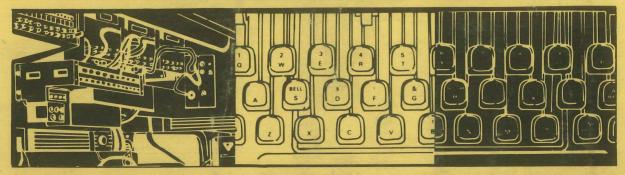


FM 11-72E1/2

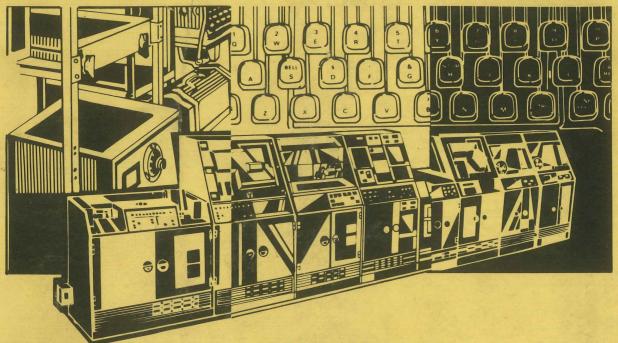
HEADQUARTERS
DEPARTMENT OF THE ARMY

# SOLDIER'S MANUAL



MOS 72E, COMBAT TELECOMMUNICATIONS CENTER OPERATOR

**SKILL LEVELS 1 AND 2** 



**APRIL 1981** 

# MOS 72E, COMBAT TELECOMMUNICATIONS CENTER OPERATOR

# **SKILL LEVELS 1 AND 2**

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<sup>\*</sup>This publication supersedes FM 11-72E1/2 dated 24 April 1978.

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Whenever pronouns or other references denoting gender appear in this manual, they are meant to refer to either male or female—unless indicated otherwise.

## **COMMANDER'S ATTENTION**

Soldier's Manuals are designed to tell soldiers what tasks they must be proficient in to be MOS qualified. If soldiers follow the road map these manuals provide, they should progress readily to positions of responsibility commensurate with their aptitude and motivation.

Initial distribution of Soldier's Manuals will be made to the unit level, based upon assigned strength in the particular MOS and Skill Level. In the event additional manuals are needed by the unit for MOS study, libraries, or other training needs, requests for publications may be sent directly to the US Army Publications Center, 2800 Eastern Boulevard, Baltimore, MD 21220.

When soldiers are issued Soldier's Manuals by their units, they are responsible for retaining and maintaining them. If they transfer, they must return the manuals to their units.

Upon promotion, the soldier may order the next higher level manual through his/her unit.

This Soldier's Manual was prepared by the US Army Signal Center.

C. E. McKNIG. J Major General, USA

Commanding

# RESERVE COMPONENT ARMY NATIONAL GUARD - ARMY RESERVE

You will be using this soldier's manual along with your Active Army counterpart.

This manual contains the critical tasks to be performed by soldiers in MOS 72E. Some tasks may require modification due to differences in equipment, facilities, and training time available to you. Tasks that are written for reserve components are identified by (RC) in the task inventory list.

Many tasks that you learned in basic training (BT) and advanced individual training (AIT) are in this manual. Others are critical tasks that you must learn on your own. Training references and materials are available and you can get them through your unit. You will be tested on your ability to perform the critical tasks in this manual. It is to your advantage to start your study program NOW.

## SPECIAL NOTICE

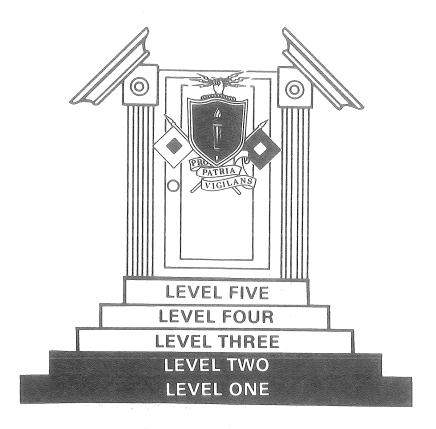
Effective 1 March 1981, MOS 72E/72G were realigned to provide separate career fields, Combat Telecommunications Center Operator (72E) and Automatic Data Telecommunications Center Operator (72G).

The Combat Telecommunications Center Operator (MOS 72E) will operate in a field environment using mobile, manual and automated equipment.

The Automatic Data Telecommunications Center Operator (MOS 72G) will operate computer systems associated with fixed telecommunications facilities and AUTODIN switching centers.

This "Special Edition" soldier's manual has been developed to assist you in the performance of your MOS duties. The next skill qualification test (SQT), for MOS 72E Skill Level 1 and 2 is scheduled for May 1983. Subsequent to that date, you will receive an updated edition of this soldier's manual which will help you successfully pass your SQT.

# Chapter 1 INTRODUCTION



#### THE SOLDIER'S MANUAL AND YOU

This manual describes what the Army expects you to know and to be able to do as a Combat Telecommunications Center Operator, MOS 72E. In addition to job tasks, this manual tells you about the management and training systems designed to help you learn your job.

If you don't understand some parts of the manual or want to know more about promotion, see your NCO/supervisor. Take your superior's advice, it is based on knowledge and experience.

The Army wants and needs well-trained soldiers who want to get ahead. This manual and the assistance of your senior NCOs can lead to promotion.

Keep your manual up to date. When new or changed material is published, it will be given to you with instructions on how and where to put it in your manual.

## THE SOLDIER'S MANUALS OF COMMON TASKS

FM 21-2, Soldier's Manual of Common Tasks, Skill Level 1, and FM 21-3, Soldier's Manual of Common Tasks, Skill Levels 2, 3, and 4, contain tasks that are common to every soldier in the Army, regardless of MOS. You are responsible for mastering all the common tasks in your present skill level as well as all of those in the lower skill levels.

FM 21-2 and FM 21-3 are available to you through your unit. Be sure to get them and use them so that you will be able to complete your training.

## MILITARY OCCUPATIONAL SPECIALTY

A military occupational specialty (MOS) is defined as a grouping of closely related jobs or duty positions. An MOS code consists of five characters which have specific meanings.

First Three Characters: These are two numbers and one letter. Together, they identify the specific specialty in a certain career field. The 72E in your MOS identifies the Combat Telecommunications Center Operator portion of the Communications Electronics Operations Career Management Field.

Fourth Character: This is a number which indicates the skill level of the individual in that MOS.

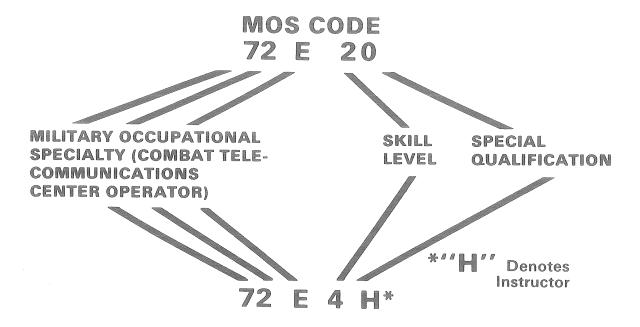
Fifth Character: This is a letter which identifies a special qualification in the MOS. The letter "O" will always be inserted as the MOS code if the individual has no additional special qualifications. Here are two examples of fifth character usage:

72E2H, Combat Telecommunications Center Operator - Qualified as an instructor.

72E20, Combat Telecommunications Center Operator - No special qualifications.

#### SKILL LEVELS

The skill level is a means of showing your level of experience and knowledge in your MOS. The Army uses five skill levels and each is identified by the fourth character of the MOS code. 72E10 indicates MOS 72E Skill Level 1 (E1 through E4). 72E20 indicates MOS 72E Skill Level 2 (E5).



Skill Level 1 is the first step in your MOS; this is where you start as a helper. You will be able to do the simple tasks on your own, the difficult tasks you will do under close supervision of your NCO.

Skill Level 2 is the second step in your MOS; the tasks you did in Skill Level 1 should be routine now. Only the more difficult tasks will be performed under the general supervision of your NCO.

The following paragraphs list the duties of MOS 72E at Skill Levels 1 and 2.

Skill Level 1 (AR 611-201):

- 1. Maintains signal security in accordance with Army regulations.
- 2. Applies the fundamentals of message handling procedures.

- 3. Operates and performs operator's daily maintenance of typewriters.
- 4. Reads military maps, to include use of compass.
- 5. Converts standard time to Greenwich Mean Time (ZULU).
- 6. Installs, operates, and performs daily and weekly maintenance on generator sets.
- 7. Starts and operates Tactical Automatic Digital Switching System (TADSS).
- 8. Installs and operates teletypewriter relay centrals and/or telegraph terminals.
- 9. Starts and operates Digital Subscriber Terminal to include associated crypto equipment.
- 10. Prepares and processes service messages.

#### Skill Level 2 (AR 611-201):

- 1. Performs the duties of Combat Telecommunications Center Specialist 72El0.
- 2. Assigns equipment within the telecommunications center and switch center to on-line/off-line operations.
- 3. Receives, issues, stores, destroys, and accounts for cryptomaterial.
- 4. Stores and files processing tapes, cards, paper tapes, and page copies.
- Stores and handles classified material in accordance with Army regulations.
- 6. Employs Army regulations, JANAPs, ACPs, CEOIs, and CEOPs pertaining to Telecommunications Center operations.
- 7. Employs proper procedure for opening/closing and operating a teletypewriter net.

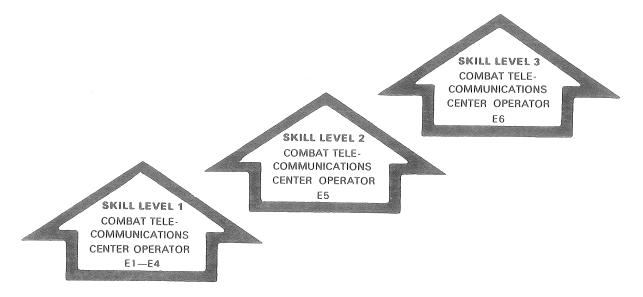
# CONTENTS OF YOUR SOLDIER'S MANUAL

In order to use your soldier's manual you will have to know some of the terms used in it. These terms are listed below: <u>Critical Skill Level Task</u>: A task which you must perform to do your job.

GO NO GO: These terms are used in testing. If you are graded GO, you have passed; a NO GO means you have failed.

Job: The tasks performed by you in order to do your job.

Duty Position: This is a job in an MOS.



The manual lists and describes the critical tasks for Skill Level 1 and Skill Level 2 of your MOS. The following breakdown shows the grades for the skill levels in your manual:

SKILL LEVELS	GRADES
1 2	E1-E4 E5

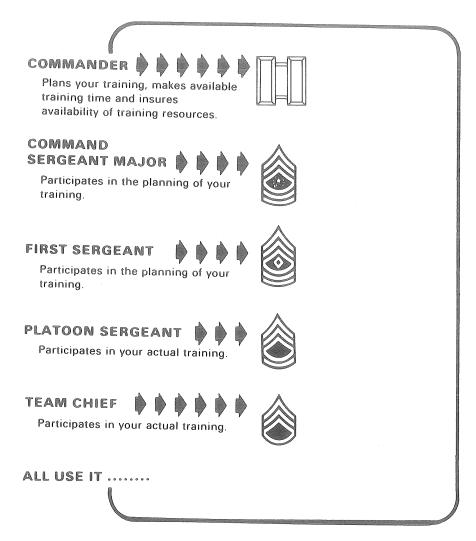
At the beginning of each succeeding chapter in your soldier's manual, there is a list of critical tasks and their titles. These tasks are the most important parts of your job.

Each task is split into these parts:

TASK:	A statement of what you must be able to do, for example: Install Generator Set. PU-619/M.
CONDITIONS:	The situation in which you must be able to do the task; e.g., a tactical or a nontactical situation under all weather conditions. It also lists the equipment and references that will be used.
STANDARDS:	A statement of how well or how accurately you must do the task.
PERFORMANCE MEASURES:	An outline of what you must know and do to complete the task.
REFERENCES:	The written material needed to complete the task. These sources are ARs, FMs, TMs, etc. If you want to find out more about the performance measure, you should go to that reference.
	TM 11-490
	TM 11 400
TECHNICAL MANUAL  ARMY COMMUNICATION FA  AUTODIN STATION AND TEI STATION OPERATING P	AUTOMATIC DIGITAL NETWORK (AUTODIN) OPERATING PROCEDURES JANAP 128(H)  JANAP 128(H)  ECHNICAL MANUAL  UNICATIONS Facilities NICATIONS CENTER G PROCEDURES
HEADQUARTERS, DEPAR	This publication contains US military information and release to other than US military agencies will be on a need to know basis.  THE JOINT CHIEFS OF STAFF WASHINGTON D. C. 20301  OCTOBER 1977  UNCLASSIFIED I ORIGINAL (Reverse Blank)

#### YOUR MANUAL AND YOUR LEADERS

You are not the only one who will use this manual. Who else uses it?



Your commander has a manual, in addition to the soldier's manual, which lists critical tasks you are required to perform and the methods of training that can help you learn those tasks. It is called the Trainer's Guide. The trainer's guide provides your commander and supervisor with a means to help you with a training program. The soldier's manual and trainer's guide are also designed to assist your commander and supervisor in evaluating your skills. Your ability to do your job will be based on how well you do the tasks listed in your soldier's manual.

#### HOW TO USE YOUR SOLDIER'S MANUAL

You should begin to use your soldier's manual by studying, practicing, and mastering the tasks listed for Skill Level 1. You learned most of them in AIT. You learned others while working on the job. It really doesn't matter where or when you first learned a task. The important question is: how well can you do it now?

If you do not understand a certain task, ask your supervisor to explain it and to assist you in getting the right study aids and references. The senior NCOs and officers in your unit use the soldier's manual to help them plan your training and to evaluate your skills. Ask them for advice and help. They want to help you.

When you are sure that you have mastered all the Skill Level 1 tasks, proceed to the Skill Level 2 tasks. Continue to study and practice until you have mastered all the tasks for both Skill Levels 1 and 2.

Once you have been promoted to E5, you should immediately begin to master the Skill Level 3 tasks.

Two points to remember about the tasks in your soldier's manual:

To qualify for promotion, you must master the tasks for the grade in which you are now serving.

As you progress to higher skill levels, you remain responsible for all the tasks listed for the lower skill levels.

#### ENLISTED PERSONNEL MANAGEMENT SYSTEM (EPMS)

The Army has adopted the EPMS to give you a better opportunity for attaining and maintaining skills through improved training programs. If you want to be successful, you must perform your assigned duties efficiently, take advantage of opportunities for training and promotion, and establish personal career goals.

One of the aims of EPMS is to provide a logical path of career development for soldiers. It also establishes a system of career-long training that prepares a soldier to take on duties at the next higher grade. The training consists of AIT for Skill Level 1, and periods of on-the-job experience (OJE) or formal training under the Noncommissioned Officer Education System (NCOES) for Skill Levels 2 through 5.

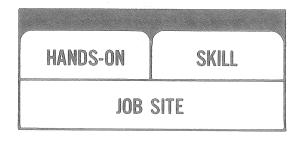
EPMS provides you with a fair and reasonable promotion system. Under EPMS, you must receive a passing score on your skill qualification test (SQT) before you can be considered for promotion. However, a passing score on your SQT does not guarantee promotion. You must be

recommended by your commander and satisfy all administrative requirements (e.g., time in grade, time in service, etc.). Your best recommendation is the manner in which you do your job and your personal behavior and efforts.

#### SKILL QUALIFICATION TEST (SQT)

The SQT is a performance oriented test of your ability to do your job. The SQT will be composed of scorable units or subtests. The SQT score is based upon the number of scorable units you pass, e.g., if a scorable unit consists of four questions, you may be required to answer three correctly to get a GO or passing score for the unit. You will be informed of the standard for each scorable unit in your SQT Notice.

The SQT may be composed of three major components:



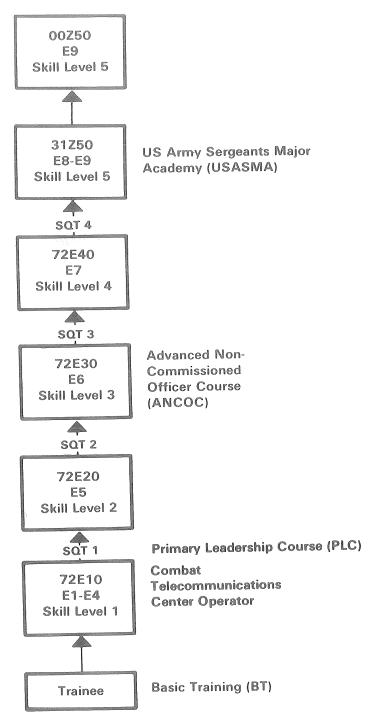
The Hands-On Component (HOC) is designed to test your ability to perform certain critical tasks using real equipment or training aids.

The Skill Component (SC) will be groups of multiple choice questions designed to test your ability to perform certain critical tasks.

The Job Site Component (JSC) will be an evaluation, made by your commander or supervisor, of your ability to perform certain critical tasks. The type tasks to be placed in the JSC are those that require physical skills and a great amount of time to perform.

Some SQTs may not have three components because they will be evaluating a low-density MOS, or there is not enough equipment, or not enough MOS holders at one location. This may change from year to year and you will be informed of such changes in your SQT Notice.

### SKILL AND TRAINING PROGRESSION FOR MOS 72E



After the SQT has been taken and scored, you will receive a report showing your score and telling you which scorable units received a NO GO during your test.

The SQT score is used to verify your current skill level. Skill Level 1 MOS holders will take SQT-1 which will be composed of Skill Level 1 tasks. Skill Level 2 MOS holders will take SQT-2 which will consist of Skill Level 1 and 2 tasks.

Approximately 60 to 90 days before you are tested, you will receive an SQT Notice. This notice will list the tasks to be tested in each component of the SQT, and where you can find the tasks in the soldier's manual. It will give you examples of the type questions that will appear in the skill component and the performance tests that will appear in the hands-on and job site components.

IF YOU DO NOT RECEIVE YOUR SQT NOTICE AT LEAST 60 DAYS PRIOR TO THE TEST DATE, CONTACT YOUR SUPERVISOR OR COMMANDER.

#### ENLISTED EVALUATION SYSTEM

This system evaluates your ability to do your job, your attitude toward the military service in general, and your potential for increased responsibility and eventual promotion. As a soldier in grades E1 through E4, you will be evaluated by means of the SQT and a local (unit) evaluation report. The evaluation report gives your commander an indication of your attitude toward your job, how well you work with others, and your possible leadership ability. Using the results of the SQT and the evaluation report your commander can compare you with all soldiers in the unit having the same MOS, skill level, and pay grade. Your commander can determine your eligibility for:

Keeping your present MOS and skill level. Promotion to the next higher grade. Reenlistment. Schooling.

As a soldier in grade E5, you will be evaluated by means of the SQT and the Senior Enlisted Evaluation Report (SEER). The SEER is used by your supervisor to report information about your duty performance that cannot be measured by the SQT. Your attitude toward your job, how well you work with others as a team member, and your leadership ability are among the rated characteristics. If you get along with others and do your job satisfactorily, your SEERs will be good.

Your SQT and SEER scores will be important factors in your Army career. They will be used to compare you with all other soldiers in the Army having the same MOS, skill level, and pay grade. They will have a part in determining your eligibility for:

Keeping your present MOS and skill level.

Promotion to the next higher skill level.

Reclassification into a different MOS.

Staying in the Army.

Reenlistment.

Military and civilian schooling.

#### SUMMARY

Your soldier's manual provides the basic parts of mutual interest to you and the Army--the critical tasks that you must be able to perform to be a successful soldier. Follow the step-by-step procedure as outlined and you will open the door to advancement.

STEP ONE: Use your soldier's manual and keep it updated.

STEP TWO: Know your MOS, skill level, and duty position.

STEP THREE: Find the critical tasks that you must master and use the references listed for each task. Refer to appendix B for tips in planning your training program.

STEP FOUR: Study and practice the critical tasks until you are sure you have mastered them. Ask the officers and NCOs in your unit for help.

STEP FIVE: Once you have mastered the critical tasks for your present MOS, skill level, and duty position, prepare for your SQT by studying and practicing the tasks listed in the SQT Notice.

If you follow the above steps, you will be able to progress through a rewarding Army career. The Army wants and needs well-trained soldiers who desire to advance through the ranks. This manual and the willing assistance of your NCOs are tools you can use to your advantage.

You are encouraged to submit recommendations or comments to improve this manual. Key your comments to the specific page, paragraph, and line of text for which the change is recommended. Provide reasons for each comment to insure understanding and complete evaluation. Use DA Form 2028 (Recommended Changes to Publications and Blank Forms) if available. However, if DA Form 2028 is not available, a letter will be acceptable. Address form or letter to:

Commander
US Army Signal Center & Fort Gordon
ATTN: ATZHTD-A
Fort Gordon, Georgia 30905

# Chapter 2 SKILL LEVEL TASKS

This chapter deals with soldier's technical tasks which have been identified as critical to Combat Telecommunications Center Operator. Skill Level 1 and Skill Level 2 tasks are included. It is your duty to master all the tasks for Skill Level 1. When you feel that you can perform these tasks, you should start on the tasks for Skill Level 2.

#### SKILL LEVEL 1

TASK NO	$\underline{\mathtt{TITLE}}$	PAGE
113-572-1003	Prepare Stop Notice	2-7
113-572-3001	Process Outgoing Message to be Trans- mitted in Paper Tape Format	2-9
113-572-4001	Retransmit a Missent Message	2-20
113-572-4002	Perform Channel Check	2-24
113-572-4003	Send Go Ahead Message	2-27
113-572-4004	Process Outgoing Service Message	2-30
113-572-5001	Process Incoming Terminating Narrative Message Received in Paper Tape Format	2-35
113-572-5002	Receipt for Flash or Emergency Command Precedence (ECP) Message	2-40
113-572-5003	Process Incoming Service Message	2-43
113-572-8003	Process Misrouted Message	2-48
113-572-8006	Process Outgoing Message to be Trans- mitted in Punched Card Format	2-52
113-572-8008	Process Incoming Terminating Message Received in Punched Card Format	2-62

TASK NO	TITLE	PAGE
113-572-9002	Deliver Messages by Messenger	2-68
113-580-2001	Activate Digital Subscriber Terminal Equipment (DSTE) (BE Configuration to Transmit and Receive)	2-70
113-583-2174	Introduce System Management Instruction to the Active System (TADSS) (Burroughs 3500)	2-80
113-583-2175	Activate A Magnetic Tape for the System (TADSS) (Burroughs 3500)	2-83
113-583-2176	Perform Channel Parameter Changes (TADSS) (Burroughs 3500)	2-85
113-583-2177	Obtain Supervisor Requested System Management Reports (TADSS) (Burroughs 3500)	2-87
113-583-2178	Implement Alternate Routing Instruction (TADSS) (Burroughs 3500)	2-89
113-583-2179	Perform Routing Indicator (RI) Changes (TADSS)(Burroughs 3500)	2-91
113-583-2180	Perform Intercept Tape Management Operation (TADSS) (Burroughs 3500)	2-93
113-583-2181	Close an Active Magnetic Tape (TADSS) (Burroughs 3500)	2-95
113-583-2182	Perform Message Tracer Action (TADSS) (Burroughs 3500)	2-96
113-583-2183	Perform Message Retrieval Action (TADSS) (Burroughs 3500)	2-98
113-598-1001	Install Teletypewriter Relay Central AN/ MGC-23	2-100

TASK NO	TITLE	PAGE
113-598-1002	Install Telegraph Terminal AN/MGC-34	2-105
113-598-1003	Install Telegraph Terminal AN/TSC-58	2-114
113-598-1020	Install Teletypewriter Central Office AN/ MGC-17	2-121
113-598-1021	Install Telegraph Terminal AN/MSC-29	2-126
113-598-2002	Operate Teletypewriter Relay Central AN/ MGC-23	2-131
113-598-2003	Operate Telegraph Terminal AN/TSC-58 to Transmit Traffic	2-134
113-598-2004	Operate Telegraph Terminal AN/TSC-58 to Receive Traffic	2-136
113-598-2008	Operate Teletypewriter Central Office AN/ MGC-17	2-138
113-598-2009	Operate Telegraph Terminal AN/MSC-29	2-140
113-598-2011	Prepare AN/UGC-74A(V)3 for Normal Operation	2-143
113-598-2015	Compose a Message Using the AN/UGC-74A(V)3	2-145
113-598-2024	Perform Operator's Preventive Maintenance and Services on Terminal Communications AN/UGC-74A(V)3	2-147
113-598-2025	Use the System Commands on the AN/UGC-74A(V)3 in the Intelligence Communications Terminal (ICT) State	2-155
113-598-3001	Perform Preventive Maintenance on Teletypewriter Equipment	2-157
113-598-3002	Perform Operator's Daily Maintenance on Telegraph Terminal AN/TSC-58	2-160

TASK NO	TITLE	PAGE
113-598-3026	Perform Operator's Preventive Maintenance on Teletypewriter Central Office AN/MGC- 17	2-169
113-598-3027	Perform Operator's Preventive Maintenance on Telegraph Terminal AN/MSC-29	2-172
113-601-1002	Install Generator Set PU-619/M	2-174
113-601-2003	Operate Generator Set PU-619/M	2-180
113-601-3002	Perform Daily Operator's Maintenance on Generator Set PU-619/M	2-185
NOTE: The following tasks are "CRYPTO" equipment oriented and requir CLASSIFIED information to define the performance measures. As thi publication is restricted to UNCLASSIFIED information, it will be necessar for you to refer to the appropriate operations publications for detaile information.		
113-609-2001	Prepare On-Line COMSEC Equipment TSEC/ KW-7	2-193
113-609-2002	Prepare Off-Line COMSEC Equipment TSEC/KL-7 for Operation	2-194
113-609-2004	Prepare On-Line COMSEC Equipment TSEC/ KW-26 for Operation	2-195
113-609-2005	Prepare On-line COMSEC Equipment TSEC/ KG-13 Operation	2-196

#### SKILL LEVEL 2

TASK NO	TITLE	PAGE
113-572-8004	Process Time Analysis (Originated)	2-197
113-572-8005	Process Time Analysis (Terminated)	2-199
113-572-8010	Process a Tracer	2-201
113-572-8011	Process Nondelivery Claim	2-203
113-573-2001	Receipt for COMSEC Material	2-206
113-573-2002	Prepare COMSEC Transfer Report	2-208
113-573-2003	Prepare Inventory of COMSEC Material	2-210
113-573-7002	Prepare COMSEC Destruction Report	2-212
113-583-2184	Shut Down the Tactical Automatic Digital Switching System (TADSS) (Burroughs 3500)	2-214
113-583-2185	Delete Equipment from the Active System (TADSS) (Burroughs 3500)	2-216
113-583-2186	Add Equipment to the Active System (TADSS) (Burroughs 3500)	2-218
113-583-2187	Dump the Routing Table to Magnetic Tape (TADSS) (Burroughs 3500)	2-220
113-583-2188	Send a Service Message to the Terminal (TADSS) (Burroughs 3500)	2-222
113-583-2189	Load the Backup System (TADSS) (Burroughs 3500)	2-224
113-583-2190	Prepare Burroughs 3500 System for Operation (TADSS)	2-226
113-583-2192	Create a Trunk Group (TADSS) (Burroughs 3500)	2-228
113-583-2193	Initialize the System by Means of the Cold Start Method Using Magnetic Tape (TADSS) (Burroughs 3500)	2-231

TASK NO	TITLE	$\underline{PAGE}$	
113-598-7001	Check Installation of AN/TSC-58	2-233	
113-601-7002	Check Operation of Generator Set PU-619/M	2-235	
NOTE: The following task is "CRYPTO" equipment oriented and require CLASSIFIED information to define the performance measures. As this publication is restricted to UNCLASSIFIED information, it will be necessary for you to refer to the appropriate operations publications for detailed information.			
113-609-2003	Check Operation of Off-Line Cryptographic Device TSEC/KL-7	2-237	



# 113-572-1003

# **Prepare Stop Notice**

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. JANAP 128(H).
- 2. ACP 127(E) US SUPP-1 (G).
- 3. Operational teletype circuit(s).

#### STANDARDS

Job standards are met when the stop notice is prepared and transmitted within 6 minutes.

#### PERFORMANCE MEASURES

NNNN

- 1. Determine last good message received. (Refer to JANAP 128(H), chap 4, sec X, para 458a, p 4-63 or ACP 127(E) US SUPP-1 (G), chap 4, para 415a, p 4-10.)
- 2. Prepare STOP notice citing last good channel number received on teletypewriter. (Refer to JANAP 128(H), chap 4, sec X, para 458a, p 4-63 or ACP 127(E) US SUPP-1 (G), Chap 4, para 415, p 4-10.

OTTUZYVW RUCLDIS9000 075150-UUUU--RUCLCSA.
ZNR UUUUU
BT
UNCLAS QRT ZAL 0751910 MAINT DOWNTIME ZID IDA110
PTTUZYUW RUKKDBA1234 0751410-UUUU--RUCLDIA, TOR 0751447
BT
#9000

Figure 1 Example of Stop Notice 128 Format

(Ti) 5 spaces (2CR) (1LF)
00 RUCQDB
DE RUCQDB 0651752
ZNR UUUUU
UNCLAS SVC QRT ZAL OPERATOR MAINT ZID CQD071
IMI CQD071
NNNN

Figure 2 Example of Stop Notice 127 Format

CAUTION: Precedence is always IMMEDIATE for STOP notices.

- 3. Log stop notice on outgoing log. (Refer to TM 11-490-2, chap 6, para 6-10a(7)(f), p 6-23.)
- 4. Transmit stop notice. (Refer to TM 11-490-2, chap 6, para 6-10a (7)(d), p 6-23.)

NOTE: Mode of transmittion will vary depending on the type of teletypewriter being utilized.

#### REFERENCES

JANAP 128(H), w/C1, Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.

ACP 127(E) W/US-Supp-1(G) Communications Instructions, TAPE RE-LAY PROCEDURES, Oct 74.



# 113-572-3001

# Process Outgoing Message to be Transmitted in Paper Tape Format

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. Operational teletype circuit(s).
- 2. AR 105-31, w/C1 and C2.
- 3. ACP 117 CAN-US SUPP-1().
- 4. ACP 131().
- 5. ACP 127(E), w/SUPP-1(G).
- 6. TM 11-490-2.
- 7. JANAP 128(H), w/C1.
- 8. DA Form 4016.
- 9. DA Form 4180.
- 10. DD Form 1503.
- 11. Completed DD Form 173.

#### STANDARDS

Job standards are met when the DD Form 173 is checked for procedural errors and the message is correctly logged, routed, perforated, checked, transmitted, and cleared within 30 minutes using proper security measures.

					JNTABILITY REC		DATE		
	For use of this form, see AR 380-5; the proponent agency is the Office, Assistant Chief of Staff for Intelligence.  SECTION A - GENERAL								
	10:			360	FROM:				
	DATE RECEIVED		ACTION OFFIC	E(S)	SUSPENSE D	ATE(S)	REGISTER	OR CONTROL NO	
THIS MULTIPURPOSE CLASSIFIED DOCUMENT ACCOUNTABILITY RECORD CAN BE USED FOR SINGLE OR MULTIPLE RECEIPTING, SUSPENSE	CONTROL, LOG OR FILE NO.	CLASSIFI- CATION	NUMBER OF COPIES	DESCRIPT or Short	TION (Type, File Ref., Title and Number of i	Unclassified Subject Indorsements/Incls)	DATE OF DOCUMEN		(A) DATE DISPATACHED (FOR RECEIPT AND TRACER ACTION)  (B) DATE DOCUMENT IS RECEIVED BY
CONTROL, INTERNAL ROUTING, REPRODUC- TION AUTHORIZATION, TRACER ACTIONS FOR DOCUMENTS TRANSFERRED, AND A CERTIFICATE OF DESTRUCTION WHEN									RECIPIENT  (C) ACTION OFFICER OR OFFICER TAKING ACTION ON THE DOCUMENT
DOCUMENTS HAVE SERVED THEIR INTENDED PURPOSE.									(D) FOR EXTERNAL AND INTERNAL SUSPENSES
1. TO USE FOR INTERNAL RECEIPTING, COMPLETE SECTIONS A AND B.									(E) CLASSIFICATION OF DOCUMENT
2. TO USE FOR EXTERNAL RECEIPTING, COMPLETE SECTION A. RECEIPIENT COMPLETES SECTION E.									(F) DESCRIPTION OF DOCUMENT IN SUFFICIENT DETAIL TO PERMIT POSITIVE IDENTIFICATION
3. TO USE FOR SUSPENSE CONTROL, FILL OUT APPROPRIATE BLOCKS IN SECTION A.			*						(G) NUMBER TO PROVIDE CONSECUTIVELY NUMBERED DESTRUCTION RECORDS FOR TOP SECRET DOCUMENTS
4. TO USE FOR DOCUMENT DESTRUCTION,		1		] SE	CTION B - ROUTING	RECEIPT OF THE MA			(H) OFFICE DESTROYING DOCUMENT
COMPLETE SECTION C AND SECTION A IF NOT ALREADY FILLED IN.					(I) NUMBER OF COPIES TO BE REPRODUCED				
5. TO USE FOR REPRODUCTION AUTHORIZA-	ТО		COPY NO.	DATE	PRINTED NA	AIVIE	3101	NATURE	(J) SIGNATURE OF AUTHORIZING OFFICIAL
TION, COMPLETE SECTION D.	1.								(K) ADDITIONAL PERTINENT INFORMATION
6. TO USE FOR TRACER ACTION, COMPLETE SECTION E AND SECTION A IF NOT	3.								(E.G., SPECIAL HANDLING INSTRUCTION)
ALREADY FILLED IN.	J.			18 18 19					
	4.								
	5.								1
									_
	MATERIAL DESCR	IRED HEREO	SECTION HAS BEEN	0					
		ESTROYED							
	OFFICE SYMBOL	COMOTED	DATE		OF CUSTODIAN OR R	LASSIFIED WASTE CON	GNATURE		
	DESTRUCTION R	ECORD NO.	DATE	PRINTED NAME C	OF CERTIFYING/DEST	R OFF. SK	GNATURE		1
	PAGE OR COPY N	OR COPY NUMBER DATE PRINTED NAME OF WITNESSING OFFICIAL					GNATURE	-	
				SECTION D	- REPRODUCTION A	UTHORITY			
	NUMBER OF CO	PIES TO BE RE	PRODUCED						
			SEC						
	RECEIPT OF	DOCUMENT(S							
	TRACER ACT		RECEIPT FOR MA	_					
	DATE		PRINTED NA	ME, GRADE OR TIT	LE	SI	IGNATURE	-	
	COMMENTS			1					
	DA FORM 390	34, 1 Jul 79		EDITI	ON OF 1 NOV 72 IS	OBSOLETE.	<b>\$</b> U.S. (	G.P.O. 1979-297-0	93
	D 011111 000	,							

Figure 1. Classified Document Accountability Record

#### PERFORMANCE MEASURES

- 1. Receipt for classified messages. (Refer to fig 1.) (Refer to TM 11-490-2, chap 6, para 6-10a (1)(a), p 6-20 and chap 7, para 7-3 thru 7-9, pp 7-2 thru 7-5.)
  - a. Original copy of DA Form 3964 is given to delivery clerk and kept with the DD Form 173.
  - b. Additional copies of DA Form 3964 are returned to the originator.
- 2. Verify releaser's block is complete.
- 3. Check DD Form 173 for procedural errors. (Refer to JANAP 128(H), anx C, p C-1 thru C-4, and AR 105-31, chap 3, para 3-1 thru 3-31, pp 1 thru 20.)
  - a. Classification stamped top and bottom.
  - b. First word of text is the classification.
  - c. General declassification schedule is present.
  - d. Address elements are correct.
    - (1) Authorized abbreviations.
    - (2) Geographical locations.
    - (3) Office symbol.
  - e. Message is double spaced.
  - f. Required heading blocks completed. (Refer to fig 2.)
  - g. "Classified by" indicated in special instructions block.

SCHOOL SECTION	JOINT MESSAGEFORM						SECURIT	S E C R E T (Training)						
the same of the same of	PAG	PAGE DTG/RELEASER TIME PRECEDENCE				CLASS	SPECAI	ORIG/MSG IDENT						
- I			DATE TIME	MONTH	YB	ACT	INFO	0000				0240955		
-	01 of	01	241005Z	JAN	78	RR	MESSAG	SSSS E HANDLING II	STRUCTIONS	L	L	0240733		
20000000														
September 1	FROM: CDRUSASC&FG FT GORDON GA //ATSN-TD-IT-T//													
account to the	TO: CDRUSACC FT HUACHUCA AZ //OFCSYM//													
TOTAL CONTRACTOR														
No. of Concession, Name of Street, or other Designation, Name of Street, Name	SECRET													
and the same of the same	Subj: Message Preparation													
Separate Constitution of the Constitution of t	A. AR 105-31 dtd AUG 77 W/Cl and C2													
distance of the latest of the	Insure DD Form 173 (Joint Messageform) is properly completed IAW													
	AR 105-31													
	GDS 31 DEC 83													
	1. DD Form 173/1 (black ink) used by all units not serviced by Optical Character Recognition Equipment (OCRE).													
	2. DD Form 173/2 (red ink) or DD Form 173/3 (blue ink) used by units who are serviced by the OCRE.													
	FOR TRAINING PURPOSES ONLY													
6														
5 4														
3														
1														
0	DISTR	R:			S. marketines where	***************************************								
	DRAFT	ER TYPE	D NAME, TITLE, OFFICE	SYMBOL PI	HONE			SPECIA	LINSTRUCTIONS					
			Snark, LTC, D-IT-T 2780					, c	lassifie	d by	ATSN-T			
			ME. TITLE. OFFICE SY			2223	· · · · · · · · · · · · · · · · · · ·							
		IGNATU	. Doe, CPT,	WION-	₽0-R,	4443	,		ITY CLASSIFICATI			DATE TIME GROUP		
	L	FORM	1 4504		***************************************				ECRE	Т (Т		; <b>)</b> G.P.O. 1980-320-000/5434		
	OD	1 MAR	79 173/1			PREVIOU	S EDITION	IS OBSOLETE			<b>₽</b> U.S.	0,1.0. 1560-320-000/343		

Figure 2. DD Form 173 - Joint Messageform.

Return unacceptable messages using DD Form 1503. (Refer to fig 3.) (Refer to TM 11-490-2, chap 6, para 6-10a(1)(i), p 6-20; JANAP 128(H), chap 5, sec II, para 5-12, p 5-10.)

- h. Signed by supervisor.
- i. Explain error to fullest extent.

NOTE: Be sure errors can be pinpointed in AR 105-31. The precedence and classification of message at times need to be considered prior to returning message.

MESSAGE CORRECTION (JANAP 128)	NOTICE 17 Feb 80								
CDR USASIG CC-O	FROM								
☐ The attached message has been transmitted; however, your a	ittention is invited to the discrepancies indicated below.								
🔼 The attached message cannot be transmitted until the discre	pancies noted below have been corrected.								
(Unless self-explanatory, discre	epancies should be clarified in the "REMARKS" block)								
GENERAL  1. Precedence omitted, incorrectly entered, or invalid.	CARD AND MAGNETIC TAPE								
2. Classification indicated cannot be transmitted	23. Language and Media Format (LMF) invalid.								
By this station	24. Language and Media Format (I.MF) unavailable at								
3. Classification omitted or incorrectly entered.	25. Content Indicator Code (CIC) incorrect or invalid.								
4. Addressee unidentifiable or invalid.									
5. Downgrading/declassification instructions omitted.	26. Originating Station Routing Indicator (OSRI) incorrect.								
	27. Station Serial Number (OSSN) duplicated.								
	28. Station Serial Number (OSSN) incorrectly prepared.								
NARRATIVE (MANUAL AND OUR PROCESSING)	29. Julian date incorrect.								
6. Unauthorized plain language address.	30. Time of File (TOF) incorrect.								
7. Unauthorized or invalid characters in heading or	31. Record count over.								
	32. Record count short.								
8. Heading/text single spaced.	33. Start of routing signal incorrect.								
9. Lower case letters.	34. End of routing signal omitted or incorrect.								
10. More than 69 characters per line.	35. EOT record omitted.								
Message incomplete.  12. Corrections not initialed.	36. EOT record does not match header information.								
13. "MINIMIZE CONSIDERED" omitted.	37. EOT record omits record count (MAG TAPE ONLY)								
14. Releaser's signature omitted.	38. Incorrect end of message function.								
15. Page number block omitted or incorrectly entered.	39. EOT signal missing or incorrect.								
16. Date-time group block omitted or incorrectly entered.	40. Improper spacing (field location) in header format.								
<ol> <li>Information and/or exempt addressee omitted or incorrectly entered.</li> </ol>	42. Cards bent or mutilated. 43. Dropped punches.								
	44. Off-punched cards.								
	45. Invalid punches or codes.								
NARRATIVE (OCR PROCESSING ONLY)	46. Invalid addressee routing indicator.								
18. Unacceptable/intermixed typewriter font.	47. Magnetic tape unreadable (will not process).								
19. Unauthorized corrections or "strikeovers" used.									
20. Typed characters unclear or unreadable by OCR.									
21. Margin incorrectly set for OCR use.									
22. Form improperly aligned (skewed) in typewriter.									
UNAUTHORIZED :									
	Billy J. Paul BILLY J. PAUL, OIC TCC								
MESSAGE IDENTIFICATION (NARRATIVE)	MESSAGE (BATCH) IDENTIFICATION (CARD AND MAGNETIC TAPE)								
OFFICE OF ORIGIN RHADJAPA	ORIGINATING STATION ROUTING INDICATOR:								
	CONTENT INDICATOR CODE:								
OFFICE SYMBOL DATE: TIME GROUP	STATION SERIAL NUMBER:								
	DATE TIME FILED:								
DD FORM 1503 EDITE	ON OF 1 NOV 64 IS OBSOLETE.								

Figure 3. DD Form 1503 - Message Correction Notice.

- 4. Assign Time of File (TOF). (Refer to TM 11-490-2, chap 6, para 6-10a(1)(j), p 6-20.)
- 5. Log Message on DA Form 4016. (Refer to fig 4.) (Refer to TM 11-490-2, chap 6, para 6-10a(1)(m), p 6-20.)

NOTE: DTG is assigned to messages by releasing authority. Return carbon comeback copy(ies). (Refer to TM 11-490-2, chap 6, para 6-10a(1)(1), p 6-20.)

For use o	24 JAN 90			PAGE NO.	NO. OF PAGES							
STATION SERIAL NO.	OFFICE SYMBOL	DATE TIME GROUP	PRECE- DENCE	CLASSI- FICA- TION	TIME OF FILING	LOG SIGN	TIME OF XMSN	HANDLING TIME	FILE	REM	REMARKS	
1976	ATI - CTC	241005 Z	R	S	 1359	GW						
				[ 		I				1		

DA FORM 4016 REPLACES DA FORM 11-189, 1 OCT 69, WHICH IS OBSOLETE.

Figure 4. Telecommunications Center Originating Message Register.

- a. Determine paging. (Refer to TM 11-490-2, chap 6, para 6-10a(1)(n), p 6-20; JANAP 128(H), chap 4, sec I, para 402, p 4-3 or ACP 127(E), w/SUPP-1(G), chap 2, sec I, para 208, p 2-8.)
- b. Determine sections. (Refer to TM 11-490-2, chap 6, para 6-10a(1)(n), p 6-20; JANAP 128(H), chap 4, sec I, para 402, p 4-3 or ACP 127(E), w/SUPP-1(G), chap 2, sec I, para 208, p 2-8.)

- 6. List Station Serial Number (SSN) on DD Form 173. (Refer to TM 11-490-2, chap 6, para 6-10a(1)(o), p 6-20.)
- 7. Route message. (Refer to TM 11-490-2, chap 6, para 6-10a(4), p 6-22; ACP 117 CAN-US SUPP-1(I), pp XI thru XXXIV.)
  - a. Apply operating signals as needed. (Refer to TM 11-490-2, chap 6, para 6-10a(4)(d), p 6-22; and ACP 131().)
  - b. Apply accounting symbol if required. (Refer to JANAP 128 (H), anx C, app I, p C-5.)
- 8. Perforate message. (Refer to TM 11-490-2, chap 6, para 6-10a(5), p 6-22; JANAP 128(H), chap 3, sec I, para 301 thru 302(a, b, c), pp 3-1 thru 3-3; chap 4, sec I and II, para 401-427, pp 4-1 thru 4-21; and ACP 127(E) w/SUPP-1(G), chap 2, sec I, para 201-212.f.1, pp 2-1 thru 2-11c.)
  - a. Required format.
    - (1) JANAP 128 (fig 5).
    - (2) ACP 127 (fig 6).
  - b. Proofread work. (Refer to TM 11-490-2, chap 6, para 6-10a(6), p 6-23.)

RTTUZYUW RUWJEKA1234 1741300-UUUU--RUCDAQA.

ZNR UUUUU

R 231215Z JUN 79

FM 3635 FLYTNGWNG STREAD AFB NY//FTS-D//

TO AFCS WASH DC//AF-M1//

BT

UNCLAS

SUBJ: TRACER ACTION

NORMALLY, REQUESTS FOR TRACER ACTION WILL BE INITIATED BY A MESSAGE ORIGINATOR OR ADDRESSEE. HOWEVER, SHOULD CIRCUMSTANCES SO DICTATE, TRACER ACTIONS MAY BE INITIATED BY AN ORGINATING COMMUNICATIONS STATION, RELAY STATION OR ADDRESSEE COMMUNICATIONS STATION.

BT

#1234

NNNN

NOTE: See Annex C to JANAP 128(H) for schematic diagram of message format other than the example above.

Figure 5 EXAMPLE: Narrative Message Format (JANAP 128)

RR RUCDAQA

DE RUWJEKA #1234 1741300

ZNR UUUUU

R 231215Z JUN 79

FM 3635 FLYTNGWNG STREAD AFB NY//FTS-D//

TO AFCS WASH DC//AF-M1//

BT

UNCLAS

SUBJ: TRACER ACTION

NORMALLY, REQUESTS FOR TRACER ACTION WILL BE INITIATED BY A MESSAGE ORIGINATOR OR ADDRESSEE. HOWEVER, SHOULD CIRCUMSTANCES SO DICTATE, TRACER ACTIONS MAY BE INITIATED BY AN ORGINATING COMMUNICATIONS STATION, RELAY STATION OR ADDRESSEE COMMUNICATIONS STATION.

вт

#1234

NNNN

See Annex B to ACP 127 (E) for Schematic Diagram of message format other than example above.

Figure 6 EXAMPLE: Narrative Message ACP 127 Format

### FM 11-72E1/2

- 9. Transmit message. (Refer to TM 11-490-2, chap 6, para 6-10a(7), p 6-23.)
  - a. Log message on DA Form 4180.

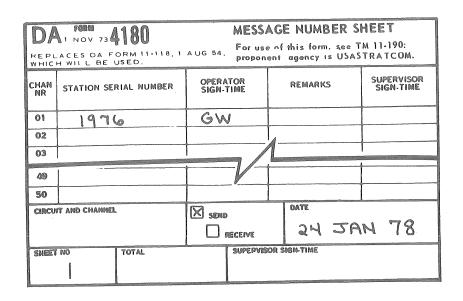


Figure 7. DA Form 4180 - Message Number Sheet.

- b. Station Serial Number.
- c. Operator Sign-Time.
- d. List Time of Transmission (TOT) on message.
- e. Record outgoing channel number on message.

NOTE: Channel numbers may not always be available.

10. Complete required entries on DA Form 4016. (Refer to TM 11-490-2, chap 6, para 6-10a(9), p 6-23.)

Fer use a	For use of this form, see TM 11-490; the proponent agency is the United States Army Strategic Communications Command.								AH JAN 90		PAGE NO. NO. OF
STATION SERIAL NO.	OFFICE SYMBOL	DATE TIME GROUP	PRECE- DENCE	C LASSI- FICA- TION	GROUPS OR CARDS	TIME OF FILING	LOG SIGN	TIME OF	HANDLING TIME	FILE SIGN	REMARKS
1976	ATI- CTC	241005 Z	R	S		1359	GW	1422	23	JT	
					A						
				  ,/				Î	ĺ		

DA FORM 1 APR 73 4016 REPLACES DA FORM 11-189, 1 OCT 69, WHICH IS OBSOLETE.

Figure 8. DA Form 4016 Telecommunications Center Originating Message Register.

11. File message in appropriate RADAY file. (Refer to TM 11-490-2, chap 6, para 6-10a(9)(d), p 6-25.)

### REFERENCES

JANAP 128(H), w/C1, Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.

AR 105-31, w/C 901 and 902, Record Communications, Aug 77.

ACP 117 CAN-US SUPP-1(), Allied Routing Indicator Book, Jul 72.

ACP 131(B), Communications Instructions Operating Signals, Jun 64 w/US SUPP-1, Jun 73.

ACP 127(E) w/US-SUPP-1(G), Communications Instructions Tape Relay Procedures, Oct 74.

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.



# 113-572-4001

### Retransmit a Missent Message

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. JANAP 128(H).
- 2. ACP 117().
- 3. ACP 127(E).
- 4. ACP 131(B).
- 5. Operational teletype circuit(s).

#### STANDARDS

Job standards are met when the missent message is retransmitted; notification is sent to originating station, if required, and service message sent to the station which missent the message. You must complete this task within 12 minutes.

### PERFORMANCE MEASURES

1. Retransmit missent message as SUSPECTED DUPLICATE (ZFD). (Refer to JANAP 128(H), chap 4, sec III, para 429b(1), p 4-26.)

RTTUZYUW RUFDEAE1234 Ø1ØØ8ØØ-UUUU--RUFDBAB.

ZNR UUUUU

R Ø9Ø7ØØZ FEB 77

Remaining format lines

Figure 1. Message as received by RUFDDAD.

NOTE: Retransmit as SUSPECTED DUPLICATE.

RTTUZFDY RUFDEAE1234 Ø1ØØ8ØØ-UUUU--RUFDBAB.

ZNR UUUUU ZFD RUFDDAD

R Ø9Ø7ØØZ FEB 77

Remaining format lines

Figure 2. Example of Message (JANAP 128 Format).

NOTE: For 127 Format, see ACP 127(E) para 426 (D), for exception.

2. Send service message to station which sent the missent message. (Refer to JANAP 128(H), chap 4, sec III, para 429b(3), p 4-26.)

RTTUZYVW RUFDDADØ123 Ø1ØØ83Ø-UUUU--RUFDCSA.

ZNR UUUUU

BT

UNCLAS SVC ZEQ1 RUFDEAE1234 Ø1ØØ8ØØ Ø9Ø7ØØZ FEB 77

Remaining format lines

Figure 3. Example of Service Message (JANAP 128 Format).

3. Send service message to originating TCC when missent message is incomplete or garbled and cannot be forwarded. (Refer to JANAP 128(H), chap 4, sec III, para 429b(2), p 4-26 or ACP 127 US SUPP-1 (G), chap 4, para 427A, p 4-30.)

NOTE: Example of service message to originating TCC, 128 format.

RTTUZYVW RUFDDADØ124 Ø1ØØ84Ø-UUUU--RUFDEAE.

ZNR UUUUU

BT

UNCLAS SVC ZEQ2 RUFDEAE1234 Ø1ØØ8ØØ Ø9Ø7ØØZ FEB 77

INCOMPLETE TEXT

Remaining format lines.

Figure 4. Example of service message to originating TCC 128 format.

RR RUFD

DE RUFDDAD Ø124 Ø1ØØ84Ø

ZNR UUUUU

UNCLAS SVC ZEQ 2 RUFDEAE 1234 Ø1ØØ8ØØ Ø9Ø7ØØZ FEB

77 GARBLED

NNNN

Figure 5. Example of service message to originating TCC 127 format.

NOTE 1: If missent message was received from Automatic Switching Center and retransmission of the missent message results in your facility receiving message again, notify ASC immediately.

NOTE 2: All outgoing actions taken on missent messages should be reflected on DA Form 4016, Telecommunications Center Originating Message Register.

### REFERENCES

ACP 117 CAN-US SUPP-1 (), Allied Routing Indicator Book, Jul 72.

ACP 131(B), Communications Instructions Operating Signals, Jun 64, w/US SUPP-1, Jun 73.

ACP 127(E) w/US-SUPP-1(G) Communications Instructions Tape Relay Procedures, Oct 74.

JANAP 128(H), w/C1, Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.



### 113-572-4002

### **Perform Channel Check**

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. JANAP 128(H).
- 2. ACP 127(E).
- 3. Operational teletype circuit(s).
- 4. TM 11-490-2.

### STANDARDS

Job standards are met when the channel check is prepared, transmitted, and returned. You will correctly prepare and transmit the channel check within 12 minutes.

NOTE: While checking the receive logs of a nonautomatic teletype circuit, you note that no traffic has been received for 30 minutes and advise the supervisor of the fact. He tells you to perform a channel check on that circuit.

### PERFORMANCE MEASURES

1. Check numbers (logs) periodically. (Refer to JANAP 128(H), chap 4, sec X, para 457c, p 4-63; TM 11-490-2, chap 6, para 6-6b(12), p 6-1 or ACP 127(E) chap 4, sec III, para 4-12(E)(F), p 4 - 8.)

NOTE: Logs are usually checked every 30 minutes.

NOTE: Terminals are responsible for the receive side of terminating circuits.

2. Prepare channel check on teletypewriter. (Refer to JANAP 128(H), chap 3, sec VII, para 341c(2)(b), p 3-43, or ACP 127(E), chap 4, sec IV, para 412(E), p 4-8.)

RTTUZYVW RUFTADAØØØØ ØØØØØØ-UUUU--RUFTADA.

ZNR UUUUU

BT

UNCLAS SVC MSG QUALITY CONTROL TEST

BT

#6000

NNNN

Figure 1. Example of JANAP 128(H) channel check.

(TI) (5 spaces) 2 CR) (1LF)

RR RUEPW

DE RUEPWN

ZNR UUUUU

TEST THE QUICK BROWN FOX JUMPED OVER THE LAZY DOGS BACK 1234567890

NNNN

INT ZBZ K

Figure 2. Example of ACP 127(E) channel check.

- 3. Log channel check on outgoing log. (Refer to TM 11-490-2, chap 6, para 6-10a(7)(f), p 6-23.)
- 4. Transmit channel check. (Refer to TM 11-490-2, chap 6, para 6-10a(7)(d), p 6-23.)

NOTE: Mode of transmission will vary depending on the type of teletypewriter being utilized.

The channel check should be returned to your station within 15 minutes. In the event it is not, notify supervisor.

### REFERENCES

JANAP 128(H), w/C1, Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.

ACP 127(E), Communications Instructions Tape Relay Procedures, Oct 74.

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.



## 113-572-4003

### Send Go Ahead Message

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. JANAP 128(H).
- 2. ACP 127(E).
- 3. TM 11-490-2.
- 4. Operational teletype circuit(s).

### STANDARDS

Job standards are met when the GO AHEAD message is prepared and transmitted within 6 minutes.

### PERFORMANCE MEASURES

- 1. Determine last good message received. (Refer to JANAP 128(H), chap 4, sec X, para 458b, p 4-63 or ACP 127(E), chap 4, sec II, para 415B, p 4-10.)
- 2. Prepare GO AHEAD message citing last good channel number received on teletypewriter. (Refer to JANAP 128(H), chap 4, sec X, para 458a, p 4-63 or ACP 127(E), chap 4, sec II, para 415B, p 4-10.)

PTTUZYVW RUCLDIA9001 0751910-UUUU--RUCLCSA.

ZNR UUUUU

BT

UNCLAS QRV ZID IDA110

PTTUZYUW RUKKDBA1234 0751410-UUUU--RUCLDIA, TOR 0751447

BT

#9001

NNNN

Figure 1. Example 128 Format.

(TI) (5 spaces) (2CR) (1LF)

PP RUCLCS

DE RUCLDIA 0751910

ZNR UUUUU

UNCLAS SVC QRV ZID A110 IMI A110

NNNN

Figure 2. Example 127 Format.

CAUTION: Precedence is usually priority for GO AHEAD messages.

- 3. Log GO AHEAD message on outgoing log (DA Form 4016). (Refer to TM 11-490-2, chap 6, para 6-10a(7)(f), p 6-23.)
- 4. Transmit GO AHEAD message. (Refer to TM 11-490-2, chap 6, para 6-10a(7)(d), p 6-23.)
  - NOTE 1: Mode of transmission will vary depending on the type of teletypewriter being utilized.
  - NOTE 2: If no traffic received within 30 minutes, send a channel check.

### REFERENCES

JANAP 128(H), w/C1, Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.

ACP 127(E), Communications Instructions Tape Relay Procedures, Oct 74.

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.



# 113-572-4004

# **Process Outgoing Service Message**

### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. JANAP 128(H).
- 2. ACP 127(E).
- 3. TM 11-490-2.
- 4. ACP 131(B).
- 5. Communications center files.

### STANDARDS

Job standards are met when a service message has been prepared for transmission within 12 minutes.

### PERFORMANCE MEASURES

RTTUZYUW RUFTOEA0435 0931200-UUUU--RUFLMMA.

ZNR UUUUU

R 311303Z APR 80

FM CDR 13TH AVN DET FT SAD GA//FLY//

TO CDR 151ST SIG BN FT HAPPY GA//JOB-DW//

BT

UNCLAS

SUBJ: FLIGHT ARRIVAL

THE FLIGHT NK-T5 WILL ARRIVE YOUR AIR FIELD

AT 1700 HRS BQ&M P I D D M DIJ PPOU MDK ARRIVAL

TIME MIGHT MPJQFDM

ВТ

(EOT)

Figure 1. Incoming garbled message.

- 1. Log entries on DA Form 4016, Telecommunications Center Originating Message Register. (Refer to TM 11-490-2, chap 7, para 7-15c(1)(c), p 7-6.)
  - a. Column 2 Service.
  - b. Column 4 Precedence.
  - c. Column 5 Classification.
  - d. Column 7 Time of File (TOF).

NOTE: Time of File (TOF) for service message, format line 2, is the TOF recorded on DA Form 4016. (Refer to TM 11-490-2, chap 7, para 7-15c(1)(d), p 7-6.)

- e. Column 8 Personal sign.
- f. Column 12 Remarks (e.g., ZES-2, ZDF etc.).

TELECOMMUNICATIONS CENTER ORIGINATING MESSAGE REGISTER For use of this form, see TM 11-490; the proponent agency is the United States Army Strategic Communications Command.							DATE			PAGE NO.	NO. OF PAGES	
STATION SERIAL NO.	OFFICE SYMBOL	DATE TIME GROUP	PRECE- DENCE	CLASSI- FICA- TION	GROUPS OR CARDS	TIME OF FILING	LOG SIGN	TIME OF	HANDLING TIME	FILE SIGN	REA	IARKS
ē	SERVICE		R	u		1430	VR				ZES	-2
											-	
											-	
			-									
			-									
											-	
			-								-	
			-									
			-									
			-									
			<del>                                     </del>								<del>                                     </del>	
			<b>†</b>									

DA FORM 4016 REPLACES DA FORM 11-189, 1 OCT 69, WHICH IS OBSOLETE.

Figure 2. DA Form 4016, Telecommunications Center Originating Message Register.

NOTE: For example of ACP 127 format for service messages see ACP 127 US SUPP-1(G), chap 4, para 419A through 419G.

2. Prepare service message on DA Form 3921, Communication Center Service Message (fig 2-2), in duplicate. (Refer to TM 11-490-2, chap 7, para 7-15c(1)(a), (b) and (c), pp 7-6 and 7-7.)

- a. Insure service message refers to Originating Station Routing Indicator (OSRI), Station Serial Number (SSN), Time of File (TOF), and Date-Time Group (DTG) of message being serviced.
- b. Obtain SSN for service from DA Form 4016, Telecommunications Center Originating Message Register, which is maintained by the service clerk.
- c. Assign correct operating signals in accordance with ACP 131 (e.g., ZES-2).

RTTUZYVW RUFLMMA1415 0931430-UUUU--RUFTOEA.

ZNR UUUUU

BT

UNCLAS SVC ZU1 RUFTOEA0435 0931400 311303Z APR 78

ZES-2 COSIR

BT

#1415

NNNN

Figure 3. Service Message Requesting Retransmission Because of Garble.

- 3. Forward original of DA Form 3921, Communication Center Service Message, to the tape perforating operator. (Refer to TM 11-490-2, chap 7, para 7-15c(1)(e) and (f), p 7-7.)
- 4. Attach duplicate copy of DA Form 3921 to the incoming narrative message, header or printout of punched cards or magnetic tape; and-
  - a. Retain in suspense file if a response is required. (Refer to TM 11-490-2, chap 7, para 7-15c(1)(g), p 7-7.)
  - b. Forward to file clerk for handling. (Refer to TM 11-490-2, chap 6, para 6-10a(1) thru 6-10d(1), pp 6-20 thru 6-29.)

### REFERENCES

ACP 131(), Communications Instructions Operating Signals, Jun 64, w/US SUPP-1, Jun 73.

ACP 127(E), Communications Instructions Tape Relay Procedures, Oct 74.

TM 11-490-2, Army Communications Facilities: Telecommunications Center Operating Procedures, Aug 75.

JANAP 128(H), w/Cl, Automatic Digitial Network (AUTODIN) Operating Procedures, Oct 77.

AR 105-31, Record Communication w/C 901 and 902, Aug 77.



### Process Incoming Terminating Narrative Message Received in Paper Tape Format

### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. DA Form 4011.
- 2. DA Form 4012.
- 3. Operational teletype circuit(s).

### STANDARDS

Job standards are met when you have processed the message with no procedural errors and all entries are correctly listed. You have 18 minutes to complete this task.

#### PERFORMANCE MEASURES

- 1. Remove hard copy and duplicates from receive equipment. (Refer to TM 11-490-2, chap 6, para 6-10d(1)(b), p 6-29.)
- 2. Record time of receipt (TOR) on hard copies.

NOTE: Record time of receipt in ZULU time manually or mechanically, unless automatically inserted by received terminal equipment. (Refer to TM 11-490-2, chap 6, para 6-10d(1)(b), p 6-29.)

- 3. Stamp precedence on message. (Refer to TM 11-490-2, chap 6, para 6-10d(1)(c), p 6-29.)
- 4. Stamp classification (in red if classified) on top and bottom of each message page. (Refer to TM 11-490-2, chap 6, para 6-10d(1)(d), p 6-29.)

- 5. Record in-station control number on all copies. (Refer to TM 11-490-2, chap 6, para 6-10d(1)(e), p 6-29.)
- 6. Record required entries on DA Form 4012. (Refer to TM 11-490-2, chap 6, para 6-10d(1)(a), p 6-29.)

	For use of this form, se		RMINATING MES			tegic Com	munications C	ommand.
CON- TROL NO.	STATION SERIAL NUMBER	OPERATOR SIGN TIME	ORIGINATING HQ: OFFICE SYMBOL	DATE TIME GROUP	CLASSI- FICA- TION	PRECE- DENCE	FOR METHODS & RESULTS USE ONLY	RE MARKS
239	RUFLMMA 0550	(12335		465	U	P		(CARD)
240	RUFTMMA 0410	UR 0003	ITADD	1223302	И	R		(NARRATIV
	RUFDAAA5036	UR0120	USAREUR	1311302	C	R		
	RUFDAAA 1056	BR0130	Estimated	500	И	R		
	RUFTOEA0312	CP0135		15	U	P		
244	RUFTDER 0313	460215	SVC		U	R		夏下产
					ļ	ļ		
RUFLAFA CLEARED BY AND DATE					SHEET	TOTAL	13 AF	'R 79
ESTRUC	TION DATE CERTIFIED	ВУ		WIT	VESSED B	Ÿ		
DA .	FORM 4012	REPLACE	S DA FORM 11-190,	1 OCT 69, WHICH I	IS OBSOLE	TE.		

Figure 1. Terminating Message Number Sheet.

- a. Record in-station control number.
- b. Record originating station routing indicator and SSN.
- c. Enter your personal sign and ZULU time.
- d. Record originating HQ/office symbol for service message (SVC).
- e. Enter Date Time Group (DTG).
- f. Record message classification.
- g. Record precedence.
- h. Enter remarks; e.g., SVC, ZFF.

- 7. Check message for completeness. (Refer to TM 11-490-2, chap 6, para 6-10d(1)(g), p 6-29.)
  - a. Check for misrouted message.
  - b. Check for operating signals.
  - c. Check for garbles.

NOTE: Forward message marked "Subject to correction" to internal router.

Misroutes, missents, garbles, incomplete, suspected duplicates, corrected copies, and stragglers are forwarded to the SERVICE DESK.

- 8. Forward appropriate message to service desk or internal router. (Refer to TM 11-490-2, chap 6, para 6-10d(1)(h-j), p 6-29.)
- 9. Route the message for delivery IAW information contained in the message. (Refer to TM 11-490-2, chap 6, para 6-10d(2)(b), p 6-31.)
  - a. Route message IAW with office symbols used in heading or text, references contained therein, subject matter, and routing instructions provided by the subscribers.
  - b. Include the personal sign below the internal routing instructions.
  - c. Hand print routing on first page of message.

NOTE: Message that is sectioned will be held until all sections are received. (Refer to TM 11-490-2, chap 6, para 6-10d(2)(e), p 6-e.)

- 10. Process and route high precedence. (Refer to TM 11-490-2, chap 6, para 6-10d(2)(c-d), p 6-31.)
  - NOTE 1: Process, upon receipt, high precedence message containing the phrase "Missing section will be forthcoming."
  - NOTE 2: Section messages requiring service action for missing sections are referred to the service clerk based upon precedence and TOR.

- 11. Account for multipage message. (Refer to TM 11-490-2, chap 6, para 6-10d(3)(b), p 6-31.)
- 12. Determine copy requirements for internal distribution. (Determine copies for distribution from the listings provided by subscribers.) (Refer to TM 11-490-2, chap 6, para 6-10d(3)(c), p 6-31.)
- 13. Assign and annotate copy number of classified message in distribution. (Refer to TM 11-490-2, chap 6, para 6-10d(3)(d), p 6-31.)
- 14. Reproduce the required number of copies. (Refer to TM 11-490-2, chap 6, para 6-10d(3)(e), p 6-31.)
- 15. Provide copies IAW local distribution and delivery requirements. (Refer to TM 11-490-2, chap 6, para 6-10d(3)(e) and (4), p 6-31.)
  - a. Page check.
  - b. Collate.
  - c. Staple.
  - d. Provide required number of copies.
- 16. Place the message in the appropriate delivery bin/box. (Refer to TM 11-490-2, chap 6, para 6-10d(5) (b), p 6-31.)
- 17. Insure information on file copy is complete. (Refer to TM 11-490-2, chap 6, para 6-10d(6)(a), p 6-31.)
  - a. Stamp original copy "File."
  - b. Record time available for delivery (TAD) on file copy.
  - c. Enter personal sign on file copy.
  - d. Place file copy in file bin/box.
- 18. Place cover sheet on classified message. (Refer to TM 11-490-2, chap 6, para 6-10d(5)(h), p 6-31.)
- 19. Call action office and/or addressee for pickup of priority action and above message. (Record time that addressee was called in the margin of DA Form 4011, Telecommunications Center Delivery List.) (Refer to TM 11-490-2, chap 6, para 6-10d(5)(i), p 6-31.)

- 20. Log message on appropriate DA Form 4011 for addressee(s). (Refer to TM 11-490-2, chap 6, para 6-10d(5)(g), p 6-31.)
- 21. Insure messenger is authorized and cleared to pick up message. (Refer to TM 11-490-2, chap 6, para 6-10d(5)(j), p 6-31.)
  - a. Check DD Form 577. (Refer to fig 2.)

Billy J. Son	GS-12	25 Jan	78				
OFFICIAL ADDRESS DTD/ITA, USASIGS, FT (	GORDON,	GA					
Billy J. Son	-						
Pickup thru IMMED/SECRET MSG							
I CERTIFY THAT THE ABOVE IS THE SIGNATURE OF THE AUTHORIZED INDIVIDUAL.							
NAME AND GRADE OF COMMANDING OFFICER							
Willie E. White, MAJOR, USA SIGC							
Willie &. W	hite						
DD FORM 577 REPLACES I SEP SI EDITI WILL BE USED UNTIL EXH	ON WHICH AUSTED.	SIGNATURE C	ARD				

Figure 2. DD Form 577, Signature Card.

- b. Require signature of the messenger and JULIAN date, ZULU time of pickup on DA Form 4011.
- 22. Insure message has been completely processed. (Refer to TM 11-490-2, chap 6, para 6-10d(6)(a), p 6-31.) Verify all personal signs.
  - a. Receive operator.
  - b. Internal router.
  - c. Reproduction clerk.
  - d. Acceptance and delivery clerk.
- 23. File message with appropriate RADAY file by DTG. (Refer to TM 11-490-2, chap 6, para 6-10d(7)(c), p 6-32.)

### REFERENCES

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.



# Receipt for Flash or Emergency Command Precedence (ECP) Message

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. TM 11-490-2.
- 2. JANAP 128(H).
- 3. ACP 127(E).
- 4. Operational teletype circuit(s).

### STANDARDS

Job standards are met when you have listed all entries correctly, received and acknowledged for a flash message to include filing. You have 5 minutes to complete this task.

### PERFORMANCE MEASURES

- 1. Process message for delivery. (Refer to TM 11-490-2, chap 7, para 7-2a(1)(b), p 7-1.)
  - a. Time stamp or enter Time of Receipt.
  - b. Assign control number obtained from DA Form 4012.
  - c. Provide a copy to Internal Routing Clerk for determination of action office and advance copy delivery.
  - d. Process message by using normal message processing steps except that such message will be handled as fast as humanly possible.

- 2. Prepare and transmit a service message. (Refer to JANAP 128(H), chap 4, sec 10, para 455a, p 4-62 or ACP 127(E), chap 4, sec II, para 405, pp 4-3 and 4-4.)
  - a. Cite the three station/channel designator.
  - b. Use three-digit channel sequence number.
  - c. Prepare originating station routing indicator, station serial number and JULIAN date-time filed.
  - d. Use content indicator code/communication action identifier ZYVW on message.
  - e. Use the abbreviation SVC in the message text.

OTTUZYVW RUADIGA8137 Ø971143-UUUU--RUADCSA.

ZNR UUUUU

BT

UNCLAS SVC R Z LGA101 RUAOABA0315 0971130

BT

#8137

NNNN

Figure 1. Example 128 Format.

(TI) (5 spaces) (2CR) (1LF)
OO RUADCS
DE RUADIG 0971143
ZNR UUUUU
UNCLAS RZ LGA101 IMI LGAIOI
NNNN

Figure 2. Example 127 Format.

NOTE 1: Transmission of receipt for a flash message is required by MODE II and other nonautomatic terminals. Other terminals will automatically acknowledge receipt.

NOTE 2: The condition of the flash message does not relieve the receiving station of its responsibility to acknowledge receipt. If sending side is out, acknowledge by any means available.

3. File service message in outgoing SVC message file. (Refer to TM 11-490-2, chap 7, para 7-15, p 7-6.)

### REFERENCES

JANAP 128(H), w/C1, Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.

ACP 127(E), Communications Instructions Tape Relay Procedure, Oct 74.

TM 11-490-2, Army Communications Facilities, Telecommunications Center Operating Procedures, Aug 75.



# 113-572-5003

# **Process Incoming Service Message**

### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. TM 11-490-2.
- 2. ACP 131.
- 3. JANAP 128(H).
- 4. ACP 127(E).
- 5. COMCENTER files.
- 6. Operational teletype circuit(s).

### **STANDARDS**

Job standards are met when the incoming service message has been processed into the COMMCEN. You have 12 minutes to complete this task.

### PERFORMANCE MEASURES

- 1. Receive and log incoming service message.
- 2. Obtain original message requiring service from COMMCEN files.
  - a. Remove outgoing message from appropriate RADAY files. (Refer to TM 11-490-2, chap 7, para 7-15c(2), pp 7-7 thru 7-9.)
  - b. Complete Optional Form 23, Chargeout Record (fig 1). (Refer to TM 11-490-2, chap 7, para 7-15c(2)(b), p 7-7.)

# OUT

(NUMBER,	IDENTIFICATION OF RECORD TITLE AND 'OR SUBJECT, DATE OF FILE OR DOCUMENT)	CHARGED TO (PERSON & OFFICE)	DATE CHARGED OUT
NOTIFICATION AND AND AND AND AND AND AND AND AND AN			
······································			
OPTIONAL FORM 23 FEB 1962 GSA Circular No. 259	CHARGEOU	JT RECORD 600 000 000 000 000 000 000 000 000 00	431680979-1 386209
·			
STAG G3-SAAHO TUO	CHARGED TO (PERSE)	IDENTIFICATION OF RECORD AND/OR SUBJECT, DATE OF DOCUMENT)	3 m. (NUMBER, TRLE

TUO

Figure 1. Optional Form 23, Chargeout Record.

- 3. Check original DD Form 173 against hard copy and the transmitted paper tape to ascertain area of garble.
- 4. Make corrections when areas of garble have been noted:
  - a. Produce new paper tape for transmission.

NOTE: If message has been checked and there are no apparent areas of garble, message must still be retransmitted as message may have been garbled in transmission. Retransmission may be accomplished by producing a new paper tape or by doing a header change. (Refer to JANAP 128(H), chap VI, para 435b or ACP 127(E), chap 4, sec II, para 405, p 4-3.)

b. Insure reference is made to service message received on format line 4. (Refer to JANAP 128(H), sec VI, para 434(d), pp 4-38 and 4-39 or ACP 127(E), sec II, para 405, pp 4-3, 4-4 and 4-5.)

NOTE: Local SOPs differ, and you may be required to assign a new station serial number (SSN). If a new SSN is assigned, the message must be logged again in accordance with local SOP.

- 5. Transmit message. (Refer to TM 11-490-2, chap 6, para 6-10a(7), p 6-23.)
  - a. Log message on DA Form 4180.
  - b. Record time of transmission (TOT) on message and personal sign on message.
  - c. Record station serial number.

NOTE: Channel numbers may not always be available.

IDA	DA 1 NOV 73 4180  MESSAGE NUMBER SHEET  For use of this form, see TM 11-190:								
REPL	.ACES DA F	ORM 11-118, 1	AUG 54,			this form, see T agency is USAS			
WHIC	H WILL BE	USED.		p. 0,001		agency to don't	TRATCOM.		
CHAN NR	STATION SE	RIAL NUMBER	OPERA SIGN-			REMARKS	SUPERVISOR SIGN-TIME		
01					·				
02									
03									
04									
05							·		
06									
07									
08									
09									
10									
11	1								
12									
13									
14				_ 4 _ ]					
15						1			
40			V_			j			
41									
42									
43									
44									
45									
46									
47									
48									
49									
50			Company of the Compan			0.0522			
CIRCUI	T AND CHANNEL		SEMD	ECEIVE		DATE			
Sterr	100.	TOTAL		SUPERVISO	OR SI	GN-TIME			

Figure 2. DA Form 4180.

- 6. Complete required entries on DA Form 4016 if message was assigned a new station serial number.
- 7. File message and remove Optional Form 23. (Refer to TM 11-490-2, chap 7, para 7-15c(2)(b), p 7-7.)

8. Forward original copy of the incoming service message to the file clerk after it has been annotated by the service clerk. (Refer to TM 11-490-2, chap 7, para 7-15c(2)(c), p 7-7.)

### REFERENCES

JANAP 128(H), w/C1, Automatic Digital Network (AUTODIN), Operating Procedures, Oct 77.

ACP 127(E) Communications Instructions Tape Relay Procedure, Oct 74.

TM 11-490-2, Army Communications Facilities: Telecommunications Center Operating Procedures, Aug 75.



# 113-572-8003

### **Process Misrouted Message**

### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. JANAP 128(H).
- 2. ACP 127(E).
- 3. ACP 131(B).
- 4. ACP 117.
- 5. Operational teletype circuit(s).

### STANDARDS

Job standards are met when a misrouted message has been corrected, retransmitted, and the originator notified via service message. You must complete this task within 12 minutes.

### PERFORMANCE MEASURES

RTTUZYUW RUEDABA6725 1831330-UUUU-RUCLAKA.

ZNR UUUUU

R 021315Z JUL 80

REMAINING FORMAT LINES

NNNN

Figure 1. Misrouted message.

- 1. Obtain correct routing indicator. Refer to ACP 117 CAN-US SUPP-1(I), pp XI thru XXXIV.)
  - a. Determine address information or lack of station delivery responsibility from format lines 7 or 8.
  - b. Apply header change. (Refer to JANAP 128(H), chap 4, sec III, para 428d, p 4-22 or ACP 127(E), chap 4, sec VI, para 426E thru K, pp 4-27, 4-28 and 4-29.)
    - (1) Place own first position LMF designator on format line 2 if necessary.
    - (2) Place content indicator code/communication action identifier ZOVW on format line 2.
    - (3) Place own OSRI on format line 2.
    - (4) Place SSN of message being routed.
    - (5) Place own JULIAN date and time filed.
    - (6) Correct routing indicator of the station to effect delivery or refile.

NOTE: If the message requires rerouting to a non-US routing indicator, the redundant security character in format lines 2 and 4 will be changed to reflect the appropriate TRC (Transmission Release Code). See chapter 7, JANAP 128(H) or ACP 127(E), Chapter 2, Paragraph 203-2, Pages 2-4A through 2-4F.

RTTUZOVW RUCLAKA6725 1831400-UUUU--RUEBALA.

ZNR UUUU ZOV RUCLAKA1524 REROUTE OF RUEDABA 6725

1831330

R 021315Z JUL 80

REMAINING FORMAT LINES

Figure 2. Message after header change.

2. Transmit message. (Refer to JANAP 128(H), chap 4, sec III, para 428b(2), p 4-22 or ACP 127(E), chap 4, sec VI, para 426, pp 4-27 and 4-28.)

NOTE: In addition to the action required, change the words "REROUTE OF", followed by the OSRI, SSN, JULIAN date and time filed as appearing in format line 2 of the original message.

3. Prepare and transmit a service message. (Refer to JANAP 128(H), chap 4, sec III, para 428b(3) and 428c, p 4-22 or ACP 127(E), chap 4, sec VI, para 426 E-1, p 4-27.)

```
RTTUZYVW RUCLAKA68Ø3 18314ØØ-UUUU--RUEDABA.

ZNR UUUUU

BT

UNCLAS SVC ZEQ3 RUEDABA6725 183133Ø

Ø21315Z JUL 80 RUEBALA Ø21415Z

BT

#68Ø3

NNNN
```

Figure 3. Example 128 Format.

```
(TI) (5 spaces) (2CR) (1LF)

RR RUEDAB

DE RUCLAK 6803 1831400

ZNR UUUUU

BT

UNCLAS SVC ZEQ3 RUEDAB 6725 1831300 02/1315Z

RUEBAL

BT

NNNN
```

Figure 4. Example 127 Format.

### REFERENCES

ACP 117 CAN-US SUPP-1(), Allied Routing Indicator Book, Jul 72.

ACP 127(E) Communications Instructions Tape Relay Procedure, Oct 74.

JANAP 128(H), w/C1, Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.



# 113-572-8006

# Process Outgoing Message to be Transmitted in Punched Card Format

## CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. DD Form 1392 (prepared by originator).
- 2. DD Form 1503.
- 3. DA Form 4016.
- 4. JANAP 128(H).
- 5. TM 11-490-2.
- 6. ACP 117 CAN-US SUPP-1().

Card message without header and EOT is available. Your trick chief will provide assistance.

#### STANDARDS

Job standards are met when you have checked the message for errors and logged the message on appropriate forms. All entries will be made without error. You have 30 minutes to complete this task.

# PERFORMANCE MEASURES

- 1. Insure DD Form 1392 (Data Messageform) is properly completed. (Refer to JANAP 128(H), chap 5, sec II, para 512, p 5-10.)
  - a. Check for precedence. (Refer to JANAP 128(H), chap 5, sec III, para 521, p 5-11.)

- b. Check Language Media Format (LMF). (Refer to JANAP 128 (H), chap 5, sec III, para 522, p 5-11.)
- c. Check for classification. (Refer to JANAP 128(H), chap 5, sec III, para 523, p 5-11 and 5-13.)
- d. Check for correct address acronym and geographical location.
- e. Check card count (detail cards). (Refer to JANAP 128(H), chap 5, sec I, para 501d, p 5-1.)
- f. Check originator's identification.
- g. Check content indicator code. (Refer to JANAP 128(H), chap 5, sec I para 506, p 5-4 and 5-5; sec III, para 524, p 5-13.)
- h. Check office symbol and telephone extension of originator.

NOTE: Return message if any of the above is incorrect. Use DD Form 1503.

2. Enter time of file (TOF) on all copies of DD Form 1392 (enter JULIAN date and ZULU time). (Refer to TM 11-490-2, chap 6, para 6-10.b(1).(c), p 6-26.)

DATA MESSAGE FORM	PRECEDENCE ROW	LINE	CC	CLASSIFICATION	SSIFIED
	ERLAND	ARMY I	EPOT, F	PA	CARD COUNT (Detail cards)
ORIGINATOR'S IDENTIFICATION follow-up, status, etc.)		CONTENT IND	RELEASING OFFICE	R'S SIGNATURE	OFFICE SYMBOL & EXT. CC-OPN-EL
USASIGS F	: ¢AO	AHCA	20HM.	JOHNSON	2244
REMARKS					
		FOR COMMUNICATION	NS CENTER USE ONL	Y	
ORIGINATOR'S ROUTING INDIC	ATOR 5	STATION SERIAL NUMBER		DATE-TIME (Time filed)	
				Ø 241319	<b>が</b>
TOTAL CARD COUNT	*	ADDRESSEE ROUTING IND	ICATOR	SUPERVISOR'S SIGNATI	
OPERATOR'S SIGNATURE	1	TIME TRANSMITTED		CLASSIFICATION	

Figure 1. Data Messageform.

3. Return one copy of DD Form 1392 to originator. (Refer to TM 11-490-2, chap 6, para 6-10b(1)(c), p 6-26.)

NOTE: In the event that you receive a prepunched header and EOT card, insure header and EOT cards of prepunched or partial prepunched messages are within 30 minutes of actual time of acceptance.

If not within 30-minute limitation, the header and EOT cards will be mutilated and retained for use by the card punch operator.

Ascertain SSN requirements based on number of cards in card count block, DD Form 1392, e.g., card count of 750 will require assignment of two SSNs. (Refer to JANAP 128(H), chap 5, sec II, para 510, p 5-5 and TM 11-490-2, chap 6, para 6-20b(1)(e), p 6-26.)

4. Enter appropriate information on DA Form 4016. (Refer to TM 11-490-2, chap 6, para 6-10b(1)(b), p 6-25.)

E or usa c	TELECOMMUNICA	ATIONS CENTER ORIGI	NATING	MESSAG Army Strat	E REGISTE	R ations Comm	vand.	24	JAN 8	)	PAGE NO.	NO. OF PAGES
STATION SERIAL NO.	OFFICE SYMBOL	DATE TIME GROUP	PRECE- DENCE		GROUPS OR CARDS	TIME OF	LOG SIGN	TIME OF XMSN	HANDLING TIME	FILE	REN	IA R KS
1976	DTD - ITA	241005 Z	R	S		1359	GW					
		<b>V</b>		l )								
	·											
DA FOR	M 4016 REPLAC	ES DA FORM 11-189, 1 OCT 6	9, WHICH I	S OBSOLE	TE.							anner de la constante de la co

VA 1 APR 73 4010

Figure 2. Telecommunications Center Originating Message Register.

a. Station serial number.

NOTE: Where specific block of SSNs have been allocated to subscribers, a separate DA Form 4016 will be maintained.

- b. Originator's identification.
- c. Precedence.
- d. Classification.
- e. Textual card count.
- f. TOF (JULIAN date and ZULU time).
- g. Two-letter personal sign.
- h. CIC (content indicator code) in "Remarks."

NOTE: Forward DA Form 3964 for controlled classified message to M & R, if required.

- 5. Insure that routing indicator(s) serve addressee(s). (Check header and EOT cards of prepunched message.) (Refer to TM 11-490-2, chap 6, para 6-10b(2)(b), p 6-26 and ACP 117 CAN-US SUPP-1 (I), pp XI thru XXXIV.)
- 6. Assign routing indicator(s) based on Language Media Format (LMF), when required. (Refer to TM 11-490-2, chap 6, para 6-10b(2)(c), p 6-26 and ACP 117 CAN-US SUPP-1 (I), pp XI thru XXXIV.)
- 7. Prepare header and end of transmission (EOT) cards acceptable for transmission, when required. (Refer to JANAP 128(H), chap 5, sec III, para 520 thru 541, pp 5-12 thru 5-19 and TM 11-490-2, chap 6, para 6-10b(3)(d), p 6-26.) (See fig 1 and 2.)

8. Enter total card count and personal sign on DD Form 1392. (Use slant bar to separate total card count and personal sign.) (Refer to TM 11-490-2, chap 6, para 6-10b(3)(d), p 6-26.)

	PRECEDENCE		LMF	CLASSIFICATION	:
DATA MESSAGE FORM	ROUTI	NE	CC	UNCLAS	SIFIED
ADDRESSEE(Clear Text) NEW CUMB	ERLAND	ARMY DE	EPOT, PA	-	(Detail cards) 8 / 33. E.
DRIGINATOR'S IDENTIFICATIO	N (RCS,	CONTENT IND	Tohn Jo		OFFICE SYMBOL & EXT. CC-OPN-EL
USASIGS 1	FEAO	AHCA	JOHN 3	TOHMSON	2244
SUBJECT:	YTT:	MODIFICE	ATION K	.17	
		FOR COMMUNICATIO	NS CENTER USE ONL	Y	
ORIGINATOR'S ROJTING INDI	CATOR STA	ATION SERIAL NUMBER		DATE-TIME (Time filed)	ಶ
TOTAL CARD COUNT		RUMBIAC		SUPERVISOR'S SIGNAT	
OPERATOR'S SIGNATURE		IE TRANSMITTED		CLASSIFICATION	
Denge Ja	ه ا	1420 Z	•	UNCLASS	SIFIED

Figure 3. Data Messageform.

- 9. Insure header and EOT are correct and match. (Check information that is provided on DD Form 1392.) (Refer to JANAP 128(H), chap 5, sec III, para 520 thru 540, pp 5-11 thru 5-18.)
- 10. Record SSN on DA Form 4180, Message Number Sheet. (Use two-letter personal sign.)

M	1 NOV 73	A100			MESS	AC	E NUMBER S	RUEET
		<b>410U</b> FORM 11-118, 1					f this form, see	
WHIC	H WILL BE	USED.	AUG 5	94,	nocorq	eni	agency is USA	STRATCOM.
CHAN NR	STATION SE	ERIAL NUMBER	OPE SIG	R/N	ATOR TIME		REMARKS	SUPERVISOR SIGN-TIME
01	002	28	J	$\overline{T}$	1420			
02				·				
03								
04								
05				-				
06		20-2	Militari Mireri Mineri			-		
07				-				
08								
09								
10					***************************************			
19								
12				-				
19			-					
14	Name and Address of the Owner, which the Owner, where the Owner, which the Owner, where the Owner, which the				4	-		
18					$\mathcal{A} \dashv$	-		
40			7/		1			í
41			V					
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44	**************************************							
45								
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49								
50								
CIRCUN	AND CHANNEL	5		45			DATE	
				-	ECEIVE			
887	NO.	TOTAL			SUPERVISO	R S	ign-Time	
A.		1						

Figure 4. DA Form 4180.

- 11. Transmit message. (Refer to TM 11-490-2, chap 6, para 6-10b(4), p 6-26.)
  - a. Ascertain that the transmission is accepted.
  - b. Rejected messages are protected in accordance with JANAP 128(H) and TCC Equipment Operator's Manual.

NOTE: Rejected messages which cannot be corrected are referred to trick chief. (Refer to TM 11-490-2, chap 6, para 6-10b(4)(c), p 6-27.)

- 12. Record time of transmit (TOT) in "Time Transmission" block of DD Form 1392. (Refer to fig 3 and TM 11-490-2, chap 6, para 6-10b (4)(f), p 6-27.)
- 13. Record signature in "Operator's" signature block of DD Form 1392. (Refer to fig 3 and TM 11-490-2, chap 6, para 6-10b(4)(g), p 6-27.)
- 14. Record TOT on DA Form 4016. (Refer to TM 11-490-2, chap 6, para 6-10b(5), p 6-27.)

2 C		5 ( D /			10 R		12 E	13 B	14 A	15 A					20 2	21	22 1	23 4	24 4	25 0	26 2	27 3	28 3	29	30 0	31 2	32 1	33 3	34	35 U	36 U	37 U	38 U	39	40	41 R				16 4 A		48	49-8
					turn						,	,	~~		was vill																							1					
																			-																								
		stion Action																													****												are filled with
Language and Media Format	Classification as appropriate	ator Communication	- 1											Number																	Classification Redundancy				Isug Signal						least O see.	iong Selection	Positions unused in header
Language and	Classification	Content Indicator	Identifier	Sociation	ospajato.			Originator						Station Serial Number		Separator			Julian Date_			Time Filed		Separator	i		100000000000000000000000000000000000000				Classification				Start-of-Routing Signal			000000	Addressee.		0 70 71	End-or-houring arginal	Positions unused in

Figure 5. Data Pattern Header Format.

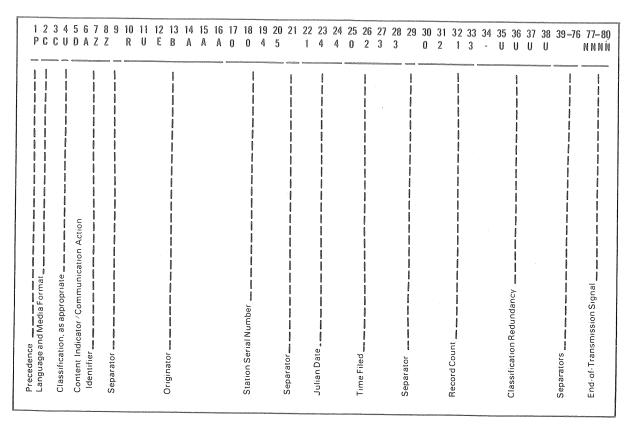


Figure 6. EOT Record Format.

TASK 113-572-3002

For use o	TELECOMMUNICA	TIONS CENTER ORIGI	NATING	MESSAG Army Strati	E REGISTE	R ations Comm	and.	a4	JAN '	78	PAGE NO.	NO. OF PAGES
STATION SERIAL NO.	OFFICE SYMBOL	DATE TIME GROUP	PRECE- DENCE	I C I ACCI		TIME OF FILING	LOG SIGN	TIME OF XMSN	HANDLING TIME	FILE SIGN	REN	AARKS
1976	DTD-ITA	241ØØ5 Z	R	S		1359	GW	1420	21	JT	-	
			ļ	-								
					/							
				7-/-						 	1	

DA FORM 1 APR 73 4016 REPLACES OA FORM 11-189, 1 OCT 69, WHICH IS OBSOLETE.

TASK 113-572-3001

Figure 7. Telecommunications Center Originating Message Register.

- 15. Record signature in "Supervisor's Signature" block of DD Form 1392. (Refer to fig 3 and TM 11-490-2, chap 6, para 6-10b(5), p 6-27.)
- 16. File card message original and carbon copy of DD Form 1392 in appropriate RADAY file. (Refer to JANAP 128(H), chap 5, sec II, para 510g, p 5-7 and TM 11-490-2, chap 6, para 6-10b(5), p 6-27.)
- 17. Record personal sign on DA Form 4016. (Refer to fig 7 and TM 11-490-2, chap 6, para 6-10b(5), p 6-27.)

# REFERENCES

JANAP 128(H), w/C1, Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.

ACP 117 CAN-US SUPP-1(), Allied Routing Indicator Book, Jul 72.

TM 11-490-2, Army Communications Facilities, Telecommunications Center Operating Procedures, Aug 75.



# 113-572-8008

# Process Incoming Terminating Message Received in Punched Card Format

## CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. DA Form 4010.
- 2. DA Form 4011.
- 3. DA Form 4012.
- 4. DA Form 4180.
- 5. TM 11-490-2.

You will also have punched cards available for incoming messages. Your trick chief will provide assistance.

### STANDARDS

Job standards are met when the message has been processed completely with no procedural errors and all entries are correctly listed. You have 12 minutes to complete this task.

## PERFORMANCE MEASURES

- 1. Receive card message with header printouts. (Refer to TM 11-490-2, chap 6, para 6-10e(1)(a), p 6-32.)
- 2. Place time of receipt on header printouts. (Refer to TM 11-490-2, chap 6, para 6-10e(1)(b), p 6-32.)

NOTE: Terminals which receive printed journal entries indicating receipt and time of receipt are exempt from entering TOR on the header printout.

- 3. Place personal sign on the header printouts. (Refer to TM 11-490-2, chap 6, para 6-10e(1)(d), p 6-32.)
- 4. Complete DA Form 4012, Terminating Message Number Sheet. (Refer to TM 11-490-2, chap 6, para 6-10e(1)(e), p 6-32.)

	For use of this form, s	TEF ee TM 11-490; th	MINATING MES	SAGE NUMBER	SHEET s Army Stra	tegic Com	munications Co	emmand.
CON- TROL NO.	STATION SERIAL NUMBER	OPERATOR SIGN/TIME	ORIGINATING HQ/ OFFICE SYMBOL	DATE TIME GROUP	CLASSI- FICA- TION		FOR METHODS & RESULTS USE ONLY	
ØI	RUEOALA2361	GW1245		CC 375	u	R		AHAC
			F	OLD				
	·							
			7				· ·	
					1			
CIRCUIT	DAFA	CLEARED BY A	AND DATE		SHEET	TOTAL	DATE	
) E C T B II C	RUEO				NO. I	SHEETS	25 76	IN 79
	TION DATE CERTIFIED	) BY		WIT	NESSED BY	,		
	FORM 4012	REPLACES	DA FORM 11-190,	L OCT 69 WHICH	IS OBSOLE:	* =		

Figure 1. Terminating Message Number Sheet.

- a. Enter in-station control number.
- b. OSRI and SSN.
- c. Record operator's personal sign and time in ZULU.
- d. Enter originating HQ/office symbol, if available.
- e. Card count in DTG block.
- f. Enter classification.
- g. Precedence.
- h. Record CIC in remarks column.

5. Record control number from DA Form 4012 on header printout adjacent to the TOR, and record two-letter personal sign. (Refer to TM 11-490-2, chap 6, para 6-10e(1)(d), p 6-32.)

NOTE: Only if TOR is not recorded automatically by the terminal equipment.

- 6. Check message for: (Refer to TM 11-490-2, chap 6, para 6-10e (1)(e), p 6-32.)
  - a. Misroute.
  - b. Missent.
  - c. Suspected duplicate pilots.

NOTE: If message is as in a, b, or c above, forward to service clerk.

- 7. Fasten card deck message with rubber band. (Refer to TM 11-490-2, chap 6, para 6-10e(1)(f), p 6-32.)
- 8. Stamp the following information on the reverse side of two blank cards: (Refer to TM 11-490-2, chap 6, para 6-10e(2)(b), p 6-32.)
  - a. Security classification, unclassified or FOR OFFICIAL USE ONLY (FOUO).
  - b. Precedence.
- 9. Place a card affixed with precedence and security classification on each end of card deck. (Refer to TM 11-490-2, chap 6, para 6-10e(2)(b), p 6-32.)
- 10. Route message by distribution listing. (List distribution on header printout.) (Refer to TM 11-490-2, chap 6, para 6-10e(2)(c), p 6-32.)
- 11. Place time available for delivery (TAD) on header printouts. (Time stamp the header printout.) (Refer to TM 11-490-2, chap 6, para 6-10e(3)(b), p 6-32.)
- 12. Place two-letter personal sign on header printouts. (Refer to TM 11-490-2, chap 6, para 6-10e(3)(b), p 6-32.)

13. Complete DA Form 4011, Telecommunications Center Delivery List. (Refer to TM 11-490-2, chap 6, para 6-10e(3)(c), p 6-32.)

DELIVE	For use of this form, see TRIES TO	TELECOMMUNICATIO FM 11-490; the proponent agent	NS CEN'	TER DEL	IVERY LIST  Army Strategic Communic	ations Comn	or PAGES	
TROL NO.	ORIGINATING HQ OR OFFICE	DATE TIME GROUP	NO. OF	CLASSI- FICA- TION	RECEIPT SIGNAT	JRE	TIME OF DELIVERY	
ØI	RUEOALA 2361	OptionStreamports	CARDS	u				1345
DA	FORM 4011 REPL	ACES DA FORM 11-39, 1 SEP	54, WHIC	H IS OBSOL	ETE. ØU.S	. G.P.O. 1	973-769859/198	3

Figure 2. Telecommunications Center Delivery List.

- a. List control number.
- b. Record OSRI and SSN.
- c. List cards.
- d. List classification.
- 14. Complete DA Form 4010, Message Distribution Register, if required. (Refer to TM 11-490-2, chap 6, para 6-10e(3)(d), p 6-32.)
- 15. Utilize classification protective cover sheet on all classified messages. (Refer to TM 11-490-2, chap 6, para 6-10e(3)(e), p 6-32.)
- 16. Place duplicate header printout in appropriate bin/box. (Refer to TM 11-490-2, chap 6, para 6-10e(3)(f), p 6-32.)
  - a. Call action addressee on priority and above action messages.
  - b. Record time addressee called in margin of DA Form 4011.

- 17. Insure messenger is authorized to pick up messages by checking DA Form 577. (Refer to TM 11-490-2, chap 6, para 6-10e(3)(g), p 6-32.)
- 18. Insure DA Form 4011 is complete. (Refer to TM 11-490-2, chap 6, para 6-10e(3)(g), p 6-32.)
  - a. Require the signature of messenger.
  - b. Record date and time of pickup.

	For use of this form, see T	TELECOMMUNICATION M 11-490; the proponent agenc				cations Comm	nand.	
DELIVER				DATE	JAN 80	PAGE	OF PAGES	
CON- TROL NO.	ORIGINATING HO OR OFFICE	DATE TIME GROUP	NO. OF COPIES	CLASSI- FICA- TION	RECEIPT SIGNAT		TIME OF DELIVERY	
ØI	RUEOALA2361	<b>4950000000000</b>	CARD	u	Gronge Will	liams	1402Z	1345
		_						
			1					
DA	FORM 4011 REPL	ACES DA FORM 11-39, 1 SEF	9 54, WHIC	H IS OBS	DLETE. \$ U.	s. G.P.O.	1973-769859/19	8

Figure 3. Telecommunications Center Delivery List.

- 19. Confirm control number. (Refer to TM 11-490-2, chap 6, para 6-10e(4)(a), p 6-32.)
  - a. Draw a line through the corresponding number on DA Form 4180.
  - b. Insert personal sign in operator sign-time.
  - c. Column corresponding with the assigned control number.
- 20. File duplicate header printout copy with appropriate RADAY traffic. (Refer to TM 11-490-2, chap 6, para 6-10e(4)(b), p 6-32.)

$\square$	1. NOV 73 4 180	M	ESSAGE NUMBER	CHEET
REPI	ACES DA EORM 11-110			
WHIC	ACES DA FORM 11-118, H WILL BE USED.	pre	ponent agency is US	ASTRATCOM.
CHAN NR	STATION SERIAL NUMBER	OPERATOR SIGN-TIME	REMARKS	SUPERVISOR SIGN-TIME
01				
02				
03				<b>—</b>
04				
05				
06				
07				1
08				
09				
10				
88				
12				
13				
14		4		1
15				<del> </del>
40				1
41				
42				
43				
44				
45				
46			,	İ
47				
49				
49				
50				
CIRCUIT .	and Channel	SEND RECEIVE	DATE	
NEET DO	O. YOTAL	SUPERN	ISOR SIGN-TIME	

Figure 4. DA Form 4180.

# REFERENCES

TM 11-490-2, Army Communications Facilities, Telecommunications Center Operating Procedures, Aug 75.

# TASK

# 113-572-9002

# **Deliver Messages by Messenger**

# CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. Messenger schedules.
- 2. Vehicle.
- 3. Routes (strip maps).
- 4. Messages/pouches.
- 5. Weapon (as required).

## STANDARDS

Job standards are met when messages/pouches are delivered to units/agencies listed on delivery list, signature obtained for each item, and the delivery list returned to the dispatcher.

# PERFORMANCE MEASURES

- 1. Obtain assigned vehicle.
- 2. Perform before operation maintenance on vehicle.
  - a. Correct noted deficiencies.
  - b. Add gas and oil as necessary.
- 3. Pick up messages/pouches from messenger dispatcher.

- 4. Receive delivery list from dispatcher.
  - a. Verify quantity of messages.
  - b. Verify quantity of pouches.
- 5. Deliver messages/pouches to units/agencies designated.
  - a. Follow predetermined routes (strip map).
  - b. Follow wire tagging if required.
- 6. Enter time of delivery on delivery list.
- 7. Obtain signature of recipient of messages/pouches. Check DA Form 577, Authorized Signature Card, if messages/pouches are classified.
- 8. Return delivery list with signatures to messenger dispatcher.
- 9. Perform after operations maintenance and turn in vehicle.

### REFERENCES

FM 24-17, Tactical Telecommunications Center Operation, Mar 77.



# 113-580-2001

# Activate Digital Subscriber Terminal Equipment (DSTE) (BE Configuration) to Transmit and Receive

### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. TM 11-7440-238-15.
- 2. Operational DSTE (BE) configuration.

NOTE: Be configuration is desirable; however, it is understood that this configuration may not always be available.

This task will be performed any time the DSTE is taken off-line (power failure, PM, etc). Supervision and assistance will be available.

#### STANDARDS

Job standards are met when the DSTE terminal is prepared to transmit and receive messages. You will send and receive a self-addressed card or paper tape message. You have 45 minutes in which to complete this task.

### PERFORMANCE MEASURES

# Part I - Common Control Unit (CCU)

- 1. Activate common control unit.
  - a. Insure CCU mode select switch is set to CCU and clock to AUTOMATIC.
  - b. Press AC power push-button and observe the following indications:

- (1) AC and DC lights are on indicating presence of AC and DC power.
- (2) DSM is on, indicating which output device is selected to operate on-line, either PRIMARY or ALTERNATE.
- (3) SW SYN is on indicating SYNCHRONIZATION has not been established with the ASC.
- c. Press LAMP AUDIO TEST and perform the following steps:
  - (1) Illumination of all back lit controls and indicators.
  - (2) Obtain from maintenance and replace any burned out bulbs.
  - (3) Adjust audio alarm to desired level.
- d. Press SEND CANCEL and observe that receive RM is extinguished due to the establishment of ACK-SYNCHRONIZATION between the send and receive.

NOTE: Open maintenance control panel and observe if display lamps are on constantly. Cycling lights will indicate a flow of data.

- e. Press send channel A ASSIGNED and observe the following:
  - (1) Audible alarm, depress audible reset.
  - (2) Red receive channel A assigned control is on, denoting that CCU has data in storage to be received on that channel; but device has not been assigned.
  - (3) Red SW WBT is on, indicating receive side incapable of processing data. Therefore, CCU will send control character WBT to the switch or sending device until the reason for stoppage is removed.
  - (4) Send channel A select white is on, indicating CCU has selected that device to process data.
- f. Press receive channel A ASSIGNED and observe the following:
  - (1) SW WBT goes off, as device may now receive data.
  - (2) Assigned control goes from red to white, denoting device is assigned.

- (3) Select white comes on, denoting CCU has selected that device to process data.
- (4) Lamps on send and receive display maintenance control panel are cycling, indicating a constant flow of data.
- g. Press send channel B ASSIGNED and observe the following:
  - (1) ASSIGNED white is on, denoting device is assigned.
  - (2) READY green is on, denoting device on that channel is ready to process data when selected by CCU.
- h. Press SEND CANCEL and observe the following:
  - (1) Red of send channel A cancel is on, denoting data was cancelled.
  - (2) Channel B went from ready to select, because data on channel A was cancelled and CCU now selected channel B to process data.

## (ACTIVATION COMPLETED)

2. Insure CCU MODE SELECT SWITCH is turned to ON LINE position and clock control to AUTOMATIC.

CAUTION: Activate all input and output devices prior to changing mode select switch to the ON LINE POSITION.

# Part II - Output Devices

- 1. Prepare high speed card punch to receive.
  - a. Remove cover and check punch assembly oil level. (Level must be 1/2- to 3/4-mark in windows.)
    - (1) Replace cover.
    - (2) Remove and empty chad bag.
  - b. Press AC Power. Control panel will indicate the following:
    - (1) AC-DC is on indicating presence of AC and DC power.
    - (2) NOT ASSIGNED is on, as device is not assigned at CCU.

- (3) STOP is on, as device is in a stop condition.
- c. Press LAMP TEST and replace burned out lamps if required.
- d. Load approximately 300 cards.
- e. Press SINGLE FEED control two or three times and observe that a card is picked, fed, and stacked each time.
- f. Press LOCAL TEST and observe the following:
  - (1) Local test control amber is on, denoting device is in local test condition.
  - (2) Cards are picked, fed, punched, and stacked in stacker continuously.
- g. Press STOP.
- h. Press START.

NOTE: Device is now in a standby condition ready to be assigned at CCU.

- 2. Prepare low speed card punch to receive.
  - a. Lift cover and insure card bed is empty (leave cover up).
  - b. Remove and empty chad box.
  - c. Insure drive motor switch is in ON position.
  - d. Press AC power, and control panel will indicate the following:
    - (1) AC-DC indicator comes on to indicate presence of AC and DC power.
    - (2) NOT ASSIGNED is on, as device is not assigned at CCU.
  - e. Insure PRINT CONTROL is depressed to light white, denoting device is in print condition.
  - f. Press LAMP TEST and replace burned out bulbs if required.
  - g. Load approximately 300 cards.

- h. Press SINGLE FEED control and observe the following:
  - (1) Advancement of first card from hopper to punch ready station.
  - (2) Advancement of second card from hopper to pre-ready station.
  - (3) Card alarm indicator goes out.
  - (4) If a MOTION FAIL or STEP FAIL alarm comes on, turn off drive motor and clear card bed. Clear alarm with single feed and close cover.
- Press SINGLE FEED again and observe first card advanced from punch ready through punch, printer stations, and card is stacked.
- j. Press LOCAL TEST control: Cards are continuously picked from hopper, fed through card bed, punched, printed, and stacked.
- k. Check cards to insure device is printing legibly. (Replace ribbon if required.)
- 1. Observe cards that were single fed are offset.
- m. Press STOP control.
- n. Press SINGLE FEED control.
- o. Press START control.

NOTE: Device is now in a standby condition ready to be assigned at CCU.

- 3. Prepare high speed paper tape punch to receive.
  - a. Remove chad box and empty chad.
  - b. Check oil in punch mechanism.
  - c. Insure oil level is at full line in window.
  - d. Set CODE SELECT switch to appropriate code. (ITA 2 for 7/8- and 11/16-inch tape and ASCII for 1-inch tape.)

- e. Set TAPE FEED control to 10 inches.
- f. Press AC Power and control panel will indicate the presence of AC-DC power.
- g. Set TAPE WIDTH to appropriate width which is to be installed. (Wide for 7/8-inch and 1-inch; narrow for 11/16-inch.)
- h. Press LAMP TEST; replace burned out lamps if required.
- i. Install tape supply.
- j. Insure tape width selector guides set to correct position for width of tape.
- k. Press print independent. Print indepentent light will come on.
- 1. Press FEED out, insuring that tape feeds through assembly correctly.
- m. Press LOCAL TEST. (Punch assembly should activate, punching continuous delete functions -- all eight levels with an edge notch.)

CAUTION: Do not operate in local test more than 2 minutes because punch pins will heat up and become dull or break.

- n. Press STOP and punch assembly will stop perforating. Check tape to insure all eight levels were punched continuously.
- o. Press FEED out and run enough tape to thread tape through idler arms and onto take-up reel.
- p. Press START control.

NOTE: Device is now in ready condition to be assigned to the CCU.

- 4. Prepare low speed paper tape punch to receive.
  - a. Remove chad box and empty chad. Check oil punch mechanism and insure that oil level is at full line in window.
  - b. Set CODE SELECT switch to appropriate code (ITA 2 for 7/8-inch and 11/16-inch tape and ASCII for 1-inch tape).

- c. Check code wheel to insure code matches with code select switch setting.
- d. Set TAPE FEED control to 10 inches.
- e. Press ac power and control panel will indicate the presence of ac and dc power.
- f. Set TAPE WIDTH selector, determined by width of tape you will install. (Wide for 7/8-inch and 1-inch tape and narrow for 11/16-inch tape.)
- g. Press LAMP TEST and replace burned out lamps as required.
- h. Install tape supply. (Insure tape feeds from top and has clockwise twist.)
- i. Insure tape width selector guides are set to correct position for width of tape.
- j. Press FEED out insuring that tape feeds through punch assembly correctly.
- k. Press LOCAL TEST (activates punch assembly, perforating continuous eight level test with edge notch).
- 1. Press STOP and punch assembly will stop perforating.
- m. Check tape to insure all eight levels were punched continuously.
- n. Press FEED out and run enough tape to thread tape through idler arms and onto take-up reel.
- o. Press START control.

NOTE: Device is now in ready condition to be assigned to CCU.

- 5. Prepare page printer to monitor output devices.
  - a. Press AC Power control.
    - (1) AC white is on, denoting presence of ac power.
    - (2) DC indicator will not come on for approximately 20 seconds.

- b. Install paper in printer.
- c. Insert paper sensor into paper supply (approximately ten fan folds from bottom fan fold).
- d. Open yoke and feed paper through yoke, aligning top edge of form with bottom edge of plastic paper guide.
- e. Close yoke.
- f. Feed paper through paper fail sensor and close paper fail clip.
- g. Press LINE FEED and insure that paper is feeding properly.
- h. Press FORM FEED to advance paper to top of next form.
- i. Set margin selector to out.
- j. Set LINE FEED selector to 1.
- k. Set TEST BIT SELECTOR switches from top to bottom with the following ASCII bits denoting an X: 00011010.
- 1. Press LOCAL TEST for continous 80 character line of the test bit character selected.
- m. Press STOP control.
- n. Press START control.

NOTE: Device is now in a standby condition and ready to be assigned at CCU.

# Part III - Input Devices

- 1. Prepare card reader to transmit.
  - a. Press ac power (ac, dc power light comes on, denoting presence of ac/dc power).
  - b. Press LAMP TEST and replace burned out lamps as required.
  - c. Check and fan cards; offset the first card.
  - d. Place cards in hopper face down with 12 edge to operator.

- e. Press SINGLE FEED two or three times to insure cards are picked, fed, and stacked correctly.
- f. Press LOCAL TEST (cards are picked, fed, read, and stacked in stacker continuously).
- g. Press STOP control.

NOTE: Device is now ready to transmit.

- 2. Prepare paper tape reader to transmit.
  - a. Set CODE SELECT switch to corresponding code: either five level ITA 2, or eight level ASCII.
  - b. Press ac power control (ac, dc power light comes on, denoting presence of ac and dc power).
  - c. Set SPEED CONTROL switch to high.
  - d. Load test tape.
  - e. Press SINGLE FEED several times to insure tape is feeding properly.
  - f. Press LOCAL test.
  - g. Press STOP control.

NOTE: Device is now in a standby condition.

3. Assign output devices from CCU.

WARNING: All output devices are in the start/assigned condition. Input devices are in stop.

- a. Card.
  - (1) Press device "A" assign.
  - (2) Press monitor "A" assign.
- b. Paper tape.
  - (1) Press device "B" assign.

(2) Press monitor "B" assign.

NOTE: High speed or low speed operation is determined by the device switching module (DSM).

- 4. Assign input card devices from CCU.
  - a. Press device "A" assign.
  - b. Press device "B" assign.

NOTE: High or low speed operation is determined by depressing the HIGH-LOW speed control on PTR only.

5. TRANSMIT and RECEIVE a self addressed card or paper tape message.

# REFERENCES

TM 11-7440-238-15, w/Cl thru 4, Operator, Organizational, DS, GS and Depot Maintenance Manual: Digital Subscriber Terminals AN/FYA-71(V)1 through AN/FYA-71(V)6, Mar 69.

JANAP 128(H) Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.



# 113-583-2174

# Introduce System Management Instruction to the Active System (TADSS) (Burroughs 3500)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Routing indicator.
- 4. Routing table.
- 5. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when system management instruction has been introduced to the active system within 5 minutes.

### PERFORMANCE MEASURES

- 1. Add an entry into the COSCOM/DISCOM routing translation table (TCDR). (Refer to basic reference, para 5.b.3, pp A-5-6 second a, A-5-6A/B, A-5-22, and A-5-23.)
  - a. Press INPUT REQUEST pushbutton.
  - b. Type in CC UTIL (standard utility call) on keyboard.
  - c. Press END OF MESSAGE (EOM) pushbutton.

- d. Enter the command designator.
- e. Enter a slant bar.
- f. Enter the desired word.
- g. Enter a slant bar.
- h. Enter the seven-character routing indicator associated with the entry to be added.
- i. Enter a slant bar.
- j. Enter the four-to-seven character TADS routing indicator associated with the routing indicator.
- k. Enter a period.
- 1. Press END OF MESSAGE (EOM) pushbutton.

NOTE: The TADS RI must be set in the World-Wide or Seventh Army Single Routing Plan prior to setting the CS3 route base.

2. Add a routing indicator (RI) to the future routing table (TFRT). Refer to basic reference, anx 5, para 7, pp A-5-6 second a, A-5-6A/B, A-5-24 thru A-5-26.)

NOTE: The future route update routine can only be activated on the hour.

- 3. Add a routing indicator (RI) to the routing table. (Refer to basic reference, anx 5, para 19.b.2, pp A-5-6 second a, A-5-6A/B, A-5-43 thru A-5-47.)
- 4. Add a collective routing indicator to the routing table. (Refer to basic reference, anx 5, para 19.b.5, pp A-5-6 second a, A-5-6A/B, A-5-45 thru A-5-47.)

NOTE: Two to forty individual routing indicators can be entered in a collective routing indicator group request. A collective member may be added only if it is present in the Seventh Army Single Routing Plan. Collective routing indicator must start with the letter U.

# REFERENCES

Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator, Sep 75.



# 113-583-2175

# Activate a Magentic Tape for the System (TADSS) (Burroughs 3500)

# CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Magnetic tape.
- 4. Magnetic tape transport.

## STANDARDS

Job standards are met when a magnetic tape has been activated within 5 minutes.

# PERFORMANCE MEASURES

- 1. Press INPUT REQUEST pushbutton. (Refer to basic reference, anx 5, p A-5-6, second a.)
- 2. Type in CC UTIL (standard utility call) on keyboard. (Refer to basic reference, anx 5, para 1, second b, pp A-5-6A/B.)
- 3. Press the END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para 1, second b thru d, pp A-5-6 and A-5-6A/B.)
- 4. Enter the command designator. (Refer to basic reference, anx 5, para 14, pp A-5-33 thru A-5-35.)
- 5. Enter a slant bar. (Refer to basic reference, anx 5, para 14, pp A-5-33 thru A-5-35.)

- 6. Enter the add command. (Refer to basic reference, anx 5, para 14, pp A-5-33 thru A-5-35.)
- 7. Enter a slant bar. (Refer to basic reference, anx 5, para 14, pp A-5-33 thru A-5-35.)
- 8. Enter the magnetic tape transport. (Refer to basic reference, anx 5, pp A-5-33 thru A-5-35.)
- 9. Enter a period. (Refer to basic reference, anx 5, para 1 second d and 14, pp A-5-6A/B and A-5-33 thru A-5-35.)
- 10. Press END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para 1 second e, pp A-5-6A/B.)

### REFERENCES

Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator, Sep 75.



# 113-583-2176

# Perform Channel Parameter Changes(TADSS) (Burroughs 3500)

### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Channel number(s).
- 4. System parameter table.
- 5. Channel parameter.
- 6. Tactical Automatic Ditital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

### STANDARDS

Job standards are met when channel parameter changes have been performed within  $10\ \mathrm{minutes}$ .

## PERFORMANCE MEASURES

- 1. Update a channel. (Refer to basic reference, anx 5, para 3.b.2 thru 5, pp A-5-16A/B thru A-5-20A.)
  - a. Determine which updated command is the command to be used.
  - b. Enter the command.
- 2. Modify a channel parameter. (Refer to basic reference, anx 5, para 3.b.6, pp A-5-18 thru A-5-20A.)

- 3. Change a parameter in the system parameter table. (Refer to basic reference, anx 5, para 25.b and 26.b, pp A-5-57 thru A-5-60.)
- 4. Perform circuit performance check. (Refer to basic reference, anx 7, para I.c.1 thru 18, pp A-7-6 and A-7-7.)

# REFERENCES

Tactical Automatic Ditital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator, Sep 75.



# 113-583-2177

# Obtain Supervisor Requested System Management Reports (TADSS) (Burroughs 3500)

### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Line printer.
- 4. Magnetic tape.
- 5. Magnetic transport.
- 6. Channel identifier.
- 7. Number messages queued up.
- 8. Totals for report.
- 9. Totals for intercept.
- 10. World-Wide Routing Plan.
- 11. Routing Indicators.
- 12. World-Wide Group.
- 13. Seventh Army Routing Plan.
- 14. Seventh Army Trunk Group.
- 15. Seventh Army Collective Routing Plan.
- 16. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when a system management report has been obtained within 5 minutes.

### PERFORMANCE MEASURES

- 1. Request a channel backlog report. (Refer to basic reference, anx 5, para 2.b, pp A-5-15 and A-5-16.)
- 2. Generate a status report of the system. (Refer to basic reference, anx 5, para 4.b, pp A-5-20A and A-5-21.)
- 3. Generate a status report of the COSCOM/DISCOM Routing translation table (TCDR). (Refer to basic reference, anx 5, para 6.b, pp A-5-23 and A-5-24.)
- 4. Request an intercept printout. (Refer to basic reference, anx 5, para 10.b, pp A-5-28 and A-5-29.)
- 5. Request a printout of the intercept summary. (Refer to basic reference, anx 5, para 11.b and 12, pp A-5-30 and A-5-31.)
- 6. Request a printout of the reconfiguration report. (Refer to basic reference, anx 5, para 16.b, pp A-5-35 thru A-5-36A.)
- 7. Retrieve the management statistics report. (Refer to basic reference, anx 5, para 17.c, pp A-5-41 and A-5-42.)
- 8. Request status report on World-Wide Routing Plan/World-Wide Trunk Group Report/Seventh Army Routing Plan/Seventh Army Trunk Group Report/Seventh Army Collective Routing Plan. (Refer to basic reference, anx 5, para 20.b, pp A-5-47 thru A-5-50.)
- 9. Request system statistics report. (Refer to basic reference, anx 5, para 23.b, pp A-5-54 and A-5-55.)

### REFERENCES



# 113-583-2178

# Implement Alternate Routing Instruction (TADSS) (Burroughs 3500)

# CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Channel(s).
- 4. Traffic to be altrouted.
- 5. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when alternate routing instruction has been implemented within 5 minutes.

# PERFORMANCE MEASURES

- 1. Implement an altroute for all messages from one channel to another channel. (Refer to basic reference, anx 5, para D.1.b.2, p A-5-12.)
- 2. Implement an altroute for specified precedence message. (Refer to basic reference, anx 5, para D.1.b.3, pp A-5-12 and A-5-13.)
- 3. Implement an altroute to specified number and precedence. (Refer to basic reference, anx 5, para D.1.b.4, p A-5-13.)
- 4. Implement an altroute for orbit messages. (Refer to basic reference, anx 5, para D.1.b.5, p A-5-14.)

5. Implement an altroute through an AUTODIN switch. (Refer to basic reference, anx 5, para D.1.b.6, pp A-5-14 and A-5-15.)

NOTE: The format of the four existing altroute UTILS remain the same with the exception that the receiver will be routing indicator instead of the circuit number. The routing indicator must currently be a member of the World-Wide Routing Table.

## REFERENCES



# 113-583-2179

# Perform Routing Indicator (RI) Changes (TADSS) (Burroughs 3500)

## CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Routing indicators.
- 4. Routing table.
- 5. World-Wide Routing table.
- 6. COSCOM/DISCOM Routing Translation table.
- 7. Future Routing Table.
- 8. Trunk Group Routing Table.
- 9. Line printer.
- 10. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

## STANDARDS

Job standards are met when routing indicator changes have been entered into the system within 5 minutes.

### PERFORMANCE MEASURES

1. Delete a trunk group from the system. (Refer to basic reference, anx 5, para 3.b.8 and para D.3.b.8, pp A-5-20 and A-5-21.)

- 2. Delete an entry from the COSCOM/DISCOM routing translation table. (Refer to basic reference, anx 5, para D.5.b.2, pp A-5-22 and A-5-23.)
- 3. Modify an entry to the COSCOM/DISCOM routing translation table. (Refer to basic reference, anx 5, para D.5.b,4, p A-5-23.)

NOTE: The TADS RI must be set in the World-Wide or Seventh Army Single Routing Plan prior to setting or modifying the CS3 route base.

4. Modify a routing indicator to the Future Routing Plan. (Refer to basic reference, anx 5, para D.7.b, pp A-5-24 thru A-5-26.)

NOTE: The Future Route update routine can only be activated on the hour.

- 5. Delete a routing indicator from the future route table. (Refer to basic reference, anx 5, para D.7.b, pp A-5-24 thru A-5-26.)
- 6. Delete a routing indicator from the routing table. (Refer to basic reference, anx 5, para D-19.b.3, p A-5-44.)
- 7. Modify a routing indicator in the routing table. (Refer to basic reference, a, anx 5, para D.19.b.4, pp A-5-44 and A-5-45.)
- 8. Delete a collective routing indicator from the routing table. (Refer to basic reference, anx 5, para D.19.b.6, p A-5-45.)
- 9. Modify a routing indicator in the World-Wide Routing Table that is routed to AUTODIN or its enabled altroute. (Refer to basic reference, anx 5, para D.19.b.7, pp A-5-46 and A-5-47.)
- 10. Delete a routing indicator from the World-Wide Routing Table that is routed to AUTODIN or its enabled altroute. (Refer to basic reference, anx 5, para D.19.b.7, pp A-5-46 and A-5-47.)

## REFERENCES



# Perform Intercept Tape Management Operation (TADSS) (Burroughs 3500)

## CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Magnetic tape.
- 4. Intercept tape.
- 5. Tape transports.
- 6. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

### STANDARDS

Job standards are met when intercept tape management operation has been performed within 5 minutes.

# PERFORMANCE MEASURES

- 1. Route messages to an intercept tape. (Refer to basic reference, anx 5, para D.9.b.2, pp A-5-27 and A-5-28.)
- 2. Reinstate an intercept tape. (Refer to basic reference, anx 5, para D.9.b.3, p A-5-28.)
- 3. Stop an intercept tape. (Refer to basic reference, anx 5, para D.9.b.4, p A-5-28.)

# REFERENCES



# 113-583-2181

# Close an Active Magnetic Tape (TADSS) (Burroughs 3500)

### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Active tape.
- 4. Line printer.

#### STANDARDS

Job standards are met when an active tape has been closed within 5 minutes.

### PERFORMANCE MEASURES

- 1. Press INPUT REQUEST pushbutton. (Refer to basic reference, anx 5, para 1.B.1. second a, p A-5-6.)
- 2. Type in CC UTIL (standard utility call) on keyboard. (Refer to basic reference, anx 5, para 1.B.1. second b, p A-5-6A/B.)
- 3. Press END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para 1.B.1. second e, p A-5-6A/B.)
- 4. Enter the command designator. (Refer to basic reference, anx 5, para D.27.b, p A-5-61.)
- 5. Enter a slant bar.

- 6. Enter the close command.
- 7. Enter a slant bar.
- 8. Enter an R (Recovery) or I (Intercept) command.
- 9. Enter a slant bar.
- 10. Enter the three-digit tape reel number.
- 11. Enter a period.
- 12. Press END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para 1.B.1. second e, p A-5-6A/B.)

# REFERENCES



# 113-583-2182

# Perform Message Tracer Action (TADSS) (Burroughs 3500)

### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Magnetic tape.
- 4. Magnetic tape transport.
- 5. Line printer.
- 6. Reference storage.
- 7. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

# STANDARDS

Job standards are met when a message tracer action has been performed and the answer has been sent back to the originating station within 20 minutes.

# PERFORMANCE MEASURES

- 1. Trace a message from reference storage. (Refer to basic reference, anx 5, para D.17.b, table A-5-2-1, pp A-5-37 thru A-5-42.)
  - a. Determine option to be used.
  - b. Enter the command.

- 2. Trace a message from magnetic tape. (Refer to basic reference, anx 5, para D.17.b, table A-5-2-2, pp A-5-37 thru A-5-42.)
  - a. Determine option going to be used.
  - b. Enter the command.

NOTE: All tape tracer requests have a special option which requires an eight-digit tape address to be specified.

## REFERENCES



# 113-583-2183

# Perform Message Retrieval Action (TADSS) (Burroughs 3500)

### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Line printer.
- 4. Reperforator.
- 5. Magnetic tape.
- 6. Magnetic tape transport.
- 7. Message from originator.
- 8. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

# STANDARDS

Job standards are met when a message retrieval action has been performed and the message has been reentered into the system within 20 minutes.

# PERFORMANCE MEASURES

1. Retrieve a message from magnetic tape to be transmitted. (Refer to basic reference, anx 5, para D.17.b, table A-5-2, pp A-5-37 thru A-5-40.)

- 2. Retrieve a message from the system to be sent to the reperforator/line printer. (Refer to basic reference, anx 5, para D.17.b, table A-5-2, pp A-5-37 thru A-5-40.)
- 3. Retrieve a message from reference storage to be retransmitted. (Refer to basic reference, anx 5, para D.17.b, table A-5-2, pp 5-37 thru 5-40.)
- 4. Retrieve a message from magnetic tape to be sent to the reperforator/line printer. (Refer to basic reference, anx 5, para D.17.b, table A-5-2, pp 5-37 thru 5-40.)

# REFERENCES



# 113-598-1001

# Install Teletypewriter Relay Central AN/MGC-23

#### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environment. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5815-308-15.
- 2. Generator set (installed).
- 3. AN/MGC-23 (complete).

WARNING: Do NOT run power lines parallel to signal cables.

## STANDARDS

Job standards are met when you have made patch connection for desired type of operation in accordance with local standard signal instructions. You have 2 hours to complete this task.

# PERFORMANCE MEASURES

- 1. Site the AN/MGC-23 The best operating site for the AN/MGC-23 is determined by the tactical situation and local terrain.
- 2. Ground AN/MGC-23 Select a grounding site within 8 feet of the power and signal entrance box.

WARNING: The grounding connection must be completed before power is connected.

3. Connect AC power source to shelter.

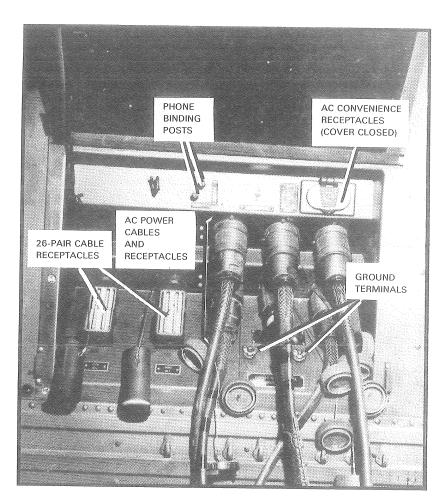


Figure 1. Power and Signal Entrance Box.

4. Place circuit breaker switches at each main POWER DISTRIBUTION PANEL to the ON position. (See fig 2a, b, c.)

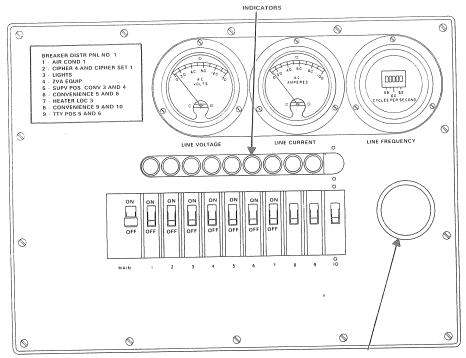


Figure 2a. Breaker Distribution Panel No. 1.

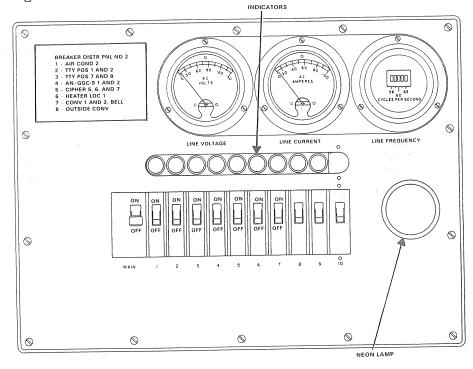


Figure 2b. Breaker Distribution Panel No.2.

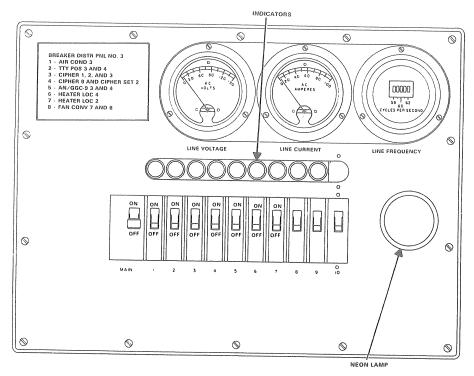


Figure 2c. Breaker Distribution Panel No. 3.

- 5. Insure the voltmeter at each power distribution panel indicates 115 volts.
- 6. Insure frequency meter at each distribution panel indicates 60 cycles per second.

NOTE: It may be necessary to make a slight readjustment at the power source to obtain the proper frequency (60 CPS) and voltage (115 volts AC) when all equipments are turned on.

7. Install COMSEC equipment as required.

- 8. Operate ZVA position to ON position.
  - a. Insure AC circuits for the four ZVA reperforators are wired through ZVA control box mounted on the curbside wall of the van.
  - b. The switches must be in the ON position to supply AC power to the ZVA reperforators.
- 9. Make patch connections for the desired type of operation.

## REFERENCES

TM 11-5815-308-15, w/C1 and 2, Operator's Organizational, DS, GS, and Depot Maintenance Manual Teletypewriter Relay Central, AN/MGC-23, Nov 68.



# 113-598-1002

# Install Telegraph Terminal AN/MGC-34

### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5805-390-15.
- 2. Generator set (installed).
- 3. AN/MGC-34 (complete).

WARNING! DO NOT run power lines parallel to signal cables.

## STANDARDS

Job standards are met when you have completely installed the AN/MGC-34 for operations. You have 1 hour to complete this task.

# PERFORMANCE MEASURES

- 1. Site AN/MGC-34.
  - a. Select a location for the trailer on firm ground that is relatively free from rocks, logs and debris.
  - b. Locate generator set approximately 75 feet from the trailer to minimize fire hazard and noise interference.
- 2. Set up trailer.
  - a. Remove the safety chains from the towing vehicle and hook them on the trailer lifting eyes.
  - b. Release the trailer front support leg from the transit position and secure it in the vertical position.

- c. Place a flat block of wood, if available, directly under the support leg.
- d. Operate the handbrake lever on the front of the trailer to lock the trailer-wheel brakes.
- e. Unlatch the pintle on the towing vehicle and lift the trailer lunette from it.
- f. Lower the rear support leg assembly by withdrawing the locking pin that holds it in the transit position.
- g. Secure the rear support leg assembly in the vertical position.
- h. Place a flat board, if available, directly under the support leg.
- i. Place the teletypewriter tables in the selected operating area; lower the teletypewriter table legs and secure them in the open position.
- j. Remove the cloth cover from the TT-76/GGCs and the TH-5/TGs.
- 3. Ground the AN/MGC-34 equipment.

WARNING: Grounding procedures must be completed before power is connected to the AN/MGC-34. AC power is utilized in the AN/MGC-34 to provide power for the teletypewriter equipment and the lamps.

- a. Remove the ground rods, the ground straps, and the hammer from the trailer.
- b. Select a grounding site within 6 feet of each teletype table. Scoop out a small hole about 6 inches deep.
- c. Drive the ground rod into the hole until the top of the ground rod is approximately 3 inches above the bottom of the hole.
- d. Connect one end of the ground lead to the ground rod, and the other end to the ground terminal on the teletypewriter table.
- 4. Insure generator set is similarly grounded.

- 5. Connect AC power source.
- 6. Level the trailer by either increasing or decreasing the adjustable length of the rear support leg.
- 7. Set up equipment.
  - a. Loosen and roll up or remove the tarpaulin.
  - b. Operate the tailgate of the trailer and secure the tailgate in the lowered position with the chains.
  - c. Loosen the clamps and remove the tables which contain the teletypewriters, the TH-5/TG's and the AC receptacle box from the trailer (fig 1).

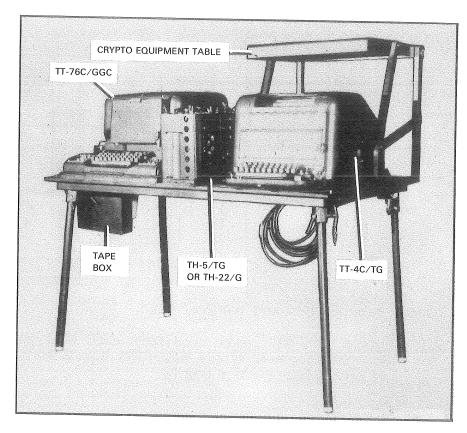


Figure 1. Front View of Teletypewriter Table.

- d. Connect the free end of the cable attached to interconnection box J-85/G to the generator set or to the power source.
  - (1) Insert the plug of the 100-foot power cord with the 6-outlet junction box into interconnection box J-85/G (fig 2).

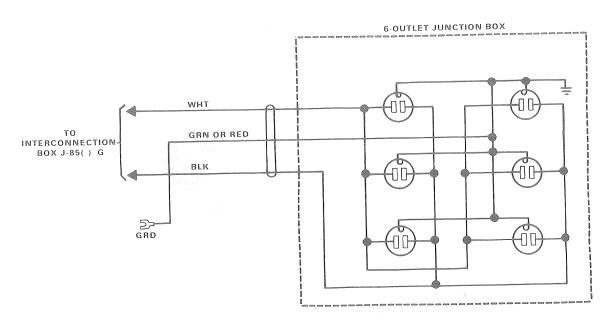


Figure 2. Outlet Junction Box and 100-Foot Cord.

(2) Insert the AC power cord from each teletypewriter table into a receptacle of the AC outlet box located at the back of each teletypewriter (fig 3).

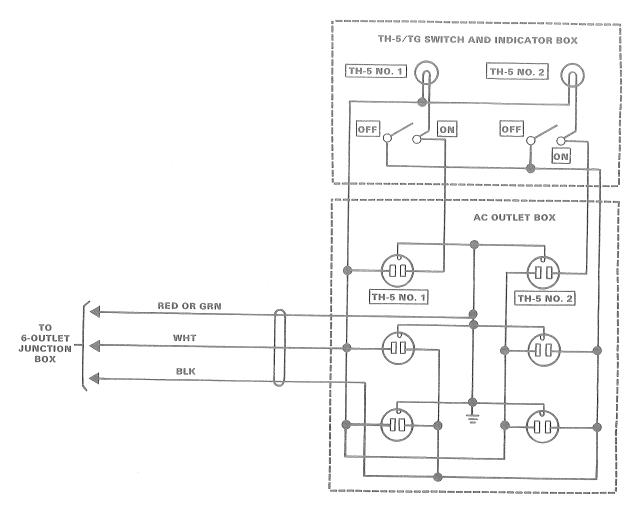


Figure 3. Outlet Box Mounted on Teletypewriter Table.

(3) Connect signal lines to the LINE binding posts on the patch panel (fig 4).

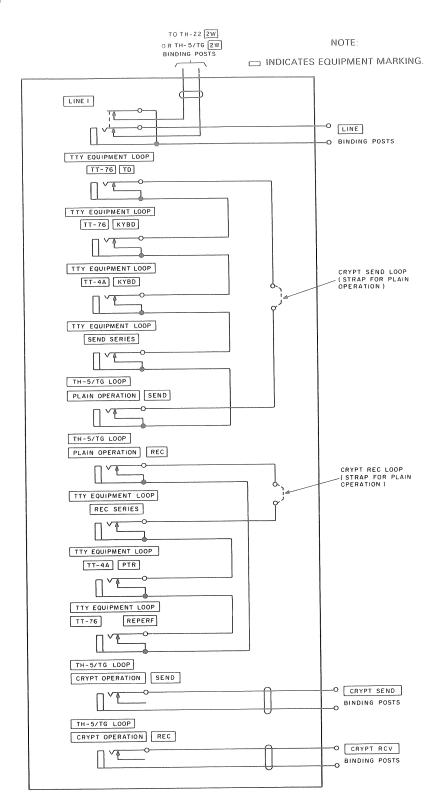


Figure 4. Patch panel.

(4) Insert teletypewriter plugs into appropriate jack on the patch panel (fig 5 and 6).

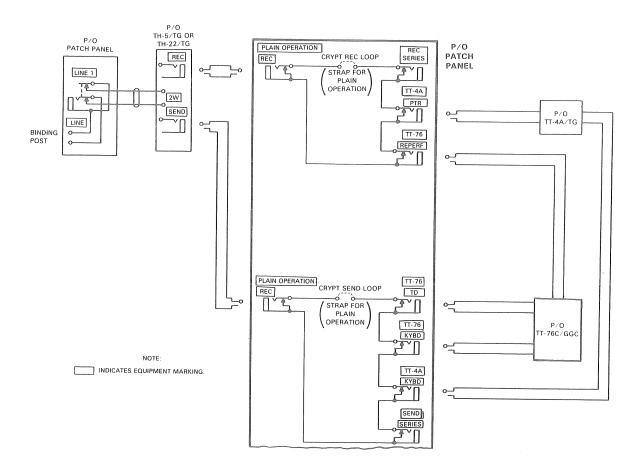


Figure 5. Plain operation.

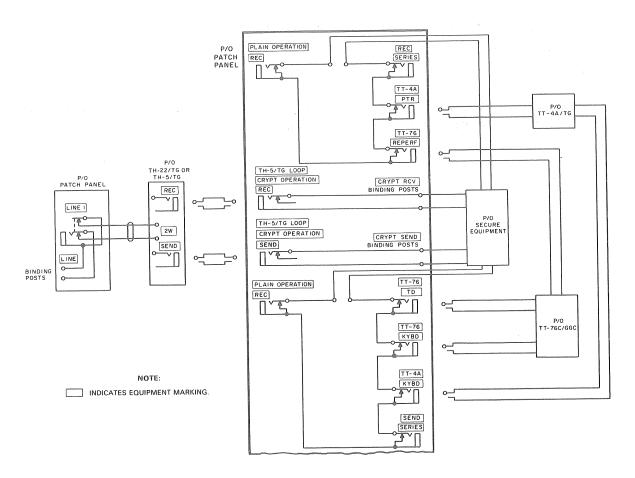


Figure 6. Secure operation.

8. Place OFF-ON switches on TT-4, TT-76, TH-5, and KW-7 to ON position for operation.

# REFERENCES

TM 11-5805-390-15, w/C1 and 2, Operator's, Organizational, DS, GS, and Depot Maintenance Manual, Terminal, Telegraph, AN/MGC-34, Jul 67.



# 113-598-1003

# Install Telegraph Terminal AN/TSC-58

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5805-574-15.
- 2. Generator set (installed).
- 3. AN/TSC-58 (complete).

WARNING: Do NOT run power lines parallel to signal cables.

#### STANDARDS

Job standards are met when you have made patch connection for desired type of operation in accordance with local standard signal instructions. You have 3 hours to complete this task.

# PERFORMANCE MEASURES

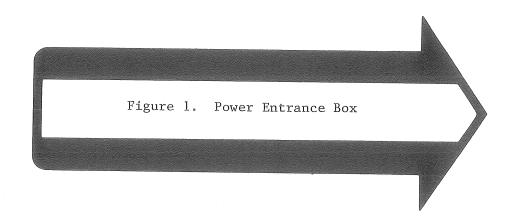
1. Site the AN/TSC-58.

NOTE: The best operating site for the AN/TSC-58 is determined by the tactical situation and local terrain.

- 2. Ground the shelter.
  - a. Select a grounding site within 6 feet of the power entrance box that is low and damp and will not interfere with power or signal cables.
  - b. Remove a ground rod and the sledgehammer from respective mounting in the shelter.

- c. Remove any dirt or grease from the ground rod.
- d. Scoop out a small hole, about 6 inches deep, at the selected grounding spot.
- e. Drive the ground rod into the hole until the top of the ground rod is approximately 3 inches above the bottom of the hole.
- f. Remove grounding strap from the storage compartment of the shelter.
- g. Connect one end of the ground strap to the ground rod, and the other end to the lower GROUND TERMINAL in the POWER ENTRANCE BOX.
- h. Saturate the ground around the rod with water to keep it moist.

WARNING: The grounding connection must be completed before power is connected to the AN/TSC-58 (fig 1).



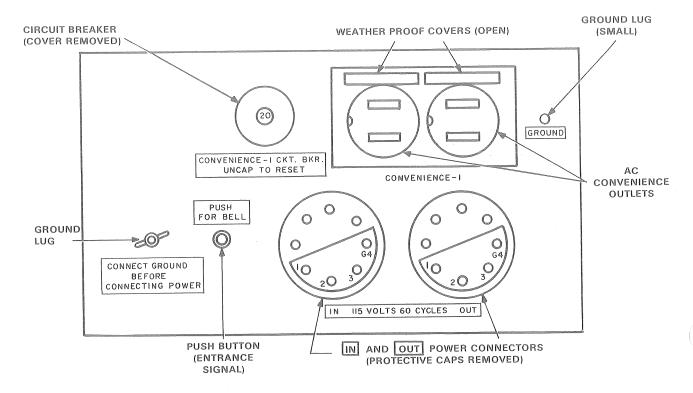


Figure 1. Power Entrance Box.

- 3. Connect AC power source to shelter.
  - a. Insure all circuit breakers and equipment power switches are in the OFF position.
  - b. Remove the power cable reel from shelter.
  - c. Connect power cable to generator set.
    - (1) Remove the cover from the IN 115 VOLTS 60 CYCLES receptacle in the power entrance box.
    - (2) Connect the power cable assembly to the IN 115 VOLTS 60 CYCLES receptacle.

NOTE 1: As an expedient, the 115 VOLTS 60 CYCLES OUT receptacle may be used to make the connection if the IN 115 VOLTS 60 CYCLES receptacle is broken.

NOTE 2: If the generator set does not include a compatible output connector, refer to the Generator Technical Manual.

- 4. Connect 26-pair cables to shelter.
  - a. Remove the covers from the connector on the 26-pair cable assembly and the INPUT 26-PAIR receptacle on the SIGNAL ENTRANCE BOX.
  - b. Insert the connector into the receptacle and secure it by closing the locking collar.
  - c. Operate the BINDING POST/CABLES switch(es) of the signal entrance panel.

NOTE: If the required cable distance exceeds 250 feet, couple two 26-pair cable assemblies together. To avoid poor quality signal, do not connect more than six 26-pair cables together.

5. Insure AC Voltmeter indicates 115 VAC.

CAUTION: When the 115 VOLTS 60 CYCLES OUT connector in the AN/TSC-58 POWER ENTRANCE BOX is used to supply power to another AN/TSC-58, do not allow the sum of the currents drawn by the load connected to the 115 VOLTS 60 CYCLES OUT connector and the current drawn by the connected AN/TSC-58 to exceed 60 amperes.

a. Insure frequency indicates 60 cycles per second.

- b. Connect field wire for local circuits.
  - (1) Connect the two-wire for telephone pairs or the telephone receive pairs (black or green) of a four-wire telephone circuit to the associated 2W-4W OUTPUT LINES binding posts on the signal entrance box.
  - (2) Place circuit breakers in shelters to ON position.
- 6. Remove the six insulated bushing screws from the shelf on which the TSEC/KW-7 is to be installed. Place the TSEC/KW-7 on the shelf and secure in position with six insulated bushing screws.
  - a. Transfer cables P3, P4, P7, and P8 from jacks J3, J4, J7, and J8 of the interconnection box to jacks J3, J4, J7, and J8 of the TSEC/KW-7.
  - b. Transfer the wires connected to binding posts E1 (black wire), E2 (red), E4, (blue), and E5 (white) of the interconnection box to terminals designed in the same way on the TSEC/KW-7.
  - c. Transfer the shield ground connections from binding post E3 GRD of the interconnection box to binding post E3 of TSEC/KW-7 (fig 2).

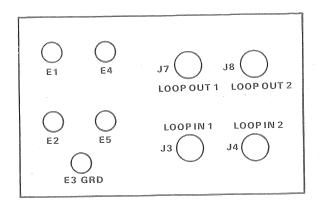


Figure 2. Interconnection box.

d. Insert the AC power cord of the TSEC/KW-7 into its assigned AC power outlet.

CAUTION: Damage to the TSEC/KW-7 may result if the AUX-DUMMY BOX switch is not operated to AUX.

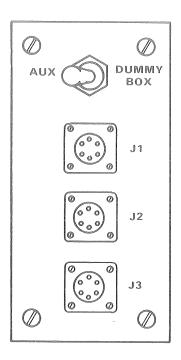


Figure 3. Aux-Dummy box.

- e. Operate the AUX-DUMMY BOX switch of the position for which the TSEC/KW-7 is being installed to AUX (fig 3).
- 7. Position OFF/ON switch on KW-7 to ON.
- 8. Place OFF/ON switch on TH-22(s) in ON position.
- 9. Check that the white and blue wire pair is connected to the 4WS TEL binding posts.
- 10. Check that the red and black wire pair is connected to the 2W-4W binding posts.

- 11. Check that the black telephone plug is connected to one of the SEND jacks.
- 12. Check that the red telephone plug is connected to the REC jack.
- 13. Check that the 115 VAC-230/VAC-26 VDC screwdriver control is set to 115 VAC.
- 14. Check that the 4W-2W-TEL screwdriver control is set to 4W when operating four-wire, or to 2W when operating two-wire.
- 15. Check that the NORM REC-SEND switch is set to NORM.
- 16. Check that the MODE ONE-MODE TWO switch is set to MODE ONE.
- 17. Place OFF/ON switch on teletypewriters in ON position.
- 18. Check and, if necessary, adjust the motor speed and rangefinder.
- 19. Insure the SIGNAL/BIAS switch on the TT-76/GGC is set to the 60-MA position and the plug from the selector magnet is inserted into the selector magnet socket marked 20 MA.
- 20. Place OFF/ON switch on LS-147 in ON position. (Insure connection to local communication facilities is established through the INTERCOM and telephone).
- 21. Make patch connection for desired type of operation.

NOTE: Patching is unnecessary when using the equipment in the normal 2W configuration for VF teletypewriter transmission, using the even numbered assigned lines (2, 4, 6 etc).

## REFERENCES

TM 11-5805-574-15, w/C1 and 2, Operator's, Organizational, DS, GS and Depot Maintenance Manual, Terminal, Telegraph, AN/ TSC-58, Jan 71.



# 113-598-1020

# Install Teletypewriter Central Office AN/MGC-17

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5815-205-14.
- 2. Generator set (installed).
- 3. AN/MGC-17 (complete).

WARNING: Do NOT run power lines parallel to signal cables.

### STANDARDS

Job standards are met when you have made patch connection for desired type of operation in accordance with local standard signal instructions. You have 3 hours to complete this task.

## PERFORMANCE MEASURES

1. Site the AN/MGC-17.

NOTE: The best operating site for the AN/MGC-17 is determined by the tactical situation and local terrain. Insure minimum of one fire extinguisher is located midway between the shelter and the generator. Insure ear plugs are worn during operation of generator.

- 2. Ground the shelter.
  - a. Select a grounding site within 10 feet of the signal power entrance box that is low and damp and will not interfere with power or signal cables.

- b. Remove a ground rod and the sledgehammer from respective mounting in the shelter.
- c. Remove any dirt or grease from the ground rod.
- d. Scoop out a small hole, about 6 inches deep, at the selected grounding spot.
- e. Drive the ground rod into the hole until the top of the ground rod is approximately 3 inches above the bottom of the hole at a 45 degree angle.
- f. Remove ground lead from accessories and spare cabinet of the shelter.
- g. Connect one end of the ground strap to the ground rod, and the other end to the lower GROUND TERMINAL in the SIGNAL & POWER ENTRANCE BOX.
- h. Saturate the ground around the rod with water to keep it moist.

WARNING: The grounding connection must be completed before power is connected to the AN/MGC-17. (Fig 1.) (Refer to TM 11-5815-205-14, chap 2, para 18, p 2-18.)

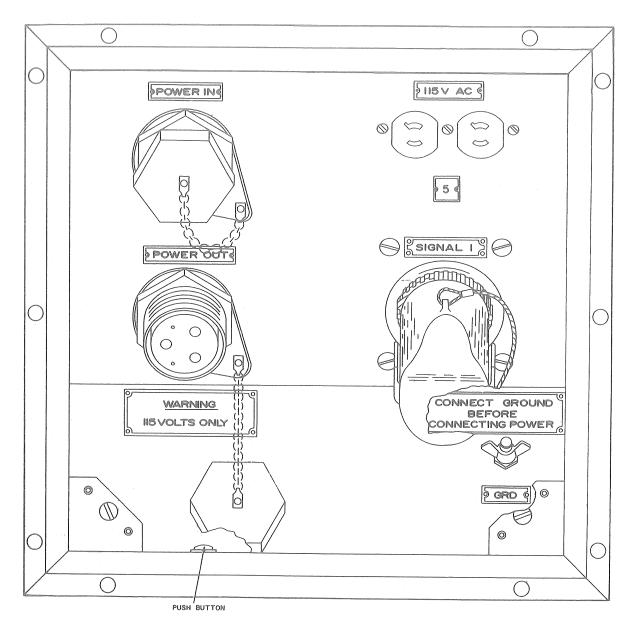


Figure 1. SIGNAL & POWER ENTRANCE box.

- 3. Connect ac power source to shelter.
  - a. Using generator set.
    - (1) Insure all circuit breakers and equipment power switches are in the OFF position.

- (2) Remove power cable and stubs from cable reels.
- (3) Connect red and white leads of one power stub to NEU-TRAL TERMINAL and black lead to the POSITIVE TERMI-NAL of the filter box of one generator set.
- (4) Connect the power stub to the INPUT NO. 1 receptacle on the switchbox mounted on the trailer.
- (5) Connect the red and white leads of the other power stub to the NEUTRAL TERMINAL and the black lead to the POSITIVE TERMINAL of the filter box of the other generator set.
- (6) Connect the other power stub between the other power unit and the INPUT NO. 2 receptacle on the switchbox.
- (7) Remove covers from both connectors of the power cable and connect one connector to POWER 115V IN receptacle in SIG & POWER ENTRANCE BOX and the other connector to OUTPUT receptacle in switchbox on the trailer. (TM 11-5815-205-14, chap 2, sec II, para 2-19a, p 2-18.)
- b. For power utilizing generator, refer to TM 11-5815-205-14, chapter 2, section II, paragraph 2-18b, page 2-18.
- c. For commercial power connections, refer to TM 11-5815-205-14, chapter 2, section II, paragraph 2-19b, page 2-18.

# 4. Energize ac circuits as follows:

SWITCH OR CIRCUIT BREAKER	POSITION
Main Circuit Breaker Voltmeter Ammeter Lights Neon, Fluorescent Switches Normal - Blackout Switch Blower 1 and Blower 2 Heater circuit breaker Heater 1 and Heater 2	ON Indicates 115 volts ac Indicates 0 ON ON Blackout as required ON ON ON ON Off/Heat/Fan as required.

(TM 11-5815-205-14, chap 2, sec II, para 2-20, p 2-19.)

- 5. Connect 26-pair cable.
  - a. Remove the covers from the connector on the 26-pair cable assembly and the INPUT 26-pair cable receptacle on the signal entrance box.
  - b. Connect the 26-pair cable to the signal entrance box. (Refer to TM 11-5815-205-14, chap 2, sec III, para 2-22, p 2-20.)

# REFERENCES

TM 11-5815-205-14, Operator's, Organizational, Direct Support, and General Support Maintenance Manual Teletypewriter Central Office, AN/MGC-17, Apr 73.



# Install Telegraph Terminal AN/MSC-29

#### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5895-205-15.
- 2. Generator set (installed).
- 3. AN/MSC-29 (complete).

WARNING: Do NOT run power lines parallel to signal cables.

## STANDARDS

Job standards are met when you have made patch connections for desired type of operation in accordance with local standard signal instructions. You have 3 hours to complete this task.

## PERFORMANCE MEASURES

1. Site the AN/MSC-29.

NOTE: The operating site for the AN/MSC29 is determined by the tactical situation and local terrain. Insure minimum of one fire extinguisher is located midway between the shelter and the generator. Insure ear plugs are worn during operation of generator.

- 2. Ground the shelter.
  - a. Select a grounding site within 10 feet of the power entrance box that is low and damp and will not interfere with power or signal cables.

- b. Remove a ground rod and the sledgehammer from respective mounting in the shelter.
- c. Remove any dirt or grease from the ground rod.
- d. Scoop out a small hole, about 6 inches deep, at the selected grounding spot.
- e. Drive the ground rod into the hole at a 45 degree angle, until the top of the ground rod is approximately 3 inches above the bottom of the hole.
- f. Remove grounding strap from the storage compartment of the shelter.
- g. Connect one end of the ground strap to the ground rod, and the other end to the lower GROUND TERMINAL in the SIGNAL & POWER ENTRANCE BOX.
- h. Saturate the ground around the rod with water to keep it moist. (Refer to TM 11-5895-205-15, chap 2, sec II, para 50a, p 42.)

WARNING: The grounding connection must be completed before power is connected to the AN/MSC-29 (fig 1).

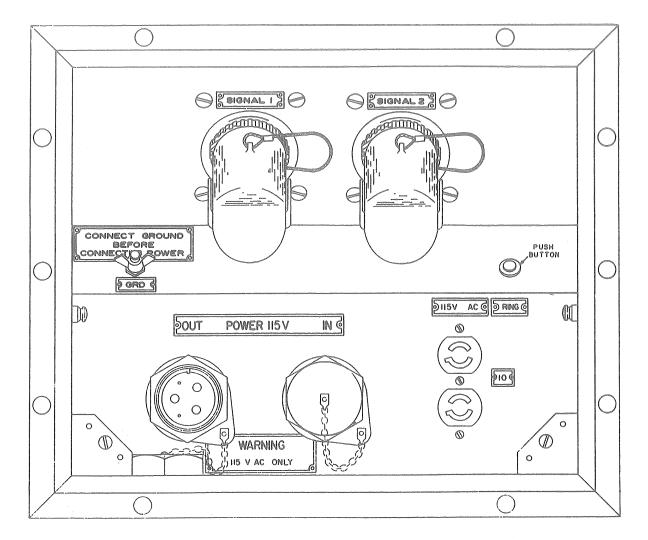


Figure 1. SIGNAL & POWER ENTRANCE box.

- 3. Connect ac power source to the shelter.
  - a. Using generator set.
    - (1) Insure all circuit breakers and equipment power switches are in the OFF position.
    - (2) Remove power cable and stubs from cable reels.
    - (3) Connect black and white leads of one power stub to POWER LINE TERMINALS and red lead to ground lug on one power unit.

- (4) Connect the power stub to the INPUT NO. 1 receptable on the switchbox mounted on the trailer.
- (5) Connect the other power stub between the other power unit and the INPUT NO. 2 receptacle on the switchbox.
- (6) Remove covers from both connectors of the power cable and connect one connector to POWER 115V IN receptacle in SIG & POWER ENTRANCE BOX and the other connector to OUTPUT receptacle in switchbox on the trailer. (Refer to TM 11-5895-205-15, chap 2, sec II, para 51a, p 43.)
- b. For commercial power connections, refer to TM 11-5895-205-15, chapter 2, section II, paragraph 51b, page 43.
- 4. Energize ac circuits as follows:

SWITCH OR CIRCUIT BREAKER	POSITION
Main Circuit Breaker Voltmeter Ammeter	ON Indicates 115 volts AC Indicates 0
Lights and Intercom Neon, Fluorescent Switches	ON ON
Normal - Blackout Switch Overload Circuit Breaker	Blackout as required
Tape Oven Breaker	ON
Tape Oven Switch Pos 1 - Pos 4 Circuit Breaker	ON ON
Blower 1 and Blower 2 Convenience Receptable	ON
Heater 1 and Heater 2	Off/Heat/Fan as required

(Refer to TM-5895-205-15, chap 2, sec II, para 52a thru q, pp 43 and 44.)

- 5. Connect 26-pair cable.
  - a. Remove the covers from the connector on the 26-pair cable assembly and the INPUT 26-pair cable receptacle on the signal entrance box.
  - b. Connect the 26-pair cable to the signal entrance box. (Refer to TM 11-5895-205-15, chap 2, sec III, para 54a, b, and c, pp 44 and 45.)

# REFERENCES

TM 11-5895-205-15, w/C3, 7 thru 11, Operation, Organizational, Field and Depot Maintenance Telegraph Terminal, AN/MSC-29, Jan 60.



# Operate Teletypewriter Relay Central AN/MGC-23

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environment. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5815-308-15.
- 2. Operational teletype circuit(s).
- 3. Multiple address message(s).

## STANDARDS

Job standards are met when messages have been relayed to the respective telecommunications center indicated by the routing indicators.

- 1. Insure TA-312/PT TELEPHONE is connected to EXTERNAL PHONE signal line at the phone pair of binding posts. (See task 113-598-1001, fig 1.)
- 2. Place secure equipment in appropriate operational condition.
- 3. Insure teletypewriter and transmitter distributor (TD) are in appropriate operational condition for paper-tape transmission.
- 4. Place ZVA control box in operation as required (fig 1).

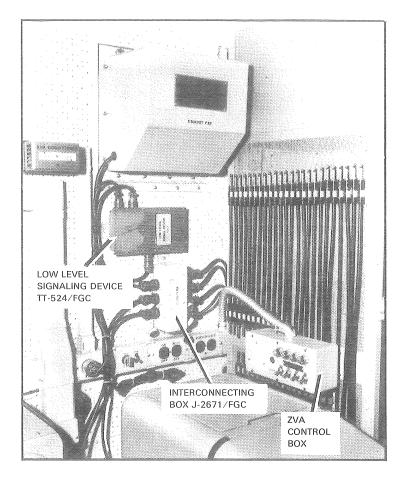


Figure 1. Cable Connections.

a. Check that signal line cables from ZVA TT-346 are connected to J1 through J4 of interconnecting box J-2671/FGC.

- b. Insure cables from J6 OUT and J7 OUT are connected to LINE 3 terminals A and B of the TT-178/FG (black leads to terminal A; white leads to terminal B).
- 5. Place low level signal device to desired operation.
- 6. Check that AC power cords of all equipment in the van are inserted into their proper receptacles.
  - a. Check that telephone plug is not plugged into the PHONE jack on the wall of the van and that the DEJECT BYPASS switch is off.
  - b. Check the connections to the line units and the TH-5/TG patch panels.
- 7. Insure required equipment is in the transmitting teletypewriter circuit.
  - a. Insure transmitter set portion of send positions 1 through 8 is on curbside wall at the rear of the van.
  - b. Insure send equipments consisting of the transmitter sets, COMSEC equipments, line units, monitor reperforators, and tape winders are complete.
- 8. Insure all required ZVA equipment is operational (fig 1).
- 9. Relay message.

CAUTION: RED light indicates security deject in operation. Disconnect phone for transmission.

10. Complete channel checks as required.

## REFERENCES

TM 11-5815-308-15, w/C1 thru 3, Operator's, Organizational, DS, GS, and Depot Maintenance Manual for the Teletypewriter Relay Central, AN/MGC-23, Nov 68.



# Operate Telegraph Terminal AN/TSC-58 to Transmit Traffic

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5805-574-15.
- 2. TM 11-490-2.
- 3. Operational teletype circuit(s).

## STANDARDS

Job standards are met when messages have been transmitted without

- 1. Operate 4W-2W-TEL switch on the TH-22/TG to appropriate position. (Refer to TM 11-5805-574-15, chap 2, sec III, para 2-17f, p 2-8.)
- 2. Place secure equipment in appropriate operational conditions (KAO-83/TSEC).
- 3. Insure teletypewriter and transmitter distributor (TD) are in appropriate operational conditions for paper tape transmission. (Refer to TM 11-5805-574-15, chap 2, sec III, para 2-15, p 2-8.)
- 4. Place low level signal device to desired operation. (Refer to TM 11-5805-574-15, chap 2, sec III, para 2-18, p 2-8.)

5. Place AUX-DUMMY BOX in desired operation condition. (Refer to TM 11-5805-574-15, chap 3, para 3-5c, p 3-7.) (Check the AUX-DUMMY BOX switch to make sure the switch is in AUX when TSEC/KW-7 is installed or in DUMMY BOX when TSEC/KW-7 IS NOT installed.)

CAUTION: Damage to the TSEC/KW-7 may result if the AUX-DUMMY BOX switch is NOT operated to AUX when the TSEC/KW-7 is used.

- 6. Select perforated taped message IAW first-in first-out and precedence. (Refer to TM 11-490-2, chap 6, para 6-10a(7)(a), p 6-23.) (See Task 113-572-3001.)
- 7. Transmit message. (Refer to TM 11-490-2, chap 6, para 6-10a(7) (d), p 6-23.) (See Task 113-572-3001.)
- 8. Complete channel checks as required. (Refer to TM 11-490-2, chap 8, para 8-15b(1)(b), p 8-6.) (Send a self-addressed channel check when traffic has not been received for 30 minutes.)

# REFERENCES

TM 11-5805-574-15, w/C1 thru 4, Operator's, Organizational, DS, GS, and Depot Maintenance Manual, Terminal, Telegraph, AN/TSC-58, Jan 71.

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.



# Operate Telegraph Terminal AN/TSC-58 to Receive Traffic

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5805-574-15.
- 2. TM 11-490-2.
- 3. Operational teletype circuit(s).

## STANDARDS

Job standards are met when you have completely received message(s) within 12 minutes.

- 1. Operate 4W-2W-TEL switch on the TH-22/TG to appropriate position. (Refer to TM 11-5805-574-15, chap 2, sec III, para 2-17f, p 2-8.) (See Task 113-598-2003.)
- 2. Insure secure equipment is in appropriate operational condition (KAO-83/TSEC).
- 3. Insure teletypewriter is in appropriate operational condition to receive. (Refer to TM 11-5805-574-15, chap 2, sec III, para 2-16, p 2-8.)
- 4. Place low level signal device to desired operation. (Refer to TM 11-5805-574-15, chap 2, sec III, para 2-18, p 2-8.)
- 5. Place AUX-DUMMY BOX in desired conditions. (Refer to TM 11-5805-574-15, chap 3, para 3-5c, p 3-7.)

- 6. Insure all required equipment is in the receiving teletypewriter circuit. (Refer to TM 11-5805-574-15, chap 3, p 3-5b, p 3-6.)
- 7. Receive message. (Refer to TM 11-490-2, chap 6, para 6-10d(1) (b), p 6-32.)
- 8. Complete channel checks as required. (Refer to TM 11-5805-574-15, chap 8, para 8-15b(1)(b), p 8-6.)

## REFERENCES

TM 11-5805-574-15, w/C1 thru 4, Operator's, Organizational, DS, GS, and Depot Maintenance Manual: Terminal, Telegraph, AN/TSC-58, Jan 71.

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.



# Operate Teletypewriter Central Office AN/MGC-17

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5815-205-14.
- 2. TM 11-490-2.
- 3. Operational teletype circuit(s).

#### STANDARDS

Job standards are met when

- a. Outgoing messages have been transmitted without error.
- b. Incoming messages have been completely received from distant terminal.

- 1. Determine facilities required and make necessary connections.
- 2. Energize ac circuits.
- 3. Check communications within the van.
  - a. Patch two positions together performing a loopback.
  - b. Phase crypto equipment make 10 point alarm test.
  - c. Send RY test, check receiver position for readability.

- 4. Disconnect in-house loopback.
- 5. Insure field telephone is operational for local communications. (Refer to TM 11-5815-205-14, chap 2, para 2-9, p 2-8.)
- 6. Patch required equipment on line for two half-duplex 2-wire secure operation. (Refer to TM 11-5815-205-14, chap 2, sec IV, para 2-27, p 2-25 and 2-26; and fig 2-2, p 2-9.)
- 7. Transmit and receive messages. (Refer to TM 11-490-2, chap 6, para 6-10a(7)(d), p 6-23 and para 6-10d(1)(b), p 6-29.)
- 8. Complete channel checks as required. (Refer to TM 11-490-2, chap 8, para 8-15b(1)(b), p 8-6.)

## REFERENCES

TM 11-5815-205-14, Operator's Organizational, Direct Support, and General Support Maintenance Manual Teletypewriter Central Office AN/MGC-17, Apr 73.

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.



# **Operate Telegraph Terminal AN/MSC-29**

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5895-205-15.
- 2. TM 11-490-2.
- 3. Operational teletype circuit(s).

#### STANDARDS

Job standards are met when

- a. Outgoing messages have been transmitted without error.
- b. Incoming messages have been received from the distant terminal.

- 1. Determine facilities required and make the necessary connections. (Refer to TM 11-5895-205-15, chap 2, sec III, para 53 and 54, pp 44 and 45.)
- 2. Energize the ac circuits. (Refer to TM 11-5895-205-15, chap 2, sec III, para 52, pp 43 and 44.)
- 3. Check communications within the van.
  - a. Patch the two positions being utilized together by using a loopback.

- b. Phase crypto equipment make 10 point alarm test.
- c. Send RY test, check receive position for readability.
- 4. Disconnect in-house loopback.
- 5. Insure field telephone and intercom are operational for local communications.
- 6. Patch for full duplex operation. Receive (use RED patch cords). Set 4W 2W TEL switch. To 4W on TH-22. Use 2 KW-7's one for receive one for send.
  - a. Receive (1st KW-7).
    - (1) Connect RED patch cord (pigtail) to E-1 and E-2 (black/white) of KW-7 line in.
    - (2) Insert cord into the receive side of TH-22.
    - (3) Connect shielded patch cords to J-7 and J-8 of KW-7, (red tip).
    - (4) Patch one cord to TT-76 receive and one to TT-4 receive at the position patching panel.
    - (5) Connect power cord.
  - b. Send (2d KW-7).
    - (1) Connect black patch cord (pigtail) to E-4 and E-5 (white/black) line out.
    - (2) Insert cord into the send side of the TH-22.
    - (3) Connect shielded patch cords to J-3 and J-4 of KW-7 (black tip).
    - (4) Patch one cord to TT-76 send and one to TT-76-TD at the position patching.

- 7. Transmit and receive messages. (Refer to TM 11-490-2, chap 6, para 6-10a, p 6-20 and para 6-10d(1)(b), p 6-29.)
- 8. Complete channel checks as required. (Refer to TM 11-490-2, chap 8, para 8-15b(1)(b), p 8-6.)

# REFERENCES

TM 11-5895-205-15, w/C3, 7 thru 11, Operation, Organizational Field and Depot Maintenance, Telegraph Terminal AN/MSC-29, Jan 60.

TM 11-490-2, Army Communication Facilities Telecommunications Center Operating Procedures, Aug 75.



# Prepare AN/UGC-74A(V)3 for Normal Operation

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. AN/UGC-74A(V)3.
- 2. TM 11-5815-602-12.

## STANDARDS

Job standards are met when all preliminary starting procedures have been performed and internal/external controls and switches have been adjusted within 30 minutes.

NOTE: Use caution when opening case and removing cover.

- 1. Inspect equipment for corrosion, rust, and fungus. (Refer to TM 11-5815-602-12, chap 2, para 2-9a.)
- 2. Perform preliminary starting procedures.
  - a. Connect primary power cable to J2 terminal.
  - b. Connect signal cable to J1 terminal.
  - c. Connect battery backup cable to J3 terminal.
  - d. Connect ground strap to ground terminal.
  - e. Attach copy holder.
  - f. Check/replenish paper supply.
  - g. Check/replace ribbon.

- 3. Perform adjustment of internal/external controls and switches for desired operation:
  - a. Internal.
  - (1) Parity ODD, EVEN, or inhibit.
  - (2) State RO, KSR, ICT.
  - (3) RCV MODE 20MA, 60MA, LODATA, 48V, LODATA.
  - (4) XMIT MODE 20MA, 60MA, LODATA, LODATA, 70M (microampere).
  - (5) BAUD RATE 45.5, 50, 75, 150, 300, 600, 1200.
  - (6) Clock INT, EXT, KG-30.
  - (7) Clock plus/minus (+, -).
  - (8) FIG S, J.
  - (9) Signal NRZ, DIO.
  - (10) Stop bits 1, 2.
  - (11) MODE ASCII, BAUDOT.
    - b. External.
  - (1) Transfer OFF.
  - (2) Audio control MIDPOINT.
  - (3) ILLUM control MIDPOINT.

## REFERENCES

TM 11-5815-602-12, Operators and Organizational Maintenance Manual for Terminal Communications AN/UGC-74A(V)3, Jan 79.



# Compose a Message Using the AN/UGC-74A(V)3

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. Completed Joint Message Form DD 173-1.
- 2. ACP 117.
- 3. TM 11-5815-602-12.
- 4. Operational AN/UGC-74A(V)3.

#### STANDARDS

Job standards are met when a message has been composed and stored in memory without error.

# PERFORMANCE MEASURES

- 1. Enter parameter command and specify system parameters through the use of the 14 subcommands. (Refer to TM 11-5815-602-12, chap 3, table 3-10.)
- 2. Enter the edit command to allow usage of the 13 subcommands. (Refer to TM 11-5815-602-12, chap 3, table 3-11.)
- 3. Enter insert subcommand.
- 4. Enter message into memory.

NOTE: If editing of message is required, refer to TM 11-5815-602-12, chapter 3, table 3-11.

5. Enter subcommand header and prepare header and trailer in JANAP 128 format.

NOTE: When composing a message in ACP-127 format the header and trailer will be composed manually.

6. Enter subcommand EXIT to return the system to the system command level.

# REFERENCES

TM 11-5815-602-12, Operator's and Organizational Maintenance Manual for Terminal Communications AN/UGC-74A(V)3, Jan 79.



# Perform Operator's Preventive Maintenance Services on Terminal Communications AN/UGC-74A(V)3

# CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. Equipment log book.
- 2. DA Form 2404.
- 3. TM 11-5815-602-12.
- 4. TM 38-750.
- 5. Operational AN/UGC-74A(V)3.

## STANDARDS

Job standards are met when you have performed the operator's preventive maintenance performance checks and services and completed all required forms. Report all defective items that cannot be corrected to the team chief. You have 15 minutes to complete this task.

- 1. Perform preventive maintenance checks and services on Terminal Communications AN/UGC-74A(V)3 as required for the following types of maintenance. (Refer to fig 1, and TM 11-5815-602-12, chap 4, para 4-1 thru 4-3, pp 107 thru 117.)
  - a. Before Operations Checks (B).
  - b. During Operations Checks (D).

- c. After Operations Checks (A).
- d. Weekly Maintenance Checks (W).
- e. Monthly Maintenance Checks (M).

See Figure 1. Operator preventive maintenance checks and services.

Item No.	In B	terva D A	al 1 W	(te M	ms to be inspected	Procedures	For readiness reporting equipment is not ready available if
1	*	* *	*	*	Terminal	Using the TM, check the terminal for completeness and satisfactory condition of its component parts, spare parts, and accessories.	Missing parts prevent the equipment from satisfactorily operating in all states.
2	*	*		*	Mounting	Check the mounting of the terminal to insure it is secure.	The set is not mounted, or is so insecurely mounted as to cause damage to the terminal during movement.
3	*		*	*	Exterior	a. Inspect the exterior of the terminal. It should be free of dirt, dust, grease, moisture, rust, corrosion, and fungus.	Excessive dirt, dust, grease, moisture, rust, corrosion, or fungus would prevent the terminal from operating properly; or, if operated, would cause possible damage or malfunctioning of the terminal.
						b. With the front outer cover removed, inspect the keyboard and dust cover for cleanliness; freedom from dirt, dust, grease, moisture, rust, corrosion, and fungus.  c. Inspect all painted	
en e		INO J	***************************************			surfaces for bare spots, rust, and corrosion.	

Figure 1. Operator preventive maintenance checks and services.

Item No.	Inter B D	rval A	I t	en M	ns to be inspected	Procedures	For readiness reporting equipment is not ready available if
omenilliggi koʻquan quanturar						d. Use a clean, dry, lint-free cloth for general cleaning purposes.	
						e. Clean panels and control knobs with a soft, clean cloth (dry or dampened; not wet).	
						f. Clean all glass with a soft, clean cloth (dry or damp; not wet).	7
4	*	*	*	*	Dust cover	a. Inspect the dust cover alignment against the chassis assembly. Check the condition of the four combination case latches. They should open with resistance, but smoothly.	The dust cover cannot be opened or closed tightly. Latches are broken or missing.
						b. With the dust cover lowered, inspect the rubber seal on the chassis assembly for wear, gouges, tears, or missing sections.	r
5	*	*	*	: :	* Primary power source cables and connectors	a. Inspect the primary source cables and connectors for cleanliness.	Unserviceable cables or connectors preventing the terminal from being operated.

Item Interval Items to be No. B D A W M inspected	Procedures	For readiness reporting equipment is not ready available if	
	b. Inspect for undue strain caused by twisting or tangling which would cause damage to the cables or connectors as the terminal is being extended from or returned into the outer case.		
	c. Inspect the cables nicks, cracks, frays, or deteriorated insulati	cuts	
	d. Inspect the cable of nectors for loose or br connectors and for cleatiness.	oken	
	(1) Clean cables and connectors with a clear dry, lint-free cloth.	1,	
	(2) Remove dust and dirt from plugs and jacks with a brush.		
6 * * * * * Case interior	a. Release the combination casse latches and carefully extend the terminal from the outer case.  CAUTION  Use extreme care to insure connector cables in the rear of the terminal are carefully pulled through the back panel to prevent damage to the cables or connectors.	Excessive dirt, dust, grease, moisture, or fungus would prevent the terminal from operating properly, or, if operated, would cause possible damage or malfunctioning of the terminal.	

	Interval Items to be B D A W M inspected	Procedures	For readiness reporting equipment is not ready available if	
outrour concentration (IIII P2 28 44		(1) The terminal should slide smoothly out from the outer case to the stop locks.		
		(2) If the terminal hangs or fails to slide smoothly, check for dirt, burrs, or other obstructions.		
		b. Clean the case interior of oil, dust, grease, moisture or fungus.		
		c. Clean the interior of the terminal with a long handle sash or camel's hair brush.		
7	* * * * * Print drum printing	Check the quality of the print drum printing by inspecting the message copy for readability.	Message copy is un- readable.	
8	* * * Visible wiring	With the terminal extended as described in TM, check all visible wiring for nicks, cuts, frays or deteriorated insulation.	Unserviceable wiring prevents the terminal from operating properly or, if operated, would cause possible damage or malfunctioning of the terminal.	

Item No.						is to be inspected	Procedures	For readiness reporting equipment is not ready available if
9	*	*	*	*	*	Paper supply	Inspect for the adequacy of the paper supply. Replenish in accordance with instructions contained in the technical manual.	Paper is not available.
10	*	*	*	*	*	Inking ribbon	Inspect the inking ribbon for signs of fraying, wear, dryness or unserviceability. Replace if necessary in accordance with instructions contained in the technical manual.	Inking ribbon is not available.
11	*			*	*	Terminal operation	a. Prepare the terminal for operation using the operator instructions contained in chapter 3, section II, of the TM and command guidance.	Terminal fails to operate properly.
							b. Observe the mechanical action of each knob, key, and switch. Insure that each moves smoothly.	
	-						c. Turn the POWER switch to the ON position; check that the terminal performs properly as applicable.	

Item Inte		ms to be inspected	Procedures	For readiness reporting equipment is not ready available if	
			d. Press and hold PARITY RESET and observe all lamps. Replace all defective indicator lamps (excluding the PARITY RESET lamp) as required.		
12	*	Elapsed time meters	Check the operational hour readings on the elapsed time meters. Notify organizational maintenance when the meters exceed their prescribed limits of either 1,000 or 10,000 hours.	Elapsed time meters have exceeded their limits.	

- 2. Complete DA Form 2404 (Equipment Inspection and Maintenance Worksheet). (Refer to TM 38-750, chap 3, para 3-46, pp 3-7 thru 3-8.2.)
- 3. Report all uncorrectable defects. (Refer to TM 38-750, chap 3, para 3-4b2, p 3-8.)
  - a. Notify your immediate supervisor of any uncorrectable fault that is found.
  - b. Submit DA Form 2404 to your supervisor or support maintenance personnel.

# REFERENCES

TM 11-5815-602-12, Operator's and Organizational Maintenance Manual, for Terminal Communication, AN/UGC-74A(V)3, Nov 79.

TM 38-750, w/C1 thru 3, The Army Maintenance Management System (TAMMS), May 78.



# Use the System Commands on the AN/UGC-74A(V)3 in the Intelligent Communications Terminal (ICT) State

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5815-602-12.
- 2. Operational AN/UGC-74A(V)3 with received message in memory and a composed message in memory.

## STANDARDS

Job standards are met when the composed message has been released from memory and transmitted and the received message has been released from memory and printed within 10 minutes.

NOTE: The following is an example of a typical ICT operation. Adjust internal/external controls and switches, and parameters for desired operation.

# Typical ICT Operation Validation/State Determination Printout.

SYSTEM INITIALIZED

SWITCH STATE - ICT

OPERATIONAL STATE - ICT

OPERATING CAPACITY - FULL

MODE - ASCII

BAUD RATE - 1200

STOP BITS - 2

END OF LINE OPTION - OD OD OA

SPACE OPTION - OFF

LINE LENGTH - 80

LINE FEEDS - 1

RECEIVE ENVELOPE OPTION =

56 5A 43 5A 43 : 4E 4E 4E 4E

TRANSMIT ENVELOPE OPTION =

56 5A 43 5A 43 : 4E 4E 4E 4E 7F 
PARITY OPTION = ODD

CAPITAL LETTER OPTION = ON

## PERFORMANCE MEASURES

- 1. Enter transmit command.
  - a. Message is transmitted.
  - b. Automatic printout of transmitted message is received.
- 3. Enter print command.
- 4. Remove printed messages from AN/UGC-74A(V)3.

NOTE: If operator desires to use any other system commands during operation of AN/UGC-74A(V)3, refer to TM 11-5815-602-12, table 3-9.

# REFERENCES

TM 11-5815-602-12, Operator's and Organizational Maintenance Manual for Terminal Communications AN/UGC-74A(V)3, Jan 79.



# Perform Preventive Maintenance on Teletypewriter Equipment

# CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. Equipment log book.
- 2. DA Form 2404.
- 3. TM 11-5815-244-12.
- 4. TM 38-750.

## STANDARDS

Job standards are met when you have performed operator's preventive maintenance on teletype equipment within 1 hour.

# PERFORMANCE MEASURES

1. Clean the equipment.

CAUTION: Do not use steel wool. Minute particles of steel can enter the electrical components and cause harmful internal shorting and grounding of circuits.

a. Clean exterior surfaces of oil deposits, grease, or ground in dirt. (Refer to TM 11-5815-244-12, chap 4, sec 1, para 4-7c, p 4-3.)

WARNING: Trichloroethane is flammable and its fumes are toxic. Provide adequate ventilation. Do not use near a flame.

- b. Brush plugs and jacks. (Refer to TM 11-5815-244-12, chap 4, sec I, para 4-7d, p 4-3.)
- c. Clean panels and control knobs with soft clean cloth. (Refer to TM 11-5815-244-12, chap 4, sec I, para 4-7e, p 4-3.)

WARNING: Compressed air is dangerous and can cause serious damage to eyes, ears, nose, and other parts of the body. It can also cause mechanical damage to the equipment. Do not use compressed air to dry parts where trichloroethane has been applied.

- 2. Clean chute and empty chad bin in the storage compartment. (Refer to TM 11-5815-244-12, chap 1, sec II, para 1-16, p 1-10.)
- 3. Replace inking ribbon.

NOTE: Replace inking ribbons only when printing becomes too light to read.

- a. Page printer. (Refer to TM 11-5815-244-12, chap 3, sec II, para 3-3e, p 3-10.)
- Perforator. (Refer to TM 11-5815-244-12, chap 3, sec II, para 3-3f, p 3-11.)
- 4. Install or replenish roll paper. (Refer to TM 11-5815-244-12, chap 3, sec II, para 3-3a, p 3-7.)
- 5. Install or replenish paper tape. (Refer to TM 11-5815-244-12, chap 3, sec II, para 3-3d, p 3-9.)
  - a. Open rear access door.
  - b. Open front access door.

- 6. Check for proper operation of switches and knobs.
  - a. Transmitter-distributor. (Refer to TM 11-5815-244-12, chap 3, sec I, para 3-2a, p 3-5.)
  - b. Perforator controls and indicators. (Refer to TM 11-5815-244-12, chap 3, sec I, para 3-2b, p 3-6.)
  - c. Page printer controls and indicators.
    - (1) Keyboard-transmitter controls. (Refer to TM 11-5815-244-12, chap 3, sec I, para 3-la, p 3-l.)
    - (2) Page-printing mechanism controls. (Refer to TM 11-5815-244-12, chap 3, sec I, para 3-1b, p 3-4.)
- 7. Check for loose, missing or damaged parts. (Refer to TM 11-5815-244-12, chap 1, sec II, para 1-9, pp 1-4 thru 16.)
- 8. Make appropriate entries on DA Form 2404. (Refer to TM 38-750, chap 3, para 3-4, p 3-4.)

NOTE: Preventive maintenance on teletypewriter equipment normally will include replacing fuses, incandescent lights, checking signal line and power cord, and adjusting motor speed if required.

#### REFERENCES

TM 11-5815-244-12, Operator's and Organizational Maintenance Manual Teletypewriter Sets, AN/FGC-25, AN/FGC-25X, AN/FGC-26, AN/FGC-26X, AN/FGC-52, AN/FGC-52X, AN/FGC-57, AN/FGC-68, AN/FGC-161, AN/FGC-162, AN/UGC-30 and AN/UGC-30X, May 75.

TM 38-750, w/Cl thru 3, The Army Maintenance Management System (TAMMS), May 78.



# 113-598-3002

# Perform Operator's Daily Maintenance on Telegraph Terminal AN/TSC-58

### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. Equipment log book.
- 2. DA Form 2404.
- 3. TM 38-750.

#### STANDARDS

Job standards are met when you have performed all the operator's daily maintenance performance checks and services and completed all required forms. Report all defective items that cannot be corrected to the team chief. You have 45 minutes to complete this task.

### PERFORMANCE MEASURES

NOTE: The maintenance will be broken down into three main groups:

Shelter exterior.

Shelter interior.

Operational checks on shelter components.

- 1. Perform daily preventive maintenance on exterior surface and components. (Refer to TM 11-5805-574-15, chap 4, sec I, para 4-2, p 4-2.)
  - a. Check for skin punctures, cracks, or open seams.

- b. Grounding system.
  - (1) Check for proper installation.
  - (2) Check for loose ground lead connections.
- c. Entrance boxes (fig 1, 2 and 3).

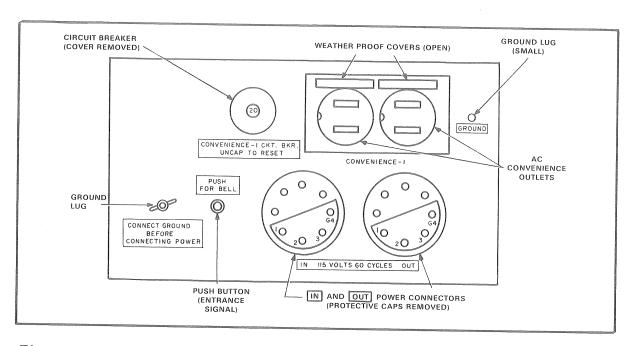
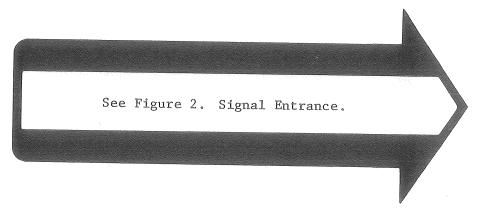


Figure 1. Power Entrance.



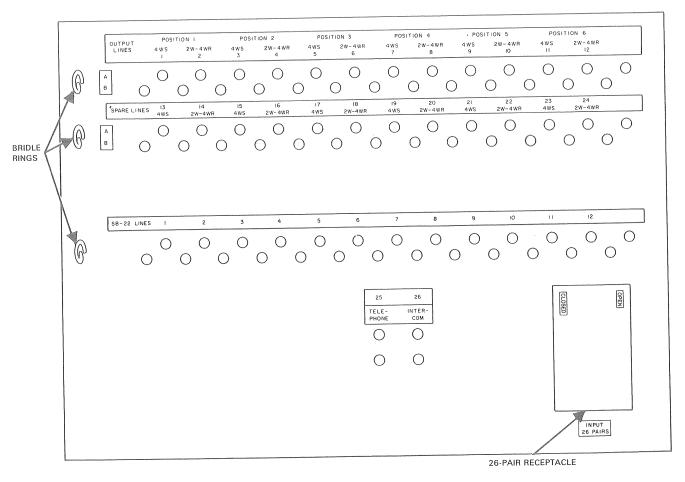
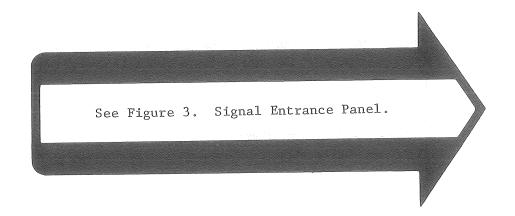


Figure 2. Signal Entrance.



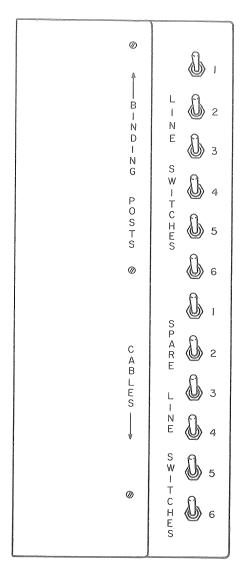


Figure 3. Signal Entrance Panel.

- (1) Clean area around receptacles.
- (2) Put cover on unused receptacles.
- d. See that air filter vent cover on assemblage door is open and not clogged or obstructed.

- e. Power and signal cable assemblies.
  - (1) Check and clean cable connections.
  - (2) Tighten loose connections.
  - (3) Put covers on unused cable connectors.
- 2. Perform checks and services on interior of shelter. (Refer to TM 11-5805-574-15, chap 4, sec I, para 4-2, p 4-2.)
  - a. Signal and power cables, cards, wires and harnesses.
    - (1) Tighten loose connections of plugs and connectors.
    - (2) Check cable insulation for cuts and cracks.
  - b. Check and replace ceiling lights as necessary.
  - c. Check for holes, open seams, or signs of leaks in walls, ceiling, and floor.
  - d. Remove unauthorized articles from storage compartments.
  - e. Inspect unused components for damage and state of cleanliness. Clean as required and cover if covers are available.

NOTE: Use lint free cloth and brushes to wipe off or clean all components and racks. Clean floor, walks, and ceiling with prescribed cleaning solution. (See figure 4 showing interior view of shelter.)

- 3. Perform operational checks on shelter components. (TM 11-5805-574-15, chap 4, sec I, para 4-2, page 4-2.)
  - a. Check for signs of internal and external binding of knobs, dials, and switches.
  - b. Check all air filters and components for cleanliness. Clean with compressed air if necessary.
  - c. Make sure that fuses are of proper rating.

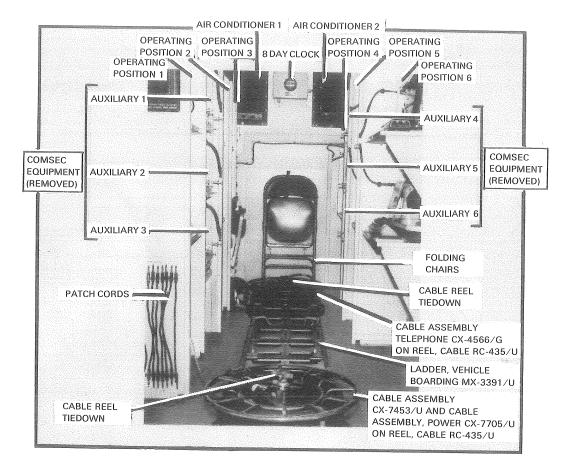


Figure 4. Interior View of Shelter.

- d. Power indicator neon light.
  - (1) Apply power to assemblage.
  - (2) Power indicator neon light should light.
- e. Check power indicators (volts AC meter on black power distribution panel, and cycles meter on red power distribution panel.)

- (1) Volts AC meter indicates 115 ± volts + 10 volts.
- (2) Cycle meter indicates 60 Hertz.
- f. Black power distribution panel.
  - (1) Operate main circuit breaker to ON.
  - (2) Amperes meter should indicate 0. (See figure 5, black power distribution panel.)

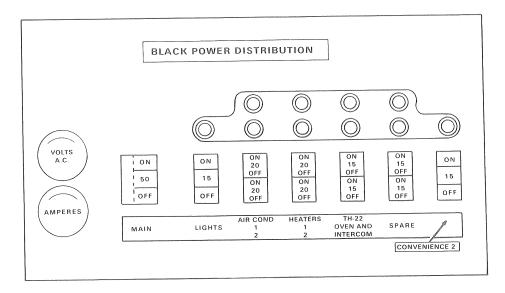


Figure 5. Black Power Distribution Panel.

- g. Check air conditioner for proper operation.
- h. Check heaters for proper operation.
- i. Check "Telephone on Switch" for proper operation.
- i. Check "Push for Bell Button" for proper operation.
- k. Red power distribution panel.
  - (1) Operate main circuit breaker to ON.
  - (2) Amperes meter should indicate 0. (See figure 6, Red Power Distribution Panel.)

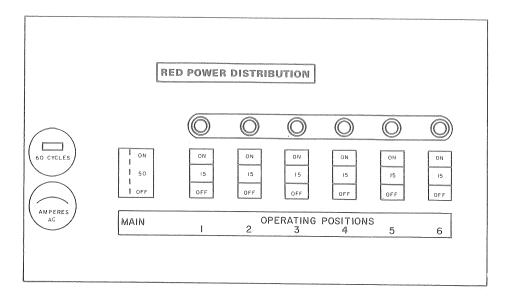


Figure 6. Red Power Distribution Panel.

- 1. Assemblage communication equipment.
  - (1) TA-312/PT Check out IAW TM 11-5805-574-15, chapter 2, section III, paragraph 2-13, page 2-7.
  - (2) SB-22/PT Check out IAW TM 11-5805-262-12, chapter 4, section I, paragraphs 38 through 40, page 32.
  - (3) LS-147(\*)/FI Check out IAW TM 11-5830-221-12, chapter 3, section I, paragraphs 13 through 17, pages 11 through 14.

### m. Rack equipment.

- (1) TH-22/TG Check out IAW TM 11-5805-356-12, chapter 4, section I, paragraph 4-5, page 4-2.
- (2) TT-76(\*)/GGC Check out IAW TM 11-5815-238-12, chapter 4, section I, paragraph 4-5, page 4-2.
- (3) TT-98(\*)/FG Check out IAW TM 11-5815-200-12, chapter 4, paragraph 4-4, page 4-2.
- (4) TSEC/KW-7 Refer to appropriate manual.
- n. Complete DA Form 2404 (Equipment Inspection and Maintenance Worksheet) and Equipment Log Book as required. (Refer to TM 38-750, chap 3, para 3-4, p 3-7 thru 3-12.)

- (1) Defects discovered during operator's maintenance of AN/TSC-58 will be noted and on-the-spot corrections made where possible as soon as operation has ended.
- (2) Record all deficiencies and shortcomings as specified by TM 38-750, chapter 3, paragraph 3-4, page 3-4.
- (3) Make entries on DA Form 2404.
- o. Submit completed report to team chief.

#### REFERENCES

TM 11-5805-262-12, w/C2, 4 thru 7, Operator's and Organizational Maintenance Manual: Switchboards Telephone, Manual SB-22/PT and SB-22A/PT, Dec 60.

TM 11-5805-356-12, w/C1 thru 7, Operator's and Organizational Maintenance Manual: Terminal, Telegraph-Telephone, AN/TCC-29, Jun 66.

TM 11-5805-574-15, w/C1 thru 4, Operator's, Organizational, DS, GS, and Depot Maintenance Manual: Terminal, Telegraph, AN/TSC-58, Jan 71

TM 11-5815-200-12, w/C1 thru 4, Operator's and Organizational Maintenance Manual: Teletypewriter Sets, AN/FGC-20, 20X, 21, 66, 159, 159X, 160, 177, AN/UGC-4, 29, 29X, and Teleprinter, TT-259/FG, Feb 66.

TM 11-5815-238-12, w/C1 thru 5, Operator's and Organizational Maintenance Manual: Teletypewriter Sets, AN/GGC-3, AN/GGC-3A, 53, 53A and Teletypewriter Reperforator Transmitter TT-76, 76A, 76B, 76C/GGC, TT-699/GGC, 699A/GGC, 699B/GGC and 699/GGC, Dec 65.

TM 11-5830-221-12, w/C1 and 3, Operator's and Organizational Maintenance Manual: Intercommunications Stations, LS-147A, B, C, and D/F1, Jun 61.

TM 38-750, w/C1 thru 3, The Army Maintenance Management System (TAMMS), May 78.



# Perform Operator's Preventive Maintenance on Teletypewriter Central Office AN/MGC-17

### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- Equipment log book.
- DA Form 2404.
- 3. TM 38-750.
- TM 11-5815-205-14.

#### STANDARDS

Job standards are met when you have performed all the operator's maintenance performance checks and services and completed all required forms. Report all defective items to the team chief.

### PERFORMANCE MEASURES

- Perform daily preventive maintenance. (Refer to TM 11-5815-205-14, chap 3, para 3-2, pp 3-1 thru 3-3.)
  - a. Check general condition of the equipment.
  - b. Remove dirt, dust, grease, and moisture from exposed parts.
  - Remove rust, dirt, and moisture from binding posts, connector, and receptacles.
  - d. Inspect ground rod.

- e. Inspect exposed cables.
- f. Tighten loose screws.
- 2. Perform monthly preventive maintenance. (Refer to TM 11-5815-205-14, chap 3, para 3-3, pp 3-3 thru 3-5.)
  - a. Clean and tighten components.
  - b. Inspect components for rust, corrosion, and moisture.
  - c. Inspect cables and wires for cuts and breaks.
  - d. Inspect for looseness of accessible items.
  - e. Clean air filters.
  - f. Inspect clock.
  - g. Inspect shelter exterior for rust and corrosion.
  - h. Inspect entrance boxes, blower exhaust, and filter intake covers for cracks, leaks, and dirt.
- 3. Perform quarterly preventive maintenance. (Refer to TM 11-5815-205-14, chap 3, para 3-4, pp 3-5 thru 3-6.)
  - a. Inventory equipment.
  - b. Inspect shelter for punctures, cracks, or open seams.
  - c. Replace ground lead if it is cut, corroded, or broken.
  - d. Remove sand, dirt, and moisture from among contacts of 26-pair cable receptacles.
  - e. Replace defective cables, cords, wires, and patching cords.
  - f. Requisition all operator and organizational maintenance manuals that are not on hand or in usable condition (including all current changed publications).

- 4. Complete DA Form 2404 (Equipment Inspection and Maintenance Worksheet) and Equipment Log Book as required. (Refer to TM 38-750, chap 3, para 3-4, pp 3-7 thru 3-12.)
  - 5. Submit completed report to team chief.

## REFERENCES

TM 11-5815-205-14, Operator's Organizational, Direct Support, and General Support Maintenance Manual, Teletypewriter Central Office AN/MGC-17, Apr 73.

TM 38-750, w/C1 thru 3, The Army Maintenance Management System (TAMMS), May 78.

# TASK

# 113-598-3027

# Perform Operator's Preventive Maintenance on Telegraph Terminal AN/MSC-29

#### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Sypervision and assistance are available. The following items are provided.

- 1. Equipment log book.
- 2. DA Form 2404.
- 3. TM 38-750.
- 4. TM 11-5895-205-15.

#### STANDARDS

Job standards are met when you have performed all the operator's maintenance performance checks and services and completed all required forms. Report all defective items to the team chief.

#### PERFORMANCE MEASURES

- 1. Perform daily preventive maintenance. (Refer to TM 11-5895-205-15, chap 3, para 65a thru g, p 56.)
  - a. Check general condition of the equipment.
  - b. Remove dirt, dust, grease, and moisture from exposed parts.
  - c. Remove rust, dirt, and moisture from binding posts, connector, and receptacles.
  - d. Inspect ground rod.

- e. Inspect exposed cables.
- f. Tighten loose screws.
- 2. Perform weekly preventive maintenance. (Refer to TM 11-5895-205-15, chap 3, para 66a thru j, p 56.)
  - a. Clean and tighten components.
  - b. Inspect components for rust, corrosion and moisture.
  - c. Inspect cables and wires for cuts and breaks.
  - d. Inspect for looseness of accessible items.
  - e. Inspect meters and clock.
  - f. Clean air filters, meters, and clock.
  - g. Wind the clock.
  - h. Inspect shelter exterior for rust and corrosion.
  - i. Inspect entrance boxes, blower exhaust, and filter intake covers for cracks, leaks, and dirt.
- 3. Complete DA Form 2404 (Equipment Inspection and Maintenance Worksheet) and Equipment Log Book as required. (Refer to TM 38-750, chap 3, para 3-4, p; 3-7 thru 3-12.)
- 4. Submit completed report to team chief.

#### REFERENCES

TM 11-5895-205-15, w/C3, 7 thru 11, Operation, Organizational, Field and Depot Maintenance, Telegraph Terminal AN/MSC-29, Jan 60.

TM 38-750, w/Cl thru 3, The Army Maintenance Management System (TAMMS), May 78.



# 113-601-1002

## Install Generator Set PU-619/M

## CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. One 10KW Generator Set PU-619/M.
- 2. TM 5-6115-275-14.
- 3. TM 5-6115-365-15.

#### STANDARDS

Job standards are met when the power generator set is installed and all irregularities or deficiencies are recorded, corrected and/or reported within 25 minutes. You will install the 10 KW generator set up to the point of starting the generator.

# PERFORMANCE MEASURES

- Site trailer. (Refer to TM 5-6115-365-15, chap 3, sec II, para 3-3a(1), p 3-3 and TM 5-6115-275-14, chap 4, sec I, para 4.2b, p 4-4.)
  - a. Locate the generator on a level surface for efficient operation.
  - b. The generator should not be operated at an angle greater than 15 degrees from level.
- 2. Apply brakes and block wheels properly. (Refer to TM 5-6115-365-15, chap 3, sec II, para 3-3a(2), p 3-3.)

NOTE: Operate the hand-brake at weekly intervals to assure freedom of linkage.

3. Position leg support down. (Refer to TM 5-6115-365-15, chap 3, sec II, para 3-3a(2), p 3-3.)

CAUTION: Wheels must be blocked, brakes set, and leg support down in the support position before attempting to roll up the tarpaulin and before starting to set up the equipment for operation.

4. Remove splash shield. (Refer to TM 5-6115-365-15, chap 3, sec II, para 3-3b(1), p 3-3.)

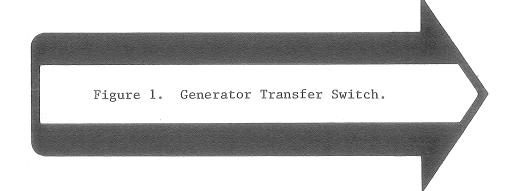
WARNING: The splash shield is heavy and cumbersome. Two people should be used to remove it.

NOTE: Roll the tarpaulin underneath to prevent water from collecting in the roll.

5. Remove all loose auxiliary items. (Refer to TM 5-6115-365-15, chap 3, sec II, para 3-3b(2), p 3-3.)

CAUTION: Place the extra oils and lubricants at least 50 feet from generators. Place fire extinguishers at fire point. Secure all other items not in use in one area. It is important that there be free circulation of air around the generator set at all times during operation. Inadequate ventilation is a major cause of damage to the equipment. Always use ear plugs.

6. Connect load cable to transfer switch. (Refer to TM 5-6115-365-15, chap 3, sec II, para 3-3b(3), p 3-3.)



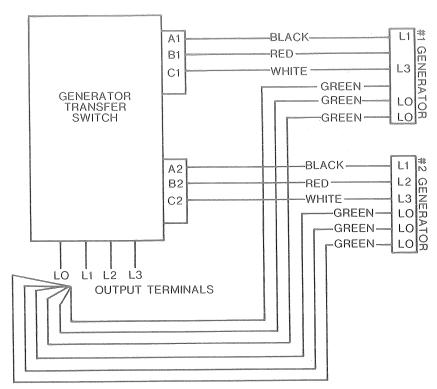
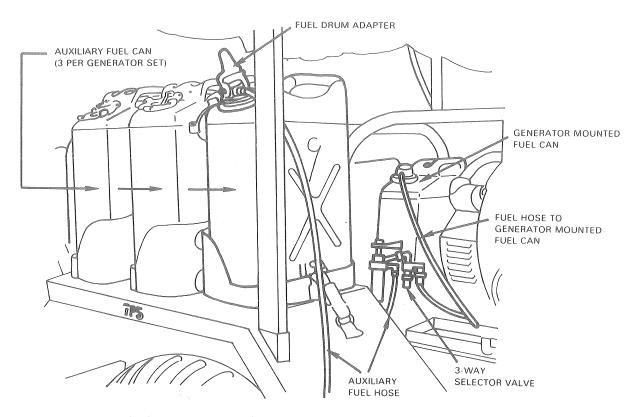


Figure 1. Generator Transfer Switch.

- 7. Generator may be grounded by any of the methods below, depending on the location and terrain. (Refer to TM 5-6115-275-14, chap 4, sec I, para 4-2b(5), p 4-5.)
  - a. Drive ground rod to a depth of 8 feet.
  - b. Connect to underground metallic water pipe.
  - c. Bury a metal plate (9 square feet) at a depth of 4 feet.
- 8. Connect ground strap. (Refer to TM 5-6115-275-14, chap 4, sec I, para 4-2b(5), p 4-5.)

CAUTION: Never operate the generator set until it has been properly grounded. Electrical defects in the load lines or equipment can cause death by electrocution when contact is made with an underground system. Ground wire must be 6AWG copper wire. Insure ground wire is secure at all ground studs.

9. Connect fuel hose. (Refer to TM 5-6115-365-15, chap 3, sec II, para 3-3d, p 3-3.)



**WARNING:** CLEAN UP ANY SPILLED FUEL IMMEDIATELY, AND LET FUMES EVAPORATE BEFORE STARTING THE GENERATOR.

#### **FUEL SYSTEM OPERATION**

- 1. CONNECT THE AUXILIARY FUEL HOSE TO THE 3-WAY FUEL SELECTOR VALVE AND CONNECT THE OTHER END TO THE ADAPTER INSTALLED IN ONE OF THE 5-GALLON AUXILIARY FUEL CANS.
- 2. POSITION THE SELECTOR VALVE TO DRAW FUEL FROM THE GENERATOR-MOUNTED FUEL CAN. START THE GENERATOR AND BRING IT UP TO OPERATING SPEED.
- 3. POSITION THE SELECTOR VALVE TO DRAW FUEL FROM THE AUXILIARY FUEL CAN. OPERATE THE GENERATOR FOR APPROXIMATELY 4 HOURS ON THE AUXILIARY FUEL CAN, THEN TURN SELECTOR VALVE TO DRAW FUEL FROM THE GENERATOR-MOUNTED FUEL CAN.
- 4. SWITCH THE ADAPTER TO ANOTHER AUXILIARY FUEL CAN AND TURN THE SELECTOR VALVE BACK TO AUXILIARY FUEL SUPPLY POSITION.

NOTE: THIS PROCEDURE ELIMINATES NEED TO CHANGE FUEL CANS.

WARNING: DO NOT LET FUEL ADAPTERS COME IN CONTACT WITH THE BATTERIES.

Figure 2. Fuel System Connection and Transfer Procedure.

- a. Check gas can.
- b. Check fuel hose.
- c. Set fuel transfer switch.
- d. Connect auxiliary fuel hose.
- 10. Position voltage/phase selection switch to correct setting. (Refer to TM 5-6115-275-14, chap 4, sec I, para 4-3a, p 4-17.)

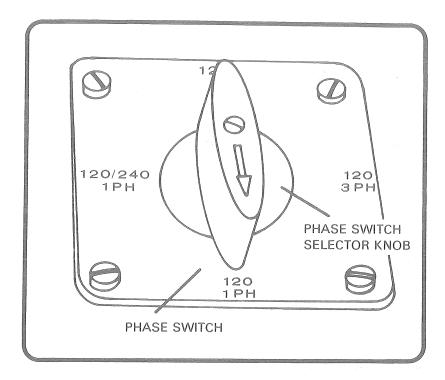


Figure 3. Phase Switch Selector Knob.

NOTE: All telecommunications center vans use 120 V, 1 phase, 2-wire.

11. Perform before operation maintenance. (Refer to table 1 and TM 5-6115-275-14, chap 3, sec III, para 3-4 and 3-5, p 3-2.)

## 12. Place switch to SET position.

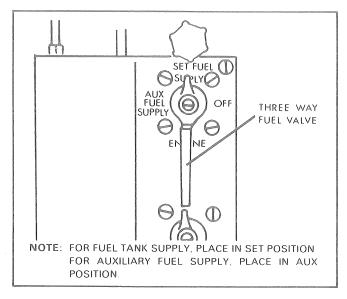


Figure 4. Three-Way Fuel Valve.

CAUTION: Position circuit breaker to OFF position.

### REFERENCES

TM 5-6115-365-15, w/Cl thru 6, Operator's Organizational, DS, GS, and Maintenance Manual (Including Repair Parts and Special Tools List): for Generator Sets, Gasoline and Diesel Engine, May 66.

TM 5-6115-275-14, Operator's, Organizational, Intermediate (Field) (DS and GS) and Depot Maintenance Manual: Generator Set, Gasoline Engine Driven, Skid Mounted, Tubular Frame, 10 KW, AC, 120/208V, 3 Phase, Less Engine, and 120/240V, Single Phase, Less Engine, Jun 77.



# 113-601-2003

# Operate Generator Set PU-619/M

#### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

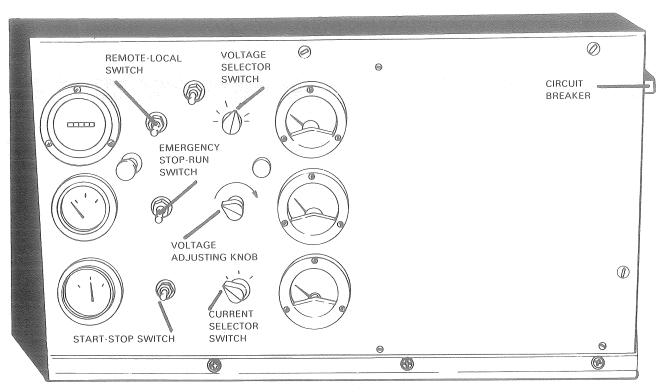
- 1. TM 5-6115-275-14.
- 2. TM 38-750.

#### STANDARDS

Job standards are met when you have completed all operational procedures and can supply power using the generator as the source. This task must be completed within a 15 minute time limit.

#### PERFORMANCE MEASURES

- 1. Start the generator.
  - a. Electrical starting (fig 1).

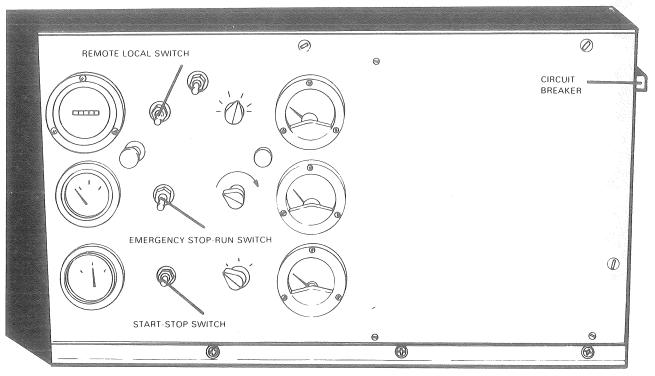


**NOTE:** WHEN STARTING ENGINE, IF NO OIL PRESSURE IS INDICATED, SHUT DOWN UNIT IMMEDIATELY.

- STEP 1. PLACE CIRCUIT BREAKER IN OFF POSITION.
- STEP 2. PLACE REMOTE-LOCAL SWITCH IN LOCAL POSITION.
- STEP 3. PLACE EMERGENCY STOP-RUN SWITCH IN NORMAL POSITION.
- STEP 4. TURN VOLTAGE ADJUSTING KNOB FULLY COUNTERCLOCKWISE.
- STEP 5. SET VOLTAGE SELECTOR SWITCH TO MONITOR DESIRED PHASE OR LINE VOLTAGE.
- STEP 6. SET CURRENT SELECTOR SWITCH TO MONITOR DESIRED CURRENT.
- STEP 7. PLACE GOVERNOR CONTROL IN COVERN POSITION.
- STEP 8. PULL OUT CHOKE CONTROL, AFTER ENGINE STARTS SLOWLY RETURN TO IN POSITION.
- **NOTE:** BEFORE STARTING ENGINE, CHECK LOAD TERMINALS FOR CORRECT OUTPUT CONNECTION AND VOLTAGE PHASE SWITCH POSITION.
- STEP 9. PRESS THE START-STOP SWITCH TO THE START POSITION, RELEASE AFTER ENGINE STARTS.

Figure 1. Electrical Starting Procedures.

## b. Manual starting (fig 2).



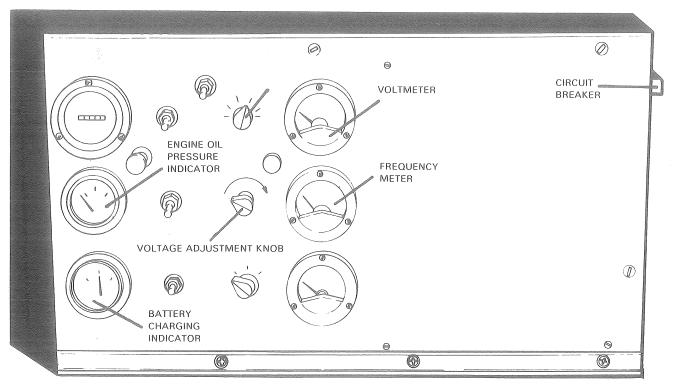
CAUTION: MAKE SURE CIRCUIT BREAKER IS IN OFF POSITION.

- STEP 1. PLACE EMERGENCY STOP-RUN SWITCH IN EMERGENCY RUN POSITION.
- STEP 2. PLACE REMOTE-LOCAL SWITCH IN LOCAL POSITION.
- **STEP 3.** PULL OUT CHOKE CONTROL, AFTER ENGINE STARTS SLOWLY RETURN CHOKE CONTROL TO THE IN POSITION.
- **STEP 4.** WHEN ENGINE REACHES OPERATING PRESSURE, PLACE EMERGENCY STOP-RUN SWITCH IN NORMAL POSITION AND AT THE SAME TIME, PRESS START-STOP SWITCH TO START POSITION AND RELEASE.

Figure 2. Manual Starting Procedures.

CAUTION: The emergency STOP-RUN switch when placed in the RUN position puts the engine safety out of action. Closely monitor the oil pressure. The generator set should be operated in the emergency run position only in an emergency situation.

- 2. Adjust generator control for correct operation using steps 1 through 8 of figure 3.
- 3. Place circuit breaker in ON position. Perform step 9 in figure 3.



**WARNING:** DO NOT INSTALL OR CHANGE LOAD CABLES OR CHANGE VOLTAGE PHASE SWITCH WHILE THE GENERATOR IS IN OPERATION.

- STEP 1. SET VOLTAGE PHASE SWITCH FOR DESIRED OUTPUT
- STEP 2. PLACE CIRCUIT BREAKER IN THE OFF POSITION.
- STEP 3. INSURE THAT LOAD LINE IS CONNECTED TO THE PROPER TERMINALS.
- STEP 4. START THE GENERATOR SET
- STEP 5. OBSERVE ENGINE OIL PRESSURE INDICATOR FOR PROPER OIL PRESSURE.
- STEP 6. OBSERVE BATTERY-CHARGING METER FOR PROPER OPERATION.
- **STEP 7.** CHECK FREQUENCY METER FOR PROPER READING. IF METER DOES NOT INDICATE 61 CYCLES, THE ENGINE GOVERNOR MUST BE ADJUSTED.
- **STEP 8.** CHECK GENERATOR OUTPUT VOLTAGE. OUTPUT VOLTAGE IS CONTROLLED BY "VOLT ADJ" KNOB ON THE FRONT PANEL.
- **NOTE:** IF NO OUTPUT IS INDICATED AND THE GENERATOR SET HAS BEEN IN STORAGE OR OUT OF OPERATION FOR A LONG PERIOD OF TIME, LOWER THE FRONT PANEL OF THE CONTROL CABINET AND MOMENTARILY PRESS THE FIELD FLASH SWITCH.
- **STEP 9.** WHEN SET IS ADJUSTED TO PROPER LEVELS AND THE ENGINE HAS REACHED OPERATING TEMPERATURE (3 TO 5 MINUTES) PLACE CIRCUIT BREAKER IN ON POSITION.

Figure 3. Operating Instruction, Generator Set PU-619/M

- 2. Adjust generator control for correct operation using steps 1 through 8 of figure 3.
- 3. Place circuit breaker in ON position. Perform step 9 in figure 3.

## Figure 3. Operating Instruction, Generator Set PU-619/M

NOTE: The generator unit should not be operated for an extended period of time. Normally it will be operated for 3 to 4 hours and "changed over" to the second set. To "change over" follow the procedures through the point of turning the circuit breaker ON on the second set. Position the transfer box switch to correspond to the generator just started and continue the operating procedures on this unit. Perform the stopping procedure on the first unit.

CAUTION 1: Avoid contact with the muffler or manifold. Exercise care that clothing does not become entangled in moving parts.

CAUTION 2: Do not operate the generator set in an enclosed space unless the exhaust gases are piped to the outside. Exhaust gases contain carbon monoxide; a poisonous, odorless, colorless gas.

CAUTION 3: Do not operate the generator set without free circulation of air, or damage to the engine may result.

4. Complete required entry in generator log book.

#### REFERENCES

TM 5-6115-275-14, Operator's, Organizational, Intermediate (Field) (DS and GS) and Depot Maintenance Manual: Generator Set, Gasoline Engine Driven, Skid Mounted, Tubular Frame, 10 KW, AC 120/208V, 3 Phase, and 120/240V, Single Phase, Less Engine, Jun 77.

TM 38-750, w/Cl thru 3, The Army Maintenance Management System (TAMMS), May 78.



# 113-601-3002

# Perform Daily Operator Maintenance on Generator Set PU-619/M

### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. Equipment log book.
- 2. DA Form 2404.
- 3. TM 5-6115-275-14.
- 4. TM 38-750.

#### STANDARDS

Job standards are met when you have performed all operator's daily preventive maintenance, and corrected and recorded all deficiencies or shortcomings on DA Form 2404 within a time limit of 20 minutes.

### PERFORMANCE MEASURES

- 1. Perform during operation maintenance. (Refer to table 1 and TM 5-6115-275-14, chap 3, sec III, para 3-4 a3-5, p 3-2.)
  - a. Battery charging ammeter should read on plus side of scale.
  - b. Oil pressure gage: 30 to 40 PSIG.
  - c. Frequency meter: 60 HZ.
  - d. Current Indicator indicates percent of load being used. Normal reading not to exceed 100 percent.

# OPERATOR/CREW PREVENTIVE MAINTENANCE CHECKS AND SERVICES (Before, During and After Operation)

INTERVAL AND SEQUENCE NO.			INSPECTION PROCEDURE		
В	D	A	ITEM	ACTION	
1		13	ENGINE	INSPECT FOR FUEL AND OIL LEAKS ON AND AROUND THE ENGINE. CHECK FOR BENT, CRACKED, BROKEN, LOOSE OR MISSING PARTS.	
2		14	OIL LEVEL GAGE	USE OIL GAGE ROD AND MEASURE THE OIL LEVEL IN THE CRANKCASE, ADD OIL IF NECESSARY. DO NOT OVERFILL. REFER TO LUBRICATION ORDER FOR PROPER GRADE OF OIL.	
3	one de la constante de la cons	15	AIR CLEANER	INSPECT FOR CLEANLINESS AND SERVICE- ABILITY. CHECK RESTRICTION INDICATOR; IF RED IS VISIBLE, REPORT TO ORGANIZA- TIONAL MAINTENANCE.	
		16	FUEL FILTER	INSPECT FILTER FOR ACCUMULATED DIRT, WATER, SEDIMENT, AND LEAKAGE.	
4		17	SPARK PLUG AND CABLE	INSPECT FOR INSECURE INSTALLATION.	
5		18	BATTERIES	TIGHTEN LOOSE CABLES AND MOUNTINGS. REMOVE CORROSION. INSPECT FOR CRACKS AND LEAKS. FILL TO 3/8 INCH (0.95 CM) ABOVE PLATES. CLEAN VENT HOLE IN FILLER CAP BEFORE INSTALLING. IN FREEZ- ING WEATHER RUN ENGINE A MINIMUM OF 1 HOUR AFTER ADDING WATER.	
6		19	FUEL TANK	ADD FUEL AS REQUIRED. INSPECT THE FUEL CAN AND ADAPTER FOR LEAKS AND DAMAGE. TIGHTEN LOOSE MOUNTINGS. INSPECT THE HOSE AND CONNECTIONS FOR LEAKS.	

## LEGEND:

B-BEFORE OPERATION

D-DURING OPERATION

A-AFTER OPERATION

#### NOTES:

- 1. DEFICIENCIES MUST BE CORRECTED OR REPORTED TO ORGANIZATIONAL MAINTENANCE.
- 2. KEEP THE ENGINE FREE OF DIRT AND OIL ON ALL EXTERNAL SURFACES. SEE THAT UNIT IS PROPERLY SHELTERED AT ALL TIMES, AND COOLING SHROUDS INSTALLED ARE NOT DAMAGED.

# OPERATOR/CREW PREVENTIVE MAINTENANCE CHECKS AND SERVICES (Before, During and After Operation) (Cont'd)

INTERVAL AND SEQUENCE NO			INSPECTION PROCEDURE		
8	D	A	ITEM	ACTION	
7		20	FAN COVER	CHECK FOR DIRT OR OBSTRUCTIONS. CLEAN SCREENS.	
8		21	GROUND TERMINAL	CHECK FOR PROPER GROUND AND LOOSE CONNECTIONS.	
9	12	22	CONTROLS AND INSTRUMENTS	INSPECT FOR DAMAGE AND LOOSE MOUNT- ING. WITH UNIT OPERATING, CHECK FOR PROPER OPERATION. NORMAL OPERATING READINGS FOR INSTRUMENTS ARE AS FOLLOWS:  CURRENT INDICATOR— INDICATES PERCENT OF LOAD BEING USED. NORMAL READING NOT TO EXCEED 100 PERCENT.	
10		23	ENGINE TO GENERATOR COUPLING	INSPECT FOR LOOSE OR DAMAGED COUPLINGS.  AMMETER D.C. PLUG SIDE OF SCALE.  OIL PRESSURE GAGE 20 TO 60 PSI (1.406 TO 4.218 KG PER SQ CM) - OIL PRSSURE IN EXCESS OF 60 PSI WILL IN NO WAY HARM OR AFFECT THE OPERATING REQUIREMENTS OF THIS ENGINE.  VOLTMETER 120-208-240 FREQUENCY METER-60 CYCLES	

#### LEGEND:

B-BEFORE OPERATION

D-DURING OPERATION

A-AFTER OPERATION

#### NOTES

- 1. DEFICIENCIES MUST BE CORRECTED OR REPORTED TO ORGANIZATIONAL MAINTENANCE.
- 2. KEEP THE ENGINE FREE OF DIRT AND OIL ON ALL EXTERNAL SURFACES. SEE THAT UNIT IS PROPERLY SHELTERED AT ALL TIMES, AND COOLING SHROUDS INSTALLED ARE NOT DAMAGED.

CAUTION: Stop operation immediately if a deficiency that would damage the equipment is noted during operation.

- 2. Perform after operation maintenance. (Refer to table 1 and TM 5-6115-275-14, chap 3, sec III, para 3-4 and 3-5, p 3-2.)
  - a. Service the fuel filter.

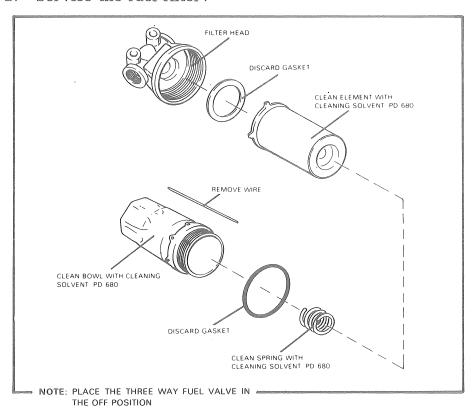
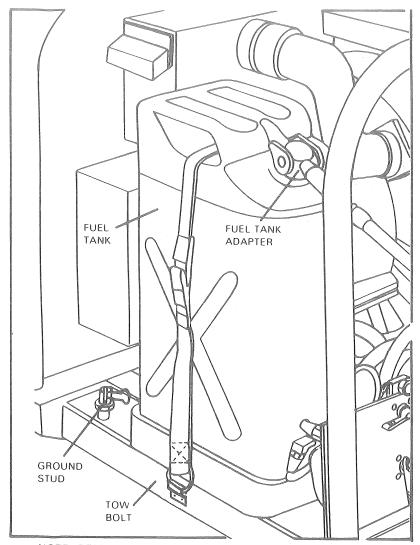


Figure 1. Fuel Filter Service Instructions.

b. Remove the fuel drum adapter.



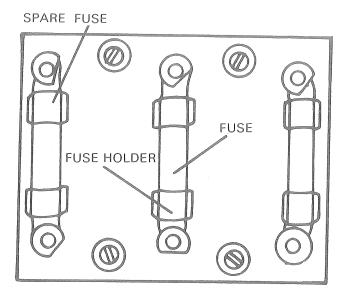
NOTE: REMOVE ADAPTER FROM FUEL TANK

Figure 2. Fuel Tank and Adapter, Removal and Installation.

- (1) Clean all parts with an approved cleaning solvent.
- (2) Inspect the fuel tank and adapters for damaged threads, cracks or other defects.

NOTE: Replace a defective fuel tank or adapter.

## c. Remove the fuses.



**NOTE:** WHEN REPLACING FUSES, BE SURE THEY ARE THE SAME SIZE AND RATING.

Figure 3. Fuses, Removal and Installation.

- (1) Clean the fuses and fuseholder with a clean, dry cloth.
- (2) Inspect the fuses for visible damage.

NOTE: Replace a defective fuse.

d. Remove and install the panel light bulbs.

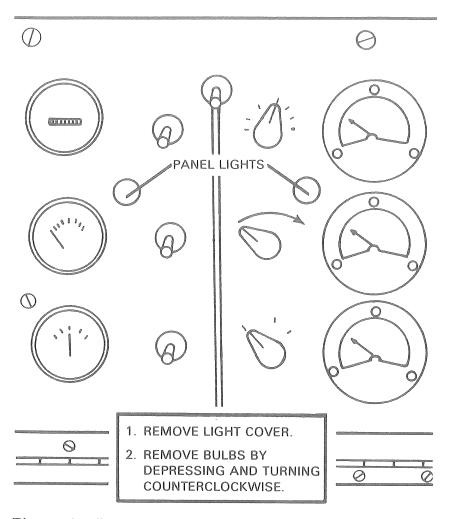


Figure 4. Panel Light Bulbs, Removal and Installation

- (1) Clean the lamp with a clean, dry cloth.
- (2) Inspect the lamps for defects.

NOTE: Replace a defective lamp.

- 3. Enter appropriate information in log book and DA Form 2404 as required. (Refer to TM 38-750, chap 3, para 3-4, pp 3-7 thru 3-12.)
  - a. Defects discovered during operation of the unit will be noted for correction to be made as soon as operation has ceased.
  - b. All deficiencies and shortcomings, together with the corrective action taken, will be recorded on DA Form 2404, as specified in reference b.
  - c. Submit completion report to trick chief.

#### REFERENCES

TM 5-6115-275-14, Operator's, Organizational, Intermediate (Field) (DS and GS) and Depot Maintenance Manual: Generator Set, Gasoline Engine Driven, Skid Mounted, Tubular Frame, 10 KW, AC 120/208V, 3 Phase, and 120/240V, Single Phase, Less Engine, Jun 77.

TM 38-750, w/Cl thru 3, The Army Maintenance Management System (TAMMS), May 78.



# 113-609-2001

# Prepare On-Line COMSEC Equipment TSEC/KW-7 for Operation

Information about the operation of this device is classified. Your COMSEC CUSTODIAN or COMSEC SECURITY OFFICER must obtain the pertinent document and SAFEGUARD same.

## REFERENCES

(C) KAO-83/TSEC, Operating Instructions For TSEC/KW-7, Apr 71.



# 113-609-2002

# Prepare Off-Line COMSEC Equipment TSEC/KL-7 for Operation

Information about the operation of this device is classified. Your COMSEC CUSTODIAN or COMSEC SECURITY OFFICER must obtain the pertinent document and SAFEGUARD same.

## REFERENCES

(C) KAO-41/TSEC, Operating Instructions For TSEC/KL-7, Sep 66.



# 113-609-2004

# Prepare On-Line COMSEC Equipment TSEC/KW-26 for Operation

Information about the operation of this device is classified. Your COMSEC CUSTODIAN or COMSEC SECURITY OFFICER must obtain the pertinent document and SAFEGUARD same.

## REFERENCES

(S) KAO-51/TSEC, Operating Instructions For TSEC/KW-26, May 69.

# TASK

## 113-609-2005

# Prepare On-Line COMSEC Equipment TSEC/KG-13 for Operation

Information about the operation of this device is classified. Your COMSEC CUSTODIAN or COMSEC SECURITY OFFICER must obtain the pertinent document and SAFEGUARD same.

#### REFERENCES

(C) KAO-81/TSEC, Operate Instructions For TSEC/KG-3, 12, 13, Apr 70.



# 113-572-8004

# **Process Time Analysis (Originated)**

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. TM 11-490-2.
- 2. DA Form 4020R.
- 3. TCC files.

#### STANDARDS

Job standards are met when time analysis (average originated handling time) by precedence has been determined.

#### PERFORMANCE MEASURES

- 1. List Time of File (TOF). (Refer to TM 11-490-2, chap 6, para 6-9b(3)(c), p 6-11.)
- 2. List Time of Transmission (TOT). (Refer to TM 11-490-2, chap 6, para 6-9b(3)(c), p 6-11.)
- 3. Determine handling time per message.
  - a. Subtract TOF from TOT.
  - b. Record answer in elapsed time.

NOTE: Repeat above procedure for each message of routine precedence to be analyzed.

CAUTION: Separate listings are maintained for each precedence category.

- 4. Determine handling time for the period.
  - a. Total the elapsed time column.
  - b. Divide total elapsed time by number of messages in that precedence category.
- 5. Provide the supervisor with these figures.

#### REFERENCES

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.



# 113-572-8005

# **Process Time Analysis (Terminated)**

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. TM 11-490-2.
- 2. DA Form 4020R.
- 3. TCC files.

#### STANDARD

Job standards are met when time analysis (average terminating handling time), by precedence, has been determined.

#### PERFORMANCE MEASURES

- List Time of Receipt (TOR). (Refer to TM 11-490-2, chap 6, para 6-9b(3)(d), p 6-11.)
- 2. List Time Available for Delivery (TAD). (Refer to TM 11-490-2, chap 6, para 6-9b(3)(d), p 6-11.)
- 3. Determine handling time per message.
  - a. Subtract TOR from TAD.
  - b. Record answer in elapsed time.

NOTE: Repeat above procedure for each message of each precedence to be analyzed.

CAUTION: Separate listings are maintained for each precedence category.

- 4. Determine handling time for period.
  - a. Total the elapsed time column.
  - b. Divide total elapsed time by number of messages in that precedence category.
- 5. Provide the supervisor with these figures.

#### REFERENCES

TM 11-490-2, Army Communications Facilities Telecommunications Center Operating Procedures, Aug 75.



## 113-572-8010

#### **Process a Tracer**

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. JANAP 128(H).
- 2. ACP 127.
- 3. ACP 131.
- 4. COMCENTER logs and files.

#### STANDARDS

Job standards are met when message has been traced for possible cause of delay, and service message has been sent to next station in transmission path. Task will be completed within 1 hour.

- 1. Examine logs and records to determine cause of delay.
  - a. Check time of receipt of initial message. (Refer to JANAP 128(H), chap 4, sec VIII, para 445a(4), p 4-48 and ACP 127, chap 4, para 438, p 4-36.)
  - b. Check time of transmission of initial message. (Refer to JANAP 128(H), chap 4, sec VIII, para 445a(4), p 4-48 and ACP 127, chap 4, para 438, p 4-36.)
  - c. Check for backlogs. (Refer to JANAP 128(H), chap 4, sec VIII, para 445a(1), p 4-47 and ACP 127, chap 4, para 438, p 4-36.)

- d. Check elapsed time between releaser time to time of file. (Refer to JANAP 128(H), chap 4, sec VIII, para 445a(1), p 4-47 and ACP 127, chap 4, para 438, p 4-36.)
- e. Check for circuit outages or preventive maintenance inspection (PMI). (Refer to JANAP 128(H), chap 4, sec VIII, para 445a(1), p 4-47 and ACP 127, chap 4, para 438, p 4-36.)
- 2. Prepare and transmit service message. (Refer to JANAP 128(H), chap 4, sec VIII, para 445a(3) and (4) and p 4-48 and ACP 127, chap 4, para 438, p 4-36.)
- 3. File all tracer information. (Refer to JANAP 128(H), chap 4, sec VIII, para 444c, p 4-46 and ACP 127, chap 4, para 438, p 4-36.)

#### REFERENCES

JANAP 128(H), Automatic Digital Network (AUTODIN) Operating Procedures, Oct 77.

ACP 131, Communications Instructions Operating Signals, 1 Jun 64, w/US SUPP-1, Jun 73.

ACP 127(E), w/US Supp-l(G), Oct 74.



# 113-572-8011

# **Process Nondelivery Claim**

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. DA Form 4019-R.
- 2. TM 11-490-2.
- 3. COMCEN logs and files.

#### STANDARDS

Job standards are met when the Nondelivery Claim has been processed to include retransmission when necessary.

- 1. Insure message was properly processed initially. (Refer to TM 11-490-2, chap 6, para 6-9j(1)(a), p 6-14.)
- 2. Send a service to appropriate station requesting a report of delivery. (Refer to TM 11-490-2, chap 6, para 6-9j (1)(b), p 6-14.)

#### EXAMPLE OF 128 FORMAT

```
RTTUZYVW RUFLMMA0836 1241350-UUUU--RUFTOEA.

ZNR UUUUU

BT

UNCLAS SVC ZUI RUFLMMA0240 1180650 280540Z APR ZFF1 COSIR

BT

#0836

NNNN
```

Figure 1. Service - Request report of delivery.

#### EXAMPLE OF 127 FORMAT

```
(TI) (5 SPACES) (2CR) (1LF)

RR RUFTOEA

DE RUFLMMA 0836 1241350

ZNR UUUUU

BT

UNCLAS SVC ZUI RUFLMMA 0240 1180650 2810540Z APR

ZFFI COSIR

BT

NNNN
```

Figure 2. Service - Request report of delivery.

- 3. If the originator desires, retransmit the message with the proper operating signals; i.e., ZFD as a suspected duplicate or ZDK as a service message response. (Refer to TM 11-490-2, chap 6, para 6-9j(1)(c), p 6-14.)
- 4. Complete DA Form 4019-R, Non-Receipt Claim Record. (Refer to TM 11-490-2, chap 6, para 6-9j(2), p 6-14.)

NON-RECEIPT CLAIM RECORD For use of this form, see TM 11-490-2: proponent agency is the United States Army Communications Command	
DATE FILED	STATION OR PERSON REQUESTING TRACER
28 APR 78	66th MI
INFORMATION TO BE DELIVERED TO	STATION CLAIMING NON-RECEIPT
CPT WAYNE	511th MI, NURNBERG
MESSAGE IDENTIFICATION ORIGINATOR'S DATE-TIME GROUP CLASSIFICATION STATION SERIAL PROCEDURE	
OFFICE SYMBOL	LUECEDEUCE
AUTZ-MI 2805402 AM CONFID	ENTIAL 0240 PRIORITY
ACTION TAKEN	
NUMBER SHEETS CHECKED MULTIPLE ADDRESS	RECORDS CHECKED RERUN LOGS CHECKED
NONE	
REELS CHECKED	
1	
$\Lambda$	
/10000	
a celling	
ากลายก	
Anclossified  Only	
15/18/1000	
ICINIC	
FINAL ACTION	
TRACER ACTION COMPLETED BY	
GAMLFFIER BA	DATE
A FORM 4019-R 1 Apr 73 REPLACES DA FORM 11 188, 1 OCT 60, WHICH IS OBSOLETE	

Figure 3. DA Form 4019-R, Non-Receipt Claim Record.

### REFERENCES

TM 11-490-2, Army Communications Facilities: Telecommunications Center Operating Procedures, Aug 75.



## 113-573-2001

### **Receipt for COMSEC Material**

#### CONDITIONS

This task is performed in a secure communications center. Supervision and assistance are available. The following items are provided.

- 1. TB 380-41(C).
- 2. DA Form 2011 (one for each short title).
- 3. DA Form 2011-1 (one for each short title).
- 4. DA Form 4669-R.
- 5. DA Form 2653-R.
- 6. SF 153 accompanying the incoming transfer.

#### STANDARDS

Job standards are met when the COMSEC material listed on SF 153 has been posted to DA Forms 2011, 2011-1, and 2653-R and required entries made on DA Form 4669-R.

### PERFORMANCE MEASURES

NOTE: TB 380-41(C), Procedures for Safeguarding, Accounting, and Supply Control of COMSEC Material, is classified "CONFIDENTIAL." Document is available from the COMSEC Custodian.

- 1. Receive from sources. (Refer to TB 380-41(C), chap 4, para 4-10a, p 4-5.)
- 2. Examine container. (Refer to TB 380-41(C), chap 4, para 4-10b, p 4-5.)

3. Inventory material.

NOTE: Packages signed for by persons other than the COMSEC Custodian, or in his absence, the Alternate Custodian, must be delivered to the custodian/alternate unopened. The inventory will be accomplished by one of these individuals. (Refer to TB 380-41(C), chap 4, para 4-13, pp 4-6 and 4-7.)

- 4. Make entries on DA Form 4669-R. (Refer to TB 380-41(C), fig 4-30, pp 455-456.)
- 5. Post incoming items to DA Form 2011, and/or 2011-1 as appropriate. (Refer to TB 380-41(C), fig 4-7 thru 4-10, pp 4-25 thru 4-30.)
- 6. Post items to DA Form 2653-R. (Refer to TB 380-41(C), chap 4, para 4-13c(2)(3), pp 4-7 thru 4-8.)
- 7. Prepare SF 153 for custodian's signature. (Refer to TB 380-41(C), fig 4-11, 4-22 and 4-23; pp 4-31, 4-42 and 4-43.)

NOTE: At this point, DA Form 2011, and/or 2011-1, DA Form 4669-R, DA Form 2653-R, and SF 153 are presented to the COMSEC Custodian for required signature and verification of entries on these forms.

8. Make the required distribution of SF 153. (Refer to TB 380-41(C), p A-1.)

#### REFERENCES

TB 380-41(C), Procedures for Safeguarding, Accounting, and Supply Control of COMSEC material (u).



# 113-573-2002

# **Prepare COMSEC Transfer Report**

#### CONDITIONS

This task is performed in a secure communications center. Supervision and assistance are available. The following items are provided.

- 1. TB 380-41(C).
- 2. SF 153.
- 3. DA Form 2011.
- 4. DA Form 2011-1.
- 5. DA Form 2653-R.
- 6. List of items to be transferred.

#### STANDARDS

Job standards are met when the correct entries have been made to SF 153, DA Form 2011, DA Form 2011-1, and DA Form 2653-R.

#### PERFORMANCE MEASURES

NOTE: TB 380-41(C), Procedures for Safeguarding, Accounting, and Supply Control of COMSEC Material (U) is classified "CONFIDENTIAL." Document should be available from COMSEC Custodian.

- 1. Determine number of copies of SF 153 required. (Refer to TB 380-41(C), app A, p A-1.)
- 2. Arrange items in alpha-numerical sequence. (Refer to TB 380-41(C), chap 4, fig 4-11, p 4-31.)

- 3. Prepare SF 153. (Refer to TB 380-41(C), chap 4, fig 4-11, 4-22 and 4-23, pp 4-31 and 4-42, 4-43.)
- 4. Update DA Form 2011 and 2011-1. (Refer to TB 380-41(C), chap 4, fig 4-8, pp 4-26 and 4-27; fig 4-10, pp 4-29 and 4-30.)
- 5. Post DA Form 2653-R. (Refer to TB 380-41(C), chap 4, para 4-13c(2)(3), p 4-8 and refer to fig 4-31, p 4-57.)

NOTE: Arrange items to be shipped for final inventory.

6. Distribute SF 153. (Refer to TB 380-41(C), app A, pp A-1 thru A-2.)

#### REFERENCES

TB 380-41(C), Procedures for Safeguarding, Accounting, and Supply Control of COMSEC Material (U), Feb 78.

# TASK

# 113-573-2003

## **Prepare Inventory of COMSEC Material**

#### CONDITIONS

This task is performed in a secure communications center. Supervision and assistance are available. The following items are provided.

- 1. Preprinted semiannual inventory.
- 2. DA Form 2011.
- 3. DA Form 2011-1.
- 4. TB 380-41(C).

#### STANDARDS

Job standards are met when the preprinted semiannual inventory is updated.

#### PERFORMANCE MEASURES

NOTE: TB 380-41(C), Procedures for Safeguarding, Accounting, and Supply Control of COMSEC Material (U), is "CONFIDENTIAL". Document should be available from COMSEC Custodian.

- 1. Verify each item. (Refer to TB 380-41(C), chap 4, para 4-13a, p 4-6 and 4-7.)
- 2. List additions. (Refer to TB 380-41(C), chap 4, para 4-13d(1) (a)1, p 4-8 and fig 4-13, p 4-33.)
- 3. List deletions. (Refer to TB 380-41(C), chap 4, para 4-13d(1) (a)2, p 4-8 and fig 4-13, p 4-33.)
- 4. Inclose SF 153 for each entry on CERTIFICATION/CORRECTION page. (Refer to TB 380-41(C),fig 4-11, p 4-31.)

- 5. Type statement and signature blocks. (Refer to TB 380-41(C), chap 4, para 4-13d(1)(a)5, p 4-8.)
- 6. Make required distribution. (Refer to TB 380-41(C), chap 4, para 4-13d(1)(b), p 4-8.)

#### REFERENCES

TB 380-41(C), Procedures for Safeguarding, Accounting, and Supply Control of COMSEC Material (U), Feb 78.



## 113-573-7002

### **Prepare COMSEC Destruction Report**

#### CONDITIONS

This task is performed in a communications center. Supervision and assistance are available. The following items are provided.

- 1. Preprinted destruction/drop-accountability report.
- 2. DA Form 2011.
- 3. DA Form 2011-1.
- 4. TB 380-41(C).

#### STANDARDS

Job standards are met when the preprinted destruction/drop-accountability report can be inventoried against material to be destroyed or dropped.

#### PERFORMANCE MEASURES

NOTE: TB 380-41(C), Procedures for Safeguarding, Accounting, and Supply Control of COMSEC Material, is "CONFIDENTIAL". Document should be available from COMSEC Custodian.

- 1. Verify each item.
  - a. Inventory. (Refer to TB 380-41(C), chap 4, para 4-13a, p 4-6 and 4-7.)
  - b. Page check. (Refer to TB 380-41(C), chap 4, para 4-10c, p 4-5 and 4-6.
- 2. List additions. (Refer to TB 380-41,(C), chap 4, para 4-13d(1) (a)1, p 4-8 and fig 4-13, p 4-33.)

- 3. List deletions. (Refer to TB 380-41(C), chap 4, para 4-13d(1) (a)2, p 4-8, and fig 4-13, p 4-33.)
- 4. Make appropriate entries on DA Form 2011. (Refer to TB 380-41(C), fig 4-8, p 4-26.)
- 5. Make appropriate entries on DA Form 2653-R. (Refer to TB 380-41(C), chap 4, para 4-13c(2) and (3), p 4-8 and fig 4-31, p 4-57.)
- 6. Enclose SF Form 153 for material that has been transferred or previously destroyed listed on C&C page. (Refer to T B 380-41(c), fig 4-31.)
- 7. Type statement and signature blocks. (Refer to TB 380-41(C), chap 4, para 4-13d(1)(a)5, p 4-8.)
- 8. Sign C&C page and make required distribution. (Refer to TB 380-41(C), chap 4, para 4-13d(1)(b), p 4-8.)

#### REFERENCES

TB 380-41(C), Procedures for Safeguarding, Accounting, and Supply Control of COMSEC Material (U), Feb 78.

# TASK

### 113-583-2184

# Shut Down the Tactical Automatic Digital Switching System (TADSS) (Burroughs 3500)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when the TADSS system has been shut down within 1 hour.

#### PERFORMANCE MEASURES

1. Press INPUT REQUEST pushbutton. (Refer to basic reference, anx 5, para B.1, second a, p A-5-6.)

NOTE: Observe the ready indicator light.

- 2. Type in CC UTIL (standard utility call) on keyboard. (Refer to basic reference, anx 5, para B.1, second b, p A-5-6A/B.)
- 3. Press END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para B.1, second b, p A-5-6A/B.)
- 4. Enter the command designator. (Refer to basic reference, anx 5, para D.21.b, pp A-5-50 thru A-5-52.)
- 5. Enter a period. (Refer to basic reference, anx 5, para B.1, second d, p A-5-6A/B.)

6. Press END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para B.1, second e, p A-5-6A/B.)

NOTE: Observe the console/line printer for all printouts.

#### REFERENCES

# TASK

## 113-583-2185

# Delete Equipment from the Active System (TADSS) (Burroughs 3500)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Alternate disk channel.
- 4. Prime disk channel.
- 5. AUTODIN light panel.
- 6. Card reader.
- 7. System memory units.
- 8. Magnetic tape units.
- 9. Processors.
- 10. Line printer.
- 11. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when the equipment has been deleted from the active system within 10 minutes.

#### PERFORMANCE MEASURES

1. Press the INPUT REQUEST pushbutton. (Refer to basic reference, anx 5, para B.1. second a, p A-56.)

NOTE: Observe the ready indicator light.

- 2. Type in CC UTIL (standard utility call) on keyboard. (Refer to basic reference, anx 5, para B.1. second b, p A-5-6A/B.)
- 3. Press the END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para B.1. second b, p A-5-6A/B.)
- 4. Enter the command designator. (Refer to basic reference, anx 5, para D.14, pp A-5-33 thru A-5-35.)
- 5. Enter a slant bar. (Refer to basic reference, anx 5, para D.14, pp A-5-33 thru A-5-35.)
- 6. Enter the letter for delete. (Refer to basic reference, anx 5, para D.14, pp A-5-33 thru A-5-35.)
- 7. Enter a slant bar. (Refer to basic reference, anx 5, para D.14, pp A-5-33 thru A-5-35.)
- 8. Enter the three/four character alphanumeric specifies identifying the equipment. (Refer to basic reference, anx 5, para D.14, pp A-5-33 thru A-5-35.)
- 9. Enter a period. (Refer to basic reference, anx 5, para B.1. second d, p A-5-6A/B.)
- 10. Press the EOM pushbutton. (Refer to basic reference, anx 5, para B.1. second e, p A-5-6A/B.)

NOTE: Observe the console/line printer for printouts.

#### REFERENCES



## 113-583-2186

# Add Equipment to the Active System (TADSS) (Burroughs 3500)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Alternate disk channel.
- 4. Prime disk channel.
- 5. AUTODIN light panel.
- 6. Card reader.
- 7. System memory units.
- 8. Magnetic tape units.
- 9. Preprocessors.
- 10. Line printer.
- 11. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when equipment has been added to the active system within 10 minutes.

#### PERFORMANCE MEASURES

1. Press the INPUT REQUEST pushbutton. (Refer to basic reference, anx 5, para B.1. second a, p A-5-6.)

NOTE: Observe the reading indicator light.

- 2. Type in CC UTIL (standard utility call) on keyboard. (Refer to basic reference, anx 5, para B.1. second b, p A-5-6A/B.)
- 3. Press the END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para B.1. second b, p A-5-6A/B.)
- 4. Enter the command designattor. (Refer to basic reference, anx 5, para D.14 and D.15, pp A-5-33 thru A-5-35.)
- 5. Enter a slant bar.
- 6. Enter the letters for adding equipment.
- 7. Enter a slant bar.
- 8. Enter the three/four characters alphanumeric specifies identifying the equipment.
- 9. Enter a period (Refer to basic reference, anx 5, para B.1. second d, p A-5-6A/B.)
- 10. Press the EOM pushbutton. (Refer to basic reference, anx 5, para B.1. second e, p A-5-6A/B.)

NOTE: Observe the console/line printer for all printouts.

#### REFERENCES

# TASK

## 113-583-2187

# Dump the Routing Table to Magnetic Tape (TADSS) (Burroughs 3500)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Routing indicator.
- 4. Routing table.
- 5. Magnetic tape.
- 6. Magnetic tape transport.
- 7. Line printer.
- 8. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when a message has been received to change a routing indicator to the routing table, and the routing table has dumped to magnetic tape within 10 minutes.

- 1. Press INPUT REQUEST pushbutton. (Refer to basic reference, anx 5, para B.1, second a, p A-5-6.)
- 2. Type in CC UTIL (standard utility call) on keyboard. (Refer to basic reference, anx 5, para B.1, second b, p A-5-6A/B.)

- 3. Press the END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para B.1, second b, p A-5-6A/B.)
- 4. Enter the command designator. (Refer to basic reference, anx 5, para D.18, p A-5-42.)
- 5. Enter a slant bar.
- 6. Determine which routine is going to be used.
- 7. Enter a period. (Refer to basic reference, anx 5, para B.1, second d, p A-5-6A/B.)
- 8. Press the EOM pushbutton. (Refer to basic reference, anx 5, para B.1, second e, p A-5-6A/B.)

NOTE: Observe the console/line printer for all printouts.

#### REFERENCES



## 113-583-2188

# Send a Service Message to the Terminal (TADSS) (Burroughs 3500)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Terminals.
- 4. Service messages.
- 5. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when a service message has been sent to a terminal within 10 minutes.

- 1. Press the INPUT REQUEST pushbutton. (Refer to basic reference, anx 5, para B.1, second a, p A-5-6.)
- 2. Type in CC UTIL (standard utility call) on keyboard. (Refer to basic reference, anx 5, para B.1, second b, p A-5-6A/B.)
- 3. Press the END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, anx 5, para B.1, second b, p A-5-6A/B.)
- 4. Enter the command designator. (Refer to basic reference, anx 5, para D.22, pp A-5-52 and A-5-53.)

- 5. Enter a slant bar.
- 6. Enter the four/seven character routing indicator (as many as needed.)
- 7. Enter a slant bar between each routing indicator.
- 8. Enter a period. (Refer to basic reference, anx 5, para B.1, second d, p A-5-6A/B.)
- 9. Enter the text of service message. (Refer to basic reference, anx 5, para D.22, pp A-5-52 and A-5-53.)
- 10. Enter two carriage returns.
- 11. Enter one line feed.
- 12. Press the EOM pushbutton. (Refer to basic reference, anx 5, para B.1, second e, A-5-6A/B.)

NOTE: Observe the console/line printer for all printouts.

#### REFERENCES



## 113-583-2189

### Load the Backup System (TADSS) (Burroughs 3500)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An off-line system.
- 2. Console printer keyboard.
- 3. Program tape.
- 4. Program disk.
- 5. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator, Sep 75.

#### STANDARDS

Job standards are met when the backup system has been loaded and made available to be pickup if the on-line system fails within 10 minutes.

- 1. Press the CLEAR button. (Refer to basic reference, anx 6, para 4.g, p A-6-12D.)
- 2. Press the TERM button.
- 3. Press the OPERATION button.
- 4. Enter by key 600000.
- 5. Press the SYSTEM INTERGRATION button.

- 6. Press the ADDRESS button.
- 7. Enter by key O.
- 8. Press the WRITE button.
- 9. Enter by key 0451N.
- 10. Press the OPERATION button.
- 11. Enter by key 600000.
- 12. Press the RUN bar.
  - NOTE 1: Enter the command at the backup processor keyboard.
  - NOTE 2: Observe the supervisory printer output for printouts.

#### REFERENCES



# 113-583-2190

# Prepare Burrough 3500 System for Operation (TADSS)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. An operational off-line system.
- 3. Console printer keyboard.
- 4. Program tape.
- 5. Program disk.
- 6. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when the Burroughs  $3500\ \mathrm{has}$  been prepared for operation within 1 hour.

- 1. Insure all vans have been set up. (Refer to basic reference, anx 7, para A.1, p A-7-1.)
- 2. Insure all equipment is on-line and in a ready state.
- 3. Insure that all operational programs have been loaded. (Refer to basic reference, anx 7, para A.2, pp A-7-1 and A-7-2.)
- 4. Enter the date and time.

- 5. Enter the manual recovery command.
- 6. Enter the letters MX.
- 7. Press the END OF MESSAGE (EOM) pushbutton.

NOTE: Observe the console printer for printouts.

- 8. Set the Burroughs 3500 system for message processing. (Refer to basic reference, anx 7, para A.3, pp A-7-2 and A-7-3.)
  - a. Insure that all crypto equipment to be used is in sync.
  - b. Place scratch tapes on all available tape stations.
  - c. Place on-line all tape stations that are to be labeled.
  - d. Purge all tapes.
  - e. Make tapes that were labeled available to the system.
  - f. Enter utility to set the system parameters.
  - g. Enter utility to obtain ROUTE/PRINT.
  - h. Enter the utility to obtain printouts.

NOTE: Observe the console/line printer for all printouts.

#### REFERENCES



## 113-583-2192

## Create a Trunk Group (TADSS) (Burroughs 3500)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational on-line system.
- 2. Console printer keyboard.
- 3. Circuit.
- 4. Channel number.
- 5. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when a trunk group has been created within  $20\,\mathrm{minutes}$ .

- 1. Press the INPUT REQUEST pushbutton. (Refer to basic reference, anx 5, para B.1, second a, p A-5-6.)
- 2. Type in CC UTIL (standard utility call) on keyboard. (Refer to basic reference, anx 5, Para B.1, second b, p A-5-6A/B.)
- 3. Press the END OF MESSAGE (EOM) pushbutton. (Refer to basic reference, a, anx 5, para B.l, second b, p A-5-6A/B.)
- 4. Enter the letter for channel. (Refer to basic reference, anx 5, para D.3.b.7, p A-5-20.)

- 5. Enter a slant bar.
- 6. Enter the word SETMASTER.
- 7. Enter a slant bar.
- 8. Enter the master line.
- 9. Enter a slant bar.
- 10. Enter the trunk group number.
- 11. Enter a slant bar.
- 12. Enter additional trunk group numbers.
- 13. Enter a period. (Refer to basic reference, anx 5, para B.1, second d, p A-5-6A/B.
- 14. Depress the EOM pushbutton (ref a, anx 5, para B.1, second e, p A-5-6A/B.)
  - NOTE 1: Observe the console printer for all printouts.
  - NOTE 2: The following conditins must be met to get a UTIL OKAY.
  - NOTE 3: All lines listed must be closed.
  - NOTE 4: All members and the master must have the same security.
  - NOTE 5: Any intended member or master cannot be part of another trunk group.
  - NOTE 6: Line printers cannot be an intended member or master.
  - NOTE 7: Any line with a line type of TRAFFIC-SERVICE cannot be an intended member or master.

NOTE 8: Master-line must be the lowest numbered line in the group.

NOTE 9: There must be between two and five lines in the group.

NOTE 10: No member can be in intercept.

NOTE 11: A line number may appear in the utility only ONCE.

#### REFERENCES



### 113-583-2193

# Initialize the System by Means of the Cold Start Method Using Magnetic Tape (TADSS) (Burroughs 3500)

#### CONDITIONS

This task is performed in a tactical automatic switching center. Supervision and assistance are available. The following items are provided.

- 1. An operational off-line system.
- 2. Console printer keyboard.
- 3. Program tape.
- 4. Magnetic tape transport.
- 5. Line printer.
- 6. Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator.

#### STANDARDS

Job standards are met when the system by means of the cold start method using magnetic tape has been initialized within 30 minutes.

- 1. Mount the Universal loader tape. (Refer to basic reference, anx 6, para B.4.e.1, p A-6-12.)
- 2. Mount the system integration tape. (Refer to basic reference, anx 6, para B.4.e.1, p A-6-12.)
- 3. Load the Universal loader. (Refer to basic reference, anx 6, para B.4.e.2, pp A-6-12 and A-6-12A.)

NOTE: Observe the console printer for printouts.

- 4. Enter the command designator. (Refer to basic reference, anx 6, para B.4.e.2 and 3, pp A-6-12 and A-6-12A.)
- 5. Enter the date and time. (Refer to basic reference, anx 6, para B.4.e.4, p A-6-12A.)
- 6. Enter the object program command.
- 7. Enter any patches to be run. (Refer to basic reference, anx 6, para B.4.3.5 and 6, pp A-6-12A and A-6-12B.)
- 8. Start backup system. (Refer to basic reference, anx 6, para B.4.e.6, p A-6-12B.)
- 9. Enter the execution of TADS. (Refer to basic reference, anx 6, para B.4.f, pp A-6-12B and A-6-12C.)

#### REFERENCES

Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for the TADS System Operator, Sep 75.



### 113-598-7001

#### Check Installation of AN/TSC-58

#### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. TM 11-5805-574-15.
- 2. Generator Set PU-619/M (installed).

#### STANDARDS

Job standards are met when you have checked that the AN/TSC-58 has been properly installed and all irregularities or deficiencies are corrected, recorded, and reported. This task can be performed within 30 minutes.

#### PERFORMANCE MEASURES

- 1. Check siting to insure that the AN/TSC-58 is located approximately 75 feet from generator to minimize the fire hazard and generator noise interference.
- 2. Check grounding.
  - a. Inspect all internal and external grounding.
  - b. Inspect grounding of the generator set.
- 3. Check and insure AC power connections are properly connected.
- 4. Inspect 26-pair cable for proper connections.

- 5. Check operation of teletypewriter equipment.
- 6. Check operation of COMSEC equipment. (See appropriate manuals.)

NOTE: Variation in tactical telecommunications shelters may be found in respective TOEs as mission and capability requirements change:

Teletypewriter Central Office, AN/MSC-17, TM 11-5815-205-14.

Terminal Typewriter AN/MGC-22, TM 11-5815-307-15.

Relay Central, Teletypewriter AN/MSC-23, TM 11-5815-308-15.

Terminal, Telegraph AN/MSC-29, TM 11-5895-205-15.

Telegraph Terminal AN/MGC-34, TM 11-5805-390-15.

#### REFERENCES

TM 11-5805-574-15, w/Cl thru 4, Operator's, Organizational, DS, GS, and Depot Maintenance Manual: Terminal, Telegraph AN/TSC-58, Jan 71.



### 113-601-7002

## Check Operation of Generator Set PU-619/M

#### CONDITIONS

This task is performed in a tactical situation under all weather conditions and NBC environments. Supervision and assistance are available. The following items are provided.

- 1. Generator log book.
- 2. DA Form 2404.
- 3. TM 5-6115-275-14.
- 4. TM 5-6115-365-15.

#### STANDARDS

Job standards are met when you have checked the generator set completely for proper operation and required maintenance. You have 10 minutes to perform this task.

#### PERFORMANCE MEASURES

- 1. Check site to insure the trailer is on as level a surface as possible, and not at an angle of more than 15°.
- 2. Check grounding to insure that the generator is properly grounded.
- 3. Check load switch to insure that it is properly connected for required voltage.
- 4. Check controls to insure that they are set properly for normal and maximum reading.

- 5. Check instruments for proper readings (fig 3).
- 6. Check to insure that daily preventive maintenance is being properly performed, and that all irregularities or deficiencies have been corrected, recorded, and reported.
- 7. Check DA Form 2404 and generator log book to insure that they are being filled out in accordance with TM 38-750, chapter 3, paragraph 3-4, page 3-4.

#### REFERENCES

TM 11-6115-275-14, Operator's, Organizational, Intermediate (Field) (DS and GS) and Depot Maintenance Manual: Generator Set, Gasoline Engine Driven, Skid Mounted, Tubular Frame, 10 KW, AC, 120/208V, 3 Phase, and 120/240V Single Phase, Less Engine, Jun 77.

TM 11-6115-365-15, w/Cl thru 6, Operators, Organizational, DS, GS, and Depot Manual (Including Repair Parts and Special Tools List): Generator Sets, Gasoline and Diesel Engine Driven, Trailer mounted, PU-619/M, May 66.



# 113-609-2003

# Check Operation of Off-Line Cryptographic Device TSEC/KL-7

Information about the operation of this device is classified. Your COMSEC CUSTODIAN or COMSEC SECURITY OFFICER must obtain the pertinent document and SAFEGUARD same.

#### REFERENCES

(C) KAO-41/TSEC, Operating Instructions for TSEC/KL-7, Sep 66.

# Appendix A REFERENCES

#### ALLIED COMMUNICATION PROCEDURES (ACP)

117 CAN-US

Allied Routing Indicator Book

SUPP 1()

127a (E) US SUPP-1(G) Communications Instructions Tape Relay Procedures

Communications Instructions Operating Signals

### JOINT ARMY NAVY AIR FORCE PUBLICATIONS (JANAP)

128 (H)

131 ()

Automatic Digital Network (AUTODIN) Operating Procedures

#### ARMY REGULATIONS (AR)

105-31

Record Communications

611-201

Enlisted Carreer Management

fields and Military Occupational

Specialties

#### DEPARTMENT OF THE ARMY PAMPHLETS (DA PAM)

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Index of Army Motion Pictures and Related Audio-Visual Aids

#### TRAINING CIRCULARS (TC)

#### FIELD MANUALS (FM)

21-2	Soldier's	Manual	of	Common	Tasks,	Skill	l Level	1
21-3	Soldier's		of	Common	Tasks,	Skill	Levels	2,

3, and 4

24 - 1

Combat Communications

24-17

Tactical Communications Center Operations

#### TECHNICAL MANUALS (TM)

5-6115-275-14

Operator's, Organizational, Intermediate (Field) and and Depot Maintenance Manual: Generator Set, Gasoline Engine Driven Skid Mounted, Tubular Frame, 10 KW, AC, 120/208 V, 3 Phase and 120/240 V, Single Phase Less Engine: DOD Models MEP-018A, 60 Hz, and MEP-23A, 400 Hz

5-6115-365-15	Operator's, Organizational, DS, GS, and Depot Maintenance Manual (Including Repair Parts and Special Tools List): Generator Sets, Gasoline and Diesel Engine Driven, Trailer Mounted, PU-619/M
11-490-2	Army Communications Facilities: Telecommunications Center Operating Procedures
11-5805-262-12	Operator and Organizational Maintenance Manual: Switchboards, Telephone, Manual SB-22/PT and SB-22A/PT
11-5805-356-12	Operator's and Organizational Maintenance Manual: Terminal, Telegraph-Telephone AN/TCC-29
11-5805-390-15	Operator's, Organizational, DS, GS, and Depot Maintenance Manual: Terminal, Telegraph AN/MGC-34
11-5805-574-15	Operator's, Organizational, DS, GS, and Depot Maintenance Manual: Terminal, Telegraph AN/TSC-58
11-5815-200-12	Operator's and Organizational Maintenance Manual: Teletypewriters Sets AN/FGC-20, AN/FGC-20X, AN/FGC-21, AN/FGC-66, AN/FGC-159, AN/FGC-159X, AN/FGC-160, AN/FGC-177, AN/UGC-4, AN/UGC-29, AN/UGC-29X and Teleprinter TT-259/FG
11-5815-205-14	Operator's and Organizational, DS, GS Maintenance Manual: Teletypewriter Central Office AN/MGC 17
11-5815-238-12	Operator's and Organizational Maintenance Manual: Teletypewriter Sets AN/GGC-3, 3A, 53, 53A and Teletypewriter Reperforator-Transmitters TT-76/GCG, 76A, 76B, and 76C
11-5815-244-12	Operator's and Organizational Maintenance Manual: Teletypewriter Sets AN/FGC-25, AN/FGC-25X, AN/FGC-26, AN/FGC-26X, AN/FGC-52, AN/FGC-52X, AN/FGC-57, AN/FGC-68, AN/FGC-161, AN/FGC-162, AN/UGC-30 and 30X
11-5815-308-15	Operator's, Organizational, DS, GS, and Depot Maintenance Manual for Teletypewriter Relay Central AN/MGC-23
11-5815-602-12	Operator's and Organizational Maintenance Manual for Terminal Communications AN/UGC-74A(V)3
11-5830-221-12	Operator's and Organizational Maintenance Manual Intercommunication Stations LS-147A, B, C, and D/FI
11-5895-205-15	Operator's Organizational, Field and Depot Maintenance Manual: Telegraph Terminal AN/MSC-29

11-7440-238-15 Operator, Organizational, DS, GS, and Depot Main-

tenance Manual: Digital Subscriber Terminals AN/FYA-71(V)1 thru AN/FYA-71(V)6 and Device

Switch Module SA-1616/G

38-750 The Army Maintenance Management System (TAMMS)

#### TECHNICAL BULLETINS (TB)

(C)380-41

Procedures for Safeguarding, Accounting, and Supply Control of COMSEC Material (U)

#### \* COMMUNICATIONS SECURITY SYSTEM AND EQUIPMENT INFORMATION

(C)KAO-41()/TSEC Operating Instructions for TSEC/KL-7

(S)KAO-51()/TSEC Operating Instructions and Procedures for TSEC/

KW-26

(C)KAO-81()/TSEC Operating Instructions and Procedures for TSEC/

KG-13/13A/3/3A

(C)KAO-83()/TSEC Operating Instructions for TSEC/KW-7

#### \*\* MANUFACTURER'S MANUAL (Provided with Equipment)

Tactical Automatic Digital Switching System (TADSS) AN/MYQ-2 Training Course Material for TADS System Operator

\*Commander, US Army Communications Security Logistics Agency, ATTN: DRSEL-CCM-NICP-LS, FT Huachuca, AZ 85613

\*\*Federal & Special Systems Group, Paoli, PA 19301

# Appendix B TIPS FOR PLANNING YOUR TRAINING PROGRAM

This group of charts will assist you in planning your MOS training program. These charts may be used to help you through the long list of references for each task. They will lead you to the best training material for your program.

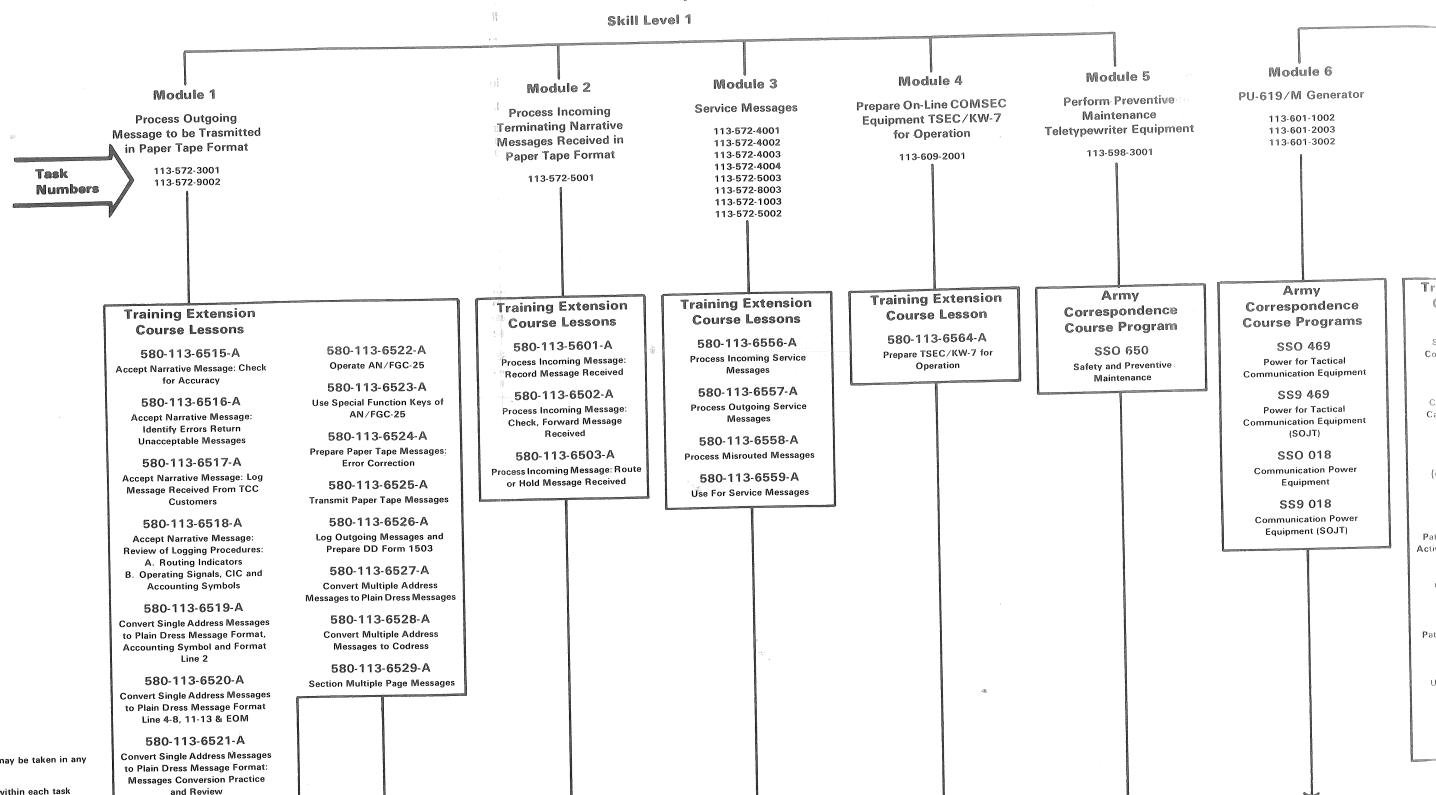
The charts are designed to show major task areas. Some task areas are common to all soldiers, other areas are for administration and procedures, and some relate to the main types of equipment used within your MOS. Under each major area, you will find modules containing one or more job tasks. The modules may cover a single piece of equipment or a group of procedures within your field. For each module, there is a list of the best training material available to you in your unit. Sometimes supporting material is listed that you may find useful as a substitute if the best training material is not available. It would be a good idea to glance over one of the charts before you proceed.

To make up your training plan, start on the left-hand side of each chart and check off those modules in which you feel you should be better qualified. There may be some modules listed on the chart in which you are well qualified. The task modules you have checked form your plan. After going through each chart and selecting the modules you need, go back and list the modules in an order that will do you the most good.

Before you finish your training plan, go over it with your supervisor. Your supervisor can help you find the training material and give you more ideas on improving your job performance. After you have decided what training you need and in what order, you will be able to come up with an overall training calendar for yourself. When you have accomplished this, you can start on your training and manage your own program.

Once you start a training module, follow the lessons or material as they are listed. Don't skip around within a training module.

Your training plan will be as good as the time you spend using it. Knowing your job is something no one can take away from you.



**Message Processing** 

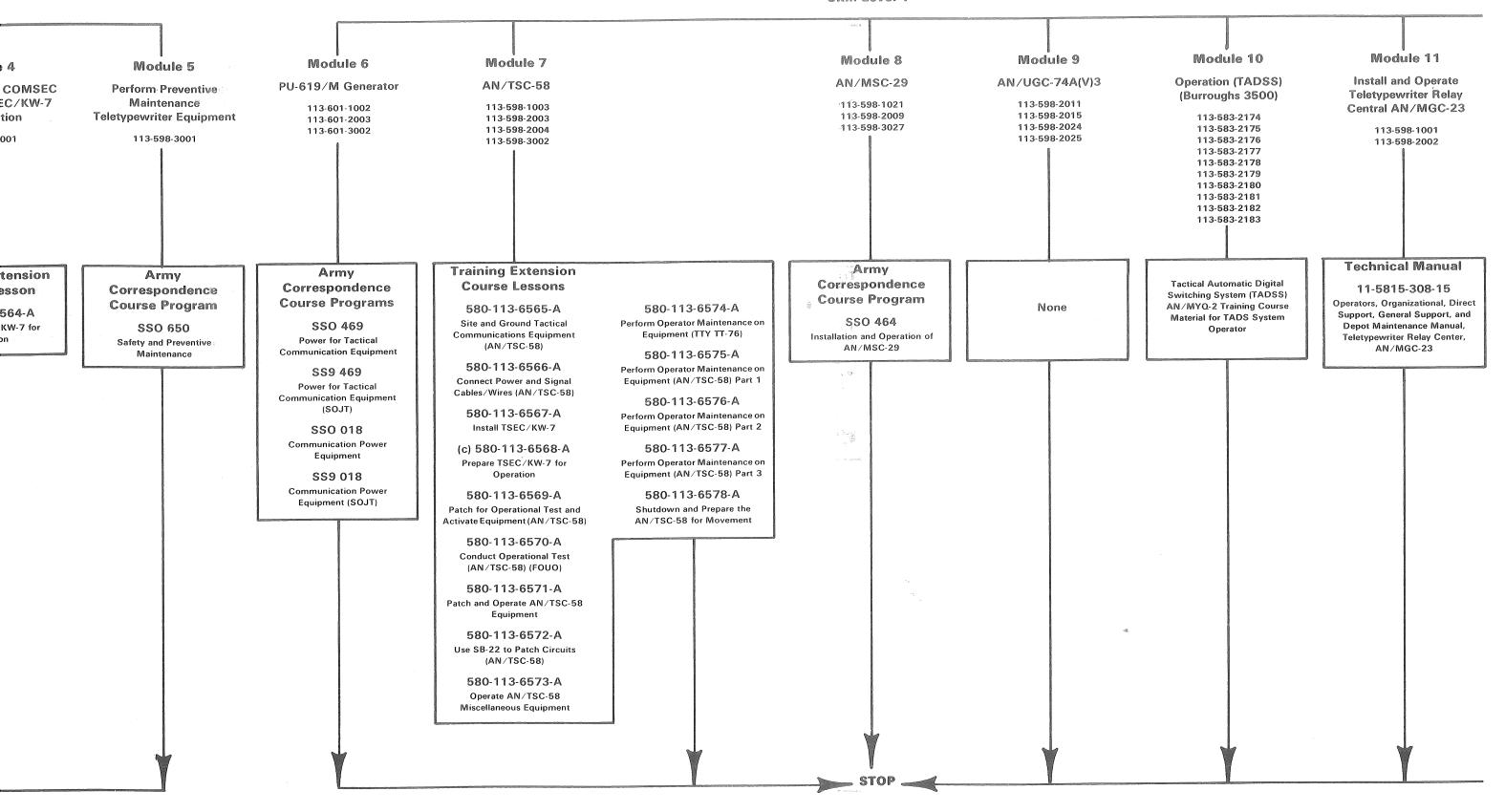
**Task Groups** 

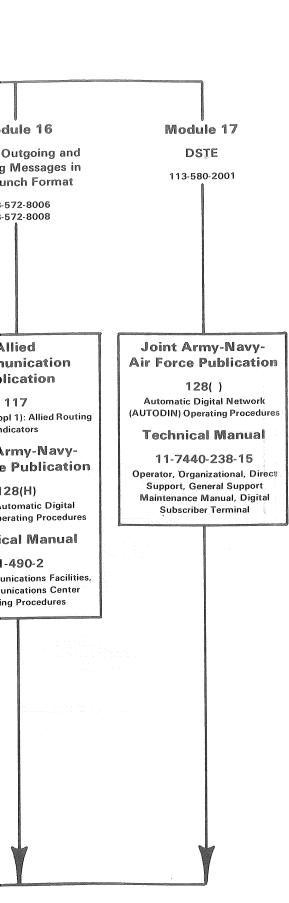
#### Guide:

- 1. Task groups may be taken in any
- 2. TEC lessons within each task group must be taken in order.

# Combat Telecommunications Center Operation Task Groups

Skill Level 1





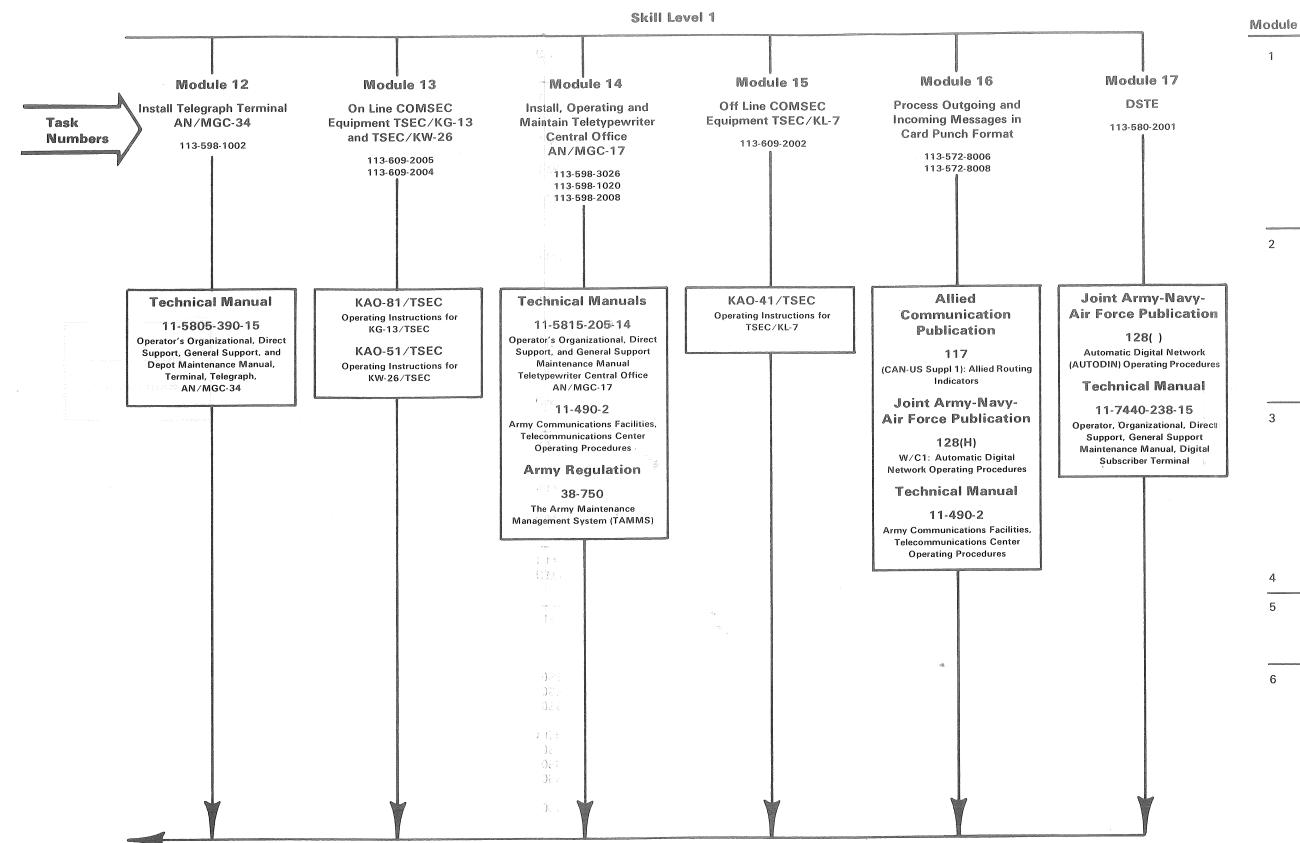
Лodule		Title
1	TM 11-490-2	Army Communications Facilities Telecommunications Contact Office Proceedures
	JANAP 128(H)	ications Center Operating Procedures Automatic Digital Network (AUTODIN) Operating Procedures
	AR 105-31	Record Communications
	ACP 117	Allied Routing Indicator Book
	(CAN-US Suppl 1)	
	ACP 131( )	Communications Instructions Operating Signals
	(c) ACP 127(E)	Communications Instructions Tape Relay Procedures
	FM 24-17	Tactical Communications Center Operations
2	TM 11-490-2	Army Communications Facilities Telecommunications Center Operating Procedures
	JANAP 128(H)	Automatic Digital Network (AUTODIN)
	ACP 117	Operating Procedures Allied Routing Indicator Book
	(CAN-US Suppl 1)	Amount of the triang maleuter book
	AR 105-31	Records Communications
	ACP 131( )	Communications Instructions Operating Signals
	(c) ACP 127(E)	Communications Instructions Tape Relay Procedures
3	(c) ACP 127(E)	Communications Instructions Tape Relay Procedures
	JANAP 128(H)	Automatic Digital Network (AUTODIN) Operating Procedures
	ACP 117	Allied Routing Indicator Book
	(CAN-US Suppl 1) ACP 131	Communications Instructions Operating
	TM 11-490-2	Signals Army Communications Facilities Telecommunications Center Operating Procedures
4	(c) KAO-83/TSEC	Operating Instructions for TSEC/KW-7
5	TM 11-5815-244-12	Operator's and Organizational Maintenance Manual
	TM 38-750	The Army Maintenance Management System (TAMMS)
6	TM 5-6115-365-15	Operator, Organizational, DS, GS, and Depot Maintenance Manual Including Repair Parts and Special Tools List: Generator Set, Gasoline and Diesel Engine Driven, Trailer Mounted
	TM 5-6115-275-14	Operator, Organizational, Intermediate (Field) (Direct Support and General Support) and Depot Maintenance Manual Generator Set, Gasoline Engine Driven, Skid Mounted, Tubular Frame

Module		Title
	TM 38-750	The Army Maintenance Management System (TAMMS)
7	TM 11-5805-574-15	Operator's, Organization, Direct Support, General Support, and Depot Maintenance Manual: Terminal, Telegraph AN/TSC-58
	TM 11-490-2	Army Communications Facilities: Telecommunications Center Operating
	TM 11-5805-262-12	Operator's and Organizational Maintenance Manual: Switchboards, Telephone, Manual
	TM 11-5805-356-12	Operator and Organizational Maintenance Manual (Including Repair Parts and Special Tools List): Terminal, Telegraph-Telephone AN/TCC-29
	TM 11-5805-574-15	Operator's Organizational, Direct Support, General Support, and Depot Maintenance Manual: Terminal Telegraph AN/TSC-58
	TM 11-5815-200-12	Operator's and Organizational Maintenance Manual Including Repair Parts and Special
	TM:11-5815-238-12	Tools List: Teletypewriter Sets AN/FGC-20 Operator's and Organizational Maintenance
	TM 11-5830-221-12	Manual Teletypewriter Sets Operator's and Organizational Maintenance Manual: Intercommunication Stations
	TM 38-750	The Army Maintenance Management System (TAMMS)
8	TM 11-5895-205-15	Operator's, Organizational, Field and Depot
<u></u>	. <del>**</del>	Maintenance Manual: Telegraph Terminal AN/MSC-29
	TM 11-490-2	Army Communications Facilities: Telecom-
	TM 38-750	munications Center Operating The Army Maintenance Management System
	11VI <sub>9</sub> 30-730	(TAMMS)
9	TM 11-5815-602-12 TM 38-750	Terminal, Communications AN/UGC-74A(V)3 The Army Maintenance Management System (TAMMS)
11 - 17	SS1 012	Introduction to 72E/72G, Combat Telecom-
11 - 17	331 012	munications Center Operator (72E)/Data Telecommunications Equipment Operator (72G)
	SSO 069	Communications Center Operations
	SSO 450	Basic Communications Principles  Manual Telephonewriter Procedures and
	SSO 451	Manual Teletypewriter Procedures and Operations
	ITO 641	Safeguarding of Defense Information
	SSO 650	Safety and Preventive Maintenance
	SSO 474 SSO 473	Organizational Operation of TCC Field Army Area Radio and Teletypewriter
	330 4/3	Equipment and Data Processing System
	SSO 454	Tactical Communication Center Operation
	-10 4 . z	

#### Guide:

- Task groups may be taken in any order.
- TEC lessons within each task group must be taken in order.

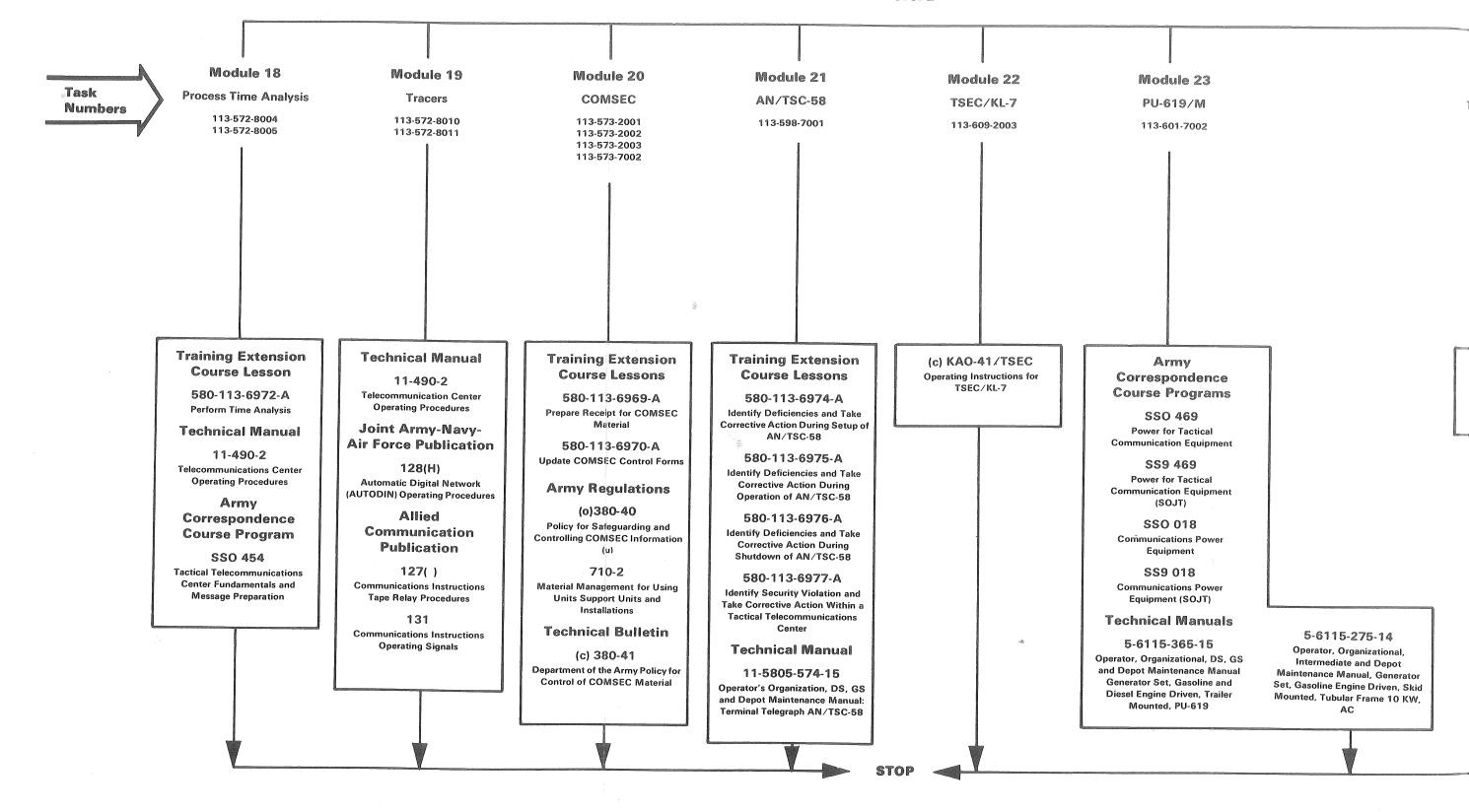
# Combat Telecommunications Center Operation Task Groups (Con't)



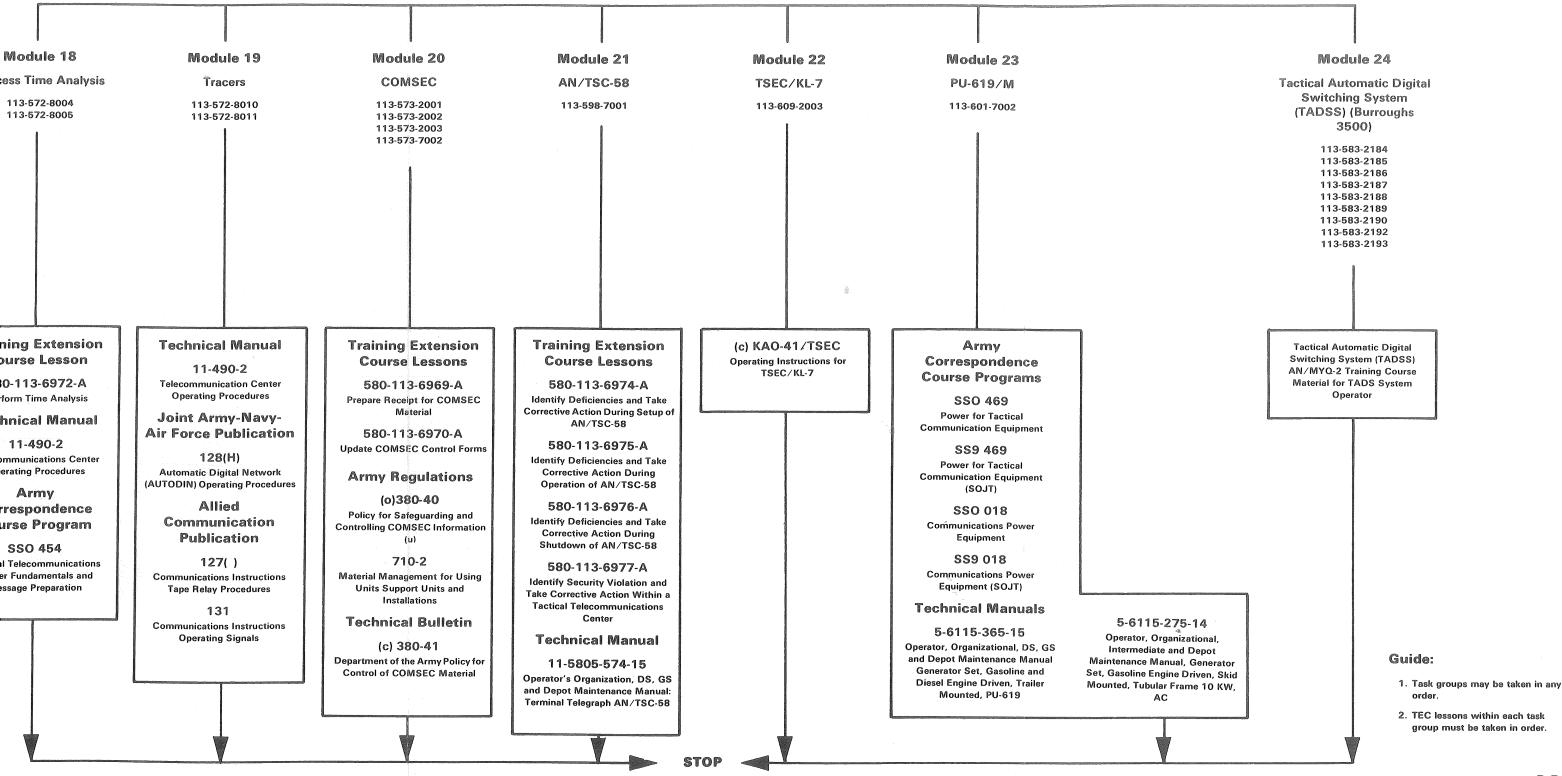
TM 11-490 JANAP 12 AR 105-31 ACP 117 (CAN-US S ACP 131( (c) ACP 12 FM 24-17 TM 11-490 JANAP 12 ACP 117 (CAN-US S AR 105-31 ACP 131( (c) ACP 12 (c) ACP 12 3 JANAP 12 ACP 117 (CAN-US S ACP 131 TM 11-490 (c) KAO-83 TM 11-581 TM 38-750 TM 5-6115

TM 5-6115

MOS Tasks Skill Level 2



### MOS Tasks Skill Level 2



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# QUESTIONNAIRE

As the user of this manual, you are a vital member of our writing team. Please provide us your opinion and suggestions by filling out this questionnaire. Be sure to include your name, AUTOVON number, and unit so we can follow up on your suggestions.

-	DUTY POSITION	AUTOVON NAME RANK TIME IN SERVICE		
1	. Are there any tasks that should be added?		☐ Yes	s □ No
2	. Are there any tasks that should be dropped?			 □ No
3	. What would you do to improve the organization	n of the task list?		
4	Did you have any trouble finding what you nee	ded in this manual?	□ Yes	
5.	Did you have any trouble understanding the material in this manual? If your answer is Yes, which part(s) was unclear?			□ No
6.	Were the CONDITIONS the way you normally perform each task?		□ Vas	
7.	Did you disagree with any of the STANDARDS?		□ Yes	 □ No
8.	Did the PERFORMANCE MEASURES help you p	erform the tasks to the STANDA	ARDS listed	
9.	Did this manual help you to do a better job?		П Уес	□ No
10.	Did you find any errors? If answer is Yes, please list.		□ Yes [	 □ No

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	FOLD ALONG DOTTED LINE		
11.	Should information from other publications be included in this manual?	s	□ No
12.	Trainers Only: Did this manual help you improve the combat efficiency of your organize \[ \sum \text{Ye} \]	atio	on?
13.	What would you do to improve this manual?		
14.	Comments:		

STAPLE HERE STAPLE HERE

Questionnaire-2

6 APRIL 1981

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E. C. MEYER General, United States Army Chief of Staff

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