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Communications

LAND MOBILE RADIO MANAGEMENT



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFRPD 33-1, *Command Control, Communication, and Computer (C4) Systems*. It establishes procedures for the effective management and control of Land Mobile Radio (LMR) networks. It applies to all users of LMR equipment at General Mitchell IAP ARS WI.

SUMMARY OF REVISIONS:

This publication was completely rewritten for currency, and changed from a GMB Regulation to a 440 AW Instruction.

1. General. LMR is a two-way radio communications system consisting of base stations, remote consoles, mobile units, and portable units. This radio system is designed to provide General Mitchell IAP with radio communications when telephone or other existing communications cannot satisfy mission essential requirements facilities. The equipment is frequency modulated which employs a narrow-band emission. Frequencies are used in very high frequency ranges. General Mitchell IAP also employs the amplitude modulated ramp control system used by vehicles to maintain contact with the Federal Aviation Administration Control Tower call sign (Milwaukee Ground) when operating on the airfield runways and taxiways.

2. Explanation of Terms:

- 2.1. Technical Work Group (TWG). An activity established at major commands, intermediate levels, and base level when necessary to validate communications-computer requirements and establish and maintain coordination among command activities.
- 2.2. Land Mobile Radio (LMR). The collective term for pagers and two-way radios. LMRs are used by various Air Force organizations to control activities on or near Air Force installations and sites.
- 2.3. Network Manager. The Network manager is the manager who has operational control of a particular LMR network.

2.4. Allowance Standard (AS). The equipment allowance document, which prescribes the basic allowance for communications-computer systems equipment. ASs are used for Mobility LMRs. Subsections AMB, AMF, AML, AMR, AMS, AQD, M, MA, NGA, and NG are used for their allowances.

2.5. Organizational Focal Point. The LMR Coordinator is the individual who is given the responsibilities Maintaining Issue/Return and Inventory of their Unit's LMR Assets. Each unit will appoint a primary and an alternate.

3. Responsibilities:

3.1. The installation commander will:

3.1.1. Ensure only the minimum number of LMRs are issued to satisfy valid requirements.

3.1.2. Ensure the total number of LMRs on the installation, both leased and government owned are within the appropriate AS and LMR authorization.

3.2. Communication-Computer System Officer (CCSO) or LMR manager will:

3.2.1. Manage LMRs for the base commander.

3.2.2. Prepare a base directive on LMR management to the TWG.

3.2.3. Review requests for LMR assets prior to submission to the base.

3.2.4. Assist Readiness Squadron in preparing the Communications Computer Systems Annex to the Readiness Plan.

3.2.5. Submit inputs to the budget for leased equipment and contract maintenance.

3.2.6. Ensure monthly invoices for equipment and services are correct and certified.

3.2.7. Ensure the lease and maintenance charges are stopped on equipment that has been removed from service, lost or stolen.

3.2.8. Based on user's request, direct installations, removals, and relocations of LMR assets.

3.2.9. Maintain an AF Form 1297, **Temporary Issue Receipt**, or an automated data record-keeping system for each item of accountable LMR equipment.

3.2.10. Notify the contractor when maintenance is required.

3.2.11. Establish a central point for processing equipment to and from the contractor.

3.2.12. Sixty days prior to contract renewal date consolidate inventories from the using organizations and list all Equipment Authorization Inventory Data accountable LMR assets. Maintain LMR tracking and reporting system program with AFRC.

3.2.13. Monitor the LMR contract to ensure that the contractor complies with the provisions of the contract.

3.2.14. Establish priority of equipment repair and net precedence.

3.3. TWG will:

3.3.1. Approve or disapprove requests for LMR equipment.

3.3.2. Review the pager allocations annually. This review will consider local changes in mission and organization to assure that the pagers in use are cost-effective. Those pagers that are no longer used, must be turned in or reallocated. The CCSO will document this review.

3.3.3. Consider the use of pagers when evaluating the request for new or the replacement of two-way radios.

3.4. 440 LG Supply (LGS) will:

3.4.1. Ensure LMR equipment authorizations do not exceed basic issue in the AS.

3.4.2. Ensure an AF Form 3215, **C4 Systems Requirement Document**, has been coordinated with the Unit Commander, CSSO and approved by the TWG.

3.4.3. Issue LMR equipment through the base CSSO to the using organization's custodian, and forward a copy of the issuing AF Form 3215 to the base LMR manager.

3.4.4. Provide administrative assistance to users and custodians when they are completing reports of survey, which are required for lost, stolen, or damaged LMR equipment.

3.4.5. Ensure all AF Forms 3215, for LMR equipment contain the base CSSO or base LMR manager's coordination.

3.5. Using Organization Focal Point will:

3.5.1. Ensure all LMR equipment is needed, being used and all excess equipment options and accessories notify the LMR manager and then are turned in promptly to LGS.

3.5.2. Prepare requests for LMR equipment on an AF Form 3215 and submit it to the TWG.

3.5.3. Report, in writing, any lost or damaged LMR equipment to LGS, CCSO and 440 AW Contracting (if leased). Prepare Reports of Survey or cash collection vouchers in accordance with AFI 33-106, *Managing High Frequency Radios, Land Mobile Radios, Cellular Telephones, and the Military Affiliate Radio System*.

3.5.4. Ensure all LMR equipment is on the equipment authorization inventory data records. Report, in writing, all unrecorded or unauthorized equipment to LGS and CCSO.

3.5.5. Ensure batteries are kept on hand for LMR equipment. Obtain batteries through normal supply channels.

3.5.6. Report all inoperative and malfunctioning LMR equipment to the LMR manager and the help desk.

3.5.7. Deliver the portable equipment that needs to be fixed to the LMR manager, and pick up equipment after maintenance has been performed.

3.5.8. Request frequencies through the frequency manager also include an AF Form 3215 and reason for the frequency.

3.5.9. Conduct customer education for all LMR users utilizing the training package that was provided by the LMR manager.

3.5.10. Ninety days before the maintenance contract anniversary date provide the CCSO with a current equipment inventory.

- 3.5.11. Notify the LMR manager immediately of any changes in LMR equipment inventory and service.
 - 3.5.12. Perform operational checks of all LMR equipment returned from maintenance.
 - 3.5.13. Ensure optimal use of LMR equipment to satisfy both normal hour and standby requirements.
 - 3.5.14. Requirements for LMR installations, removals, and relocations will be submitted on an AF Form 3215. Submit the form to the LMR manager.
 - 3.5.15. Appoint, in writing, a Net Manager and forward a copy of the appointment letter to the LMR manager.
 - 3.5.16. Route AF Form 601, **Equipment Action Request**, through the CCSO before submission to LGS for all mobility assets.
 - 3.5.17. Ensure that all LMR equipment and accessories are removed from vehicles that are being turned into salvage. The LMR manager upon notification from the user will arrange actual removal of LMR equipment.
 - 3.5.18. Provide necessary safeguards for all LMR equipment. Radio-equipped vehicles must be locked when not in use.
 - 3.5.19. Initiate LMR replacement action for equipment when necessary. LMR equipment will be replaced when justified through an analysis consisting of: equipment condition, repair costs, frequency of failure, deterioration of service, and parts availability.
- 3.6. Communications Security (COMSEC) Policy:
- 3.6.1. LMR nets require protection of information by applying normal COMSEC or Data Encryption Standards (DES). DES equipment will be used to protect unclassified, national security-related information and cannot be used to protect classified information. If an LMR net is to be used to pass classified information, government-approved cryptographic COMSEC equipment must be used.
 - 3.6.2. Annual LMR training related to COMSEC and operations security will be administered to all LMR net managers.
 - 3.6.3. Only DES equipment endorsed by National Security Agency (NSA) can be used by the Air Force. Air Force organizations may only purchase and use commercial DES equipment having valid NSA-assigned U.S. Government Equipment Identification Decal endorsement number.
 - 3.6.4. Only keying material produced by NSA and accounted for and distributed in the COMSEC material control system can be used to key the DES equipment. Keying material requirements must be established in accordance with AFKAG-2, through the Base COMSEC account, with a 45-day lead-time.
- 3.7. Safety. The safe operation of a radio is the user's responsibility. All precautions will be taken to prevent personal injury and damage to the equipment. Do not place key rings and other metal objects around or on the radio antenna.
- 3.8. Priority of Equipment Repair and Net Precedence. Base stations will normally receive first consideration over any repairs of any other equipment within the same net. LMR equipment supporting flight safety, fire/crash, and security will receive maintenance consideration before LMR equipment

in other nets related to routine operations. LMR equipment on nets of precedence may be repaired first depending upon conditions and operational requirements. Attachment 1 lists precedence of LMR nets and the equipment repair priority.

3.9. Authorizations and Allowances. The equipment allowance table for non-medical communications equipment is AS 660. The equipment allowance tables for medical treatment facilities are ASs B96, 897 and 903. The equipment allowance table for War Reserve Material LMRs is AS 929.

3.10. Procedures for Obtaining LMR Networks and Equipment. Organizations requiring new LMR networks or desiring LMR equipment to use with existing nets will use the following procedures. Contact the CCSO and LGS for assistance in completing the AF Form 601. The organization will also complete a request with all information noted in Attachment 2. Attach this request to the completed AF Form 601 and submit it to CCSO, 440 SPTG/SC, through LGS, 440 LG/LGSC.

PAUL R. COOPER, Brig Gen, USAFR
Commander

Attachment 1

PRECEDENCE OF LAND MOBILE RADIO NETS PRIORITY OF EQUIPMENT REPAIR

<u>Net byPrecedence</u>	<u>Frequency(MH.)</u>	<u>Type ofEquipment</u>	<u>RepairPriority</u>
1. Fire/Crash	173.5875	Base Station	1-1
(Includes Tac Hosp.)		Remotes	1-2
		Mobiles	1-3
		Portables	1-4
		Converta-Comms	1-5
2. Base Security	163.4625	Base Station	2-1
		Remotes	2-2
		Mobiles	2-3
		Portables	2-4
		Converta-Comms	2-5
3. FAA Ramp Control	121.9(AM)	Mobiles	3-1
4. Maintenance	165.1375	Base Station	4-1
Expediter		Remotes	4-2
Supply		Converta-Comms	4-3
MSL/POL		Portables	4-4
5. Commander's	148.1750	Base Station	5-1
		Remotes	5-2
		Portables	5-3
6. Disaster Readiness	413.0500	Base Station	6-1
(Includes Safety)	163.1375	Remotes	6-2
		Mobiles	6-3
		Portables	6-4
7. Civil	151.1000/	Base Station	7-1
Engineers	148.1000	Remotes	7-2
		Portables	7-3
		Converta-Comms	7-4
Net byPrecedence	Frequency(MH=)	Type of Equipment	RepairPriority
8. 440LG/LGT	148.0500	Portables	8-1
Mobility			
9. 34 APS Net	150.2000	Portables	9-1
10. 440 CES	413.200/	Portables	10-1

PRIME BEEF	.300		
11. 95 AS Net	413.1500	Portables	11-1
12. 440 ALCF	413.0757.100	Portables	12-1
NET	.200/.275/ .300/.350		
	.400		
13. Pagers	Leased/ Bravo +		3-1
Government/Nationwide Owned Local extended			

Attachment 2**LAND MOBILE RADIO REQUIREMENT FORMAT**

REPLY TO ATTN OF: (Preparing Activity)

SUBJECT: Land Mobile Radio Requirement

TO: Communications-Computer Systems Requirement Board

1. Description of requirement:

- a. Give the equipment type (base station, mobile, portable).
- b. Indicate whether this is within an existing authorization or if it is a new authorization.
- c. Indicate funding source. (Is it within the existing budget or will it require unprogrammed base funds?).
- d. Indicate if a new frequency is required.
- e. Give the net manager of the network.

2. Resources required (fill in as applicable):

a. Nonrecurring Costs:

- (1) Acquisition cost.
- (2) Engineering cost.
- (3) Installation cost.

b. Annual Recurring Costs:

- (1) Leasing or other contractual costs.
- (2) Other resources (money and material).

c. Other Considerations. State all known costs (including items such as leased circuits and peripheral equipment) have been considered and their costs included.

3. Justification. Completely justify the requirement in this paragraph including the following, as appropriate:

a. Specific mission supported.

b. How this will provide increased mission effectiveness.

c. How the equipment will support the mission.

d. Cost trade-off. Show how the Land Mobile Radios will increase the efficiency of the mission or function. Relate this into dollar savings. A complete economic analysis is not required, but documented savings should clearly establish that issuing a Land Mobile Radio will result in overall savings to the government. Areas of cost trade-off are:

(1) Reduced transportation costs.

(2) Time.

(3) Increased worker productivity.

(4) Decreased manpower.

(5) Conversion of two-way assets to pagers.

(6) Reduction in telephone toll costs.

e. Other justifications, favorable impact on morale of standby personnel, etc.

f. Explain, in detail, how the disapproval of requirement will affect the mission.

4. Consideration of Alternatives. Provide a summary of the communication alternatives considered. If this requirement is for two-way assets, give the reason why pagers will not satisfy the requirement.

5. Organization Focal Point. Indicate the focal point, office symbol and telephone number.

6. Coordination. Use a statement showing that this requirement has been coordinated with the Base CCSO, Base Supply and any other affected activities.

SIGNATURE BLOCK OF REQUESTOR