Communications and Information

MANAGING HIGH FREQUENCY RADIOS, LAND MOBILE RADIOS, CELLULAR TELEPHONES, AND THE MILITARY AFFILIATE RADIO SYSTEM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Mr Harold R. Collins)
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This instruction implements Air Force Policy Directive (AFPD) 33-1, *Command, Control, Communications, and Computer (C4) Systems*; Defense Information Systems Agency (DISA) Circular 310-70-79, *MYSTIC STAR Network Management Manual and Users Guide*, and Department of Defense (DoD) Directive 4650.2, *Military Affiliate Radio System (MARS),* January 17, 1986, with Change 1. It identifies responsibilities to implement and support Air Force high frequency (HF) radio, land mobile radios (LMR), cellular telephones (CT), and Military Affiliate Radio System (MARS). Refer technical questions concerning LMRs and MARS to HQ AFCA/SYXM and questions concerning HF to HQ AFCA/SYXR, 203 W Losey Street, Room 3065, Scott AFB IL 62225-5234, and questions concerning MYSTIC STAR to HQ AMC/SCP, 203 W Losey Street, Room 3180, Scott AFB IL. Send recommended changes and conflicts between this and other publications on Air Force (AF) Form 847, **Recommendation for Change of Publication**, to HQ AFCA/XPPD, 203 W Losey Street, Room 1065, Scott AFB IL 62225-5224. **Attachment 1** lists references, abbreviations, and acronyms used in this instruction.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

Section A—Managing High Frequency Systems

1. United States Air Force High Frequency. All agencies identified in this section coordinate HF requirements and solutions so that radio systems and networks actively support the users.

1.1. Headquarters United States Air Force, Command and Control Combat Requirements and Information Warfare Division (HQ USAF/XORI) oversees the development, documentation, and validation of USAF operational requirements for HF communications systems.

1.2. HQ Air Force Communications and Information Center, Transmissions Systems Branch (HQ AFCIC/SYNT) directs the development, operation, and maintenance of USAF HF systems and networks.

1.3. HQ Air Force Communications Agency (HQ AFCA/SYXR):

1.3.1. Develops USAF HF architecture, standards, policies, and procedures.

1.3.2. Recommends, analyzes, and approves systems operations and maintenance support methods.

1.3.3. Identifies, reviews, and tracks all USAF HF technical requirements.

1.3.4. Facilitates global and regional networking solutions.

2. **The Global High Frequency System.** This system consists of 15 HF stations around the world providing worldwide communications to all DoD ground agencies and aircraft.

2.1. The system supports:

2.1.1. Command and control, special purpose, contingency air-ground-air, and Navy ship-to-shore communications. Neither the system nor individual stations are dedicated to any service, command, or other activity.

2.1.2. Authorized users according to established traffic precedence.

2.2. The Global HF System Manager (HQ AFCA/SYXR):

2.2.1. Establishes a single set of Air Force procedures for global HF system operations.

2.2.2. Reviews and implements MAJCOM-level recommendations for changes to the Air Force Global HF System procedures.

2.2.3. Coordinates the mission requirements of HF system users with appropriate MAJCOM plans/programs, operations, and requirements directorates.

2.2.4. Answers requests for intercommand and interservice special communications support.

2.2.5. Evaluates global HF system network performance.

2.2.6. Accompanies MAJCOM HF managers on staff visits to evaluate operations, equipment use, and system integrity.

2.3. MAJCOM HF managers within the Air Combat Command, Air Mobility Command, Air Force Materiel Command, Pacific Air Forces, United States Air Forces in Europe, Air Force Space Command, United States Navy High Command (HICOM - USN HF/SSB Communications Network), and MYSTIC STAR:

2.3.1. Oversee operations of assets under their control.

2.3.2. Match employees and equipment to job requirements.

2.3.3. Evaluate training, operations, and equipment use.

2.3.4. Coordinate publication creation and production.

2.3.5. Track each publication through production and report its status to the systems manager.

3. MYSTIC STAR System. This is a worldwide communications system, operated and maintained by elements of the United States Air Force, United States Army, and United States Navy, under the control of the DISA Operations Center. Its network provides worldwide communications by directly controlling radio equipment located at global HF system stations. It consists of ultra high frequency satellite and HF networks supporting Presidential, special air, commanders-in-chief, Joint Staff, very important persons, and command airborne missions.

3.1. The MYSTIC STAR HF Network Consists of:

3.1.1. A single master net control station (MNCS) located at Andrews AFB MD.

3.1.2. Interstation and intersite circuits.

3.1.3. Relay and auxiliary communications subsystems.

3.2. HQ AMC/SCP:

3.2.1. Oversees the life-cycle management of the MYSTIC STAR Network.

3.2.2. Develops system architecture, network policy, and guidelines in conjunction with DISA.

3.2.3. Oversees the activities of the MYSTIC STAR Ops-Tech Manager's Office.

3.2.4. Manages the life cycle, future planning, programming, and budgeting of MYSTIC STAR elements from a system perspective.

3.3. The MYSTIC STAR Operations Technical Manager:

3.3.1. Operates from the MYSTIC STAR Ops-Tech Manager's Office (located in the 789th Communications Squadron, Andrews AFB MD).

3.3.2. Directly interfaces with the MYSTIC STAR users.

3.3.3. Evaluates system facilities.

3.3.4. Assesses network performance.

3.3.5. Compares performance trends to established standards.

3.3.6. Recommends improvements to criteria, documentation, or performance.

3.3.7. Works with personnel on all plans for operating, maintaining, managing, controlling, and configuring the network.

3.3.8. Recommends budgets for network operations.

3.3.9. Reports the operational status, performance status, or limitations of the network to HQ AMC/SCP.

3.3.10. Implements plans and special system configurations.

3.4. The Commander, 89th Communications Group:

3.4.1. Manages, operates, and evaluates the MNCS according to DISA Circular 310-70-79.

3.4.2. Gives network status updates to the MYSTIC STAR system manager through the operations technical manager.

3.4.3. Provides facility, administrative, and logistical support for the MNCS.

Section B—*Managing Land Mobile Radios and Cellular Telephones*

4. Managing Land Mobile Radios (LMRs) and Cellular Telephones (CTs). LMRs include base support radios, pagers, and CTs. *NOTE:* This instruction does not apply to alarm monitor and control systems, citizens-band radios, and low-power systems.

4.1. HQ AFCIC/SYNT is the Air Force focal point for developing LMR policy. (This responsibility is delegated to HQ AFCA/SYXM.)

4.2. HQ AFCA/SYXM:

4.2.1. Acts on behalf of HQ AFCIC/SYNT as the day-to-day Air Force LMR System Manager.

4.2.2. Provides the Air Force a single point of contact for HQ USAF, MAJCOMs, vendors, and other parties to improve LMR support and formulates policy changes for HQ USAF review and approval.

4.2.3. Monitors LMR technological advances and changes to identify the types of LMRs that will best satisfy mission requirements for both wartime and peacetime. Evaluates practical improvements in LMR support that enhance mission performance, offer significant savings in personnel or operating costs, and provide other benefits.

4.2.4. Reviews MAJCOM audit information, identifies base-level deficiency patterns and trends with Air Force-wide applicability, and crossfeeds that information to all MAJCOMs for inclusion in MAJCOM individual crossfeed programs.

4.3. Air National Guard (ANG/SCIS) provides guidance to ANG units.

4.4. MAJCOMs:

4.4.1. Establish a single point of contact for LMR issues at their headquarters.

4.4.2. Must appoint a command-level LMR manager. Forward a copy of the command-level manager appointment letter, and any changes, to HQ AFCA/SYXM within 15 days.

4.4.3. Use **Attachment 6** checklist as a guide to assure compliance with Air Force LMR policy and guidance.

4.5. MAJCOM LMR Manager:

4.5.1. Must complete Air Force Qualification Training package (AFQTP) 2E1X3-210W, *Base Land Mobile Radio Management,* according to AFI 36-2233, *Air Force On-The-Job Training Products for Communications-Electronics Enlisted Specialty Training*.

4.5.2. Must use either the current version of the Air Force Standard LMR Management Information System (MIS) or LMR Tracking and Reporting System (TRS) to manage the command's LMR, pager, and cellular assets.

4.5.3. Must compile command base-level LMR MIS or TRS data during 11-31 January/July and provide a copy of the consolidated data to HQ AFCA/SYXM not later than 1 February/August.

Review and provide feedback to field units on the accuracy of LMR MIS or TRS data. The reporting requirements in this paragraph along with paragraphs **4.7.14.**, and **4.9.6.** are exempt from licensing according to AFI 37-124, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections.*

4.5.4. Reviews MAJCOM and command base-level LMR audit information, identifies base-level deficiency patterns and trends with command-wide applicability, and crossfeeds that information to field units for inclusion in their crossfeed programs.

4.5.5. Provides a copy of MAJCOM and command base-level audit reports to HQ AFCA/SYXM.

4.5.6. Evaluates planned base-level corrective actions for audit-related LMR deficiencies and makes sure that procedural controls to prevent recurrence are included and implemented.

4.5.7. Crossfeeds surplus LMR equipment lists and requests for equipment assistance to command bases and other MAJCOMs.

4.5.8. Prepares a supplement to this AFI to accommodate MAJCOM situations. As a minimum, identifies MAJCOM point of contact.

4.6. Base Communications-Information Systems Officers (CSO):

4.6.1. Appoint, in writing, the base-level primary/alternate LMR manager.

4.6.2. Manage LMRs for the installation commander.

4.6.3. Appoint the LMR Quality Assurance Evaluator, if appointing authority is delegated by the installation commander.

4.6.4. Make sure the MIS or the TRS and maintenance service contract inventories are reconciled annually with one accomplished 30-60 days prior to contract/option award date.

4.6.5. Review and validate the Five-Year Replacement Plan on an annual basis.

4.6.6. Provide a copy of the validated Five-Year Replacement Plan to using organizations for budget decisions.

4.6.7. Review LMR audit reports, identifies base-level deficiency patterns and trends with command-wide applicability, and crossfeeds that information to MAJCOM for inclusion in their crossfeed program.

4.6.8. Provide a copy of all LMR-related local audit reports to the MAJCOM LMR manager.

4.6.9. Evaluate planned base-level corrective actions for audit-related LMR deficiencies and ensures procedural controls to prevent recurrence are implemented.

4.6.10. Analyze and evaluate each CT requirement. (See **Attachment 5** for guidance on developing telephone acquisition decision matrix.)

4.6.11. Make sure a technical solution for each CT requirement is prepared. When it is determined that a CT is the solution, make sure the technical solution includes an analysis of the security risk for the requirement.

4.6.12. Make sure a cost comparison is prepared for each CT requirement. This analysis will address the feasibility and cost of using each (for example, pagers, LMRs, and so forth). It includes a life-cycle cost estimate for each alternative determined feasible.

4.6.13. Acquire CT assets and service using existing MAJCOM procedures for requesting and approving mobile communications requirements.

4.6.14. Develop and disseminates a uniform CT policy to include reference to personal calls consistent with AFI 33-111, *Telephone Systems Management,* and the usage of government telephones.

4.7. Base LMR Manager:

4.7.1. Must complete AFQTP 2E1X3-210W according to AFI 36-2233.

4.7.2. Must use either the current version of the Air Force Standard LMR MIS or LMR TRS to manage the base's host and tenant LMR, pager, and CT assets.

4.7.3. Maintain an LMR continuity folder. As a minimum, include the items listed at Attachment 2 in the continuity folder.

4.7.4. Use National Security Agency (NSA)-approved devices for LMRs requiring communications security (COMSEC) or data encryption according to standards of the National Institute of Standards and Technology (NIST) and Federal Information Processing Standard (FIPS) Publication 140-1, *Security Requirements for Cryptographic Modules.*

4.7.5. Use NSA/NIST-approved Type I COMSEC devices with a valid United States Government equipment identification (USGEID) endorsement number to secure classified traffic.

4.7.6. Use NSA/NIST-approved Type II COMSEC equipment with a valid USGEID endorsement number to protect unclassified information relating to national security.

4.7.7. Send requests for exceptions to HQ AFCA/SYSC/SYXM, 203 W Losey Street, Room 3065, Scott AFB IL 62225-5234 with a courtesy copy to your MAJCOM LMR Manager. *NOTE:* ANG units submit waiver requests through ANG/SCIS, 3500 Fetchet Avenue, Andrews AFB MD 20331-5157.

4.7.8. Use only keying material produced by NSA and accounted for and distributed in the COMSEC material control system.

4.7.9. Establish needs for data encryption standard keying materials at least 45 days before you need them. (See Air Force Cryptographic Operational General Publication 2 [AFKAG-2], *AF COMSEC Accounting Manual*, and appropriate Air Force 33-series publications.)

4.7.10. Maintain COMSEC-equipped LMRs according to AFSAL/National Telecommunications Information System Security Instruction (NTISSI) 3005, *Safeguarding and Control of Data Encryption Standard (DES) Equipment and Associated Unclassified Communications Security Aids.*

4.7.11. Make sure personnel who maintain COMSEC-equipped LMRs:

4.7.11.1. Have United States citizenship.

4.7.11.2. Attend a controlled cryptographic item briefing.

4.7.11.3. Receive COMSEC awareness training.

4.7.11.4. Verify all LMRs are zeroized or the encryption module removed before giving them to contract maintenance for repair.

4.7.11.5. Process requirements for LMRs according to AFI 33-103, *Requirements Development and Processing.*

4.7.12. Make sure an authorized frequency is assigned to all frequency dependent equipment before purchase according to AFI 33-118, *Radio Frequency Spectrum Management.* **EXCEPTION:** Equipment designated for deployment packages are exempt from this requirement. However, frequency management planning for deployments well in advance is essential. See **Attachment 4** for planning guidance for LMR radio deployment.

4.7.13. Make sure requirements that call for the use of intrinsically safe LMR (ISLMR) equipment are submitted through command safety channels for validation before local approval and acquisition. Base CSOs should develop local ISLMR operational procedures with the base safety officer, if required.

4.7.14. Base LMR manager will run the LMR MIS or TRS backup and MAJCOM export routines between 1-10 January and 1-10 July and provide a copy of this information to the command LMR manager not later than 11 January/July.

4.7.15. Must train net managers. Initial training should occur as soon as possible but not later than 30 days after the person has been assigned. Refresher training must be accomplished annually. Use **Attachment 3** to conduct net manager training.

4.7.16. Brief net managers on the requirements for consent to CT monitoring in AFI 33-219, *Telecommunications Monitoring and Assessment Program (TMAP).*

4.7.17. Review LMR needs in contingency deployment planning (AFI 10-404, *Base Support Planning*). (See **Attachment 4**).

4.7.18. Crossfeed surplus LMR equipment lists and requests for equipment assistance to net managers and MAJCOM LMR manager.

4.7.19. Verify all LMR assets are zeroized or the encryption module removed prior to turn-in to base supply.

4.8. Using Organization:

4.8.1. Commander Or Designated Representative:

4.8.1.1. Appoints, in writing, a primary and alternate unit net manager (unit LMR focal point) to make sure the following duties are accomplished. *NOTE:* When using a net controlled by another organization, the commander or authorized representative of the unit owning the equipment will appoint an equipment custodian to perform the duties of the unit net manager.

4.8.1.2. Forwards copy of unit net manager appointment letter to base LMR manager.

4.8.1.3. Annually revalidates the unit's requirement to determine if CTs are still necessary.

4.8.1.4. Uses the MIS or TRS Five-Year Replacement Plan when making LMR, pager, and CT replacement decisions.

4.8.2. Unit Net Manager:

4.8.2.1. Prepares requests for LMR equipment according to AFI 33-103 and Air Force 23-series supply instructions. Coordinate with the base LMR manager to make sure requirements are clearly defined, compatible with existing systems, and technically feasible before submit-

ting requirements documents.

4.8.2.2. Makes sure excess equipment is turned in promptly.

4.8.2.3. Makes sure the base LMR manager has inspected each equipment item before it is placed in service or removed from service; turned in to or returned from maintenance, and prior to turn in to base supply.

4.8.2.4. Reports lost or damaged LMR equipment to the base LMR manager, equipment custodian and to base contracting if equipment is leased. If report of survey or cash collection vouchers are required by Air Force Manual (AFMAN) 23-220, *Reports of Survey for Air Force Property*, provides an information copy to the LMR manager.

4.8.2.5. Makes sure LMR equipment is on LMR MIS Inventory records. Inform the base LMR manager, in writing, of unrecorded equipment. *NOTE:* Unrecorded equipment is not covered by the maintenance contract.

4.8.2.6. Makes sure enough batteries and other ancillary items for the LMR equipment are obtained through base supply (or other appropriate channels) and stocked.

4.8.2.7. Develops procedures to make sure prompt reporting of malfunctioning LMR equipment to the base LMR manager.

4.8.2.8. Establishes procedures for delivering portable and mobile equipment requiring maintenance, and for making fixed equipment available for maintenance.

4.8.2.9. Reports frequency requirements and interference to the base frequency and base LMR managers.

4.8.2.10. Implement a customer education program, to include training programs provided by the base LMR manager (Attachment 3). Operations Security (OPSEC) and COMSEC training proposals should be coordinated with base/unit OPSEC and COMSEC managers.

4.8.2.10.1. Brief CT users on the proper use of CTs to include OPSEC and abuse.

4.8.2.10.2. Brief CT users on the requirements for consent to monitoring in AFI 33-219.

4.8.2.11. Promptly notifies the base LMR manager of changes in LMR equipment and service requirements.

4.8.2.12. Performs immediate operational checks on new LMR equipment placed in service or returned from maintenance.

4.8.2.13. Establishes procedures to make sure ISLMRs are inspected prior to use in a hazardous environment.

4.8.2.14. Establishes written procedures for setting DES and COMSEC codes on radios.

4.8.2.15. Coordinates with the local COMSEC custodian to establish keying requirements to support DES or COMSEC-equipped LMR nets.

4.8.2.16. For units with deployment or contingency missions (See Attachment 4):

4.8.2.16.1. Issue specialized customer education document, if required.

4.8.2.16.2. Maintain assets, including batteries, ancillary equipment, manuals, and so forth for readiness.

4.8.2.16.3. Establish written procedures to issue, receipt for, and ship LMR equipment to and from deployed locations.

4.8.2.16.4. Provide the base LMR manager a list of all LMR equipment that will be in a deployed status for 30 or more days.

4.8.2.16.5. Coordinate with the local COMSEC custodian to establish keying requirements to support deployed DES or COMSEC-equipped LMR nets.

4.9. LMR MIS/LMR TRS:

4.9.1. The base CSO makes sure the base LMR manager uses either the current version of Air Force Standard LMR MIS or LMR TRS to manage the base's host and tenant LMR, pager, and CT assets.

4.9.2. MIS/TRS users must comply with DoD Directive 5000.1, *Defense Acquisition*, March 15, 1996; DoD Regulation 5000.2, *Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs,* March 1996; and AFIs 33-104, *Base-Level Planning and Implementation*; and 33-112, *Computer Systems Management.*

4.9.3. Using organizations should use the MIS or TRS Five-Year Replacement Plan when making LMR, pager, and CT replacement decisions. The base CSO will review and validate the Five-Year Replacement Plan on an annual basis. A copy of the validated plan will be furnished to user agencies for budget decisions.

4.9.4. Base CSO will make sure the MIS or the TRS and maintenance service contract inventories are reconciled annually with one accomplished 30-60 days prior to contract/option award date.

4.9.5. Base LMR manager will provide using organizations an inventory report for reconciliation at least annually, or as requested.

4.9.6. Base LMR manager will run the LMR MIS or TRS backup and MAJCOM export routines between 1-10 January and 1-10 July and provide a copy of this information to the command LMR manager not later than 11 January/July. The command LMR managers will provide a copy of this information to HQ AFCA/SYXM not later than 1 February/August

4.10. Trunked LMR Systems.

4.10.1. Base LMR manager must obtain frequencies for a trunked LMR system before any procurement actions.

4.10.2. For the United States and possessions, base LMR manager must prepare a conversion plan using format specified in the National Telecommunications and Information Administration (NTIA) Manual of Regulations and Procedures for Federal Radio Frequency Management, Chapter 10.8. Submit completed conversion plan through command channels to the Department of Commerce, National Telecommunications, and Information Administration, International Radio Advisory Committee, Spectrum Planning Subcommittee. Other overseas bases must follow host nation agreements.

4.11. Cellular Telephones. Use CTs for official government administrative business and manage according to the directives and guidelines governing management of telephone systems in AFI 33-111. Do not approve CTs for use in environments where classified, sensitive, or critical information

may be inadvertently overheard and transmitted. Restrict CTs to administrative requirements only. Use cellular secure telephone unit-III (STU-III) to satisfy operational mission requirements only when time constraints prevent the use of other secure means.

Section C—Managing the Military Affiliate Radio System

5. The MARS Mission. For a full statement, refer to DoD Directive 4650.2, *Military Affiliate Radio System (MARS)*, January 17, 1986/w Change 1.

5.1. Using MARS provides:

5.1.1. Worldwide emergency communications.

5.1.2. Fixed and mobile communications that support the disaster preparedness program (AFI 32-4001, *Disaster Preparedness Planning and Operations*).

5.1.3. Point-to-point record data and voice communications that support personnel morale and welfare.

5.2. MARS Consists of Military and Affiliate Organizational Elements:

5.2.1. The military element includes contingency MARS facilities.

5.2.2. The affiliate element consists of amateur radio operators and their stations. This element augments military capabilities and provides a volunteer reserve of stations and trained radio operators that support morale and welfare.

6. Responsibilities:

6.1. HQ USAF/SC develops MARS policy and provides overall guidance for the MARS program.

6.2. The Chief, USAF MARS (HQ AFCA/SYXM):

6.2.1. Manages the MARS program for HQ USAF.

6.2.2. Issues operating publications to MARS stations.

6.2.3. Represents HQ USAF on the DoD Joint MARS Chiefs Panel, amateur radio conventions, and MARS conferences.

6.2.4. Coordinates with MARS chiefs from other services on matters requiring joint-service resolutions.

6.2.5. Coordinates with MAJCOMs:

6.2.5.1. To determine emergency and contingency communications requirements.

6.2.5.2. To answer MARS frequency requests.

6.2.6. Sends valid frequency requests to the Air Force Frequency Management Agency (AFFMA).

6.2.7. Develops and publishes guidelines and management procedures for MARS operations.

6.2.8. Assigns and manages MARS Repeater frequencies according to AFI 33-118.

6.2.9. Establishes a management structure to administer the affiliate organization and control network operations using AF Forms 3661, **MARS Personnel Action Notification**, and 3665, **Military Affiliate Radio System Certificate of Appointment.**

6.2.10. Appoints region and state MARS directors and other key affiliate officials.

6.2.11. Oversees the management of excess and surplus government property acquired for use in MARS through the MARS property accountable officer.

6.2.12. Responds to applications for MARS membership and issues AF Form 3666, **Military Affiliate Radio System Station License and Identification Card**.

6.2.13. Serves as Air Force liaison for amateur radio.

6.2.14. Controls and issues Department of Defense (DD) Form 2350, **DoD Military Affiliate Radio System (MARS) Disaster Support Identification Card.**

6.2.15. Budgets for postage stamps for MARS regions.

6.2.16. Approves DD Form 630**, Department of Defense Application for Membership in Military Affiliate Radio System (MARS**), which authorizes MARS station operations.

6.2.17. Approves auxiliary MARS stations along with the host command.

6.2.18. Authorizes the affiliate to operate a MARS station by approving DD Form 630.

6.2.19. Terminates affiliates who bring discredit upon themselves or MARS, or who fail to:

6.2.19.1. Abide by the publications and rules governing MARS.

6.2.19.2. Complete required MARS training.

6.2.19.3. Maintain minimum quarterly participation on established MARS radio nets as instructed by published management guidelines.

6.2.19.4. Maintain a current Federal Communications Commission amateur radio license.

6.2.19.5. Notify appropriate authorities of a change of address.

NOTE:

Terminated affiliates must wait 2 years before requesting reinstatement in the MARS program. Affiliates that resign must wait 1 year before requesting reinstatement. Members terminated for extreme cause (for example, unbecoming conduct) must wait a minimum of 5 years before requesting reinstatement in any of the military services' MARS programs.

6.2.20. Termination waivers of affiliates may be granted for extenuating circumstances on a case-by-case basis.

6.2.21. Grants periods of inactive status to MARS affiliates on a case-by-case basis.

6.2.22. Establishes procedures for MARS affiliates to access the government telephone systems.

6.3. MAJCOM CSOs:

6.3.1. Appoint a command MARS director.

6.3.2. Identify MARS support requirements.

6.3.3. Appoint installation MARS directors as required.

6.3.4. Notify Chief, USAF MARS of all appointments.

6.4. Installation commanders will appoint an installation MARS director who will administer the local MARS base support team program.

6.5. MARS Affiliates:

6.5.1. Comply with publications governing MARS operations.

6.5.2. Submit frequency requests through the Chief, USAF MARS.

6.6. MARS accountable officers process DD Form 1348-1A, **Issue Release/Receipt Document.**

6.7. MARS officials:

6.7.1. Use AF Form 3663**, United States Air Force Global HF System Certification,** to make sure frequency compliance.

6.7.2. Use AF Form 427, **Military Affiliate Radio System Message,** to process messages.

7. Military MARS Stations. These stations consist of unmanned (standby) base MARS stations. MAJCOMs and bases should support military MARS stations in the same manner as other Air Force communications facilities. The base unit of assignment oversees equipment maintenance.

8. Auxiliary MARS Stations. Installations are authorized to establish auxiliary MARS stations for special missions such as United States Air Force Reserve, ANG, Civil Air Patrol, and base morale, welfare, and recreation.

9. Eligibility for Affiliate Membership.

9.1. Refer to DoD Directive 4650.2 for eligibility requirements for affiliate membership.

9.2. Request affiliate membership on **DD Form 630** through the state MARS director.

9.2.1. Membership in the MARS program of more than one military service is not permitted.

10. Training. Refer to the MARS operating directives for training guidelines.

11. Operating Directives. Follow MARS operating directives with allied communications publications.

12. Support to Civil Agencies.

12.1. Refer to the National Military Command System, National Emergency Communications Plan (Secret) for MARS support guidelines for civil agencies.

12.2. Refer to AFPD 32-40, *Disaster Preparedness*, for support guidelines for civil agencies near military installations.

13. MARS Mobile Communications Stations. Installation commanders:

13.1. Determine the requirements for a MARS mobile communications station.

13.2. May establish a MARS support team of local affiliates for contingency requirements.

14. Storage and Shipment of MARS Equipment. Any active duty, military MARS member may ship or store MARS equipment at government expense. (See Joint Travel Regulations.)

15. Government Telephones. MARS affiliate officials may use government telephone systems for official business.

16. Official Mail. MARS affiliates may use official mail to conduct official MARS business according to DoD Manual 4525.8/AF Sup, *DoD Official Mail Manual,* April 1994.

17. Checklists. Use the questions at **Attachment 6**, **Attachment 7**, **Attachment 8**, and **Attachment 9**, along with AF Form 2519, **All Purpose Checklist** (available electronically) to develop a checklist for MAJCOM LMR, MARS, HF, and MYSTIC STAR management.

18. Forms Prescribed. This instruction prescribes AF Forms 427, 3661, 3663, 3665, 3666; and DD Forms 630 and 2350.

WILLIAM J. DONAHUE, Lt General, USAF
Director, Communications and Information

Attachment 1

GLOSSARY OF REFERENCES, ABBREVIATIONS, AND ACRONYMS

References

DoD Manual 4525.8/AF Sup, *DoD Official Mail Manual,* April 1994

DoD Directive 4650.2, *Military Affiliate Radio System (MARS),* January 17, 1986/w Change 1

DoD Directive 5000.1, *Defense Acquisition*, March 15, 1996

DoD Regulation 5000.2, *Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information Systems (MAIS) Acquisition Programs,* March 1996

AFKAG-2, *AF COMSEC Accounting Manual*

AFSAL/NTISSI 3005, *Safeguarding and Control of Data Encryption Standard (DES) Equipment and Associated Unclassified Communications Security Aids*

FIPS Publication 140-1, *Security Requirements for Cryptographic Modules*

AFPD 32-40, *Disaster Preparedness*

AFPD 33-1, *Command, Control, Communications, and Computer (C4) Systems*

AFI 10-404, *Base Support Planning*

AFI 32-4001, *Disaster Preparedness Planning and Operations*

AFI 33-103, *Requirements Development and Processing*

AFI 33-104, *Base-Level Planning and Implementation*

AFI 33-111, *Telephone Systems Management*

AFI 33-112, *Computer Systems Management*

AFI 33-118, *Radio Frequency Spectrum Management*

AFI 33-219, *Telecommunications Monitoring and Assessment Program (TMAP)*

AFI 36-2233, *Air Force On-the-Job Training Products for Communications-Electronics Enlisted Specialty Training*

AFI 37-124, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections*

AFMAN 23-220, *Reports of Survey for Air Force Property*

DISA Circular 310-70-79, *MYSTIC STAR Network Management Manual and Users Guide* (Publication can be obtained by writing to the Director, DISA, ATTN: BLA, 701 S. Courthouse Road., Arlington VA 22204-2199)

AFQTP 2E1X3-210W, *Base Land Mobile Radio Management*

Abbreviations and Acronyms

AF—Air Force (as used in forms)

AFCA—Air Force Communications Agency

AFCIC—Air Force Communications and Information Center

AFFMA—Air Force Frequency Agency

AFI—Air Force Instruction

AFKAG—Air Force Cryptographic Operational General Publication

AFMAN—Air Force Manual (new designation)

AFPD—Air Force Policy Directive

AFQTP—Air Force Qualification Training Package

AFR—Air Force Regulation

AMC—Air Mobility Command

ANG—Air National Guard

C2—Command and Control

C4—Command, Control, Communications, and Computers

COMSEC—Communications Security

CSO—Communications-Information Systems Officer

CT—Cellular Telephone

DD—Department of Defense (as used in forms)

DES—Data Encryption Standard

DISA—Defense Information Systems Agency

DoD—Department of Defense

DRU—Direct Reporting Unit

FIPS—Federal Information Processing Standard

FOA—Field Operating Agency

HF—High Frequency

ISLMR—Intrinsically Safe Land Mobile Radio

LMR—Land Mobile Radio

MAJCOM—Major Command

MARS—Military Affiliate Radio System

MIS—Management Information System

MNCS—Master Net Control Station

MSOTMO—MYSTIC STAR Ops-Tech Manager

NIST—National Institute of Standards and Technology

NSA—National Security Agency

NTIA—National Telecommunications and Information Administration

NTISSI—National Telecommunications Information Systems Security Instruction

OPSEC—Operations Security

QTP—Qualification Training Package

STU-III—Secure Telephone Unit-III

TRS—Tracking and Reporting System

USAF—United States Air Force

USGEID—United States Government Equipment Identification

Attachment 2

LAND MOBILE RADIO CONTINUITY FOLDER

A2.1. LMR managers maintain complete and current records for continuity. Include these items in the continuity folder:

A2.1.1. A list of managers and alternates, including nets, units, office symbols, and telephone numbers for:

A2.1.1.1. MAJCOM LMR manager.

A2.1.1.2. Contractors and contract managers.

A2.1.1.3. Base supply equipment management, research, and receiving personnel.

A2.1.1.4. Base contracting office personnel (service and supply sections).

A2.1.1.5. Base frequency manager.

A2.1.1.6. Base COMSEC and OPSEC officers.

A2.1.2. A list of governing directives and related publications and the location of the publication.

A2.1.3. Processing procedures and examples of completed forms.

A2.1.4. Net restoration priorities.

A2.1.5. Procedures for demilitarizing LMR assets.

A2.1.6. A customer education package that includes:

A2.1.6.1. A copy of the customer education brochure or publication.

A2.1.6.2. Cross-feed updates.

A2.1.7. An equipment inventory list with an explanation of your reconciliation method. Include:

A2.1.7.1. Contracts.

A2.1.7.2. A sample of a request letter you received from net managers.

A2.1.8. Procedures for processing assets for repairs when they are covered under contract and when they are not. Include:

A2.1.8.1. An example of completed AF Form 1297, **Temporary Issue Receipt**.

A2.1.8.2. An example of a completed job control log.

A2.1.8.3. An example of claim and repair tickets completed by LMR managers and contractors.

A2.1.8.4. Control procedures for mobile, portable, and fixed assets.

A2.1.8.5. An example of a letter reporting loss, damage, or stopped payments.

A2.1.9. A copy of the most recent replacement plan.

A2.1.10. A copy of a base map showing equipment installations. Also include:

A2.1.10.1. Copies of individual net diagrams.

A2.1.10.2. A list of locations requiring escorted entry.

A2.1.10.3. The method you used to coordinate escorted entry.

A2.1.11. A list of the base LMR manager's responsibilities for overseeing the central base paging system. Include:

A2.1.11.1. Operating information for the system encoder and an explanation of its purpose.

A2.1.11.2. Control procedures for pagers and examples of completed shipping forms.

A2.1.11.3. Procedures for issuing spare pagers.

A2.1.12. Maintenance and updating procedures for the MIS/TRS.

A2.1.13. Contingency LMR procedures including instructions on using war reserve materiel.

A2.1.14. A list of:

A2.1.14.1. COMSEC equipment users.

A2.1.14.2. Procedures for obtaining keying material from COMSEC custodians.

A2.1.14.3. Procedures for coding LMR assets.

A2.1.15. Procedures for getting engineering help.

A2.1.16. Procedures for establishing annual LMR maintenance contracts. Include an explanation of how you:

A2.1.16.1. Budget for repairs.

A2.1.16.2. Characterize your equipment and develop a list of working parts.

A2.1.16.3. Get needed support within your time requirements.

A2.1.17. The LMR contract surveillance plan.

A2.1.18. A list of military technicians trained in LMR repair.

A2.1.19. Letters from customers or questionnaire responses.

Attachment 3

TRAINING TOPICS FOR LAND MOBILE RADIO NET MANAGERS

A3.1. The following general topics are mandatory for use in the net manager's training guide. Add to this list as required by local conditions.

A3.1.1. General Information:

A3.1.1.1. Points of Contact.

A3.1.1.2. Applicable Publications.

A3.1.1.3. Systems Description.

A3.1.1.4. Net (or Talk group) Description.

A3.1.1.5. Management Information System (MIS).

A3.1.1.6. Communications-Information Systems Requirements Documents.

A3.1.1.7. Frequency Requirements.

A3.1.1.8. Intrinsically Safe Requirements.

A3.1.1.9. Equipment Inventories.

A3.1.1.10. Equipment Markings.

A3.1.1.11. Budgeting Procedures.

A3.1.1.12. Replacement Plans.

A3.1.1.13. Contingency Procedures.

A3.1.1.14. Customer Feedback.

A3.1.1.15. Audits.

A3.1.1.16. Explanation of Terms.

A3.1.2. Maintenance and Operating Procedures for LMRs and Cellular Telephones:

A3.1.2.1. General Operating Rules.

A3.1.2.1.1. Procedures for Processing Assets for Repair/Operator Maintenance.

A3.1.2.1.2. Warranty Information.

A3.1.2.1.3. Pecuniary Liability in Case of Misuse or Abuse.

A3.1.2.1.4. Contingency Operations.

A3.1.2.1.5. Operating Restrictions in Hazardous Environments.

A3.1.2.1.6. Inspection and Operation of Intrinsically Safe LMRs.

A3.1.2.1.7. Data Encryption Standards (DES)/Fascinator.

A3.1.2.1.8. Meaconing, Intrusion, Jamming, and Interference Reporting Procedures.

A3.1.2.1.9. Command, Control, and Communications Countermeasures.

A3.1.2.1.10. Consent to monitoring, AFI 33-219.

A3.1.3. COMSEC and OPSEC:

A3.1.3.1. Use of COMSEC Equipment.

A3.1.3.2. OPSEC Requirements.

A3.1.3.3. Essential Elements of Friendly Information.

Attachment 4

PLANNING FOR LAND MOBILE RADIO DEPLOYMENT

A4.1. Some units have known or probable deployment locations, often in other nations. Other units must plan for deployment anywhere. The base CSO and LMR manager must advise base and unit planners to consider LMR needs well in advance of any deployment. Some of the factors to consider are:

A4.1.1. Will you need your LMRs? Maybe the host base can satisfy the need.

A4.1.2. Are your frequencies usable in the host area? (Send requests well in advance [AFI 33-118]). Coordinate overseas requirements through the Air Force theater command frequency management office.

A4.1.3. How will you maintain LMRs?

A4.1.4. Do you need spares? What is the probability of combat damage or loss in transit or handling?

A4.1.5. Will chargers work on host-nation or host-base power sources? (Voltages and frequencies vary by nation.)

A4.1.6. Will you need fixed base stations, repeaters, and antennas? Should you pre-position them, or will you carry and install them your self?

A4.1.7. Will you need special procedures and call signs?

A4.1.8. Do you have adequate geographical coverage?

A4.1.9. Do you need encryption (DES, Type 1, etc.)?

A4.1.10. What about interoperability with other units? (Frequencies, DES, Type 1, etc.).

A4.1.11. Are your LMRs capable of operating within host base/host nation LMR technical parameters, i.e., frequency, channel spacing, power, etc.? (Send requests well in advance [AFI 33-118]). Coordinate overseas requirements through the Air Force theater command frequency management office.

A4.1.12. Develop a deployed continuity folder by tailoring the information in **Attachment 2** to meet your requirements. The base points of contact now become the deployed points of contact.

Attachment 5

CELLULAR TELEPHONE ACQUISITION DECISION MATRIX

A5.1. Does the requirement document specify that the primary use is for Command & Control Communications? (If "YES," look for a technical solution other than a cellular telephone. If "NO," proceed to the next paragraph.)

A5.2. Does the requirement document identify a need for transmission/reception of Classified, or Sensitive Unclassified Information in a mobile environment? (If "YES," look at a portable/mobile STU-III technical solution rather than a conventional cellular instrument. If "NO," proceed to the next paragraph.)

A5.3. Does satisfaction of this requirement with a cellular telephone result in the net reduction in the number of LMRs or pagers in use on the base? (If "YES," examine paragraphs **A5.4.**, and **A5.5.** If "NO," proceed to paragraph **A5.6.**)

A5.4. Does the requirement document identify a mission that was previously satisfied by an LMR or pager? (If "YES," proceed to paragraph **A5.5.** If "NO," proceed to paragraph **A5.6.**)

A5.5. What aspect of the original mission has changed, which makes the continued use of LMR or pagers unworkable? (If the requirement is essentially the same as before and convenience is the primary reason for the request, acquisition of a cellular telephone is not warranted. If there is a substantial change to the mission, proceed to paragraph **A5.6.**)

A5.6. Is there a Serious Mission Degradation, Failure, or Life and Death Impact not previously present that you cannot meet through the use of LMRs or pagers? (If "YES," consider the applicability of cellular instruments. If "NO," look for a technical solution other than cellular telephone.)

Attachment 6

CHECKLIST FOR MAJCOM LAND MOBILE RADIO MANAGEMENT

A6.1. Has the MAJCOM established a single point of contact for LMR issues at their headquarters?

A6.2. Has the MAJCOM appointed a LMR Manager?

A6.3. Has a copy of the command-level LMR manager appointment letter been forwarded to HQ AFCA/ SYXM?

A6.4. Has the MAJCOM LMR manager completed AFQTP 2E1X3-210W?

A6.5. Is the MAJCOM LMR manager using the current version of the LMR MIS or TRS to manage the command's LMRs, pagers, and cellular telephones?

A6.6. Does the MAJCOM LMR manager compile the command's base level LMR MIS or TRS data by 31 January/July?

A6.7. Is a copy of the compiled LMR MIS or TRS data provided to HQ AFCA/SYXM not later than 1 February/August?

A6.8. Does the MAJCOM LMR manager review and provide feedback to field units concerning the accuracy of the LMR MIS or TRS data?

A6.9. Does the MAJCOM LMR manager review LMR-related local and MAJCOM audit reports, identify, base-level deficiency patterns and trends, crossfeed the information to all command elements and HQ AFCA/SYXM, and monitor base-level actions taken within their commands?

A6.10. Does the MAJCOM LMR manager closely evaluate planned base-level corrective actions for audit-related LMR deficiencies and ensure that procedural controls to prevent recurrence are included and implemented?

A6.11. Does the MAJCOM LMR manager crossfeed surplus LMR equipment lists and requests for equipment assistance to command bases and other MAJCOMs?

Attachment 7

CHECKLIST FOR MILITARY AFFILIATE RADIO SYSTEM (MARS)

A7.1. Does the Chief, USAF MARS appoint qualified affiliates to the positions of Region and State MARS directors?

A7.2. Control the issue of DD Forms 2350, **DoD Military Affiliate Radio system (MARS) Disaster Support Identification Card**?

A7.3. Require and Maintain the quarterly participation reports on MARS members as received from the region Operations and Analysis manager?

A7.4. Does the Chief, USAF MARS monitor frequency request for MARS use?

A7.5. Has the MAJCOM CSO appointed a MAJCOM MARS director?

A7.6. Are Installation MARS appointed as required?

A7.7. Has a copy of all MAJCOM installation MARS director appointments been provided to the Chief, USAF MARS?

A7.8. Does MARS accountable officer make sure DD Form 1348-1 is properly processed to release government property to qualified recipients?

Attachment 8

CHECKLIST FOR GLOBAL HIGH FREQUENCY (HF) SYSTEM

A8.1. Has the Global System Manager:

A8.1.1. Established a single set of Air Force procedures for Global HF system operations?

A8.1.2. Reviewed and implemented MAJCOM-level recommendations for changes to the Air Force Global HF System procedures?

A8.1.3. Coordinated mission requirements with system users?

A8.1.4. Answered questions for intercommand and interservice special communications support?

A8.2. Has the Global HF System Manager:

A8.2.1. Evaluated Global HF System network performance?

A8.2.2. Accompanied MAJCOM HF Managers on staff visits to evaluate operations, equipment use, and system integrity?

A8.2.3. Overseen operations of assets under their control?

A8.2.4. Matched employees and equipment to job requirements?

A8.2.5. Evaluated training, operations, and equipment use?

A8.2.6. Coordinated publication creation and production?

A8.2.7. Tracked each publication through production and reported its status to the system manager?

Attachment 9

CHECKLIST FOR MYSTIC STAR SYSTEM

A9.1. Has the MYSTIC STAR Ops-Tech Manager (MSOTMO) assessed network performance?

A9.2. Has the MSOTMO compared performance trends to establish standards?

A9.3. Has the MSOTMO recommended improvements to criteria, documentation, or performance?

A9.4. Has the MSOTMO worked with personnel on all plans for operating, maintaining managing, controlling, and configuring the network?

A9.5. Has the MSOTMO recommended budgets for network operations?

A9.6. Has the MSOTMO reported the operational status, performance status, or limitations of the network to HQ AMC/SCP?

A9.7. Has the MSOTMO implemented plans and special system configurations?