The commander of each unit that operates RF equipment appoints a primary and alternate point of contact, in writing, to act as the frequency monitor. The appointment letter will contain the name, rank, organization, office symbol, phone number and DEROS of the individuals appointed this duty. This letter will be updated any time the information changes. Appointment letters will be sent to the Installation Spectrum Manager and 607 ACOMS/SCCX.

**3.7. Unit Frequency Monitor Responsibilities:**

3.7.1. If tenant on a non-USAF installation, coordinates all new or revised frequency requirements with the host installation communications-electronics (C-E) officer. In cases where neither unit is host, coordinate with the adjacent installation's C-E officers.

3.7.2. Acts as the single point of contact for all matters pertaining to the frequencies used by their unit. Unit frequency monitors will be responsible for maintaining a listing of all frequencies used by their unit. The frequency monitor will ensure that any changes to the unit's frequency authorizations are forwarded to the Installation Spectrum Manager and to 607 ACOMS/SCCX. Ensures that an assignment/authorization document is kept on file for every radio frequency in use by the unit. This document will be provided by the assignment authority or 607 ACOMS OSM at the time the assignment is approved.

3.7.3. Ensures all requests for additions, changes, or deletions of frequencies in the ITO are coordinated with the 607 ACOMS OSM prior to incorporation. Users of frequencies and associated TADs are required to provide updated information if the parameters of the assignment change in any way.

3.7.4. Ensures the operation of equipment that radiates RF energy complies with authorization limitations and tolerances.

3.7.5. Ensures current directives concerning spectrum management are available, current and are being followed.

3.7.6. Takes prompt action to resolve any deficiencies causing harmful interference to other authorized users.

3.7.7. Reviews assigned frequencies annually and advises the Installation Spectrum Manager of any assignments that are no longer needed or which require modification.

3.7.8. Requests no more transmit power or antenna gain and height than is necessary to provide satisfactory service.

3.7.9. Uses radiation suppression devices (dummy loads) when tuning, testing or experimenting with communication equipment.

3.7.10. Ensures that operators of HF radio systems are familiar with the use of propagation predictions.

3.7.11. Ensures that operations are conducted only on those frequencies authorized for the unit/activity.

3.7.12. For new systems, ensures the requirement has been validated by the local C4I planning board prior to procurement or installation and operation.

3.7.13. Ensures that frequency support and EMC is considered before the procurement, acquisition, installation or operation of any equipment designed to transmit or receive RF energy.

**4. Frequency Assignment Actions** . No device designed to radiate RF energy will be operated by the USAF in the ROK without specific authorization.

4.1. **New Assignments.** Requests for new permanent assignments must be coordinated through USAF channels, JFMO-K, and the host government IAW AFM 33-120, Chapter 3. The normal lead-time will be anywhere from 120 days to one year prior to the required operational date. If a frequency assignment is needed sooner, full justification and mission impact must be provided to substantiate the urgency. Requests for new permanent frequency assignments will be submitted through the Installation Spectrum Manager in the Standard Frequency Action Format (SFAF). The specifics regarding the equipment to be used and geographical information must be included. Once complete,

the 7 AF Form 11 (EF), **Frequency Reques**, will be forwarded to the 607 ACOMS OSM for action. Any assistance that is required can be obtained from 607 ACOMS OSM.

4.1.1. Electronic submissions are recommended for all requests for spectrum support. Submissions will be in ASCII text and e-mailed to the 7 AF Spectrum Management box for action. 7 AF OSM will respond with acknowledgement and appropriate Command Application Number.

4.2. **Modifications.** These actions are necessary any time the information in the current assignment changes. Some modifications to an existing assignment must be coordinated in the same manner as a new assignment. Therefore, a 120 day lead-time prior to the operational date must be observed for EMC considerations.

4.3. **Deletions** . It is vital that frequency assignments that are no longer needed be identified to the Installation Spectrum Manager. A deletion action will be processed and that frequency will be made available to other users.

4.4. **Renewals and 5-Year Reviews.** Permanent frequency assignments are required to be reviewed a minimum of every five years. These reviews will ensure the frequency records are kept up to date. The information that is currently in the record must be reviewed for accuracy and completeness by the user. Users will be advised of any reviews that are necessary by the Installation Spectrum Manager. Assignment reviews can be accomplished 120 days prior to the expiration date of the assignment.

4.5. **Temporary.** Temporary assignments are those issued for a period of time less than 90 days in duration. These assignments are issued on a Non-Interference Basis (NIB). NIB is where the intended user agrees and accepts any and all interference that may result from this temporary assignment. If for any reason interference is received by another agency with permanent assignment status, the user with the NIB assignment must immediately cease operations on that frequency(ies) and notify the 7 AF OSM. Temporary assignments are assigned for exercises or situations where a permanent assignment is not required. Temporary assignments normally support a planned activity and should be coordinated well in advance of the required date. A minimum of 60 days lead-time is established to obtain frequency support for planned activities. Real-world contingencies can be handled more expeditiously when necessary. If a PACAF unit requiring frequency support is based outside the ROK, the request will be routed through their Numbered Air Force OSM to JFMO-K with a copy to 607 ACOMS, OSM. If the unit is CONUS-based, the request should be forwarded through MAJCOM channels to JFMO-K with information copies to HQ PACAF/SCMTT and 607 ACOMS/SCCX. Units based in the ROK will send requests to 607 ACOMS/SCCX.

5. **EMI.** USAF users of equipment designed to radiate RF energy, whether ground based or airborne, will take all practical measures necessary to identify, report and reduce EMI incidents. The first step is to identify the source, if possible, then attempt to resolve the situation at the lowest level possible. For assistance, contact the Installation Spectrum Manager. Due to the congestion of the RF spectrum within the ROK, users can expect to experience some kind of interference on their communications systems. It is the responsibility of the user to take whatever steps are necessary to resolve the situation. All incidents of EMI that are determined to be something other than an equipment problem must be reported on 7 AF Form 12 (EF), **Interference Report**. Reports will be submitted to 607 ACOMS/SCCX and 7 AF System Control (SYSCON).

## 6. Frequency Assignment Limitations:

6.1. **Air Traffic Control (ATC).** ATC frequencies will only be used to control the movement of aircraft taxiing, departing and approaching air terminals or those aircraft enroute in controlled airspace. ATC frequencies will not be used for any other purpose.

6.2. **Navigational Aids (NAVAIDS).** All requests for NAVAIDS frequencies will also include a request for identifiers. Requests must indicate whether the NAVAID requested uses a two, three, or four-letter identifier (ID) and any ID letter limitations. It will also include any tuning limitations of the associated equipment.

6.3. **Amateur (Ham) and Citizens Band Radio Operations.** Amateur operations within the ROK will be IAW USFKR 25-6. Operations will be limited to military installations. Mobile operations are not permitted. Citizens Band (CB) operations are strictly prohibited in the ROK. Operations of such equipment could result in a SOFA incident and equipment may be confiscated.

6.4. **Cellular Telephone Operations.** Cellular Telephones from the United States operate in a different frequency band than cellular telephones in the ROK and will not operate in the ROK. Units requiring cellular telephones will go through appropriate local contracting channels. There is no DoD endorsed cellular telephone service in the ROK.

7. **Integrated Communications Database (ICDB)** . ICDB replaced what was formerly the Integrated Satellite Database numbers (ISDB). ICDB numbers are required when submitting a satellite access request. Without an ICDB, a frequency cannot be assigned by the Regional Space Support Center (RSSC). ICDB numbers are applied for and issued through J-3, USFK.

8. **Forms Prescribed:** 7 AF Form 11 (EF), **Frequency Request;** 7 AF Form 12 (EF), **Interference Report.**

JOSEPH E. HURD, Lieutenant General, USAF  
Commander