

STP 11-25A-OFS

**HEADQUARTERS
DEPARTMENT OF THE ARMY**

**Officer Foundation Standards (OFS)
Manual**

AOC 25A

SIGNAL COMMISSIONED OFFICER

**Ranks First Lieutenant (1LT)
and Captain (CPT)**

APRIL 2002

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OFFICER FOUNDATION STANDARDS (OFS) MANUAL

AOC 25A

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Ranks First Lieutenant (1LT) and Captain (CPT)

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PREFACE

The Mission: The mission of the Signal Corps is to provide rapid and reliable information to support the command and control of the Army's combat forces during both peace and war. Signal support is the collective, integrated, and synchronized use of information systems, services and resources and it encompasses the following disciplines: communications, automation, visual information, records management, and printing and publications.

The Role of the Signal Officer: Inherent with the Signal Corps' mission are command, supervisory, managerial, and technical leadership for the engineering, acquisition, design, programming, installation, operation, and maintenance of information systems in both fixed and mobile configurations. From the foxhole to the White House, Signal officers plan, direct, control, and manage signal support at all levels of the Army, which include tactical, strategic, and sustaining base operations. This requires the integration and/or interconnection of diverse types of automation, communications, visual information, records management, and printing and publications equipment and systems into local area and wide area information networks.

This manual applies to both Active and Reserve Component soldiers.

The proponent for this publication is the Signal School. Users of this publication are encouraged to report errors, recommend changes, and submit comments on its improvement. Comments should be keyed to the specific page, paragraph, and line of text in which the change is recommended. Reasons will be provided for each comment to ensure understanding and complete evaluation. Comments should be made on DA Form 2028 directly to Commander, US Army Signal Center and Fort Gordon, ATTN: ATZH-DTM-I, Fort Gordon, Georgia 30905-5074.

Unless this manual states otherwise, masculine pronouns do not refer exclusively to men.

CHAPTER 1

Introduction

1-1. GENERAL

Professional Development Objectives: A broad spectrum of opportunities exists within the Signal Corps. The majority of Signal officers will progress by concentrating their career development on the operational aspects of the branch. Officers train for and seek repetitive command and staff assignments within operational signal units at all levels of command. All Signal officers must be prepared to perform their wartime duties, both on and off the battlefield. Every officer may be called upon to perform his or her role as an Army officer and, in particular, as a Signal officer. At the company grade level, all Signal officers are required to obtain a mixture of troop leading and Signal operational experience. Ultimately, Signal officers must develop and maintain a blend of tactical and technical competence throughout their careers.

1-2. TASK SUMMARIES

a. Task summaries outline the wartime performance requirements of each critical task in the soldier's manual (SM). They provide the soldier proficiency on training. As a minimum, task summaries include information you must know and the skills that you must perform to standards for each task. The format for the task summaries included in this SM is as follows:

- (1) **Task title.** The task title identifies the action to be performed.
- (2) **Task number.** A 10-digit number identifies each task or skill. Include this task number, along with the task title, in any correspondence relating to the task. To determine which tasks are testable at each skill level, refer to Chapter 2, Part 2, Critical Tasks. The first two numbers of the last four of each task DO NOT indicate the skill levels testable for that particular task.
- (3) **Conditions.** The task conditions identify all the equipment, tools, references, job aids, and supporting personnel that the soldier needs to perform the task in wartime. This section identifies any environmental conditions that can alter task performance, such as visibility, temperature, and wind. This section also identifies any specific cues or events (a chemical attack or identification of a threat vehicle) that trigger task performance.
- (4) **Standards.** The task standards describe how well and to what level you must perform a task under wartime conditions. Standards are typically described in terms of accuracy, completeness, and speed.
- (5) **Training and Evaluation Guide.** This section contains—
 - (a) The task performance steps that provide details required to perform the task.
 - (b) The performance evaluation guide that contains—
 1. The evaluation preparation, which provides special setup procedures and instructions for evaluating task performance (if required).
 2. Performance measures with GO/NO GO criteria.
 3. Evaluation guidance, which indicates requirements for receiving a GO and other special guidance (if required).

(6) **References.** This section identifies references that provide more detailed and thorough explanations of task performance requirements than that are given in the task summary description.

b. Additionally, some task summaries include safety statements and notes. Safety statements (danger, warning, and caution) alert user to the possibility of immediate death, personal injury, or damage to equipment. Notes provide a small, extra supportive explanation or hint relative to the performance measures.

CHAPTER 2

MOS Training Plan

Lieutenants: Upon completion of Basic Officer Leadership Course (BOLC), Phase 2 (Signal), the majority of lieutenants will secure an initial assignment as a signal platoon leader. Generally, the goal for Signal Lieutenants should be a minimum of 18 months experience with troops in signal units.

Captains: Following completion of one or more initial assignments in signal operations, officers normally attend the Signal Captains Career Course (SCCC) between their third and sixth year of service. To enhance professional development and promotional potential, each officer should strive for a successful company command and staff experience at signal battalion/brigade level.

2-1. GENERAL.

a. The MOS Training Plan (MTP) identifies the essential components of a unit-training plan for individual training. Units have different training needs and requirements based on differences in environment, location, equipment, dispersion, and similar factors. Therefore, the MTP should be used as a guide for conducting unit training and not a rigid standard. The MTP consists of two parts. Each part is designed to assist the commander in preparing a unit training plan which satisfies integration, cross training, training up, and sustainment training requirements for soldiers in this MOS.

(1) Part One of the MTP shows the relationship of an MOS skill level between duty position and critical tasks. These critical tasks are grouped by task commonality into subject areas.

(2) Section I lists subject area numbers and titles used throughout the MTP. These subject areas are used to define the training requirements for each duty position within an MOS and relate duty positions to subject areas and cross-training and train-up/merger requirements.

- **Duty Position column.** This column lists the duty positions of the MOS, by skill level, which have different training requirements.
- **Subject Area column.** This column lists, by numerical key (see Section I), the subject areas a soldier must be proficient in to perform in that duty position.
- **Cross Train column.** This column lists the recommended duty position for which soldiers should be cross-trained.
- **Train-up/Merger column.** This column lists the corresponding duty position for the next higher skill level or MOSC the soldier will merge into on promotion.

(b) Section II identifies the total training requirement for each duty position within an MOS and provides a recommendation for cross training and train-up/merger training.

(2) Part Two lists, by general subject areas, the critical tasks to be trained in an MOS and the type of training required (resident, integration, or sustainment).

- **Subject Area column.** This column lists the subject area number and title in the same order as Section I, Part One of the MTP.
- **Task Number column.** This column lists the task numbers for all tasks included in the subject area.
- **Title column.** This column lists the task title for each task in the subject area.

- **Training Location column.** This column identifies the training location where the task is first trained to soldier training publications standards. If the task is first trained to standard in the unit, the word "Unit" will be in this column. If the task is first trained to standard in the training base, it will identify, by brevity code (ANCOC, BNCOC, etc.), the resident course where the task was taught. Figure 2-1 contains a list of training locations and their corresponding brevity codes.

OAC	Officer Advanced Course
OBC	Officer Basic Course

Figure 2-1. Training Locations

- **Sustainment Training Frequency column.** This column indicates the recommended frequency at which the tasks should be trained to ensure soldiers maintain task proficiency. Figure 2-2 identifies the frequency codes used in this column.

BA	- Biannually
AN	- Annually
SA	- Semiannually
QT	- Quarterly
MO	- Monthly
BW	- Biweekly
WK	- Weekly

Figure 2-2. Sustainment Training Frequency Codes

- **Sustainment Training Skill Level column.** This column lists the skill levels of the MOS for which soldiers must receive sustainment training to ensure they maintain proficiency to soldier's manual standards.

2-2. SUBJECT AREA CODES.

Skill Level 2

- 1 General
- 2 CNR
- 3 MSE
- 4 TRI-TAC
- 5 Automation

Skill Level 3

- 1 General
- 2 CNR
- 3 MSE
- 4 TRI-TAC
- 5 Automation

2-3. CRITICAL TASKS LIST.

MOS TRAINING PLAN

CRITICAL TASKS

Subject Area	Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
Skill Level 2					
1. General	113-312-5001	Plan Platoon Level Wire/Cable Support	OBC	OT	1-2
	113-427-5001	Provide Signal Support to Non-Signal Units	OBC	OT	1-2
2. CNR	113-485-5001	Provide Single Channel Radio Communications Support	OBC	OT	1-2
3. MSE	113-525-5001	Plan Node Center/Large Extension Node Installation	OBC	OT	1-2
	113-525-5002	Manage Node Center/Large Extension Node	OBC	OT	1-2
4. TRI-TAC	113-522-5001	Manage Installation of the AN/TTC-39(*)	OBC	OT	1-2
5. Automation	113-397-5001	Manage the implementation of Information Security	OBC	OT	1-2
	113-407-5001	Plan a Local Area Network (LAN)	OBC	OT	1-2
	113-407-5002	Direct the Installation/Operation/Maintenance of a Local Area Network (LAN)	OBC	OT	1-2
	113-484-5001	Operate a Computer System	OBC	OT	1-2
	113-493-5001	Manage Unit Automation Equipment	OBC	OT	1-2
Skill Level 3					
1. General	113-312-6001	Manage Wire/Cable Support	OAC	OT	3-4
	113-427-6001	Manage Signal Support to Non-Signal Units	OAC	OT	3-4
2. CNR	113-485-6001	Plan Single Channel Radio Communications Networks	OAC	OT	3-4
	113-485-6002	Manage Single Channel Radio Communications Networks	OAC	OT	3-4
3. MSE	113-413-6002	Manage an EAC Network	OAC	OT	3-4
	113-525-6001	Manage an ECB Network	OAC	OT	3-4
	113-525-6002	Plan an ECB Network	OAC	OT	3-4
	113-525-6003	Plan the Installation of an ECB Node Center/Large Extension Node (LEN)	OAC	OT	3-4

CRITICAL TASKS

Subject Area	Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
4. TRI-TAC	113-340-6001	Plan the Installation of an EAC Area Node	OAC	OT	3-4
	113-413-6001	Plan an Echelons Above Corps (EAC) Network	OAC	OT	3-4
5. Automation	113-407-6001	Manage a Local Area Network (LAN)	OAC	OT	3-4

CHAPTER 3**MOS/Skill Level Tasks**

Skill Level 2

Subject Area 1: General

Provide Signal Support to Non-Signal Units**113-427-5001**

Conditions: Given assigned personnel and equipment, OPORD/FRAGO, Unit SOP, and applicable regulations and publications.

Standards: The supported units communicated IAW the OPORD/FRAGO, Unit SOP, and existing guidance and directives.

Performance Steps

1. Identify Connectivity Requirements for the Army Battlefield Command System (ABCS).
2. Conduct Communications Operations in an Electronic Warfare (EW) Environment.
3. Troubleshoot a COMSEC Mismatch of an AN/VRC-97.
4. Restore MSE User Terminals.
5. Plan Communications for Tactical Command Posts.
6. Knowledge of Non-Signal Units.
7. Use Unit METL.
8. Skills and Knowledge of Telephone Control Officer (TCO), COMSEC Custodian, Automation, TMDE, Calibration, ANCD, and SME for Signal Training.
9. Provide Communications Support Using Radio Set Control Group AN/VRC-12 Series Radios.
10. Plan Communications Support Using Tactical Telephone Systems.
11. Determine the Initialization Information for EPLRS Devices/Database.
12. Provide Communications Support Using Tactical Wire or Cable Systems.
13. Knowledge of CNRI Systems.
14. Direct a Net Control Station Operation.
15. Plan Electronic Key Variable Netting Combat Net and Electronic Remote Fill (ERF).
16. Provide Installation, Operation, and Maintenance Support to the Users of Single Channel Ground and Airborne Radio Systems (SINCGARSs).
17. Understand Capabilities and Limitations of MSE.
18. Use Automated and Manual LOS Profiling.
19. Manage COMSEC Material, Equipment, and Accounts.
20. Provide Communications Support Using Intercommunication Set AN/VIC-1/3.

Performance Steps

21. Prepare Signal Estimates, Plans, and Orders.
22. Prepare Signal Annex to Non-Signal Unit OPORD in Support of Military Decision-Making Process (MDMP).
23. Plan for the Use of Field Expedient Antennas.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Provided Communications Support Using Radio Set Control Group AN/VRC-12 Series Radios.	—	—
2. Directed a Net Control Station Operation.	—	—
3. Provided Installation, Operation, and Maintenance Support to the Users of SINCGARSS.	—	—
4. Provided Communications Support Using Intercommunication Set AN/VIC-1/3.	—	—
5. Prepared Signal Estimates, Plans, and Orders.	—	—
6. Prepared Signal Annex to Non-Signal Unit OPORD in Support of the MDMP.	—	—

References

Required

- AR 190-13
- AR 25-1
- AR 350-41
- AR 380-19
- AR 380-40
- AR 380-5
- AR 380-67
- AR 381-11
- AR 381-14
- AR 700-139
- AR 710-2
- AR 735-5
- AR 750-1
- AR 750-43
- DA PAM 25-1-1
- DA PAM 25-380-2
- DA PAM 350-40
- DA PAM 738-750
- FM 100-10
- FM 100-103
- FM 100-15
- FM 100-6
- FM 101-5
- FM 1-100
- FM 1-111
- FM 1-112
- FM 11-32
- FM 11-43
- FM 11-50
- FM 11-55
- FM 17-95
- FM 24-33

Related

References**Required**

FM 25-100
FM 3-0
FM 3-101
FM 3-19.30
FM 34-10
FM 34-25
FM 44-100
FM 44-64
FM 5-100
FM 6-02.40
FM 6-20-30
FM 6-20-40
FM 6-20-50
FM 63-2
FM 63-21
FM 63-3
FM 71-100
FM 71-123
FM 71-2
FM 71-3
FM 7-20
FM 7-30
FM 90-13
FM 90-3
FM 90-5
SB 11-6
STANAG-4206 ED.2
STANAG-4212 ED.2
STANAG-4214 ED.1(1)
TB 380-41
TB 43-180
TC 24-20
TM 11-5800-216-10-4
TM 11-5820-401-10-1
TM 11-5820-401-10-1-HR
TM 11-5820-401-10-2
TM 11-5820-890-10-1
TM 11-5820-890-10-2
TM 11-5820-890-10-3
TM 11-5820-890-10-4
TM 11-5820-890-10-7
TM 11-5825-283-10
TM 11-5830-263-10
TM 11-5830-340-12

Related

**Plan Platoon Level Wire/Cable Support
113-312-5001**

Conditions: Given the OPORD/FRAGO with site and engineering data, applicable SOPs, map, applicable regulations and publications, personnel, and equipment listing.

Standards: The Platoon Leader established a wire and cable plan that supported user connectivity requirements IAW the OPORD/FRAGO and applicable SOPs.

Performance Steps

1. Identify User Requirements.
2. Plan for Connectivity of Remote Multiplexer Combiner, TD Line Termination Unit, and NATO Analog Interface Unit (NAIU).
3. Adequately Organize Personnel (Troop Leading Procedures).
4. Use Knowledge of Line Loss.
5. Determine Communications Requirements for Joint/Combined Operations.
6. Plan Communications Support Using a Tactical Telephone.
7. Manage a Data Network (TPN).
8. Plan Communications Support Using Tactical Message Terminals.
9. Plan Communications Support Using the Tri-Service Tactical Communications Switching Network (Voice and Message).
10. Plan Network Support Using Transmission Systems.
11. Plan Communications Support Using a Wire/Cable System.
12. Develop Network Planning and Engineering Input to Signal Estimate.
13. Plan CNRI Systems.
14. Identify Major Components, Capabilities, and Limitations of Tropospheric Scatter Communications Systems.
15. Provide Communications Support Using Tropospheric Scatter Communications Systems.
16. Supervise the Planning, Designing, and Layout of Tropospheric Scatter Communications Systems.
17. Provide Communications Support Using the Tri-Service Tactical Communications AN/TTC-39 (PS) Switching Network.
18. Manage COMSEC Material, Equipment, and Accounts.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Identified User Requirements.	—	—
2. Determined Communications Requirements for Joint/Combined Operations.	—	—
3. Developed Network Planning and Engineering Input to Signal Estimate.	—	—
4. Identified Major Components, Capabilities, and Limitations of Tropospheric Scatter Communications Systems.	—	—

Performance Measures	<u>GO</u>	<u>NO GO</u>
5. Provided Communications Support Using Tropospheric Scatter Communications Systems.	—	—
6. Provided Communications Support Using the Tri-Service Tactical Communications AN/TTC-39 (PS) Switching Network.	—	—
7. Managed COMSEC Material, Equipment, and Accounts.	—	—

References

Required	Related
AR 380-40	
ARTEP 11-065-MTP	
ARTEP 11-067-30-MTP	
FM 100-16	
FM 11-24	
FM 11-41	
FM 11-43	
FM 11-50	
FM 11-55	
FM 24-1	
FM 24-12	
FM 24-16	
FM 24-17	
FM 24-22	
FM 24-24	
FM 24-7	
GTA 11-04-022	
GTA 11-10-50	
GTA 11-4-23	
STP 11-31L13-SM-TG	
TATS 621-31L10(F)	
TB 380-41	
TC 24-20	
TM 11-5805-695-12	
TM 11-5805-706-12	
TM 11-5805-707-12	
TM 11-5805-749-12	
TM 11-5810-292-13&P	

Subject Area 2: CNR

**Provide Single Channel Radio Communications Support
113-485-5001**

Conditions: Given an OPORD/OPLAN, Unit SOP, applicable references, and authorized equipment and personnel.

Standards: Established and maintained the Single Channel Radio Communications Network IAW the OPORD/OPLAN, met mission requirements, and subscribers were able to access and use the system during operations.

Performance Steps

1. Identify Communications Requirements for Single Channel Networks.
2. Prepare Network Diagram for TACSAT, IHFR, FM, NTDRS, JTRS, and EPLRS, as Required.
3. Determine Frequency Requirements at ECB.
4. Produce/Distribute SOI Using JACES.
5. Prepare Contingency Plans.
6. Plan for Retransmission Operations.
7. Supervise Signal Security Measures.
8. Identify Major Components, Capabilities, and Limitations, with User Responsibilities for the Installation, Operation, and Maintenance of IHFR.
9. Supervise the Planning, Designing, and Layout of an IHFR Network.
10. Provide Communications Support Using High Frequency (HF) or Very High Frequency (VHF) Antenna Systems.
11. Identify Major Components, Capabilities, and Limitations of a Single Channel Tactical Satellite System.
12. Provide Communications Support Using a Single Channel Satellite System.
13. Prepare Signal Annex to Non-Signal OPORD.
14. Identify Major Components, Capabilities, and Limitations of an FM.
15. Plan the Installation of an FM Network.
16. Provide Communications Support Using an FM Network.
17. Provide Communications Support Using an IHFR System.
18. Manage COMSEC Material, Equipment, and Accounts.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Produced/Distributed SOI Using JACES.	—	—
2. Prepared Network Diagram for TACSAT, IHFR, FM, NTDRS, JTRS, and EPLRS, as Required.	—	—
3. Prepared Contingency Plans.	—	—

Performance Measures

	<u>GO</u>	<u>NO GO</u>
4. Identified Major Components, Capabilities, and Limitations, with User Responsibilities for the Installation, Operation, and Maintenance of IHFR.	—	—
5. Identified Major Components, Capabilities, and Limitations of a Single Channel Satellite System.	—	—
6. Prepared Signal Annex to Non-Signal OPORD.	—	—
7. Identified Major Components, Capabilities, and Limitations of an FM.	—	—

References**Required****Related**

AR 25-1
 AR 380-40
 FM 100-16
 FM 100-6
 FM 1-100
 FM 11-32
 FM 11-41
 FM 11-43
 FM 11-44
 FM 11-45
 FM 11-50
 FM 11-665
 FM 11-668
 FM 24-1
 FM 24-11
 FM 24-12
 FM 24-17
 FM 24-18
 FM 24-19
 FM 24-2
 FM 24-22
 FM 24-24
 FM 24-33
 FM 24-35
 FM 24-35-1
 FM 24-7
 FM 3-05.20
 FM 34-45
 FM 71-100
 FM 7-98
 FM 90-3
 FM 90-31
 FM 90-5
 GTA 11-3-29
 GTA 11-3-30
 GTA 11-3-31
 JCS PUB 6-05
 JCS PUB 6-05.1
 JCS PUB 6-05.6
 MF 11-5670
 NMT-12
 NTDR-12
 STP 11-31C13-SM-TG

References

Required

STP 11-31U14-SM-TG
TATS 101-31U10(F)
TATS 201-31C10(F)
TB 380-41
TC 24-21
TM 11-5820-401-10-1
TM 11-5820-520-10
TM 11-5820-890-10-1
TM 11-5820-923-12
TM 11-5820-924-13

Related

Subject Area 3: MSE

Manage Node Center/Large Extension Node**113-525-5002**

Conditions: Given the OPORD/FRAGO with site and engineering data, Unit SOP, map, compass, applicable regulations and publications, assigned equipment and personnel, and approved site diagram.

Standards: The Platoon Leader established and maintained the Node Center/Large Extension Node (LEN) using appropriate force protection measures and met connectivity requirements IAW the Unit SOP and OPORD/FRAGO.

Performance Steps

1. Direct Installation.
2. Evaluate Grounding Systems.
3. Prepare a Tactical Power Distribution Plan for Communications Support Using Power Generation Equipment.
4. Direct Operation.
5. Address Subscriber Requirements (LEN).
6. Manage Small Extension Node/Remote Radio Access Unit (RAU).
7. Implement Battle Tracking.
8. Direct Maintenance.
9. Analyze and Send Reports (R1 through R6).
10. Sustain the Site.
11. Plan for Reconfiguration.
12. Conduct Signal Site Reconnaissance (Recon).
13. Plan for Signal Site Defense.
14. Plan for Change of Mission.
15. Prepare a Power Distribution Plan.
16. Operate an FM Net.
17. Conduct Over-the-Air-Rekey.
18. Direct Signal Site Security (Force Protection).
19. Identify METT-T and Maneuver Unit Intent.
20. Manage COMSEC Material, Equipment, and Accounts.
21. Produce a FRAGO with Graphics.
22. Plan the Displacement of a Node Center.
23. Node Management Facility (NMF).
24. Supervise the Installation and Operation of the AN/TYC-39.

Performance Steps

- 25. Conduct Leaders Recon.
- 26. Ensure Validity of Engineering Data.
- 27. Plan the Modification of a Node Center and LEN Switch Database.
- 28. Provide Communications Support Using Mobile Subscriber Terminals.
- 29. Supervise the Installation, Operation, and Maintenance of the SEN(V)1/2.
- 30. Troubleshoot a COMSEC Mismatch of the AN/VRC 97.
- 31. Provide Communications Support Using Super High Frequency (SHF).
- 32. Provide Communications Support Using the Tactical Wire/Cable.
- 33. Coordinate Tactical Wire/Cable Support.
- 34. Describe Interaction Between MSRT and RAU.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Prepared a Tactical Power Distribution Plan for Communications Support Using Power Generation Equipment.	—	—
2. Analyzed and Sent Reports (R1 through R6).	—	—
3. Conducted Signal Site Reconnaissance.	—	—
4. Prepared a Power Distribution Plan.	—	—
5. Operated an FM Net.	—	—
6. Conducted Over-the-Air-Rekey.	—	—
7. Directed Signal Site Security (Force Protection).	—	—
8. Developed a FRAGO with Graphics.	—	—
9. Provided Communications Support Using Mobile Subscriber Terminals.	—	—
10. Supervised the Installation, Operation, and Maintenance of the SEN(V)1/2.	—	—
11. Troubleshoot a COMSEC Mismatch of the AN/VRC 97.	—	—
12. Provided Communications Support Using the Tactical Wire/Cable.	—	—

References

Required	Related
AR 25-1	
AR 25-30	
AR 310-25	
AR 310-50	
AR 380-19	
AR 380-40	
AR 380-5	
AR 5-12	
CJCSM 6231.07	
FM 100-15	
FM 100-16	
FM 101-5	

References**Required**

FM 101-5-1
FM 11-32
FM 11-41
FM 11-43
FM 11-50
FM 11-55
FM 12-6
FM 24-1
FM 24-11
FM 24-17
FM 24-18
FM 24-22
FM 24-24
FM 24-33
FM 24-35
FM 25-100
FM 3-0
FM 6-02.40
FM 71-100
GTE REFERENCE GUIDE
JOINT PUB 0-2
JOINT PUB 1
SR-43A
SR-45
STANAG-5040 ED.3(3)
STANAG-5042 ED.1(5)
TC 24-20
TM 11-5800-216-10-1
TM 11-5800-216-10-2
TM 11-5800-216-10-3
TM 11-5800-216-10-4

Related

Plan Node Center/Large Extension Node Installation
113-525-5001

Conditions: Given the OPORD/FRAGO with site and engineering data, Unit SOP, map, compass, applicable regulations and publications, equipment, and personnel listing.

Standards: The Platoon Leader developed an Installation Plan that met the requirements of the Unit OPORD/FRAGO and was approved by the commander.

Performance Steps

1. Understand and Use METT-T and Maneuver Unit Intent.
2. Produce a FRAGO with Graphics.
3. Implement Leaders Recon.
4. Ensure Validity of Engineering Data.
5. Supervise the Installation and Operation of a LEN.
6. Supervise the Installation and Operation of a Node Center.
7. Supervise the Installation and Operation of a Contingency Communication Package.
8. Manage COMSEC Material, Equipment, and Accounts.
9. Plan Communications Requirements in Support of Subscriber Requirements.
10. Plan Communications Requirements Using MSE Network (VHF, UHF, SHF).
11. Identify Major Components, Capabilities, and Limitations of MSE.
12. Determine LOS Profile without Automated Tools or with NPT.
13. Plan CNRI Systems.
14. Plan Communications Support Using Range Extension Systems.
15. Develop Net Planning and Engineering Input for Signal Estimate.
16. Develop Net Planning and Engineering Input for Signal OPLAN.
17. Plan Communications Requirements Using WIN-T.
18. Manage a TPN.
19. Identify Major Components, Capabilities, and Limitations of a Tactical Satellite.
20. Identify Major Components, Capabilities, and Limitations of an FM.
21. Plan a Single Channel Radio Communications Net.
22. Provide Installation, Operation, and Maintenance Support to the Users of SINCGARSS.
23. Plan an FM Voice Communications Net.
24. Analyze Radio Frequency Interference Problems.
25. Supervise Net Control Station Operations.
26. Employ CNRI Systems.

Performance Steps

- 27. Plan Small Extension Node/Remote RAU Installation.
- 28. Manage COMSEC Material, Equipment, and Accounts.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Developed a FRAGO with Graphics.	—	—
2. Determined LOS Profile with NPT.	—	—
3. Determined LOS Profile without Automated Tools.	—	—
4. Developed Net Planning and Engineering Input for Signal Estimate.	—	—
5. Developed Net Planning and Engineering Input for Signal OPLAN.	—	—
6. Provided Installation, Operation, and Maintenance Support to the Users of SINCGARSs.	—	—
7. Employed CNRI Systems.	—	—
8. Managed COMSEC Material, Equipment, and Accounts.	—	—

References

Required	Related
AR 25-1	
AR 25-30	
AR 310-25	
AR 310-50	
AR 380-19	
AR 380-40	
AR 380-5	
AR 5-12	
CJCSM 6231.07	
FM 100-15	
FM 100-20	
FM 101-5	
FM 101-5-1	
FM 11-32	
FM 11-41	
FM 11-43	
FM 11-50	
FM 11-55	
FM 12-6	
FM 24-1	
FM 24-11	
FM 24-17	
FM 24-18	
FM 24-22	
FM 24-24	
FM 24-33	
FM 24-35	
FM 25-100	
FM 3-0	
FM 6-02.40	
FM 71-100	
GTE REFERENCE GUIDE	

References

Required

JOINT PUB 0-2

JOINT PUB 1

SR-43A

SR-45

STANAG-5040 ED.3(3)

STANAG-5042 ED.1(5)

TC 24-20

TM 11-5800-216-10-1

TM 11-5800-216-10-2

TM 11-5800-216-10-3

TM 11-5800-216-10-4

Related

Subject Area 4: TRI-TAC

Manage Installation of the AN/TTC-39(*)**113-522-5001**

Conditions: Given the OPORD/FRAGO with site and engineering data, Unit SOP, map, compass, applicable regulations and publications, assigned equipment and personnel, and approved site diagram.

Standards: The Platoon Leader established and maintained the AN/TTC-39(*) using appropriate force protection measures and met connectivity requirements IAW the Unit SOP and OPORD/FRAGO.

Performance Steps

1. Direct the Installation of the AN/TTC-39(D).
2. Direct the Operation of the AN/TTC-39(D).
3. Direct Troubleshooting of the AN/TTC-39(D).
4. Direct the Maintenance of the AN/TTC-39(D).
5. Determine Communications Requirements for Joint/Combined Operations.
6. Plan Communications Support Using a Tactical Telephone.
7. Manage a TPN.
8. Plan Communications Support Using Tactical Message Terminals.
9. Plan Communications Support Using Tri-Service.
10. Plan Tactical Communications Switching Network (Voice and Message).
11. Plan Network Support Using Transmission Systems.
12. Plan Communications Support Using a Wire/Cable System.
13. Develop Network Planning and Engineering Input to Signal Estimate.
14. Develop Network Planning and Engineering Input to Signal OPLAN.
15. Plan CNRI Systems.
16. Identify Major Components, Capabilities, and Limitations of Tropospheric Scatter Communications Systems.
17. Provide Communications Support Using Tropospheric Scatter Communications Systems.
18. Supervise the Planning, Designing, and Layout of Tropospheric Scatter Communications Systems.
19. Provide Communications Support Using Tri-Service Tactical Communications AN/TTC -39 (PS) Switching Network.
20. Manage COMSEC Material, Equipment, and Account.

NOTE: AN/TTC-39(*) Identifies All Versions of the AN/TTC-39.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Directed the Installation of the AN/TTC-39(D).	—	—
2. Directed the Operation of the AN/TTC-39(D).	—	—
3. Directed Troubleshooting of the AN/TTC-39(D).	—	—
4. Directed the Maintenance of the AN/TTC-39(D).	—	—
5. Developed Network Planning and Engineering Input to Signal Estimate.	—	—
6. Developed Network Planning and Engineering Input to Signal OPLAN.	—	—
7. Provided Communications Support Using the Tri-Service Tactical Communications AN/TTC -39 (PS) Switching Network.	—	—

NOTE: AN/TTC-39(*) Identifies All Versions of the AN/TTC-39.

References

Required	Related
AR 380-40	
AR 380-5	
ARTEP 11-435-MTP	
ARTEP 11-437-30-MTP	
FM 100-16	
FM 101-5	
FM 11-32	
FM 11-41	
FM 11-43	
FM 11-45	
FM 11-50	
FM 11-55	
FM 20-3	
FM 24-1	
FM 24-12	
FM 24-16	
FM 24-17	
FM 24-22	
FM 24-24	
FM 24-27	
FM 24-33	
FM 24-35	
FM 24-35-1	
FM 24-7	
FM 3-19.30	
FM 3-25.26	
FM 7-98	
GTA 11-04-022	
GTA 11-10-50	
GTA 11-4-23	
GTA 11-4-24	
GTE REFERENCE GUIDE	
JCS PUB 6-05	
JCS PUB 6-05.1	
JCS PUB 6-05.6	
STP 11-31F13-SM-TG	

References

Required

STP 11-31L13-SM-TG
TATS 621-31L10(F)
TB 380-40
TB 380-41
TB 43-0129
TC 24-20
TC 24-21
TM 11-5805-695-12
TM 11-5805-706-12
TM 11-5805-707-12
TM 11-5805-749-12
TM 11-5810-292-13&P

Related

Subject Area 5: Automation

Manage the implementation of Information Security

113-397-5001

Conditions: As an Information Systems Security Officer (ISSO), given applicable regulations and publications, assigned personnel and an Information Security Plan.

Standards: Is met when information security procedures are implemented in compliance with security policies, directives and regulations.

Performance Steps

1. Recognize an information security attack.
2. Respond to the attack.
3. Execute notification procedures.
4. Provide Virus Protection Measures.
5. Implement Password Protection Measures.
6. Update network operating system.
7. Develop/validate accreditation plan.
8. Develop/validate unit information management SOP
9. Train personnel on information security.
10. Monitor information security measures.

Performance Measures

1. Respond to the attack.
2. Execute notification procedures.
3. Implement Password Protection Measures.
4. Develop/validate accreditation plan.
5. Develop/validate unit information management SOP

<u>GO</u>	<u>NO GO</u>
—	—
—	—
—	—
—	—
—	—

References

Required
 FM 24-7
 ISBN 1562763644

Related

Operate a Computer System

113-484-5001

Conditions: Given a computer system, software, network access, applicable reference manuals, and Unit Automation SOP.

Standards: The system was functional and maintained IAW regulations and guidance, and the user was able to perform assigned tasks.

Performance Steps

1. Assemble System Components.
2. Power-up System and Peripherals.
3. Install and Configure Operating System and Applications Software.
4. Create Documents Using Word Processing, Spreadsheet, Database, and Graphics Software.
5. Process E-mail.
 - a. Start E-mail Program.
 - b. Prepare E-mail Message.
 - c. Send an E-mail Message.
 - d. Receive an E-mail Message.
6. Transfer Files Between Computers.
 - a. Log onto the Host Computer.
 - b. Upload Files to the Host Computer.
 - c. Download Files from the Host Computer.
 - d. Log off of the Host Computer.
7. Remove Computer Viruses.
 - a. Perform Virus Checks on Hard Drive and Disks.
 - b. Remove all Viruses IAW Specific Antivirus Software and Unit SOP.
 - c. Report Virus IAW SOP.
8. Perform Disk Maintenance.
 - a. Scan Disk for Errors.
 - b. Repair Disk as Required.
 - c. Defragment Disk.
9. Back Up Computer Files.
 - a. Duplicate System Files.
 - b. Duplicate Data Files.
 - c. Duplicate Entire File System for Emergency Restoration.
10. Restore Computer Files.
 - a. Recover Files.
 - b. Read and Utilize Backup Files
11. Power Down the System and Peripherals.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Assembled System Components.	—	—
2. Powered Up System and Peripherals.	—	—
3. Installed and Configured Operating System and Applications Software.	—	—

Performance Measures	<u>GO</u>	<u>NO GO</u>
4. Created Documents Using Word Processing, Spreadsheet, Database, and Graphics Software.	—	—
5. Processed E-mail.	—	—
a. Started E-mail Program.		
b. Prepared E-mail Message.		
c. Sent an E-mail Message.		
d. Received an E-mail Message.		
6. Transferred Files Between Computers.	—	—
a. Logged onto the Host Computer.		
b. Uploaded Files to the Host Computer.		
c. Downloaded Files from the Host Computer.		
d. Logged off of the Host Computer.		
7. Removed Computer Viruses.	—	—
a. Performed Virus Checks on Hard Drive and Disks.		
b. Removed all Viruses IAW Specific Antivirus Software and Unit SOP.		
c. Reported Virus IAW SOP.		
8. Performed Disk Maintenance.	—	—
a. Scanned Disk for Errors.		
b. Repaired Disk as Required.		
c. Defragmented Disk.		
9. Backed Up Computer Files.	—	—
a. Duplicated System Files.		
b. Duplicated Data Files.		
c. Duplicated Entire File System for Emergency Restoration.		
10. Restored Computer Files.	—	—
a. Recovered Files.		
b. Read and Utilized Backup Files.		
11. Powered Down the System and Peripherals.	—	—

References

Required

- ISBN 0072122269
- ISBN 0072337451
- ISBN 0782122612
- ISBN 0789710536
- ISBN 1562057685
- ISBN 1562763644

Related

Direct the Installation/Operation/Maintenance of a Local Area Network (LAN)

113-407-5002

Conditions: Given the approved LAN diagram/plan, using the Unit Automation Information Systems Plan, assigned personnel, hardware, applicable regulations and publications, OPORD/OPLAN, Unit SOP, appropriate COTS hardware and software documentation, and local command directives.

Standards: Operated and maintained the LAN IAW the approved LAN diagram/plan.

Performance Steps

1. Ensure Procurement of Equipment.
2. Install and Configure a Networking Operating System.
3. Configure Client Computers.
4. Direct the Installation of the LAN.
5. Direct the Operation of the LAN.
6. Direct the Installation, Operation, and Maintenance of the LAN.
7. Perform System Administrator Functions.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Procured Equipment.	—	—
2. Installed and Configured a Networking Operating System.	—	—
3. Configured Client Computers.	—	—
4. Directed the Installation of the LAN.	—	—
5. Directed the Operation of the LAN.	—	—
6. Directed Troubleshooting of the LAN.	—	—
7. Directed the Installation, Operation, and Maintenance of the LAN.	—	—
8. Performed System Administrator Functions.	—	—

References

Required

- ISBN 0072122269
- ISBN 0072337451
- ISBN 0782122612
- ISBN 1562057499
- ISBN 1562057685
- ISBN 1562763644

Related

- ISBN 0789710536

Manage Unit Automation Equipment
113-493-5001

Conditions: Given an approved Automation Distribution Plan, Unit automation equipment, assigned personnel, applicable regulations and publications, and the Unit Automation SOP.

Standards: Distributed and maintained the Unit automation equipment IAW user requirements and applicable regulations and publications.

Performance Steps

1. Develop/Modify and Gain Approval of a Distribution Plan.
2. Analyze Unit Automation Requirements.
3. Acquire Assets.
4. Identify Purchasing Methods.
5. Validate Purchase Requests.
6. Distribute Assets.
7. Maintain Assets.
8. Supervise UML of Equipment.
9. Supervise Proper Procedures for Troubleshooting Equipment.
10. Dispose of Assets.
11. Identify Excess Equipment.
12. Supervise the Transfer or Turn-in of Excess Equipment.
13. Configure Hardware/Software to Meet User Requirements.
14. Train Personnel in the Operation and Employment of Equipment.
15. Manage Unit Automation Procedures.
16. Periodically Inspect Automation Operations to Ensure Compliance with Unit Automation SOP.
17. Provide Written Results to the Unit Commander.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Developed/Modified and Gained Approval of a Distribution Plan.	—	—
2. Acquired Assets.	—	—
3. Distributed Assets.	—	—
4. Identified Excess Equipment.	—	—
5. Configured Hardware/Software to Meet User Requirements.	—	—
6. Trained Personnel in the Operation and Employment of Equipment.	—	—
7. Provided Written Results to the Unit Commander.	—	—

References

Required

ISBN 0072122269
ISBN 0072337451
ISBN 0782122612
ISBN 0789710536
ISBN 1562057685
ISBN 1562763644

Related

Plan a Local Area Network (LAN)

113-407-5001

Conditions: Given the Unit Automation Information Systems Plan, applicable regulations and publications, OPORD/OPLAN, Unit SOP, appropriate COTS hardware and software documentation, and local command directives.

Standards: The LAN diagram/plan met the requirements of the Unit OPORD/OPLAN, and the commander approved the plan.

Performance Steps

1. Assess Requirements for Network's Servers/Client Computers.
 - a. Determine What Type of Network will Best Serve the User's Needs Based on Bandwidth Requirements.
 - b. Determine Gateway Network Interface.
 - c. Assess Requirements for Network Hardware.
2. Design Network Diagram.
 - a. Determine if Network Management Utilities are Required.
3. Determine Procurement Procedures for Hardware and Software.
4. Assess Network Security Requirements.
5. Determine What Type of Tactical Network/Network Interface will be Used.
6. Determine Connectivity Requirements.
7. Determine Network Encryption Requirements.
8. Determine What Type of Services are Required Based on Bandwidth Requirements.
9. Coordinate with Signal Battalion and Brigade Network Planners to Ensure Requirements are Met.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Assessed Requirements for Network's Servers/Client Computers.	—	—
2. Designed Network Diagram.	—	—
3. Determined Procurement Procedures for Hardware and Software.	—	—
4. Assessed Network Security Requirements.	—	—

References

Required	Related
ISBN 0072122269	
ISBN 0072337451	
ISBN 0782122612	
ISBN 0789710536	
ISBN 1562057499	
ISBN 1562057685	
ISBN 1562763644	

Skill Level 3
Subject Area 1: General

Manage Signal Support to Non-Signal Units
113-427-6001

Conditions: Given assigned personnel and equipment, OPORD/FRAGO, Unit SOP, and applicable regulations and publications.

Standards: The supported units could communicate IAW the OPORD/FRAGO, Unit SOP, and directives.

Performance Steps

1. Identify Connectivity Requirements for ABCS.
2. Troubleshoot a COMSEC Mismatch of an AN/VRC-97.
3. Restore MSE User Terminals.
4. Plan Communications for Tactical Command Posts.
5. Gain Knowledge of Non-Signal Units.
6. Use Unit METL.
7. Skills and Knowledge of Telephone Control Officer (TCO), COMSEC Custodian, Automation, TMDE, Calibration, ANCD, and SME for Signal Training.
8. Plan Communications Support Using Tactical Telephone Systems.
9. Determine the Initialization Information for EPLRS Devices/Database.
10. Provide Communications Support Using Tactical Wire or Cable Systems.
11. Gain Knowledge of CNRI Systems.
12. Direct a Net Control Station Operation.
13. Plan Electronic Key Variable Netting Combat Net and Electronic Remote Fill (ERF).
14. Provide installation, Operation, and Maintenance Support to the Users of SINCGARSs.
15. Understand Capabilities and Limitations of MSE.
16. Use Automated and Manual LOS Profiling.
17. Manage COMSEC Material, Equipment, and Accounts.
18. Provide Communications Support Using Intercommunication Set AN/VIC-1/3.
19. Prepare Signal Estimates, Plans, and Orders.
20. Prepare Signal Annex to Non-Signal Unit OPORD in Support of the MDMP.

Performance Measures

- | | <u>GO</u> | <u>NO GO</u> |
|--|-----------|--------------|
| 1. Identified Connectivity Requirements for ABCS. | — | — |
| 2. Conducted Communications Operations in an EW Environment. | — | — |
| 3. Troubleshoot a COMSEC Mismatch of an AN/VRC-97 MDMP. | — | — |

Performance Measures	<u>GO</u>	<u>NO GO</u>
4. Restored MSE User Terminals.	—	—
5. Provided Communications Support Using Radio Set Control Group AN/VRC-12 Series Radios.	—	—
6. Provided Communications Support Using Tactical Wire or Cable Systems.	—	—
7. Provided installation, Operation, and Maintenance Support to the Users of SINCGARSs.	—	—
8. Provided Communications Support Using Intercommunication Set AN/VIC-1/3.	—	—
9. Prepared Signal Estimates, Plans, and Orders.	—	—
10. Prepared Signal Annex to Non-Signal Unit OPORD in Support of the MDMP.	—	—

References

Required	Related
AR 190-13	
AR 25-1	
AR 350-41	
AR 380-19	
AR 380-40	
AR 380-5	
AR 380-67	
AR 381-11	
AR 381-14	
AR 700-139	
AR 710-2	
AR 735-5	
AR 750-1	
AR 750-43	
DA PAM 25-1-1	
DA PAM 25-16	
DA PAM 25-380-2	
DA PAM 350-40	
DA PAM 738-750	
FM 100-10	
FM 100-103	
FM 100-15	
FM 100-6	
FM 101-5	
FM 1-100	
FM 1-111	
FM 1-112	
FM 11-32	
FM 11-43	
FM 11-55	
FM 17-95	
FM 24-33	
FM 25-100	
FM 3-0	
FM 3-101	
FM 3-19.30	
FM 34-10	
FM 34-25	

References**Required**

FM 44-100
FM 5-100
FM 6-02.40
FM 6-20-30
FM 6-20-40
FM 6-20-50
FM 63-2
FM 63-21
FM 63-3
FM 71-100
FM 71-2
FM 71-3
FM 7-20
FM 7-30
FM 90-13
FM 90-3
FM 90-5
SB 11-6
STANAG-4206 ED.2
STANAG-4212 ED.2
STANAG-4214 ED.1(1)
TB 380-41
TB 43-180
TC 24-20
TM 11-5800-216-10-4
TM 11-5820-401-10-1
TM 11-5820-401-10-1-HR
TM 11-5820-401-10-2
TM 11-5820-890-10-1
TM 11-5820-890-10-2
TM 11-5820-890-10-3
TM 11-5820-890-10-4
TM 11-5820-890-10-7
TM 11-5825-283-10
TM 11-5830-263-10
TM 11-5830-340-12

Related

Manage Wire/Cable Support
113-312-6001

Conditions: Given the OPORD/FRAGO with site and engineering data, Unit SOP, map, compass, applicable regulations and publications, assigned equipment and personnel, and approved site diagram.

Standards: Established and maintained the Wire and Cable Plan IAW the OPORD/FRAGO, and the Plan met mission requirements.

Performance Steps

1. Direct the Installation of the Tactical Cable/Wire.
2. Direct the Operation of the TD-1233, Remote Loop Group Multiplexer; TD-1234, Remote Multiplexer Combiner; and TD Line Termination Unit.
3. Direct Troubleshooting of the Tactical Cable/Wire.
4. Direct the Maintenance of the Tactical Cable/Wire.
5. Use NATO Analog Interface (NAI).

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Directed the Installation of the Tactical Cable/Wire.	—	—
2. Directed the Operation of the TD-1233, Remote Loop Group Multiplexer; TD-1234, Remote Multiplexer Combiner; and TD Line Termination Unit.	—	—
3. Directed Troubleshooting of the Tactical Cable/Wire.	—	—
4. Directed the Maintenance of the Tactical Cable/Wire.	—	—

References

Required	Related
AR 380-19	
AR 380-40	
ARTEP 11-065-MTP	
ARTEP 11-067-30-MTP	
FM 100-16	
FM 11-24	
FM 11-41	
FM 11-43	
FM 11-50	
FM 11-55	
FM 24-1	
FM 24-12	
FM 24-16	
FM 24-17	
FM 24-2	
FM 24-22	
FM 24-24	
FM 24-7	
GTA 11-04-022	
GTA 11-10-50	
GTA 11-4-23	
GTA 11-4-24	
STP 11-31L13-SM-TG	

References

Required

TATS 621-31L10(F)
TB 380-41
TC 24-20
TM 11-5805-695-12
TM 11-5805-706-12
TM 11-5805-707-12
TM 11-5805-749-12
TM 11-5810-292-13&P

Related

Subject Area 2: CNR

Manage Single Channel Radio Communications Networks
113-485-6002

Conditions: Given an OPORD/OPLAN, Unit SOP, assigned personnel and equipment, applicable references, and approved plan.

Standards: Established and maintained the Single Channel Radio Communications Network IAW the OPORD/OPLAN, met mission requirements, and subscribers were able to access and use the system during operations.

Performance Steps

1. Use Knowledge of Security Procedures.
2. Direct Installation.
3. Evaluate Grounding Systems.
4. Direct the Installation, Operation, and Maintenance of the AN/VRC-12 Series Radio.
5. Direct Operation.
6. Direct Maintenance.
7. Troubleshoot Network.
8. ANCD.
9. Manage an EPLRS Network.
 - a. Identify Communications Requirements for an EPLRS Network.
 - b. Supervise the Planning, Designing, and Layout of the EPLRS Network.
 - c. Determine Initialization Information for EPLRS Devices/Database.
 - d. Supervise the Establishment of the EPLRS Network.
 - e. Maintain the EPLRS Network.
10. Identify the Major Components, Capabilities, and Limitations, with User Responsibilities for the Installation, Operation, and Maintenance of IHFR.
11. Supervise the Planning, Designing, and Layout of an IHFR Network.
12. Provide Communications Support Using HF or VHF Antenna Systems.
13. Identify Major Components, Capabilities, and Limitations of Single Channel Satellite Systems.
14. Provide Communications Support Using Single Channel Satellite Systems.
15. Prepare Signal Annex to Non-Signal OPORD.
16. Identify Major Components, Capabilities, and Limitations of an FM.
17. Plan the Installation of an FM Network.
18. Manage COMSEC Material, Equipment, and Accounts.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Directed the Installation, Operation, and Maintenance of the AN/VRC-12 Series Radio.	—	—
2. Provided Communications Support Using Single Channel Satellite Systems.	—	—
3. Prepared Signal Annex to Non-Signal OPORD.	—	—
4. Managed COMSEC Material, Equipment, and Accounts.	—	—

References**Required**

AR 25-1
 AR 380-40
 FM 100-16
 FM 100-6
 FM 1-100
 FM 11-24
 FM 11-32
 FM 11-41
 FM 11-43
 FM 11-45
 FM 11-665
 FM 11-668
 FM 24-1
 FM 24-11
 FM 24-12
 FM 24-17
 FM 24-18
 FM 24-19
 FM 24-2
 FM 24-22
 FM 24-24
 FM 24-33
 FM 24-35
 FM 24-35-1
 FM 24-7
 FM 3-05.20
 FM 3-97.6
 FM 71-100
 FM 7-98
 FM 90-3
 FM 90-31
 FM 90-5
 GTA 11-3-29
 GTA 11-3-30
 GTA 11-3-31
 JCS PUB 6-05
 JCS PUB 6-05.1
 JCS PUB 6-05.6
 MF 11-5670
 NMT-12
 NTDR-12
 STP 11-31C13-SM-TG
 STP 11-31U14-SM-TG
 TATS 101-31U10(F)

Related

TB 380-41
 TM 11-5820-890-10-2

References

Required

TATS 201-31C10(F)
TC 24-21
TM 11-5820-1033-12
TM 11-5820-401-10-1
TM 11-5820-520-10
TM 11-5820-890-10-1
TM 11-5820-919-12
TM 11-5820-923-12
TM 11-5820-924-13

Related

**Plan Single Channel Radio Communications Networks
113-485-6001**

Conditions: Given an OPORD/OPLAN, Unit SOP, SOI, applicable references, equipment, and personnel listing.

Standards: Developed and approved the network diagram IAW OPORD/OPLAN in support of a contingency or exercise mission requirement.

Performance Steps

1. Identify Communications Requirements for Single Channel Networks.
2. Prepare Network Diagram for TACSAT, IHFR, FM, NTDRS, JTRS, and EPLRS, as Required.
3. Determine Frequency Requirements at ECB.
4. Produce/Distribute SOI Using JACES.
5. Prepare Contingency Plans.
6. Plan for Retransmission Operations.
7. Supervise Signal Security Measures.
8. Identify the Major Components, Capabilities, and Limitations, with User Responsibilities for the Installation, Operation, and Maintenance of IHFR.
9. Supervise the Planning, Designing, and Layout of an IHFR Network.
10. Provide Communications Support Using HF or VHF Antenna Systems.
11. Identify Major Components, Capabilities, and Limitations of a Single Channel Satellite System.
12. Provide Communications Support Using a Single Channel Satellite System.
13. Prepare Signal Annex to Non-Signal OPORD.
14. Identify Major Components, Capabilities, and Limitations of an FM.
15. Plan the Installation of an FM Network.
16. Provide Communications Support Using an FM Network.
17. Provide Communications Support Using an IHFR System.
18. Manage COMSEC Material, Equipment, and Accounts

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Prepared Network Diagram for TACSAT, IHFR, FM, NTDRS, JTRS, and EPLRS, as Required.	—	—
2. Produced/Distributed SOI Using JACES.	—	—
3. Prepared Contingency Plans.	—	—
4. Prepared Signal Annex to Non-Signal OPORD.	—	—

References

Required
AR 25-1

Related
TM 11-5820-890-10-1

References

Required

AR 380-40
DVC 11-41
FM 1-100
FM 11-24
FM 11-32
FM 11-41
FM 11-43
FM 11-45
FM 11-50
FM 11-665
FM 11-668
FM 24-1
FM 24-11
FM 24-12
FM 24-17
FM 24-18
FM 24-19
FM 24-2
FM 24-22
FM 24-24
FM 24-33
FM 24-35
FM 24-35-1
FM 24-7
FM 3-05.20
FM 34-40-7
FM 34-45
FM 71-100
FM 7-98
FM 90-3
FM 90-31
FM 90-5
GTA 11-3-29
GTA 11-3-30
GTA 11-3-31
JCS PUB 6-05
JCS PUB 6-05.1
JCS PUB 6-05.6
MF 11-5670
NMT-12
NTDR-12
STP 11-31C13-SM-TG
STP 11-31U14-SM-TG
TATS 101-31U10(F)
TATS 201-31C10(F)
TC 24-21
TM 11-5820-1033-12
TM 11-5820-401-10-1
TM 11-5820-520-10
TM 11-5820-919-40-1
TM 11-5820-923-12
TM 11-5820-924-13

Related

Subject Area 3: MSE

**Plan the Installation of an ECB Node Center/Large Extension Node (LEN)
113-525-6003**

Conditions: Given the OPORD/FRAGO with site and engineering data, Unit SOP, map, compass, applicable regulations and publications, and equipment and personnel listing.

Standards: The Installation Plan met the requirements of the Unit OPORD/FRAGO and was approved by the commander.

Performance Steps

1. Coordinate Company Level Assets.
2. Understand and Use METT-T and Maneuver Unit Intent.
3. Produce a FRAGO with Graphics.
4. Conduct Leaders Recon.
5. Ensure Validity of Engineering Data.
6. Supervise the Installation and Operation of a LEN.
7. Supervise the Installation and Operation of a Node Center.
8. Supervise the Installation and Operation of a Contingency Communication Package.
9. Manage COMSEC Material, Equipment, and Accounts.
10. Plan Communications Requirements in Support of Subscriber Requirements.
11. Plan Communications Requirements Using MSE Network (VHF, UHF, SHF).
12. Identify Major Components, Capabilities, and Limitations of MSE.
13. Determine LOS Profile with NPT.
14. Determine LOS Profile without Automated Tools.
15. Plan CNRI Systems.
16. Plan Communications Support Using Range Extension Systems.
17. Develop Net Planning and Engineering Input for Signal Estimate.
18. Develop Net Planning and Engineering Input for Signal OPLAN.
19. Plan Communications Requirements Using WIN-T.
20. Manage a TPN.
21. Identify Major Components, Capabilities, and Limitations of a Tactical Satellite.
22. Identify Major Components, Capabilities, and Limitations of an FM.
23. Plan a Single Channel Radio Communications Net.
24. Provide Installation, Operation, and Maintenance Support to the Users of SINCGARSs.
25. Plan an FM Voice Communications Net.

Performance Steps

- 26. Analyze Radio Frequency Interference Problems.
- 27. Supervise Net Control Station Operations.
- 28. Employ CNRI Systems.
- 29. Plan Small Extension Node/Remote RAU Installation.
- 30. Manage COMSEC Material, Equipment, and Accounts.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Developed a FRAGO with Graphics.	—	—
2. Determined LOS Profile with NPT.	—	—
3. Determined LOS Profile without Automated Tools.	—	—
4. Developed Net Planning and Engineering Input for Signal Estimate.	—	—
5. Developed Net Planning and Engineering Input for Signal OPLAN.	—	—
6. Provided Installation, Operation, and Maintenance Support to the Users of SINCGARs.	—	—
7. Employed CNRI Systems.	—	—
8. Managed COMSEC Material, Equipment, and Accounts.	—	—

References

Required	Related
AR 25-1	
AR 380-40	
AR 700-139	
AR 735-5	
DA PAM 25-1-1	
DA PAM 25-380-2	
FM 11-32	
FM 11-43	
FM 11-44	
FM 11-55	
FM 24-11	
FM 24-33	
FM 24-7	
GLOBAL REF GUIDE	
GTE REFERENCE GUIDE	
SB 11-6	
STANAG-4206 ED.2	
STANAG-4212 ED.2	
STANAG-4214 ED.1(1)	
TB 11-5820-890-12	
TB 380-41	
TC 24-20	
TM 11-5800-216-10-1	
TM 11-5800-216-10-2	
TM 11-5800-216-10-3	
TM 11-5800-216-10-4	
TM 11-5820-401-10-1	

References

Required

TM 11-5820-401-10-1-HR
TM 11-5820-401-10-2
TM 11-5820-890-10-1
TM 11-5820-890-10-2
TM 11-5820-890-10-3
TM 11-5830-263-10
TM 11-5830-340-12

Related

Plan an ECB Network
113-525-6002

Conditions: Given subscriber requirements, automated network planning tools, workstation and software, OPORD/OPLAN, Unit SOP, applicable regulations and publications, and maps.

Standards: The ECB network met the requirements of the OPORD/OPLAN, and the commander approved the plan.

Performance Steps

1. Utilize Network Planning Tools; for example, System Control Center (SCC), the NPT, and Integrated System Control (ISYSCON).
2. Plan Communications Requirements in Support of Subscriber Requirements.
3. Plan Communications Requirements Using MSE Network (VHF, UHF, SHF).
4. Identify Major Components, Capabilities, and Limitations of MSE.
5. Determine LOS Profile without Automated Tools or with NPT.
6. Plan CNRI Systems.
7. Plan Communications Support Using Range Extension Systems.
8. Develop Net Planning and Engineering Input for Signal Estimate.
9. Develop Net Planning and Engineering Input for Signal OPLAN.
10. Plan Communications Requirements Using WIN-T.
11. Manage a TPN.
12. Identify Major Components, Capabilities, and Limitations of a Tactical Satellite.
13. Identify Major Components, Capabilities, and Limitations of an FM.
14. Plan a Single Channel Radio Communications Net.
15. Provide Installation, Operation, and Maintenance Support to the Users of SINCGARSs.
16. Plan an FM Voice Communications Net.
17. Analyze Radio Frequency Interference Problems.
18. Supervise Net Control Station Operations.
19. Employ CNRI Systems.
20. Plan Small Extension Node/Remote RAU Installation.
21. Manage COMSEC Material, Equipment, and Accounts.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Utilized Network Planning Tools; for example, the SCC, NPT, and ISYSCON.	—	—
2. Determined LOS Profile with NPT.	—	—
3. Determined LOS Profile without Automated Tools.	—	—
4. Developed Net Planning and Engineering Input for Signal Estimate.	—	—

Performance Measures

	<u>GO</u>	<u>NO GO</u>
5. Developed Net Planning and Engineering Input for Signal OPLAN.	—	—
6. Provided Installation, Operation, and Maintenance Support to the Users of SINCGARs.	—	—
7. Employed CNRI Systems.	—	—
8. Managed COMSEC Material, Equipment, and Accounts.	—	—

References**Required**

AR 25-1

AR 380-40

DA PAM 25-1-1

DA PAM 25-16

DA PAM 25-380-2

FM 100-6

FM 101-5

FM 11-32

FM 11-43

FM 11-44

FM 11-50

FM 11-55

FM 24-2

FM 24-7

FM 25-100

FM 34-10

FM 71-100

GLOBAL REF GUIDE

GTE REFERENCE GUIDE

STANAG-4206 ED.2

STANAG-4212 ED.2

STANAG-4214 ED.1(1)

TB 380-41

TM 11-5800-216-10-4

TM 11-5820-401-10-1

TM 11-5820-401-10-2

TM 11-5820-401-20-1

TM 11-5820-401-20-2

TM 11-5820-890-10-1

TM 11-5820-890-10-2

TM 11-5820-890-10-3

TM 11-5820-890-10-4

TM 11-5820-890-10-7

TM 11-5830-263-10

TM 11-5830-340-12

Related

FM 24-33

Manage an ECB Network
113-525-6001

Conditions: Given an OPORD/OPLAN, assigned personnel and equipment, applicable regulations and publications, and an approved ECB Network Diagram.

Standards: Established an ECB Network IAW the OPORD/OPLAN and met mission requirements.

Performance Steps

1. Supervise the Installation, Operation, and Management of Network Management Tools (SCC).
2. Supervise the Installation, Operation, and Management of MSE Network.
3. Evaluate Grounding Systems.
4. Supervise Communications Support.
5. Consider the Use of Range Extension Systems.
6. Analyze Radio Frequency Interference Problems.
7. Manage a TPN.
8. Perform Net Analysis.
9. Manage Network Traffic Routing.
10. Conduct Communications Contingency Planning.
11. Supervise Signal Security.
12. Direct Coordination of Logistical Support.
13. Manage MSE Communications Security Procedures to Execute a COMSEC Rekey of the MSE Network.
14. Supervise SCC Operations.
15. Manage COMSEC Material, Equipment, and Accounts.
16. Perform Network Analysis (R1 through R6).

Performance Measures

1. Performed Net Analysis.
2. Performed Network Analysis (R1 through R6).

GO **NO GO**

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References

Required

- AR 25-1
- AR 380-40
- DA PAM 25-1-1
- DA PAM 25-380-2
- FM 100-6
- FM 101-5
- FM 11-32
- FM 11-43
- FM 11-44
- FM 11-50

Related

References**Required**

FM 11-55
FM 24-2
FM 24-33
FM 24-7
FM 25-100
FM 34-10
FM 71-100
GLOBAL REF GUIDE
GTE REFERENCE GUIDE
STANAG-4206 ED.2
STANAG-4212 ED.2
STANAG-4214 ED.1(1)
TB 380-41
TM 11-5800-216-10-4
TM 11-5820-401-10
TM 11-5820-401-10-1
TM 11-5820-401-10-1-HR
TM 11-5820-401-10-2
TM 11-5820-890-10-1
TM 11-5820-890-10-2
TM 11-5820-890-10-3
TM 11-5820-890-10-4
TM 11-5820-890-10-7
TM 11-5830-263-10
TM 11-5830-340-12

Related

Manage an EAC Network
113-413-6002

Conditions: Given an OPORD/OPLAN, assigned personnel and equipment, applicable regulations and publications, and an approved EAC Network Diagram.

Standards: Established an EAC Network IAW the OPORD/OPLAN and met mission requirements.

Performance Steps

1. Supervise the Installation, Operation, and Management of Network Management Tools.
2. Evaluate Grounding Systems.
3. Supervise the Installation, Operation, and Management of Nodal Operations.
4. Manage a TPN.
5. Perform Network Analysis.
6. Manage Network Traffic Routing.
7. Consider all Types of Required Gateways.
8. Identify Major Components, Capabilities, and Limitations of the DGM.
9. Supervise the Installation, Operation, and Maintenance of the TYC-39.
10. Plan Communications Support Using Microwave LOS Systems at EAC.
11. Provide Communications Support Using the Tri-Service Tactical Communications AN/TTC-39D (PS) Switching Network.
12. Supervise CSCE.
13. Manage COMSEC Material, Equipment, and Accounts.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Performed Network Analysis.	—	—
2. Managed Network Traffic Routing Considering Gateways (NIPRNET, SIPRNET, DSN, VTC, DCO).	—	—
3. Planned Communications Support Using Microwave LOS Systems at EAC.	—	—
4. Provided Communications Support Using the Tri-Service Tactical Communications AN/TTC-39D (PS) Switching Network.	—	—
5. Managed COMSEC Material, Equipment, and Accounts.	—	—

References

Required	Related
AR 25-1	
AR 380-40	
DA PAM 25-1-1	
DA PAM 25-380-2	
FM 100-6	
FM 101-5	
FM 11-32	
FM 11-43	

References**Required**

FM 11-44
FM 11-50
FM 11-55
FM 24-2
FM 24-33
FM 24-7
FM 25-100
FM 34-10
FM 71-100
GLOBAL REF GUIDE
GTE REFERENCE GUIDE
STANAG-4206 ED.2
STANAG-4212 ED.2
STANAG-4214 ED.1(1)
TB 380-41
TM 11-5800-216-10-4
TM 11-5820-401-10-1
TM 11-5820-401-10-1-HR
TM 11-5820-401-10-2
TM 11-5820-890-10-1
TM 11-5820-890-10-2
TM 11-5820-890-10-3
TM 11-5820-890-10-4
TM 11-5820-890-10-7
TM 11-5830-263-10
TM 11-5830-340-12

Related

Subject Area 4: TRI-TAC

**Plan an Echelons Above Corps (EAC) Network
113-413-6001**

Conditions: As a Radio Officer, Assistant S3, or Network Officer, in Garrison or in the field, using an NPT, NMT, ISYSCON Workstation and or Personal Computer (PC) based software, OPORD, Unit SOP, FM 11-55, FM 24-24, TB 11-5805-782-10-1, and GTE Reference Guide for Network Nodal Managers.

Standards: Developed a Communications Plan that satisfied network and subscribers' support requirements.

Performance Steps

1. Determine Communications Requirements for Joint/Combined Operations.
2. Plan Communications Support Using a Tactical Telephone.
3. Plan Communications Support Using Tactical Message Terminals.
4. Plan Communications Support Using the Tri-Service Tactical Communications Switching Network (Voice and Message).
5. Plan Network Support Using Transmission Systems.
6. Plan Wire Communications Support Using a Wire/Cable System.
7. Develop Network Planning and Engineering Input to Signal Estimate.
8. Develop Network Planning and Engineering Input to Signal OPLAN.
9. Plan CNRI Systems.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Determined Communications Requirements for Joint/Combined Operations.	—	—
2. Planned Communications Support Using a Tactical Telephone.	—	—
3. Planned Communications Support Using Tactical Message Terminals.	—	—
4. Planned Communications Support Using the Tri-Service Tactical Communications Switching Network (Voice and Message).	—	—
5. Planned Network Support Using Transmission Systems.	—	—
6. Planned Wire Communications Support Using a Wire/Cable System.	—	—
7. Developed Network Planning and Engineering Input to Signal Estimate.	—	—
8. Develop Network Planning and Engineering Input to Signal OPLAN.	—	—
9. Planned CNRI Systems.	—	—

References

Required

FM 11-55

FM 24-24

GTE REFERENCE GUIDE

TB 11-5805-782-10-1

Related

**Plan the Installation of an EAC Area Node
113-340-6001**

Conditions: Given the OPORD/FRAGO with site and engineering data, Unit SOP, map, compass, applicable regulations and publications, assigned equipment, and personnel listing.

Standards: The installation plan met the requirements of the Unit OPORD/FRAGO and was approved by the commander.

Performance Steps

1. Direct the Installation of the AN/TTC-39(*).
2. Direct the Operation of the AN/TTC-39(*).
3. Direct Troubleshooting of the AN/TTC-39(*).
4. Direct the Maintenance of the AN/TTC-39(*).
5. Direct the Installation, Operation, and Maintenance of Cable/Wire, Extension, and Transmission Force Protection.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Directed the Installation of the AN/TTC-39(*).	—	—
2. Directed the Operation of the AN/TTC-39(*).	—	—
3. Directed Troubleshooting of the AN/TTC-39(*).	—	—
4. Directed the Maintenance of the AN/TTC-39(*).	—	—
5. Directed the Installation, Operation, and Maintenance of Cable/Wire, Extension, and Transmission Force Protection.	—	—

References

Required	Related
AR 380-19	
AR 380-40	
AR 380-41-5	
AR 380-5	
ARTEP 11-435-MTP	
ARTEP 11-437-30-MTP	
FM 100-16	
FM 101-5	
FM 11-32	
FM 11-41	
FM 11-43	
FM 11-45	
FM 11-50	
FM 11-55	
FM 20-3	
FM 24-1	
FM 24-12	
FM 24-16	
FM 24-17	
FM 24-22	
FM 24-24	

References**Required**

FM 24-27
FM 24-33
FM 24-35
FM 24-35-1
FM 24-7
FM 3-19.30
FM 3-25.26
FM 7-98
GTA 11-04-022
GTA 11-10-50
GTA 11-4-23
GTA 11-4-24
GTE REFERENCE GUIDE
JCS PUB 6-05
JCS PUB 6-05.1
JCS PUB 6-05.6
STP 11-31F13-SM-TG
STP 11-31L13-SM-TG
TATS 621-31L10(F)
TB 380-41
TB 43-0129
TC 24-21
TM 11-5805-695-12
TM 11-5805-706-12
TM 11-5805-707-12
TM 11-5805-749-12
TM 11-5810-292-13&P

Related

Subject Area 5: Automation

Manage a Local Area Network (LAN)

113-407-6001

Conditions: Given the approved LAN diagram/plan, using the unit Automation Information Systems plan, assigned personnel, hardware, applicable regulations and publications, OPORD/OPLAN, Unit SOP, appropriate COTS hardware and software documentation, and local command directives.

Standards: The LAN operated and was maintained IAW the approved LAN diagram/plan.

Performance Steps

1. Ensure Procurement of Equipment.
2. Installation and Configuration of Networking Operating System.
3. Configure Client Computers.
4. Direct the Installation of the LAN.
5. Direct the Operation of the LAN.
6. Direct Troubleshooting of the LAN.
7. Direct the Maintenance of the LAN.
8. Perform System Administrator Functions.
9. NES.

Performance Measures

1. Procured Equipment.
2. Installed and Configured Networking Operating System.
3. Configured Client Computers.
4. Directed the Installation of the LAN.
5. Directed the Operation of the LAN.
6. Directed Troubleshooting of the LAN.
7. Directed the Maintenance of the LAN.
8. Performed System Administrator Functions.

GO NO GO

_____	_____
_____	_____
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_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

References

Required

- ISBN 0072122269
- ISBN 0782122612
- ISBN 0789710536
- ISBN 1562057685
- ISBN 1562763644

Related

GLOSSARY**Section I**
Abbreviations

(O)	FOR OFFICIAL USE ONLY
(S)	SECRET
(U)	Unclassified
1LT	First Lieutenant
AIS	automated information system
ANCD	automated net control device
ANCOC	Advanced Noncommissioned Officer Course
AOC	Area of Concentration
AR	Army Regulation/Army Reserve
ARTEP	Army Training and Evaluation Program
ARTEP-MTP	Army Training and Evaluation Program-Mission Training Plan
ASUM	Applications Software User's Manual
BNCOC	Basic Noncommissioned Officer Course
BOLC	Basic Officer Leader Course
CAW	Certification Authority Workstation
CCP	Communications Contingency Package
CEOI	Communications-Electronics Operating Instructions
CJCSM	Chairman, Joint Chiefs of Staff Manual
CNR	combat net radio; calibration not required
CNRI	combat net radio interface
COMSEC	communications security
CPT	Captain
CSCE	communications system control element
CSOM	Computer System Operator's Manual
CUM	Computer User's Manual

DA PAM	Department of the Army Pamphlet
DCO	dial central office
DGM	digital group multiplexer; digital group modem
DoD/DOD	Department of Defense
DSN	Defense Switched Network
DVC	devices
EAC	echelons above corps
ECB	echelons corps and below
ED	edition
EPLRS	Enhanced Position Location Reporting System
ERF	electronic remote fill
EW	electronic warfare
FM	field manual; frequency modulation; file maintenance
FRAGO	fragmentary order
GTA	Graphic Training Aid
HF	high frequency
IASO	Information Assurance Security Officer
IAW	in accordance with
IHFR	improved high frequency radio
IS	Information Security
ISBN	International Standard Book Number
ISS	Information Security System
JACES	Joint Automated Communications Engineering Systems
JCS PUB	Joint Chiefs of Staff Publication
JP	Joint Publication
JTRS	Joint Tactical Radio System
LAN	local area network
LEN	large extension node

LOS	line of sight
MDMP	Military Decision Making Process
METL	mission essential task list
METT-T	Mission, Enemy, Terrain, Troops, and Time
MFG	manufacturer
MISC	miscellaneous
MOS	Military Occupational Specialty
MOSC	Military Occupational Specialty Code
MSE	mobile subscriber equipment
MST	Mobile Subscriber Terminal
MTP	Mission Training Plan; MOS Training Plan
NAI	NATO analog interface
NAIU	NATO analog interface unit
NATO	North Atlantic Treaty Organization
NIPRNET	Non-Secure Internet Protocol Routing Network
NMF	node management facility
NMT	network management tool
NPT	network planning terminal
NTDRS	Near Term Digital Radio System
OAC	Officer Advanced Course
OBC	Officer Basic Course
OPLAN	operation plan
OPORD	operation order
OS	operating system
PC	programmable controller; personal computer
PS	packet switch/point of sight
PUB/pub	publication
RAU	radio access unit

RECON/recon	reconnaissance
REF	reference
REG/Reg	Regulation; Regiment
RFI	Reserve Forces Intelligence; radio-frequency interference
SB	Supply Bulletin
SCC	system control center
SCCC	Signal Captains Career Course
SENS	small extension node switch/system
SHF	super high frequency
SINGARS	Single-Channel Ground and Airborne Radio System
SIPRNET	Secure Internet Protocol Routing Network
SME	Subject Matter Expert
SOI	signal operation instructions
SOP	standing operating procedure
STANAG	Standardization Agreement
TACSAT	tactical satellite
TATS	Total Army Training System
TB	technical bulletin
TC	technical coordinator; training circular; thermocouple
TCO	telecommunications certification officer
TD	Time Division; Training Development
TG	trainer's guide
TM	technical manual
TMDE	test, measurement, and diagnostic equipment
TOE	table(s) of organization and equipment
TPN	Tactical Packet Network
TRI-TAC	tri-service tactical
UHF	ultra high frequency

ULM	unit level maintenance
US	United States
VHF	very high frequency
VTC	video teleconference
WIN-T	Warfighter Information Network - Terrestrial

Section II

Terms

Army Battle Command System (ABCS)

Transition of all fielded, developmental Army C2 systems into one fully integrated, and interoperable system with seamless connectivity from the NCA to the foxhole.

Army Training and Evaluation Program (ARTEP)

The US Army's collective training program. The ARTEP establishes unit-training objectives critical to unit survival and performance in combat. They combine the training and the evaluation processes into one integrated function. The ARTEP is a training program and not a test. The sole purpose of external evaluation under this program is to diagnose unit requirements for future training.

Integrated System Control (ISYSCON)

The Army system that will provide overall automated system command and management for Army communication systems at the corps and division levels. ISYSCON will manage the time/frequency resource allocation, geographic deployment and citing, key management, CONOPS, and the common library of data.

Mobile Subscriber Radiotelephone Terminal (MSRT)

The AN/VCR-97 consisting of RT-1539 and KY-69 DSVT

MOS training plan (MTP)

The MTP is a guide for the conduct of individual training in units. An MTP is developed for each MOS and addresses all skill levels of an MOS and all duty positions. The MTP lists all MOS-specific and shared critical tasks for which the MOS is responsible. It will not include common tasks.

Officer Foundation Standards (OFS) System

A system that standardizes officer institutional training and provides a tool for use by commanders and individual officers. It supports officer training and leader development. Training products are distributed electronically.

performance measures (PM)

Those behavior or product characteristics which the trainer observes/checks to determine if the soldier has performed the task correctly.

Soldier training publication (STP)

Publications that contain critical tasks and other training information used to train soldiers and serve to standardize individual training for the whole Army; provide information and guidance in conducting individual training in the unit; and aid the soldier, officer, noncommissioned officer (NCO), and commander in training critical tasks. They consist of Soldier's Manuals, Trainer's Guides, Military Qualification Standards Manuals, and Officer Foundation Standards System manuals.

Soldier's manual (SM)

List critical task summaries for a specific MOS and skill level (SL); provide conditions, standards, and performance measures for each critical task; and are the base documents for all MOS-specific individual task training and evaluation.

Task Performance Steps

The required unit/individual actions that must be performed to accomplish the critical task. Each step must be specific and detailed and contain only one action or unit of work. Note: A collective task step may be a supporting individual or collective task.

task summary (TS)

A statement of the task in an action-verb format plus all essential performance measures. A standard format fully describes the task for the soldier in the field. It will accommodate any product or process task whether it is in fixed sequence, alternate sequence, or combination. The task summary is used both to train the soldier to perform the task and to evaluate the soldier's ability to perform the task (within testing constraints).

Total Army Training System (TATS) Course

A course designed to train the same MOS/AOC skill level or ASI, LIC, SQI, SI within the Total Army. The course ensures standardization by training all course critical tasks to task performance standard. It may be trained at different sites and may involve use of different media/methods to train the various phases/modules/lessons.

REFERENCES

Required Publications

Required publications are sources that users must read in order to understand or to comply with this publication.

Army Regulations

AR 190-13	The Army Physical Security Program. 30 September 1993
AR 25-1	Army Information Management. 15 January 2000
AR 25-30	The Army Publishing and Printing Program. 21 June 1999
AR 310-25	Dictionary of United States Army Terms. (Reprinted w/Basic Incl C1). 15 October 1983
AR 310-50	Authorized Abbreviations and Brevity Codes. 15 November 1985
AR 350-41	Training in Units. 19 March 1993
AR 380-19	Information Systems Security. 27 February 1998
AR 380-40	(O) Policy for Safeguarding and Controlling Communications Security (COMSEC) Material (U). 1 September 1994
AR 380-5	Department of the Army Information Security Program. 29 September 2000
AR 380-67	The Department of the Army Personnel Security Program. 9 September 1988
AR 381-11	Production Requirements and Threat Intelligence Support to the U.S. Army. 28 June 2000
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OS MFG MANUAL	Operating System (OS) Manufacturer's (MFG) Reference Manual
OS REFERENCE MANUAL	Operating System (OS) Reference Manual
OSC MANUALS	Operating System Control (OSC) Statement Manuals
OSUM	Operating System User's Manuals (OSUM)
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SUM NSM	Software User's Manual (SUM) for the Network Security Manager (NSM) Version 4.2.1. 1 March 2000
TOE 11-065L000	Signal Battalion, Division (MSE)
TOE 11-067	Area Signal Company, Division Signal Battalion (MSE)
TOE 11-067L000	Area Signal Company
TOE 11-068	Signal Support Company, Division Signal Battalion (MSE)
TOE 11-403L100	Signal Company, Tactical Satellite Communications
TOE 11-435L000	Corps Area Signal Battalion (MSE)
TOE 11-437L000	Signal Support Company
TOE 11-445L000	Corps Support Signal Battalion (MSE)
TOE 11-446L000	HHC Corps Support Signal Battalion (MSE)
TOE 11-447L000	Signal Support Company
TOE 11-603L100	Signal Company, Tactical Satellite Communications
TOE 11-627L000	Signal Operations Company, Medium Headquarters
TOE 11-637L100	Area Signal Company, Signal Telecommunications Battalion (Area)
US DOD CP	X.509 Certificate Policy (CP) for the U.S. Department of Defense (DOD), Version 5.0. 1 December 1999
VERSION 3.1 GUIDE	Nodal Managers Guide. 1 February 1999
WEBSITE GUIDANCE	Guidance for the Management of Army Websites. 30 October 1996
Technical Bulletins	
TB 11-5800-224-10-1	Enhanced Switch Operation Program (ESOP) Software User's Guide Volume I. 1 August 1998
TB 11-5800-224-10-2	Enhanced Switch Operation Program (ESOP) Software User's Guide Volume II. 1 August 1998
TB 11-5895-1500-10	MCS Software User's Guide Operations Software for Version 10.03.1 Tactical Computer Processor AN/UYQ-43(V)1, Tactical Computer Processor AN/UYQ-43(V)2 (Reprinted w/Basic Incl C1-2). 15 September 1991
TB 11-5895-1544-10-1	Operator's Manual for Mobile Subscriber Equipment Network Planning Terminal (MSE-NPT) V1.00. 1 May 1994
TB 11-5895-1544-10-2	Operator's Manual for Mobile Subscriber Equipment Network Planning Terminal (MSE-NPT) V1.00 (Reprinted w/Basic Incl C1-2). 1 May 1994
TB 11-7010-248-10	Software Operator's Manual for Version 2.4 Integrated Network Management System (INMS) for the Communications System Control Element (CSCE) AN/TYQ-30() and AN/TYQ-31. 1 May 1995
TB 380-41	(O) Procedures for Safeguarding, Accounting, and Supply Control of COMSEC Materials (Reprinted w/Basic Incl C1). 1 October 1994

Technical Manuals

(O)TM 11-5810-256-10-1	Net Controller Operating Instructions Procedures for Communications Security Equipment KY-57. 30 June 1988
(O)TM 11-5810-256-12	Operator's and Unit Maintenance Manual for Communications Security Equipment KY-57. 30 September 1996
(O)TM 11-5810-278-12&P	Operator's and Unit Maintenance Manual (Including Repair Parts and Special Tools List) for Electronic Key Generators TSEC/KG-30/30A/31/31A/33/33A/34/34A/35/37/38. 5 January 1989
(O)TM 11-5810-292-13&P	Operator's, Unit and Direct Support Maintenance Manual for General Purpose Tape Reader KOI-18, Electronic Transfer Device KYK-13, Net Control Device KYX-15/15A. 31 May 1989
(O)TM 11-5810-308-24P	Unit, Intermediate, Direct Support and Specialized Repair Activity and Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools List..... Loop Encryption Device TSEC/KG-84, TSEC/KG-84A. 1 July 1987
(O)TM 11-5810-309-10	Operator's Manual, TSEC/KG-84A, Dedicated Loop Encryption Device. 10 December 1984
(O)TM 11-5810-312-12-1	Operator's and Organizational Maintenance Manual: Installation Kits for Communications Security Equipment, TSEC/KY-57, Volume 1. 15 August 1982
(O)TM 11-5810-312-12-2	Operator's and Organizational Maintenance Manual: Installation Kits for Communications Security Equipment, TSEC/KY-57, Volume 2: Installation Kits for Wheeled Vehicles. 8 September 1982
(O)TM 11-5810-312-12-3	Operator's and Organizational Maintenance Manual: Installation Kits for Communications Security Equipment, TSEC/KY-57, Volume 3: Installation Kits for Tracked Vehicles. 15 November 1982
(O)TM 11-5810-312-12-4	Operator's and Organizational Maintenance Manual: Installation Kits for Communications Security Equipment, TSEC/KY-57, Volume 4: Installation Kits for General Purpose Use and Shelter Applications. 19 April 1983
(O)TM 11-5810-323-12	Operator's and Unit Maintenance Manual for Common Equipment Facility, HGF-83/TSEC, HGF-85/TSEC, HGF-87/TSEC.
(O)TM 11-5810-326-13	Operator's, Organizational, and Direct Support Maintenance Manual for Loop Key Generator/Common Unit HGX-82. 12 July 1989
(O)TM 11-5810-327-10	Operator's Manual for Automatic Key Distribution Center Rekeying Control Unit HGX-83/TSEC.
(O)TM 11-5810-328-13	Operator's, Organizational, and Direct Support Maintenance Manual for Interface Control Unit HGX-82/TSEC. 29 June 1984
(O)TM 11-5810-329-10	Operator's Manual for Digital Subscriber Voice Terminal TSEC/KY-68 and Auxiliary Power Supply HYP-71/TSEC. 3 June 1996
(O)TM 11-5810-329-23	Unit and Intermediate Direct Support Maintenance Manual for Digital Subscriber Voice Terminal TSEC/KY-68 and Auxiliary Power Supply HYP-71/TSEC. 10 August 1987
(O)TM 11-5810-330-13	Operator's, Organizational, and Direct Support Maintenance Manual for Loop Key Generator Set TSEC/KG-82. 23 June 1986
(O)TM 11-5810-331-13	Operator's, Unit, and Direct Support Maintenance Manual for Key Variable Generator TSEC/KG-83. 25 July 1989
(O)TM 11-5810-336-13	Operator's, Unit and Intermediate Direct Support Maintenance Manual for Electronic Key Generator Trunk Encryption Device and Ancillary Signal Frames HNF-81-1, HNF-81-2, and Transition Unit/Frames HGF-91, HGF-94. 31 January 1989

(O)TM 11-5810-349-10	Operator's Manual, Secure Digital Net Radio Interface Unit KY-90. 30 December 1987
(O)TM 11-5810-361-10	Operator's Manual for Trunk Encryption Device KG-94 and KG-194. 5 May 1994
(O)TM 11-5810-365-10	Operator's Manual for Trunk Encryption Devices KG-94A, KG-94A and Interface Adapter Unit. 3 January 1994
TM 11-2300-475-13&P-1	Operator's, Organizational, & DS Maint Manual (Incl Repr Parts & Special Tools List) for Install Kit, Elect Eq MK-2462/GRC-193A in Truck Cargo, 1 1/4 Ton, 4x4, M882 or M1008A1 (CUCV)....Radio Set AN/GRC-193A (Reprinted w/Basic Incl C1). 1 September 1987
TM 11-2300-475-13&P-2	Operator's, Organizational, and Direct Support Maintenance Manual (Including Repair Parts and Special Tools List) for Installation Kit, Electronic Equipment MK-2459/GRC-193A in General Purpose Installations for Radio Set AN/GRC-193A. 1 September 1987
TM 11-2300-475-13&P-6	Operator's, Unit and Direct Support Maintenance Manual (Including Repair Parts and Special Tools List) for Installation Kit, Electronic Equipment, MK-2541/GRC-193A in HMMWV, Cargo/Troop Carrier M998, M1038. 1 July 1988
TM 11-3895-202-13	Operator's, Organizational, and Direct Support Maintenance Manual for Reel Units RL-31, RL-31-B, RL-31-C, RL-31-D, and RL-31-E. 15 January 1986
TM 11-3895-207-14	Operator's, Organizational, Direct Support, and General Support Maintenance Manual for Reeling Machines, Cable, Motor Driven RL-172/G, RL-172A/G. 1 October 1987
TM 11-3895-209-14	Operator's, Organizational, Direct Support and General Support Maintenance Manual for Reeling Machines, Cable, Engine-Driven, RL-207/G and RL-207A/G. 15 June 1986
TM 11-5820-890-10-1	Operator's Manual for SINGARS Ground Combat Net Radio, ICOM Manpack Radio AN/PRC-119A, Short Range Vehicular Radio AN/VRC-87A, Short Range Vehicular Radio With Single Radio Mount AN/VRC-87C, Short Range.....AN/VRC-92A. 1 September 1992
TM 11-5820-890-10-2	SINGARS ICOM Ground Radio Operator's Pocket Guide for Manpack Radio AN/PRC-119A, Short Range Vehicular Radio AN/VRC-87A, Short Range Vehicular Radio with Single Radio Mount.....Long Range/Long Range Vehicular Radio AN/VRC-92A. 1 September 1992

Training Aids

DLT	Data Link Terminal (DLT) Trainer
DLU	Data Link Upgrade (DLU) Trainer
DM-100A	Hampden Trainer DC Machine
IEWPT	Intelligence/Electronic Warfare Proficiency Trainer (IEWPT)
NCSRT	Non-Communication Signal Recognition Trainer (NCSRT)
P/N 99901351	DC Experiment Set, NIDA 130C
P/N 99901352	AC Experiment Set, NIDA 130C
REMBASS	Remotely Monitored Battlefield Sensor System (REMBASS)

Training Circulars

TC 11-4	Handbook for AN/VRC-12 Series of Radio Sets. 8 April 1977
TC 11-6	Grounding Techniques. 3 March 1989
TC 11-70	Communications-Electronics Fundamentals: Multiplexing. 24 December 1986
TC 24-17	Systems Management Guide for Division Level Automatic Switching SB-3614A(V) and AN/TTC-41(V). 27 December 1988
TC 24-20	Tactical Wire and Cable Techniques. 3 October 1988
TC 24-21	Tactical Multichannel Radio Communications Techniques. 3 October 1988
TC 24-34	COMSEC Logistics and Operational Support in the Field. 27 December 1988

Training Support Packages

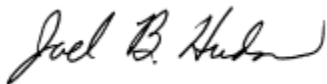
W2K TO BE DET	Windows 2000 Network Infrastructure Administration. 1 June 2001
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STP 11-25A-OFS
29 APRIL 2002

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

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