DEPARTMENT OF THE ARMY
HEADQUARTERS, FIFTH U.S. ARMY AND FORT SAM HOUSTON
Fort Sam Houston, Texas 78234-5000

FSH Regulation
25-10

11 July 1994

Information Management: Telecommunications
NON-TACTICAL RADIO SYSTEM
INSTALLATION SUPPORT REGULATION

Issue of supplements to this regulation is prohibited unless specifically approved by Headquarters, Fifth U.S. Army and Fort Sam Houston.

1. PURPOSE. To prescribe policies, procedures, and responsibilities for requesting, tasking, coordinating, and controlling support requirements associated with the non-tactical radio systems to include paging systems.

2. REFERENCES.

a. AR 25-1, Army Information Resources Management Program.

b. DA Form 2407, Maintenance Request.

c. DA Form 5695-R, Information Systems Project Document.

d. FM 24-19, Radio Operator's Handbook.

3. APPLICABILITY. This regulation applies to all activities that require non-tactical radio support from the U.S. Army Garrison, Fort Sam Houston.

4. EXPLANATION OF TERMS. (See glossary)

5. GOALS. To establish an Ultra High Frequency (UHF) trunking radio system serving all major Federal Government facilities and agencies in San Antonio and surrounding areas; to incrementally expand the system to its optimum configuration; and to convert all FSH very high frequency (VHF) non-tactical radio users to the UHF trunking system over a five-year period.

6. POLICY.

a. The San Antonio Area Trunking System (SAATS) is a modular radio system designed to fulfill the radio communications

requirements of all Federal Government agencies in the San Antonio metropolitan area. The acquisition of this new technology, multi-user-operated trunking system requires policy and procedural guidance for FSH non-tactical radio users.

b. Due to the high cost of converting to UHF trunking radio system, it will be done incrementally with a completion date of five years after the initial UHF trunking system purchase. Non-tactical radio users will be operating two radio networks during the conversion period: one VHF system and one UHF system. Therefore, close coordination will be maintained between radio users and communications personnel during the equipment planning and installation phases.

7. SYSTEM MANAGEMENT AND SUPERVISION

a. The operating frequencies for the SAATS were assigned to Fort Sam Houston by the Federal Communications Commission.

b. The SAATS is centrally managed and controlled by Fort Sam Houston (FSH). The FSH modular system components are co-managed by the Fort Sam Houston Directorate of Information Management (DOIM) and Brooke Army Medical Center Information Management Division. System components operated by FSH Garrison activities are controlled and monitored by the DOIM Network Management Branch. The components used by BAMC units are controlled and monitored by the BAMC Communications Coordinator.

c. System changes, expansions, deletions, re-programming or modifications must be approved in writing by the FSH DOIM prior to implementation.

d. Major users of the SAATS (Fort Sam Houston, Brooke Army Medical Center, Wilford Hall Medical Center, Audie Murphy Veterans Administration Hospital, and other Federal Government entities) will manage and control their own on-premise system components. However, interfacing with the FSH system by other segments of the SAATS requires the written approval of the FSH DOIM.

8. EQUIPMENT ACQUISITION AND SYSTEM ACCESS

a. Acquisition of equipment and access to the trunking system are initiated by the requestor by submitting DA Form 5695-R, Information System Project Document (ISPD), to the Director of Information Management, Fifth U.S. Army and Fort Sam Houston, 2108 9th St, Fort Sam Houston, TX 78234-5005. Assistance in completing the form is available from the DOIM Network Management Branch.

b. Garrison activities will submit the form with a cover memorandum signed by the director, deputy director or unit commander. Tenant activities will have the requirement approved and certified by authorized officials before submitting the requirement to DOIM. Upon approval and funds transfer, acquisition action for the equipment (i.e., radios, pagers or other components) will begin.

c. Acquisition of non-trunking radio equipment (other than pagers) to meet non-tactical radio communications requirements by FSH organizations is not permitted unless approved in writing by DOIM. Waiver requests must provide full justification.

9. CUSTOMER NETWORK CONFIGURATION

a. Trunking radio system technology provides features and capabilities which are not available on other non-trunking radio systems. The trunking system operation permits user networks to be flexible by allowing the user to designate the number of users who will communicate with each other or with other groups in an open or secure mode.

b. Each using unit/directorate will appoint a radio control officer (RCO) to manage the assigned equipment and to act as liaison between the organization and the DOIM trunking radio system manager. The RCO will:

(1) Establish and maintain a radio network listing. The listing will include the radio identification number, the radio serial number, the grouping information, the user's call sign, and the user's name. The RCO will maintain equipment maintenance history records, and will ensure that the equipment use complies with radio communications protocols, rules and regulations. Operating procedures are contained in Field Manual 24-19, Radio Operator's Handbook.

(2) The RCO will also coordinate all repair actions with the DOIM trunking system manager, and will maintain programming information for the fixed, mobile or portable radio equipment. Additionally, the RCO will maintain information on radio pagers in use, including pager type, serial number, cap codes and pager user.

c. Individual directorate or activity trunking system network configurations are determined by the number of radios and features required. Each network may use a maximum of 70 radios. Because of system computer memory requirements, radios programmed for telephone interconnect or private call capability are equivalent to 10 radios in the total 70-radio limit. The RCO, in

conjunction with the DOIM system manager, will establish a radio network programming scheme for his/her unit or directorate that meets the organization's radio communications requirements.

d. Trunking radio equipment is software-driven and programmed by specialized personal computer equipment. The radio equipment will be programmed when received by the DOIM or the BAMC system manager, in coordination with the RCO. The reprogramming of radio equipment is a reimbursable item from the using organization.

10. NON-TACTICAL RADIO EQUIPMENT MAINTENANCE.

a. Non-tactical radio equipment includes non-trunking radio systems, trunking radio systems, radio pagers and associated equipment

b. Maintenance of non-tactical radio equipment used by FSH organizations is the responsibility of DOIM. Maintenance requests for non-tactical radio equipment are initiated by the RCO by submitting a DA Form 2407, Maintenance Request, to the DOIM Networks Management Branch. Information required on the form includes: defective component model number, serial number, point of contact, telephone number and a brief description of the problem. Repairs for tenant-unit equipment are reimbursable to DOIM.

c. Classification for turn-in of non-tactical radio equipment will be treated in the same manner as a maintenance request, and will require the use of a DA Form 2407.

d. Maintenance of tactical radio equipment is the responsibility of the FSH Directorate of Logistics.

11. TRUNKING SYSTEM EXPANSION.

a. Requests to increase organization radio system networks must be submitted to the DOIM on DA Form 5695-R. New equipment requires approval and certification by the DOIM prior to acquisition. Organizational RCOs and planners must consider the maximum radio-to-repeater ratio of 70 to 1 when planning trunking radio expansion. An additional repeater may be needed if this limit is reached.

b. Unit RCOs should be aware that reprogramming and reconfiguring trunking system radios may be an acceptable alternative for achieving the same result as purchasing additional radios. The DOIM system manager is available for technical assistance.

c. Because of the high cost of trunking equipment, full conversion from conventional to trunking radios may be cost prohibitive to an organization with a large user base or a radio control console. A phased conversion may be necessary, requiring operation of conventional and trunking radios from one radio control console. Close technical coordination would be needed between the RCO and the DOIM system manager during the planning process.

12. OPERATIONS SECURITY. Radio users are reminded that radio conversations are susceptible to monitoring by unauthorized organizations and individuals. Radio communications security concerns should be brought to the attention of the DOIM system manager for possible data encryption service (DES) applications. The DES protection may be used for unclassified, sensitive or operational information; the use of nontactical radios for transmission of classified information is strictly prohibited.

13. FSH RADIO PAGING SYSTEM

a. The radio paging system consists of a VHF, multi-node simulcast configuration. System coverage includes Bexar County and surrounding areas. Acquisition of pagers and pager air-time service is accomplished by submitting DA Form 5695-R to the DOIM. The FSH paging system is equipped with both tone/voice and digital capability, and the desired option should be specified on the ISPD.

b. The FSH DOIM provides maintenance of radio pagers for all authorized FSH users. Defective pagers should be turned in with a DA Form 2407 to the DOIM Networks Management Branch. Individual pager users are responsible for lost or damaged pagers in accordance with Army regulations.

GLOSSARY

COMMON USER RADIO EQUIPMENT - The radio equipment within the trunking system that is used by all trunking system users. Equipment includes repeaters, antenna combusters, system controller and antenna systems.

CONVENTIONAL REPEATER RADIO NETWORK - A radio system with a group of radio users sharing a dedicated set of frequencies and radio equipment. Repeater format allows for radio signals to be amplified and retransmitted.

DATA ENCRYPTION STANDARD (DES) - A process by which radios can be encrypted to prevent anyone, other than another radio with the same encryption code, from monitoring sensitive-material radio transmissions. A DES module is purchased and installed in the radio requiring this security feature. NOTE: DES does not provide protection for classified information, which may never be transmitted over non-tactical radio systems.

FORT SAM HOUSTON TRUNKING RADIO NETWORK - All local area trunking radio users located at Fort Sam Houston and Camp Bullis. The functional users include:

a. Medical Services (BAMC).

b. Facilities and Utilities Management.

c. Command and Control

d. Law Enforcement

e. Fire Protection and Prevention

f. Telecommunications Maintenance Support.

g. Environmental Control

h. Mobilization, Training and Security.

i. Ordinance Disposal.

RADIO "ALIAS" - The assigning of a name or other form of identification to a radio identification number. The main purpose is for making dispatching easier for those systems utilizing a manned dispatching process.

SAN ANTONIO AREA TRUNKING SYSTEM (SAATS) - The centrally managed, modular UHF radio system designed to serve the non-tactical radio

communications requirements of Federal agencies in the metropolitan San Antonio area. System users share common-user, non-dedicated equipment and frequencies. The core, common-user system components are located at Fort Sam Houston and Wilford Hall Medical Center, Lackland Air Force Base. The present and future users of the SAATS are:

a. Fort Sam Houston

b. Brooke Army Medical Center

c. Wilford Hall Medical Center.

d. Audie Murphy Veterans Administration Hospital.

e. Camp Bullis.

f Brooks Air Force Base.

g. Kelly Air Force Base.

h. Lackland Air Force Base

i. Randolph Air Force Base

TALKGROUP - A distinct group of radio trunking system users, usually within one directorate, unit, or functional area, who need to communicate with each other. Talkgroups are similar to networks.

TRUNKING RADIO IDENTIFICATION NUMBER - The number assigned to each trunking radio set and programmed into the trunking radio system. The identification number is used by the trunking system processor to provide instructions to the radio; i.e., to activate the radio for access to the system and enable programmed nfeatures. If a radio is lost, the identification number can be locked out of the system, rendering it useless.

The proponent of this regulation is the Directorate of Information Management. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to the Commander, U.S. Army Garrison, Fort Sam Houston, ATTN: AFZG-IM, Fort Sam Houston, TX 78234-5000.

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