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SECRETARY OF THE AIR FORCE**



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**SPECTRUM INTERFERENCE
RESOLUTION PROGRAM**

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This instruction implements AFD 10-7, *Command and Control Warfare*, and describes the US Air Force Spectrum Interference Resolution (AFSIR) Program. Provides Military Department guidance in accordance with Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3320.02B, *Joint Spectrum Interference Resolution (JSIR)*, CJCSI 3320.02A-1, *Classified Supplement to Joint Spectrum Interference Resolution (JSIR)*, and Chairman Joint Chiefs of Staff Manual (CJCSM) 3320.02, *Joint Spectrum Interference Resolution (JSIR) Procedures*. Provides guidance for reporting, identifying, evaluating, and controlling electromagnetic interference (EMI) to meet electromagnetic compatibility (EMC) goals of the Air Force Electromagnetic Environmental Effects (E3) program as defined in Department of Defense Directive (DODD) 3222.3, *DOD Electromagnetic Environmental Effects (E3) Program*. Provides guidance for requesting Quick Fix Interference Resolution Capability (QFIRC) and related EMC measurements and specialized engineering services. This publication applies to the Air National Guard (ANG) and Air Force Reserve (AFRC). Major commands (MAJCOM), field operating agencies (FOA), and direct reporting units (DRU) must develop procedures for implementing this instruction. The reporting requirements in this publication are exempt from licensing in accordance with AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections*. Send recommended changes or comments to Headquarters Air Force Communications Agency (HQ AFCA/EASD), 203 W. Losey St, Room 1100, Scott AFB IL 62225-5222, through appropriate channels, using AF IMT 847, **Recommendation for Change of Publication**, with an information copy to Air Force Frequency Management Agency (AFFMA/DOO), 2461 Eisenhower Ave, Hoff-

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(AFSPC) This supplement implements and extends the guidance of Air Force Instruction (AFI) 10-707, *Spectrum Interference Resolution Program*, 20 June 2005. This supplement applies to Air Force Space Command (AFSPC) and its subordinate units. This supplement applies to all Air Force Major Commands (MAJCOMs) employing space systems. This supplement also applies to the Air National Guard (ANG) and Air Force Reserve (AFRES) units performing AFSPC missions. Provide any recommended changes, questions, and notification of conflicts between this supplement and other publications using AF IMT 847, *Recommendation for Change of Publication*, to AFSPC/A6NII, Command Spectrum Management Office, 150 Vandenberg Street., Suite 1105, Peterson AFB CO 80914-4730. Contact AFSPC/A6NII by telephone (DSN 692-5958/6765/6400 or Commercial (719) 554-5958/6765/6400, fax (DSN 692-9656) or e-mail AFSPC.A6NIII@Peterson.AF.Mil. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN37-123 (will convert to AFMAN33-363), *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) which may be found on-line at <https://afrims.amc.af.mil>.

SUMMARY OF CHANGES

This revision updates responsibilities and procedures for managing the AFSIR Program. It provides additional guidance on how to investigate and report EMI from DOD, non-DOD, and suspected hostile sources.

(AFSPC) This revision updates all reporting procedures and associated address elements. This supplement has been completely revised and should be reviewed in its entirety.

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1. Air Force Spectrum Interference Resolution (AFSIR) Program. CJCSI 3320.02B states DOD components will attempt to resolve interference affecting systems under their auspices at the lowest level possible within their chain of command. The AFSIR program pertains to Air Force units experiencing interference at any time except when under the operational control of a Combatant Command. MAJCOMs with units located outside of the continental United States may report and resolve interference in accordance with geographical Unified Command procedures and can request AFFMA or QFIRC assistance, if needed. Report any Air Force interference experienced while supporting joint operations in accordance with Joint Task Force or Combatant Command procedures. Report interference to space systems, including space, ground, and control segments to your MAJCOM, in accordance with Air Force Space Command (AFSPC) supplemental guidance. The focus of the AFSIR program is to resolve EMI at the lowest organizational level. Submit all reports, initial, follow-on, and closure through the MAJCOM to AFFMA.

1.1. **(Added-AFSPC)** (For OCONUS AFSPC Mission-System Units) For AFSPC units under control of Unified Commands outside the U.S. include the following SIPRNET address elements in your Electromagnetic Interference (EMI) reports:

AFSPC.CommandCenter@AFSPC.AF.Smil.Mil

AFSPC.A6NII@AFSPC.AF.Smil.Mil

USSTRATCOMGlobalSpectrumManagement@Stratnets.Stratcom.Smil.Mil

JSPOCCombatOpsv3@Vandenberg.AF.Smil.Mil

RSSC-EUR@EUR.DISA.Smil.Mil (for EUCOM locations)

RSSC-PAC@PAC.DISA.Smil.Mil (for PACOM locations)

2. Electromagnetic Interference (EMI). EMI can be caused by enemy, neutral, friendly, or natural sources, and must be resolved on a case-by-case basis. Users must investigate and report as outlined in paragraph 3.

2.1. EMI from DOD Users. When the EMI clearly results from another DOD user, attempt to resolve the interference at the lowest organizational level. After all local efforts have been exhausted to resolve the EMI, request assistance through command frequency management channels.

2.2. EMI from Non-DOD Users. Request assistance through command frequency management channels. Do not go directly to the Federal Communications Commission (FCC) or any other agency. Air Force-owned equipment may cause EMI that appears to originate from a nongovernment source. AFFMA personnel will coordinate with the FCC and other government agencies if the investigation shows that non-Air Force equipment caused the EMI.

2.3. EMI from suspected hostile sources. The primary difference between hostile and nonhostile EMI is intention. All incidents should initially be treated as nonhostile EMI until proven otherwise.

2.3. **(AFSPC)** (For AFSPC Mission-System Units) Unless the source of an EMI to AFSPC mission systems is known, it will be treated with a sense of urgency. Mission systems for the purpose of this supplement, are systems/equipment in direct support of AFSPC missions, i.e. Air Force Satellite Control Network (AFSCN), Missile Warning Systems, Missile Fields, etc. and operate 24/7. Urgency is required until it is reasonably certain the interference is not the result of hostile or otherwise intentional activity. While the majority of the interference events are non-hostile, it is not the role of an

operator to determine if an EMI is hostile or not. IAW United States Strategic Command's (USSTRATCOM) Strategic Directive (SD) 710-4, ***Satellite Communications (SATCOM) Electromagnetic Interference (EMI) Resolution Procedures***, the Commander USSTRATCOM will make the hostile/non-hostile decision based on information provided from several sources including CDR (Commander) AFSPC, Director (DIR) Global SatCom (Satellite Communications) Support Center (GSSC), DIR Regional SatCom Support Center (RSSC), and CDR Joint Space Operations (JSO).

2.3.1. EMI from hostile sources should be reported to the Joint Spectrum Center (JSC) in accordance with CJCSI 3320.02A-1 (Secret) and by MAJCOMs in accordance with AFPD 10-20, *Air Force Defensive Counterinformation Operations*. Report any hostile interference experienced while supporting joint operations in accordance with Joint Task Force or Combatant Command procedures. Report Military Satellite Communications incidents to US Strategic Command in accordance with AFSPC supplemental guidance.

2.3.1. (AFSPC) (For all MAJCOMs and their units within the CONUS) AFI 10-707 directs all MAJCOMs to utilize this supplement to address EMIs to any node of a space system. CJCSM 3320.02, ***Joint Spectrum Interference Resolution (JSIR) Procedures***, and the ***Unified Command Plan, 1 Mar 2005***, assigns USSTRATCOM as the focal point for all incidents of interference and electromagnetic attack affecting DoD space systems. Only paragraphs **2.3.1.**, **3.6.3.** and **7.1. (Added)** in this supplement apply to all MAJCOMs for space system interference reporting. USSTRATCOM's (RSSC) must be included in all reports of space system EMIs. The RSSC for the CONUS is located at Mac Dill AFB FL and can be contacted at DSN 968-6845. The SIPRNET address is: RSSC@MACDILL.AF.Smil.Mil The SD 710-4 requires submission of initial EMI reports within 72 hours from when the suspected EMI was first noticed. For outside CONUS, COCOMs will have contact information for their RSSC locations.

3. Electromagnetic Interference (EMI) Resolution.

3.1. The victim of the interference contacts the local installation spectrum manager (ISM) or other point of contact identified by the MAJCOM. Accomplish the following actions prior to requesting assistance from the MAJCOM spectrum manager.

3.1.1. System operator will contact equipment maintenance personnel to determine if the EMI is the result of maintenance actions or an equipment malfunction.

3.1.2. System operator will contact other known nearby units to ascertain if they are experiencing the same type of EMI. This may aid in identifying the interference source.

3.1.3. When co-channel interference (interference between systems assigned similar frequency assignments) is suspected, the ISM will attempt to determine the location of frequency assignments that fall within the bandwidth of the victim receiver.

3.1.4. If resources are available, system operations and equipment maintenance personnel will attempt to determine the bandwidth, relative amplitude, and modulation of the EMI with a spectrum analyzer. Find the approximate bandwidth by varying the receiver frequency to determine the affected frequency band.

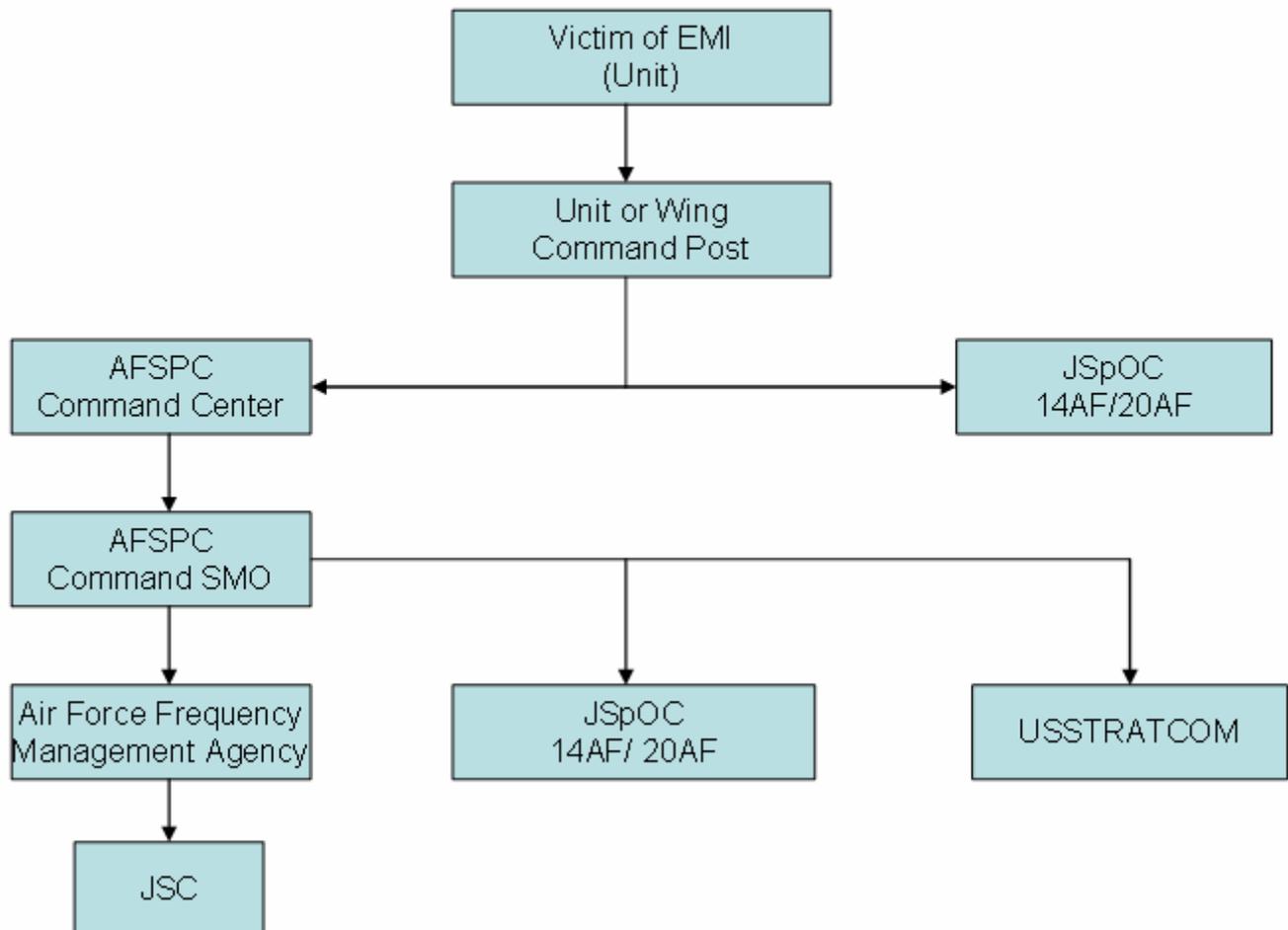
3.1.5. If a non-Air Force activity reports suspected interference from an Air Force asset, the victim experiencing EMI must collect the related information. The ISM or MAJCOM designated point of contact will attempt to resolve the EMI.

3.1.6. After exhausting all local resolution efforts, the ISM or MAJCOM designated point of contact can contact the 738th Engineering Installation Squadron (EIS) located at Keesler AFB MS, directly for an initial assessment of the problem, obtain consultation, and recommendations regarding actions, coordination and techniques that can be used to identify the source and resolve the EMI.

3.1.7. **(Added-AFSPC)** (For AFSPC Mission-System Units) EMI reporting by AFSPC Wings and units experiencing mission-system interference (including interferences affecting critical support functions such as maintenance or security) begins with the operator who is experiencing the interference. Reports are to be addressed to JSpOC and HQ AFSPC Command Center through the host-wing Command Post via SIPRNET. When sending EMI reports, process them using the “Importance: High” (!) flag on your personal computer. Formats are provided for each AFSPC mission system (**Attachment 3 (Added) through Attachment 8 (Added)**), which specifies required information and provides address elements to submit reports. Reporting information for the AFSCN is found in **Attachment 3 (Added)**; for the Satellite Read-out Stations (SRS), see **Attachment 4 (Added)**; for AFSPC radars see **Attachment 5 (Added)**; for AFSPC ranges, see **Attachment 6 (Added)**; for missile fields see **Attachment 7 (Added)**; for all others see **Attachment 8 (Added)**. Also see **Figure 1. (Added)** for the EMI reporting chain.

Figure 1. (Added-AFSPC) EMI Reporting Chain for AFSPC Units

EMI Reporting Chain For AFSPC Mission Systems



- 3.1.7.1. **(Added-AFSPC)** (For AFSPC Mission-System Units) The AFSPC Command SMO is on-call to respond to all mission system EMI reports 24/7. Reporting times are two hours from initial EMI indication to its Wing Command Post. For Wing Command Posts, one hour has been established for release of an official report to JSpOC and the AFSPC Command Center. A total of three hours is allotted from the initial indication of an EMI to the release of the initial report to JSpOC and AFSPC Command Center. Submit reports within the time criteria, even if local investigation of the EMI is not complete and submit follow-up reports using the same addressees for any changes to the initial report. Local processes should be in place and used to determine if an EMI indication is a result of equipment anomaly, space weather, scheduling, outside sources, etc.
- 3.1.7.2. **(Added-AFSPC)** (For AFSPC Mission-System Units) HQ AFSPC Command SMO will complete a formal JSIR report in accordance with CJCSM 3320.02A, for AFSPC units that report EMIs using the SIRF format described in **Attachment 3 (Added)** through **Attachment 8 (Added)**.
- 3.1.7.3. **(Added-AFSPC)** (For AFSPC Mission-System Units) The JSpOC will monitor the EMI reports from the wings to the AFSPC Command Center for mission impact and to assist with information flow within the established timelines.
- 3.1.8. **(Added-AFSPC)** (For AFSPC Units) All other wireless systems not in direct support of AFSPC mission systems (24/7), such as LMRs (except for missile fields in support of operations), and program management tests, should report their EMIs through their frequency management offices by the end of the next duty day and process via routine channels.
- 3.1.9. **(Added-AFSPC)** (For AFSPC Mission-System Units) Identification of severity of mission impact, in items 6 & 7 of **Attachment 3 (Added)** through **Attachment 8 (Added)**, might provide additional resources to resolve EMIs. The three degrees of mission impacts are: minimal, significant, and severe and are defined in **Attachment 1**, "terms."
- 3.2. If resolution is not obtained in accordance with paragraph **3.1**, the ISM or MAJCOM designated point of contact will request assistance from the MAJCOM spectrum manager. The MAJCOM spectrum manager should use any additional information and tools available to resolve the EMI and should request a report as outlined in paragraph **3.6**.
- 3.3. If the MAJCOM spectrum manager cannot resolve the EMI, request assistance from AFFMA. AFFMA will attempt to first coordinate resolution with the MAJCOM and 738 EIS.
- 3.4. If resolution is not achieved in accordance with paragraph **3.3**, a QFIRC may be required. Coordinate approval between AFFMA, MAJCOM, and 738 EIS prior to deployment of the QFIRC.
- 3.5. AFFMA can also request national-level federal agency and/or JSC support, as appropriate.
- 3.6. EMI Reporting:
- 3.6.1. Report Precedence. The ISM or MAJCOM designated point of contact and MAJCOM Spectrum Management Office will determine precedence consistent with the urgency of the reported situation.
- 3.6.2. Security Classification of EMI Reports. Units must evaluate the security sensitivity of the EMI on the affected system and classify the report accordingly. Security classification of interference incidents/reports is determined principally by nationality and location of the implied or stated

source of the interference and the security sensitivity of the affected military system. Stations located in combat areas or having a sensitive military mission generally must classify all interference reports. Guidelines for classifying interference incidents are contained in CJCSI 3320.02B.

3.6.2. (AFSPC) (For AFSPC Units) The classification of the report is determined by the mission system's Security Classification Guide (SCG). If, however, the interference indicates a vulnerability, or is not identified in the SCG, classify the report in accordance with CJCSI 3320.02C, *Joint Spectrum Interference Resolution (JSIR)*, **Attachment 9 (Added)** of this supplement.

3.6.3. Report Format. Submit an AFSIR report by electronic means (preferably E-mail). The Spectrum XXI [SXXI] Interference Resolution module is a tool that can be used for this purpose. Interference reports sent by MAJCOMs will be courtesy copied to the JSC J3 as an information addressee for historical record keeping purposes. See **Attachment 2** for a sample interference report.

3.6.3. (AFSPC) (For all MAJCOMs and their units within CONUS) For space system EMIs, submit report in the JSIR format IAW CJCSM 3320.02A. See **paragraph 7.1. (Added)**.

3.6.4. Types of Reports.

3.6.4.1. Initial Report. The ISM or MAJCOM designated point of contact will generate a report.

3.6.4.2. Supplemental or Follow-on Reports. Submit supplemental reports when needed to add or modify information previously submitted. Use a supplemental report to request 738 EIS on-site QFIRC technical assistance.

3.6.4.3. Closing Reports. The ISM or MAJCOM designated point of contact will submit a closing report when the EMI incident is resolved or requires no further action.

3.6.4.3. (AFSPC) (For all AFSPC Units) AFSPC SMO will submit Closing/Final reports with information copy to victim of EMI (see AFSPC "Terms" for Close/Final report).

3.6.5. Report Addressees.

3.6.5.1. Air Force units must submit AFSIR reports through their chain of command up to the MAJCOM as the action addressee with info copy to AFFMA NIPRNET affma/do@pentagon.af.mil or SIPRNET affma.do@affma.af.smil.mil and 738 EIS NIPRNET 738eis.eem.Chief@keesler.af.mil or SIPRNET 738eis.eee3@keesler.af.smil.mil.

3.6.5.2. MAJCOMs submit reports to AFFMA NIPRNET affma/do@pentagon.af.mil or SIPRNET affma.do@affma.af.smil.mil as the action addressee with info copy to 738 EIS NIPRNET 738eis.eem.Chief@keesler.af.mil or SIPRNET 738eis.eee3@keesler.af.smil.mil and JSC NIPRNET operations@jsc.mil or SIPRNET operations@jsc.js.smil.mil.

3.6.6. During exercise periods, coordinate all EMI reports with the Electronic Warfare Coordination Cell (EWCC) in the Air Operations Center or EW Duty Officer. Do not submit an exercise-related report if jamming or intrusion activities are authorized during an exercise. Depending on geographical location, contact the Range Spectrum Manager or Area Frequency Coordinator to determine if the interference is an approved part of the exercise.

3.6.6. (AFSPC) (For all AFSPC Units) Exercise EMI reports must clearly be marked "Exercise" at top and bottom of the report and will be terminated at the AFSPC Command Spectrum Management Office, and be reviewed to determine if further information is needed in a follow-on AFSPC Supplement. SIPRNET address element for these reports as a minimum should be, AFSPC.A6NII@AFSPC.AF.Smil.Mil.

3.6.7. Exceptions to Reporting. Do not report an incident when:

3.6.7.1. The interference is transient EMI from natural sources (e.g., rain, lightning, etc.).

3.6.7.2. The interference only affects training frequencies assigned on a noninterference basis for training purposes.

3.6.7.3. Space weather (e.g., HF fades, Polar Cap Absorption (PCA) events, geomagnetic storming, etc.) is the suspected, or confirmed, cause of the interference. For assistance, notify the local weather unit of the EMI to include date, time, location, system, and frequency impacts. The local weather unit can contact the Air Force Weather Agency, as appropriate.

3.6.7.4. The interference is only experienced aboard intelligence, surveillance and reconnaissance (ISR) aircraft aloft and is localized when mission equipment or payload equipment is turned on/off or used. In these cases, the interference must be reported to the flying unit's Director of Maintenance/Maintenance Officer and Director of Operations. The unit's Director of Maintenance/Maintenance Officer may report the EMI to AFMC; the flying unit's Director of Operations must characterize the operational impact. The unit's Director of Maintenance/Maintenance Officer must determine if unit maintenance or calibration will resolve the EMI before notifying AFMC. If notified, AFMC must determine if any field or depot upgrades meant to resolve the EMI are already scheduled. AFMC is responsible for reporting the EMI to AFFMA if the EMI can be detected at a distance of more than 50 meters from the aircraft.

4. Requesting Quick Fix Interference Reduction Capability (QFIRC) and Joint Spectrum Interference Resolution (JSIR) Assistance:

4.1. QFIRC. The QFIRC reduces or eliminates unintentional (non-hostile) EMI associated with Air Force operational equipment. The QFIRC service analyzes and recommends corrective actions for reported EMI problems. The 738 EIS, located at Keesler AFB MS, provides QFIRC to all Air Force units. This unit can provide people and equipment to perform on-site direction finding and interference problem analysis. The 738 EIS will document corrective actions and give recommendations for solving EMI problems in a formal report that will be forwarded to the requesting unit and to its parent MAJCOM and AFFMA.

4.2. JSIR. The JSC is the office of primary responsibility (OPR) for the JSIR Program. This program office maintains a central database of EMI cases, resolutions, and lessons learned for all DOD EMI and provides analytical and on-site assistance in resolving EMI problems. JSIR assistance will be requested by AFFMA after all Air Force resources are exhausted.

5. Roles and Responsibilities.

5.1. Joint Spectrum Center (JSC):

5.1.1. Manage the JSIR program in accordance with the Joint Staff (JS)/J6 guidance.

- 5.1.2. Maintain the DOD JSIR database and status tracking, to include EMI characteristics and methods of resolution for each EMI case reported. Provide database access to Air Force units upon request.
- 5.1.3. Assist in the resolution of EMI. If on-site assistance is necessary, the request must be initiated by AFFMA.
- 5.2. Deputy Chief of Staff for Air and Space Operations (HQ USAF/XORE) will:
 - 5.2.1. Monitor and suggest countermeasures, when applicable.
 - 5.2.2. In conjunction with AFFMA, assist in the resolution of operational frequency deconfliction issues.
- 5.3. Air Force Frequency Management Agency (AFFMA) will:
 - 5.3.1. Act as the Air Force focal point for EMI resolution guidance.
 - 5.3.2. Coordinate all policy and instructional guidance with HQ USAF/XO.
 - 5.3.3. Act as the Air Force focal point for the JSIR program.
 - 5.3.4. Ensure that funds for the QFIRC program are annually programmed and made available to reimburse the 738 EIS for travel and per diem costs associated with on-site QFIRC support.
 - 5.3.5. Act as the focal point for EMI problems when the proposed solution involves changes in frequency assignments.
 - 5.3.6. Submit U.S./Canada and U.S./Mexico radio interference reports as directed in the National Telecommunications and Information Administration (NTIA) Manual of Regulations and Procedures for Federal Radio Frequency Management.
- 5.4. Air Force Materiel Command (AFMC) will:
 - 5.4.1. Review and coordinate EMC standards with other agencies, in addition to developing military EMC standards and specifications for the design, development, procurement, production, test, and measurement of electrical, electronic, and telecommunication equipment.
 - 5.4.2. Design equipment for maximum suppression of undesirable emissions and optimum rejection of potential EMI.
 - 5.4.3. Conduct EMI studies and analyses to ensure that equipment in the design or development stages will meet or exceed established specifications and standards and achieve EMC in its intended operational environment.
 - 5.4.4. Provide funds for managing and procuring common test equipment required to support EMI reduction efforts and centrally procured QFIRC items.
 - 5.4.5. Notify HQ USAF/XOIR and SAF/AQI if the EMI is experienced aboard an ISR aircraft and the EMI is caused by mission equipment or payload equipment aboard the aircraft. Notify AFFMA of the EMI if the EMI can be detected off-board (more than 50 meters from the aircraft).
- 5.5. 738 EIS will:
 - 5.5.1. Act as the focal point for the QFIRC and EMC/EMI measurements.

5.5.2. Maintain an EMC office to analyze programs for electronic facilities, identify EMI problems and where possible, make or recommend planning adjustments to eliminate or reduce EMI problems.

5.5.3. Establish and maintain the QFIRC program for the Air Force. QFIRC services include:

5.5.3.1. Receiving and analyzing reports of EMI to operational equipment and systems and providing technical assistance when requested. Technical assistance could include, electromagnetic environmental effects (EME) studies, EMC and EMI consultation, on-site interference investigations including direction-finding measurements to locate the source(s) of EMI, as well as initiating and recommending corrective actions to resolve EMI problems.

5.5.3.2. Procuring and maintaining reasonable quantities of interference reduction devices to resolve operational EMI problems. Items will be provided directly to the unit experiencing EMI when the items will be effective in reducing or eliminating the EMI problem.

5.5.3.3. Advising all working levels of the other military Services, nonmilitary government agencies, and civilian users of electronic equipment, both domestic and foreign, on methods to eliminate or reduce EMI problems, where Air Force equipment is involved.

5.5.3.4. Upon request, provide technical advice and measurement assistance to AFFMA and MAJCOMs on EMI problems during equipment and systems acquisition. The requestor may fund assistance.

5.5.3.5. Advising HQ AFMC of EMI trends or developments that require changes in maintenance procedures, requirements for new equipment, or modifications to present equipment.

5.5.3.6. Reviewing and coordinating on EMC standards, as necessary, with other agencies and assist HQ AFMC in the development of adequate and useful military standards and specifications for the design, development, procurement, production, test and measurement of electromagnetic spectrum-dependent equipment.

5.5.3.7. Providing Air Force activities with measurement services to analyze and resolve EMI problems. These services include prototyping and testing various configurations of equipment to determine the best installation criteria when parameters cannot be obtained from equipment design specifications or available test data.

5.5.3.8. Procuring, developing, and employing reliable and accurate measurement techniques and equipment with the sensitivity, accuracy, range, and stability necessary to provide valid electromagnetic measurement data on Air Force electronic equipment and systems to evaluate EMI and EMC, and providing measurements and specialized engineering services as outlined in this instruction.

5.5.3.9. Maintaining a reference library of technical information on actions taken to resolve EMI problems, and provide available information to the JSC to be included in the JSIR database.

5.5.3.10. Publishing a user/maintainer technical guide for resolving EMI at the local level.

5.6. MAJCOMs, FOAs, and DRUs will:

5.6.1. Adhere to the policy of the AFSIR program.

- 5.6.2. Identify EMI and EMC requirements and request the appropriate technical assistance to perform the required analysis, measurements and evaluations.
- 5.6.3. Eliminate or control EMI before installing equipment.
- 5.6.4. Ensure maintenance and operations personnel and activities implement measures to minimize EMI during operational use of equipment, to include obtaining valid frequency assignments from an appropriate authority.
- 5.6.5. Ensure that off-the-shelf and locally procured and leased equipment are designed to suppress or reject EMI.
- 5.6.6. Supplement this instruction, as necessary, or provide a policy letter to establish reporting channels and OPRs at each level of command. Supplements must not impede the reporting of EMI or restrict the direct communication of policy between subordinate units and Air Force engineering agencies that provide QFIRC consulting and technical support, measurements and specialized engineering services. Coordinate command supplements with AFFMA and send a copy to the 738 EIS/EEEM, 670 Maltby Hall Drive, Ste 234, Keesler AFB MS 39534-2633.
- 5.6.7. Provide a command point of contact for EMI and EMC to the 738 EIS.
- 5.6.8. Ensure that EMI is reported in accordance with the EMI reporting policy and procedures.
- 5.6.9. Establish training to ensure personnel are familiar with this instruction, procedures for reporting EMI and requesting assistance when needed.
- 5.6.10. Develop EMI education programs tailored to their mission and equipment.
- 5.6.11. Assist subordinate units in identifying, resolving and reporting EMI.
- 5.6.12. Determine the registration priority of the frequencies involved in an EMI problem.
- 5.6.13. Resolve EMI resulting from frequency assignment problems through negotiations with MAJCOMs, other agencies and foreign countries, through the appropriate Combatant Command, as required.
- 5.6.14. Ensure that EMC requirements are considered before assigning frequencies.
- 5.6.15. Coordinate actions to resolve EMI.

6. Information Collections, Records, and Forms or Information Management Tools (IMT).

- 6.1. Information Collections. No information collections are created by this publication. The reporting requirement in this publication is exempt from licensing in accordance with AFI 33-324.
- 6.2. Records. Maintain records in accordance with AFMAN 37-123 (will become AFMAN 33-363) and Air Force Web-RIMS RDS located at <https://webrims.amc.af.mil/rds/index.cfm>, Table 33-12, *Frequency Management*, Rule 8.
- 6.3. Forms or IMTs (Adopted and Prescribed).
 - 6.3.1. Adopted Forms or IMTs: AF IMT 847, **Recommendation for Change of Publication.**
 - 6.3.2. Prescribed Forms or IMTs. No Forms or IMTs are prescribed by this publication.

7. (Added-AFSPC) Space System Guidance (For all MAJCOMs and their units within CONUS)

7.1. **(Added-AFSPC)** (For all MAJCOMs and their units within CONUS) Space systems include the earth terminal, all links between the earth terminal and the satellite, and the satellite itself. The definition of space systems can be found in Joint Pub 1-02 *Department of Defense Dictionary of Military and Associated Terms*. IAW SD 710-4, space systems EMIs will be reported in the JSIR format, as addressed in the CJCSM 3320.02A. When reporting space system EMIs, the following address elements must be used as a minimum, whether submitting reports via SIPRNET, NIPRNET or DMS:

To: Regional SATCOM Support Center (RSSC CONUS) Mac Dill AFB, FL

RSSC@MACDILL.AF.Smil.Mil

Info: USSTRATCOM

USSTRATCOMGlobalSpectrumManagement@Stratnets.stratcom.Smil.Mil

Joint Spectrum Center OPERATIONS@JSC.JS.SMIL.MIL

Your Host Command Post

Your Frequency Manager

AFFMA

NOTE: (For all MAJCOMs and their units within CONUS) Each MAJCOM shall determine who submits the EMI report in the JSIR format.

WILLIAM T. HOBBS, Lt Gen, USAF
DCS, Warfighting and Integration

(AFSPC)

BRADLEY W. BUTLER, Brigadier General, USAF
Director, Logistics and Communications

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

DODD 3222.3, *DOD Electromagnetic Environmental Effects (E3) Program*, September 8, 2004

CJCSI 3320.02A-1, *Classified Supplement to Joint Spectrum Interference Resolution (JSIR)*

CJCSI 3320.02B, *Joint Spectrum Interference Resolution (JSIR)*

CJCSM 3320.02, *Joint Spectrum Interference Resolution (JSIR) Procedures*

AFPD 10-7, *Command and Control Warfare*

AFPD 10-20, *Air Force Defensive Counterinformation Operations*

AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections*

AFMAN 37-123, *Management of Records* (will become AFMAN 33-363)

Web-RIMS Records Disposition Schedule (RDS)

Abbreviations and Acronyms

AFFMA—Air Force Frequency Management Agency

AFSIR—Air Force Spectrum Interference Resolution Program

AFSPC—Air Force Space Command

CJCSI—Chairman Joint Chiefs of Staff instruction

CJCSM—Chairman Joint Chiefs of Staff manual

DOD—Department of Defense

DRU—direct reporting unit

E3—electromagnetic environmental effects

EIS—Engineering Installation Squadron

EMC—electromagnetic compatibility

EMI—electromagnetic interference

EW—electronic warfare

FCC—Federal Communications Commission

FOA—field operating agency

ISM—installation spectrum manager

JSC—Joint Spectrum Center

JSIR—joint spectrum Interference resolution

MAJCOM—major command

NTIA—National Telecommunications and Information Administration

QFIRC—quick fix interference reduction capability

RDS—records disposition schedule

Terms

Electromagnetic environmental effects (E3)—The impact of the electromagnetic environment upon the operational capability of military forces, equipment, systems, and platforms. It encompasses all electromagnetic disciplines, including electromagnetic compatibility and electromagnetic interference; electromagnetic vulnerability; electromagnetic pulse; electronic protection, hazards of electromagnetic radiation to personnel, ordnance, and volatile materials; and natural phenomena effects of lightning and precipitation static. (Joint Publication [JP 1-02])

Electromagnetic compatibility (EMC)—The ability of systems, equipment, and devices that utilize the electromagnetic spectrum to operate in their intended operational environments without suffering unacceptable degradation or causing unintentional degradation because of electromagnetic radiation or response. It involves the application of sound electromagnetic spectrum management; system, equipment, and device design configuration that ensures interference-free operation; and clear concepts and doctrines that maximize operational effectiveness. (JP 1-02)

Electromagnetic interference (EMI)—Any electromagnetic disturbance that interrupts, obstructs, or otherwise degrades or limits the effective performance of electronics and electrical equipment. It can be induced intentionally, as in some forms of electronic warfare, or unintentionally, as a result of spurious emissions and responses, intermodulation products, and the like. (JP 1-02)

Attachment 1 (AFSPC)**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*

SD 710-4, *Satellite Communications (SATCOM) Electromagnetic Interference (EMI) Resolution Procedures*

Abbreviations and Acronyms

AFRES—Air Force Reserve

AFSCN—Air Force Satellite Control Network

ANG—Air National Guard

CDR—Commander

COCOM—Combatant Command

CONUS—Continental United States

DIR—Director

DMS—Defense Messaging System

DSN—Defense Switch Network

Flt—Flight

Geo—Geostationary (satellite)

GMT—Greenwich Meridian Time

GPS—Global Positioning System

GSSC—Global SATCOM Support Center

IAW—In Accordance With

JSO—Joint Space Operations

JSpOC—Joint Space Operations Center

LF—Launch Facility

LMR—Land Mobile Radio

MAF—Missile Alert Facility

MHz—Megahertz

MW—Missile Warning

NIPRNET—Non-secure Internet Protocol Network

Non-Geo—Non-Geostationary (satellite)

NuDet—Nuclear Detonation
RSSC—Regional SATCOM Support Center
SATCOM—Satellite Communications
SCG—Security Classification Guide
SD—Strategic Directive
SIPRNET—Secure Internet Protocol Network
SIRF—Spectrum Interference Resolution Format
SMO—Spectrum Management Office
SOPS—Space Operations Squadron
SRS—Satellite Read-Out Station
SS—Space Surveillance
STE—Secure Telephone Equipment
STU III—Secure Telephone Unit
USSTRATCOM—United States Strategic Command

Terms

Impact (Minimal Impact)—The mission can be accomplished with little effort or expenditure of resource.

Impact (Significant Impact)—The mission capability is reduced but can still be accomplished. This implies the need to use available spares, reduced sensitivity, reduced automation, or other expenditure of resources to mitigate the effects of the EMI.

Impact (Severe Impact)—The mission cannot effectively be accomplished when EMI is present.

Report Status (Open)—An EMI report that is still being worked to try to resolve (examples: Initial or follow-up reports)

Report Status (Closed)—The status of this report is one that is either resolved (final report) or all attempts to resolve the EMI has been exhausted. The status is then closed. Reports are closed by the AFSPC Command SMO.

Report Type (Initial Report)—Submitted by the victim of the interference

Report Type (Amended Initial Report)—Submitted by AFSPC SMO as a JSIR report

Report Type (Follow-up Report)—Submitted by either victim of interference or AFSPC SMO

Report Type (Final Report)—Submitted by AFSPC SMO

Attachment 2

SAMPLE INTERFERENCE REPORT

TO: See Paragraph **3.6.5**.

INFO: See Paragraph **3.6.5**.

SUBJECT: INTERFERENCE REPORT - (Provide Case No. for tracking purpose, e.g., MAJCOM Abbreviation YY-No. - AETC 03-05)

TYPE OF REPORT (INITIAL, FOLLOW-ON, CLOSING): INITIAL

CLASSIFICATION: U

DECLASSIFICATION INSTRUCTIONS:

SPECIAL HANDLING INSTRUCTIONS:

RELEASABILITY: Approved For Public Release

DATE OF REPORT: 20040520

VICTIM

LINE 1 FREQUENCY: M243

LINE 2A STATE/COUNTRY: TX

LINE 2B LOCATION: LAUGHLIN

LINE 2C COORDINATES: 292035N1004703W

LINE 3A SYSTEM FUNCTION: AIR OPERATIONS

LINE 3B SYSTEM NAME : (If available)

LINE 3C NOMENCLATURE: ASGVCS-401B

LINE 3D MANUFACTURER/MODEL #:

LINE 3E SYSTEM DESCRIPTION OF OTHER VICTIM(S): (If available)

LINE 3F RX CHARACTERISTICS: (If available)

LINE 3G EMISSION DESIGNATOR: 6K00A3E

LINE 3H ANTENNA TYPE: BLADE

LINE 4 OPERATING MODE: Air Operations

INTERFERENCE

LINE 5 CHARACTERISTICS: UHF Guard Channel

LINE 6 EFFECT ON PERFORMANCE: Chatter on guard net limits its effectiveness for emergencies

LINE 7A DATE & TIME: 20030401, 100000

LINE 7B DURATION: On-going (sporadic intervals)

LINE 7C REPETITION RATE: Intermittent

LINE 7D INTERFERENCE SIGNAL LEVEL: (If available)

LINE 7E ACTIVITIES COINCIDING WITH INTERFERENCE:

LINE 8 SOURCE LOCATION: (If available)

LINE 9 LOCATION OF OTHER RECEIVERS AFFECTED: (If available)

SUMMARY

LINE 10 NARRATIVE SUMMARY:

The type of interference is generally announcements of certain types of airspace or field ops (tincan) are in operation, or closed, etc. I hear inter-flight communication between other aircraft types on this freq as well

LINE 11 REPORT DATE TIME GROUP: 041414ZAPR2003

LINE 12 INTERFERENCE SOURCE AND RESOLUTION: (If available)

LINE 13 TECHNICAL ASSISTANCE NEEDED? NO

LINE 14 POINT OF CONTACT: SSGT. FREEDOM AMERICA, DSN 123-4567, CML: (999) 123-4567

VICTIM FREQUENCY RECORD (Information maintained in local Spectrum Manager's Database, e.g., Radio Frequency Authorization - RFA)

SERIAL NUMBER: AF 024561

SOURCE: FRRS

TYPE: A

FREQUENCY RECORD:

005. UA

010. N

102. AF 024561

103. I9973325
110. M243.000
113. FA
114. 6K00A3E
115. W50
117. 42
118. E
113/02. MA
114/02. 6K00A3E
115/02. W10
117/02. 49
118/02. E
130. 1
142. 20070520
143. 20020520
144. Y
200. USAF
202. AETC
204. AETC
205. AETC
206. LAUGHLIN
207. 47OSS
208. SOF
300. TX
301. LAUGHLIN
303. 292035N1004703W
306. 200B
340. G,AN/GRC-211
343. J/F 12/05219
354. DIPOLE
355. AT1181
357. 2

- 358. 329
- 359. 15
- 362. ND
- 363. V
- 373. E
- 400. TX
- 401. LAUGHLIN
- 403. 292035N1004703W
- 440. C,ASGVCS-401B
- 443. J/F 12/07856
- 454. BLADE
- 457. 0
- 473. E
- 500. S189
- 502. TGuard
- 503. FL450
- 511. AIR OPERATIONS
- 512. AIR/GROUND/AIR COMMUNICATIONS
- 513. SOF
- 520.
- 701. T04
- 702. AETC 2002-0703
- 924. FRRS
- 927. 20020521
- 928. 20020425
- 956. T04 020424

Attachment 3 (Added-AFSPC)**SPECTRUM INTERFERENCE REPORT FORMAT (SIRF) FOR THE AFSCN****Classification**

(EMI report SIPRNET address elements as a minimum)

TO: JSPOC

AFSPC COMMAND CENTER

INFO: 1SPCS/SCC

USSTRATCOM/GSSC

CDRJSO

AFSPC/A6NII

50SW/(FREQUENCY MANAGEMENT)

50OSS

50OSS/(INTEL)

Subject: Initial or Follow-Up EMI Report

- 1. Receiver affected:** Center frequency of victim receiver in MHz.
- 2. Location and coordinates:** Name of base, town etc. & coordinates in degrees, minutes, and seconds using the 0 – 180 degree basis, i.e. 180W/180E.
- 3. Persistence of interference:** How often, intermittent or continuous?
- 4. Zulu date/time of interference:** Interference start and end times in GMT. If interference is still present at the end of support; identify as 24Jan05/1412Z to present.
- 5. System name effected:** (GPS II-R, IRON # _____, Flt # ____, Geo/Non-Geo or AFSCN if known.)
- 6. Current mission impact:** (See AFSPC Supplement “**Terms**” for mission impact definitions) – (e.g. Significant Impact – Lost lock, reacquired by increasing power to 5 kilowatts and support completed.)
- 7. Potential impact to users if interference continues:** Continued use of excessive power.
- 8. Antenna azimuth & elevation at time of EMI:** If ranging information is also available, please provide.
- 9. EMI indication:** What evidence did/do you have, that indicated you had/have an EMI event?
- 10. EMI snapshot:** Photo/screen shot is/is not available.
- 11. Contacts:** Those organizations contacted by the operator to try to identify the interference source and their responses, i.e. 22 SOPS: No conjunctions or known interference source. Space Weather: Space environment quiet.

12. General information about the interference: Whatever information is available that may help in the investigation of the EMI, i.e. center frequency of interfering source appears to be on _____ MHz with 2MHz bandwidth.

13. Current resolution actions: E.g. awaiting results of trouble shooting; awaiting higher headquarters assistance; None – Interference no longer present.

14. Contact information: Include position (Crew Commander) submitting the report and a secure telephone number, i.e. STE/STU III.

15. Classification information: Use the system's security classification guide. If not available, use enclosed security decision page, **Attachment 9 (Added)**.

NOTE: It is the intention of the AFSPC Command Spectrum Management Office to contact the operator in the report to discuss the EMI issue in the secure mode.

Attachment 4 (Added-AFSPC)**SPECTRUM INTERFERENCE REPORT FORMAT (SIRF) FOR THE SRS****Classification**

(EMI report SIPRNET address elements as a minimum)

TO: JSPOC

AFSPC COMMAND CENTER

INFO: 1SPCS/SCC

USSTRATCOM/GSSC

CDRJSO

AFSPC/A6NII

460SW/(SCMR)

460SW/(INTEL)

Subject: Initial or Follow-Up EMI Report

- 1. Receiver affected:** Center frequency of victim receiver in MHz.
- 2. Location and coordinates:** Name of base, town etc. & coordinates in degrees, minutes, and seconds using the 0 – 180 degrees basis, i.e. 180W/180E.
- 3. Persistence of interference:** How often, intermittent or continuous?
- 4. Zulu date/time of interference:** Interference start and end times in GMT. If interference is still present at the end of support, identify as 24Jan05/1412Z to present.
- 5. System name effected:** GPS II-R, IRON # _____, Flt # ____, Geo/Non-Geo or SRS ground station.
- 6. Current mission impact:** (See AFSPC Supplement “**Terms**” for mission impact definitions) – (e.g. Minimal Impact – Interfering signal weak completed support.)
- 7. Potential impact to users if interference continues:** Minimal, provided the interfering signal does not increase.
- 8. Antenna azimuth & elevation at time of EMI:** If ranging information also available, please provide.
- 9. EMI indication:** What evidence did/do you have, that indicated you had/have an EMI event?
- 10. EMI snapshot:** Photo/screen shot is/is not available.
- 11. Contacts:** Those organizations contacted by the operator to try to identify the interfering source and there responses, i.e. 22 SOPS: No conjunctions or known interfering source. Space Weather: Space environment quiet.

12. General information about the interference: Whatever information is available that may help in the investigation of the EMI, i.e. center frequency of interfering source appears to be on ____ MHz with 2 MHz bandwidth.

13. Current resolution actions: E.g. Awaiting results of trouble shooting; Awaiting higher headquarters assistance; None – Interference no longer present.

14. Contact information: Include position (Crew Commander) submitting the report and a secure telephone number, i.e. STE/STU III.

15. Classification information: Use the system's security classification guide. If not available, use enclosed security decision page, **Attachment 9 (Added)**.

NOTE: It is the intention of the AFSPC Command Spectrum Management Office to contact the operator in the report to discuss the EMI issue in the secure mode.

Attachment 5 (Added-AFSPC)**SPECTRUM INTERFERENCE REPORT FORMAT (SIRF) FOR THE MW/SS****Classification**

(EMI report SIPRNET address elements as a minimum)

To JSPOC

ASPC COMMAND CENTER

Info: 21SW WING OPERATIONS

CDRJSO

1SPC/SCC

AFSPC/A6NII

21OSS/IN

Subject: Initial or Follow-Up EMI Report

- 1. Receiver affected:** Center frequency of victim receiver in MHz.
- 2. Location and coordinates:** Name of base, town etc. & coordinates in degrees, minutes, and seconds using the 0 – 180 degree basis, i.e. 180W/180E.
- 3. Persistence of interference:** How often, intermittent or continuous?
- 4. Zulu date/time of interference:** Interference start and end times in GMT. If interference is still present at time of report; identify as 24Jan05/1412Z to present.
- 5. System name effected:** AN/FPS-85 Space Surveillance Radar/AN/FPS-123 Pave Paws Radar.
- 6. Current mission impact:** (See AFSPC Supplement “**Terms**” for mission impact definitions) – (e.g. Severe Impact – Interference has caused the radar a red condition.)
- 7. Potential impact to users if interference continues:** Loss of satellite cataloging and satellite tracking.
- 8. Antenna azimuth & elevation at time of EMI:** Or direction in degrees from where the EMI is coming from.
- 9. EMI indication:** What evidence did/do you have that indicated you had/have an EMI event?
- 10. EMI snapshot:** Photo/screen shot is/is not available.
- 11. Contacts:** Those organizations you contacted to try to identify the interference source and there responses, e.g. Pascagoula shipyard-no activity; Otis ANGB-no activity.

12. General information about the interference: Whatever information is available that may help in the investigation, i.e. center frequency of interfering source appears to be on ____MHz with a 2 MHz bandwidth.

13. Current resolution actions: E.g. Awaiting results of trouble shooting; Awaiting higher headquarters assistance; None – Interference no longer present.

14. Contact information: Include position (Crew Commander) submitting the report, and a secure telephone number, i.e. STE/STU III.

15. Classification information: Use system's security classification guide. If not available, use enclosed security decision page, **Attachment 9 (Added)**.

NOTE: It is the intention of the AFSPC Command Spectrum Management Office to contact the operator in the report to discuss the EMI issue in the secure mode.

Attachment 6 (Added-AFSPC)**SPECTRUM INTERFERENCE REPORT FORMAT (SIRF) FOR THE RANGES****Classification**

(EMI report SIPRNET address elements as a minimum)

To JSPOC

AFSPC COMMAND CENTER

Info: 30SW or 45SW WING OPERATIONS

CDRJSO

AFSPC/A6NII

30SW/45SW/(INTEL)

30SW/45SW/(Frequency Management Offices)

Subject: Initial or Follow-Up EMI Report

- 1. Receiver affected:** Center frequency of victim receiver in MHz.
- 2. Location and coordinates:** Name of base, town etc. & coordinates in degrees, minutes, and seconds using the 0 – 180 degree basis, i.e. 180W/180E.
- 3. Persistence of interference:** How often, intermittent or continuous?
- 4. Zulu date/time of interference:** Interference start and end times. If interference is still present at time of report; identify as 24Jan05/1412Z to present.
- 5. System name effected:** (AN/FPQ-14 Radar)
- 6. Current mission impact:** (See AFSPC Supplement “**Terms**” for mission impact definitions) – (e.g. Significant Impact – “Lost tracking. Reacquired vehicle by increasing power. What radar performance was lost as a result of action(s) taken?”)
- 7. Potential impact to users if interference continues:** Possible cancellation of launches and associated costs.
- 8. Antenna azimuth & elevation at time of EMI:** Or direction in degrees from where the EMI is coming from.
- 9. EMI indication:** What evidence did/do you have, that indicated you had/have and EMI event?
- 10. EMI snapshot:** Photo/screen shot is/is not available.
- 11. Contacts:** Those organizations contacted by the operator to try to identify the interference source and there responses, i.e. FCA.

12. General information about the interference: Whatever information is available that may help in the investigation, i.e. center frequency of interfering source appears to be on ____MHz with a 2 MHz bandwidth.

13. Current resolution actions: E.g. Awaiting results of trouble shooting; Awaiting higher headquarters assistance; None – Interference no longer present.

14. Contact information: Include position (Crew Commander) submitting the report, and a secure telephone number, i.e. STE/STU III.

15. Classification information: Use the system's security classification guide. If not available, use enclosed security decision page, **Attachment 9 (Added)**.

NOTE: It is the intention of the AFSPC Command Spectrum Management Office to contact the operator in the report to discuss the EMI issue in the secure mode.

Attachment 7 (Added-AFSPC)**SPECTRUM INTERFERENCE REPORT FORMAT (SIRF) FOR THE MAF/LF****Classification**

(EMI report SIPRNET address elements as a minimum)

To : AFCOMMANDCENTER

AFSPC COMMAND CENTER

Info 90SW/91SW/341SW COMMAND CENTERS

AFSPC/A6NII

20AF/(INTEL)

90SW/91SW/341SW/(Frequency Management Offices)

Subject: Initial or Follow-Up EMI Report

- 1. Receiver affected:** Center frequency of victim receiver in MHz.
- 2. Location and coordinates:** Name of base, town etc. & coordinates in degrees, minutes, and seconds using the 0 – 180 degree basis, i.e. 180W/180E.
- 3. Persistence of interference:** How often, intermittent or continuous?
- 4. Zulu date/time of interference:** Interference start and end times. If interference is still present at time of report; identify as 24Jan05/1412Z to present.
- 5. System name effected:** (Missile Alert Facility (MAF))
- 6. Current mission impact:** (See AFSPC Supplement “**Terms**” for mission impact definitions) – (e.g. Significant impact – “Intermittent contact with convoy.” What actions were taken to overcome the EMI and the outcome?)
- 7. Potential impact to users if interference continues:** Possible cancellation of movement of missiles and costs for delays.
- 8. Antenna azimuth & elevation at time of EMI:** NA for MAFs/LFs unless spectrum analyzer can determine direction of EMI.
- 9. EMI indication:** What indication did/do you have, that indicated you had/have an EMI event?
- 10. EMI snapshot:** Photo/screen shot is/is not available.
- 11. Contacts:** Those organizations you contacted to try to identify interference source and there responses, i.e. base frequency manager.

12. General information about the interference: Whatever information is available that may help in the investigation, i.e. center frequency of interfering source appears to be on ____MHz with a bandwidth of 1 MHz.

13. Current resolution actions: E.g. Awaiting results of trouble shooting; awaiting higher headquarters assistance; None – Interference no longer present.

14. Contact information: Include position (Crew Commander) submitting the report, and a secure telephone number, i.e. STE/STU III.

15. Classification information: Use the system's security classification guide. If not available, use enclosed security decision page, **Attachment 9 (Added)**.

NOTE: It is the intention of the AFSPC Command Spectrum Management Office to contact the operator in the report to discuss the EMI issue in the secure mode.

Attachment 8 (Added-AFSPC)**SPECTRUM INTERFERENCE REPORT FORMAT (SIRF) FOR ALL OTHERS****Classification**

(EMI report SIPRNET address elements as a minimum)

To: JSPOC or 20AF COMMAND CENTER

AFSPC COMMAND CENTER

Info: WNG OPERATIONS

CDRJSO

1SPC/SCC

AFSPC/A6NII

WING INTEL

Subject: Initial or Follow-Up EMI Report

- 1. Receiver affected:** Center frequency of victim receiver in MHz.
- 2. Location and coordinates:** Name of base, town etc. & coordinates in degrees, minutes, and seconds using the 0 – 180 degree basis, i.e. 180W/180E.
- 3. Persistence of interference:** How often, intermittent or continuous?
- 4. Zulu date/time of interference:** Interference start and end times in GMT. If interference is still present at time of report; identify as 24Jan06/1412Z to present.
- 5. System name effected:** NuDet, SATCOM, etc.
- 6. Current mission impact:** (See AFSPC Supplement “**Terms**” for mission impact definitions) – (e.g. Severe Impact – Interference has caused the radar a red condition.)
- 7. Potential impact to users if interference continues:** E.g. Loss of Command and Control of AFSPC mission system.
- 8. Antenna azimuth & elevation at time of EMI:** Or direction in degrees from where the EMI is coming from.
- 9. EMI indication:** What evidence did/do you have that indicated you had/have an EMI event?
- 10. EMI snapshot:** Photo/screen shot is/is not available.
- 11. Contacts:** Those organizations you contacted to try to identify the interference source and there responses, i.e. maintenance shop, base frequency manager, AFOTECH, etc.

12. General information about the interference: Whatever information is available that may help in the investigation, i.e. center frequency of interfering source appears to be on ____MHz with a 2 MHz bandwidth.

13. Current resolution actions: E.g. Awaiting results of trouble shooting; Awaiting higher headquarters assistance; None – Interference no longer present.

14. Contact information: Include position (Crew Commander) submitting the report, and a secure telephone number, i.e. STE/STU III.

15. Classification information: Use the system's security classification guide. If not available, use enclosed security decision page, **Attachment 9 (Added)**.

NOTE: It is the intention of the AFSPC Command Spectrum Management Office to contact the operator in the report to discuss the EMI issue in the secure mode.

Attachment 9 (Added-AFSPC)**JSIR SECURITY CLASSIFICATION GUIDE**

A9.1. (Added-AFSPC) Security classification of interference incidents/reports is determined principally by nationality and location of the implied or stated source of the interference and the security sensitivity of the affected military system. Stations located in combat areas or having a sensitive military mission generally must classify all interference reports. The following are guidelines for classifying interference incidents and reports:

A9.1.1. **(Added-AFSPC)** The specific identification of an unfriendly platform or location by country or coordinates as the source of interference or electronic attack will be classified as SECRET. Reason: 1.5.c, Declassify on: X1.

A9.1.2. **(Added-AFSPC)** Specific susceptibility or vulnerability of US electronic equipment/systems will be classified at a minimum level of SECRET. Reason: 1.5(g), Declassify on: X3. The classification guide for the affected system should be consulted for specific guidance.

A9.1.3. **(Added-AFSPC)** Parametric data of classified US electronic equipment/systems will be classified in accordance with the classification guide for the equipment affected. Classify correspondence equal to the security category assigned the affected system.

A9.1.4. **(Added-AFSPC)** Suspected interference from unidentified sources while operating near hostile countries will be classified SECRET. Reason: 1.5(g), Declassify: 10 years from date of incident.

A9.1.5. **(Added-AFSPC)** Interference to US electromagnetic equipment/systems caused by EA exercises in foreign nations will be classified as CONFIDENTIAL. Reason: 1.5(g), Declassify on: X5.

A9.1.6. **(Added-AFSPC)** Suspected interference from friendly sources will be treated as UNCLASSIFIED unless it reveals a specific system vulnerability, in which case it will be classified at a minimum level of SECRET. Reason: 1.5(g), Declassify on: X3.

A9.1.7. **(Added-AFSPC)** Suspected interference from unknown sources will be classified at a minimum level of CONFIDENTIAL. The classification guide for the affected system should be consulted for specific guidance.

A9.1.8. **(Added-AFSPC)** When referring to JSIR and stating that JSIR analyses are a function of the JSC, reports will be UNCLASSIFIED.