

MARINE CORPS ORDER 1510.37C

From: Commandant of the Marine Corps  
To: Distribution List

Subj: INDIVIDUAL TRAINING STANDARDS (ITS) SYSTEM FOR THE DATA  
SYSTEMS OCCUPATIONAL FIELD (OCCFLD) 40

Ref: (a) MCO 1510.34A  
(b) MCO 1553.1B  
(c) MCO 1553.2  
(d) MCO 1553.3

Encl: (1) Components of an ITS  
(2) ITS Management  
(3) Index of Tasks by Training Location, Level of  
Training, Sustainment, and Grade to Standard  
(4) Common ITS Listing  
(5) Training Support  
(6) Individual Training Standards for OccFld 40

1. Purpose. To publish the ITS System for OccFld 40.

2. Background

a. The references establish the system used to publish all training standards, provide policy, and assign responsibilities for applying the Systems Approach to Training (SAT).

b. ITS's provide a common base of training for all Marines who have the same MOS. They provide the basis for the SAT of all individual training. ITS's are to be used by institutional and unit commanders to determine proficiency of individual Marines, to establish training plans and courses of instruction, and to maintain a progressive and systematic method to monitor training impacts on Individual Career Development Plans.

c. ITS's are derived from Mission Performance Standards which come from combat requirements of the Fleet Marine Forces. Changes to doctrine, force structure, and the introduction of new weapons and equipment will require revision of this Order on a regular basis.

3. Information

a. ITS's are to be used by institutional and unit commanders to design, develop, conduct, and evaluate their individual training of Marines. Institutional commanders will derive Terminal Learning Objectives (TLO) and Enabling Learning Objectives (ELO) from the tasks and performance steps set forth

herein. Task lists reported on Course Descriptive Data (CDD) submissions will consist of task titles contained in this Order. Unit commanders will use the tasks contained in this Order as the basis of individual training in their long range, short range, and near term training plans.

b. The ITS system for OccFld 40 contains the following:

(1) Enclosure (1) contains the components of an ITS.

(2) Enclosure (2) sets forth the ITS management, as it relates to use and maintenance.

(3) Enclosure (3) is an index of tasks by training location, level of training, sustainment, and grade to standard.

(4) Enclosure (4) is a listing of tasks common to two or more MOS's in OccFld 40.

(5) Enclosure (5) lists training support in four categories:

(a) Appendix A, Training Devices, Simulators, and Training Aids.

(b) Appendix B, Training Equipment.

(c) Appendix C, Ammunition, Explosives, and Pyrotechnics.

(d) Appendix D, Training Materials.

(6) Enclosure (6) lists ITS's for each MOS in OccFld 40.

#### 4. Action

a. Commanding General, Marine Corps Combat Development Command (MCCDC)

(1) Ensure that all units and institutions are using this Order to train personnel to the standards required of their grade and MOS.

(2) Ensure that the Marine Corps Institute (MCI) and the Training and Audiovisual Support Centers (TAVSC) provide standardized job aids and other training support requirements to facilitate training in units.

(3) Review, revise, and manage the upkeep of this Order in coordination with Force Commanders, MOS/OccFld sponsors and with subject matter experts.

(4) Ensure coordination occurs with the Commander, Marine Corps Systems Command (MARCORSYSCOM) to identify and validate training and education support requirements for the development and acquisition of training support systems.

b. Commanding Generals of the Marine Forces Atlantic/Pacific and Supporting Establishment Commands; and Commanders of Separate Organizations not Commanded by a General Officer

(1) Use this Order to implement the SAT process for DATA SYSTEMS training.

(2) Establish managed on-the-job training (MOJT) programs to train Marines using the tasks to form the basis of initial, sustainment, or refresher training proficiencies in units both for DATA SYSTEMS and command training plans.

5. Submission of Recommendations and Requirements. Recommendations concerning the contents of this Order are invited. Submit recommendations for change and recommended training requirements to the Commanding General, MCCDC (C461) via the appropriate chain of command.

6. Mobilization. All ITS's in this Order will remain in effect during mobilization.

7. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

B. B. KNUTSON, JR.  
By direction

DISTRIBUTION:

Copy to: 7000110 (55)  
7230004 (30)  
7000120 (10)  
8145005 (2)  
8145001 (1)  
7000144 (1)

## COMPONENTS OF AN ITS

1. General. ITS's contain six components; task, condition(s), standard, performance steps, reference(s), and administrative instructions.

2. Alphanumeric System. Each ITS is identified by the MOS followed by a series of numbers which identify the Duty Area, and Task.

a. The MOS is identified by four Arabic numbers. The four numbers are the ones assigned to the MOS in the MCO P1200.7 (MOS Manual). For the DATA SYSTEMS OFFICER MOS, the numeric designators would be 4002.X.X.

b. Duty areas are identified by ascending Arabic numerals and are numbered consecutively by MOS. The designator for the first duty area under MOS 4002 would be 4002.1.X.

c. Tasks within a duty area are numbered consecutively. The first task under the first duty area of MOS 4002 is numbered 4002.1.1. The second task under the third duty area of MOS 4002 is numbered 4002.3.2, and so forth.

3. ITS Components

a. Task. The task describes what a Marine has to do. It is a clearly stated, performance oriented action requiring a learned skill. Knowledge or enrichment topics which are required for the performance of a specific task are included in the administrative instructions. This type of information may very well comprise a separate class with its own TLO/ELO, but is not a separate task.

b. Condition(s). The conditions set forth the real world or wartime circumstances in which the tasks are to be performed. This element of an ITS underscores "realism" in training. When resources or safety requirements limit the conditions, this should be stated. It is important to understand that the conditions set forth in this Order are the minimum, and may be adjusted when applicable.

c. Standard. A standard is inviolate. It is not guidance, but a very carefully worded statement which sets the proficiency level expected when the task is performed. The standard should summarize the performance steps.

d. Performance Steps. There must be at least two performance steps for each task. Performance steps specify actions required to fulfill the proficiency established by the standard.

e. Reference(s). Reference(s) are doctrinal publications which provide the authority vested in the performance steps and references. References should be publications which are readily available.

f. Administrative Instructions. Administrative instructions provide the trainer/instructor with special circumstances relating to the ITS such as safety, real world limitations, and knowledge or enrichment topics which may be a prerequisite to successful accomplishment of the ITS.

## ITS MANAGEMENT

## 1. ITS Use

a. ITS's are the basis for all individual training in units and formal schools. Since ITS's are written for every MOS they specify every proficiency Marines are required to achieve as individuals in support of their unit combat missions.

b. ITS's provide measures of performance that must be used by unit commanders to both diagnose individual deficiencies and to evaluate training. Deficiencies should be recorded and scheduled on future training plans. ITS's which are mastered should be recorded in individual training records and scheduled for sustainment/refresher training in the future.

c. Institution commanders are responsible for providing instruction based on ITS's. These selected ITS's appear as tasks on item number 24 of the Course Descriptive Data. Using the SAT process, institutional commanders formulate programs of instruction (POI) which fulfill the requirements of the operating forces.

d. Unit and institution commanders must work in tandem so that individuals continue to receive instruction until mandated proficiencies are achieved. Individual training cannot and should not cease upon graduation from a formal school. Schools do not have the resources (people, time, money) to teach every ITS required for MOS proficiency. Unit commanders must recognize this and continue individual training. When Marines do achieve proficiencies, unit commanders must systematically record these proficiencies and establish periodic sustainment training according to the frequency set forth in enclosure (3).

## 2. ITS Maintenance

a. ITS's exist because of the threat. Changes which occur must be reflected in ITS's as a team effort of the formal schools, the operating forces, and staff agencies at Headquarters, U.S. Marine Corps and at the Marine Corps Combat Development Command. Changes in the threat, new weapons/equipment and doctrine will require new or updated training proficiencies.

b. ITS's are validated when they are used by institution and unit commanders. Changes can be initiated by units, institutions, or higher headquarters. To ensure quality training, ITS's must be updated continuously. Input will be systematically collected, staffed, and incorporated into ITS's at least annually.

ENCLOSURE (2)

c. ITS users should be critical of the ITS's as a whole as they support or fail to support a particular MOS.

d. Specific components of an ITS should also be examined for realism and pertinence.

e. ITS Management is dynamic. User maintenance is the key to refining proficiencies which best serve unit missions.

INDEX OF TASKS BY TRAINING LOCATION, LEVEL OF TRAINING,  
SUSTAINMENT, AND GRADE TO STANDARD

1. This enclosure identifies where ITS's are taught, Training Location; the Level of Training regarding proficiency, "P" for preliminary, not to standard, and "S" for trained to standard; and the lowest grade required to demonstrate proficiency in each ITS.
2. The Training Location is either Formal School (FS) or MOJT.
3. Sustainment training is always the responsibility of the unit commander. The number in the MOJT column represents the number of months between evaluation or retraining to maintain the proficiency required by the standard.

TASK NUMBER	TASK	FS	MOJT SUST	Grade
MOS 4002, DATA SYSTEMS OFFICER				
4002.1.1 . . . . .	MANAGE THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) FOR ADP	S	12	2NDLT
4002.1.2 . . . . .	MANAGE CONTRACTS	S	12	1STLT
4002.1.3 . . . . .	ORGANIZE PERSONNEL FOR ADP OPERATIONS	S	12	2NDLT
4002.1.4 . . . . .	ACCOUNT FOR ADP EQUIPMENT	S	12	2NDLT
4002.1.5 . . . . .	PREPARE ABBREVIATED SYSTEMS DECISION PAPER (ASDP)	S	12	2NDLT
4002.1.6 . . . . .	PREPARE TELECOMMUNICATIONS SERVICE REQUEST (TSR)	P	S/6	2NDLT
4002.1.7 . . . . .	DETERMINE CRITICAL PATH FOR DEVELOPMENT SYSTEM	S	12	2NDLT
4002.1.8 . . . . .	WRITE A FEASIBILITY STUDY	S	12	2NDLT
4002.1.9 . . . . .	SUPERVISE UNIT TRAINING	P	S/12	2NDLT
4002.2.1 . . . . .	INSTALL A ROUTER	S	12	2NDLT
4002.2.2 . . . . .	CONFIGURE A HOST FOR TCP/IP	S	12	2NDLT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4002.2.3	USE LAN/WAN NETWORK MANAGEMENT TOOLS	S	12	2NDLT
4002.2.4	INSTALL LAN/WAN	S	12	2NDLT
4002.2.5	MANAGE LAN/WAN/EUCE	S	12	2NDLT
4002.3.1	MONITOR SOFTWARE OPERATIONAL TESTS AND EVALUATIONS	P	S/12	2NDLT
4002.3.2	ESTABLISH SOFTWARE DEVELOPMENT STANDARD	P	S/12	2NDLT
4002.3.3	SUPERVISE DEVELOPMENT OF USER REQUIREMENTS	P	S/12	2NDLT
4002.4.1	INSTALL UNIX OPERATING SYSTEM	P	S/6	2NDLT
4002.4.2	OPERATE A COMPUTER USING UNIX OPERATING SYSTEM	P	S/6	2NDLT
4002.4.3	MANAGE USER ACCOUNTS	P	S/6	2NDLT
4002.4.4	MANAGE FILE SYSTEMS	P	S/6	2NDLT
4002.4.5	INSTALL HARDWARE	P	S/6	2NDLT
4002.4.6	INSTALL SOFTWARE	P	S/6	2NDLT
4002.4.7	CONDUCT SYSTEM BACKUP/RECOVERY	P	S/6	2NDLT
4002.4.8	TUNE SYSTEM PERFORMANCE	P	S/6	2NDLT
4002.4.9	MANAGE MULTIPLE NETWORKS	P	S/6	2NDLT
4002.4.10	WRITE SHELL SCRIPT FILES	P	S/6	2NDLT
4002.4.11	MANAGE SYSTEM PROCESS	P	S/6	2NDLT
4002.4.12	MANAGE NETWORK SERVICES	P	S/6	2NDLT
4002.4.13	MANAGE NETWORK SECURITY	P	S/6	2NDLT
4002.5.1	PREPARE A DATA COMMUNICATIONS PLAN FOR AN ANNEX K	S	12	2NDLT
4002.5.2	PLAN COMMUNICATIONS SUPPORT FOR A COMMAND POST	S	12	2NDLT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4002.5.3 . . . . .	PLAN DATA COMMUNICATIONS FOR JOINT/COMBINED OPERATIONS	S	12	2NDLT
4002.5.4 . . . . .	WRITE A DATA COMMUNICATIONS SOP	S	12	2NDLT
4002.6.1 . . . . .	ESTABLISH INFORMATION SECURITY PROCEDURES	P	S/6	2NDLT
4002.6.2 . . . . .	PLAN DATA COMMUNICATION SECURITY	S	12	2NDLT
4002.7.1 . . . . .	PERFORM LIMITED TECHNICAL INSPECTION (LTI)		S/12	2NDLT
4002.7.2 . . . . .	USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS		S/12	2NDLT
4002.7.3 . . . . .	PREPARE AN EQUIPMENT REPAIR ORDER (ERO)		S/12	2NDLT
4002.7.4 . . . . .	PREPARE EQUIPMENT FOR EMBARKATION		S/12	2NDLT
4002.7.5 . . . . .	PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION	S	6	2NDLT
4002.7.6 . . . . .	IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS E(3) PROGRAM	P	S/12	2NDLT
4002.7.7 . . . . .	DIAGNOSE MALFUNCTIONING EUCE SUITE	S	12	2NDLT
4002.7.8 . . . . .	SUPERVISE BASIC MAINTENANCE ON EUCE SUITE	S	12	2NDLT
4002.8.1 . . . . .	INSTALL STANDARD EUCE OS SOFTWARE	S	12	2NDLT
4002.8.2 . . . . .	UTILIZE PRESENTATION GRAPHICS SOFTWARE	S	12	2NDLT
4002.8.3 . . . . .	EXECUTE MS-DOS UTILITIES	S	12	2NDLT
4002.8.4 . . . . .	UTILIZE WORD PROCESSING SOFTWARE	S	12	2NDLT
4002.8.5 . . . . .	UTILIZE SPREADSHEET SOFTWARE PACKAGE	S	12	2NDLT

ENCLOSURE (3)

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4002.8.6 . . . . .	UTILIZE MICROCOMPUTER DATA BASE SOFTWARE	S	12	2NDLT
MOS 4010, DATA SYSTEMS SOFTWARE OFFICER				
4010.1.1 . . . . .	MANAGE THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) FOR ADP	S	12	WO
4010.1.2 . . . . .	MANAGE CONTRACTS	S	12	WO
4010.1.3 . . . . .	ORGANIZE PERSONNEL FOR ADP OPERATIONS	S	12	WO
4010.1.4 . . . . .	ACCOUNT FOR ADP EQUIPMENT	S	12	WO
4010.1.5 . . . . .	PREPARE ABBREVIATED SYSTEMS DECISION PAPER (ASDP)	S	12	WO
4010.1.6 . . . . .	PREPARE TELECOMMUNICATIONS SERVICE REQUEST (TSR)	P	S/6	WO
4010.2.1 . . . . .	INSTALL A ROUTER	S	12	WO
4010.2.2 . . . . .	CONFIGURE A HOST FOR TCP/IP	S	12	WO
4010.2.3 . . . . .	USE LAN/WAN NETWORK MANAGEMENT TOOLS	S	12	WO
4010.2.4 . . . . .	INSTALL LAN/WAN	S	12	WO
4010.2.5 . . . . .	MANAGE LAN/WAN/EUCE	P	S/6	WO
4010.3.1 . . . . .	USE TSO TO DEVELOP OR MAINTAIN SYSTEM SOFTWARE	P	S/6	WO
4010.3.2 . . . . .	WRITE JCL PROCEDURE	S	S/6	WO
4010.3.3 . . . . .	CODE APPLICATIONS PROCEDURE	P	S/6	WO
4010.3.4 . . . . .	DRAW A STRUCTURED FLOWCHART	P	S/6	WO
4010.3.5 . . . . .	CODE APPLICATION PROGRAM	P	S/6	WO
4010.3.6 . . . . .	EXECUTE EXISTING APPLICATIONS PROGRAM	P	S/6	WO

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4010.3.7	CODE JCL PROCEDURE USING SORT UTILITY	P	S/6	WO
4010.3.8	CODE APPLICATION PROGRAM USING ARITHMETIC VERBS AND EDITING TECHNIQUES	P	S/6	WO
4010.3.9	ESTABLISH PROCEDURES FOR ADP PRODUCTION SOFTWARE SUPPORT		S/6	WO
4010.3.10	AUDIT SOFTWARE CONFIGURATION MANAGEMENT PROGRAM	P	S/12	WO
4010.3.11	ESTABLISH SOFTWARE TRAINING PROGRAM		S/6	WO
4010.3.12	MONITOR SOFTWARE SECURITY PROCEDURES		S/6	WO
4010.3.13	ORGANIZE SOFTWARE DEVELOPMENT TEAMS	P	S/12	WO
4010.3.14	MONITOR PERFORMANCE OF NETWORK SYSTEMS SOFTWARE	P	S/3	WO
4010.3.15	MAINTAIN PROGRAMMING LIBRARIES	P	S/12	WO
4010.3.16	MANAGE ANNUAL SOFTWARE SUPPORT REVIEW PROGRAM	P	S/12	WO
4010.4.1	USE A HIGH-LEVEL PROGRAMMING LANGUAGE	S	6	WO
4010.4.2	ACCESS ADABAS DATA BASE FILE	S	6	WO
4010.4.3	DESIGN NATURAL RETRIEVAL PROGRAM	S	6	WO
4010.4.4	DESIGN NATURAL RETRIEVAL PROGRAM USING NATURAL LOOP LOGIC	S	6	WO
4010.4.5	DESIGN AN INTERACTIVE PROGRAM UTILIZING THE NATURAL PROGRAMMING LANGUAGE	S	6	WO
4010.4.6	DESIGN A NATURAL UPDATE PROGRAM	S	6	WO
4010.4.7	DEFINE COMPONENTS, CAPABILITIES, AND LIMITATIONS OF NATURAL	S	6	WO

ENCLOSURE (3)

TASK NUMBER	TASK	FS	MOJTSUST	Grade
4010.5.1 . . . . .	EXECUTE DATABASE SOFTWARE ON FMF-EUCE	S	3	WO
4010.5.2 . . . . .	PREPARE FMF-EUCE FOR USE	S	12	WO
4010.5.3 . . . . .	EXECUTE A FILE TRANSFER	S	3	WO
4010.5.4 . . . . .	CONFIGURE DISPLAY PROCESSOR AND SUPPORTING PERIPHERALS	S	6	WO
4010.5.5 . . . . .	PERFORM OPERATOR MAINTENANCE ON FMF-EUCE	S	6	WO
4010.5.6 . . . . .	UTILIZE WORD PROCESSING SOFTWARE	P	S/12	WO
4010.5.7 . . . . .	UTILIZE SPREADSHEET SOFTWARE PACKAGE	P	S/12	WO
4010.5.8 . . . . .	UTILIZE MICROCOMPUTER DATA BASE SOFTWARE	S	3	WO
4010.5.9 . . . . .	EXECUTE MS-DOS UTILITIES	S	12	WO
4010.5.10 . . . . .	DIAGNOSE MALFUNCTIONING EUCE SUITE	S	6	WO
4010.5.11 . . . . .	DEVELOP COUNTERMEASURES TO MINIMIZE MICROCOMPUTER SECURITY THREATS	S	6	WO
4010.5.12 . . . . .	UTILIZE IBM 3278 TYPE TERMINAL EMULATION PACKAGE	S	6	WO
4010.5.13 . . . . .	INSTALL STANDARD EUCE OS SOFTWARE	S	12	WO
4010.5.14 . . . . .	UTILIZE PRESENTATION GRAPHICS SOFTWARE	S	12	WO
4010.6.1 . . . . .	DEVELOP A REQUIREMENTS STATEMENT	S	12	WO
4010.6.2 . . . . .	CREATE MISSION NEED STATEMENT (MNS)	S	12	WO
4010.6.3 . . . . .	CONSTRUCT FUNCTIONAL REQUIREMENTS DEFINITION (FRD)	S	12	WO
4010.6.4 . . . . .	WRITE A FEASIBILITY STUDY	S	12	WO
4010.6.5 . . . . .	CONDUCT WALK THROUGH	P	12	WO

ENCLOSURE (3)

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4010.6.6 . . . . .	DETERMINE COSTS AND BENEFITS UTILIZING ECONOMIC ANALYSIS	S	12	WO
4010.6.7 . . . . .	DETERMINE CRITICAL PATH FOR DEVELOPMENT SYSTEM	P	12	WO
4010.6.8 . . . . .	SUPERVISE DEVELOPMENT OF USER REQUIREMENTS	S	6	WO
4010.6.9 . . . . .	ESTABLISH SOFTWARE DEVELOPMENT STANDARD OPERATING PROCEDURES (SOP'S)	S	12	WO
4010.6.10 . . . . .	MONITOR SOFTWARE OPERATIONAL TESTS AND EVALUATIONS	P	S/12	WO
4010.6.11 . . . . .	CONDUCT CUSTOMER LIAISON	S	12	WO
4010.7.1 . . . . .	CONSTRUCT CONTEXT DIAGRAM	S	12	WO
4010.7.2 . . . . .	CONSTRUCT DATA FLOW DIAGRAM (DFD)	S	12	WO
4010.7.3 . . . . .	CONSTRUCT A DATA DICTIONARY	S	6	WO
4010.7.4 . . . . .	DEVELOP AN IS USING SDM	S	12	WO
4010.8.1 . . . . .	PREPARE A DATA COMMUNICATIONS PLAN FOR AN ANNEX K		S/12	WO
4010.8.2 . . . . .	PLAN COMMUNICATIONS SUPPORT FOR A COMMAND POST		S/12	WO
4010.8.3 . . . . .	PLAN DATA COMMUNICATIONS FOR JOINT/COMBINED OPERATIONS		S/12	WO
4010.8.4 . . . . .	WRITE A DATA COMMUNICATIONS SOP		S/12	WO
4010.9.1 . . . . .	PERFORM LIMITED TECHNICAL INSPECTION (LTI)		S/12	WO
4010.9.2 . . . . .	USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS		S/12	WO
4010.9.3 . . . . .	PREPARE AN EQUIPMENT REPAIR ORDER (ERO)		S/12	WO

TASK NUMBER	TASK	FS	MOJTSUST	Grade
4010.9.4 . . . . .	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF COMMUNICATION-ELECTRONIC EQUIPMENT		S/12	WO
4010.9.5 . . . . .	PREPARE EQUIPMENT FOR EMBARKATION		S/12	WO
4010.9.6 . . . . .	PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION		S/12	WO
4010.9.7 . . . . .	IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS E(3) PROGRAM		S/12	WO
4010.9.8 . . . . .	CONDUCT SKILL PROGRESSION TRAINING FOR ADP PERSONNEL		S/12	WO
4010.10.1 . . . . .	ESTABLISH ADP SECURITY MEASURES	S	6	WO
4010.10.2 . . . . .	DEVELOP A RISK ASSESSMENT	S	6	WO
4010.10.3 . . . . .	DEVELOP CONTINGENCY PLAN	S	6	WO
4010.11.1 . . . . .	INSTALL UNIX OPERATING SYSTEM	P	S/12	WO
4010.11.2 . . . . .	OPERATE A COMPUTER USING UNIX OPERATING SYSTEM	P	S/12	WO
4010.11.3 . . . . .	MANAGE USER ACCOUNTS	P	S/12	WO
4010.11.4 . . . . .	MANAGE FILE SYSTEMS	P	S/12	WO
4010.11.5 . . . . .	INSTALL HARDWARE	P	S/12	WO
4010.11.6 . . . . .	INSTALL SOFTWARE	P	S/12	WO
4010.11.7 . . . . .	CONDUCT SYSTEM BACKUP/RECOVERY	P	S/12	WO
4010.11.8 . . . . .	TUNE SYSTEM PERFORMANCE	P	S/12	WO
4010.11.9 . . . . .	MANAGE MULTIPLE NETWORKS	P	S/12	WO
4010.11.10 . . . . .	WRITE SHELL SCRIPT FILES	P	S/12	WO
4010.11.11 . . . . .	MANAGE SYSTEM PROCESS	P	S/12	WO
4010.11.12 . . . . .	MANAGE NETWORK SERVICES	P	S/12	WO

ENCLOSURE (3)

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4010.11.13 . . . . .	MANAGE NETWORK SECURITY	P	S/12	WO
	MOS 4025, NETWORK CONTROL SPECIALIST			
4025.1.1 . . . . .	INSTALL TELEPROCESSING PERIPHERAL DEVICES		S/6	LCPL
4025.1.2 . . . . .	CORRECT TELEPROCESSING SYSTEM FAILURES		S/6	LCPL
4025.1.3 . . . . .	OPERATE TELEPROCESSING CONSOLES		S/6	LCPL
4025.1.4 . . . . .	OPERATE DIAGNOSTIC MODEM NETWORKS		S/6	LCPL
4025.1.5 . . . . .	MAINTAIN DIAGNOSTIC MODEM NETWORKS		S/6	LCPL
4025.1.6 . . . . .	DESIGN DIAGNOSTIC MODEM NETWORKS		S/6	LCPL
4025.1.7 . . . . .	MONITOR NETWORK PERFORMANCE		S/6	LCPL
4025.1.8 . . . . .	PERFORM FIRST LEVEL CORRECTIVE ACTIONS INVOLVING TELEPROCESSING SOFTWARE		S/6	LCPL
	MOS 4034, COMPUTER OPERATOR			
4034.1.1 . . . . .	OPERATE MASTER CONSOLE	S	24	PVT
4034.1.2 . . . . .	OPERATE COMPUTER CONSOLE	S	24	PVT
4034.1.3 . . . . .	OPERATE TAPE DRIVE	S	24	PVT
4034.1.4 . . . . .	OPERATE HIGH SPEED LINE PRINTER	S	24	PVT
4034.1.5 . . . . .	OPERATE LASER PRINTER	P	S/3	PVT
4034.1.6 . . . . .	PERFORM INITIAL PROGRAM LOAD	S	12	PVT
4034.1.7 . . . . .	OPERATE DIRECT ACCESS STORAGE DEVICE (DASD)	S	24	PVT
4034.1.8 . . . . .	PERFORM EMERGENCY SHUTDOWN PROCEDURES	P	S/6	PVT

TASK NUMBER	TASK	FS	MOJTSUST	Grade
4034.1.9 . . . . .	MANAGE ADP EQUIPMENT		S/3	SGT
4034.1.10 . . . . .	PREPARE SHIFT SCHEDULES		S/1	SGT
4034.2.1 . . . . .	PROCESS INCOMING TAPES		S/1	PVT
4034.2.2 . . . . .	PREPARE TAPES FOR MAILING		S/1	PVT
4034.2.3 . . . . .	INITIALIZE AND LABEL MAGNETIC TAPE	P	S/3	PVT
4034.2.4 . . . . .	CLEAN MAGNETIC REEL TAPE	P	S/1	PVT
4034.2.5 . . . . .	CERTIFY MAGNETIC TAPE	P	S/1	PVT
4034.2.6 . . . . .	PREPARE SCRATCH TAPES	P	S/1	PVT
4034.2.7 . . . . .	MAINTAIN ALTERNATE LIBRARY	S		PVT
4034.3.1 . . . . .	PRODUCE MICROFICHE	P	S/3	PVT
4034.3.2 . . . . .	OPERATE DECOLLATOR		S/1	PVT
4034.3.3 . . . . .	OPERATE BURSTER		S/1	PVT
4034.3.4 . . . . .	PROVIDE CUSTOMER SERVICE	P	S/1	PVT
4034.4.1 . . . . .	CONDUCT PREDEPLOYMENT COORDINATION		S/6	SSGT
4034.4.2 . . . . .	PERFORM EMERGENCY SHUTDOWN PROCEDURES		S/3	PVT
4034.5.1 . . . . .	OPERATE FIRE EXTINGUISHER SYSTEM		S/1	PVT
4034.5.2 . . . . .	MANAGE UNINTERRUPTIBLE POWER SUPPLY (UPS)		S/2	PVT
4034.5.3 . . . . .	MONITOR TEMPERATURE AND HUMIDITY GAUGES		S/1	PVT
4034.5.4 . . . . .	MONITOR ENVIRONMENTAL CONTROL UNITS		S/1	PVT
4034.6.1 . . . . .	PROVIDE ASSISTANCE FROM A HELP DESK		S/6	PVT
4034.6.2 . . . . .	MONITOR OPERATIONS OF A HELP DESK		S/6	SGT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
MOS 4038, DATA CONTROL SPECIALIST				
4038.1.1 . . . . .	PROVIDE CUSTOMER SERVICE		S/6	CPL
4038.1.2 . . . . .	CONDUCT CUSTOMER LIAISON		S/6	CPL
4038.1.3 . . . . .	SUPERVISE TAPE LIBRARY OPERATIONS		S/6	SGT
4038.2.1 . . . . .	PERFORM PROCEDURE OPTIMIZATION	S	12	CPL
4038.2.2 . . . . .	IMPLEMENT NEW PROCEDURES	S	12	CPL
4038.2.3 . . . . .	MANIPULATE DATA SETS	S	12	CPL
4038.2.4 . . . . .	CONDUCT ANNUAL REVIEW OF COMPUTER OPERATIONS MANUAL (OM)	P	S/12	SSGT
4038.2.5 . . . . .	SUPERVISE MAINTENANCE OF PRODUCTION LIBRARIES		S/12	
4038.3.1 . . . . .	PRODUCE DAILY SCHEDULE		S/12	CPL
4038.3.2 . . . . .	EXECUTE PRODUCTION JOBS	P	S\12	CPL
4038.3.3 . . . . .	RESPOND TO ABNORMAL JOB TERMINATION (ABEND)	P	S/12	CPL
4038.3.4 . . . . .	ESTABLISH PRODUCTION CONTROL SOP		S/12	SSGT
MOS 4066, SMALL COMPUTER SYSTEMS SPECIALIST (SCSS)				
4066.1.1 . . . . .	ORGANIZE PERSONNEL FOR LAN/EUCE SYSTEM OPERATIONS		S/24	SGT
4066.1.2 . . . . .	ORGANIZE EQUIPMENT FOR LAN/EUCE SYSTEM OPERATIONS		S/24	SGT
4066.1.3 . . . . .	ESTABLISH ADP/DATA COMMUNICATIONS SECURITY MEASURES	P	S/6	SGT
4066.1.4 . . . . .	SUPERVISE OPERATION OF A NETWORK OPERATIONS/INFORMATION CENTER		S/12	GYSGT
4066.2.1 . . . . .	OPERATE MICROCOMPUTER/EUCE SUITE	S	6	PVT
4066.2.2 . . . . .	CONFIGURE MICROCOMPUTER/EUCE SUITE	S	6	PVT

ENCLOSURE (3)

TASK NUMBER	TASK	FS	MOJTSUST	Grade
4066.2.3 . . . . .	INSTALL MICROCOMPUTER/EUCE SUITE FOR OPERATIONAL USE	S	12	PVT
4066.2.4 . . . . .	PREPARE MICROCOMPUTER/EUCE SUITE FOR DEPLOYMENT	S	6	PVT
4066.2.5 . . . . .	TROUBLESHOOT MICROCOMPUTER/EUCE PROBLEMS	S	6	PVT
4066.2.6 . . . . .	MAINTAIN MICROCOMPUTER/EUCE EQUIPMENT	S	6	PVT
4066.2.7 . . . . .	CONFIGURE MARINE CORPS AUTHORIZED SOFTWARE	S	6	PVT
4066.2.8 . . . . .	OPERATE MARINE CORPS AUTHORIZED SOFTWARE	S	6	PVT
4066.2.9 . . . . .	TROUBLESHOOT MARINE CORPS AUTHORIZED SOFTWARE PROBLEMS	S	6	PVT
4066.2.10 . . . . .	MAINTAIN MARINE CORPS AUTHORIZED SOFTWARE		S/6	LCPL
4066.3.1 . . . . .	WRITE DATA COMMUNICATIONS DOCUMENT		S/24	SSGT
4066.3.2 . . . . .	PERFORM DATA COMMUNICATIONS SYSTEMS PLANNING AND ENGINEERING		S/24	MSGT
4066.3.3 . . . . .	PLAN FOR DEPLOYED MAINTENANCE SUPPORT		S/24	SSGT
4066.3.4 . . . . .	COORDINATE POWER DISTRIBUTION AND GROUNDING REQUIREMENTS		S/12	CPL
4066.3.5 . . . . .	COORDINATE COMMUNICATIONS SECURITY MATERIAL SYSTEM (CMS) SUPPORT		S/12	SSGT
4066.4.1 . . . . .	DIRECT INSTALLATION, OPERATION, AND MAINTENANCE OF DATA COMMUNICATION SYSTEMS		S/12	SSGT
4066.4.2 . . . . .	INSTALL CRYPTOGRAPHIC EQUIPMENT	P	S/12	CPL
4066.4.3 . . . . .	OPERATE CRYPTOGRAPHIC EQUIPMENT	P	S/12	CPL

TASK NUMBER	TASK	FS	MOJTSUST	Grade
4066.4.4	INSTALL DATA TERMINAL EQUIPMENT (DTE)	P	S/12	LCPL
4066.4.5	OPERATE DATA TERMINAL EQUIPMENT (DTE)	P	S/12	LCPL
4066.4.6	INSTALL DATA COMMUNICATIONS EQUIPMENT (DCE)	P	S/12	LCPL
4066.4.7	OPERATE DATA COMMUNICATIONS EQUIPMENT (DCE)	P	S/12	LCPL
4066.4.8	ENGINEER DTE TO DCE CONNECTIVITY		S/12	SSGT
4066.4.9	CONFIGURE A HOST FOR TCP/IP	S	12	SSGT
4066.5.1	INSTALL UNIX OPERATING SYSTEM		S/12	CPL
4066.5.2	OPERATE A COMPUTER USING UNIX OPERATING SYSTEM	S	12	PFC
4066.5.3	MANAGE USER ACCOUNTS		S/12	CPL
4066.5.4	MANAGE FILE SYSTEMS		S/12	SGT
4066.5.5	INSTALL HARDWARE		S/12	SGT
4066.5.6	INSTALL SOFTWARE		S/12	SGT
4066.5.7	WRITE SHELL SCRIPT FILES		S/12	SGT
4066.5.8	CONDUCT SYSTEM BACKUP/RECOVERY		S/12	SGT
4066.5.9	TUNE SYSTEM PERFORMANCE		S/12	SGT
4066.5.10	MANAGE MULTIPLE NETWORKS		S/12	SSGT
4066.5.11	MANAGE SYSTEM PROCESS		S/12	SGT
4066.5.12	MANAGE NETWORK SERVICES		S/12	SGT
4066.5.13	MANAGE NETWORK SECURITY		S/12	SGT
4066.6.1	PERFORM LIMITED TECHNICAL INSPECTION (LTI)		S/12	CPL
4066.6.2	USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS		S/12	SGT

TASK NUMBER	TASK	FS	MOJTSUST	Grade
4066.6.3	PREPARE AN EQUIPMENT REPAIR ORDER (ERO)		S/12	CPL
4066.6.4	PROVIDE TECHNICAL ASSISTANCE DURING INSTALLATION OF ADP EQUIPMENT		S/12	SGT
4066.6.5	PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION		S/12	PFC
4066.6.6	IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS E(3) PROGRAM		S/12	SGT
4066.6.7	CONDUCT SKILL PROGRESSION TRAINING FOR ADP PERSONNEL		S/12	SGT
4066.6.8	CONDUCT BASIC MAINTENANCE ON EUCE SUITE	S	12	PVT
4066.7.1	PLAN EMBARKATION/REDEPLOYMENT/DISPLACEMENT OF DATA COMMUNICATIONS EQUIPMENT AND PERSONNEL		S/12	SSGT
4066.7.2	DIRECT EMBARKATION OF DATA COMMUNICATIONS EQUIPMENT AND PERSONNEL		S/12	SGT
4066.8.1	ESTABLISH TRAINING PLANS AND SCHEDULE		S/12	GYSGT
4066.8.2	MANAGE DATA COMMUNICATIONS TRAINING PROGRAM		S/12	SSGT
4066.8.3	CONDUCT DATA COMMUNICATIONS TRAINING PROGRAM		S/12	SGT
4066.9.1	PLAN LOCAL AREA NETWORKS		S/12	GYSGT
4066.9.2	DIRECT INSTALLATION OF LOCAL AREA NETWORKS		S/12	SSGT
4066.9.3	INSTALL A LOCAL AREA NETWORK	P	S/12	PFC
4066.9.4	MAINTAIN A LOCAL AREA NETWORK	P	S/12	SGT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4066.9.5 . . . . .	MANAGE A LOCAL AREA NETWORK	S	12	PFC
4066.9.6 . . . . .	CONNECT LOCAL AND WIDE AREA NETWORKS		S/12	GYSGT
4066.9.7 . . . . .	MANAGE IP NETWORK		S/12	GYSGT
MOS 4067, PROGRAMMER, ADA				
4067.1.1 . . . . .	ANALYZE CUSTOMER REQUEST	P	S/12	SSGT
4067.1.2 . . . . .	DESIGN A COMPUTER PROGRAM/AUTOMATED INFORMATION SYSTEM (AIS)	P	S/12	SSGT
4067.1.3 . . . . .	CONSTRUCT A COMPUTER PROGRAM/AIS	S	12	PVT
4067.1.4 . . . . .	TEST A COMPUTER PROGRAM/AIS	P	S/12	PVT
4067.1.5 . . . . .	IMPLEMENT A COMPUTER PROGRAM/AIS	P	S/12	CPL
4067.2.1 . . . . .	PERFORM PROJECT MANAGEMENT	P	S/12	SSGT
4067.2.2 . . . . .	ASSIGN PROGRAMMING TASKS	P	S/6	SSGT
4067.2.3 . . . . .	MONITOR PROGRAMMING TASKS	P	S/6	SSGT
4067.2.4 . . . . .	CONDUCT MANAGED ON THE JOB TRAINING (MOJT)	P	S/12	SSGT
4067.3.1 . . . . .	MODIFY EXISTING PROGRAM	P	S/12	PVT
4067.4.1 . . . . .	CREATE DBMS ACCESS	P	S/12	SSGT
4067.4.2 . . . . .	CREATE A BATCH JOB IN ON-LINE QUERY LANGUAGE	P	S/12	SSGT
4067.4.3 . . . . .	USE DATA DICTIONARY	P	S/12	SSGT
4067.5.1 . . . . .	MANIPULATE DATA SETS TO SATISFY ALL UTILITY FUNCTIONS	P	S/12	PVT
4067.6.1 . . . . .	OPERATE MICROCOMPUTER SUITE/EUCE	P	S/12	PVT

TASK NUMBER	TASK	FS	MOJTSUST	Grade
	MOS 4068, DATA NETWORK TECHNICIAN			
4068.1.1	DEVELOP DATA COMMUNICATIONS SECURITY MEASURES	P	S/24	GYSGT
4068.1.2	DESIGN CRYPTOGRAPHIC TOPOLOGY		S/24	SSGT
4068.1.3	DEVELOP A NETWORK SECURITY PLAN	P	S/24	SSGT
4068.2.1	DESIGN A LOCAL AREA NETWORK	S	24	SSGT
4068.2.2	DESIGN A WIDE AREA NETWORK	S	24	SSGT
4068.2.3	DETERMINE PERSONNEL REQUIREMENTS		S/24	SSGT
4068.2.4	WRITE DATA COMMUNICATIONS DOCUMENT		S/24	SSGT
4068.2.5	ESTABLISH EMBARKATION PROCEDURES		S/24	SSGT
4068.2.6	DEVELOP AN IP NETWORK ARCHITECTURE	S	24	SSGT
4068.2.7	DEVELOP A MULTI-PROTOCOL NETWORK PLAN	S	24	SSGT
4068.2.8	PLAN FOR CLASSIFIED/SENSITIVE JOINT SERVICE NETWORK CONNECTIVITY		S/24	MSGT
4068.3.1	CONNECT A UNIX PLATFORM TO A NETWORK	S	24	SGT
4068.3.2	INSTALL TERMINAL EMULATION SOFTWARE	S	24	SGT
4068.4.1	MANAGE A NETWORK	P	S/24	SGT
4068.5.1	PERFORM ADVANCED TROUBLESHOOTING TECHNIQUES	S	24	SGT
4068.5.2	MANAGE BANYAN VINES NETWORK	S	24	SGT
4068.5.3	CONFIGURE ROUTER HARDWARE	S	24	SGT
4068.5.4	CONFIGURE ROUTER SOFTWARE	S	24	SGT
4068.5.5	MANAGE MULTIPLE ELECTRONIC MAIL SYSTEMS	S	24	SGT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4068.5.6 . . . . .	CONFIGURE DOMAIN NAME SERVICE (DNS)	S	24	SGT
4068.6.1 . . . . .	MANAGE THE PLANNING, PROGRAMMING AND BUDGETING SYSTEM (PPBS) FOR DATA COMMUNICATION EQUIPMENT	P	S/24	MSGT
4068.6.2 . . . . .	MANAGE CONTRACTS	P	S/24	GYSGT
4068.6.3 . . . . .	MANAGE MIMMS/SASSY REPORTS AND REQUIREMENTS	P	S/24	SSGT
MOS 4069, SYSTEMS PROGRAMMER				
4069.1.1 . . . . .	BUILD INPUT/OUTPUT CONFIGURATION DATA SET (IOCDs)	S	6	SGT
4069.1.2 . . . . .	BUILD MVS OPERATING SYSTEM CODE	S	6	SGT
4069.1.3 . . . . .	BUILD MVS OPERATING SYSTEM INPUT/OUTPUT CONFIGURATION COMPONENT	S	6	SGT
4069.1.4 . . . . .	CREATE JOB ENTRY SUBSYSTEM (JES2) PARAMETERS	S	6	SGT
4069.1.5 . . . . .	INSTALL PROGRAM PRODUCTS	S	6	SGT
4069.1.6 . . . . .	INSTALL PROPRIETARY SOFTWARE PRODUCTS	S	6	SSGT
4069.1.7 . . . . .	INSTALL JOB ENTRY SUBSYSTEM (JES2) EXIT ROUTINES	S	6	SSGT
4069.1.8 . . . . .	INSTALL MVS OPERATING SYSTEM EXIT ROUTINES	S	6	SSGT
4069.2.1 . . . . .	MODIFY MVS OPERATING SYSTEM DATA SETS	S	6	SGT
4069.2.2 . . . . .	MODIFY JOB ENTRY SUBSYSTEM (JES2) PARAMETERS	S	6	SGT
4069.2.3 . . . . .	MAINTAIN DIRECT ACCESS STORAGE DEVICES (DASD)	S	6	SGT
4069.2.4 . . . . .	MODIFY PROGRAM PRODUCTS	S	6	SGT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4069.2.5	MODIFY PROPRIETARY SOFTWARE PRODUCTS		S/6	SGT
4069.2.6	MODIFY JOB ENTRY SUBSYSTEM (JES2) EXIT ROUTINES		S/6	SSGT
4069.2.7	MODIFY MVS OPERATING SYSTEM EXIT ROUTINES		S/6	SSGT
4069.2.8	SUPERVISE PROGRAMMING EFFORTS		S/6	MGYSGT
4069.2.9	MONITOR IMPLEMENTATION OF NEW SYSTEMS		S/6	MGYSGT
4069.2.10	REVIEW OPERATION OF EXISTING SYSTEMS		S/6	MGYSGT
4069.2.11	MAINTAIN VIRTUAL STORAGE SYSTEM	P	S/6	SSGT
4069.2.12	EVALUATE PERFORMANCE OF ADPE		S/6	SSGT
4069.2.13	DEVELOP OPERATING SYSTEM SOFTWARE MAINTENANCE IMPLEMENTATION PROCEDURES	P	S/6	GYSGT
4069.2.14	SUPERVISE CONFIGURATION MANAGEMENT PROCEDURES		S/6	GYSGT
4069.2.15	APPLY ROSCOE COMMANDS		S/6	SGT
4069.2.16	MAINTAIN LIBRARIES		S/6	SGT
4069.2.17	WRITE ALC PROGRAMS	S	6	SGT
4069.2.18	MODIFY/TROUBLESHOOT ALC PROGRAMS	S	6	SGT
4069.2.19	CREATE GENERATIONAL DATA GROUP (GDG)		S/6	SGT
4069.2.20	CREATE VIRTUAL STORAGE ACCESS METHOD (VSAM) DATASET		S/6	SGT
4069.2.21	UTILIZE TSO TO DEVELOP OR MAINTAIN SYSTEM SOFTWARE		S/6	SGT
4069.3.1	MONITOR SYSTEM PERFORMANCE	S	6	SSGT
4069.3.2	ANALYZE SYSTEM PERFORMANCE	S	6	SSGT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4069.3.3 . . . . .	DEVELOP TUNING RECOMMENDATIONS	S	6	SSGT
4069.3.4 . . . . .	ADJUST MVS OPERATING SYSTEM PARAMETERS	S	6	SSGT
4069.3.5 . . . . .	ADJUST PROGRAM PRODUCT PARAMETERS		S/6	SSGT
4069.3.6 . . . . .	ADJUST PROPRIETARY SOFTWARE PRODUCT PARAMETERS		S/6	SSGT
4069.3.7 . . . . .	WRITE CAPACITY PLAN		S/6	GYSGT
4069.4.1 . . . . .	ANALYZE APPLICATION DUMP	S	6	SGT
4069.4.2 . . . . .	ANALYZE SUPERVISOR CALL DUMP	S	6	SGT
4069.4.3 . . . . .	ANALYZE STAND-ALONE DUMP	S	6	SGT
MOS 4071, DATABASE MANAGEMENT SYSTEM (DBMS) SPECIALIST				
4071.1.1 . . . . .	ANALYZE CUSTOMER REQUEST	S	6	SSGT
4071.1.2 . . . . .	DESIGN A RELATIONAL DATABASE MANAGEMENT SYSTEM (RDBMS)	S	6	SSGT
4071.2.1 . . . . .	MODIFY RELATIONAL DATABASE	S	6	SSGT
4071.3.1 . . . . .	CREATE DBMS ACCESS	P	S/6	SSGT
MOS 4075, COMPUTER SECURITY SPECIALIST				
4075.1.1 . . . . .	SUPERVISE SOFTWARE INSTALLATION/MAINTENANCE	P	S/6	SSGT
4075.1.2 . . . . .	MONITOR SECURITY SYSTEM	P	S/6	SSGT
4075.1.3 . . . . .	TRAIN SECURITY ADMINISTRATORS		S/6	SSGT
4075.1.4 . . . . .	EVALUATE PROPOSED SOFTWARE PURCHASES		S/6	GYSGT
4075.2.1 . . . . .	IMPLEMENT SENSITIVE INFORMATION HANDLING PROCEDURE	P	S/6	SSGT
4075.2.2 . . . . .	CONTROL ACCESS TO SENSITIVE AREAS	P	S/6	SSGT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4075.2.3 . . . . .	MONITOR PHYSICAL SECURITY ENVIRONMENT	P	S/6	SSGT
4075.2.4 . . . . .	INSTRUCT PERSONNEL IN PHYSICAL SECURITY REQUIREMENTS		S/6	SSGT
4075.2.5 . . . . .	IMPLEMENT SECURITY FOR THE NETWORK	S	6	SSGT
4075.3.1 . . . . .	PERFORM RISK ANALYSIS	S	6	SSGT
4075.3.2 . . . . .	CREATE FACILITY SECURITY PROFILE (FSP)		S/6	GYSGT
4075.3.3 . . . . .	CREATE CONTINGENCY PLAN	S	6	SSGT
4075.3.4 . . . . .	INSTRUCT PERSONNEL ON CONTINGENCY PLANS	P	S/12	SSGT
4075.3.5 . . . . .	PERFORM ANNUAL ACCREDITATION REVIEW	S	6	SSGT
	MOS 4099, DATA PROCESSING CHIEF			
4099.1.1 . . . . .	MONITOR ALL PERSONNEL MATTERS		S/6	MGYSGT
4099.1.2 . . . . .	ANALYZE PROBLEMS AND REFER ACTION		S/6	MGYSGT
4099.1.3 . . . . .	MONITOR PERSONNEL GAINS/LOSSES		S/6	MGYSGT
4099.1.4 . . . . .	SUPERVISE MAINTENANCE OF NAVY AND MARINE CORPS DIRECTIVE SYSTEMS		S/6	MGYSGT
4099.1.5 . . . . .	MAINTAIN INTERNAL CONTROL OF CORRESPONDENCE		S/6	MGYSGT
4099.1.6 . . . . .	ORGANIZE PERSONNEL FOR ADP OPERATIONS		S/6	MGYSGT
4099.1.7 . . . . .	ANALYZE OPERATIONAL RECORDS AND REPORTS		S/6	MGYSGT
4099.1.8 . . . . .	PROVIDE GUIDANCE IN SCHEDULING PERSONNEL		S/6	MGYSGT
4099.1.9 . . . . .	PERFORM ADMINISTRATIVE DUTIES		S/6	MGYSGT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
4099.1.10	. . . . . PERFORM PERIODIC INSPECTION OF THE DATA PROCESSING FACILITY		S/6	MGYSGT
4099.1.11	. . . . . PROVIDE ASSISTANCE IN PREPARATION OF FEASIBILITY STUDIES AND APPLICATION PLANS		S/6	MGYSGT
4099.1.12	. . . . . EXPLAIN POLICIES OF ORGANIZATION TO SUBORDINATES		S/6	MGYSGT
4099.1.13	. . . . . ENSURE ADHERENCE TO DATA PROCESSING PROCEDURES AND SOP'S		S/6	MGYSGT

## COMMON ITS LISTING

1. General. This enclosure provides a cross reference of ITS's common to more than one MOS within OccFld 40. It is designed to assist the trainer in consolidating training for common tasks. Essential subjects ITS's are not listed since all Marines, regardless of MOS or grade, must be able to achieve the standard for those tasks.

2. Format. The enclosure lists the Task Title for each common task within the Occfld. Common Task Numbers follow each Task Title.

TASK NUMBER EXAMPLE: 4002.1.1

- o 4002 refers to the applicable DATA SYSTEMS OFFICER.
- o .1 refers to the Duty Area within the MOS; in this case, "MANAGE ADP RESOURCES".
- o .1 refers to the Task; in this case, "DEVELOP INITIAL BUDGET SUBMISSIONS (FOR A MAJOR ADP INSTALLATION)".

TASK TITLE	COMMON TASK NUMBERS		
ACCOUNT FOR ADP EQUIPMENT	4002.1.4	4010.1.4	
ANALYZE CUSTOMER REQUEST	4067.1.1	4071.1.1	
CONDUCT CUSTOMER LIAISON	4010.6.11	4038.1.2	
CONDUCT SKILL PROGRESSION TRAINING FOR ADP PERSONNEL	4010.9.8	4066.6.7	
CONDUCT SYSTEM BACKUP/RECOVERY	4002.4.7	4010.11.7	4066.5.8
CONFIGURE A HOST FOR TCP/IP	4002.2.2	4010.2.2	4066.4.9
CREATE DBMS ACCESS	4067.4.1	4071.3.1	

TASK TITLE	COMMON TASK NUMBERS		
DETERMINE CRITICAL PATH FOR DEVELOPMENT SYSTEM	4002.1.7	4010.6.7	
DIAGNOSE MALFUNCTIONING EUCE SUITE	4002.7.7	4010.5.10	
EXECUTE MS-DOS UTILITIES	4002.8.3	4010.5.9	
IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS E(3) PROGRAM	4002.7.6	4010.9.7	4066.6.6
INSTALL A ROUTER	4002.2.1	4010.2.1	
INSTALL HARDWARE	4002.4.5	4010.11.5	4066.5.5
INSTALL LAN/WAN	4002.2.4	4010.2.4	
INSTALL SOFTWARE	4002.4.6	4010.11.6	4066.5.6
INSTALL STANDARD EUCE OS SOFTWARE	4002.8.1	4010.5.13	
INSTALL UNIX OPERATING SYSTEM	4002.4.1	4010.11.1	4066.5.1
MANAGE CONTRACTS	4002.1.2	4010.1.2	4068.6.2
MANAGE FILE SYSTEMS	4002.4.4	4010.11.4	4066.5.4
MANAGE LAN/WAN/EUCE	4002.2.5	4010.2.5	
MANAGE MULTIPLE NETWORKS	4002.4.9	4010.11.9	4066.5.10
MANAGE NETWORK SECURITY	4002.4.13	4010.11.13	4066.5.13
MANAGE NETWORK SERVICES	4002.4.12	4010.11.12	4066.5.12

TASK TITLE	COMMON TASKS NUMBERS		
MANAGE SYSTEM PROCESS	4002.4.11	4010.11.11	4066.5.11
MANAGE THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) FOR ADP	4002.1.1	4010.1.1	
MANAGE USER ACCOUNTS	4002.4.3	4010.11.3	4066.5.3
MONITOR SOFTWARE OPERATIONAL TESTS AND EVALUATIONS	4002.3.1	4010.6.10	
OPERATE A COMPUTER USING UNIX OPERATING SYSTEM	4002.4.2	4010.11.2	4066.5.2
ORGANIZE PERSONNEL FOR ADP OPERATIONS	4002.1.3	4010.1.3	4099.1.6
PERFORM EMERGENCY SHUTDOWN PROCEDURES	4034.1.8	4034.4.2	
PERFORM LIMITED TECHNICAL INSPECTION (LTI)	4002.7.1	4010.9.1	4066.6.1
PLAN COMMUNICATIONS SUPPORT FOR A COMMAND POST	4002.5.2	4010.8.2	
PLAN DATA COMMUNICATIONS FOR JOINT/COMBINED OPERATIONS	4002.5.3	4010.8.3	
PREPARE A DATA COMMUNICATIONS PLAN FOR AN ANNEX K	4002.5.1	4010.8.1	
PREPARE ABBREVIATED SYSTEMS DECISION PAPER (ASDP)	4002.1.5	4010.1.5	
PREPARE AN EQUIPMENT REPAIR ORDER (ERO)	4002.7.3	4010.9.3	4066.6.3
PREPARE EQUIPMENT FOR EMBARKATION	4002.7.4	4010.9.5	
PREPARE TELECOMMUNICATIONS SERVICE REQUEST (TSR)	4002.1.6	4010.1.6	
PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION	4002.7.5	4010.9.6	4066.6.5

TASK TITLE	COMMON TASKS NUMBERS		
PROVIDE CUSTOMER SERVICE	4034.3.4	4038.1.1	
SUPERVISE DEVELOPMENT OF USER REQUIREMENTS	4002.3.3	4010.6.8	
TUNE SYSTEM PERFORMANCE	4002.4.8	4010.11.8	4066.5.9
USE LAN/WAN NETWORK MANAGEMENT TOOLS	4002.2.3	4010.2.3	
USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS	4002.7.2	4010.9.2	4066.6.2
UTILIZE MICROCOMPUTER DATA BASE SOFTWARE	4002.8.6	4010.5.8	
UTILIZE PRESENTATION GRAPHICS SOFTWARE	4002.8.2	4010.5.14	
UTILIZE SPREADSHEET SOFTWARE PACKAGE	4002.8.5	4010.5.7	
UTILIZE WORD PROCESSING SOFTWARE	4002.8.4	4010.5.6	
WRITE A DATA COMMUNICATIONS SOP	4002.5.4	4010.8.4	
WRITE A FEASIBILITY STUDY	4002.1.8	4010.6.4	
WRITE DATA COMMUNICATIONS DOCUMENT	4066.3.1	4068.2.4	
WRITE SHELL SCRIPT FILES	4002.4.10	4010.11.10	4066.5.7

TRAINING SUPPORT

1. This enclosure identifies training support in four categories for each MOS or the OccFld as a whole. Some of the support items are identified by tasks, groups of tasks, or for the entire task list as follows:

Appendix A: Training Devices, Simulators, and Training Aids

Appendix B: Training Equipment

Appendix C: Ammunition, Explosives, and Pyrotechnics

Appendix D: Training Materials

2. If support identified in any appendix does not apply, the appendix will be included stating: "DOES NOT APPLY TO THIS MOS/OCCFLD."

TRAINING DEVICES, SIMULATORS, AND TRAINING AIDS

DOES NOT APPLY TO THIS MOS/OCCFLD

TRAINING EQUIPMENT

DOES NOT APPLY TO THIS MOS/OCCFLD

AMMUNITION, EXPLOSIVES, AND PYROTECHNICS

This appendix identifies ammunition, explosive and pyrotechnics (CLASS V) requirements for a task.

- o The first column is the task number.
- o The second column identifies the Department of Defense Identification Code (DODIC).
- o The third column is the Nomenclature pertaining to the DODIC.
- o The fourth column, "Initial Proficiency," identifies the quantity of CLASS V each trainee will expend to achieve initial proficiency in this task.
- o The fifth column, "Per Iteration," lists the quantity of CLASS V expended to maintain proficiency after initial proficiency is achieved.
- o The sixth column, Annual Sustainment, provides the amount of CLASS V required for one Marine to maintain proficiency in this task for a one year period. Annual Sustainment quantities are derived by the following formula:

```

+-----+
|12 Months Divided By Sustainment Factor Times Per Iteration|
|                                     Equals Annual Sustainment                                     |
+-----+

```

Example: Take the Sustainment Factor from Enclosure (3). Divide this number into 12 months to find out how many times per year a task must be re-evaluated or retrained:

- \* TASK 1330.1.5 has a sustainment factor of 3.
- \* This number divided into 12, tells you the task has to be retrained four times per year (every three months).
- \* Multiply 4 times the "per iteration" factor to find the annual sustainment quantity.

```

+-----+
|12 months/3 x 4 = 16|
+-----+

```

It takes 16, 12 gauge buckshot rounds to maintain proficiency in this task every year.

MCO 1510.37C

TASK	DODIC	NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
------	-------	--------------	------------------------	------------------	-----------------------

DOES NOT APPLY TO THIS MOS/OCCFLD

TRAINING MATERIALS

DOES NOT APPLY TO THIS MOS/OCCFLD

INDIVIDUAL TRAINING STANDARDS FOR THE DATA SYSTEMS OCCUPATIONAL  
FIELD (OCCFLD) 40

MOS 4002, DATA SYSTEMS OFFICER

DUTY AREA 1 - RESOURCE MANAGEMENT/ADMINISTRATION		
TASK 4002.1.1	. . . . . MANAGE THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) FOR ADP	6-A-1
TASK 4002.1.2	. . . . . MANAGE CONTRACTS	6-A-2
TASK 4002.1.3	. . . . . ORGANIZE PERSONNEL FOR ADP OPERATIONS	6-A-3
TASK 4002.1.4	. . . . . ACCOUNT FOR ADP EQUIPMENT	6-A-3
TASK 4002.1.5	. . . . . PREPARE ABBREVIATED SYSTEMS DECISION PAPER (ASDP)	6-A-4
TASK 4002.1.6	. . . . . PREPARE TELECOMMUNICATIONS SERVICE REQUEST (TSR)	6-A-5
TASK 4002.1.7	. . . . . DETERMINE CRITICAL PATH FOR DEVELOPMENT SYSTEM	6-A-5
TASK 4002.1.8	. . . . . WRITE A FEASIBILITY STUDY	6-A-6
TASK 4002.1.9	. . . . . SUPERVISE UNIT TRAINING	6-A-6
DUTY AREA 2 - DATA COMMUNICATIONS SYSTEMS		
TASK 4002.2.1	. . . . . INSTALL A ROUTER	6-A-7
TASK 4002.2.2	. . . . . CONFIGURE A HOST FOR TCP/IP	6-A-8
TASK 4002.2.3	. . . . . USE LAN/WAN NETWORK MANAGEMENT TOOLS	6-A-9
TASK 4002.2.4	. . . . . INSTALL LAN/WAN	6-A-9
TASK 4002.2.5	. . . . . MANAGE LAN/WAN/EUCE	6-A-11
DUTY AREA 3 - SOFTWARE ENGINEERING		
TASK 4002.3.1	. . . . . MONITOR SOFTWARE OPERATIONAL TESTS AND EVALUATIONS	6-A-12
TASK 4002.3.2	. . . . . ESTABLISH SOFTWARE DEVELOPMENT STANDARD	6-A-13
TASK 4002.3.3	. . . . . SUPERVISE DEVELOPMENT OF USER REQUIREMENTS	6-A-13

DUTY AREA 4 -	UNIX OPERATING SYSTEM	
TASK 4002.4.1	. . . . .	6-A-14
	INSTALL UNIX OPERATING SYSTEM	
TASK 4002.4.2	. . . . .	6-A-15
	OPERATE A COMPUTER USING UNIX OPERATING SYSTEM	
TASK 4002.4.3	. . . . .	6-A-15
	MANAGE USER ACCOUNTS	
TASK 4002.4.4	. . . . .	6-A-16
	MANAGE FILE SYSTEMS	
TASK 4002.4.5	. . . . .	6-A-17
	INSTALL HARDWARE	
TASK 4002.4.6	. . . . .	6-A-17
	INSTALL SOFTWARE	
TASK 4002.4.7	. . . . .	6-A-18
	CONDUCT SYSTEM BACKUP/RECOVERY	
TASK 4002.4.8	. . . . .	6-A-18
	TUNE SYSTEM PERFORMANCE	
TASK 4002.4.9	. . . . .	6-A-19
	MANAGE MULTIPLE NETWORKS	
TASK 4002.4.10	. . . . .	6-A-19
	WRITE SHELL SCRIPT FILES	
TASK 4002.4.11	. . . . .	6-A-20
	MANAGE SYSTEM PROCESS	
TASK 4002.4.12	. . . . .	6-A-21
	MANAGE NETWORK SERVICES	
TASK 4002.4.13	. . . . .	6-A-21
	MANAGE NETWORK SECURITY	
DUTY AREA 5 -	DATA COMMUNICATIONS PLAN FOR ANNEX K	
TASK 4002.5.1	. . . . .	6-A-22
	PREPARE A DATA COMMUNICATIONS PLAN FOR AN ANNEX K	
TASK 4002.5.2	. . . . .	6-A-23
	PLAN COMMUNICATIONS SUPPORT FOR A COMMAND POST	
TASK 4002.5.3	. . . . .	6-A-24
	PLAN DATA COMMUNICATIONS FOR JOINT/COMBINED OPERATIONS	
TASK 4002.5.4	. . . . .	6-A-24
	WRITE A DATA COMMUNICATIONS SOP	
DUTY AREA 6 -	INFORMATION SECURITY	
TASK 4002.6.1	. . . . .	6-A-25
	ESTABLISH INFORMATION SECURITY PROCEDURES	
TASK 4002.6.2	. . . . .	6-A-26
	PLAN DATA COMMUNICATION SECURITY	
DUTY AREA 7 -	SYSTEM RESTORATION	
TASK 4002.7.1	. . . . .	6-A-26
	PERFORM LIMITED TECHNICAL INSPECTION (LTI)	

TASK 4002.7.2	. . . . .	6-A-27
	USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS	
TASK 4002.7.3	. . . . .	6-A-28
	PREPARE AN EQUIPMENT REPAIR ORDER (ERO)	
TASK 4002.7.4	. . . . .	6-A-28
	PREPARE EQUIPMENT FOR EMBARKATION	
TASK 4002.7.5	. . . . .	6-A-29
	PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION	
TASK 4002.7.6	. . . . .	6-A-30
	IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS E(3) PROGRAM	
TASK 4002.7.7	. . . . .	6-A-31
	DIAGNOSE MALFUNCTIONING EUCE SUITE	
TASK 4002.7.8	. . . . .	6-A-31
	SUPERVISE BASIC MAINTENANCE ON EUCE SUITE	
DUTY AREA 8 - DISK OPERATING SYSTEM		
TASK 4002.8.1	. . . . .	6-A-32
	INSTALL STANDARD EUCE OS SOFTWARE	
TASK 4002.8.2	. . . . .	6-A-33
	UTILIZE PRESENTATION GRAPHICS SOFTWARE	
TASK 4002.8.3	. . . . .	6-A-33
	EXECUTE MS-DOS UTILITIES	
TASK 4002.8.4	. . . . .	6-A-34
	UTILIZE WORD PROCESSING SOFTWARE	
TASK 4002.8.5	. . . . .	6-A-35
	UTILIZE SPREADSHEET SOFTWARE PACKAGE	
TASK 4002.8.6	. . . . .	6-A-36
	UTILIZE MICROCOMPUTER DATA BASE SOFTWARE	

MOS 4010, DATA SYSTEMS SOFTWARE OFFICER

DUTY AREA 1 -	RESOURCE MANAGEMENT/ADMINISTRATION	
TASK 4010.1.1	. . . . .	6-B-1
	MANAGE THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) FOR ADP	
TASK 4010.1.2	. . . . .	6-B-2
	MANAGE CONTRACTS	
TASK 4010.1.3	. . . . .	6-B-3
	ORGANIZE PERSONNEL FOR ADP OPERATIONS	
TASK 4010.1.4	. . . . .	6-B-3
	ACCOUNT FOR ADP EQUIPMENT	
TASK 4010.1.5	. . . . .	6-B-4
	PREPARE ABBREVIATED SYSTEMS DECISION PAPER (ASDP)	
TASK 4010.1.6	. . . . .	6-B-5
	PREPARE TELECOMMUNICATIONS SERVICE REQUEST (TSR)	
DUTY AREA 2 -	DATA COMMUNICATIONS SYSTEMS	
TASK 4010.2.1	. . . . .	6-B-5
	INSTALL A ROUTER	
TASK 4010.2.2	. . . . .	6-B-6
	CONFIGURE A HOST FOR TCP/IP	
TASK 4010.2.3	. . . . .	6-B-7
	USE LAN/WAN NETWORK MANAGEMENT TOOLS	
TASK 4010.2.4	. . . . .	6-B-7
	INSTALL LAN/WAN	
TASK 4010.2.5	. . . . .	6-B-9
	MANAGE LAN/WAN/EUCE	
DUTY AREA 3 -	PROGRAMMING RESOURCES	
TASK 4010.3.1	. . . . .	6-B-10
	USE TSO TO DEVELOP OR MAINTAIN SYSTEM SOFTWARE	
TASK 4010.3.2	. . . . .	6-B-11
	WRITE JCL PROCEDURE	
TASK 4010.3.3	. . . . .	6-B-11
	CODE APPLICATIONS PROCEDURE	
TASK 4010.3.4	. . . . .	6-B-12
	DRAW A STRUCTURED FLOWCHART	
TASK 4010.3.5	. . . . .	6-B-13
	CODE APPLICATION PROGRAM	
TASK 4010.3.6	. . . . .	6-B-14
	EXECUTE EXISTING APPLICATIONS PROGRAM	
TASK 4010.3.7	. . . . .	6-B-15
	CODE JCL PROCEDURE USING SORT UTILITY	
TASK 4010.3.8	. . . . .	6-B-16
	CODE APPLICATION PROGRAM USING ARITHMETIC VERBS AND EDITING TECHNIQUES	

TASK 4010.3.9	. . . . .	6-B-17
	ESTABLISH PROCEDURES FOR ADP PRODUCTION SOFTWARE SUPPORT	
TASK 4010.3.10	. . . . .	6-B-17
	AUDIT SOFTWARE CONFIGURATION MANAGEMENT PROGRAM	
TASK 4010.3.11	. . . . .	6-B-18
	ESTABLISH SOFTWARE TRAINING PROGRAM	
TASK 4010.3.12	. . . . .	6-B-19
	MONITOR SOFTWARE SECURITY PROCEDURES	
TASK 4010.3.13	. . . . .	6-B-19
	ORGANIZE SOFTWARE DEVELOPMENT TEAMS	
TASK 4010.3.14	. . . . .	6-B-20
	MONITOR PERFORMANCE OF NETWORK SYSTEMS SOFTWARE	
TASK 4010.3.15	. . . . .	6-B-21
	MAINTAIN PROGRAMMING LIBRARIES	
TASK 4010.3.16	. . . . .	6-B-21
	MANAGE ANNUAL SOFTWARE SUPPORT REVIEW PROGRAM	
DUTY AREA 4 -	SUPPORT OF DATA BASE MANAGEMENT SYSTEMS	
TASK 4010.4.1	. . . . .	6-B-22
	USE A HIGH-LEVEL PROGRAMMING LANGUAGE	
TASK 4010.4.2	. . . . .	6-B-23
	ACCESS ADABAS DATA BASE FILE	
TASK 4010.4.3	. . . . .	6-B-24
	DESIGN NATURAL RETRIEVAL PROGRAM	
TASK 4010.4.4	. . . . .	6-B-25
	DESIGN NATURAL RETRIEVAL PROGRAM USING NATURAL LOOP LOGIC	
TASK 4010.4.5	. . . . .	6-B-26
	DESIGN AN INTERACTIVE PROGRAM UTILIZING THE NATURAL PROGRAMMING LANGUAGE	
TASK 4010.4.6	. . . . .	6-B-26
	DESIGN A NATURAL UPDATE PROGRAM	
TASK 4010.4.7	. . . . .	6-B-27
	DEFINE COMPONENTS, CAPABILITIES, AND LIMITATIONS OF NATURAL	
DUTY AREA 5 -	END USER COMPUTING EQUIPMENT	
TASK 4010.5.1	. . . . .	6-B-28
	EXECUTE DATABASE SOFTWARE ON FMF-EUCE	
TASK 4010.5.2	. . . . .	6-B-29
	PREPARE FMF-EUCE FOR USE	
TASK 4010.5.3	. . . . .	6-B-30
	EXECUTE A FILE TRANSFER	
TASK 4010.5.4	. . . . .	6-B-30
	CONFIGURE DISPLAY PROCESSOR AND SUPPORTING PERIPHERALS	
TASK 4010.5.5	. . . . .	6-B-31
	PERFORM OPERATOR MAINTENANCE ON FMF-EUCE	

TASK 4010.5.6	. . . . .	6-B-32
	UTILIZE WORD PROCESSING SOFTWARE	
TASK 4010.5.7	. . . . .	6-B-32
	UTILIZE SPREADSHEET SOFTWARE PACKAGE	
TASK 4010.5.8	. . . . .	6-B-33
	UTILIZE MICROCOMPUTER DATA BASE SOFTWARE	
TASK 4010.5.9	. . . . .	6-B-34
	EXECUTE MS-DOS UTILITIES	
TASK 4010.5.10	. . . . .	6-B-35
	DIAGNOSE MALFUNCTIONING EUCE SUITE	
TASK 4010.5.11	. . . . .	6-B-35
	DEVELOP COUNTERMEASURES TO MINIMIZE MICROCOMPUTER SECURITY THREATS	
TASK 4010.5.12	. . . . .	6-B-36
	UTILIZE IBM 3278 TYPE TERMINAL EMULATION PACKAGE	
TASK 4010.5.13	. . . . .	6-B-37
	INSTALL STANDARD EUCE OS SOFTWARE	
TASK 4010.5.14	. . . . .	6-B-38
	UTILIZE PRESENTATION GRAPHICS SOFTWARE	
DUTY AREA 6 - ADP SOFTWARE PROJECTS		
TASK 4010.6.1	. . . . .	6-B-38
	DEVELOP A REQUIREMENTS STATEMENT	
TASK 4010.6.2	. . . . .	6-B-39
	CREATE MISSION NEED STATEMENT (MNS)	
TASK 4010.6.3	. . . . .	6-B-40
	CONSTRUCT FUNCTIONAL REQUIREMENTS DEFINITION (FRD)	
TASK 4010.6.4	. . . . .	6-B-41
	WRITE A FEASIBILITY STUDY	
TASK 4010.6.5	. . . . .	6-B-41
	CONDUCT WALK THROUGH	
TASK 4010.6.6	. . . . .	6-B-42
	DETERMINE COSTS AND BENEFITS UTILIZING ECONOMIC ANALYSIS	
TASK 4010.6.7	. . . . .	6-B-43
	DETERMINE CRITICAL PATH FOR DEVELOPMENT SYSTEM	
TASK 4010.6.8	. . . . .	6-B-44
	SUPERVISE DEVELOPMENT OF USER REQUIREMENTS	
TASK 4010.6.9	. . . . .	6-B-44
	ESTABLISH SOFTWARE DEVELOPMENT STANDARD OPERATING PROCEDURES (SOP'S)	
TASK 4010.6.10	. . . . .	6-B-45
	MONITOR SOFTWARE OPERATIONAL TESTS AND EVALUATIONS	
TASK 4010.6.11	. . . . .	6-B-46
	CONDUCT CUSTOMER LIAISON	

DUTY AREA 7 -	SOFTWARE ENGINEERING PRINCIPLES	
TASK 4010.7.1	. . . . .	6-B-47
	CONSTRUCT CONTEXT DIAGRAM	
TASK 4010.7.2	. . . . .	6-B-47
	CONSTRUCT DATA FLOW DIAGRAM (DFD)	
TASK 4010.7.3	. . . . .	6-B-48
	CONSTRUCT A DATA DICTIONARY	
TASK 4010.7.4	. . . . .	6-B-49
	DEVELOP AN IS USING SDM	
DUTY AREA 8 -	DATA COMMUNICATIONS SYSTEMS	
TASK 4010.8.1	. . . . .	6-B-50
	PREPARE A DATA COMMUNICATIONS PLAN FOR AN ANNEX K	
TASK 4010.8.2	. . . . .	6-B-51
	PLAN COMMUNICATIONS SUPPORT FOR A COMMAND POST	
TASK 4010.8.3	. . . . .	6-B-51
	PLAN DATA COMMUNICATIONS FOR JOINT/COMBINED OPERATIONS	
TASK 4010.8.4	. . . . .	6-B-53
	WRITE A DATA COMMUNICATIONS SOP	
DUTY AREA 9 -	SYSTEM RESTORATION	
TASK 4010.9.1	. . . . .	6-B-54
	PERFORM LIMITED TECHNICAL INSPECTION (LTI)	
TASK 4010.9.2	. . . . .	6-B-54
	USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS	
TASK 4010.9.3	. . . . .	6-B-55
	PREPARE AN EQUIPMENT REPAIR ORDER (ERO)	
TASK 4010.9.4	. . . . .	6-B-56
	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF COMMUNICATION-ELECTRONIC EQUIPMENT	
TASK 4010.9.5	. . . . .	6-B-56
	PREPARE EQUIPMENT FOR EMBARKATION	
TASK 4010.9.6	. . . . .	6-B-57
	PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION	
TASK 4010.9.7	. . . . .	6-B-58
	IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS E(3) PROGRAM	
TASK 4010.9.8	. . . . .	6-B-59
	CONDUCT SKILL PROGRESSION TRAINING FOR ADP PERSONNEL	
DUTY AREA 10 -	INFORMATION SECURITY	
TASK 4010.10.1	. . . . .	6-B-60
	ESTABLISH ADP SECURITY MEASURES	

TASK 4010.10.2	. . . . .	6-B-61
	DEVELOP A RISK ASSESSMENT	
TASK 4010.10.3	. . . . .	6-B-62
	DEVELOP CONTINGENCY PLAN	
DUTY AREA 11 - UNIX SYSTEM ADMINISTRATION		
TASK 4010.11.1	. . . . .	6-B-63
	INSTALL UNIX OPERATING SYSTEM	
TASK 4010.11.2	. . . . .	6-B-63
	OPERATE A COMPUTER USING UNIX OPERATING SYSTEM	
TASK 4010.11.3	. . . . .	6-B-64
	MANAGE USER ACCOUNTS	
TASK 4010.11.4	. . . . .	6-B-65
	MANAGE FILE SYSTEMS	
TASK 4010.11.5	. . . . .	6-B-65
	INSTALL HARDWARE	
TASK 4010.11.6	. . . . .	6-B-66
	INSTALL SOFTWARE	
TASK 4010.11.7	. . . . .	6-B-67
	CONDUCT SYSTEM BACKUP/RECOVERY	
TASK 4010.11.8	. . . . .	6-B-67
	TUNE SYSTEM PERFORMANCE	
TASK 4010.11.9	. . . . .	6-B-67
	MANAGE MULTIPLE NETWORKS	
TASK 4010.11.10	. . . . .	6-B-68
	WRITE SHELL SCRIPT FILES	
TASK 4010.11.11	. . . . .	6-B-69
	MANAGE SYSTEM PROCESS	
TASK 4010.11.12	. . . . .	6-B-69
	MANAGE NETWORK SERVICES	
TASK 4010.11.13	. . . . .	6-B-70
	MANAGE NETWORK SECURITY	

MOS 4025, NETWORK CONTROL SPECIALIST

DUTY AREA 1 -	TELEPROCESSING HARDWARE	
TASK 4025.1.1	. . . . . INSTALL TELEPROCESSING PERIPHERAL DEVICES	6-C-1
TASK 4025.1.2	. . . . . CORRECT TELEPROCESSING SYSTEM FAILURES	6-C-2
TASK 4025.1.3	. . . . . OPERATE TELEPROCESSING CONSOLES	6-C-2
TASK 4025.1.4	. . . . . OPERATE DIAGNOSTIC MODEM NETWORKS	6-C-3
TASK 4025.1.5	. . . . . MAINTAIN DIAGNOSTIC MODEM NETWORKS	6-C-4
TASK 4025.1.6	. . . . . DESIGN DIAGNOSTIC MODEM NETWORKS	6-C-5
TASK 4025.1.7	. . . . . MONITOR NETWORK PERFORMANCE	6-C-6
TASK 4025.1.8	. . . . . PERFORM FIRST LEVEL CORRECTIVE ACTIONS INVOLVING TELEPROCESSING SOFTWARE	6-C-7

MOS 4034, COMPUTER OPERATOR

DUTY AREA 1 - OPERATING SYSTEMS		
TASK 4034.1.1	. . . . .	6-D-1
	OPERATE MASTER CONSOLE	
TASK 4034.1.2	. . . . .	6-D-1
	OPERATE COMPUTER CONSOLE	
TASK 4034.1.3	. . . . .	6-D-2
	OPERATE TAPE DRIVE	
TASK 4034.1.4	. . . . .	6-D-3
	OPERATE HIGH SPEED LINE PRINTER	
TASK 4034.1.5	. . . . .	6-D-3
	OPERATE LASER PRINTER	
TASK 4034.1.6	. . . . .	6-D-4
	PERFORM INITIAL PROGRAM LOAD	
TASK 4034.1.7	. . . . .	6-D-4
	OPERATE DIRECT ACCESS STORAGE DEVICE (DASD)	
TASK 4034.1.8	. . . . .	6-D-5
	PERFORM EMERGENCY SHUTDOWN PROCEDURES	
TASK 4034.1.9	. . . . .	6-D-6
	MANAGE ADP EQUIPMENT	
TASK 4034.1.10	. . . . .	6-D-6
	PREPARE SHIFT SCHEDULES	
DUTY AREA 2 - MANAGING MAGNETIC MEDIA LIBRARY		
TASK 4034.2.1	. . . . .	6-D-7
	PROCESS INCOMING TAPES	
TASK 4034.2.2	. . . . .	6-D-8
	PREPARE TAPES FOR MAILING	
TASK 4034.2.3	. . . . .	6-D-8
	INITIALIZE AND LABEL MAGNETIC TAPE	
TASK 4034.2.4	. . . . .	6-D-9
	CLEAN MAGNETIC REEL TAPE	
TASK 4034.2.5	. . . . .	6-D-10
	CERTIFY MAGNETIC TAPE	
TASK 4034.2.6	. . . . .	6-D-11
	PREPARE SCRATCH TAPES	
TASK 4034.2.7	. . . . .	6-D-11
	MAINTAIN ALTERNATE LIBRARY	
DUTY AREA 3 - CONTROLLING INPUT/OUTPUT		
TASK 4034.3.1	. . . . .	6-D-12
	PRODUCE MICROFICHE	
TASK 4034.3.2	. . . . .	6-D-13
	OPERATE DECOLLATOR	
TASK 4034.3.3	. . . . .	6-D-13
	OPERATE BURSTER	
TASK 4034.3.4	. . . . .	6-D-14
	PROVIDE CUSTOMER SERVICE	

DUTY AREA 4 - DEPLOYABLE FORCE AUTOMATED SERVICE CENTER (DFASC)

TASK 4034.4.1 . . . . . 6-D-15  
 CONDUCT PREDEPLOYMENT COORDINATION

TASK 4034.4.2 . . . . . 6-D-16  
 PERFORM EMERGENCY SHUTDOWN PROCEDURES

DUTY AREA 5 - ENVIRONMENTAL CONTROL OPERATIONS

TASK 4034.5.1 . . . . . 6-D-17  
 OPERATE FIRE EXTINGUISHER SYSTEM

TASK 4034.5.2 . . . . . 6-D-17  
 MANAGE UNINTERRUPTIBLE POWER SUPPLY  
 (UPS)

TASK 4034.5.3 . . . . . 6-D-18  
 MONITOR TEMPERATURE AND HUMIDITY GAUGES

TASK 4034.5.4 . . . . . 6-D-18  
 MONITOR ENVIRONMENTAL CONTROL UNITS

DUTY AREA 6 - HELP DESK OPERATIONS

TASK 4034.6.1 . . . . . 6-D-19  
 PROVIDE ASSISTANCE FROM A HELP DESK

TASK 4034.6.2 . . . . . 6-D-19  
 MONITOR OPERATIONS OF A HELP DESK

MOS 4038, DATA CONTROL SPECIALIST

DUTY AREA 1 -	SERVING THE CUSTOMER	
TASK 4038.1.1	PROVIDE CUSTOMER SERVICE	6-E-1
TASK 4038.1.2	CONDUCT CUSTOMER LIAISON	6-E-2
TASK 4038.1.3	SUPERVISE TAPE LIBRARY OPERATIONS	6-E-2
DUTY AREA 2 -	PRODUCTION ANALYSIS	
TASK 4038.2.1	PERFORM PROCEDURE OPTIMIZATION	6-E-3
TASK 4038.2.2	IMPLEMENT NEW PROCEDURES	6-E-4
TASK 4038.2.3	MANIPULATE DATA SETS	6-E-5
TASK 4038.2.4	CONDUCT ANNUAL REVIEW OF COMPUTER OPERATIONS MANUAL (OM)	6-E-6
TASK 4038.2.5	SUPERVISE MAINTENANCE OF PRODUCTION LIBRARIES	6-E-7
DUTY AREA 3 -	CONTROLLING PRODUCTION	
TASK 4038.3.1	PRODUCE DAILY SCHEDULE	6-E-8
TASK 4038.3.2	EXECUTE PRODUCTION JOBS	6-E-8
TASK 4038.3.3	RESPOND TO ABNORMAL JOB TERMINATION (ABEND)	6-E-9
TASK 4038.3.4	ESTABLISH PRODUCTION CONTROL SOP	6-E-10

## MOS 4066, SMALL COMPUTER SYSTEMS SPECIALIST (SCSS)

DUTY AREA 1 - RESOURCE MANAGEMENT AND ADMINISTRATION		
TASK 4066.1.1	. . . . .	6-F-1
	ORGANIZE PERSONNEL FOR LAN/EUCE SYSTEM OPERATIONS	
TASK 4066.1.2	. . . . .	6-F-1
	ORGANIZE EQUIPMENT FOR LAN/EUCE SYSTEM OPERATIONS	
TASK 4066.1.3	. . . . .	6-F-2
	ESTABLISH ADP/DATA COMMUNICATIONS SECURITY MEASURES	
TASK 4066.1.4	. . . . .	6-F-3
	SUPERVISE OPERATION OF A NETWORK OPERATIONS/INFORMATION CENTER	
DUTY AREA 2 - MICROCOMPUTERS		
TASK 4066.2.1	. . . . .	6-F-3
	OPERATE MICROCOMPUTER/EUCE SUITE	
TASK 4066.2.2	. . . . .	6-F-4
	CONFIGURE MICROCOMPUTER/EUCE SUITE	
TASK 4066.2.3	. . . . .	6-F-4
	INSTALL MICROCOMPUTER/EUCE SUITE FOR OPERATIONAL USE	
TASK 4066.2.4	. . . . .	6-F-5
	PREPARE MICROCOMPUTER/EUCE SUITE FOR DEPLOYMENT	
TASK 4066.2.5	. . . . .	6-F-6
	TROUBLESHOOT MICROCOMPUTER/EUCE PROBLEMS	
TASK 4066.2.6	. . . . .	6-F-6
	MAINTAIN MICROCOMPUTER/EUCE EQUIPMENT	
TASK 4066.2.7	. . . . .	6-F-7
	CONFIGURE MARINE CORPS AUTHORIZED SOFTWARE	
TASK 4066.2.8	. . . . .	6-F-7
	OPERATE MARINE CORPS AUTHORIZED SOFTWARE	
TASK 4066.2.9	. . . . .	6-F-8
	TROUBLESHOOT MARINE CORPS AUTHORIZED SOFTWARE PROBLEMS	
TASK 4066.2.10	. . . . .	6-F-9
	MAINTAIN MARINE CORPS AUTHORIZED SOFTWARE	
DUTY AREA 3 - DATA COMMUNICATIONS SUPPORT		
TASK 4066.3.1	. . . . .	6-F-10
	WRITE DATA COMMUNICATIONS DOCUMENT	
TASK 4066.3.2	. . . . .	6-F-11
	PERFORM DATA COMMUNICATIONS SYSTEMS PLANNING AND ENGINEERING	

TASK 4066.3.3	PLAN FOR DEPLOYED MAINTENANCE SUPPORT	6-F-11
TASK 4066.3.4	COORDINATE POWER DISTRIBUTION AND GROUNDING REQUIREMENTS	6-F-12
TASK 4066.3.5	COORDINATE COMMUNICATIONS SECURITY MATERIAL SYSTEM (CMS) SUPPORT	6-F-13
DUTY AREA 4 - INSTALLATION OF DATA COMMUNICATION SYSTEMS		
TASK 4066.4.1	DIRECT INSTALLATION, OPERATION, AND MAINTENANCE OF DATA COMMUNICATION SYSTEMS	6-F-14
TASK 4066.4.2	INSTALL CRYPTOGRAPHIC EQUIPMENT	6-F-14
TASK 4066.4.3	OPERATE CRYPTOGRAPHIC EQUIPMENT	6-F-15
TASK 4066.4.4	INSTALL DATA TERMINAL EQUIPMENT (DTE)	6-F-16
TASK 4066.4.5	OPERATE DATA TERMINAL EQUIPMENT (DTE)	6-F-16
TASK 4066.4.6	INSTALL DATA COMMUNICATIONS EQUIPMENT (DCE)	6-F-17
TASK 4066.4.7	OPERATE DATA COMMUNICATIONS EQUIPMENT (DCE)	6-F-17
TASK 4066.4.8	ENGINEER DTE TO DCE CONNECTIVITY	6-F-18
TASK 4066.4.9	CONFIGURE A HOST FOR TCP/IP	6-F-18
DUTY AREA 5 - UNIX OPERATING SYSTEMS		
TASK 4066.5.1	INSTALL UNIX OPERATING SYSTEM	6-F-19
TASK 4066.5.2	OPERATE A COMPUTER USING UNIX OPERATING SYSTEM	6-F-20
TASK 4066.5.3	MANAGE USER ACCOUNTS	6-F-21
TASK 4066.5.4	MANAGE FILE SYSTEMS	6-F-21
TASK 4066.5.5	INSTALL HARDWARE	6-F-22
TASK 4066.5.6	INSTALL SOFTWARE	6-F-23
TASK 4066.5.7	WRITE SHELL SCRIPT FILES	6-F-23
TASK 4066.5.8	CONDUCT SYSTEM BACKUP/RECOVERY	6-F-24
TASK 4066.5.9	TUNE SYSTEM PERFORMANCE	6-F-24

TASK 4066.5.10	. . . . .	6-F-25
	MANAGE MULTIPLE NETWORKS	
TASK 4066.5.11	. . . . .	6-F-25
	MANAGE SYSTEM PROCESS	
TASK 4066.5.12	. . . . .	6-F-26
	MANAGE NETWORK SERVICES	
TASK 4066.5.13	. . . . .	6-F-27
	MANAGE NETWORK SECURITY	
DUTY AREA 6 - SYSTEM RESTORATION		
TASK 4066.6.1	. . . . .	6-F-27
	PERFORM LIMITED TECHNICAL INSPECTION (LTI)	
TASK 4066.6.2	. . . . .	6-F-28
	USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS	
TASK 4066.6.3	. . . . .	6-F-28
	PREPARE AN EQUIPMENT REPAIR ORDER (ERO)	
TASK 4066.6.4	. . . . .	6-F-29
	PROVIDE TECHNICAL ASSISTANCE DURING INSTALLATION OF ADP EQUIPMENT	
TASK 4066.6.5	. . . . .	6-F-30
	PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION	
TASK 4066.6.6	. . . . .	6-F-31
	IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS E(3) PROGRAM	
TASK 4066.6.7	. . . . .	6-F-31
	CONDUCT SKILL PROGRESSION TRAINING FOR ADP PERSONNEL	
TASK 4066.6.8	. . . . .	6-F-33
	CONDUCT BASIC MAINTENANCE ON EUCE SUITE	
DUTY AREA 7 - EMBARK/TRANSPORT DATA COMMUNICATIONS ASSETS		
TASK 4066.7.1	. . . . .	6-F-33
	PLAN EMBARKATION/REDEPLOYMENT/DISPLACEMENT OF DATA COMMUNICATIONS EQUIPMENT AND PERSONNEL	
TASK 4066.7.2	. . . . .	6-F-34
	DIRECT EMBARKATION OF DATA COMMUNICATIONS EQUIPMENT AND PERSONNEL	
DUTY AREA 8 - DATA COMMUNICATIONS PERSONNEL TRAINING		
TASK 4066.8.1	. . . . .	6-F-35
	ESTABLISH TRAINING PLANS AND SCHEDULE	
TASK 4066.8.2	. . . . .	6-F-35
	MANAGE DATA COMMUNICATIONS TRAINING PROGRAM	
TASK 4066.8.3	. . . . .	6-F-36
	CONDUCT DATA COMMUNICATIONS TRAINING PROGRAM	

DUTY AREA 9 -	LOCAL AND WIDE AREA NETWORKS	
TASK 4066.9.1	. . . . .	6-F-37
	PLAN LOCAL AREA NETWORKS	
TASK 4066.9.2	. . . . .	6-F-37
	DIRECT INSTALLATION OF LOCAL AREA NETWORKS	
TASK 4066.9.3	. . . . .	6-F-38
	INSTALL A LOCAL AREA NETWORK	
TASK 4066.9.4	. . . . .	6-F-38
	MAINTAIN A LOCAL AREA NETWORK	
TASK 4066.9.5	. . . . .	6-F-39
	MANAGE A LOCAL AREA NETWORK	
TASK 4066.9.6	. . . . .	6-F-40
	CONNECT LOCAL AND WIDE AREA NETWORKS	
TASK 4066.9.7	. . . . .	6-F-40
	MANAGE IP NETWORK	

## MOS 4067, PROGRAMMER, ADA

DUTY AREA 1 -	PROGRAMMING	
TASK 4067.1.1	. . . . . ANALYZE CUSTOMER REQUEST	6-G-1
TASK 4067.1.2	. . . . . DESIGN A COMPUTER PROGRAM/AUTOMATED INFORMATION SYSTEM (AIS)	6-G-1
TASK 4067.1.3	. . . . . CONSTRUCT A COMPUTER PROGRAM/AIS	6-G-2
TASK 4067.1.4	. . . . . TEST A COMPUTER PROGRAM/AIS	6-G-3
TASK 4067.1.5	. . . . . IMPLEMENT A COMPUTER PROGRAM/AIS	6-G-4
DUTY AREA 2 -	MANAGING PROGRAMMERS	
TASK 4067.2.1	. . . . . PERFORM PROJECT MANAGEMENT	6-G-5
TASK 4067.2.2	. . . . . ASSIGN PROGRAMMING TASKS	6-G-5
TASK 4067.2.3	. . . . . MONITOR PROGRAMMING TASKS	6-G-6
TASK 4067.2.4	. . . . . CONDUCT MANAGED ON THE JOB TRAINING (MOJT)	6-G-7
DUTY AREA 3 -	PROGRAM MAINTENANCE	
TASK 4067.3.1	. . . . . MODIFY EXISTING PROGRAM	6-G-8
DUTY AREA 4 -	DATABASE MANAGEMENT SYSTEM (DBMS)	
TASK 4067.4.1	. . . . . CREATE DBMS ACCESS	6-G-10
TASK 4067.4.2	. . . . . CREATE A BATCH JOB IN ON-LINE QUERY LANGUAGE	6-G-10
TASK 4067.4.3	. . . . . USE DATA DICTIONARY	6-G-11
DUTY AREA 5 -	SYSTEM UTILITIES	
TASK 4067.5.1	. . . . . MANIPULATE DATA SETS TO SATISFY ALL UTILITY FUNCTIONS	6-G-13
DUTY AREA 6 -	END USER COMPUTER EQUIPMENT	
TASK 4067.6.1	. . . . . OPERATE MICROCOMPUTER SUITE/EUCE	6-G-14

MOS 4068, DATA NETWORK TECHNICIAN

DUTY AREA 1 -	NETWORK SECURITY	
TASK 4068.1.1	DEVELOP DATA COMMUNICATIONS SECURITY MEASURES	6-H-1
TASK 4068.1.2	DESIGN CRYPTOGRAPHIC TOPOLOGY	6-H-1
TASK 4068.1.3	DEVELOP A NETWORK SECURITY PLAN	6-H-2
DUTY AREA 2 -	NETWORK PLANNING	
TASK 4068.2.1	DESIGN A LOCAL AREA NETWORK	6-H-3
TASK 4068.2.2	DESIGN A WIDE AREA NETWORK	6-H-4
TASK 4068.2.3	DETERMINE PERSONNEL REQUIREMENTS	6-H-4
TASK 4068.2.4	WRITE DATA COMMUNICATIONS DOCUMENT	6-H-5
TASK 4068.2.5	ESTABLISH EMBARKATION PROCEDURES	6-H-6
TASK 4068.2.6	DEVELOP AN IP NETWORK ARCHITECTURE	6-H-7
TASK 4068.2.7	DEVELOP A MULTI-PROTOCOL NETWORK PLAN	6-H-7
TASK 4068.2.8	PLAN FOR CLASSIFIED/SENSITIVE JOINT SERVICE NETWORK CONNECTIVITY	6-H-8
DUTY AREA 3 -	UNIX NETWORKING	
TASK 4068.3.1	CONNECT A UNIX PLATFORM TO A NETWORK	6-H-9
TASK 4068.3.2	INSTALL TERMINAL EMULATION SOFTWARE	6-H-10
DUTY AREA 4 -	NETWORK MANAGEMENT	
TASK 4068.4.1	MANAGE A NETWORK	6-H-10
DUTY AREA 5 -	ADVANCED NETWORKING	
TASK 4068.5.1	PERFORM ADVANCED TROUBLESHOOTING TECHNIQUES	6-H-11
TASK 4068.5.2	MANAGE BANYAN VINES NETWORK	6-H-12
TASK 4068.5.3	CONFIGURE ROUTER HARDWARE	6-H-12
TASK 4068.5.4	CONFIGURE ROUTER SOFTWARE	6-H-13

TASK 4068.5.5	. . . . .	6-H-13
	MANAGE MULTIPLE ELECTRONIC MAIL SYSTEMS	
TASK 4068.5.6	. . . . .	6-H-14
	CONFIGURE DOMAIN NAME SERVICE (DNS)	
DUTY AREA 6 -	RESOURCE MANAGEMENT	
TASK 4068.6.1	. . . . .	6-H-15
	MANAGE THE PLANNING, PROGRAMMING AND BUDGETING SYSTEM (PPBS) FOR DATA COMMUNICATION EQUIPMENT	
TASK 4068.6.2	. . . . .	6-H-16
	MANAGE CONTRACTS	
TASK 4068.6.3	. . . . .	6-H-16
	MANAGE MIMMS/SASSY REPORTS AND REQUIREMENTS	

MOS 4069, SYSTEMS PROGRAMMER

DUTY AREA 1 -	GENERATION AND INSTALLATION OF SYSTEMS SOFTWARE	
TASK 4069.1.1	BUILD INPUT/OUTPUT CONFIGURATION DATA SET (IOCDs)	6-I-1
TASK 4069.1.2	BUILD MVS OPERATING SYSTEM CODE	6-I-2
TASK 4069.1.3	BUILD MVS OPERATING SYSTEM INPUT/OUTPUT CONFIGURATION COMPONENT	6-I-3
TASK 4069.1.4	CREATE JOB ENTRY SUBSYSTEM (JES2) PARAMETERS	6-I-4
TASK 4069.1.5	INSTALL PROGRAM PRODUCTS	6-I-4
TASK 4069.1.6	INSTALL PROPRIETARY SOFTWARE PRODUCTS	6-I-5
TASK 4069.1.7	INSTALL JOB ENTRY SUBSYSTEM (JES2) EXIT ROUTINES	6-I-6
TASK 4069.1.8	INSTALL MVS OPERATING SYSTEM EXIT ROUTINES	6-I-7
DUTY AREA 2 -	SYSTEMS SOFTWARE	
TASK 4069.2.1	MODIFY MVS OPERATING SYSTEM DATA SETS	6-I-8
TASK 4069.2.2	MODIFY JOB ENTRY SUBSYSTEM (JES2) PARAMETERS	6-I-8
TASK 4069.2.3	MAINTAIN DIRECT ACCESS STORAGE DEVICES (DASD)	6-I-9
TASK 4069.2.4	MODIFY PROGRAM PRODUCTS	6-I-10
TASK 4069.2.5	MODIFY PROPRIETARY SOFTWARE PRODUCTS	6-I-11
TASK 4069.2.6	MODIFY JOB ENTRY SUBSYSTEM (JES2) EXIT ROUTINES	6-I-11
TASK 4069.2.7	MODIFY MVS OPERATING SYSTEM EXIT ROUTINES	6-I-12
TASK 4069.2.8	SUPERVISE PROGRAMMING EFFORTS	6-I-13
TASK 4069.2.9	MONITOR IMPLEMENTATION OF NEW SYSTEMS	6-I-14
TASK 4069.2.10	REVIEW OPERATION OF EXISTING SYSTEMS	6-I-15

TASK 4069.2.11	. . . . .	6-I-15
	MAINTAIN VIRTUAL STORAGE SYSTEM	
TASK 4069.2.12	. . . . .	6-I-16
	EVALUATE PERFORMANCE OF ADPE	
TASK 4069.2.13	. . . . .	6-I-16
	DEVELOP OPERATING SYSTEM SOFTWARE	
	MAINTENANCE IMPLEMENTATION PROCEDURES	
TASK 4069.2.14	. . . . .	6-I-17
	SUPERVISE CONFIGURATION MANAGEMENT	
	PROCEDURES	
TASK 4069.2.15	. . . . .	6-I-18
	APPLY ROSCOE COMMANDS	
TASK 4069.2.16	. . . . .	6-I-19
	MAINTAIN LIBRARIES	
TASK 4069.2.17	. . . . .	6-I-19
	WRITE ALC PROGRAMS	
TASK 4069.2.18	. . . . .	6-I-21
	MODIFY/TROUBLESHOOT ALC PROGRAMS	
TASK 4069.2.19	. . . . .	6-I-22
	CREATE GENERATIONAL DATA GROUP (GDG)	
TASK 4069.2.20	. . . . .	6-I-23
	CREATE VIRTUAL STORAGE ACCESS METHOD	
	(VSAM) DATASET	
TASK 4069.2.21	. . . . .	6-I-23
	UTILIZE TSO TO DEVELOP OR MAINTAIN	
	SYSTEM SOFTWARE	
DUTY AREA 3 -	TUNING OF SYSTEMS SOFTWARE	
TASK 4069.3.1	. . . . .	6-I-24
	MONITOR SYSTEM PERFORMANCE	
TASK 4069.3.2	. . . . .	6-I-25
	ANALYZE SYSTEM PERFORMANCE	
TASK 4069.3.3	. . . . .	6-I-27
	DEVELOP TUNING RECOMMENDATIONS	
TASK 4069.3.4	. . . . .	6-I-28
	ADJUST MVS OPERATING SYSTEM PARAMETERS	
TASK 4069.3.5	. . . . .	6-I-29
	ADJUST PROGRAM PRODUCT PARAMETERS	
TASK 4069.3.6	. . . . .	6-I-30
	ADJUST PROPRIETARY SOFTWARE PRODUCT	
	PARAMETERS	
TASK 4069.3.7	. . . . .	6-I-30
	WRITE CAPACITY PLAN	
DUTY AREA 4 -	DIAGNOSING SYSTEMS SOFTWARE	
TASK 4069.4.1	. . . . .	6-I-32
	ANALYZE APPLICATION DUMP	
TASK 4069.4.2	. . . . .	6-I-32
	ANALYZE SUPERVISOR CALL DUMP	
TASK 4069.4.3	. . . . .	6-I-33
	ANALYZE STAND-ALONE DUMP	

MOS 4071, DATABASE MANAGEMENT SYSTEM (DBMS) SPECIALIST

DUTY AREA 1 -	CREATION OF RELATIONAL DATABASES	
TASK 4071.1.1	. . . . .	6-J-1
	ANALYZE CUSTOMER REQUEST	
TASK 4071.1.2	. . . . .	6-J-1
	DESIGN A RELATIONAL DATABASE MANAGEMENT	
	SYSTEM (RDBMS)	
DUTY AREA 2 -	MAINTENANCE OF RELATIONAL DATABASES	
TASK 4071.2.1	. . . . .	6-J-3
	MODIFY RELATIONAL DATABASE	
DUTY AREA 3 -	USE OF DATABASE MANAGEMENT SYSTEMS (DBMS)	
TASK 4071.3.1	. . . . .	6-J-4
	CREATE DBMS ACCESS	

## MOS 4075, COMPUTER SECURITY SPECIALIST

DUTY AREA 1 -	SOFTWARE SECURITY	
TASK 4075.1.1	. . . . .	6-K-1
	SUPERVISE SOFTWARE INSTALLATION/MAINTENANCE	
TASK 4075.1.2	. . . . .	6-K-2
	MONITOR SECURITY SYSTEM	
TASK 4075.1.3	. . . . .	6-K-2
	TRAIN SECURITY ADMINISTRATORS	
TASK 4075.1.4	. . . . .	6-K-3
	EVALUATE PROPOSED SOFTWARE PURCHASES	
DUTY AREA 2 -	PHYSICAL SECURITY	
TASK 4075.2.1	. . . . .	6-K-4
	IMPLEMENT SENSITIVE INFORMATION HANDLING PROCEDURE	
TASK 4075.2.2	. . . . .	6-K-4
	CONTROL ACCESS TO SENSITIVE AREAS	
TASK 4075.2.3	. . . . .	6-K-5
	MONITOR PHYSICAL SECURITY ENVIRONMENT	
TASK 4075.2.4	. . . . .	6-K-6
	INSTRUCT PERSONNEL IN PHYSICAL SECURITY REQUIREMENTS	
TASK 4075.2.5	. . . . .	6-K-7
	IMPLEMENT SECURITY FOR THE NETWORK	
DUTY AREA 3 -	ACCREDITATION AND CONTINGENCY PLANNING	
TASK 4075.3.1	. . . . .	6-K-8
	PERFORM RISK ANALYSIS	
TASK 4075.3.2	. . . . .	6-K-8
	CREATE FACILITY SECURITY PROFILE (FSP)	
TASK 4075.3.3	. . . . .	6-K-9
	CREATE CONTINGENCY PLAN	
TASK 4075.3.4	. . . . .	6-K-10
	INSTRUCT PERSONNEL ON CONTINGENCY PLANS	
TASK 4075.3.5	. . . . .	6-K-10
	PERFORM ANNUAL ACCREDITATION REVIEW	

MOS 4099, DATA PROCESSING CHIEF

DUTY AREA 1 -	DATA PROCESSING UNIT	
TASK 4099.1.1	. . . . .	6-L-1
	MONITOR ALL PERSONNEL MATTERS	
TASK 4099.1.2	. . . . .	6-L-1
	ANALYZE PROBLEMS AND REFER ACTION	
TASK 4099.1.3	. . . . .	6-L-2
	MONITOR PERSONNEL GAINS/LOSSES	
TASK 4099.1.4	. . . . .	6-L-3
	SUPERVISE MAINTENANCE OF NAVY AND MARINE CORPS DIRECTIVE SYSTEMS	
TASK 4099.1.5	. . . . .	6-L-3
	MAINTAIN INTERNAL CONTROL OF CORRESPONDENCE	
TASK 4099.1.6	. . . . .	6-L-4
	ORGANIZE PERSONNEL FOR ADP OPERATIONS	
TASK 4099.1.7	. . . . .	6-L-4
	ANALYZE OPERATIONAL RECORDS AND REPORTS	
TASK 4099.1.8	. . . . .	6-L-5
	PROVIDE GUIDANCE IN SCHEDULING PERSONNEL	
TASK 4099.1.9	. . . . .	6-L-6
	PERFORM ADMINISTRATIVE DUTIES	
TASK 4099.1.10	. . . . .	6-L-7
	PERFORM PERIODIC INSPECTION OF THE DATA PROCESSING FACILITY	
TASK 4099.1.11	. . . . .	6-L-7
	PROVIDE ASSISTANCE IN PREPARATION OF FEASIBILITY STUDIES AND APPLICATION PLANS	
TASK 4099.1.12	. . . . .	6-L-8
	EXPLAIN POLICIES OF ORGANIZATION TO SUBORDINATES	
TASK 4099.1.13	. . . . .	6-L-9
	ENSURE ADHERENCE TO DATA PROCESSING PROCEDURES AND SOP'S	

MOS 4002, DATA SYSTEMS OFFICER

DUTY AREA 1 - RESOURCE MANAGEMENT/ADMINISTRATION

TASK: 4002.1.1 MANAGE THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) FOR ADP

CONDITION(S): Given appropriate references, local comptroller guidance, contracts, delivery orders, planning documents, and appropriate budget forms.

STANDARD: A budget will be implemented that will enable an ADP installation to meet its financial obligations.

PERFORMANCE STEPS:

1. Determine the sources of budget information.
2. Establish installation goals and objectives.
3. Determine administrative assistance required.
4. Prepare the budget.
5. Complete the budget.
6. Submit the budget.
7. Apply PPBS concepts to the financial management of the ADP activity.
8. Procure ADP resources utilizing economic analysis.
9. Evaluate proposed software purchases.

REFERENCE(S) :

1. MCO 7100.8, Field Budget Guidance Manual
2. MCBul 7100 Series, Field Budget Guidance
3. MCO P5233.1, Marine Corps ADP Management Standards Manual
4. MCO 5236.2, Automated Data Processing Resource Delegation Program

MCO 1510.37C

5. MCO 5231.1C, Life Cycle Management for Automated Information Systems Projects
6. Armed Forces Staff College PUB 1
7. IRM 5231 Series
8. IRM 5236 Series

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.1.2 MANAGE CONTRACTS**

CONDITION(S): Given contracting documents, local contracting officer documents, requirements for new contracts, lists of ADP resources, specific deadlines, and appropriate reference.

STANDARD: The contracts will be managed for hardware, software, and services per the reference.

PERFORMANCE STEPS:

1. Perform responsibilities of contracting officer's technical representative and project manager.
2. Supervise identification and preparation of requirements for forwarding to Purchasing and Contracting.
3. Review special clauses.
4. Review principles of fund management on contracts.
5. Evaluate contract performance.

REFERENCE(S):

1. IRM 5236-01, Contract Administration

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.1.3 ORGANIZE PERSONNEL FOR ADP OPERATIONS**

CONDITION(S): Given a mission, table of organization, manning level chart, personnel, and local established procedures.

STANDARD: The ADP personnel will be organized to support the execution of ADP requirements.

PERFORMANCE STEPS:

1. Determine the number of personnel available in the organizational structure to include staffing goals and manning levels.
2. Identify the major functional areas within the ADP organization.
3. Assign tasks to the proper functional areas within the organizational structure.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. Local established procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.1.4 ACCOUNT FOR ADP EQUIPMENT**

CONDITION(S): Given responsible officer account listings, ADP equipment, and appropriate references.

STANDARD: The ADP equipment will be managed with 100 percent accountability.

PERFORMANCE STEPS:

1. Identify ADPE accounting procedures.
2. Inventory ADP equipment.
3. Turn-in ADP equipment for disposal.
4. Report the receipt/acceptance of ADP equipment.
5. Turn-in ADPE equipment for maintenance.

MCO 1510.37C

6. Review ADP equipment utilization.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. MCO 4400 Series

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.1.5 PREPARE ABBREVIATED SYSTEMS DECISION PAPER (ASDP)**

CONDITION(S): Given a requirement for ADP equipment purchase and references.

STANDARD: An ASDP will be prepared per the references.

PERFORMANCE STEPS:

1. Identify all options/alternatives.
2. Conduct a cost comparison and economic analysis on all options/alternatives.
3. Determine maintenance costs.
4. Justify the equipment purchase.
5. Submit ASDP to appropriate approval level.
6. Order the equipment.

REFERENCE(S) :

1. MCO 5231.1C
2. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.1.6 PREPARE TELECOMMUNICATIONS SERVICE REQUEST (TSR)**

CONDITION(S): Provided requirement for telecommunication support and references.

STANDARD: A TSR will be prepared per the references.

PERFORMANCE STEPS:

1. Research references.
2. Determine information required.
3. Compile necessary information.
4. Prepare the TSR.
5. Submit for approval.

REFERENCE(S):

1. FMFM 3-30
2. NAVTELCOMINST 2880-1B
3. DCA Circulars

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.1.7 DETERMINE CRITICAL PATH FOR DEVELOPMENT SYSTEM**

CONDITION(S): Given a project assignment as a Data Systems Officer and the reference.

STANDARD: The critical path for a developing system will be determined using completion time and activity slack times per the reference.

PERFORMANCE STEPS:

1. Calculate completion time and activity slack time.
2. Identify characteristics of a project type that can be controlled using network analysis.
3. Implement steps of project network.
4. Establish objectives of critical path analysis.

5. Construct a project network.

REFERENCE(S) :

1. Management Science, L. Krajewski and H. Thompson, John Wiley and Sons, 1981 Edition

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4002.1.8 WRITE A FEASIBILITY STUDY

CONDITION(S): Given an assignment as a member of Information Systems Development Team and the reference.

STANDARD: A feasibility study will be written per the reference.

PERFORMANCE STEPS:

1. Identify location of the feasibility study in LCM process.
2. Determine technical, operational, and economic feasibility.
3. Write a purpose statement.
4. Write each section of the feasibility study.
5. Construct the study.

REFERENCE(S) :

1. MCO P5231.1, Life Cycle Management for Information Systems

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4002.1.9 SUPERVISE UNIT TRAINING

CONDITION(S): Provided the unit's annual training plan, monthly training schedules, and the reference.

STANDARD: Unit training will be supervised so that training will include data communications, BST, and individual training per the reference.

PERFORMANCE STEPS:

1. Establish training priorities.
2. Manage mission oriented training.
3. Manage skill progression training.
4. Prepare unit training plan.
5. Provide supervision at all levels during conduct of training.
6. Evaluate training.
7. Document completed training.

REFERENCE(S) :

1. MCO P1200.7, MOS Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 2 - DATA COMMUNICATIONS SYSTEMS

TASK: 4002.2.1 INSTALL A ROUTER

CONDITION(S): Given a list of incoming LAN/WAN equipment and their installation planning guides, a list of incoming software, and the layout of the effected area.

STANDARD: An implementation plan to install a router on a LAN/WAN for a given geographical area will be prepared within the time frame allotted.

PERFORMANCE STEPS:

1. From the LAN/WAN planning diagrams determine the type of router required to support the plan.
2. From the LAN/WAN planning diagrams determine the configuration for the router.

3. Determine type and number of connections.
4. Determine types and numbers of interface cards.
5. Install LAN/WAN router.
6. Configure the addressing scheme.
7. Test and implement the router.
8. Manage server to server WAN communication.
9. Manage TCP/IP addresses for your activity.
10. Configure a network for Telnet access.

REFERENCE(S):

1. Local SOP
2. Original Vendor User Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4002.2.2 CONFIGURE A HOST FOR TCP/IP

CONDITION(S): Given a server and administrative authority over a LAN/WAN.

STANDARD: The administrative and installation procedures for operating a LAN/WAN server to server communications using TCP/IP will be followed.

PERFORMANCE STEPS:

1. Install TCP\IP software.
2. Configure the addressing scheme.
3. Test and implement the router.
4. Manage server to server WAN communication.
5. Manage TCP/IP addresses for your activity.

REFERENCE(S) :

1. Local SOP
2. Original Vendor User Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4002.2.3 USE LAN/WAN NETWORK MANAGEMENT TOOLS

CONDITION(S): Given LAN/WAN network management software.

STANDARD: Network management will be performed on the operational LAN/WAN.

PERFORMANCE STEPS:

1. Establish the LAN/WAN management responsibilities.
2. Optimize LAN/WAN performance.

REFERENCE(S) :

1. Local SOP
2. Original Vendor User Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4002.2.4 INSTALL LAN/WAN

CONDITION(S): Given a list of incoming LAN/WAN equipment and their installation planning guides, a list of incoming software, and the layout of the effected area.

STANDARD: An LAN/WAN for a given geographical area will be installed within the time frame allotted.

PERFORMANCE STEPS:

1. Determine the specific boundaries for the LAN/WAN.
2. Receive/accept the LAN/WAN equipment.

3. Prepare implementation plan.
4. Install fiber optic cabling, twisted pair, coaxial, or 10baseT cabling.
5. Install data terminal equipment (DTE)
6. Install data communication equipment (DCE).
7. Install data encryption equipment (DEE).
8. Install LAN server(s).
9. Add a workstation to the LAN.
10. Install multimedia (voice, video) adapters.
11. From the LAN/WAN planning diagrams determine the type of bridge required to support the plan.
12. From the LAN/WAN planning diagrams determine the configuration for the bridge.
13. Determine type and number of connections.
14. Determine types and numbers of interface cards.
15. Install LAN/WAN bridge.
16. Configure the addressing scheme.
17. Test and implement the bridge.
18. Install or configure an intelligent communications adapter (ISC) to provide server interface.
19. Install or configure an intelligent communications adapter (ISC) to provide PC dial-in/PC dial-out capability.
20. Configure a 3270 option for a LAN.
21. Install/configure a gateway using SMTP or softswitch.

REFERENCE(S):

1. Local SOP
2. Original Vendor User Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix A to  
ENCLOSURE (6)

---

**TASK:** 4002.2.5 MANAGE LAN/WAN/EUCE

**CONDITION(S):** Given a LAN/WAN/EUCE, equipment and software, and appropriate references.

**STANDARD:** The administrative procedures for controlling, operating and managing a LAN/WAN/EUCE for a given geographical area will be followed.

**PERFORMANCE STEPS:**

1. Identify and correct problems on ethernet networks.
2. Identify and correct problems on token ring networks.
3. Monitor performance of network systems software.
4. Access the LAN administration software.
5. Administer network users.
6. Administer network services.
7. Administer network workstations.
8. Manage LAN resources.
9. Manage user profiles.
10. Correct data communication equipment (DCE) failures.
11. Analyze LAN performance.
12. Adjust LAN operating system parameters for enhanced performance.
13. Correct data terminal equipment (DTE) failures.
14. Correct LAN/WAN/EUCE problems.
15. Correct LAN administration problems.
16. Correct LAN security problems.
17. Maintain a 3270 option for a LAN.
18. Use an SMNP agent to troubleshoot a LAN/WAN/EUCE problem.
19. Maintain a gateway using SMTP or softswitch.

MCO 1510.37C

REFERENCE(S) :

1. Local SOP
2. Original Vendor User Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 3 - SOFTWARE ENGINEERING

TASK: 4002.3.1 MONITOR SOFTWARE OPERATIONAL TESTS AND EVALUATIONS

CONDITION(S): Given an assignment as a Data Systems Software Officer and the appropriate references.

STANDARD: Software operational tests and evaluations will be monitored to ensure compliance with appropriate references.

PERFORMANCE STEPS:

1. Review software design specifications.
2. Evaluate implementation proposals.
3. Select best proposal.
4. Supervise implementation.
5. Analyze results of testing.
6. Develop enhancement program.
7. Establish implementation guidelines and milestones.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U. S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.3.2 ESTABLISH SOFTWARE DEVELOPMENT STANDARD**

CONDITION(S): Given an assignment as a Data Systems Software Officer and the appropriate references.

STANDARD: Software development SOP's will be established per appropriate references.

PERFORMANCE STEPS:

1. Conduct detailed software development reviews.
2. Analyze strong points and deficiencies of programming.
3. Review development trends.
4. Document procedures for routine and unscheduled incidents.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U. S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.3.3 SUPERVISE DEVELOPMENT OF USER REQUIREMENTS**

CONDITION(S): Given an assignment as a Data Systems Software Officer and the appropriate references.

STANDARD: User information systems requirements will be developed and supervised to ensure compliance with appropriate references.

PERFORMANCE STEPS:

1. Attend software maintenance and development meetings.
2. Evaluate proposals from customers and programming.
3. Analyze specific items of additional information required.
4. Present software maintenance and development proposals.

Appendix A to  
ENCLOSURE (6)

MCO 1510.37C

5. Identify significant software specifications.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 4 - UNIX OPERATING SYSTEM

TASK: 4002.4.1 INSTALL UNIX OPERATING SYSTEM

CONDITION(S): Given system manuals, a workstation, and operating system software release media.

STANDARD: Install and configure the UNIX operating system.

PERFORMANCE STEPS:

1. Determine users system configuration requirements.
2. Boot the system using UNIX release media.
3. Configure the kernel.
4. Initialize UNIX configuration files.
5. Configure the workstation for users.
6. Verify operating environment log files.

REFERENCE(S) :

1. UNIX Reference Manual
2. Hardware and Software Manuals
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix A to  
ENCLOSURE (6)

**TASK: 4002.4.2 OPERATE A COMPUTER USING UNIX OPERATING SYSTEM**

CONDITION(S): Given a UNIX workstation with software.

STANDARD: Commands will be entered from a UNIX shell.

PERFORMANCE STEPS:

1. Conduct system start-up/shutdown.
2. Log-in to the workstation.
3. Change password.
4. Invoke on-line manual pages.
5. Edit a file using an editor.
6. Print a file.
7. Invoke input/output redirection.
8. Change file permissions.
9. Use UNIX file utilities.
10. Use UNIX communication utilities.
11. Use diagnostic utilities.
12. Log-out of the workstation.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.4.3 MANAGE USER ACCOUNTS**

CONDITION(S): Given a workstation, software, and the reference.

MCO 1510.37C

STANDARD: User accounts will be managed per the reference.

PERFORMANCE STEPS:

1. Modify (add/delete users) the password file.
2. Verify sufficient disk space exists for user.
3. Create/remove a home directory for user.
4. Change file permissions to enable/disable user file access.
5. Configure user environment variables.

REFERENCE(S):

1. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.4.4 MANAGE FILE SYSTEMS**

CONDITION(S): Given a network of UNIX workstations.

STANDARD: The file system will be managed per operating system manual.

PERFORMANCE STEPS:

1. Determine the type of UNIX operating system.
2. Format data storage media.
3. Partition data storage media.
4. Create file systems.
5. Modify file systems.
6. Mount/unmount file systems.
7. Export file systems.
8. Delete file systems.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4002.4.5 INSTALL HARDWARE

CONDITION(S): Given a UNIX workstation, peripheral devices, and device specific software.

STANDARD: Peripheral devices will be installed and configured per the references.

PERFORMANCE STEPS:

1. Install peripheral hardware.
2. Modify system environment files.

REFERENCE(S):

1. Local SOP
2. UNIX Operating System Software

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4002.4.6 INSTALL SOFTWARE

CONDITION(S): Given a UNIX workstation and software.

STANDARD: Software will be installed and configured per the references.

PERFORMANCE STEPS:

1. Install application software.

MCO 1510.37C

2. Configure presentation software for new application software.
3. Configure system resources for new application software.

REFERENCE(S) :

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.4.7 CONDUCT SYSTEM BACKUP/RECOVERY**

CONDITION(S): Given a network of UNIX workstations with peripheral devices.

STANDARD: System files will be backed up and recovered per the references.

PERFORMANCE STEPS:

1. Backup file(s), directories, and file systems.
2. Restore file(s), directories, and file systems.

REFERENCE(S) :

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.4.8 TUNE SYSTEM PERFORMANCE**

CONDITION(S): Given a network of UNIX workstations with peripheral devices.

STANDARD: System performance will be optimized per the references.

Appendix A to  
ENCLOSURE (6)

PERFORMANCE STEPS:

1. Monitor system performance.
2. Reconfigure the kernel.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.4.9 MANAGE MULTIPLE NETWORKS**

CONDITION(S): Given a network of multiple UNIX servers.

STANDARD: The network will be managed per the references.

PERFORMANCE STEPS:

1. Configure gateways and routers between networks.
2. Configure routing tables on servers.
3. Monitor inter-network load.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.4.10 WRITE SHELL SCRIPT FILES**

CONDITION(S): Given a UNIX workstation and software.

MCO 1510.37C

STANDARD: The shell script will be created and run per the references.

PERFORMANCE STEPS:

1. Create a simple shell script.
2. Save a shell script.
3. Execute a shell script.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.4.11 MANAGE SYSTEM PROCESS**

CONDITION(S): Given a UNIX workstation and software.

STANDARD: The system process will be managed per the references.

PERFORMANCE STEPS:

1. Define a system process.
2. Define the different types of processes.
3. Manage system processes.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administrative Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.4.12 MANAGE NETWORK SERVICES**

CONDITION(S): Given a network of multiple UNIX servers.

STANDARD: Network services will be managed per the references.

PERFORMANCE STEPS:

1. Define Network File System (NFS) terminology.
2. Export file hierarchies with NFS.
3. Mount file hierarchies with MFS.
4. Create NFS automounter maps.
5. Mount file hierarchies with the NFS automounter.
6. Define Network Information Service (NIS) terminology.
7. Configure an NIS domain.
8. Configure the UNIX to UNIX Copy Program (UUCP).
9. Use UUCP to copy files to/from a remote host.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.4.13 MANAGE NETWORK SECURITY**

CONDITION(S): Given a network of multiple UNIX workstations and servers, security regulations, and classification of data.

STANDARD: The network will be secured against known threats per the references.

PERFORMANCE STEPS:

1. Analyze current network security procedures.

MCO 1510.37C

2. Recommend solutions to identified vulnerabilities.
3. Implement corrections to secure network.

REFERENCE(S) :

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 5 - DATA COMMUNICATIONS PLAN FOR ANNEX K

TASK: 4002.5.1 PREPARE A DATA COMMUNICATIONS PLAN FOR AN ANNEX K

CONDITION(S): Given an assignment as a member of a general/special staff or ISMO.

STANDARD: The communications plan will be prepared for Annex K (Communications) to an operation order for an amphibious operation.

PERFORMANCE STEPS:

1. Contact the key staff and special staff officers for guidance.
2. Formulate a communications support concept for operations.
3. Locate sources of required operational information.
4. Develop data communications support plan for deployed FMF unit.
5. Prepare ADP support appendix to an operations order.
6. Plan for deployed maintenance support.
7. Plan for STU-III data operations.
8. Plan for analog/digital switching interface.

Appendix A to  
ENCLOSURE (6)

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4002.5.2 PLAN COMMUNICATIONS SUPPORT FOR A COMMAND POST

CONDITION(S): Given a list of requirements for communications support for a command post.

STANDARD: A communications support plan will be prepared.

PERFORMANCE STEPS:

1. Plan deployment of data communications system.
2. Plan redeployment of data communications system.
3. Plan a LAN in a garrison environment.
4. Plan a LAN in a tactical environment.
5. Plan a WAN in a garrison environment.
6. Plan a WAN in a tactical environment.
7. Plan a data communications system.
8. Plan a data communications system to support data transfer.
9. Plan cabling requirements for data communications.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MCO 1510.37C

**TASK: 4002.5.3 PLAN DATA COMMUNICATIONS FOR JOINT/COMBINED OPERATIONS**

CONDITION(S): Given a list of requirements for communications support for joint/combined operations.

STANDARD: A communications support plan will be prepared.

PERFORMANCE STEPS:

1. Plan inter-agency network communications link.
2. Analyze data transfer procedures utilized by other components.
3. Establish liaison with joint/combined forces data communications personnel.

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.5.4 WRITE A DATA COMMUNICATIONS SOP**

CONDITION(S): Given a data communications support plan.

STANDARD: A data communications SOP will be developed.

PERFORMANCE STEPS:

1. Determine areas of concern in ADPE maintenance, supply, personnel management, and communication support.
2. Draft data communication center emergency action plan (EAP).

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 6 - INFORMATION SECURITY

TASK: 4002.6.1 ESTABLISH INFORMATION SECURITY PROCEDURES

CONDITION(S): Given ADP hardware and software, key personnel, and security regulations.

STANDARD: Security procedures will be established to ensure maximum protection and integrity of ADP resources.

PERFORMANCE STEPS:

1. Determine the goals of ADP security.
2. Implement access controls.
3. Administer security.
4. Review risk assessment and contingency plan annually.
5. Test contingency plan.
6. Develop terminal area security plan.
7. Install anti-virus software.
8. Develop a command information security SOP.

REFERENCE(S) :

1. OPNAVINST 5239.1A, DON ADP Security Procedures
2. MCO P5510.14, Marine Corps ADP Security Manual
3. Computer Security Act of 1987
4. DOD Directive 5200.28
5. IRM 5239 Series
6. Applicable Vendor Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.6.2 PLAN DATA COMMUNICATION SECURITY**

CONDITION(S): Given a LAN/WAN manage the security according to INFOSEC guidelines.

STANDARD: The administrative procedures for protecting the transmission, integrity, and classification of data flowing through a data communication system will be followed.

PERFORMANCE STEPS:

1. Prepare microcomputer security procedures.
2. Use KG-84 for secure data communications.
3. Execute data communication security plan.
4. Correct LAN security problems.

REFERENCE(S):

1. OPNAVINST 5239.1A, DON ADP Security Procedures
2. MCO P5510.14, Marine Corps ADP Security Manual
3. Local SOP
4. Original Vendor User Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**DUTY AREA 7 - SYSTEM RESTORATION**

**TASK: 4002.7.1 PERFORM LIMITED TECHNICAL INSPECTION (LTI)**

CONDITION(S): Provided suspect items of equipment and references.

STANDARD: Equipment conditions will be inspected to determine the extent and level of maintenance required to restore it to a specified condition.

PERFORMANCE STEPS:

1. Determine requirements of the LTI.

2. Develop an LTI checklist.
3. Inspect the equipment.
4. Complete the checklist.
5. Report the results.

REFERENCE(S) :

1. MCO P4790.2B MIMMS Field Procedures Manual
2. MCO 4400.82F MIMMS Controlled Item Management Manual
3. UNIT T/E (CMR)
4. Appropriate Technical Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.7.2 USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS**

CONDITION(S): Given MIMMS/SASSY reports and forms.

STANDARD: Use MIMMS/SASSY forms and requirements per the references.

PERFORMANCE STEPS:

1. Use ERO and ERO/SL
2. Use DPR and LM2 reports

REFERENCE(S) :

1. Local SOP
2. UM 4790.\_
3. TM 4790.\_

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.7.3 PREPARE AN EQUIPMENT REPAIR ORDER (ERO)**

CONDITION(S): Given the appropriate references, equipment repair order (ERO) form, and equipment record jacket.

STANDARD: The ERO must be filled out correctly per the references.

PERFORMANCE STEPS:

1. Fill out the required sections on the equipment repair order (ERO).
2. Enter required information in the equipment record log.
3. Induct the equipment into the maintenance cycle.
4. After maintenance is complete close the ERO.
5. File the ERO in the equipment record jacket.

REFERENCE(S):

1. Local SOP
2. UM 4790.\_
3. TM 4790.\_

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.7.4 PREPARE EQUIPMENT FOR EMBARKATION**

CONDITION(S): Provided equipment, personnel, a mission, and references.

STANDARD: Equipment will be embarked per the references.

PERFORMANCE STEPS:

1. Inspect SL-3 completeness of maintenance/maintenance support equipment.
2. Determine requirements for embarkation materials, boxes, strapping, etc..
3. Inspect tactical marking of maintenance/maintenance support equipment.

4. Inspect packing and embark lists upon completion.
5. Inspect weather/water proofing of maintenance/maintenance support equipment.
6. Determine special lifting/handling requirements for maintenance/maintenance support equipment.
7. Determine special security requirements for maintenance/maintenance support equipment.

REFERENCE(S) :

1. MCO P4750.3 Painting Camouflage Pattern Painting, Registration Marking and Identification of Marine Corps Tactical Equipment
2. UNIT T/E (CMR)
3. Appropriate Unit SOP'S
4. Appropriate SL-3'S Major Components of End Items

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4002.7.5 PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION

CONDITION(S): Provided ESD sensitive devices, ESD protection materials, ESD labels, and applicable technical manuals and references.

STANDARD: Perform actions to protect ESD sensitive devices per the references.

PERFORMANCE STEPS:

1. Review references.
2. Identify materials requiring ESD protection.
3. Perform actions necessary to protect ESD sensitive materials.

REFERENCE(S) :

1. TM-9999-15/1 ESD Awareness Electrostatic Discharge

Appendix A to  
ENCLOSURE (6)

2. TM-9999-15/2 Electrostatic Discharge (ESD) Management
3. MCO 2410.2A Electromagnetic Environmental Effects (E3) Control Program
4. TI-4400-15/1 Paclagomg, Handling, Srorage and Transporataion of Electrostatic Discharge Sensitive Items
5. TM 9406-15 Grounding Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.7.6 IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS E(3) PROGRAM**

CONDITION(S): Provided mission, personnel, test equipment, and appropriate references.

STANDARD: Implement (E3) program per FMFM 3-36 Guide To Electromagnetic Interference Control, Chapter 6.

PERFORMANCE STEPS:

1. Develop design and installation techniques that cover the following areas:
  - a. Indirect coupling
  - b. Shielding
  - c. Grounding
  - d. Bonding
  - e. Filtering
  - f. Corrosion control
2. Develop maintenance standards.
3. Identify and report E3 problems to the unit E3 coordinator.

REFERENCE(S):

1. TM 9406-15 Grounding Procedures
2. FMFM 3-36 Guide To Electromagnetic Interference Control

3. TI 5820-25/22

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.7.7 DIAGNOSE MALFUNCTIONING EUCE SUITE**

CONDITION(S): Provided the Marine Corps EUCE suite, diagnostic software, and references.

STANDARD: Malfunctions of computer components will be correctly diagnosed per the references.

PERFORMANCE STEPS:

1. Use diagnostic software to identify the error.
2. Diagnose malfunctioning peripheral devices.
3. Troubleshoot software execution errors.

REFERENCE(S):

1. Operator Manuals/User Guides

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.7.8 SUPERVISE BASIC MAINTENANCE ON EUCE SUITE**

CONDITION(S): Provided the Marine Corps EUCE suite and references.

STANDARD: The EUCE component function will be supervised so that it will be restored/upgraded per the references.

PERFORMANCE STEPS:

1. Supervise the replacement of EUCE components (monitors, drives, interface cards, power supply).
2. Supervise the replacement/addition of memory chips.

MCO 1510.37C

REFERENCE(S):

1. Appropriate Operator Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 8 - DISK OPERATING SYSTEM

TASK: 4002.8.1 INSTALL STANDARD EUCE OS SOFTWARE

CONDITION(S): Provided the Marine Corps EUCE suite, standard EUCE OS software, and references.

STANDARD: The standard EUCE OS software will be set up and installed per the references.

PERFORMANCE STEPS:

1. Modify config.sys and autoexec.bat file.
2. Analyze memory usage (main, extended, expanded).
3. Execute OS utilities.
4. Use anti-virus software to remove a virus, if any.
5. Install and configure MS-DOS operating system.
6. Install and configure graphical user interface (GUI).

REFERENCE(S):

1. User Guides

ADMINISTRATIVE INSTRUCTIONS:

1. The current standard EUCE application software is Lotus Smartsuite running under the Windows GUI.

**TASK: 4002.8.2 UTILIZE PRESENTATION GRAPHICS SOFTWARE**

CONDITION(S): Given a microcomputer, presentation graphics software, and the reference.

STANDARD: A presentation graphics software package will be loaded and utilized per the reference.

PERFORMANCE STEPS:

1. Load the software into the microcomputer.
2. Create a presentation.
3. Edit a presentation.
4. Transfer data to/from other applications.
5. Print a presentation.

REFERENCE(S):

1. Applicable Presentation Graphics Software Documentation

ADMINISTRATIVE INSTRUCTIONS:

1. The current standard EUCE application software is Lotus Smartsuite running under the Windows GUI.

---

**TASK: 4002.8.3 EXECUTE MS-DOS UTILITIES**

CONDITION(S): Given a microcomputer with printer, a system diskette with MS-DOS utilities, an MS-DOS manual, a list of specifications, and the reference.

STANDARD: MS-DOS utilities will be executed to produce a solution to the problem specifications per the reference.

PERFORMANCE STEPS:

1. Review the purpose and functions of a microcomputer operating system.
2. Start up and boot the microcomputer.
3. Use the FORMAT utility to prepare a diskette for use.

4. Use the DIRECTORY command.
5. Use the DISKCOPY utility.
6. Use the COPY command.
7. Use the RENAME command.
8. Use the DELETE command.
9. Use EDLIN to write and to execute a command file that includes the CLEAR, COPY, RENAME, and DIRECTORY commands.
10. Use the TREE command.
11. Use the ATTRIB command.
12. Use the CHKDSK command.

REFERENCE(S) :

1. Heath: Microsoft MS-DOS Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4002.8.4 UTILIZE WORD PROCESSING SOFTWARE**

CONDITION(S): Given a microcomputer, word processing software, a set of specifications, and the reference.

STANDARD: A word processing software package will be loaded and utilized per the specific software's command syntax requirements per the reference.

PERFORMANCE STEPS:

1. Load the software into the microcomputer.
2. Create a document.
3. Format/reformat the document.
4. Edit the document.
5. Spell check the document.
6. Print the document.

7. Convert a document to ASCII format.

REFERENCE(S) :

1. Applicable Word Processing Software Documentation

ADMINISTRATIVE INSTRUCTIONS:

1. The current standard EUCE application software is Lotus Smartsuite running under the Windows Graphical User Interface (GUI).
- 

**TASK: 4002.8.5 UTILIZE SPREADSHEET SOFTWARE PACKAGE**

CONDITION(S): Given a microcomputer, spreadsheet software, a list of specifications, and the reference.

STANDARD: A spreadsheet software package will be loaded and utilized per the specific software's command syntax requirements, within 3 1/2 hours, per the reference.

PERFORMANCE STEPS:

1. Load the software into the microcomputer.
2. Create a spreadsheet.
3. Perform data entry.
4. Devise cell relationships and mathematical expressions.
5. Perform recalculations.
6. Print and graph the spreadsheet.

REFERENCE(S) :

1. Applicable Spreadsheet Software Documentation

ADMINISTRATIVE INSTRUCTIONS:

1. The current standard EUCE application software is Lotus Smartsuite running under the Windows Graphical User Interface (GUI).

**TASK: 4002.8.6 UTILIZE MICROCOMPUTER DATA BASE SOFTWARE**

CONDITION(S): Given a microcomputer, data base software, a list of specifications, and the reference.

STANDARD: A data base software package will be loaded and utilized per the specific software's command syntax requirements per the reference.

PERFORMANCE STEPS:

1. Load the software into the microcomputer.
2. Name the data base.
3. Create records.
4. Modify the data base.

REFERENCE(S):

1. Applicable Microcomputer Data Base Software Documentation

ADMINISTRATIVE INSTRUCTIONS:

1. The current standard EUCE application software is Lotus Smartsuite running under the Windows Graphical User Interface (GUI).
-

MOS 4010, DATA SYSTEMS SOFTWARE OFFICER

DUTY AREA 1 - RESOURCE MANAGEMENT/ADMINISTRATION

TASK: 4010.1.1 MANAGE THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) FOR ADP

CONDITION(S): Given appropriate references, local comptroller guidance, contracts, delivery orders, planning documents, and appropriate budget forms.

STANDARD: Implement a budget that will enable an ADP installation to its meet its financial obligations.

PERFORMANCE STEPS:

1. Determine the sources of budget information.
2. Establish installation goals and objectives.
3. Determine administrative assistance required.
4. Prepare the budget.
5. Complete the budget.
6. Submit the budget.
7. Apply PPBS concepts to the financial management of the ADP activity.
8. Procure ADP resources utilizing economic analysis.
9. Evaluate proposed software purchases.

REFERENCE(S) :

1. MCO 7100.8, Field Budget Guidance Manual
2. MCBul 7100 Series, Field Budget Guidance
3. MCO P5233.1, Marine Corps ADP Management Standards Manual
4. MCO 5236.2, Automated Data Processing Resource Delegation Program

MCO 1510.37C

5. MCO 5231.1C, Life Cycle Management for Automated Information Systems Projects
6. Armed Forces Staff College PUB 1
7. IRM 5231 Series
8. IRM 5236 Series

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.1.2 MANAGE CONTRACTS**

CONDITION(S): Given contracting documents, local contracting officer documents, requirements for new contracts, lists of ADP resources, specific deadlines, and appropriate references.

STANDARD: The contracts will be managed for hardware, software, and services per appropriate references.

PERFORMANCE STEPS:

1. Perform responsibilities of contracting officer's technical representative and project manager.
2. Supervise identification and preparation of requirements for forwarding to Purchasing and Contracting.
3. Review special clauses.
4. Review principles of fund management on contracts.
5. Evaluate contract performance.

REFERENCE(S):

1. IRM 5236-01, Contract Administration

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.1.3 ORGANIZE PERSONNEL FOR ADP OPERATIONS**

CONDITION(S): Given a mission, table of organization, manning level chart, personnel, and local established procedures.

STANDARD: The ADP personnel will be organized to support the execution of ADP requirements.

PERFORMANCE STEPS:

1. Determine the number of personnel available in the organizational structure to include staffing goals and manning levels.
2. Identify the major functional areas within the ADP organization.
3. Assign tasks to the proper functional areas within the organizational structure.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. Local established procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.1.4 ACCOUNT FOR ADP EQUIPMENT**

CONDITION(S): Given responsible officer account listings, ADP equipment, and appropriate references.

STANDARD: The ADP equipment will be managed with 100 percent accountability.

PERFORMANCE STEPS:

1. Identify ADPE accounting procedures.
2. Inventory ADP equipment.
3. Turn-in ADP equipment for disposal.
4. Report the receipt/acceptance of ADP equipment.
5. Turn-in ADPE equipment for maintenance.

MCO 1510.37C

6. Review ADP equipment utilization.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. MCO 4400 Series

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.1.5 PREPARE ABBREVIATED SYSTEMS DECISION PAPER (ASDP)

CONDITION(S): Given a requirement for ADP equipment purchase and references.

STANDARD: Prepare an ASDP per the references.

PERFORMANCE STEPS:

1. Identify all options/alternatives.
2. Conduct a cost comparison and economic analysis on all options/alternatives.
3. Determine maintenance costs.
4. Justify the equipment purchase.
5. Submit ASDP to appropriate approval level.
6. Order the equipment.

REFERENCE(S):

1. MCO 5231.1C
2. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.1.6 PREPARE TELECOMMUNICATIONS SERVICE REQUEST (TSR)**

CONDITION(S): Provided requirement for telecommunication support and references.

STANDARD: A TSR will be prepared per the references.

PERFORMANCE STEPS:

1. Research references.
2. Determine information required.
3. Compile necessary information.
4. Prepare the TSR.
5. Submit for approval.

REFERENCE(S):

1. FMFM 3-30
2. NAVTELCOMINST 2880-1B
3. DCA Circulars

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**DUTY AREA 2 - DATA COMMUNICATIONS SYSTEMS**

**TASK: 4010.2.1 INSTALL A ROUTER**

CONDITION(S): Given a list of incoming LAN/WAN equipment and their installation planning guides, a list of incoming software, and the layout of the effected area.

STANDARD: An implementation plan to install a router on a LAN/WAN for a given geographical area will be prepared within the time frame allotted.

PERFORMANCE STEPS:

1. From the LAN/WAN planning diagrams determine the type of router required to support the plan.

2. From the LAN/WAN planning diagrams determine the configuration for the router.
3. Determine type and number of connections.
4. Determine types and numbers of interface cards.
5. Install LAN/WAN router.
6. Configure the addressing scheme.
7. Test and implement the router.
8. Manage server to server WAN communication.
9. Manage TCP/IP addresses for your activity.
10. Configure a network for Telnet access.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK:** 4010.2.2 CONFIGURE A HOST FOR TCP/IP

**CONDITION(S):** Given a server and administrative authority over a LAN/WAN.

**STANDARD:** The administrative and installation procedures for operating a LAN/WAN server to server communications using TCP/IP will be followed.

**PERFORMANCE STEPS:**

1. Install TCP\IP software.
2. Configure the addressing scheme.
3. Test and implement the router.
4. Manage server to server WAN communication.
5. Manage TCP/IP addresses for your activity.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.2.3 USE LAN/WAN NETWORK MANAGEMENT TOOLS

CONDITION(S): Given LAN/WAN network management software.

STANDARD: Network management will be performed on the operational LAN/WAN.

PERFORMANCE STEPS:

1. Establish the LAN/WAN management responsibilities.
2. Optimize LAN/WAN performance.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.2.4 INSTALL LAN/WAN

CONDITION(S): Given a list of incoming LAN/WAN equipment and their installation planning guides, a list of incoming software, and the layout of the effected area.

STANDARD: Install a LAN/WAN for a given geographical area will be prepared within the time frame allotted.

PERFORMANCE STEPS:

1. Determine the specific boundaries for the LAN/WAN.
2. Receive/accept the LAN/WAN equipment.
3. Prepare implementation plan.
4. Install fiber optic cabling, twisted pair, coaxial, or 10baseT cabling.

5. Install data terminal equipment (DTE)
6. Install data communication equipment (DCE).
7. Install data encryption equipment (DEE).
8. Install LAN server(s).
9. Add a workstation to the LAN.
10. Install multimedia (voice, video) adapters.
11. From the LAN/WAN planning diagrams determine the type of bridge required to support the plan.
12. From the LAN/WAN planning diagrams determine the configuration for the bridge.
13. Determine type and number of connections.
14. Determine types and numbers of interface cards.
15. Install LAN/WAN bridge.
16. Configure the addressing scheme.
17. Test and implement the bridge.
18. Install or configure an intelligent communications adapter (ISC) to provide server interface.
19. Install or configure an intelligent communications adapter (ISC) to provide PC dial-in/PC dial-out capability.
20. Configure a 3270 option for a LAN.
21. Install/Configure a gateway using SMTP or softswitch.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.2.5 MANAGE LAN/WAN/EUCE

CONDITION(S): Given a LAN/WAN manage the maintenance of equipment and software.

STANDARD: The administrative procedures for controlling, operating and managing a LAN/WAN for a given geographical will be followed.

PERFORMANCE STEPS:

1. Identify and correct problems on ethernet networks.
2. Identify and correct problems on token ring networks.
3. Monitor performance of network systems software.
4. Access the LAN administration software.
5. Administer network users.
6. Administer network services.
7. Administer network workstations.
8. Manage LAN resources.
9. Manage user profiles.
10. Correct data communication equipment (DCE) failures.
11. Analyze LAN performance.
12. Adjust LAN operating system parameters for enhanced performance.
13. Correct data terminal equipment (DTE) failures.
14. Correct LAN/WAN problems.
15. Correct LAN administration problems.
16. Correct LAN security problems.
17. Maintain a 3270 option for a LAN.
18. Use an SMNP agent to troubleshoot a LAN/WAN problem.
19. Maintain a gateway using SMTP or softswitch.

MCO 1510.37C

REFERENCE(S):

1. Local SOP
2. Original Vendor User Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 3 - PROGRAMMING RESOURCES

TASK: 4010.3.1 USE TSO TO DEVELOP OR MAINTAIN SYSTEM SOFTWARE

CONDITION(S): Given a terminal, proper accessor ID and access, software, and the reference.

STANDARD: TSO will be used to locate, access, and execute JCL and/or clists per the reference.

PERFORMANCE STEPS:

1. Perform ALLOCATE.
2. Perform EDIT.
3. Perform SAVE.
4. Perform SUBMIT.
5. Perform COPY.
6. Perform INPUT.
7. Perform UPDATE.
8. Perform MOVE.
9. Perform DELETE.

REFERENCE(S):

1. CA-TSO Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.2 WRITE JCL PROCEDURE**

CONDITION(S): Given an operating system, a system specification, a terminal, and appropriate references.

STANDARD: A JCL procedure will be written utilizing IEBGENER per appropriate references.

PERFORMANCE STEPS:

1. Draw a descriptive system flowchart.
2. Code a syntactically correct JCL in-stream procedure.
3. Execute JCL in-stream procedure.
4. Solve IEBGENER problems presented in the system specification.
5. Execute program IEBGENER statements.
6. Execute IEBGENER control statements.

REFERENCE(S):

1. OS/VS2 MVS JCL (GC28-0692)
2. IBM OS/VS Message Library: VS2 System Codes (GC38-1008)
3. ADR/ROSCOE Terminal User Guide (SR20-20-20)
4. IBM OS/VS COBOL Compiler & Library Programmer's Guide (SC28-6483)
5. MCO P5233.1, Marine Corps ADP Management Standards Manual
6. OS/VS MVS Utilities (GC26-3902)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.3 CODE APPLICATIONS PROCEDURE**

CONDITION(S): Given a system specification, an operating system, a terminal, and appropriate references.

STANDARD: A syntactically correct applications procedure will be coded that solves the problem presented in the system specification contained per appropriate references, within 1 hour.

PERFORMANCE STEPS:

1. Code a syntactically correct and complete JCL job stream.
2. Execute JCL procedure.

REFERENCE(S):

1. OS/VS2 MVS JCL (GC28-0692)
2. IBM OS/VS Message Library: VS2 System Codes (GC38-1008)
3. IBM OS/VS COBOL Compiler & Library Programmer's Guide (SC28-6483)
4. IBM Introducing ... The Computer (SH20-1724)
5. OS/VS MVS Utilities (GC26-3902)
6. MCO P5233.1, Marine Corps ADP Management Standards Manual
7. CA-SORT, Reference Guide

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.4 DRAW A STRUCTURED FLOWCHART**

CONDITION(S): Given appropriate references, templates, and paper.

STANDARD: A structured flowchart will be produced that logically solves the problem presented in the program specification, within 2 hours, per appropriate references.

PERFORMANCE STEPS:

1. Determine sequence logic structure.
2. Determine decision logic structure.
3. Determine read logic structure.
4. Determine loop-control logic structure.

5. Draw flowchart.

REFERENCE(S) :

1. IBM VS COBOL for OS/VS (GC26-3857)
2. IBM, Improved Programming Technologies (GC20-1850)
3. IBM, An Introduction to Structured Programming in COBOL (GC20-1776)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.5 CODE APPLICATION PROGRAM**

CONDITION(S): Given program specifications, a COBOL compiler, a terminal, and appropriate references.

STANDARD: A structured COBOL program will be designed and written that logically solves the problem presented in the program specification, within 14 hours, per appropriate references.

PERFORMANCE STEPS:

1. Flowchart the program.
2. Code the program with correct syntactical commands.
3. Execute the program.
4. Explain the flow and process of the successful program.

REFERENCE(S) :

1. IBM VS COBOL for OS/VS (GC26-3857)
2. OS/VS2 MVS JCL (GC28-0692)
3. IBM OS/VS Message Library: VS2 System Codes (GC38-1008)
4. ADR/ROSCOE Terminal User Guide (SR20-20-20)
5. IBM OS/VS COBOL Compiler & Library Programmer's Guide (SC28-6483)
6. MCO P5233.1, Marine Corps ADP Management Standards Manual

7. IBM, Improved Programming Technologies (GC20-1850)
8. IBM, An Introduction to Structured Programming in COBOL (GC20-1776)
9. ANSI/MIL-STD-1815A-1983, Ada Programming Language Reference Manual

ADMINISTRATIVE INSTRUCTIONS:

1. All COBOL coding must be syntactically correct per appropriate references.

---

**TASK: 4010.3.6 EXECUTE EXISTING APPLICATIONS PROGRAM**

CONDITION(S): Given a problem program request, a program listing, a terminal, an operating system, a standard compile-link-and-go catalog procedure, and appropriate references.

STANDARD: An existing applications program will be executed without errors, within three runs, per appropriate references. Input/output file names must be identified within 1 hour.

PERFORMANCE STEPS:

1. Identify the correct input/output file names.
2. Execute the cataloged procedure.
3. Provide JCL overrides.

REFERENCE(S):

1. IBM VS COBOL for OS/VS (GC26-3857)
2. OS/VS2 MVS JCL (GC28-0692)
3. IBM OS/VS Message Library: VS2 System Codes (GC38-1008)
4. ADR/ROSCOE Terminal User Guide (SR20-20-20)
5. IBM OS/VS COBOL Compiler & Library Programmer's Guide (SC28-6483)
6. OS/VS MVS Utilities (GC26-3902)
7. MCO P5233.1, Marine Corps ADP Management Standards Manual

8. ANSI/MIL-STD-1815A-1983, Ada Programming Language Reference Manual

ADMINISTRATIVE INSTRUCTIONS:

1. All JCL coding must be syntactically correct as per appropriate references.

---

TASK: 4010.3.7 CODE JCL PROCEDURE USING SORT UTILITY

CONDITION(S): Given an operating system, a system specification, a terminal, and appropriate references.

STANDARD: A JCL in-stream procedure using sort utility will be coded to solve the machine-sort problem presented in the system specification as per appropriate references, within 2 hours.

PERFORMANCE STEPS:

1. Code in-stream procedure.
2. Execute in-stream procedure.
3. Execute Program SORT statement.
4. Implement Sort CONTROL statements.

REFERENCE(S):

1. OS/VS2 MVS JCL (GC28-0692)
2. IBM OS/VS Message Library: VS2 System Codes (GC38-1008)
3. ADR/ROSCOE Terminal User Guide (SR20-20-20)
4. IBM OS/VS COBOL Compiler & Library Programmer's Guide (SC28-6483)
5. MCO P5233.1, Marine Corps ADP Management Standards Manual
6. CA-SORT, Reference Guide (Release 6.3)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.8 CODE APPLICATION PROGRAM USING ARITHMETIC VERBS AND EDITING TECHNIQUES**

CONDITION(S): Given a COBOL compiler, a terminal, a problem specification, and appropriate references.

STANDARD: A structured application program will be coded that logically solves the problem presented in the program specification within 21 hours, per appropriate references.

PERFORMANCE STEPS:

1. Flowchart the program.
2. Code the program using arithmetic statements.
3. Edit the program.
4. Execute the program.

REFERENCE(S):

1. IBM VS COBOL for OS/VS (GC26-3857)
2. OS/VS2 MVS JCL (GC28-0692)
3. IBM OS/VS Message Library: VS2 System Codes (GC38-1008)
4. IBM OS/VS COBOL Compiler & Library Programmer's Guide (SC28-6483)
5. MCO P5233.1, Marine Corps ADP Management Standards Manual
6. IBM, Improved Programming Technologies (GC20-1850)
7. IBM, An Introduction to Structured Programming in COBOL (GC20-1776)
8. ANSI/MIL-STD-1815A-1983, Ada Programming Language Reference Manual

ADMINISTRATIVE INSTRUCTIONS:

1. All COBOL coding must be syntactically correct.

**TASK: 4010.3.9 ESTABLISH PROCEDURES FOR ADP PRODUCTION SOFTWARE SUPPORT**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

STANDARD: ADP production software support procedures will be established per appropriate references.

PERFORMANCE STEPS:

1. Ensure establishment of production quality assurance program.
2. Review performance of production software.
3. Publish SOP's and recall rosters in support of production software.
4. Ensure required changes are made.
5. Initiate immediate and long term support actions.
6. Develop implementation plans.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.10 AUDIT SOFTWARE CONFIGURATION MANAGEMENT PROGRAM**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

STANDARD: The software configuration management program will be audited to ensure compliance with appropriate references.

PERFORMANCE STEPS:

1. Determine ADP software requirements.
2. Analyze needs of users.

MCO 1510.37C

3. Maintain controlled distribution of software products.
4. Establish accurate configuration summaries.
5. Ensure compliance with current configuration.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.11 ESTABLISH SOFTWARE TRAINING PROGRAM**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

STANDARD: A software training program will be established per appropriate references.

PERFORMANCE STEPS:

1. Evaluate qualifications of programmers.
2. Determine training requirements.
3. Evaluate training sources.
4. Conduct training cost analyses.
5. Schedule personnel for training.
6. Develop local training program/OJT.
7. Request quotas to Computer Sciences School.
8. Publish program SOP.
9. Update as necessary.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.12 MONITOR SOFTWARE SECURITY PROCEDURES**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

STANDARD: Software security procedures will be monitored to ensure compliance with appropriate references.

PERFORMANCE STEPS:

1. Monitor software security program.
2. Establish security SOP's.
3. Audit application of security controls, codes, and passwords.
4. Determine security vulnerabilities.
5. Implement data input review and edit procedures.
6. Review physical security procedures.
7. Analyze unauthorized accesses or access attempts.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.13 ORGANIZE SOFTWARE DEVELOPMENT TEAMS**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

MCO 1510.37C

STANDARD: Software development teams will be organized per appropriate references.

PERFORMANCE STEPS:

1. Analyze abilities of programmers.
2. Evaluate workload and schedules.
3. Establish software development priorities.
4. Select personnel for specific responsibilities.
5. Review progress.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.14 MONITOR PERFORMANCE OF NETWORK SYSTEMS SOFTWARE**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

STANDARD: Network systems software performance will be monitored to ensure compliance with appropriate references.

PERFORMANCE STEPS:

1. Analyze efficiency of the network.
2. Validate change and upgrade requirements.
3. Ensure preparation of SOP's.
4. Evaluate results of diagnostic software.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.15 MAINTAIN PROGRAMMING LIBRARIES**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

STANDARD: Programming libraries will be maintained in compliance with appropriate references.

PERFORMANCE STEPS:

1. Determine production library requirements.
2. Determine test library requirements.
3. Establish library standards.
4. Analyze software integration proposals.
5. Establish programming standards for use of libraries.
6. Supervise library configuration management.
7. Audit contents and use of libraries.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.3.16 MANAGE ANNUAL SOFTWARE SUPPORT REVIEW PROGRAM**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

MCO 1510.37C

STANDARD: An annual software support review program will be established and managed per appropriate references.

PERFORMANCE STEPS:

1. Compile software support inventories.
2. Monitor preparation of support summaries.
3. Conduct review of current and proposed programs.
4. Coordinate meetings with program sponsors/users.
5. Monitor modification and deletion of selected programs.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 4 - SUPPORT OF DATA BASE MANAGEMENT SYSTEMS

TASK: 4010.4.1 USE A HIGH-LEVEL PROGRAMMING LANGUAGE

CONDITION(S): Given an assignment as a member of a DBA Team and appropriate references.

STANDARD: High-Level programming language will be used by retrieving, modifying, and saving a Natural program at 100 percent proficiency per appropriate references.

PERFORMANCE STEPS:

1. Review components of Natural language architecture.
2. Log on to the Natural programming facility.
3. Use Natural mode for creating a program.
4. List a DDM on the terminal screen.

5. List the names of the programs saved on a Natural applications library.
6. Retrieve a program from a Natural applications library.
7. Modify the program.
8. Use the COMPILE CHECK command to check the syntax of a Natural program.
9. Use the Natural HELP command to access the program.
10. Review the components of the Natural language security system.
11. Save the program.

## REFERENCE(S):

1. Natural 2 Reference Manual (NAT-210-022)
2. Natural 2 Programmer's Guide (NAT-210-020)
3. Natural Release Notes (Installation Tape)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.4.2 ACCESS ADABAS DATA BASE FILE**

CONDITION(S): Given an assignment as a member of a DBA Team and appropriate references.

STANDARD: An ADABAS data base file will be accessed by constructing a syntactically correct Natural program and demonstrating use of the program at 100 percent proficiency per appropriate references.

## PERFORMANCE STEPS:

1. Code the Natural program to access and retrieve data using the FIND statement.
2. Code the Natural language to display selected data retrieved from a ADABAS data base file using the DISPLAY statement.
3. Enter commands to print a report using BATCHCSS.

4. Code a Natural program to extract using the HISTOGRAM statement.
5. Code a Natural program to sequentially access and retrieve data using the READ statement.
6. Code a Natural program to select records using the WHERE clause.
7. Identify the various utilities used to maintain ADABAS.
8. Describe the various ADAREP reports used in support of ADABAS.

REFERENCE(S) :

1. Natural 2 Reference Manual (NAT-210-022)
2. Natural 2 Programmer's Guide (NAT-210-020)
3. Natural Release Notes (Installation Tape)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.4.3 DESIGN NATURAL RETRIEVAL PROGRAM**

CONDITION(S): Given a Natural compiler, a terminal, a list of specifications, and appropriate references.

STANDARD: A Natural retrieval program will be designed and executed per the Natural language syntax within 1 hour.

PERFORMANCE STEPS:

1. Code a Natural program using the FORMAT statement to set the output line size.
2. Code a Natural program using the WRITE TITLE statement.
3. Code a Natural program using the DISPLAY statement to customize the output report.
4. Code and execute a Natural program using the NEWPAGE statement to control report paging.
5. Code and execute a Natural program using the WRITE TRAILER statement to produce end-of-page detail information.

6. Use the attribute definition parameters to customize the output report.
7. Use the Natural Standard System Functions in the output report.

REFERENCE(S) :

1. Natural 2 Reference Manual (NAT-210-022)
2. Natural 2 Programmer's Guide (NAT-210-020)
3. Natural Release Notes (Installation Tape)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.4.4 DESIGN NATURAL RETRIEVAL PROGRAM USING NATURAL LOOP LOGIC

CONDITION(S): Given a Natural compiler, a terminal, a list of specifications, and appropriate references.

STANDARD: A Natural program will be designed and executed with 100 percent accuracy using decision logic outlined per appropriate references.

PERFORMANCE STEPS:

1. Code and execute using IF statement.
2. Code and execute using DO ... DOEND clause.
3. Code and execute using RESET statement.
4. Code and execute using CLOSE LOOP statement.

REFERENCE(S) :

1. Natural 2 Reference Manual (NAT-210-022)
2. Natural 2 Programmer's Guide (NAT-210-020)
3. Natural Release Notes (Installation Tape)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

**TASK: 4010.4.5 DESIGN AN INTERACTIVE PROGRAM UTILIZING THE NATURAL PROGRAMMING LANGUAGE**

CONDITION(S): Given a Natural compiler, a terminal, a list of specifications, and appropriate references.

STANDARD: An interactive Natural program will be designed and executed with 100 percent accuracy to generate custom input screens per appropriate references.

PERFORMANCE STEPS:

1. Code and execute using the MAP statement.
2. Code and execute using the MAP utility.
3. Code and execute using the REINPUT statement.

REFERENCE(S):

1. Natural 2 Reference Manual (NAT-210-022)
2. Natural 2 Programmer's Guide (NAT-210-020)
3. Natural Release Notes (Installation Tape)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.4.6 DESIGN A NATURAL UPDATE PROGRAM**

CONDITION(S): Given a Natural compiler, a terminal, a list of specifications, and appropriate references.

STANDARD: A Natural update program will be designed and executed per appropriate references.

PERFORMANCE STEPS:

1. Code and execute a Natural program using the END TRANSACTION statement.
2. Code and execute a Natural program using the UPDATE statement.

3. Code and execute a Natural program using the STORE statement.
4. Code and execute a Natural program using the DELETE statement.
5. Code and execute a Natural program using the FETCH statement.
6. Code and execute a Natural program using the STOP statement.

REFERENCE(S) :

1. Natural 2 Reference Manual (NAT-210-022)
2. MCO P5233.1, Marine Corps ADP Management Standards Manual
3. Natural 2 Programmer's Guide (NAT-210-020)
4. Natural Release Notes (Installation Tape)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.4.7 DEFINE COMPONENTS, CAPABILITIES, AND LIMITATIONS OF NATURAL**

CONDITION(S): Given an assignment as a member of DBA Team and appropriate references.

STANDARD: The components, capabilities and limitations of Natural will be defined per appropriate references to personnel requiring training.

PERFORMANCE STEPS:

1. Identify components of the Natural system.
2. Explain the structure of the Natural environment.
3. Explain the Natural Buffer Pool.
4. Describe a Natural Batch Module.
5. Describe a Natural Parameter Module.
6. Explain Natural administration using utilities such as SYSDA, INPL, SYSDDM, SYSTAT, AND SYSMAIN.

MCO 1510.37C

7. Explain the Data Dictionary.

REFERENCE(S) :

1. Natural 2 Reference Manual (NAT-210-022)
2. Natural 2 Programmer's Guide (NAT-210-020)
3. Natural Release Notes (Installation Tape)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 5 - END USER COMPUTING EQUIPMENT

TASK: 4010.5.1 EXECUTE DATABASE SOFTWARE ON FMF-EUCE

CONDITION(S): Given a suite of operational FMF-EUCE, user system diskettes, and problem specifications.

STANDARD: The DATABASE software will be executed on FMF-EUCE.

PERFORMANCE STEPS:

1. Load the DATABASE program.
2. Initialize the DATABASE data base.
3. Update the file description.
4. Add records to the DATABASE data base.
5. Update existing records on the DATABASE data base.
6. Delete existing records from the DATABASE data base.
7. Sort the DATABASE data base into a specified sequence.
8. Select certain records from the DATABASE data base.
9. Update the print description.
10. Print a report containing the selected records.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.2 PREPARE FMF-EUCE FOR USE**

CONDITION(S): Given a suite of operational computer equipment in their packing cases, the site of installation, and an adequate power supply.

STANDARD: FMF-EUCE will be prepared for use in the FMF.

PERFORMANCE STEPS:

1. Unpack components.
2. Label and identify each operational computer equipment component.
3. Install signal cables.
4. Install power cables.
5. Identify power requirements for each component.
6. Apply power to each component.
7. Check the following operational computer equipment components for proper operation:
  - a. Display/Processor Unit
  - b. Keyboard Unit
  - c. Matrix Printer
  - d. Magnetic Tape Unit
  - e. Paper Tape Unit
  - f. CD-ROM unit
  - g. Laser Printer
8. Remove power from each component.
9. Repack each component, if necessary.

MCO 1510.37C

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.3 EXECUTE A FILE TRANSFER**

CONDITION(S): Given a suite of minicomputers and microcomputers, all cables, software, modems, and the reference.

STANDARD: A file transfer will be executed per the reference.

PERFORMANCE STEPS:

1. Review functions of the file transfer.
2. Review limitations of the file transfer.
3. Text edit the file.
4. Perform asynchronous communication.
5. Execute the file transfer.

REFERENCE(S):

1. MEF Comm Asynchronous Communications Automated Support System Terminal Operator Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.4 CONFIGURE DISPLAY PROCESSOR AND SUPPORTING PERIPHERALS**

CONDITION(S): Given a suite of operational FMF-EUCE computer equipment, an initial program load (IPL) diskette, a NON-IPL diskette, cut paper forms, and margin-punched paper forms.

STANDARD: The display processor will be configured by loading the diskettes into the Display/Processor Unit (DPU) and by loading cut-paper forms and margin-punched paper forms into the Matrix Printer.

Appendix B to  
ENCLOSURE (6)

PERFORMANCE STEPS:

1. Load the diskettes into the processor.
2. Load paper into the printer.
3. Set the switches on DPU.
4. Configure display on terminal screen of DPU by adjusting knobs.
5. Unload diskettes from the DPU, as required.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.5 PERFORM OPERATOR MAINTENANCE ON FMF-EUCE**

CONDITION(S): Given a suite of operational FMF-EUCE computer equipment.

STANDARD: Operator maintenance will be performed on the operational computer equipment.

PERFORMANCE STEPS:

1. Assign responsibility for performing maintenance.
2. Establish the operator maintenance responsibilities.
3. Perform cleaning procedure on the DPU and Dust Separator Air Filters.
4. Ensure the proper handling of diskettes.
5. Ensure use of proper short-term, diskette-storage techniques.
6. Ensure use of proper long-term, diskette-storage techniques.
7. Replace printer ribbon cartridge.
8. Record maintenance performed.

MCO 1510.37C

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.6 UTILIZE WORD PROCESSING SOFTWARE**

CONDITION(S): Given a microcomputer, word processing software, a set of specifications, and the reference.

STANDARD: A word processing software package will be loaded and utilized per the specific software's command syntax requirements per the reference.

PERFORMANCE STEPS:

1. Load the software into the microcomputer.
2. Create a document.
3. Format/Reformat the document.
4. Edit the document.
5. Spell check the document.
6. Print the document.
7. Convert a document to ASCII format.

REFERENCE(S):

1. Applicable Word Processing Software Documentation

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.7 UTILIZE SPREADSHEET SOFTWARE PACKAGE**

CONDITION(S): Given a microcomputer, spreadsheet software, a list of specifications, and the reference.

STANDARD: A spreadsheet software package will be loaded and utilized per the specific software's command syntax requirements, within 3 1/2 hours, per the reference.

PERFORMANCE STEPS:

1. Load the software into the microcomputer.
2. Create a spreadsheet.
3. Perform data entry.
4. Devise cell relationships and mathematical expressions.
5. Perform recalculations.
6. Print and graph the spreadsheet.

REFERENCE(S):

1. Applicable Spreadsheet Software Documentation

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.5.8 UTILIZE MICROCOMPUTER DATA BASE SOFTWARE

CONDITION(S): Given a microcomputer, data base software, a list of specifications, and the reference.

STANDARD: A data base software package will be loaded and utilized per the specific software's command syntax requirements per the reference.

PERFORMANCE STEPS:

1. Load the software into the microcomputer.
2. Name the data base.
3. Create records.
4. Modify the data base.

REFERENCE(S):

1. Applicable Microcomputer Data Base Software Documentation

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.9 EXECUTE MS-DOS UTILITIES**

CONDITION(S): Given a microcomputer with printer, a system diskette with MS-DOS utilities, an MS-DOS manual, a list of specifications, and the reference.

STANDARD: MS-DOS utilities will be executed to produce a solution to the problem specifications per the reference.

PERFORMANCE STEPS:

1. Review the purpose and functions of a microcomputer operating system.
2. Start up and boot the microcomputer.
3. Use the FORMAT utility to prepare a diskette for use.
4. Use the DIRECTORY command.
5. Use the DISKCOPY utility.
6. Use the COPY command.
7. Use the RENAME command.
8. Use the DELETE command.
9. Use EDLIN to write and to execute a command file that includes the CLEAR, COPY, RENAME, and DIRECTORY commands.
10. Use the TREE command.
11. Use the ATTRIB command.
12. Use the CHKDSK command.

REFERENCE(S):

1. Heath: Microsoft MS-DOS Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.10 DIAGNOSE MALFUNCTIONING EUCE SUITE**

CONDITION(S): Provided the Marine Corps EUCE suite, diagnostic software, and references.

STANDARD: Malfunctions of computer components will be correctly diagnosed per the references.

PERFORMANCE STEPS:

1. Use diagnostic software to identify the error.
2. Diagnose malfunctioning peripheral devices.
3. Troubleshoot software execution errors.

REFERENCE(S):

1. Operator Manuals/User Guides

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.11 DEVELOP COUNTERMEASURES TO MINIMIZE MICROCOMPUTER SECURITY THREATS**

CONDITION(S): Given a microcomputer site, vulnerability assessment, and a list of specifications.

STANDARD: Countermeasures will be developed which can be implemented to reduce microcomputer security threats.

PERFORMANCE STEPS:

1. Determine ways in which the microcomputer represents a threat.
2. Determine the security limitations of a microcomputer.
3. Determine types of threats applicable.
4. Establish primary goal.
5. Assign responsibility for the security of information.
6. Ensure hardware and software inventory control.
7. Determine types of physical access control that can be used to improve physical access security.

8. Control access to executable software.
9. Ensure that current versions of key data files are backed up.
10. Review methods of providing TEMPEST (compromising emanations security).
11. Ensure the accreditation process is completed before a system is authorized for use in classified processing.
12. Implement a countermeasure for management control of diskettes containing classified material.
13. Properly destroy classified material contained on diskettes, as necessary.
14. Setup periodic security evaluations.
15. Publish security plan.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.5.12 UTILIZE IBM 3278 TYPE TERMINAL EMULATION PACKAGE**

CONDITION(S): Given a microcomputer/minicomputer, terminal emulation board, terminal emulation software, a modem, communications line, and appropriate references.

STANDARD: An IBM 3278-type terminal emulation package will be utilized per appropriate references.

PERFORMANCE STEPS:

1. Install the interface board.
2. Install the terminal emulation software.
3. Enter the terminal emulation session.
4. Exit the terminal emulation session.

REFERENCE(S):

1. CXI User's Guide, Third Edition, CXI, Inc., Palo Alto, CA., 1986
2. CXI File Transfer, Second Edition, CXI Inc., 1986

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.5.13 INSTALL STANDARD EUCE OS SOFTWARE

CONDITION(S): Provided the Marine Corps EUCE suite, standard EUCE OS software, and references.

STANDARD: The standard EUCE OS software will be set up and installed per the references.

PERFORMANCE STEPS:

1. Modify config.sys and autoexec.bat file.
2. Analyze memory usage (main, extended, expanded).
3. Execute OS utilities.
4. Use anti-virus software to remove a virus, if any.
5. Install and configure MS-DOS operating system.
6. Install and configure graphical user interface (GUI).

REFERENCE(S):

1. User Guides

ADMINISTRATIVE INSTRUCTIONS:

1. The current standard EUCE application software is Lotus Smartsuite running under the Windows GUI.
-

**TASK: 4010.5.14 UTILIZE PRESENTATION GRAPHICS SOFTWARE**

CONDITION(S): Given a microcomputer, presentation graphics software, and the reference.

STANDARD: A presentation graphics software package will be loaded and utilized per the reference.

PERFORMANCE STEPS:

1. Load the software into the microcomputer.
2. Create a presentation.
3. Edit a presentation.
4. Transfer data to/from other applications.
5. Print a presentation.

REFERENCE(S):

1. Applicable Presentation Graphics Software Documentation

ADMINISTRATIVE INSTRUCTIONS:

1. The current standard EUCE application software is Lotus Smartsuite running under the Windows GUI.

---

**DUTY AREA 6 - ADP SOFTWARE PROJECTS**

**TASK: 4010.6.1 DEVELOP A REQUIREMENTS STATEMENT**

CONDITION(S): Given an assignment as a member of an IS development team and appropriate references.

STANDARD: A requirements statement will be developed per appropriate references.

PERFORMANCE STEPS:

1. Determine the IS requirement.
2. Review components of an IS.

3. Review functions of an IS.
4. Define requirements of an IS.
5. Describe user of an IS.
6. Categorize user of an IS.
7. Determine requirements for a new information system.
8. Detect a user IS requirement.
9. Validate or correct the IS requirement.

REFERENCE(S) :

1. MCO P5231.1, Life Cycle Management for Information Systems
2. IRM-5231-20, Information Resources Management Requirements Statement

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.6.2 CREATE MISSION NEED STATEMENT (MNS)**

CONDITION(S): Given an assignment as a member of an IS development team and the reference.

STANDARD: An MNS will be created per the reference.

PERFORMANCE STEPS:

1. Review the purpose of an MNS.
2. Determine approval factors.
3. Develop each section of an MNS.
4. Create the MNS.

REFERENCE(S) :

1. MCO P5231.1, Life Cycle Management for Information Systems

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.6.3 CONSTRUCT FUNCTIONAL REQUIREMENTS DEFINITION (FRD)**

CONDITION(S): Given an assignment as a member of an IS development team and appropriate references.

STANDARD: An FRD will be constructed per appropriate references.

PERFORMANCE STEPS:

1. Review the purpose of the FRD.
2. Design the FRD.
3. Review what a leveled set of an FRD graphically represents.
4. Record current physical system.
5. Differentiate between a logical model and a physical model.
6. Construct the FRD.

REFERENCE(S) :

1. MCO P5231.1, Life Cycle Management for Information Systems
2. IRM-5231-04, Functional Requirements Definition
3. The Practice of Structured Analysis, by Robert Keller, Yourdon Press, New York, NY, 1983
4. Managing the System Life Cycle, By Edward Yourdon, published by Yourdon Press, New York, 1982

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.6.4 WRITE A FEASIBILITY STUDY**

CONDITION(S): Given an assignment as a member of an IS development team and the reference.

STANDARD: A feasibility study will be written per the reference.

PERFORMANCE STEPS:

1. Identify location of the feasibility study in LCM process.
2. Determine technical, operational, and economic feasibility.
3. Write a purpose statement.
4. Write each section of the feasibility study.
5. Construct the study.

REFERENCE(S):

1. MCO P5231.1, Life Cycle Management for Information Systems

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.6.5 CONDUCT WALK THROUGH**

CONDITION(S): Given an assignment as a member of an IS development team and appropriate references.

STANDARD: A structured walk through will be conducted using SDM per appropriate references.

PERFORMANCE STEPS:

1. Determine the purpose of a structured walk through.
2. Identify members of the walk through.
3. Determine scope of the walk through.
4. Establish occasions for the walk through.
5. Designate responsibilities of the walk through members.

6. Conduct the walk through.
7. Note discrepancies.
8. Debrief appropriate authority.
9. Followup on corrective action.

REFERENCE(S):

1. Improved Programming Technologies - an Overview, IBM (GC20-1850)
2. Team Programming in the Small Technical Company, 1977 SIGCPR Conference Proceedings, pages 132 through 143
3. Perspective by R. B. Forest, INFOSYSTEMS, November 1977
4. The Formal Technical Review Process in Structural Programming, Data Pro Research Corporation, February 1978
5. Structured Walk through, Second Edition, Edward Yourdan

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.6.6 DETERMINE COSTS AND BENEFITS UTILIZING ECONOMIC ANALYSIS**

CONDITION(S): Given an assignment as a member of an IS development team and appropriate references.

STANDARD: The costs and benefits will be determined using the present value concept per appropriate references.

PERFORMANCE STEPS:

1. Identify where the economic analysis occurs.
2. Perform steps in economic analysis.
3. Locate sources of assistance.
4. Extract cost, by type, from the analysis information.
5. Apply present value technique to the quantifiable cost.
6. Determine cost.

REFERENCE(S) :

1. Office, Assistant Secretary of Defense (ASD) (Comptroller), Resource Management Monograph, Economic Analysis, May 1971
2. NAVDAC Pub 15/7000, Economic Analysis Procedures for ADP, by D. C. Zimmerman, March 1980 Edition
3. MCO P5231.1, Life Cycle Management for Information Systems

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.6.7 DETERMINE CRITICAL PATH FOR DEVELOPMENT SYSTEM

CONDITION(S): Given an assignment as a member of an IS development team and the reference.

STANDARD: The critical path for a developing system will be determined using completion time and activity slack times per the reference.

PERFORMANCE STEPS:

1. Calculate completion time and activity slack time.
2. Identify characteristics of a project type that can be controlled using network analysis.
3. Implement steps of project network.
4. Establish objectives of critical path analysis.
5. Construct a project network.

REFERENCE(S) :

1. Management Science, by L. Krajewski and H. Thompson, John Wiley and Sons, 1981 Edition, pages 264 through 278

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MCO 1510.37C

**TASK: 4010.6.8 SUPERVISE DEVELOPMENT OF USER REQUIREMENTS**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

STANDARD: ADP user requirements will be developed and supervised to ensure compliance with appropriate references.

PERFORMANCE STEPS:

1. Attend software maintenance and development meetings.
2. Evaluate proposals from customers and programming personnel.
3. Analyze specific items of additional information required.
4. Present software maintenance and development proposals.
5. Identify significant software specifications.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.6.9 ESTABLISH SOFTWARE DEVELOPMENT STANDARD OPERATING PROCEDURES (SOP'S)**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

STANDARD: Software development SOP's will be established per appropriate references.

PERFORMANCE STEPS:

1. Conduct detailed software development reviews.
2. Analyze strong points and deficiencies of programming section.
3. Review development trends.

Appendix B to  
ENCLOSURE (6)

4. Document procedures for routine and unscheduled incidents.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.6.10 MONITOR SOFTWARE OPERATIONAL TESTS AND EVALUATIONS**

CONDITION(S): Given an assignment as a data systems software officer and appropriate references.

STANDARD: Software operational tests and evaluations will be monitored to ensure compliance with appropriate references.

PERFORMANCE STEPS:

1. Review software design specifications.
2. Evaluate implementation proposals.
3. Select best proposal.
4. Supervise implementation.
5. Analyze results of testing.
6. Develop enhancement program.
7. Establish implementation guidelines and milestones.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

**TASK: 4010.6.11 CONDUCT CUSTOMER LIAISON**

**CONDITION(S):** Given an assignment as a data systems software officer and appropriate references.

**STANDARD:** Customer liaison will be conducted to ensure the quality of ADP software support provided is in compliance with SOP's and appropriate references.

**PERFORMANCE STEPS:**

1. Determine ADP software support requirements.
2. Review customer support plans and SOP's.
3. Analyze software maintenance and development capabilities.
4. Conduct on-site visits to customer locations.
5. Provide advance notice to customers on changes to support capabilities.
6. Coordinate changes to support requirements.
7. Develop alternate software support plans as required.
8. Maintain customer recall and point of contact rosters.

**REFERENCE(S):**

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

**ADMINISTRATIVE INSTRUCTIONS: (NONE)**

---

DUTY AREA 7 - SOFTWARE ENGINEERING PRINCIPLES

TASK: 4010.7.1 CONSTRUCT CONTEXT DIAGRAM

CONDITION(S): Given an assignment as a member of an IS development team and the reference.

STANDARD: A context diagram and event list will be constructed utilizing design techniques under SDM per the reference.

PERFORMANCE STEPS:

1. Review the elements of a context diagram.
2. Review the elements of a structured chart.
3. Construct a context diagram.
4. Correct the logical and technical errors.
5. Apply the elements of structured design to context diagram.

REFERENCE(S):

1. Structured Design, E. Yourdon and L. Constantine, Yourdon, Incorporated, 1979

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.7.2 CONSTRUCT DATA FLOW DIAGRAM (DFD)

CONDITION(S): Given an assignment as a member of an IS development team and the reference.

STANDARD: A preliminary data flow diagram and structure chart will be constructed utilizing design techniques under SDM for Marine Corps Systems Development Methodology per the reference.

PERFORMANCE STEPS:

1. Identify the elements of the DFD.
2. Identify external events.

MCO 1510.37C

3. Develop the process description.
4. Apply external event(s) to the DFD.
5. Construct the DFD and structure chart.

REFERENCE(S):

1. Structured Design, E. Yourdon and L. Constantine, Yourdon, Incorporated, 1979

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.7.3 CONSTRUCT A DATA DICTIONARY**

CONDITION(S): Given an assignment as a member of an IS development team and appropriate references.

STANDARD: A data dictionary will be constructed modeling the information flow through a system and to define the data flows, stores, processes, and relationships per appropriate references.

PERFORMANCE STEPS:

1. Review standard symbols used in data dictionaries.
2. Identify correct data dictionary entries.
3. Identify correct elements based on element specifications.
4. Write data dictionary entries.

REFERENCE(S):

1. System Development Methodology, Volume III
2. Systems Development Without Pain, by Paul T. Ward, published by Yourdon Press, New York, 1984
3. Essential Systems Analysis, by S. and Palmer J. McMenamin, published by Yourdon Press, New York, 1984
4. Structured Analysis and System Specification, by Tom DeMarco, published by Yourdon Press, New York, 1979

5. Structured Design, E. Yourdon and L. Constantine, Yourdon, Incorporated, 1979

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.7.4 DEVELOP AN IS USING SDM**

CONDITION(S): Given an assignment as a member of an IS development team and appropriate references.

STANDARD: An IS will be developed using SDM per appropriate references.

PERFORMANCE STEPS:

1. Select modeling tools.
2. Build the model.
3. Develop processes.
4. Develop data stores using modeling.
5. Develop program organization using modeling.
6. Implement DATAMANAGER to manage the development of the IS.

REFERENCE(S) :

1. Systems Development Without Pain, by Paul T. Ward, published by Yourdon Press, New York, 1984
2. Managing the System Life Cycle, by Edward Yourdon, published by Yourdon Press, New York, 1982
3. Software Engineering A Practitioner's Approach, by Roger S. Pressman, published by McGraw Hill, St. Louis, 1987
4. The Practical Guide to Structured Systems Design, by Meiler Page-Jones, published by Yourdon Press, New York, 1980
5. Fundamental Concepts of Information Modeling, by Matt Flavin, published by Yourdon Press, New York, 1981
6. Systems Development Methodology, Volumes II and III

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 8 - DATA COMMUNICATIONS SYSTEMS

TASK: 4010.8.1 PREPARE A DATA COMMUNICATIONS PLAN FOR AN ANNEX K

CONDITION(S): Given an assignment as a member of a general/special staff or ISMO.

STANDARD: The communications plan will be prepared for Annex K (Communications) to an operation order for an amphibious operation.

PERFORMANCE STEPS:

1. Contact the key staff and special staff officers for guidance.
2. Formulate a communications support concept for operations.
3. Locate sources of required operational information.
4. Develop data communications support plan for deployed FMF unit.
5. Prepare ADP support appendix to an operations order.
6. Plan for deployed maintenance support.
7. Plan for STU-III data operations.
8. Plan for analog/digital switching interface.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.8.2 PLAN COMMUNICATIONS SUPPORT FOR A COMMAND POST**

CONDITION(S): Given a list of requirements for communications support for a command post.

STANDARD: A communications support plan will be prepared.

PERFORMANCE STEPS:

1. Plan deployment of data communications system.
2. Plan redeployment of data communications system.
3. Plan a LAN in a garrison environment.
4. Plan a LAN in a tactical environment.
5. Plan a WAN in a garrison environment.
6. Plan a WAN in a tactical environment.
7. Plan a data communications system.
8. Plan a data communications system to support data transfer.
9. Plan cabling requirements for data communications.

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.8.3 PLAN DATA COMMUNICATIONS FOR JOINT/COMBINED OPERATIONS**

CONDITION(S): Given a list of requirements for communications support for joint/combined operations.

STANDARD: A communications support plan will be prepared.

PERFORMANCE STEPS:

1. Plan inter-agency network communications link.
2. Analyze data transfer procedures utilized by other components.

MCO 1510.37C

3. Establish liaison with joint/combined forces data communications personnel.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.8.4 WRITE A DATA COMMUNICATIONS SOP

CONDITION(S): Given a data communications support plan.

STANDARD: A data communications SOP will be developed.

PERFORMANCE STEPS:

1. Determine areas of concern in ADPE maintenance, supply, personnel management, and communication support.
2. Draft data communication center emergency action plan (EAP).

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 9 - SYSTEM RESTORATION

TASK: 4010.9.1 PERFORM LIMITED TECHNICAL INSPECTION (LTI)

CONDITION(S): Provided suspect items of equipment and references.

STANDARD: Inspect equipment conditions to determine the extent and level of maintenance required to restore it to a specified condition.

PERFORMANCE STEPS:

1. Determine requirements of the LTI.
2. Develop an LTI checklist.
3. Inspect the equipment.
4. Complete the checklist.
5. Report the results.

REFERENCE(S):

1. MCO P4790.2B, MIMMS Field Procedures Manual
2. MCO 4400.82F, MIMMS Controlled Item Management Manual
3. UNIT T/E (CMR)
4. Appropriate Technical Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.9.2 USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS

CONDITION(S): Given MIMMS/SASSY reports and forms.

STANDARD: MIMMS/SASSY forms and requirements will be used per references.

PERFORMANCE STEPS:

1. Use ERO and ERO/SL
2. Use DPR and LM2 reports

REFERENCE(S):

1. Local SOP
2. UM 4790.\_
3. TM 4790.\_

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK:** 4010.9.3 PREPARE AN EQUIPMENT REPAIR ORDER (ERO)

**CONDITION(S):** Given the appropriate references, equipment repair order (ERO) form, and equipment record jacket.

**STANDARD:** The ERO must be filled out correctly.

PERFORMANCE STEPS:

1. Fill out the required sections on the equipment repair order (ERO).
2. Enter required information in the equipment record log.
3. Induct the equipment into the maintenance cycle.
4. After maintenance is complete close the ERO.
5. File the ERO in the equipment record jacket.

REFERENCE(S):

1. Local SOP
2. UM 4790.\_
3. TM 4790.\_

ADMINISTRATIVE INSTRUCTIONS: (NONE)

**TASK: 4010.9.4 PROVIDE TECHNICAL ASSISTANCE DURING THE  
INSTALLATION OF COMMUNICATION-ELECTRONIC EQUIPMENT**

CONDITION(S): Provided an operational plan and appropriate equipment.

STANDARD: Ensure communications-electronic equipment is installed and functioning as specified per the applicable equipment TM.

PERFORMANCE STEPS:

1. Verify power source.
2. Verify antenna installation.
3. Verify remote capabilities.
4. Verify equipment operation.
5. Verify equipment operating procedures when required.
6. Provide guidance to correct any discrepancies noted during the performance of above steps.

REFERENCE(S):

1. Appropriate Technical Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.9.5 PREPARE EQUIPMENT FOR EMBARKATION**

CONDITION(S): Provided equipment, personnel, a mission, and references.

STANDARD: Embark equipment per the references.

PERFORMANCE STEPS:

1. Inspect SL-3 completeness of maintenance/maintenance support equipment.
2. Determine requirements for embarkation materials, boxes, strapping, etc..

3. Inspect tactical marking of maintenance/maintenance support equipment.
4. Inspect packing and embark lists upon completion.
5. Inspect weather/water proofing of maintenance/maintenance support equipment.
6. Determine special lifting/handling requirements for maintenance/maintenance support equipment.
7. Determine special security requirements for maintenance/maintenance support equipment.

REFERENCE(S) :

1. MCO P4750.3, Painting Camouflage Pattern Painting, Registration Marking and Identification of Marine Corps Tactical Equipment
2. UNIT T/E (CMR)
3. Appropriate Unit SOP'S
4. Appropriate SL-3'S Major Components of End Items

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.9.6 PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION**

CONDITION(S): Provided ESD sensitive devices, ESD protection materials, ESD labels, and applicable technical manuals and references.

STANDARD: Perform actions to protect ESD sensitive devices per the references.

PERFORMANCE STEPS:

1. Review references.
2. Identify materials requiring ESD protection.
3. Perform actions necessary to protect ESD sensitive materials.

REFERENCE(S):

1. TM-9999-15/1, ESD Awareness Electro-Static Discharge
2. TM-9999-15/2, Electro-Static Discharge (ESD) Management
3. MCO 2410.2A, Electromagnetic Environmental Effects (E3) Control Program
4. TI-4400-15/1, Packaging, Handling, Storage and Transportation of Electrostatic Discharge Sensitive Items
5. TM 9406-15, Grounding Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.9.7 IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS E(3) PROGRAM

CONDITION(S): Provided mission, personnel, test equipment, and appropriate references.

STANDARD: Implement (E3) program per FMFM 3-36 Guide to Electromagnetic Interference Control, Chapter 6.

PERFORMANCE STEPS:

1. Develop design and installation techniques that cover the following areas:
  - a. Indirect coupling
  - b. Shielding
  - c. Grounding
  - d. Bonding
  - e. Filtering
  - f. Corrosion control
2. Develop maintenance standards.
3. Identify and report E3 problems to the unit E3 coordinator.

REFERENCE(S) :

1. TM 9406-15, Grounding Procedures
2. FMFM 3-36, Guide to Electromagnetic Interference Control
3. TI 5820-25/22

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.9.8 CONDUCT SKILL PROGRESSION TRAINING FOR ADP PERSONNEL

CONDITION(S): Provided commander's guidance, unit training SOP, unit training schedule, assigned training topic, personnel to receive training, appropriate technical manuals, a training site, and references.

STANDARD: Conduct operator, technical and supervisor training for all maintenance and equipment related MOS's within the unit per the unit training plan.

PERFORMANCE STEPS:

1. Review unit training plan.
2. Gather reference materials.
3. Study reference materials.
4. Develop training outline.
  - a. Determine tasks to be trained.
  - b. Determine sequence of tasks.
  - c. Determine time/space constraints.
  - d. Determine requirements/availability of assistants.
  - e. Determine resources required.
5. Rehearse presentation.
6. Prepare training site.
7. Evaluate Marines' performance to ensure learning.
8. Record and report training completed.

REFERENCE(S):

1. FMFM 0-1, Unit Training Management Guide
2. FMFM 0-1A, How to Conduct Training
3. FM 24-20, Tactical Wire and Cable Techniques
4. Appropriate Technical/Military Publications
5. TM 9999-15/2, Electro-Static Discharge (ESD) Management
6. Unit Training Plan

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 10 - INFORMATION SECURITY

TASK: 4010.10.1 ESTABLISH ADP SECURITY MEASURES

CONDITION(S): Given ADP hardware and software, Security Methods and procedures, and problematic situations.

STANDARD: ADP security measures will be established per applicable directives.

PERFORMANCE STEPS:

1. Determine the purpose of ADP Security Plan for the activity.
2. Determine the goals of ADP security.
3. Produce documentation during the activity accreditation, as applicable.
4. Provide access control to ADP system.
5. Develop an access matrix for the ADP system.
6. Supervise maintenance of an uninterruptible power supply.
7. Provide structured design to the ADP security area.

8. Maintain the administration of the ADP Security Program.

REFERENCE(S) :

1. OPNAVINST 5239.1A, DON ADP Security Procedures
2. MCO P5510.14, Marine Corps ADP Security Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.10.2 DEVELOP A RISK ASSESSMENT**

CONDITION(S): Given an itemized asset list, specification of facilities, and problematic situations.

STANDARD: A risk assessment will be developed which is most cost effective in terms of its return on investment.

PERFORMANCE STEPS:

1. Determine significance of accreditation by the designated approving authority.
2. Determine the purpose of risk assessment.
3. Review the risk analysis process.
4. Determine categories of monetary or operational impact.
5. Evaluate the asset, as applicable.
6. Evaluate the situation.
7. Prepare annual loss expectancy input documentation.
8. Prepare additional countermeasures input documentation.
9. Implement the countermeasures plan based on budget and guidelines of higher authority.

MCO 1510.37C

REFERENCE(S) :

1. OPNAVINST 5239.1A, DON ADP Security Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.10.3 DEVELOP CONTINGENCY PLAN

CONDITION(S): Given mission support requirements and problematic situation.

STANDARD: A contingency plan will be developed per applicable directives.

PERFORMANCE STEPS:

1. Determine purpose of contingency plan and its phases.
2. Establish phases of contingency plan.
3. Determine situations covered by a contingency plan.
4. Prioritizing the problematic situations.
5. Establish hot- and cold-site backups.
6. Review the alternate-site concept.
7. Test/Evaluate the contingency plan.
8. Determine the need for inclusion of emergency destruction steps.
9. Publish plan.

REFERENCE(S) :

1. OPNAVINST 3850.4, Protection of DON Personnel and Resources
2. OPNAVINST 5239.1A, DON ADP Security Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 11 - UNIX SYSTEM ADMINISTRATION

TASK: 4010.11.1 INSTALL UNIX OPERATING SYSTEM

CONDITION(S): Given system manuals, a workstation, and operating system software release media.

STANDARD: The UNIX operating system will be installed and configured per the references.

PERFORMANCE STEPS:

1. Determine users system configuration requirements.
2. Boot the system using UNIX release media.
3. Configure the kernel.
4. Initialize UNIX configuration files.
5. Configure the workstation for users.
6. Verify operating environment log files.

REFERENCE(S):

1. UNIX Reference Manual
2. Hardware and Software Manuals
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.11.2 OPERATE A COMPUTER USING UNIX OPERATING SYSTEM

CONDITION(S): Given an UNIX workstation with software.

STANDARD: The UNIX operating system will be operated so that commands from an UNIX shell will be entered.

PERFORMANCE STEPS:

1. Conduct system start-up/shutdown.

MCO 1510.37C

2. Log-in to the workstation.
3. Change password.
4. Invoke on-line manual pages.
5. Edit a file using an editor.
6. Print a file.
7. Invoke input/output redirection.
8. Change file permissions.
9. Use UNIX file utilities.
10. Use UNIX communication utilities.
11. Use diagnostic utilities.
12. Log-out of the workstation.

REFERENCE(S) :

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.11.3 MANAGE USER ACCOUNTS**

CONDITION(S): Given a workstation, software, and the reference.

STANDARD: User accounts will be managed per the reference.

PERFORMANCE STEPS:

1. Modify (add/delete users) the password file.
2. Verify sufficient disk space exists for user.
3. Create/Remove a home directory for user.
4. Change file permissions to enable/disable user file access.
5. Configure user environment variables.

REFERENCE(S) :

1. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4010.11.4 MANAGE FILE SYSTEMS

CONDITION(S): Given a network of UNIX workstations.

STANDARD: The file system will be managed according to the operating system manual.

PERFORMANCE STEPS:

1. Determine the type of UNIX operating system.
2. Format data storage media.
3. Partition data storage media.
4. Create file systems.
5. Modify file systems.
6. Mount/Unmount file systems.
7. Export file systems.
8. Delete file systems.

REFERENCE(S) :

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MCO 1510.37C

**TASK: 4010.11.5 INSTALL HARDWARE**

CONDITION(S): Given a UNIX workstation, peripheral devices, and device specific software.

STANDARD: Peripheral devices will be installed and configured per the references.

PERFORMANCE STEPS:

1. Install peripheral hardware.
2. Modify system environment files.

REFERENCE(S):

1. Local SOP
2. UNIX Operating System Software

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.11.6 INSTALL SOFTWARE**

CONDITION(S): Given a UNIX workstation and software.

STANDARD: Software will be installed and configured per the references.

PERFORMANCE STEPS:

1. Install application software.
2. Configure presentation software for new application software.
3. Configure system resources for new application software.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.11.7 CONDUCT SYSTEM BACKUP/RECOVERY**

CONDITION(S): Given a network of UNIX workstations with peripheral devices.

STANDARD: System files will be backedup and recovered per the references.

PERFORMANCE STEPS:

1. Backup file(s), directories, and file systems.
2. Restore file(s), directories, and file systems.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.11.8 TUNE SYSTEM PERFORMANCE**

CONDITION(S): Given a network of UNIX workstations with peripheral devices.

STANDARD: System performance will be optimized per the references.

PERFORMANCE STEPS:

1. Monitor system performance.
2. Reconfigure the kernel.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MCO 1510.37C

**TASK: 4010.11.9 MANAGE MULTIPLE NETWORKS**

CONDITION(S): Given a network of multiple UNIX servers.

STANDARD: The network will be managed per the references.

PERFORMANCE STEPS:

1. Configure gateways and routers between networks.
2. Configure routing tables on servers.
3. Monitor inter-network load.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.11.10 WRITE SHELL SCRIPT FILES**

CONDITION(S): Given a UNIX workstation and software.

STANDARD: The shell script will be created and run per the references.

PERFORMANCE STEPS:

1. Create a simple shell script.
2. Save a shell script.
3. Execute a shell script.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

**TASK: 4010.11.11 MANAGE SYSTEM PROCESS**

CONDITION(S): Given a UNIX workstation and software.

STANDARD: The system process will be managed per the references.

PERFORMANCE STEPS:

1. Define a system process.
2. Define the different types of processes.
3. Manage system processes.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administrative Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.11.12 MANAGE NETWORK SERVICES**

CONDITION(S): Given a network of multiple UNIX servers.

STANDARD: Network services will be managed per the references.

PERFORMANCE STEPS:

1. Define Network File System (NFS) terminology.
2. Export file hierarchies with NFS.
3. Mount file hierarchies with MFS.
4. Create NFS automounter maps.
5. Mount file hierarchies with the NFS automounter.
6. Define Network Information Service (NIS) terminology.
7. Configure a NIS domain.

MCO 1510.37C

8. Configure the UNIX to UNIX Copy Program (UUCP).
9. Use UUCP to copy files to/from a remote host.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4010.11.13 MANAGE NETWORK SECURITY**

CONDITION(S): Given a network of multiple UNIX workstations and servers, security regulations, and classification of data.

STANDARD: The network will be secured against known threats per the references.

PERFORMANCE STEPS:

1. Analyze current network security procedures.
2. Recommend solutions to identified vulnerabilities.
3. Implement corrections to secure network.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MOS 4025, NETWORK CONTROL SPECIALIST

DUTY AREA 1 - TELEPROCESSING HARDWARE

TASK: 4025.1.1 INSTALL TELEPROCESSING PERIPHERAL DEVICES

CONDITION(S): Given the following items: vendor's component description manuals, modems, emulation cards, telephone wire, COMTEN Front-End Processor (FEP), terminals, screwdrivers, wire strippers, diagnostic equipment, operators manual, local SOP, and the reference.

STANDARD: Peripheral devices will be installed within 30 minutes and tested so that applications are accessed per appropriate references.

PERFORMANCE STEPS:

1. Ensure that an acceptable environment exists; i.e., power, temperature, humidity, and space.
2. Ensure that when installing devices, it is coordinated with software personnel to ensure that the device(s) are included in the scheduled COMTEN generation.
3. Review the vendor supplied component description manuals.
4. String cable/phone lines.
5. Strap/Configure the modems.
6. Test the circuit to ensure that information can be transmitted and/or received.
7. Strap or configure controller or terminal.
8. Initiate the circuit to ensure that the system is operating efficiently.

REFERENCE(S):

1. MCO P5230.14, Marine Corps Data Network (MCDN) Management and Control Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance Steps must be performed sequentially.
- 

**TASK: 4025.1.2 CORRECT TELEPROCESSING SYSTEM FAILURES**

CONDITION(S): Given the following items: telephone communication, CRT (3270 Display Application User Manuals, vendor supplied components description manuals), pencil and paper, data link analyzer, proper tools, screwdriver, wire strippers, access to COMTEN Front-End Processor (FEP), list of teleprocessing system failures, local SOP, and appropriate references.

STANDARD: Within 30 minutes, the cause of teleprocessing system failures must be identified and the corrective action taken must be explained to the supervisor verbally or by written correspondence per appropriate references.

PERFORMANCE STEPS:

1. Locate the failure.
2. Determine and explain if the failure is in the hardware, software, or local area network, as applicable.
3. If hardware failure, list action taken to correct the failure.
4. If failure is beyond maintenance capability, or it is determined that the problem is a software malfunction, refer the situation to another agency.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. MCO P5230.14, Marine Corps Data Network (MCDN) Management and Control Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
-

**TASK: 4025.1.3 OPERATE TELEPROCESSING CONSOLES**

CONDITION(S): Given the following items: software package operators guides, access to all systems consoles, list of required results, local SOP, and the reference.

STANDARD: An appropriate teleprocessing console will be operated so that the desired results are obtained within 15 minutes and verified by the evaluator.

PERFORMANCE STEPS:

1. Determine what results are desired.
2. Select the software package to affect that action.
3. Research reference library for appropriate command.
4. Enter appropriate commands and operations on appropriate console or LAN Systems console/master node device.
5. Interpret the results of the command with the aid of reference.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

**TASK: 4025.1.4 OPERATE DIAGNOSTIC MODEM NETWORKS**

CONDITION(S): Given the following items: pencil and paper, modem documentation, modem, storage for statistics, installation requirements, and the reference.

STANDARD: Diagnostic modem networks will be operated so as to meet installation requirements and identify problems immediately.

PERFORMANCE STEPS:

1. Research diagnostic modem documentation.
2. Compile statistics.

MCO 1510.37C

3. Recognize error condition.

REFERENCE(S):

1. RS 232 Interface Description

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

**TASK: 4025.1.5 MAINTAIN DIAGNOSTIC MODEM NETWORKS**

CONDITION(S): Given the following items: pencil and paper, diagnostic modem, documentation on the modem, network configuration addresses, vendors contact sheet, Problem Referral Sheet, Problem Determination Guide, and the reference.

STANDARD: Maintain Diagnostic Modem Networks to fully isolate problems within 15 minutes and document during each step.

PERFORMANCE STEPS:

1. Research line, modem, and terminal diagnostic addresses.
2. Determine what diagnostics to perform.
3. Perform diagnostics on master modem, if necessary.
4. Perform diagnostics on line, if necessary.
5. Perform diagnostics on the slave or secondary modem, if necessary.
6. Perform diagnostics on the terminal, if necessary.
7. Analyze results of test.
8. Determine the problem area.
9. Repair or bypass problem or refer to maintenance activity.
10. Document problem.

REFERENCE(S) :

1. RS 232 Interface Description

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

---

TASK: 4025.1.6 DESIGN DIAGNOSTIC MODEM NETWORKS

CONDITION(S): Given the following items: telephone service request or work order, current COMTEN and system generation, paper and pencil, statistical analysis package, user's request, network monitoring system, hardware documentation, on-line application, installation standards, and appropriate references.

STANDARD: Design a diagnostic modem network that is compatible with existing equipment and is operationally functional to meet the requirements of the local installation.

PERFORMANCE STEPS:

1. Receive approved on-line application request.
2. Compile statistics.
3. Determine response time and throughput of the network.
4. Research documentation on required hardware.
5. Determine user circuits and locations.
6. Assign the terminal to a circuit.
7. Assign diagnostics modem addresses.
8. Assign controller and terminal addresses.
9. Perform evaluation test.
10. Document the design.
11. Place order for necessary equipment.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

Appendix C to  
ENCLOSURE (6)

2. MCO P5230.14, Marine Corps Data Network (MCDN) Management and Control Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

---

**TASK: 4025.1.7 MONITOR NETWORK PERFORMANCE**

CONDITION(S): Given the following items: paper and pencil, terminal, statistical analysis package, log book, network monitoring equipment, measurement and monitoring devices documentation, telephone, telephone directory, trouble reports form, COMTEN and system generation, OS Console, COMTEN Console, access to on-line application, vehicle, local SOP, and the reference.

STANDARD: Network performance will be monitored to ensure identification of poor performing segments of the network and report that performance to the teleprocessing officer.

PERFORMANCE STEPS:

1. Research network configuration.
2. Research measurement/monitoring devices documentation.
3. Monitor the following devices:
  - a. Hardware/Software Statistics
  - b. Operator Console
  - c. Indicator Lights
  - d. User/Network Feedback
  - e. LAN performance
4. Refer teleprocessing system failure to troubleshooting team.
5. Document gathered statistics.
6. Use statistical analysis package.
7. Analyze network statistics.

8. Document daily network performance.
9. Refer poor network performance to teleprocessing officer.

REFERENCE(S) :

1. MCO P5230.14, Marine Corps Data Network (MCDN) Management and Control Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

---

**TASK: 4025.1.8 PERFORM FIRST LEVEL CORRECTIVE ACTIONS INVOLVING TELEPROCESSING SOFTWARE**

CONDITION(S): Given the following items: teleprocessing system generation, paper and pencil, monitoring devices, local SOP, access to pertinent applications, telephone, trouble report form, hardware test equipment, hardware/software trace instructions, applications users manual, and the reference.

STANDARD: First level corrective actions involving teleprocessing software will be successfully performed so that routine software problems are resolved within 15 minutes and major problems are referred to the problem change coordinator.

PERFORMANCE STEPS:

1. Recognize that a software problem exists.
2. Research documentation of teleprocessing software products of local SOP.
3. Perform initial corrective action.
4. Document the problem with a Trouble Report Form.
5. Refer all uncorrectable problems to problem change coordinator.

REFERENCE(S) :

1. Errors and Codes Manual

MCO 1510.37C

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
-

MOS 4034, COMPUTER OPERATOR

DUTY AREA 1 - OPERATING SYSTEMS

TASK: 4034.1.1 OPERATE MASTER CONSOLE

CONDITION(S): Given the following items; master console, main frame, peripheral equipment appropriate to program run, operations manual, local SOP, applicable vendor manuals, and appropriate references.

STANDARD: MVS and JES2 commands will be entered with 90 percent accuracy and to determine the correct operator response with 100 percent accuracy per appropriate references.

PERFORMANCE STEPS:

1. Manipulate the keyboard to provide input.
2. Respond to computer system command.
3. Respond to computer system query.
4. Respond to computer system message.

REFERENCE(S):

1. XA MVS System Commands
2. JES2 Commands
3. Systems Messages and Codes Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4034.1.2 OPERATE COMPUTER CONSOLE

CONDITION(S): Given the following items: computer console, main frame, peripheral equipment appropriate to program run, operations manual, local SOP, applicable vendor manuals, and appropriate references.

MCO 1510.37C

STANDARD: JES2 commands will be entered to control and determine the status of I/O devices with 90 percent accuracy.

PERFORMANCE STEPS:

1. Manipulate the keyboard to provide input.
2. Respond to computer system command.
3. Respond to computer system query.
4. Respond to computer system message.

REFERENCE(S):

1. MVS/XA MVS System Commands
2. JES2 Commands
3. Systems Messages and Codes Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4034.1.3 OPERATE TAPE DRIVE**

CONDITION(S): Given the following items: tape drive, local SOP, job or system request, tape, and the reference.

STANDARD: The tape drive will be readied and operated within 10 minutes of receipt of request 100 percent of the time and within 3 minutes of receipt of request 75 percent of the time. Systems malfunctions must be corrected.

PERFORMANCE STEPS:

1. Access tape from appropriate area.
2. Execute system request for mounting tape.
3. Monitor tape drive.
4. Dismount tape.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4034.1.4 OPERATE HIGH SPEED LINE PRINTER**

CONDITION(S): Given the following items: high speed line printer, continuous form paper system output request from console, operator's manual, form book, local SOP, and the reference.

STANDARD: The printer will be operated so that alignment, print position, and lines per inch on standard forms are done on the first try 95 percent of the time, on all special forms this must be done by the third try 80 percent of the time. System malfunctions must be corrected.

PERFORMANCE STEPS:

1. Load paper.
2. Set printer control.
3. Dismount output.
4. Breakdown output.
5. Distribute output.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

**TASK: 4034.1.5 OPERATE LASER PRINTER**

CONDITION(S): Given the following items: laser printer, paper, operator's manual, local SOP, and the reference.

STANDARD: The laser printer will be operated so that output forms and quality of print are done on the first try 95 percent of the time. System malfunctions must be diagnosed.

PERFORMANCE STEPS:

1. Load paper.
2. Set printer via printer console.
3. Monitor print.
4. Unload output.
5. Distribute output.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

---

**TASK: 4034.1.6 PERFORM INITIAL PROGRAM LOAD**

CONDITION(S): Given the following items: MVS compatible mainframe, a properly generated operating system, local SOP, and the reference.

STANDARD: An initial program load (IPL) will be properly performed 98 percent of the time. All malfunctions must be corrected.

PERFORMANCE STEPS:

1. The number of steps and the complexity of actions required varies greatly between sites. Therefore, no steps will be specified at this time.

REFERENCE(S):

1. MVS/XA System Initialization and Tuning Guide

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4034.1.7 OPERATE DIRECT ACCESS STORAGE DEVICE (DASD)**

CONDITION(S): Given a direct access storage device, a direct access storage device controller, local SOP, and the reference.

STANDARD: Initial machine load (IML) the direct access storage device controller with 100 percent accuracy per appropriate references.

PERFORMANCE STEPS:

1. Vary path off-line using master console.
2. Disable the controller.
3. Power off the controller.
4. Power on the controller.
5. Enable the controller.

REFERENCE(S):

1. Introduction to Direct Access Storage Devices

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

**TASK: 4034.1.8 PERFORM EMERGENCY SHUTDOWN PROCEDURES**

CONDITION(S): Given a situation requiring emergency shutdown and restart, and Local SOP.

STANDARD: Within the time-frames allotted, the mainframe and supporting peripherals will be properly shutdown and restarted.

PERFORMANCE STEPS:

1. Determine scenarios in which emergency shutdowns should be performed.
2. Power-down computer according to the situation.
3. If time allows, shutdown mainframe prior to power-down.
4. Utilize fire suppression system if necessary.

5. Power-up system after problem is resolved.

REFERENCE(S) :

1. Vendor Supplied Materials

ADMINISTRATIVE INSTRUCTIONS:

---

TASK: 4034.1.9 MANAGE ADP EQUIPMENT

CONDITION(S): Given ADP nomenclature, equipment, and situations that require the responsible officer to receive, replace and/or inventory this equipment.

STANDARD: The installation and status of ADP equipment will be managed per directive.

PERFORMANCE STEPS:

1. Review Marine Corps ADP equipment reporting system.
2. Review government for reuse policy
3. Turn-in government ADP equipment for disposal, as applicable.
4. Report the receipt, acceptance, excess, inventory, and utilization, failure and/or replacement of ADP equipment to CMC (CTAR).
5. Ensure use of ADPE accounting procedures in terms of existing Marine Corps directives.
6. Explain the accounting procedures for ADPE in terms of existing Marine Corps directives.

REFERENCE(S) :

1. MCO P5211.2, The Privacy Act of 1974

ADMINISTRATIVE INSTRUCTIONS:

---

**TASK: 4034.1.10 PREPARE SHIFT SCHEDULES**

CONDITION(S): Given an assignment as an operations chief and the appropriate references.

STANDARD: The shift schedules will be prepared per appropriate references.

PERFORMANCE STEPS:

1. Review ADP processing requirements.
2. Analyze customer requirements.
3. Apply automated tools to balance workload over time.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS:

---

**DUTY AREA 2 - MANAGING MAGNETIC MEDIA LIBRARY**

**TASK: 4034.2.1 PROCESS INCOMING TAPES**

CONDITION(S): Given the following items: tapes, tape log, local SOP, transmittal sheet, and the reference.

STANDARD: Incoming tapes will be processed with 100 percent accuracy.

PERFORMANCE STEPS:

1. Unpack the tape.
2. Log tape into incoming tape log.
3. Store tape.
4. Make appropriate notification of tape arrival.

MCO 1510.37C

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

TASK: 4034.2.2 PREPARE TAPES FOR MAILING

CONDITION(S): Given the following items: tapes, tape log, local SOP, transmittal sheet, and the reference.

STANDARD: Tapes will be prepared for mailing with 100 percent accuracy and the transmittal must be completed in duplicate with no errors. The tape must be packed securely with one copy of transmittal.

PERFORMANCE STEPS:

1. Make appropriate entries in tape log.
2. Complete transmittal.
3. Pack tape for mailing.
4. Mail tape.
5. Conduct review as needed to identify missing/overdue tape returns.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
-

**TASK: 4034.2.3 INITIALIZE AND LABEL MAGNETIC TAPE**

CONDITION(S): Given the following items: magnetic tape, tape drive, computer system with appropriate program, external label, magic marker, local SOP, and the reference.

STANDARD: The magnetic tape must be initialized, labeled externally, and remain undamaged with 100 percent accuracy.

PERFORMANCE STEPS:

1. Update program input.
2. Label tape externally.
3. Submit tape and job for initialization.
4. Store tape.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

**TASK: 4034.2.4 CLEAN MAGNETIC REEL TAPE**

CONDITION(S): Given the following items: magnetic reel tape, tape cleaner, operator's manual, tape log, local SOP, and the reference.

STANDARD: The magnetic tape will be cleaned with 100 percent accuracy and must not be damaged during threading.

PERFORMANCE STEPS:

1. Mount tape on tape cleaner.
2. Start tape cleaner.
3. Dismount tape from tape cleaner.
4. Store tape or return tape to tape drive.
5. Log in tape cleaning.

MCO 1510.37C

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

TASK: 4034.2.5 CERTIFY MAGNETIC TAPE

CONDITION(S): Given the following items: tape (which will require removal of bad spot), tape certifier, local SOP, cutting device, tape log, operator's manual, and the reference.

STANDARD: The magnetic tape will be certified with 100 percent accuracy and no damage to tape must occur during threading. All sections of tape indicated to be defective must be removed.

PERFORMANCE STEPS:

1. Mount tape on certifier.
2. Ensure error recorder in place.
3. Start certifier.
4. Dismount tape from certifier.
5. Check error recorder.
6. Cut bad tape as required.
7. Replace reflector.
8. Log in tape certification.
9. Return tape for initialization of discard tape.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

**TASK: 4034.2.6 PREPARE SCRATCH TAPES**

CONDITION(S): Given the following items: tape library, computer system with appropriate program, local SOP, and the reference.

STANDARD: Scratch tapes will be prepared with 100 percent accuracy per the reference.

PERFORMANCE STEPS:

1. Submit job for execution.
2. Pull tapes according to the Scratch Tape Listing.
3. Identify tapes to be cleaned or certified according to the Scratch Tape Listing.
4. Place scratch tapes on scratch tape rack.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

**TASK: 4034.2.7 MAINTAIN ALTERNATE LIBRARY**

CONDITION(S): Given the following items: tape library, alternate library site, computer system with appropriate program, local SOP, and the reference.

STANDARD: The alternate library will be maintained with 100 percent accuracy per the reference.

PERFORMANCE STEPS:

1. Submit job for execution.
2. Pull tapes listed in Alternate Library Report.
3. Place tapes in alternate library.

MCO 1510.37C

4. Return appropriate tapes to main library.
5. Catalog alternate library according to installation SOP.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

---

DUTY AREA 3 - CONTROLLING INPUT/OUTPUT

TASK: 4034.3.1 PRODUCE MICROFICHE

CONDITION(S): Given the following items: microfilm, communications equipment, operator's manual, local SOP, and the reference.

STANDARD: The microfiche will be produced with 100 percent accuracy per the reference.

PERFORMANCE STEPS:

1. Properly setup microfiche according to specifications.
2. Start microfilm machine.
3. Perform quality control on output.
4. Separate jobs upon completion.
5. Distribute output as required.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

**TASK: 4034.3.2 OPERATE DECOLLATOR**

CONDITION(S): Given the following items: decollator, paper forms, job request form, installation requirement, local SOP, and the reference.

STANDARD: The decollator will be operated, output properly aligned, and all forms separated to meet the installation requirement. All malfunctions must be corrected.

PERFORMANCE STEPS:

1. Load paper forms.
2. Adjust decollator controls.
3. Start decollator.
4. Stop decollator.
5. Unload carbons and paper forms.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4034.3.3 OPERATE BURSTER**

CONDITION(S): Given the following items: burster, forms to be separated, vendor's manual, local SOP, and the reference.

STANDARD: The burster will be operated, output properly aligned, evenly spaced, properly sequenced, and completely separated. All malfunctions must be corrected.

PERFORMANCE STEPS:

1. Set burster controls.
2. Load forms into burster.
3. Begin burster operation.

MCO 1510.37C

4. Monitor burster operation.
5. Unload forms from burster.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

**TASK: 4034.3.4 PROVIDE CUSTOMER SERVICE**

CONDITION(S): Given an assignment to the operations section of an ADP center, a requirement to respond to customer requests for output.

STANDARD: Provide customer with requested output in a timely manner, or direct customer to appropriate ADP section for requested output.

PERFORMANCE STEPS:

1. Print output without error, through print distribution software if available.
2. Distribute output.
3. Use available software applications to determine status of customer's output.
4. If unable to resolve request for output, forward or direct customer request to Production Control or appropriate ADP section for resolution.

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS:

1. (NONE)

---

DUTY AREA 4 - DEPLOYABLE FORCE AUTOMATED SERVICE CENTER (DFASC)

TASK: 4034.4.1 CONDUCT PREDEPLOYMENT COORDINATION

CONDITION(S): Given a scenario or Letter of Instruction (LOI) requiring deployment, assignment to a DFASC, and local SOP.

STANDARD: Within the time-frame allotted, operational and logistical requirements for deployment of the DFASC will be scheduled and coordinated.

PERFORMANCE STEPS:

1. Coordinate meals, water supply, shower facilities, and other consumables for personnel.
2. Schedule a training area, if the deployment is for training purposes.
3. Schedule motor transport assets required for duration of exercise or deployment.
4. Schedule portable power supply for deployment.
5. Schedule forklifts for loading and unloading DFASC supporting equipment.
6. Determine fuel requirements and refueling schedule.
7. Determine user processing requirements and plan accordingly.
8. Create deployment/exercise folder.
9. Document coordinated dates and times in exercise folder.
10. Schedule a pre-embarkation Limited Technical Inspection (LTI).

REFERENCE(S) :

1. None

MCO 1510.37C

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4034.4.2 PERFORM EMERGENCY SHUTDOWN PROCEDURES**

CONDITION(S): Given assignment to a DFASC, a requirement for emergency shutdown and restart of mainframe, emergency shutdown and restart operating procedures, and local SOP.

STANDARD: Within the time-frame allotted, the mainframe and supporting peripherals will be properly shutdown and restarted.

PERFORMANCE STEPS:

1. Determine scenarios in which emergency shutdowns should be performed.
2. Determine location of emergency power switches in the DFASC van.
3. Determine proper usage and operating procedures in regards to the Halon Fire Suppression System.
4. Determine the Halon Fire Suppression System.
5. Create documentation specifying the correct shutdown procedures.
6. Train all personnel on correct shutdown procedures.
7. Schedule training drills to practice shutdown and restart procedures.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 5 - ENVIRONMENTAL CONTROL OPERATIONS

TASK: 4034.5.1 OPERATE FIRE EXTINGUISHER SYSTEM

CONDITION(S): Given the following items; fire extinguisher system, base fire regulations, vendor supplied manuals, local SOP, and appropriate references.

STANDARD: Properly operate fire extinguisher system in an emergency and/or test environment.

PERFORMANCE STEPS:

1. Evaluate situation.
2. Engage Halon bypass.
3. Contain fire, if feasible, utilizing fire extinguisher system until fire department arrives.

REFERENCE(S):

1. Current base or facility fire regulations
2. Vendor supplied manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4034.5.2 MANAGE UNINTERRUPTIBLE POWER SUPPLY (UPS)

CONDITION(S): Given the following items: UPS system, vendor supplied manuals, local SOP, and the reference.

STANDARD: UPS gauges and displays will be analyzed to determine proper operation according to local SOP.

PERFORMANCE STEPS:

1. Ensure UPS equipment is operating within normal standards as determined by vendor at regularly scheduled intervals.
2. Ensure vendor performs periodic preventive maintenance.
3. Create documentation detailing how to manually bypass the generator power to resume normal operations.

MCO 1510.37C

REFERENCE(S):

1. Vendor supplied manuals

ADMINISTRATIVE INSTRUCTIONS:

---

**TASK: 4034.5.3 MONITOR TEMPERATURE AND HUMIDITY GAUGES**

CONDITION(S): Given the following items; temperature and humidity gauges, vendor supplied manuals, local SOP, and the reference.

STANDARD: Ensure temperature and humidity gauges are operating within normal parameters.

PERFORMANCE STEPS:

1. Analyze gauges to determine if temperature and humidity system is operating properly.
2. Notify appropriate personnel if temperature and/or humidity system is not within normal ranges.
3. Perform appropriate shutdown procedures to prevent thermal damage.

REFERENCE(S):

1. Vendor supplied manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4034.5.4 MONITOR ENVIRONMENTAL CONTROL UNITS**

CONDITION(S): Given the following items; air conditioning equipment, vendor supplied manuals, local SOP, and the reference.

STANDARD: Ensure environmental control equipment are operating within normal parameters.

PERFORMANCE STEPS:

1. Analyze gauges to determine if temperature and humidity system is operating properly.

2. Notify appropriate personnel if temperature and/or humidity system is not within normal ranges.
3. Perform appropriate shutdown procedures to prevent thermal damage.

REFERENCE(S):

1. Vendor supplied manuals

ADMINISTRATIVE INSTRUCTIONS:

---

**DUTY AREA 6 - HELP DESK OPERATIONS**

**TASK: 4034.6.1 PROVIDE ASSISTANCE FROM A HELP DESK**

CONDITION(S): Given a requirement to provide assistance from a help desk and the following items; 3270 access to mainframe, applicable software applications, manuals, local SOP, and appropriate references.

STANDARD: Respond or direct customer to appropriate personnel to resolve customer problems.

PERFORMANCE STEPS:

1. Evaluate customer's request.
2. Attempt to resolve problem.
3. If problem is unresolved, direct call to appropriate section or applicable tracking system.
4. Track unresolved problems and forward to appropriate sections.

REFERENCE(S):

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MCO 1510.37C

**TASK: 4034.6.2 MONITOR OPERATIONS OF A HELP DESK**

CONDITION(S): Given the following items; supervisory assignment to a Help Desk, applicable software applications, local SOP, and the reference.

STANDARD: Help Desk operations will be monitored using appropriate software applications to ensure tracking and resolution of all problems in an acceptable time-frame.

PERFORMANCE STEPS:

1. Monitor tracking software closely.
2. Ensure Help Desk personnel properly resolve trouble calls within their area of responsibility.
3. Ensure Help Desk personnel forward unresolved trouble calls to appropriate sections of tracking systems.

REFERENCE(S):

1. Vendor supplied manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MOS 4038, DATA CONTROL SPECIALIST

DUTY AREA 1 - SERVING THE CUSTOMER

TASK: 4038.1.1 PROVIDE CUSTOMER SERVICE

CONDITION(S): Given the following items: Job Identification Number List, local SOP, Work Request Form, Deallocation Listing, and appropriate references.

STANDARD: Customer service will be provided to ensure assistance provided is within the capabilities of the ADP installation and customer needs are met.

PERFORMANCE STEPS:

1. Define customer requirements.
2. If customer requirement is an existing production job, perform the following:
  - a. Check deallocation.
  - b. Verify proper input/output.
3. If customer requirement is not supported by an existing production job, refer requirement to the appropriate section.
4. Provide feedback to customer on status of their requirement.

REFERENCE(S):

1. Computer Operations Manual (OM)
2. IBM MVS/XA JCL Reference Manual (GC28-1352-3)
3. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)
4. IBM OS/VS2 MVS Utilities Manual (GC26-3902)

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

**TASK: 4038.1.2 CONDUCT CUSTOMER LIAISON**

CONDITION(S): Given an assignment as a production control technician and appropriate references.

STANDARD: Customer liaison will be conducted per appropriate references.

PERFORMANCE STEPS:

1. Determine the ADP hardware support requirements for the ADP site.
2. Review customer support plans and SOP's.
3. Analyze ADP hardware capabilities in view of support requirements.
4. Conduct on-site visits to customer locations.
5. Provide advance notice to customers on changes to support capabilities.
6. Coordinate changes to support requirements resulting from changes to operational schedules.
7. Maintain customer liaison during periods of unscheduled outages.
8. Develop alternate support plans as required.
9. Maintain customer recall and point of contact rosters.
10. Assist customers with contingency planning.
11. Conduct periodic reviews of customer support requirements with all customers.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4038.1.3 SUPERVISE TAPE LIBRARY OPERATIONS**

CONDITION(S): Given an assignment as a production analysis chief and appropriate references.

STANDARD: The tape library operations will be supervised per appropriate references.

PERFORMANCE STEPS:

1. Review SOP's for accuracy and detail.
2. Establish daily tape librarian functions.
3. Ensure use of scratch tape inventory.
4. Establish procedures for scratch tape designation and operation.
5. Ensure tape cleaning and certification procedures are followed.
6. Analyze deficiencies originating with magnetic tape media.
7. Supervise training of tape librarians.
8. Supervise purchase of tape media.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 2 - PRODUCTION ANALYSIS

TASK: 4038.2.1 PERFORM PROCEDURE OPTIMIZATION

CONDITION(S): Given the following items: Job Identification Number List, Data Set Cross Reference Listing, Deallocation Listing, local SOP, and the reference.

STANDARD: The procedures will be optimized to produce efficient time and resource utilization.

PERFORMANCE STEPS:

1. Receive and log request.
2. Review procedure for improvement in all the following areas:

MCO 1510.37C

- a. Naming conventions.
  - b. Disposition processing.
  - c. Data control block information.
  - d. Unit.
  - e. Space.
  - f. Volume.
  - g. Sort information.
  - h. Move steps.
  - i. Document/flow chart.
3. Amend procedure with error-free execution and verify implemented procedure changes.
  4. Maintain Proc-Libs, JCL-Libs, Load Libs, and Sysin-Libs.
  5. Load new programs received from Class I Sponsors.
  6. Coordinate amended procedures with responsible programming section and the system sponsor.
  7. Create/Revise/Distribute OM to reflect procedure update.

REFERENCE(S) :

1. Computer Operations Manual (OM)

ADMINISTRATIVE INSTRUCTIONS:

---

**TASK: 4038.2.2 IMPLEMENT NEW PROCEDURES**

CONDITION(S): Given a new procedure from a Class I sponsor.

STANDARD: New procedures will be implemented per IRAM and local site requirements.

PERFORMANCE STEPS:

1. Review request.

2. Review procedures for accurately coded JCL per site standard.
3. Make necessary changes to bring procedures up to standard.
  - a. Create VSAM files as required.
  - b. Create GDG's as required.
4. Test procedure for accuracy.
5. Export procedures, programs, job library, and sysin library members to appropriate libraries.
6. Document updates of the JCL in the documentation library.

REFERENCE(S):

1. Computer Operations Manual (OM)
2. IBM MVS/XA JCL Reference Manual (GC28-1352-3)
3. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)
4. OS Utilities Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

---

**TASK: 4038.2.3 MANIPULATE DATA SETS**

CONDITION(S): Given customer request or optimization requirement, local SOP, and appropriate references.

STANDARD: Data sets will be manipulated to satisfy all requested and required functions per local SOP.

PERFORMANCE STEPS:

1. Review customer request for accuracy and validity.
2. Evaluate and select appropriate utilities or software applications.
3. Perform applicable maintenance.

REFERENCE(S):

1. OS Utilities Manual
2. Job Control Language Manual
3. Messages and Codes Manual

ADMINISTRATIVE INSTRUCTIONS:

1. (NONE)

---

**TASK: 4038.2.4 CONDUCT ANNUAL REVIEW OF COMPUTER OPERATIONS MANUAL (OM)**

CONDITION(S): Given the following items: Job Identification Number List, Data Set Cross Reference, Library Listing, Annual Review Form Checklist, customer and programmer analyst present, Deallocation Listing, local SOP, and appropriate references.

STANDARD: Within the time specified in the appointing letter directive, an Annual Review of the Computer Operations Manual will be conducted per the Annual Review Form Checklist contained in MCO P5233.1, Marine Corps ADP Management Standards Manual.

PERFORMANCE STEPS:

1. Form audit team:
  - a. Organize team members.
  - b. Assign areas of responsibility.
2. Establish time frame for review of OM.
3. Notify customer and programmer of time of audit.
4. Provide audit team members with special instructions, based on changes in system resources or changes in the site SOP.
5. Conduct review in accordance with OM Annual Review Form.
6. Recommend job for optimization if required.
7. File OM.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. Computer Operations Manual (OM)
3. IBM MVS/XA JCL Reference Manual (GC28-1352-3)
4. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)
5. OS Utilities Manual
6. Computer Associates Manual (CA Sort)

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

---

TASK: 4038.2.5 SUPERVISE MAINTENANCE OF PRODUCTION LIBRARIES

CONDITION(S): Given an assignment as a production analysis chief and the reference.

STANDARD: The maintenance of production libraries will be supervised to ensure compliance with the reference.

PERFORMANCE STEPS:

1. Supervise the maintenance of the production libraries.
  - a. Compress.
  - b. Backup.
  - c. Allocate/Delete space as required.

REFERENCE(S) :

1. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 3 - CONTROLLING PRODUCTION

TASK: 4038.3.1 PRODUCE DAILY SCHEDULE

CONDITION(S): Given automated scheduling software and identified customer requirements procedure form a Class I sponsor.

STANDARD: A schedule will be produced that includes daily production cycles and special customer job requests.

PERFORMANCE STEPS:

1. Prioritize and sequence daily schedule based on:
  - a. Statement of priorities.
  - b. Available resource configuration.
  - c. Stand-alone time.
2. Submit schedule for approval.
3. Publish schedule.

REFERENCE(S):

1. Computer Operations Manual (OM)

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

TASK: 4038.3.2 EXECUTE PRODUCTION JOBS

CONDITION(S): Given automated scheduling software and customer requests.

STANDARD: Execute production jobs cycles that customer requirements.

PERFORMANCE STEPS:

1. Review work requested in scheduling software.

2. Execute job ensuring that system Job Control Language requirements are met.
3. Monitor job flow utilizing automated scheduling software.
4. Review job deallocation to ensure job runs error free.

REFERENCE(S):

1. Computer Operations Manual (OM)
2. IBM MVS/XA JCL Reference Manual (GC28-1352-3)
3. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

**TASK: 4038.3.3 RESPOND TO ABNORMAL JOB TERMINATION (ABEND)**

CONDITION(S): Given an abnormally terminated job, automated scheduling software, and appropriate references.

STANDARD: The job will be restarted minimizing adverse effect on production time and system resources.

PERFORMANCE STEPS:

1. Obtain deallocation.
2. Examine deallocation ABEND code:
  - a. Check systems log.
  - b. Check procedure listing.
  - c. Check procedure log.
3. Research ABEND code using appropriate reference manuals.
4. Research deallocations to ensure necessary data sets are re-created or deleted if not needed.
5. Restart job per with the Operations Manual:
  - a. Utilizing scheduling software.

- b. Using appropriate overrides per the OM.
  - c. Utilizing "Fast Dump Restores" software, if necessary.
6. If unable to complete step 4, refer to appropriate section.

REFERENCE(S):

1. Computer Associates Manual (CA Sort)
2. IBM MVS/XA JCL Reference Manual (GC28-1352-3)
3. IBM OS/VS2 MVS Utilities Manual (GC26-3902)
4. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)

ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.
- 

**TASK: 4038.3.4 ESTABLISH PRODUCTION CONTROL SOP**

CONDITION(S): Given an assignment as the Production Control Chief, a requirement to establish a production control SOP per local site requirements, and appropriate references.

STANDARD: Establish a production SOP in writing per local site requirements.

PERFORMANCE STEPS:

1. Determine site requirements.
2. Access availability resources.
3. Determine priority of work.
4. Train personnel on the following:
  - a. Scheduling software.
  - b. Problem resolution.
  - c. Software applications used for problem resolution.

- d. IBM utilities.
- e. Backup procedures.
- f. Emergency procedures.
- g. Data Control Technician school requirements.

REFERENCE(S) :

1. Computer Associates Manual (CA Sort)
2. IBM MVS/XA JCL Reference Manual (GC28-1352-3)
3. IBM OS/VS2 MVS Utilities Manual (GC26-3902)
4. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MOS 4066, SMALL COMPUTER SYSTEMS SPECIALIST (SCSS)

DUTY AREA 1 - RESOURCE MANAGEMENT AND ADMINISTRATION

TASK: 4066.1.1 ORGANIZE PERSONNEL FOR LAN/EUCE SYSTEM OPERATIONS

CONDITION(S): Given a platoon of Marines.

STANDARD: The platoon will be organized to facilitate smooth and efficient operations.

PERFORMANCE STEPS:

1. Examine personnel availability.
2. Examine individual marines knowledge.
3. Examine training schedule.

REFERENCE(S):

1. Unit Training Schedule
2. Individual Training Records
3. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.1.2 ORGANIZE EQUIPMENT FOR LAN/EUCE SYSTEM OPERATIONS

CONDITION(S): Given the platoon CMR.

STANDARD: Equipment will be organized to facilitate smooth and efficient operations.

PERFORMANCE STEPS:

1. Examine the CMR for equipment accountability.

MCO 1510.37C

2. Examine equipment record (ERO) log and temp loan records for equipment availability.
3. Examine orders or directives for equipment requirements.

REFERENCE(S) :

1. UM 4790
2. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.1.3 ESTABLISH ADP/DATA COMMUNICATIONS SECURITY MEASURES**

CONDITION(S): Given applicable ADP security and communications security references and equipment.

STANDARD: An ADP/Data communications security directive/policy will be established.

PERFORMANCE STEPS:

1. Review applicable directives.
2. Examine local security concerns.
3. Ensure adherence to ADP/Data Communications security procedures.

REFERENCE(S) :

1. OPNAVINST 5510.1
2. IRM
3. Local Security Regulations
4. Local SOP

ADMINISTRATIVE INSTRUCTIONS:

1. This is an absolute necessity when processing classified material on EUCE.

---

**TASK: 4066.1.4 SUPERVISE OPERATION OF A NETWORK OPERATIONS/INFORMATION CENTER**

**CONDITION(S):** Given an installed network and personnel to support the network.

**STANDARD:** The network operations/information center will operate, troubleshoot, and maintain the network.

**PERFORMANCE STEPS:**

1. Organize personnel into watches or teams.
2. Monitor network performance.
3. Dispatch troubleshooting teams.
4. Maintain circuit outage/restoration log.

**REFERENCE(S):**

1. Local ADP/NETWORK SOP

**ADMINISTRATIVE INSTRUCTIONS:** (NONE)

---

**DUTY AREA 2 - MICROCOMPUTERS**

**TASK: 4066.2.1 OPERATE MICROCOMPUTER/EUCE SUITE**

**CONDITION(S):** Given a microcomputer\EUCE suite, operation system, and the vendor supplied manuals.

**STANDARD:** The major components of a microcomputer\EUCE suite will be operated per references.

**PERFORMANCE STEPS:**

1. Use the appropriate commands to manage files and directories.
2. Use data backup and restoration commands.
3. Power up and boot the microcomputer/EUCE suite.

MCO 1510.37C

REFERENCE(S):

1. Vendor specific user/reference manuals
2. Local SOP and locally procured user/reference manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.2.2 CONFIGURE MICROCOMPUTER/EUCE SUITE**

CONDITION(S): Given a microcomputer/EUCE suite, operating system, and the vendor supplied manuals.

STANDARD: The microcomputer/EUCE suite will be configured for use appropriate references.

PERFORMANCE STEPS:

1. Configure the microcomputer.
2. Configure the printer.
3. Configure a printer action table.
4. Test the printer to check the configuration.

REFERENCE(S):

1. Vendor specific user/reference manuals
2. Local SOP and locally procured user/reference manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.2.3 INSTALL MICROCOMPUTER/EUCE SUITE FOR OPERATIONAL USE**

CONDITION(S): Given a microcomputer/EUCE suite in their cases/boxes, the site of installation, adequate power supply, and the vendor supplied manuals.

STANDARD: All microcomputer/EUCE components must be installed and connected for operational use per appropriate references.

Appendix F to  
ENCLOSURE (6)

PERFORMANCE STEPS:

1. Unpack microcomputer/EUCE equipment.
2. Connect the keyboard, mouse, and monitor to the microcomputer/EUCE.
3. Connect the Magnetic Tape Drive.
4. Connect the Paper Tape Reader/Punch.
5. Connect the Graphics Plotter.
6. Connect the Letter Quality Printer.

REFERENCE(S):

1. Vendor specific user/reference manuals
2. Local SOP and locally procured user/reference manuals

ADMINISTRATIVE INSTRUCTIONS:

---

**TASK: 4066.2.4 PREPARE MICROCOMPUTER/EUCE SUITE FOR DEPLOYMENT**

CONDITION(S): Given a fully operational microcomputer/EUCE suite, operating system, and the vendor supplied manuals.

STANDARD: The major components of an operational microcomputer/EUCE suite will be disconnected and prepared for deployment per appropriate references.

PERFORMANCE STEPS:

1. Disconnect keyboard, mouse, and monitor from the microcomputer/EUCE suite.
2. Disconnect the Magnetic Tape Drive.
3. Disconnect the Paper Tape Reader/Punch.
4. Disconnect the Graphics Plotter.
5. Disconnect the printer.
6. Pack the microcomputer/EUCE suite.

MCO 1510.37C

REFERENCE(S):

1. Vendor specific user/reference manuals
2. Local SOP and locally procured user/reference manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.2.5 TROUBLESHOOT MICROCOMPUTER/EUCE PROBLEMS**

CONDITION(S): Given a microcomputer/EUCE suite, diagnostic hardware/software, and vendor supplied manuals.

STANDARD: When presented with various common microcomputer/EUCE problems, the type and cause of the problem will be identified and resolved.

PERFORMANCE STEPS:

1. Identify hardware and/or software problems using diagnostic hardware/software.
2. Take appropriate actions to resolve the microcomputer/EUCE problem.

REFERENCE(S):

1. Vendor specific user/reference manuals
2. Local SOP and locally procured user/reference manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.2.6 MAINTAIN MICROCOMPUTER/EUCE EQUIPMENT**

CONDITION(S): Given an operational microcomputer/EUCE suite and vendor supplied manuals.

STANDARD: Microcomputer/EUCE equipment will be maintained to ensure mission readiness.

PERFORMANCE STEPS:

1. Power down microcomputer/EUCE suite.

Appendix F to  
ENCLOSURE (6)

2. Perform preventive maintenance on microcomputer/EUCE suite.
3. Power up microcomputer/EUCE suite and return to operational state.

REFERENCE(S) :

1. Local SOP
2. Locally Procured User/Reference Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.2.7 CONFIGURE MARINE CORPS AUTHORIZED SOFTWARE**

CONDITION(S): Given a microcomputer/EUCE configured with an operating system and vendor supplied manuals.

STANDARD: Marine Corps authorized software will be configured for operational use.

PERFORMANCE STEPS:

1. Install Marine Corps authorized application, database, word processing, spreadsheet, graphics, communications, and graphical user interface.
2. Configure Marine Corps authorized application, database, word processing, spreadsheet, graphics, communications, and graphical user interface software for current environment.

REFERENCE(S) :

1. Vendor specific user/reference manuals
2. Local SOP and locally procured user/reference manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.2.8 OPERATE MARINE CORPS AUTHORIZED SOFTWARE**

CONDITION(S): Given a microcomputer/EUCE configured with an operating system, Marine Corps authorized software, and vendor supplied manuals.

STANDARD: Marine Corps authorized software must be operated on microcomputer/EUCE suite utilizing manuals provided with the software.

PERFORMANCE STEPS:

1. Create and modify databases.
2. Create and modify word-processing documents.
3. Create and modify spreadsheets.
4. Create and modify graphic documents.
5. Operate communications software.
6. Operate graphical user interface software.

REFERENCE(S):

1. Vendor specific user/reference manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.2.9 TROUBLESHOOT MARINE CORPS AUTHORIZED SOFTWARE PROBLEMS**

CONDITION(S): Given a microcomputer/EUCE configured with an operating system, Marine Corps authorized software, and vendor supplied manuals.

STANDARD: Problems in Marine Corps authorized software operated on a microcomputer/EUCE will be identified and resolved using manuals provided with the software and vendor support.

PERFORMANCE STEPS:

1. Identify the software problem using appropriate operator manuals.
2. Correct the software problem and/or reload the software.

3. Call appropriate vendor for assistance when needed.

REFERENCE(S):

1. Vendor specific user/reference manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.2.10 MAINTAIN MARINE CORPS AUTHORIZED SOFTWARE**

CONDITION(S): Given a microcomputer/EUCE configured with an operating system, Marine Corps authorized software, and vendor supplied manuals.

STANDARD: Marine Corps authorized software operated on a microcomputer/EUCE will be maintained utilizing updates provided by the vendor.

PERFORMANCE STEPS:

1. Identify updates provided by the vendor for all software.
2. Apply the software updates to current software and reload the software.
3. Call appropriate vendor for assistance when needed.

REFERENCE(S):

1. Vendor specific user/reference manuals
2. Local SOP and locally procured user/reference manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 3 - DATA COMMUNICATIONS SUPPORT

TASK: 4066.3.1 WRITE DATA COMMUNICATIONS DOCUMENT

CONDITION(S): Given appropriate operations orders and SOP's.

STANDARD: A data communications appendix to annex k or letter of instruction must be written for operations and exercises.

PERFORMANCE STEPS:

1. Examine operation order or sop for requirements.
2. Examine CMR for equipment accountability.
3. Examine equipment record (ERO) log for equipment availability.
4. Examine personnel resources for availability/training.
5. Write the LOI or appendix for the exercise or operation including:
  - a. Data communications connectivity.
  - b. LAN/WAN connectivity.
  - c. Encryption devices to be used and location.
  - d. LAN accounts.
  - e. Personnel assignments.
  - f. Special instructions.

REFERENCE(S):

1. Local SOP
2. Operations Order or Plan
3. FM 3-30

ADMINISTRATIVE INSTRUCTIONS:

1. Close coordination with commo or G/S-6 is required to perform this task.

**TASK: 4066.3.2 PERFORM DATA COMMUNICATIONS SYSTEMS PLANNING AND ENGINEERING**

CONDITION(S): Given operations order or installation/upgrade requirements.

STANDARD: An installation/upgrade plan must designed and engineered.

PERFORMANCE STEPS:

1. Examine the operations order or installation/upgrade requirements.
2. Create layout diagram of connectivity.
3. Determine best connectivity available.
4. Design and engineer a plan for connectivity.
5. Ensure routers, hubs, bridges, etc. are included in engineering diagrams.
6. Ensure network will support connectivity.
7. Submit telephone service requests (TSR) as required.

REFERENCE(S) :

1. Local SOP
2. Operator/Technical Manuals of Equipment to be Installed

ADMINISTRATIVE INSTRUCTIONS:

1. Systems planning and engineering must include the ability to expand and migrate to other systems or networks.

**TASK: 4066.3.3 PLAN FOR DEPLOYED MAINTENANCE SUPPORT**

CONDITION(S): Provided deployment instructions and equipment list.

MCO 1510.37C

STANDARD: Determine maintenance requirements and coordinate for technician support/repair parts availability.

PERFORMANCE STEPS:

1. Examine deployment instructions.
2. Examine equipment list.
3. Coordinate with maintenance personnel to ensure technicians and repair parts will be available during deployment.

REFERENCE(S) :

1. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.3.4 COORDINATE POWER DISTRIBUTION AND GROUNDING REQUIREMENTS**

CONDITION(S): Given equipment listing.

STANDARD: Determine power and grounding requirements for EUCE.

PERFORMANCE STEPS:

1. Examine equipment listing.
2. Examine TM's or operator manuals for power/grounding requirements.
3. Coordinate with power installation personnel to ensure they know the power/grounding requirements.
4. Check power receptacle where EUCE will be installed utilizing a meter or power checker.
5. Ensure EUCE is grounded correctly.

REFERENCE(S) :

1. Local SOP
2. TM's or Operator Manuals

Appendix F to  
ENCLOSURE (6)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.3.5 COORDINATE COMMUNICATIONS SECURITY MATERIAL SYSTEM (CMS) SUPPORT

CONDITION(S): Given annex k or letter of instruction.

STANDARD: Coordinate CMS support with the CMS custodian to ensure the correct equipment and keying material is available for deployment.

PERFORMANCE STEPS:

1. Examine the annex k or letter of instruction.
2. Determine the cryptographic equipment to be used and quantity needed.
3. Coordinate with the CMS custodian to ensure equipment and material is available for deployment and embarked.
4. Ensure personnel are authorized to use equipment and keying material.

REFERENCE(S):

1. Local SOP
2. CMS 1

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 4 - INSTALLATION OF DATA COMMUNICATION SYSTEMS

TASK: 4066.4.1 DIRECT INSTALLATION, OPERATION, AND MAINTENANCE OF DATA COMMUNICATION SYSTEMS

CONDITION(S): Given operation order or instructions.

STANDARD: Direct the installation, operation, and maintenance of the data communications system.

PERFORMANCE STEPS:

1. Examine operation order or instructions.
2. Organize personnel and equipment for installation.
3. Monitor installation and operation of equipment.
4. Coordinate troubleshooting of equipment/data communication systems.

REFERENCE(S):

1. Local SOP
2. Operation Order or Instructions

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.4.2 INSTALL CRYPTOGRAPHIC EQUIPMENT

CONDITION(S): Given circuit diagrams and cryptographic equipment.

STANDARD: Required cryptographic equipment will be installed using the circuit diagrams.

PERFORMANCE STEPS:

1. Examine circuit diagrams and determine cables required to install cryptographic equipment.
2. Install cryptographic equipment into data communications network.

3. Operate cryptographic equipment.
4. Troubleshoot cryptographic equipment.
5. Remove and replace defective cryptographic equipment.

REFERENCE(S) :

1. Local SOP
2. CMS 1
3. Appropriate KAO's and KAM's

ADMINISTRATIVE INSTRUCTIONS:

1. CMS 1 contains security and storage requirements for cryptographic material and equipment.
- 

**TASK: 4066.4.3 OPERATE CRYPTOGRAPHIC EQUIPMENT**

CONDITION(S): Given circuit diagrams and cryptographic equipment installed in a data communications network.

STANDARD: The cryptographic equipment will be operated per local SOP and the appropriate KAO or KAM.

PERFORMANCE STEPS:

1. Operate cryptographic equipment.
2. Troubleshoot cryptographic equipment.
3. Remove and replace defective cryptographic equipment.

REFERENCE(S) :

1. Local SOP
2. CMS 1
3. Appropriate KAO's and KAM's

ADMINISTRATIVE INSTRUCTIONS:

1. The KAO and KAM for specific equipment contains operating instructions and the CMS 1 contains security and storage requirements for cryptographic material and equipment.
- 

TASK: 4066.4.4 INSTALL DATA TERMINAL EQUIPMENT (DTE)

CONDITION(S): Given data terminal equipment.

STANDARD: Data terminal equipment must be installed into a data communication system.

PERFORMANCE STEPS:

1. Determine cables required for DTE and connectivity.
2. Connect DTE to peripherals.
3. Connect DTE to required data communication system.
4. Power up DTE.

REFERENCE(S):

1. Local SOP
2. DTE Operator Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.4.5 OPERATE DATA TERMINAL EQUIPMENT (DTE)

CONDITION(S): Given data terminal equipment installed in a data communications network.

STANDARD: Data terminal equipment must be operated on a data communication system.

PERFORMANCE STEPS:

1. Operate DTE as required.
2. Troubleshoot and repair DTE as required.

REFERENCE(S) :

1. Local SOP
2. DTE Operator Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.4.6 INSTALL DATA COMMUNICATIONS EQUIPMENT (DCE)

CONDITION(S): Given data communications equipment.

STANDARD: Data communications equipment must be installed on a data communications network.

PERFORMANCE STEPS:

1. Determine cables required for DCE and connectivity.
2. Connect DCE to required peripherals.
3. Connect DCE to required data communication system.
4. Power up DCE.

REFERENCE(S) :

1. Local SOP
2. DCE Operator Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.4.7 OPERATE DATA COMMUNICATIONS EQUIPMENT (DCE)

CONDITION(S): Given data communications equipment.

STANDARD: Data communications equipment must be operated and maintained on a data communication system.

PERFORMANCE STEPS:

1. Power up DCE.

2. Operate DCE as required.
3. Troubleshoot and repair DCE as required.

REFERENCE(S) :

1. Local SOP
2. DCE Operator Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.4.8 ENGINEER DTE TO DCE CONNECTIVITY**

CONDITION(S): Given connectivity requirement.

STANDARD: A diagram must be created to show DTE/DCE connectivity and cables designed for connectivity if required.

PERFORMANCE STEPS:

1. Examine connectivity requirements.
2. Determine what equipment will be acting as DTE and what equipment will be acting as DCE.
3. Determine standards used on DTE and DCE (i.e. rs-232, rs-449, etc)
4. Create diagram showing DTE and DCE connectivity.
5. Create diagram of cables required for DTE to DCE connectivity.

REFERENCE(S) :

1. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.4.9 CONFIGURE A HOST FOR TCP/IP**

CONDITION(S): Given a server and administrative authority over a LAN/WAN.

STANDARD: The administrative and installation procedures for operating a LAN/WAN server to server communications using TCP/IP will be followed.

PERFORMANCE STEPS:

1. Install TCP\IP software.
2. Configure the addressing scheme.
3. Test and implement the router.
4. Manage server to server WAN communication.
5. Manage TCP/IP addresses for your activity.

REFERENCE(S):

1. Local SOP
2. Original Vendor User Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**DUTY AREA 5 - UNIX OPERATING SYSTEMS**

**TASK: 4066.5.1 INSTALL UNIX OPERATING SYSTEM**

CONDITION(S): Given system manuals, a workstation, and operating system software release media.

STANDARD: The UNIX operating system will be installed and configured per the references.

PERFORMANCE STEPS:

1. Determine users system configuration requirements.
2. Boot the system using UNIX release media.
3. Initialize UNIX configuration files.

4. Configure the workstation for users.
5. Verify operating environment log files.

REFERENCE(S) :

1. UNIX Reference Manual
2. Hardware and Software Manuals
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.5.2 OPERATE A COMPUTER USING UNIX OPERATING SYSTEM**

CONDITION(S): Given an UNIX workstation with software.

STANDARD: The computer will be operated using the UNIX operating system per the references.

PERFORMANCE STEPS:

1. Conduct system start-up/shutdown.
2. Log-in to the workstation.
3. Change password.
4. Invoke on-line manual pages.
5. Edit a file using an editor.
6. Print a file.
7. Invoke input/output redirection.
8. Change file permissions.
9. Log-out of the workstation.
10. Use UNIX file utilities.
11. Use UNIX communication utilities.
12. Use diagnostic utilities.

REFERENCE(S) :

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.5.3 MANAGE USER ACCOUNTS

CONDITION(S): Given a workstation, software, and appropriate reference.

STANDARD: User accounts will be managed per the reference.

PERFORMANCE STEPS:

1. Modify (add/delete users) the password file.
2. Verify sufficient disk space exists for user.
3. Create/remove a home directory for user.
4. Change file permissions to enable/disable user file.
5. Configure user environment variables.

REFERENCE(S) :

1. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.5.4 MANAGE FILE SYSTEMS

CONDITION(S): Given a network of UNIX workstations.

STANDARD: File systems will be managed per the operating system manual.

PERFORMANCE STEPS:

1. Determine the type of UNIX operating system.

MCO 1510.37C

2. Format data storage media.
3. Partition data storage media.
4. Create file systems.
5. Modify file systems.
6. Mount/unmount file systems.
7. Export file systems.
8. Delete file systems.

REFERENCE(S) :

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.5.5 INSTALL HARDWARE**

CONDITION(S): Given UNIX workstation, peripheral devices, and device specific software.

STANDARD: Peripheral devices and device specific software will be installed per the references.

PERFORMANCE STEPS:

1. Install peripheral hardware.
2. Modify system environment files.

REFERENCE(S) :

1. Local SOP
2. UNIX Operating System Software

ADMINISTRATIVE INSTRUCTIONS: (NONE)

**TASK: 4066.5.6 INSTALL SOFTWARE**

CONDITION(S): Given a UNIX workstation and software.

STANDARD: Software will be installed and configured per the Operating System Manual.

PERFORMANCE STEPS:

1. Install application software.
2. Configure presentation software for new application software.
3. Configure system resources for new application software.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.5.7 WRITE SHELL SCRIPT FILES**

CONDITION(S): Given an UNIX workstation and software.

STANDARD: A shell script will be written per the references.

PERFORMANCE STEPS:

1. Create a simple shell script.
2. Save a shell script.
3. Execute a shell script.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.5.8 CONDUCT SYSTEM BACKUP/RECOVERY**

CONDITION(S): Given a network of UNIX workstations with peripheral devices.

STANDARD: System backup/recovery will be conducted per the references.

PERFORMANCE STEPS:

1. Backup file(s), directories, and file systems.
2. Restore file(s), directories, and file systems.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.5.9 TUNE SYSTEM PERFORMANCE**

CONDITION(S): Given a network of UNIX workstations with peripheral devices.

STANDARD: System performance will be optimized per the references.

PERFORMANCE STEPS:

1. Monitor system performance.
2. Reconfigure the kernel.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.5.10 MANAGE MULTIPLE NETWORKS**

CONDITION(S): Given a network of multiple UNIX servers.

STANDARD: The network will be managed per the references.

PERFORMANCE STEPS:

1. Configure gateways and routers.
2. Configure routing tables on servers.
3. Monitor inter-network load.
4. Use network utilities.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.5.11 MANAGE SYSTEM PROCESS**

CONDITION(S): Given an UNIX workstation and software.

STANDARD: The system process will be managed per the references.

PERFORMANCE STEPS:

1. Define a system process.
2. Define the different types of processes.
3. Manage system processes.

MCO 1510.37C

REFERENCE(S) :

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.5.12 MANAGE NETWORK SERVICES

CONDITION(S): Given a network of multiple UNIX servers.

STANDARD: The network services will be managed per the references.

PERFORMANCE STEPS:

1. Define Network File System (NFS) terminology.
2. Export file hierarchies with NFS.
3. Mount file hierarchies with NFS.
4. Create NFS automounter maps.
5. Mount file hierarchies with the NFS automounter.
6. Define Network Information Service (NIS) terminology.
7. Configure a NIS domain.
8. Configure the UNIX to UNIX Copy Program (UUCP).
9. Use UUCP to copy files to/from a remote host.

REFERENCE(S) :

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

**TASK: 4066.5.13 MANAGE NETWORK SECURITY**

CONDITION(S): Given a network of multiple UNIX workstations and servers, security regulations, and classification of data.

STANDARD: The network will be secure against all known threats.

PERFORMANCE STEPS:

1. Analyze current network security procedures.
2. Recommend solutions to identified vulnerabilities.
3. Implement corrections to secure network.

REFERENCE(S):

1. On-line Manual
2. UNIX Operating System Manual
3. UNIX System and Network Administration Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**DUTY AREA 6 - SYSTEM RESTORATION**

**TASK: 4066.6.1 PERFORM LIMITED TECHNICAL INSPECTION (LTI)**

CONDITION(S): Provided suspect items of equipment and references.

STANDARD: A limited technical inspection will be performed to determine the extent and level of maintenance required to restore it to a specified condition.

PERFORMANCE STEPS:

1. Determine requirements of the LTI.
2. Develop an LTI checklist.
3. Inspect the equipment.

MCO 1510.37C

4. Complete the checklist.
5. Report the results.

REFERENCE(S) :

1. MCO P4790.2B, MIMMS Field Procedures Manual
2. MCO 4400.82F, MIMMS Controlled Item Management Manual
3. UNIT T/E (CMR)
4. Appropriate Technical Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.6.2 USE MIMMS/SASSY REPORTS, REPORTS, AND REQUIREMENTS

CONDITION(S): Given MIMMS/SASSY reports and forms.

STANDARD: MIMMS/SASSY forms and requirements will be used per the references.

PERFORMANCE STEPS:

1. Explain ERO and EROSL
2. Explain DPR and LM2 reports

REFERENCE(S) :

1. Local SOP
2. UM 4790.\_
3. TM 4790.\_

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.6.3 PREPARE AN EQUIPMENT REPAIR ORDER (ERO)**

CONDITION(S): Given the appropriate references, equipment repair order (ERO) form, and equipment record jacket.

STANDARD: The ERO must be filled out correctly.

PERFORMANCE STEPS:

1. Fill out the required sections on the equipment repair order (ERO).
2. Enter required information in the equipment record log.
3. Induct the equipment into the maintenance cycle.
4. After maintenance is complete close the ERO.
5. File the ERO in the equipment record jacket.

REFERENCE(S):

1. Local SOP
2. UM 4790.\_
3. TM 4790.\_

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.6.4 PROVIDE TECHNICAL ASSISTANCE DURING INSTALLATION OF ADP EQUIPMENT**

CONDITION(S): Provided an operational plan and appropriate equipment.

STANDARD: ADP equipment will be installed and functioning as specified per the applicable equipment TM.

PERFORMANCE STEPS:

1. Verify power source.
2. Verify antenna installation.
3. Verify remote capabilities.
4. Verify equipment operation.

MCO 1510.37C

5. Verify equipment operating procedures when required.
6. Provide guidance to correct any discrepancies noted during the performance of above steps.

REFERENCE(S) :

1. Appropriate Technical Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.6.5 PROTECT ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES DURING HANDLING, STORAGE, AND TRANSPORTATION**

CONDITION(S): Provided ESD sensitive devices, ESD protection materials, ESD labels, applicable technical manuals, and references.

STANDARD: ESD sensitive devices will be protected per the references.

PERFORMANCE STEPS:

1. Review references.
2. Identify materials requiring ESD protection.
3. Perform actions necessary to protect ESD sensitive materials.

REFERENCE(S) :

1. TM-9999-15/1, ESD Awareness Electro-Static Discharge
2. TM-9999-15/2, Electro-Static Discharge (ESD) Management
3. MCO 2410.2A, Electromagnetic Environmental Effects (E3) Control Program
4. TI-4400-15/1, Packaging, Handling, Storage and Transportation of Electrostatic Discharge Sensitive Items
5. TM 9406-15, Grounding Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix F to  
ENCLOSURE (6)

---

TASK: 4066.6.6 IMPLEMENT ELECTROMAGNETIC ENVIRONMENTAL EFFECTS  
E(3) PROGRAM

CONDITION(S): Provided mission, personnel, test equipment, and appropriate references.

STANDARD: E3 program will be implemented per FMFM 3-36 Guide to Electromagnetic Interference Control, Chapter 6.

PERFORMANCE STEPS:

1. Develop design and installation techniques that cover the following areas:
  - a. Indirect coupling
  - b. Shielding
  - c. Grounding
  - d. Bonding
  - e. Filtering
  - f. Corrosion control
2. Develop maintenance standards.
3. Identify and report E3 problems to the unit E3 coordinator.

REFERENCE(S):

1. TM 9406-15, Grounding Procedures
2. FMFM 3-36, Guide to Electromagnetic Interference Control
3. TI 5820-25/22

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MCO 1510.37C

**TASK: 4066.6.7 CONDUCT SKILL PROGRESSION TRAINING FOR ADP PERSONNEL**

CONDITION(S): Provided commander's guidance, unit training SOP, unit training schedule, assigned training topic, personnel to receive training, appropriate technical manuals, a training site, and references.

STANDARD: Operator, technical, and supervisor training will be conducted for all maintenance and equipment related MOS's within the unit per the unit training plan.

PERFORMANCE STEPS:

1. Review unit training plan.
2. Gather reference materials.
3. Study reference materials.
4. Develop training outline.
  - a. Determine tasks to be trained.
  - b. Determine sequence of tasks.
  - c. Determine time/space constraints.
  - d. Determine requirements/availability of assistants.
  - e. Determine resources required.
5. Rehearse presentation.
6. Prepare training site.
7. Evaluate Marines' performance to ensure learning.
8. Record and report training completed.

REFERENCE(S):

1. FMFM 0-1, Unit Training Management Guide
2. FMFM 0-1A, How to Conduct Training
3. FM 24-20, Tactical Wire and Cable Techniques
4. Appropriate Technical/Military Publications
5. TM 9999-15/2, Electro-static Discharge (ESD) Management

Appendix F to  
ENCLOSURE (6)

6. Unit Training Plan

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.6.8 CONDUCT BASIC MAINTENANCE ON EUCE SUITE**

CONDITION(S): Provided the Marine Corps EUCE suite and references.

STANDARD: The basic maintenance on the EUCE suite will be conducted per the applicable directives and manuals.

PERFORMANCE STEPS:

1. Replace EUCE components (monitors, drives, interface cards, power supply).
2. Replace/add memory chips.

REFERENCE(S):

1. Appropriate Operator Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**DUTY AREA 7 - EMBARK/TRANSPORT DATA COMMUNICATIONS ASSETS**

**TASK: 4066.7.1 PLAN EMBARKATION/REDEPLOYMENT/DISPLACEMENT OF DATA COMMUNICATIONS EQUIPMENT AND PERSONNEL**

CONDITION(S): Given deployment orders or instructions, equipment, and personnel.

STANDARD: The deployment/redeployment/displacement of equipment and personnel will be planned per the reference.

PERFORMANCE STEPS:

1. Examine deployment order/instructions.
2. Determine equipment and personnel requirements.

MCO 1510.37C

3. Develop instructions for the deployment.
4. Determine special lifting/handling requirements for maintenance/maintenance support equipment.
5. Determine special security requirements for maintenance/maintenance support equipment.

REFERENCE(S) :

1. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.7.2 DIRECT EMBARKATION OF DATA COMMUNICATIONS EQUIPMENT AND PERSONNEL**

CONDITION(S): Given embarkation instructions/orders.

STANDARD: The embarkation of equipment will be directed.

PERFORMANCE STEPS:

1. Examine the embarkation instructions.
2. Ensure personnel are prepared for embarkation.
3. Ensure equipment has limited technical inspection (LTI) completed and is operational.
4. Ensure equipment is packed properly.
5. Ensure personal equipment is serviceable and packed properly.
6. Ensure an accurate embark manifest is maintained for accountability.
7. Inspect SL-3 completeness of maintenance/maintenance support equipment.
8. Inspect technical marking of maintenance/maintenance support equipment.

REFERENCE(S) :

1. Local SOP

Appendix F to  
ENCLOSURE (6)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 8 - DATA COMMUNICATIONS PERSONNEL TRAINING

TASK: 4066.8.1 ESTABLISH TRAINING PLANS AND SCHEDULE

CONDITION(S): Given a platoon of marines.

STANDARD: The required training plans and schedules will be prepared per appropriate references.

PERFORMANCE STEPS:

1. Examine personnel to determine training requirements.
2. Examine references to determine training requirements.
3. Prepare annual/semi-annual/quarterly training plan as required.
4. Prepare monthly training schedule.
5. Prepare other required training schedules and reports.

REFERENCE(S):

1. Local SOP
2. Higher HQ Training Plan/Order

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.8.2 MANAGE DATA COMMUNICATIONS TRAINING PROGRAM

CONDITION(S): Given a platoon of marines and training plans/schedules.

STANDARD: The training plans and schedules must be implemented to include required records.

PERFORMANCE STEPS:

1. Examine training plans and schedules.

MCO 1510.37C

2. Assign personnel to teach required classes.
3. Ensure lesson plans are created for classes.
4. Ensure training rosters and lesson plans are maintained as required.
5. Ensure instructors have adequate knowledge of subject matter.

REFERENCE(S):

1. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.8.3 CONDUCT DATA COMMUNICATIONS TRAINING PROGRAM**

CONDITION(S): Given training plans and schedules with assignments.

STANDARD: A lesson plan must be created and submitted, the class must be taught, and lesson plan updated as required.

PERFORMANCE STEPS:

1. Examine class assignment.
2. Utilizing pertinent references create a lesson plan.
3. Submit the lesson plan for approval.
4. Rehearse the class.
5. Instruct the class using the lesson plan.
6. Prepare class attendance roster.
7. Update the lesson plan as required.

REFERENCE(S):

1. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 9 - LOCAL AND WIDE AREA NETWORKS

TASK: 4066.9.1 PLAN LOCAL AREA NETWORKS

CONDITION(S): Given connectivity requirements.

STANDARD: Plan the LAN to include cable diagrams and runs.

PERFORMANCE STEPS:

1. Examine connectivity requirements.
2. Conduct site survey of area to be installed.
3. Diagram area to be installed.
4. Ensure there are sufficient LAN cards for installation.
5. Ensure there are sufficient connectors and cable for installation.

REFERENCE(S):

1. Local SOP
2. LAN Hardware and Software Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.9.2 DIRECT INSTALLATION OF LOCAL AREA NETWORKS

CONDITION(S): Given connectivity and LAN requirements.

STANDARD: Direct the installation of the LAN from start until installation is complete.

PERFORMANCE STEPS:

1. Examine LAN diagram and requirements.
2. Ensure sufficient consumable items are on hand for installation (i.e. cable, connectors).

MCO 1510.37C

3. Ensure sufficient personnel are on hand for installation.
4. Ensure sufficient tools are on hand for installation.
5. Coordinate with users as to installation time.
6. Dispatch installation teams.
7. Check installation for quality and correctness.

REFERENCE(S) :

1. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4066.9.3 INSTALL A LOCAL AREA NETWORK

CONDITION(S): Given requirements and diagrams.

STANDARD: Install the local area network to include LAN cards, cables, connectors, and servers.

PERFORMANCE STEPS:

1. Install LAN cables according to diagrams.
2. Install connectors where drops belong on the LAN.
3. Install LAN cards as required.
4. Install the network server, configuring it for local use.
5. Document network card settings.

REFERENCE(S) :

1. Local SOP
2. NOS Operations and Installation Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.9.4 MAINTAIN A LOCAL AREA NETWORK**

CONDITION(S): Given an installed and operational local area network and connectivity diagrams.

STANDARD: Maintain the local area network to include monitoring performance, troubleshooting equipment and software, replacing defective LAN cards, cables, connectors, and servers.

PERFORMANCE STEPS:

1. Monitor the network utilizing available network analyzers and software.
2. Troubleshoot circuit/equipment outages.
3. Repair/Replace defective equipment.
4. Update documentation.

REFERENCE(S):

1. Local SOP
2. NOS Operations and Installation Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.9.5 MANAGE A LOCAL AREA NETWORK**

CONDITION(S): Given a Local Area Network (LAN) and appropriate technical references.

STANDARD: A Local Area Network will be managed to include users, services, and server operations per the references.

PERFORMANCE STEPS:

1. Administer user accounts.
2. Administer services.
3. Administer server operations.

REFERENCE(S):

1. Local SOP

MCO 1510.37C

2. NOS Operations and Installation Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.9.6 CONNECT LOCAL AND WIDE AREA NETWORKS**

CONDITION(S): Given wide area network requirements.

STANDARD: Local area networks must be connected to wide area network forming an internetwork utilizing routers, bridges, and DCE as required.

PERFORMANCE STEPS:

1. Determine connectivity requirements.
2. Determine WAN protocol to be used.
3. Install routers as required.
4. Install bridges as required.
5. Install DCE as required.
6. Ensure local servers are configured for WAN connectivity.

REFERENCE(S):

1. Local SOP
2. NOS Operations and Installation Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4066.9.7 MANAGE IP NETWORK**

CONDITION(S): Given a class A, B, or C IP network.

STANDARD: The IP network must be subnetted and managed to ensure efficient operations.

PERFORMANCE STEPS:

1. Utilizing the class of IP network assigned examine uses and users requiring IP addresses.
2. Subnet the IP network to maximize effectiveness.
3. Diagram the IP network.
4. Register hosts with the defense data network (DDN) network information center (NIC).
5. Install/configure IP software on hosts and networks.

REFERENCE(S) :

1. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MOS 4067, PROGRAMMER, ADA

DUTY AREA 1 - PROGRAMMING

TASK: 4067.1.1 ANALYZE CUSTOMER REQUEST

CONDITION(S): Given a customer request, a point of contact, and appropriate references.

STANDARD: The request will be analyzed to determine the most viable solution that satisfies the customer's need.

PERFORMANCE STEPS:

1. Verify user requirements.
2. Determine system requirements.
3. Conduct Feasibility Study.
4. Perform system analysis.
5. Develop analysis specifications.

REFERENCE(S):

1. MCO P5231.1\_, Life Cycle Management for Automated Information Systems
2. IRM-5231 Series
3. IRM-5234 Series
4. Software Engineering, Ian Sommerville
5. Software Engineering, Ada Second Edition, Grady Booch

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MCO 1510.37C

**TASK: 4067.1.2 DESIGN A COMPUTER PROGRAM/AUTOMATED INFORMATION SYSTEM (AIS)**

CONDITION(S): Given analysis specifications, a point of contact, and appropriate references.

STANDARD: The AIS will be designed to satisfy the analysis specifications utilizing software engineering principles.

PERFORMANCE STEPS:

1. Develop design specifications.
2. Develop a test plan.
3. Develop an implementation plan.

REFERENCE(S):

1. MCO P5231.1\_, Life Cycle Management for Automated Information Systems
2. IRM-5231 Series
3. IRM-5234 Series
4. Software Engineering, Ian Sommerville
5. Software Engineering, Ada Second Edition, Grady Booch

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4067.1.3 CONSTRUCT A COMPUTER PROGRAM/AIS**

CONDITION(S): Given design specifications, appropriate hardware/software, and appropriate references.

STANDARD: A computer program/AIS will be constructed so that it conforms 100% to the design specifications.

PERFORMANCE STEPS:

1. Develop code.
2. Compile code.
3. Perform unit testing.

4. Develop documentation.

REFERENCE(S) :

1. MCO P5231.1\_, Life Cycle Management for Automated Information Systems
2. IRM-5231 Series
3. ANSI/MIL-STD-1815A-1983, Ada Programming Language Reference Manual
4. JCL Reference Manual
5. MVS Utilities Manual
6. CICS Reference Manuals
7. TSO/E Reference Manuals
8. ADABAS Reference Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK:** 4067.1.4 TEST A COMPUTER PROGRAM/AIS

**CONDITION(S):** Given a test plan, source files, source listing, compiled program/system, and appropriate references.

**STANDARD:** The program/AIS will be tested to determine the ability to fulfill requirements as identified by the test plan.

PERFORMANCE STEPS:

1. Construct test environment.
2. Execute test procedure.
3. Evaluate test results.
4. Document test results.

REFERENCE(S) :

1. Software Testing Techniques, Second Edition, Boris Beizer

MCO 1510.37C

2. Software Testing and Evaluation, DeMillo, McCracken, Martin, Passafiume
3. Introduction to Computer and Data Processing, Shelly & Cashman
4. IRM-5231 Series

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4067.1.5 IMPLEMENT A COMPUTER PROGRAM/AIS

CONDITION(S): Given a tested system, implementation plan, executable code, and access to the target production environment.

STANDARD: A computer program/AIS will be implemented to provide the customer with an executable system per the implementation plan.

PERFORMANCE STEPS:

1. Install program/AIS.
2. Conduct user training.
3. Conduct user acceptance training.

REFERENCE(S):

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 2 - MANAGING PROGRAMMERS

TASK: 4067.2.1 PERFORM PROJECT MANAGEMENT

CONDITION(S): Given projects to complete, qualified personnel, access to system information, and appropriate references.

STANDARD: Project management will be performed to ensure completion of projects within established resource constraints.

PERFORMANCE STEPS:

1. Establish tasks (deliverables).
2. Prioritize tasks.
3. Determine available resources.
4. Determine development sequence.
5. Document plan.
6. Assign tasks.
7. Monitor progress.
8. Review/modify plan.

REFERENCE(S):

1. MCO P5231.1\_, Life Cycle Management for Automated Information Systems
2. IRM-5231 Series
3. Local Established Procedures
4. Applicable Vendor Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MCO 1510.37C

**TASK: 4067.2.2 ASSIGN PROGRAMMING TASKS**

CONDITION(S): Given programming assignments for completion, access to personnel, a Program Specification, access to systems information, and appropriate references.

STANDARD: Programming tasks will be assigned per functional and operational requirements ensuring timely completion of the mission.

PERFORMANCE STEPS:

1. Review Detailed Design Specifications (DDS).
2. Identify system constraints and resources.
3. Identify available programming resources.
4. Estimate size and time requirements of task.
5. Prioritize all current programming tasks.
6. Assign programming tasks to programmers.

REFERENCE(S):

1. MCO 5271.1, Information Resources Management (IRM) Standard Guidelines Program
2. IRM-5231-01, System Development Methodology Overview
3. IRM-5231-02, System Development Methodology Developer Perspective
4. IRM-5231-06, Detailed Design Specification

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4067.2.3 MONITOR PROGRAMMING TASKS**

CONDITION(S): Given programming assignments to include personnel assigned to the projects, due dates of the projects, and appropriate references.

STANDARD: All programming assignments will be completed correctly and by the project due date. Skill deficits will be identified in a timely manner.

PERFORMANCE STEPS:

1. Serve a subject matter expert.
2. Assess progress of programming tasks.
3. Identify skill deficits.
4. Provide corrective guidance.

REFERENCE(S):

1. MCO 5271.1, Information Resources Management (IRM) Standard Guidelines Program
2. IRM-5231-01, System Development Methodology Overview
3. IRM-5231-02, System Development Methodology Developer Perspective
4. IRM-5231-06, Detailed Design Specification
5. IRM-5234-01, Programming Standards
6. IRM-5234-04, Naming Conventions

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4067.2.4 CONDUCT MANAGED ON THE JOB TRAINING (MOJT)**

CONDITION(S): Given a local SOP, personnel requiring MOJT, ITS, and the reference.

STANDARD: Tasks for training will be identified and adequate training received by all personnel per local SOP.

PERFORMANCE STEPS:

1. Identify formal school capabilities.
2. Identify personnel skills deficiencies.
3. Aggregate training requirements.
4. Create training plan.
5. Develop training method.

MCO 1510.37C

6. Conduct MOJT to ITS.

REFERENCE(S) :

1. MCO 1510.37C, Individual Training Standards (ITS) System for the Data Systems Occupational Field (OCCFLD) 40

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 3 - PROGRAM MAINTENANCE

TASK: 4067.3.1 MODIFY EXISTING PROGRAM

CONDITION(S): Given Detailed Design Specification (DDS), access to Data Dictionary, existing system documentation, programming tools, access to appropriate computers(s), and appropriate references.

STANDARD: Existing Programs will be modified to meet all DDS requirements per the System Development Methodology (SDM) on systems originally developed using the SDM. They will also meet all DDS requirements per the local SOP on systems not documented per the SDM.

PERFORMANCE STEPS:

1. Acquire program requiring modification.
2. Modify program to meet requirements.
3. Create appropriate comments (program internal).
4. Syntax check program.
5. Complete Structured Walk-through.
6. Conduct Unit-Level testing.
7. Document test results.
8. Modify program documentation.

REFERENCE(S) :

1. MCO 5271.1, Information Resources Management (IRM) Standards and Guidelines Program
2. ANSI/MIL-STD-1815A-1983, ADA Programming Language Reference Manual
3. IRM-5231-01, System Development Methodology Overview
4. IRM-5231-02, System Development Methodology Developer Perspective
5. IRM-5231-06, Detailed Design Specification
6. IRM-5231-07, Users Manual
7. IRM-5231-08, Computer Operations Manual
8. IRM-5231-11, Data Base Plan
9. IRM-5231-14, Test Plan
10. IRM-5234-01, Programming Standard
11. IRM-5234-04, Naming Conventions
12. IRM-5235-01, Data Dictionary
13. COBOL Reference Manual
14. Job Control Language Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 4 - DATABASE MANAGEMENT SYSTEM (DBMS)

TASK: 4067.4.1 CREATE DBMS ACCESS

CONDITION(S): Given a program request, access to Data Dictionary, access to appropriate computer(s) tools, and references.

STANDARD: Access to the DBMS will be created to meet access requirements identified in the program request.

PERFORMANCE STEPS:

1. Identify type of access required.
2. Identify search criteria.
3. Identify fields to be returned
4. Create access.

REFERENCE(S):

1. MCO 5271.1, Information Resources Management (IRM) Standards and Guidelines Program
2. ANSI/MIL-STD-1815A-1983, ADA Programming Language Reference Manual
3. IRM-5231-06, Detailed Design Specification
4. IRM-5234-01, Programming Standard
5. IRM-5234-04, Naming Conventions
6. IRM-5235-01, Data Dictionary
7. COBOL Reference Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4067.4.2 CREATE A BATCH JOB IN ON-LINE QUERY LANGUAGE**

CONDITION(S): Given a program request, access to the data dictionary, on-line access to appropriate computer(s), tools, and references.

STANDARD: A batch job will be created in an on-line query language which implements a program request.

PERFORMANCE STEPS:

1. Read request.
2. Identify environment required.
3. Select Job Control Language corresponding to environment.
4. Code program.
5. Test program.

REFERENCE(S) :

1. MCO 5271.1, Information Resources Management (IRM) Standards and Guidelines Program
2. ANSI/MIL-STD-1815A-1983, ADA Programming Language Reference Manual
3. IRM-5231-01, System Development Methodology Overview
4. IRM-5231-02, System Development Methodology Developer Perspective
5. IRM-5231-06, Detailed Design Specification
6. IRM-5231-14, Test Plan
7. IRM-5234-01, Programming Standard
8. IRM-5234-04, Naming Conventions
9. IRM-5235-01, Data Dictionary

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4067.4.3 USE DATA DICTIONARY**

CONDITION(S): Given a program request, access to a data dictionary, on-line access to appropriate computer(s), tools, and appropriate references.

STANDARD: The Data Dictionary will be used per local SOP and the System Development Methodology (SDM).

PERFORMANCE STEPS:

1. Find field(s) in the data dictionary.
2. Check program use for consistency with the data dictionary.
3. Submit request for addition of new fields as needed.
4. Build user views.

REFERENCE(S):

1. MCO 5271.1, Information Resources Management (IRM) Standards and Guidelines Program
2. ANSI/MIL-STD-1815A-1983, ADA Programming Language Reference Manual
3. IRM-5231-06, Detailed Design Specification
4. IRM-5234-01, Programming Standard
5. IRM-5234-04, Naming Conventions
6. IRM-5235-01, Data Dictionary

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 5 - SYSTEM UTILITIES

TASK: 4067.5.1 MANIPULATE DATA SETS TO SATISFY ALL UTILITY FUNCTIONS

CONDITION(S): Given utility function request, appropriate computer access, customer request, and appropriate references.

STANDARD: Data sets will be manipulated to satisfy all requested utility functions.

PERFORMANCE STEPS:

1. Review available system utilities.
2. Select appropriate system utility.
3. Create data set(s).
4. Delete data set(s).
5. Compress data set(s).
6. Copy data.
7. Edit data.
8. Print data.
9. Sort data.

REFERENCE(S):

1. OSD Utilities Manual
2. Job Control Language Manual
3. Messages and Codes Manual
4. Vendor specific utilities manuals
5. Locally procured utilities manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 6 - END USER COMPUTER EQUIPMENT

TASK: 4067.6.1 OPERATE MICROCOMPUTER SUITE/EUCE

CONDITION(S): Given a microcomputer/EUCE suite installed, adequate power supply, and the vendor supplied manuals.

STANDARD: Microcomputer/EUCE suite must be operated per appropriate references.

PERFORMANCE STEPS:

1. Identify the components of the microcomputer.
2. Power up and boot the microcomputer.
3. Operate Marine Corps standard operating system software.
4. Operate Marine Corps standard EUCE/PC software.

REFERENCE(S):

1. Vendor supplied user and reference manuals
2. Locally procured user and reference manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MOS 4068, DATA NETWORK TECHNICIAN

DUTY AREA 1 - NETWORK SECURITY

TASK: 4068.1.1 DEVELOP DATA COMMUNICATIONS SECURITY MEASURES

CONDITION(S): Given applicable data communications security references and equipment.

STANDARD: Data communications security measures will be developed per the references to meet minimum security requirements.

PERFORMANCE STEPS:

1. Review applicable directives.
2. Examine local security concerns.
3. Plan security measures.
4. Write security directive.

REFERENCE(S):

1. OPNAVINST 5510.1
2. Local Security Regulations
3. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4068.1.2 DESIGN CRYPTOGRAPHIC TOPOLOGY

CONDITION(S): Given data communication architecture, cryptographic equipment, and security requirements.

STANDARD: Cryptographic topology will be designed per the references to meet minimum security levels for the security classification required.

PERFORMANCE STEPS:

1. Examine circuit diagram.

MCO 1510.37C

2. Examine bandwidth requirements.
3. Determine available cryptographic equipment.
4. Develop cryptographic topology.

REFERENCE(S):

1. OPNAVINST 5510.1
2. Annex K
3. Local Security Regulations
4. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.1.3 DEVELOP A NETWORK SECURITY PLAN**

CONDITION(S): Given a network diagram, security requirements, and available access controls.

STANDARD: A network security plan will be developed per the references to meet minimum security levels for the security classification required.

PERFORMANCE STEPS:

1. Examine security requirements.
2. Examine existing network.
3. Determine network vulnerabilities.
4. Examine available hardware/software access controls.
5. Write the network security plan.

REFERENCE(S):

1. OPNAVINST 5510.1
2. Local Security Regulations
3. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 2 - NETWORK PLANNING

TASK: 4068.2.1 DESIGN A LOCAL AREA NETWORK

CONDITION(S): Given local area network requirements.

STANDARD: A local area network will be designed per the references resulting in a detailed level four diagram.

PERFORMANCE STEPS:

1. Examine communications architecture and paths.
2. Examine data security requirements.
3. Examine physical security requirements.
4. Examine available bandwidth.
5. Examine client/server workstations to be connected.
6. Determine IP addressing requirements.
7. Develop contingency plan.
8. Write local area network topology plan.

REFERENCE(S):

1. OPNAVINST 5510.1
2. MCO 5510.14
3. SECNAVINST 5239.1A
4. Local Security Regulations
5. Local SOP
6. Annex K

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MCO 1510.37C

**TASK: 4068.2.2 DESIGN A WIDE AREA NETWORK**

CONDITION(S): Given wide area network requirements.

STANDARD: A wide area network will be designed per the references resulting in a detailed level four diagram.

PERFORMANCE STEPS:

1. Examine communications architecture and paths.
2. Examine data security requirements.
3. Examine physical security requirements.
4. Examine available bandwidth.
5. Examine client/server workstations to be connected.
6. Determine IP addressing requirements.
7. Develop contingency plan.
8. Write wide area network topology plan.

REFERENCE(S):

1. OPNAVINST 5510.1
2. MCO 5510.14
3. SECNAVINST 5239.1A
4. Local Security Regulations
5. Local SOP
6. Annex K

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.2.3 DETERMINE PERSONNEL REQUIREMENTS**

CONDITION(S): Given data communication architecture, mission requirements, and the existing effective T/O.

Appendix H to  
ENCLOSURE (6)

STANDARD: Personnel requirements will be determined so that an appropriate level of staffing is determined to accomplish mission objectives.

PERFORMANCE STEPS:

1. Identify mission requirements.
2. Examine current unit T/O.
3. Identify deficiencies.
4. Staff proposed T/O.

REFERENCE(S) :

1. Current T/O
2. Local SOP
3. Local Security Regulations
4. Annex K

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4068.2.4 WRITE DATA COMMUNICATIONS DOCUMENT

CONDITION(S): Given appropriate operations orders and SOP's.

STANDARD: A data communications appendix to Annex K or letter of instruction (LOI) must be written for operations and exercises.

PERFORMANCE STEPS:

1. Examine operation order or SOP for requirements.
2. Examine CMR for equipment accountability.
3. Examine equipment record (ERO) log for equipment availability.
4. Examine personnel resources for availability/training.
5. Write the LOI or appendix for the exercise or operation including:
  - a. Data communications connectivity.

- b. LAN/WAN connectivity.
- c. Encryption devices to be used and location.
- d. LAN accounts.
- e. Personnel assignments.
- f. Special instructions.

REFERENCE(S):

1. Local SOP
2. Operations Order or Plan
3. FM 3-30

ADMINISTRATIVE INSTRUCTIONS:

1. Close coordination with the Comm Ops Section of local G/S-6 is required to perform this task.

---

**TASK: 4068.2.5 ESTABLISH EMBARKATION PROCEDURES**

CONDITION(S): Provided ADPE resources, personnel, mission requirements, and reference.

STANDARD: Embarkation procedures will be established per the reference.

PERFORMANCE STEPS:

1. Establish Equipment Density List (EDL).
2. Determine equipment priorities.
3. Write embarkation SOP.

REFERENCE(S):

1. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix H to  
ENCLOSURE (6)

---

**TASK: 4068.2.6 DEVELOP AN IP NETWORK ARCHITECTURE**

**CONDITION(S):** Given a mission, established data communication architecture, identified IP clients, and available IP networks.

**STANDARD:** An IP network architecture will be developed resulting in a detailed level four diagram.

**PERFORMANCE STEPS:**

1. Review data communication architecture.
2. Identify IP clients.
3. Identify number of IP networks required.
4. Establish subnetting scheme.
5. Assign IP addresses.
6. Create a level four diagram.

**REFERENCE(S):**

1. Local SOP
2. DDN Users Guide

**ADMINISTRATIVE INSTRUCTIONS:** (NONE)

---

**TASK: 4068.2.7 DEVELOP A MULTI-PROTOCOL NETWORK PLAN**

**CONDITION(S):** Given data communication architecture, set of identified protocols, and references.

**STANDARD:** A multi-protocol network plan will be developed to achieve sustainable performance in a heterogeneous network environment.

**PERFORMANCE STEPS:**

1. Identify protocols on current network.
2. Research protocol characteristics.

MCO 1510.37C

3. Identify interoperability difficulties.
4. Establish network plan.

REFERENCE(S):

1. Local SOP
2. Original Equipment Manufacturer (OEM) Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.2.8 PLAN FOR CLASSIFIED/SENSITIVE JOINT SERVICE NETWORK CONNECTIVITY**

CONDITION(S): Given mission requirements, data communication architecture, and appropriate references.

STANDARD: Classified/sensitive joint service network connectivity will be planned per the references.

PERFORMANCE STEPS:

1. Identify mission requirements.
2. Identify IP clients.
3. Identify available entry point.
4. Submit request for gateway access.
5. Develop connectivity plan.

REFERENCE(S):

1. DISA Defense Information System Network Integrated Tactical - Strategic Data Networking (ITSDN) Internet Protocol addressing Plan 24 Jun 94
2. DISA Defense Information System Network Secret Internet Protocol Router Network (SIPRNET) Internet protocol addressing plan 24 Nov 94
3. DISA Defense Secure Network 1 Phase Out and Secret Internet Protocol Router Network implementation plan 21 Oct 94

4. DISA Defense Contingency Exercise Plan 10-95
5. OPNAVINST 5510.1
6. Local SOP
7. Local Security SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**DUTY AREA 3 - UNIX NETWORKING**

**TASK: 4068.3.1 CONNECT A UNIX PLATFORM TO A NETWORK**

CONDITION(S): Given a UNIX platform with all appropriate hardware and software, and existing network, and an IP address.

STANDARD: The UNIX platform will be connected to a network which will transmit and receive data throughout the network.

PERFORMANCE STEPS:

1. Determine type of connection.
2. Install appropriate software.
3. Physically connect UNIX platform.
4. Configure communications interface.
5. Verify connectivity.
6. Modify routing tables.
7. Verify routes.

REFERENCE(S):

1. Local SOP
2. UNIX Operating System Manual
3. Communications Interface Manual
4. Original Equipment Manufacturer (OEM) Manuals

MCO 1510.37C

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.3.2 INSTALL TERMINAL EMULATION SOFTWARE**

CONDITION(S): Given a compatible workstation with all appropriate hardware, software, and an existing network.

STANDARD: The terminal emulation software will be installed to connect it to a remote host.

PERFORMANCE STEPS:

1. Determine if an IP address is required.
2. Load terminal emulation software.
3. Configure emulation software.
4. Verify connection to remote host.

REFERENCE(S):

1. Local SOP
2. Original Equipment Manufacturer (OEM) Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**DUTY AREA 4 - NETWORK MANAGEMENT**

**TASK: 4068.4.1 MANAGE A NETWORK**

CONDITION(S): Given network management software, a workstation, and an existing network.

STANDARD: The network will be managed to enhance network performance per the references.

PERFORMANCE STEPS:

1. Install network management software.
2. Configure network management software.

Appendix H to  
ENCLOSURE (6)

3. Monitor network.
4. Identify problem areas.
5. Optimize network.

REFERENCE(S) :

1. Local SOP
2. Original Equipment Manufacturer (OEM) Manuals
3. Network Operating System Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 5 - ADVANCED NETWORKING

TASK: 4068.5.1 PERFORM ADVANCED TROUBLESHOOTING TECHNIQUES

CONDITION(S): Given troubleshooting equipment and appropriate technical references.

STANDARD: Advanced troubleshooting techniques will be performed to resolve network problems.

PERFORMANCE STEPS:

1. Identify possible problems.
2. Analyze problems.
3. Hypothesize possible solutions.
4. Validate possible solutions.
5. Implement solutions.
6. Verify resolution.
7. Document procedures.

REFERENCE(S) :

1. Current Revision Network Operating System Documentation

Appendix H to  
ENCLOSURE (6)

MCO 1510.37C

2. Original Equipment Manufacturer (OEM) Manuals
3. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.5.2 MANAGE BANYAN VINES NETWORK**

CONDITION(S): Given multi-protocol Wide Area Network (WAN) topology and appropriate technical references.

STANDARD: A Banyan VINES wide area network will be managed per Advanced VINES Administration course documentation.

PERFORMANCE STEPS:

1. Perform advanced VINES administration.
2. Maintain advanced VINES network.

REFERENCE(S):

1. Advanced Banyan VINES Administration manuals
2. Current Release Banyan VINES Network Operating System Documentation
3. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.5.3 CONFIGURE ROUTER HARDWARE**

CONDITION(S): Given a router, data communication architecture, and appropriate references.

STANDARD: The router hardware will be configured to ensure operational capability.

PERFORMANCE STEPS:

1. Identify required internal components.
2. Identify required external peripheral components.

Appendix H to  
ENCLOSURE (6)

3. Identify available hardware options.
4. Install internal components.
5. Install external components.

REFERENCE(S):

1. Local SOP
2. Original Equipment Manufacturer (OEM) Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.5.4 CONFIGURE ROUTER SOFTWARE**

CONDITION(S): Given a router, data communication architecture, and appropriate technical references.

STANDARD: The router software will be configured to pass multiple protocols between multiple network devices.

PERFORMANCE STEPS:

1. Identify network protocols.
2. Identify installed hardware.
3. Configure software.

REFERENCE(S):

1. Original Equipment Manufacturer (OEM) Manuals
2. Local Security SOP
3. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.5.5 MANAGE MULTIPLE ELECTRONIC MAIL SYSTEMS**

CONDITION(S): Given multiple electronic mail packages, multiple Network Operating Systems (NOS), and appropriate technical references.

STANDARD: Multiple electronic mail packages will be managed to allow for message interoperability between different NOS's per the references.

PERFORMANCE STEPS:

1. Identify different NOS's.
2. Identify electronic mail systems.
3. Configure Mail Handling Agent (MHA).
4. Configure automated directory services.

REFERENCE(S):

1. MCO 5271.4A
2. Original Equipment Manufacturer (OEM) Manuals
3. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.5.6 CONFIGURE DOMAIN NAME SERVICE (DNS)**

CONDITION(S): Given DNS software, host platform, and appropriate technical references.

STANDARD: DNS will be configured to allow name resolution for IP clients per the references.

PERFORMANCE STEPS:

1. Identify IP clients.
2. Register domain with proper authority.
3. Install DNS software.
4. Manage DNS.

REFERENCE(S) :

1. Original Equipment Manufacturer (OEM) Manuals
2. Local Security SOP
3. Local SOP

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 6 - RESOURCE MANAGEMENT

TASK: 4068.6.1 MANAGE THE PLANNING, PROGRAMMING AND BUDGETING SYSTEM (PPBS) FOR DATA COMMUNICATION EQUIPMENT

CONDITION(S): Given the appropriate references, local comptroller guidance, contracts, delivery orders, planning documents, and appropriate budget forms.

STANDARD: The PPBS will be managed for data communications equipment that will enable a unit to meet its financial obligation.

PERFORMANCE STEPS:

1. Determine the sources of budget information.
2. Establish installation goals and objectives.
3. Determine administrative systems required.
4. Prepare the budget.
5. Complete the budget.
6. Submit the budget.
7. Procure data communication equipment.

REFERENCE(S) :

1. Local SOP
2. MCO 7100.8
3. MCBul 7100 Series

MCO 1510.37C

4. MCO P5233.1
5. Armed Forces Staff College PUB 1
6. IRM 5231 Series
7. IRC 5236 Series

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4068.6.2 MANAGE CONTRACTS**

CONDITION(S): Given contacting documents, local contracting officer documents, requirements for new contracts, lists of ADP resources, specific deadlines, and appropriate references.

STANDARD: The contracts will be managed for hardware, software, and services per appropriate references.

PERFORMANCE STEPS:

1. Perform responsibilities of contracting officer's technical representative and project manager.
2. Supervise identification and preparation of requirements for forwarding to purchasing and contracting.
3. Review special clauses.
4. Review principles of fund management on contracts.
5. Evaluate contract performance.

REFERENCE(S):

1. Local SOP
2. IRM 5236-01

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4068.6.3 MANAGE MIMMS/SASSY REPORTS AND REQUIREMENTS

CONDITION(S): Given MIMMS/SASSY reports and forms.

STANDARD: MIMMS/SASSY reports and requirements will be managed per the references.

PERFORMANCE STEPS:

1. Identify ERO and ERO/SL procedures.
2. Identify DPR and LM2 report procedures.

REFERENCE(S) :

1. Local SOP
2. UM 4790.\_
3. TM 4790.\_

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

## MOS 4069, SYSTEMS PROGRAMMER

## DUTY AREA 1 - GENERATION AND INSTALLATION OF SYSTEMS SOFTWARE

TASK: 4069.1.1 BUILD INPUT/OUTPUT CONFIGURATION DATA SET  
(IOCDs)

CONDITION(S): Given the use of the system reference library, input/output configuration description, installation requirements, and appropriate utility programs.

STANDARD: The input/output configuration data set will be built so that it will describe the input/output configuration per the installation requirements.

## PERFORMANCE STEPS:

1. Identify the hardware input/output configuration.
2. Code the input/output configuration program (IOCP) macros to define the hardware I/O configuration.
3. Execute the IOCP using the coded macros to produce a test input/output configuration data set (IOCDs).
4. Verify the results of the IOCP execution.
5. Perform an initial microcode load (IML) using the test IOCDs.
6. Verify the results of the IML.
7. Perform an initial program load (IPL) of an MVS operating system.
8. Verify the results of the IPL.
9. Test the operation of the hardware input/output configuration.
10. Verify the results of the test.
11. Implement the test IOCDs into the production environment.

## REFERENCE(S) :

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.1.2 BUILD MVS OPERATING SYSTEM CODE**

CONDITION(S): Given the use of the system reference library, input/output configuration description, installation requirements, appropriate utility programs, and distribution libraries.

STANDARD: The MVS operating system code will be built so that the resultant libraries are per the installation requirements.

PERFORMANCE STEPS:

1. Identify the MVS operating system code specifications.
2. Code the MVS system generation macros to define the parameters of the MVS operating system.
3. Execute the Stage I system generation process using the coded macros to produce a Stage II jobstream.
4. Verify the results of the Stage I execution.
5. Execute the Stage II system generation process to produce test MVS operating system code.
6. Verify the results of the Stage II execution.
7. Perform an initial program load (IPL) of the MVS operating system using the test MVS operating system code.
8. Verify the results of the IPL.
9. Test the operation of the MVS operating system code.
10. Verify the results of the test.
11. Implement the tested MVS operating system code into the production environment.

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.1.3 BUILD MVS OPERATING SYSTEM INPUT/OUTPUT CONFIGURATION COMPONENT**

CONDITION(S): Given the use of the system reference library, input/output configuration description, input/output configuration program macros, installation requirements, appropriate utility programs, and distribution libraries.

STANDARD: The MVS operating system input/output configuration component will be built so that it will describe the input/output configuration per the input/output configuration data set and the installation requirements.

PERFORMANCE STEPS:

1. Obtain the input/output configuration program (IOCP) macros.
2. Identify the MVS software input/output configuration.
3. Code the MVS configuration program (MVSCP) macros to define the MVS software I/O configuration.
4. Execute the MVSCP using the IOCP and MVSCP macros to create a test MVS operating system I/O configuration component.
5. Verify the results of the MVSCP execution.
6. Perform an initial program load (IPL) of the MVS operating system using the test MVS operating system I/O configuration component.
7. Verify the results of the IPL.
8. Test the operation of the MVS operating system I/O configuration component.
9. Verify the results of the test.
10. Implement the tested MVS operating system I/O configuration component into the production environment.

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix I to  
ENCLOSURE (6)

**TASK: 4069.1.4 CREATE JOB ENTRY SUBSYSTEM (JES2) PARAMETERS**

CONDITION(S): Given the use of the system reference library, input/output configuration description, installation requirements, appropriate utility programs, and MVS operating system parameter libraries.

STANDARD: The job entry subsystem (JES2) parameters must be created so that JES2 will perform per the installation requirements.

PERFORMANCE STEPS:

1. Identify the operating requirements of the job entry subsystem (JES2).
2. Code the JES2 parameters.
3. Test the job entry subsystem (JES2) utilizing the coded parameters.
4. Verify the results of the test.
5. Implement the tested parameters into the production environment.

REFERENCE(S):

1. System Reference Library
2. MVS operating system parameter libraries

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.1.5 INSTALL PROGRAM PRODUCTS**

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, vendor supplied data, input/output configuration description, installation requirements, and appropriate utility programs.

STANDARD: The program product will be installed to perform per the vendor supplied instructions and the installation requirements.

PERFORMANCE STEPS:

1. Select the program product.
2. Read the vendor supplied instructions.
3. Install the program product into a test environment using the vendor supplied data.
4. Test the program product.
5. Verify the results of the test.
6. Implement the tested program product into the production environment.

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.1.6 INSTALL PROPRIETARY SOFTWARE PRODUCTS**

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, vendor supplied data, input/output configuration description, and appropriate utility programs.

STANDARD: The proprietary software product will be installed to perform per the vendor supplied instructions and the installation requirements.

PERFORMANCE STEPS:

1. Select the proprietary software product.
2. Read the vendor supplied instructions.
3. Install the proprietary software product into a test environment using the vendor supplied data.
4. Test the proprietary software product.
5. Verify the results of the test.
6. Implement the tested proprietary software product into the production environment.

MCO 1510.37C

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.1.7 INSTALL JOB ENTRY SUBSYSTEM (JES2) EXIT ROUTINES**

CONDITION(S): Given the use of the system reference library, current MVS operating system documentation, installation requirements, current job entry subsystem (JES2) parameters, appropriate utility programs, and MVS operating system libraries.

STANDARD: The job entry subsystem (JES2) exit routines must be installed and execute per the installation requirements.

PERFORMANCE STEPS:

1. Identify the job entry subsystem (JES2) exit routine necessary to implement the requested function.
2. Code the JES2 exit routine.
3. Assemble and link-edit the JES2 exit routine.
4. Verify the results of the assembly and link-edit.
5. Implement the exit into a test JES2 environment.
6. Test the JES2 exit routine.
7. Verify the results of the test.
8. Implement the exit into the production JES2 environment.

REFERENCE(S):

1. System Reference Library
2. MVS Operating System Libraries

ADMINISTRATIVE INSTRUCTIONS:

1. Marines performing this task must have an understanding of the assembler programming language.

---

**TASK: 4069.1.8 INSTALL MVS OPERATING SYSTEM EXIT ROUTINES**

**CONDITION(S):** Given the use of the system reference library, current MVS operating system documentation, installation requirements, MVS operating system parameter libraries, appropriate utility programs, and MVS operating system libraries.

**STANDARD:** The MVS operating system exit routines must be installed and executed per the installation requirements.

**PERFORMANCE STEPS:**

1. Identify the MVS operating system exit routine necessary to implement the requested function.
2. Code the MVS operating system exit routine.
3. Assemble and link-edit the MVS operating system exit routine.
4. Verify the results of the assembly and link-edit.
5. Implement the exit into a test MVS operating system environment.
6. Test the MVS operating system exit routine.
7. Verify the results of the test.
8. Implement the exit into the production MVS operating system environment.

**REFERENCE(S):**

1. System Reference Library
2. MVS Operating System Libraries

**ADMINISTRATIVE INSTRUCTIONS:**

1. Marines performing this task should have an understanding of the assembler programming language.

DUTY AREA 2 - SYSTEMS SOFTWARE

TASK: 4069.2.1 MODIFY MVS OPERATING SYSTEM DATA SETS

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, vendor supplied data, current distribution libraries, current MVS operating system documentation, installation requirements, and appropriate utility programs.

STANDARD: The data sets must be modified so that the MVS operating system will perform per the vendor supplied instructions and installation requirements.

PERFORMANCE STEPS:

1. Identify the requested changes to the operating requirements of the MVS operating system.
2. Read the vendor supplied instructions.
3. Identify the MVS operating system data sets that require changes.
4. Create a test version of the MVS operating system.
5. Modify the test version of the selected MVS operating system data sets using the vendor supplied data.
6. Test the test version of the MVS operating system.
7. Verify the results of the test.
8. Migrate the tested version of the MVS operating system data sets into the production environment.

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.2 MODIFY JOB ENTRY SUBSYSTEM (JES2) PARAMETERS**

CONDITION(S): Given the use of the system reference library, current MVS operating system documentation, current job entry subsystem (JES2) parameters, installation requirements, and appropriate utility programs.

STANDARD: The job entry subsystem (JES2) parameters must be modified so that the job entry subsystem (JES2) will perform per the installation requirements.

**PERFORMANCE STEPS:**

1. Identify the requested changes to the operating requirements of the job entry subsystem (JES2).
2. Create a test version of the JES2 parameters.
3. Modify the test JES2 parameters.
4. Test JES2 utilizing the test version of the JES2 parameters.
5. Verify the results of the test.
6. Migrate the tested version of the parameters into the production environment.

**REFERENCE(S):**

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.3 MAINTAIN DIRECT ACCESS STORAGE DEVICES (DASD)**

CONDITION(S): Given the use of the system reference library, current MVS operating system documentation, installation requirements, appropriate utility programs, and direct access storage devices (DASD).

STANDARD: The direct access storage devices (DASD) must be maintained per the installation requirements.

**PERFORMANCE STEPS:**

1. Select the direct access storage device (DASD).

2. Initialize the DASD using the appropriate MVS operating system utility or vendor supplied utility.
3. Backup the DASD using the appropriate MVS operating system utility or vendor supplied utility.
4. Restore the DASD using the appropriate MVS operating system utility or vendor supplied utility.

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.4 MODIFY PROGRAM PRODUCTS**

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, vendor supplied data, current MVS operating system documentation, installation requirements, and appropriate utility programs.

STANDARD: The program product must be modified so that the program product and MVS operating system will perform per the vendor supplied instructions and installation requirements.

PERFORMANCE STEPS:

1. Select the program product.
2. Read the vendor supplied instructions.
3. Create a test version of the program product.
4. Modify the test version of the program product using the vendor supplied data.
5. Test the test version of the program product.
6. Verify the results of the test.
7. Migrate the tested version of the program product into the production environment.

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.5 MODIFY PROPRIETARY SOFTWARE PRODUCTS**

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, vendor supplied data, current MVS operating system documentation, installation requirements, and appropriate utility programs.

STANDARD: The proprietary software product must be modified so that the proprietary software product and the MVS operating system will perform per the vendor supplied instructions and installation requirements.

PERFORMANCE STEPS:

1. Select the proprietary software product.
2. Read the vendor supplied instructions.
3. Create a test version of the proprietary software product.
4. Modify the test version of the proprietary software product using the vendor supplied data.
5. Test the test version of the proprietary software product.
6. Verify the results of the test.
7. Migrate the tested version of the proprietary software product into the production environment.

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.6 MODIFY JOB ENTRY SUBSYSTEM (JES2) EXIT ROUTINES**

CONDITION(S): Given the use of the system reference library, current job entry subsystem (JES2) exit routines, current job entry subsystem (JES2) parameters, current MVS operating system documentation, installation requirements, appropriate utility programs, and appropriate references.

STANDARD: The job entry subsystem (JES2) exit routines must be modified so that they will perform per the installation requirements.

**PERFORMANCE STEPS:**

1. Identify the requested changes to the job entry subsystem (JES2) exit routine.
2. Modify the JES2 exit routine.
3. Assemble and link-edit the JES2 exit routine.
4. Verify the results of the assembly and link-edit.
5. Implement the exit into a test JES2 environment.
6. Test the JES2 exit routine.
7. Verify the results of the test.
8. Implement the exit into the production JES2 environment.

**REFERENCE(S):**

1. System Reference Library
2. MVS Operating System Libraries

**ADMINISTRATIVE INSTRUCTIONS:**

1. Marines performing this task should have an understanding of the assembler programming language.
-

**TASK: 4069.2.7 MODIFY MVS OPERATING SYSTEM EXIT ROUTINES**

**CONDITION(S):** Given the use of the system reference library, current MVS operating system exit routines, current MVS operating system documentation, installation requirements, appropriate utility programs, and appropriate references.

**STANDARD:** The MVS operating system exit routines must be modified so that they will perform per the installation requirements.

**PERFORMANCE STEPS:**

1. Identify the requested changes to the MVS operating system exit routine.
2. Modify the MVS operating system exit routine.
3. Assemble and link-edit the MVS operating system exit routine.
4. Verify the results of the assembly and link-edit.
5. Implement the exit into a test MVS operating system environment.
6. Test the MVS operating system exit routine.
7. Verify the results of the test.
8. Implement the exit into the production MVS operating system environment.

**REFERENCE(S):**

1. MVS Operating System Libraries
2. MVS Operating System Parameter Libraries
3. System Reference Library

**ADMINISTRATIVE INSTRUCTIONS:**

1. Marines performing this task should have an understanding of the assembler programming language.

**TASK: 4069.2.8 SUPERVISE PROGRAMMING EFFORTS**

CONDITION(S): Given a programming work section which has ongoing work requests and projects, and applicable technical manuals.

STANDARD: Monitor the progress and techniques used to perform and complete the task.

PERFORMANCE STEPS:

1. Assign unit of work.
2. Establish deadlines.
3. Monitor progress.
4. Get feed back from personnel assigned.

REFERENCE(S):

1. Applicable Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.9 MONITOR IMPLEMENTATION OF NEW SYSTEMS**

CONDITION(S): Given a software or application package, applicable technical manuals, installation guides, and local SOP.

STANDARD: Monitor assignment of work, implementation plan, and execution of plan.

PERFORMANCE STEPS:

1. Review package.
2. Assign to proper section.
3. Monitor progress.
4. Make adjustments.

REFERENCE(S):

1. Applicable Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.10 REVIEW OPERATION OF EXISTING SYSTEMS**

CONDITION(S): Given assignment to a programming work section, established procedures, local SOP's, system software data, applicable technical manuals, and applicable software run books and procedures.

STANDARD: Review the system configuration to ensure all steps in their proper operation are followed.

PERFORMANCE STEPS:

1. Review procedures for correctness.
2. Review site SOP's.
3. Review system software run procedures.
4. Review data and reports.

REFERENCE(S):

1. Applicable Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.11 MAINTAIN VIRTUAL STORAGE SYSTEM**

CONDITION(S): Given ADP resource tasks, monitoring reports, job planning documents, and the reference.

STANDARD: The virtual storage system will be maintained per the reference.

PERFORMANCE STEPS:

1. Implement the RSM to keep track of the contents of real storage.
2. Implement the ASM to keep track of the contents of the page data sets, the swap data sets, and the VIO data sets.

MCO 1510.37C

3. Implement the VSM to obtain and free virtual storage and manage storage allocation for programs requiring real storage.

REFERENCE(S) :

1. OS/VS2 Overview (GC28-0984)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4069.2.12 EVALUATE PERFORMANCE OF ADPE

CONDITION(S): Given an assignment as a systems programmer and appropriate references.

STANDARD: ADPE performance will be evaluated per appropriate references.

PERFORMANCE STEPS:

1. Review diagnostic reports and utilization statistics.
2. Evaluate performance statistics.
3. Monitor implementation and results of changes.
4. Recommend maintenance actions and procedural changes.
5. Schedule Preventive Maintenance.

REFERENCE(S) :

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

Appendix I to  
ENCLOSURE (6)

**TASK: 4069.2.13 DEVELOP OPERATING SYSTEM SOFTWARE MAINTENANCE IMPLEMENTATION PROCEDURES**

CONDITION(S): Given an assignment as a systems programmer and appropriate references.

STANDARD: Procedures will be developed for operating system software maintenance implementation per appropriate references.

PERFORMANCE STEPS:

1. Review software modification proposals.
2. Approve proposals.
3. Develop implementation plans.
4. Analyze requirements for Initial Program Loads, Initial Machine Loads, and other ADPE software.
5. Provide non-disruptive scheduling of modifications and ADPE software work.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.14 SUPERVISE CONFIGURATION MANAGEMENT PROCEDURES**

CONDITION(S): Given an assignment as a data systems operations officer and appropriate references.

STANDARD: Configuration management procedures will be supervised to ensure operation with appropriate references.

PERFORMANCE STEPS:

1. Evaluate current configuration management policies.
2. Validate configuration management overviews/summaries.
3. Establish configuration management SOP's.

Appendix I to  
ENCLOSURE (6)

-

4. Audit compliance with published procedures.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual
2. U.S. Marine Corps Information Resources Management Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.15 APPLY ROSCOE COMMANDS**

CONDITION(S): Given a terminal, a list of commands, user sign-on, software, and the reference.

STANDARD: A ROSCOE program will be run by operating the terminal and appropriate software commands per the reference.

PERFORMANCE STEPS:

1. Identify command areas.
2. Perform INPUT command.
3. Perform DELETE command.
4. Perform ATTACH command.
5. Perform FETCH command.
6. Perform SUBMIT command.
7. Perform UPDATE command.
8. Perform SEARCH command.
9. Perform DISPLAY command.
10. Perform SAVE command.
11. Perform COPY command.
12. Perform EDIT command.
13. Perform MOVE command.

REFERENCE(S) :

1. ADR/ROSCOE Terminal User Guide (SR20-20-20)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4069.2.16 MAINTAIN LIBRARIES

CONDITION(S): Given a computer, input/output devices, other peripheral devices, work space, and appropriate references.

STANDARD: Library members will be maintained by issuing the correct commands through an I/O device to manipulate members without error on a second-run basis.

PERFORMANCE STEPS:

1. Add members.
2. Delete members.
3. Modify members.
4. Move members.
5. Rename members.

REFERENCE(S) :

1. IRM-5234-04, Information Resources Management Naming Conventions
2. IRM-5233-06, Information Resources Management Library Management System
3. IMB MVS/XA JCL Reference Manual (GC28-1352-3)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.17 WRITE ALC PROGRAMS**

CONDITION(S): Given a computer, input/output devices, other peripheral devices, program specifications, applicable operating environment standards, coding sheets, pencils, note pad, flowchart materials (template and flowchart paper) or Decision Table worksheets, and appropriate references.

STANDARD: Systems programs will be written to meet the requirements of the system's design specifications per the IRM Programming Standard. Proper use of tables, sort, report editing, subroutines (passed data and linkage), file update (sequential and random), and use of information from the PARM parameter must be demonstrated.

PERFORMANCE STEPS:

1. Draw a program flowchart (or Decision Table) that satisfies all program specifications.
2. Write (code) the program. The program logic flow will correspond to the flowchart (Decision Table).
3. Key in the program using available I/O devices.
4. Write applicable execution JCL for the compiler procedure.
5. Key in execution JCL.
6. Compile the program. (The JCL and program data must be submitted in proper sequence for compilation without errors.)
7. Write program test JCL.
8. Key in program test JCL.
9. Test program. (The test JCL must be submitted for execution with JCL and program data in proper sequence for execution without error.)

REFERENCE(S):

1. IRM-5234-01, Information Resources Management Programming Standard
2. IRM-5234-04, Information Resources Management Naming Conventions
3. IBM MVS/XA JCL Reference Manual (GC28-1352-3)

4. IBM OS/VS2 MVS Utilities Manual (GC26-3902)
5. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)
6. IBM S/370 XA Principles of Operations (SA22-7085)

## ADMINISTRATIVE INSTRUCTIONS:

1. Performance steps must be performed sequentially.

---

**TASK: 4069.2.18 MODIFY/TROUBLESHOOT ALC PROGRAMS**

CONDITION(S): Given a computer, input/output devices, other peripheral devices, program specifications, applicable operating environment standards, coding sheets, pencils, note pad, program listings, desk or work space, and a problem or error in an existing program, and appropriate references.

STANDARD: An existing ALC program that contains embedded errors will be troubleshoot in a specified time limit commensurate with the complexity of the errors to meet the requirements of the program specifications per the IRM Programming Standard.

## PERFORMANCE STEPS:

1. Identify the problem with the ALC program using debugging tools and techniques.
2. Write (code) a modification to the existing application to correct the problem.
3. Write and key in the execution JCL of the assembler procedure.
4. Assemble (execute) the program.
5. Write and key in program test JCL.
6. Test program for identified errors.
7. Submit the program listing and output to supervisor when it is error-free and meets the program specifications.

## REFERENCE(S):

1. IRM-5234-01, Information Resources Management Programming Standard

MCO 1510.37C

2. IBM MVS/XA JCL Reference Manual (GC28-1352-3)
3. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)
4. IBM S/370 XA Principles of Operations (SA22-7085)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK:** 4069.2.19 CREATE GENERATIONAL DATA GROUP (GDG)

**CONDITION(S):** Given the use of OS Systems reference library, installation requirements, and appropriate utility programs.

**STANDARD:** GDG will be created to specifications.

**PERFORMANCE STEPS:**

1. Identify the GDG requirements.
2. Write (code) a utility to specifications.
3. Execute the utility.
4. Verify successful completion of utility.
5. Test software using new GDG.
6. Implement new GDG into production.
7. Update procedure manual.

**REFERENCE(S):**

1. OS Utilities Manual
2. IBM MVS/XA JCL Reference Manual (GC28-1352-3)
3. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)
4. Appropriate software manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.20 CREATE VIRTUAL STORAGE ACCESS METHOD (VSAM) DATASET**

CONDITION(S): Given the use of systems reference library, installation requirements, and appropriate utility programs.

STANDARD: VSAM will be created to specifications.

PERFORMANCE STEPS:

1. Identify the VSAM requirements.
2. Write (code) a utility to specifications.
3. Execute the utility.
4. Verify successful completion of utility.
5. Test software using new VSAM.
6. Implement new VSAM into production.
7. Update procedure manual.

REFERENCE(S):

1. OS Utilities Manual
2. IBM MVS/XA JCL Reference Manual (GC28-1352-3)
3. IBM MVS/XA Messages and Codes Manual (GC28-1157-5)
4. Appropriate software manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.2.21 UTILIZE TSO TO DEVELOP OR MAINTAIN SYSTEM SOFTWARE**

CONDITION(S): Given a terminal, proper accessor id and access, software, and the reference.

STANDARD: TSO will be utilized to locate, access, and execute jcl and/or clists.

PERFORMANCE STEPS:

1. Sign-on to system.

2. Perform ALLOCATE.
3. Perform EDIT.
4. Perform SAVE.
5. Perform SUBMIT.
6. Perform COPY.
7. Perform INPUT.
8. Perform UPDATE.
9. Perform MOVE.
10. Perform DELETE.

REFERENCE(S) :

1. CA-TSO Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 3 - TUNING OF SYSTEMS SOFTWARE

TASK: 4069.3.1 MONITOR SYSTEM PERFORMANCE

CONDITION(S): Given the use of the system reference library, current MVS operating system documentation, installation requirements, installation performance objectives, appropriate MVS operating system monitoring utilities, MVS operating system parameter libraries, program product parameter libraries, and proprietary software product parameter libraries.

STANDARD: The MVS operating system performance, program product performance, and proprietary software product performance is to be monitored per the installation requirements.

PERFORMANCE STEPS:

1. Set the Resource Measurement Facility (RMF) parameters for data collection.
2. Set the System Management Facility (SMF) parameters for data collection.

3. Collect RMF data related to the processor, real storage, and the input/output resources of the MVS operating system.
4. Collect SMF data related to MVS operating system processing.
5. Create RMF reports.
6. Create SMF reports.
7. View the RMF reports to ensure the MVS operating system is performing within the installation performance objectives.
8. View the SMF reports to ensure the MVS operating system is processing within the installation performance objectives.

## REFERENCE(S):

1. System Reference Library
2. MVS Operating System Parameter Libraries
3. Program Product Parameter Libraries
4. Proprietary Software Product Parameter Libraries

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.3.2 ANALYZE SYSTEM PERFORMANCE**

CONDITION(S): Given the use of the system reference library, Resource Measurement Facility (RMF) reports, System Management Facility (SMF) reports, current MVS operating system documentation, installation requirements, installation performance objectives, appropriate MVS operating system monitoring utilities, MVS operating system parameter libraries, program product parameter libraries, and proprietary software parameter product libraries.

STANDARD: The MVS operating system performance is to be analyzed per the installation requirements.

PERFORMANCE STEPS:

1. Describe the performance problem in terms of the objectives that are not being met.
  - a. User-oriented objectives.
  - b. System-oriented objectives.
2. Review basic performance factors.
  - a. Hardware configuration.
  - b. I/O resource usage.
  - c. Control of users that monopolize resources.
  - d. Resource contention.
  - e. Paging performance.
3. Identify potential bottlenecks in the system and assess the impact of the bottleneck.
  - a. System-oriented problems - resource management.
    - (1) Processor.
    - (2) I/O resources.
    - (3) Paging subsystem.
  - b. User-oriented problems - workload management.
4. Write a system performance analysis describing the results of the study.

REFERENCE(S):

1. System Reference Library
2. MVS Operating System Parameter Libraries
3. Program Product Parameter Libraries
4. Proprietary Software Product Parameter Libraries

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.3.3 DEVELOP TUNING RECOMMENDATIONS**

CONDITION(S): Given the use of the system reference library, Resource Measurement Facility (RMF) reports, System Management Facility (SMF) reports, current MVS operating system documentation, installation requirements, installation performance objectives, system performance analysis, MVS operating system parameter libraries, program product parameter libraries, and proprietary software product parameter libraries.

STANDARD: Tuning recommendations are to be developed, that once implemented, will cause the MVS operating system, program products, and proprietary software products to perform per the installation performance objectives and installation requirements.

**PERFORMANCE STEPS:**

1. Read the system performance analysis.
2. Determine if the performance problems are related to bottlenecks in the system.
3. Determine if the performance problems can be corrected by:
  - a. Modifying the performance objectives.
  - b. Reconfiguring hardware.
  - c. Obtaining more hardware.
  - d. Redesigning the paging subsystem.
  - e. Modifying system control program parameters.
  - f. Modifying the system control program.
  - g. Modifying program product parameters.
  - h. Modifying the program product control program.
  - i. Modifying the program product data sets.
  - j. Modifying proprietary software product parameters.
  - k. Modifying the proprietary software product control program.
  - l. Modifying the proprietary software product data sets.

4. Identify the methods by which the MVS operating system, program products, and proprietary software products can be modified to achieve optimum performance.
5. Write the tuning recommendations.

REFERENCE(S):

1. System Reference Library
2. MVS Operating System Parameter Libraries
3. Program Product Parameter Libraries
4. Proprietary Software Product Parameter Libraries

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.3.4 ADJUST MVS OPERATING SYSTEM PARAMETERS**

CONDITION(S): Given the use of the system reference library, MVS operating system parameter libraries, current MVS operating system documentation, tuning recommendations, installation requirements, and appropriate utility programs.

STANDARD: The MVS operating system parameters are adjusted per the tuning recommendations and installation requirements.

PERFORMANCE STEPS:

1. Read the tuning recommendations.
2. Determine which MVS operating system parameters are to be modified.
3. Create a test version of the MVS operating system parameter libraries.
4. Modify the test version of the MVS operating system parameter libraries.
5. Test the MVS operating system using the test version of the MVS operating system parameter libraries.
6. Verify the results of the test.
7. Migrate the tested version of the MVS operating system parameter libraries into the production environment.

REFERENCE(S) :

1. System Reference Library
2. MVS Operating System Parameter Libraries

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4069.3.5 ADJUST PROGRAM PRODUCT PARAMETERS

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, vendor supplied data, current MVS operating system documentation, tuning recommendations, installation requirements, program product parameter libraries, and appropriate utility programs.

STANDARD: The program product parameters are adjusted per the tuning recommendations and installation requirements.

PERFORMANCE STEPS:

1. Read the tuning recommendations.
2. Determine which program product parameters are to be modified.
3. Create a test version of the program product parameter libraries.
4. Modify the test version of the program product parameter libraries.
5. Test the program product using the test version of the program product parameter libraries.
6. Verify the results of the test.
7. Migrate the tested version of the program product parameter libraries into the production environment.

REFERENCE(S) :

1. System Reference Library
2. Program Product Parameter Libraries

ADMINISTRATIVE INSTRUCTIONS: (NONE)

**TASK: 4069.3.6 ADJUST PROPRIETARY SOFTWARE PRODUCT PARAMETERS**

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, vendor supplied data, current MVS operating system documentation, tuning recommendations, installation requirements, proprietary software product parameter libraries, and appropriate utility programs.

STANDARD: The proprietary software product parameters are adjusted per the tuning recommendations and installation requirements.

PERFORMANCE STEPS:

1. Read the tuning recommendations.
2. Determine which proprietary software product parameters are to be modified.
3. Create a test version of the proprietary software product parameter libraries.
4. Modify the test version of the proprietary software product parameter libraries.
5. Test the proprietary software product using the test version of the proprietary software product parameter libraries.
6. Verify the results of the test.
7. Migrate the tested version of the proprietary software product parameter libraries into the production environment.

REFERENCE(S):

1. System Reference Library
2. Program Product Parameter Libraries

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4069.3.7 WRITE CAPACITY PLAN

CONDITION(S): Given the use of the system reference library, installation requirements, installation performance objectives, and Resource Measurement Facility (RMF) reports.

STANDARD: The capacity plan will be written per the installation requirements.

PERFORMANCE STEPS:

1. Collect a series of Resource Measurement Facility (RMF) reports covering the last 12 months according to the following criteria:
  - a. There must be one set of RMF reports per month.
  - b. Each month's reports must cover a period of 5 days during the peak hours.
2. Identify each MVS operating system resource.
3. Identify the utilization of each MVS operating system resource for each month of RMF's reports.
4. Identify the utilization level at which each of the MVS operating system resources are exhausted.
5. Determine the growth potential of each of the MVS operating system resources.
6. Determine the anticipated utilization growth for each resource in the given MVS operating system.
7. Determine the estimated life in months for each MVS operating system resource.
8. Identify the methods by which the estimated life of each resource may be extended.
9. Identify the required purchase of any additional resources.
10. Consolidate the data from the study into a capacity plan.

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 4 - DIAGNOSING SYSTEMS SOFTWARE

TASK: 4069.4.1 ANALYZE APPLICATION DUMP

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, current application program documentation, current application program allocation listing, application program dump, and appropriate utility programs.

STANDARD: An application dump will be analyzed so that the exact error is identified per the vendor supplied instructions and installation requirements.

PERFORMANCE STEPS:

1. Select an application program dump.
2. Determine the absolute address of the instruction causing the abnormal end (ABEND).
3. Determine in which module the ABEND-causing instruction is contained.
4. Determine in which program the ABEND-causing instruction occurs.
5. Determine the displacement into the program of the ABEND-causing instruction.
6. Find the instruction in the source listing of the program that caused the ABEND.
7. Identify the error causing the ABEND.

REFERENCE(S):

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.4.2 ANALYZE SUPERVISOR CALL DUMP**

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, current MVS operating system documentation, installation requirements, LOGREC listing, system log, supervisor call (SVC) dump, and appropriate utility programs.

STANDARD: A supervisor call (SVC) dump will be analyzed so that the exact error and failing component are identified per the vendor supplied instructions and installation requirements.

**PERFORMANCE STEPS:**

1. Select a supervisor call (SVC) dump.
2. Determine if the SVC dump is the initial SVC dump and not one caused by percolation.
3. Identify the SVC dump title.
4. Gather the information about the problem indicated by the SVC dump title.
5. Identify any problems indicated by the system log.
6. Gather any SVC dump associated information from LOGREC.
7. Identify the error causing the MVS operating system problem.
8. Identify the failing component of the MVS operating system.

**REFERENCE(S):**

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4069.4.3 ANALYZE STAND-ALONE DUMP**

CONDITION(S): Given the use of the system reference library, vendor supplied manual(s), vendor supplied instructions, current MVS operating system documentation, installation requirements, operator log, stand-alone dump, and appropriate utility programs.

STANDARD: A stand-alone dump sort will be analyzed so that the exact error and failing component are identified per the vendor supplied instructions and installation requirements.

PERFORMANCE STEPS:

1. Select a stand-alone dump.
2. Determine why the stand-alone dump was taken.
3. Determine the current state of the MVS operating system.
4. Determine the global status of the MVS operating system.
5. Determine if any previous errors in the MVS operating system have affected the current problem.
6. Determine the recent MVS operating system activity.
7. Determine the work status within the MVS operating system.
8. Analyze the symptoms identified by the problem determination steps.
9. Identify the error causing the MVS operating system problem.
10. Identify the failing component of the MVS operating system.

REFERENCE(S) :

1. System Reference Library

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MOS 4071, DATABASE MANAGEMENT SYSTEM (DBMS) SPECIALIST

DUTY AREA 1 - CREATION OF RELATIONAL DATABASES

TASK: 4071.1.1 ANALYZE CUSTOMER REQUEST

CONDITION(S): Given a customer request, point of contact, and appropriate references.

STANDARD: The most viable solution will be determined that satisfies the customer's needs.

PERFORMANCE STEPS:

1. Verify user requirements.
2. Determine system requirements.
3. Conduct Feasibility Study.
4. Perform system analysis.
5. Develop analysis specifications.

REFERENCE(S):

1. MCO P5231.1, Life Cycle Management for Automated Information Systems
2. IRM-5231 Series
3. IRM-5234 Series
4. Software Engineering, Fourth Edition, Ian Sommerville
5. Software Engineering, Ada Second Edition, Grady Booch

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4071.1.2 DESIGN A RELATIONAL DATABASE MANAGEMENT SYSTEM (RDBMS)**

**CONDITION(S):** Given an analyzed customer request, point of contact, appropriated references, and an RDBMS tool.

**STANDARD:** A relational database will be designed to fully satisfy the needs of the customer.

**PERFORMANCE STEPS:**

1. Determine appropriate design method to use.
2. Identify entities (objects).
3. Model the system using the appropriate design method.
4. Create Data Dictionaries.
5. Identify all keys.
6. Perform key normalization.
7. Access the database using a high-level language (i.e., SQL).

**REFERENCE(S):**

1. Principles of Database Management, James Martin
2. Database Design Fundamentals, Naphtali Rische
3. The Practitioners Blueprint for Logical and Physical Database Design, Eric Vesely
4. An Introduction to Data Base Design, John K. Lyon
5. Software Engineering, Fourth Edition, Ian Sommerville

**ADMINISTRATIVE INSTRUCTIONS: (NONE)**

---

DUTY AREA 2 - MAINTENANCE OF RELATIONAL DATABASES

TASK: 4071.2.1 MODIFY RELATIONAL DATABASE

CONDITION(S): Given a customer request, point of contact, and appropriate references.

STANDARD: Existing databases will be modified to fully satisfy request changes.

PERFORMANCE STEPS:

1. Verify user requirements.
2. Determine system requirements.
3. Conduct Feasibility Study.
4. Perform system analysis.
5. Develop analysis specifications.
6. Implement changes.

REFERENCE(S):

1. MCO P5231.1, Life Cycle Management for Automated Information System
2. IRM-5231 Series
3. IRM-5234 Series
4. Software Engineering, Fourth Edition, Ian Sommerville
5. Software Engineering, Ada Second Edition, Grady Booch

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 3 - USE OF DATABASE MANAGEMENT SYSTEMS (DBMS)

TASK: 4071.3.1 CREATE DBMS ACCESS

CONDITION(S): Given a program request, access to Data Dictionary, access to appropriate computer(s), tools, and references.

STANDARD: Access to DBMS will be created to meet access requirements identified in the program request.

PERFORMANCE STEPS:

1. Identify type of access required.
2. Identify search criteria.
3. Identify fields to be returned.
4. Create access.

REFERENCE(S):

1. MCO 5271.1, Information Resources Management (IRM) Standards and Guidelines Program
2. ANSI/MIL-STD-1815A-1983, Ada Programming Language Reference Manual
3. IRM-5231-06, Detailed Design Specification
4. IRM-5234-01, Programming Standard
5. IRM-5234-04, Naming Conventions
6. IRM-5235-01, Data Dictionary
7. COBOL Reference Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MOS 4075, COMPUTER SECURITY SPECIALIST

DUTY AREA 1 - SOFTWARE SECURITY

TASK: 4075.1.1 SUPERVISE SOFTWARE INSTALLATION/MAINTENANCE

CONDITION(S): Given the appropriate manuals, instructions, data, necessary utilities for the installation/ maintenance of the software product, and appropriate references.

STANDARD: The application proprietary security of system software product will comply with the security requirements as stated in the security documentation for the product and the applicable security regulations.

PERFORMANCE STEPS:

1. Review product documentation.
2. Verify proposed installation/maintenance procedures to insure compliance with security regulations.
3. Monitor installation/maintenance to insure that security procedures are followed.
4. Test and evaluate security requirements of the installed/up graded product.

REFERENCE(S) :

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. OPNAVINST 5239.1A, DON ADP Security Procedures
3. MCO P5510.14, Marine Corps ADP Security Manual
4. IRM-5234-04, Information Resources Management Naming Conventions
5. Applicable Vendor Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

**TASK: 4075.1.2 MONITOR SECURITY SYSTEM**

CONDITION(S): Given the site requirements, security regulations, the appropriate utility programs, the SMF files, the appropriate audit security files, and appropriate references.

STANDARD: The security system will be monitored and audited as defined by site regulations.

PERFORMANCE STEPS:

1. Obtain/review site requirements.
2. Perform required audits as specified in site requirements.
3. Distribute reports to appropriate personnel.

REFERENCE(S):

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. OPNAVINST 5239.1A, DON ADP Security Procedures
3. MCO P5510.14, Marine Corps ADP Security Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4075.1.3 TRAIN SECURITY ADMINISTRATORS**

CONDITION(S): Given the Terminal Area Security Officers (TASO) Manual, appropriate training aids, and appropriate references.

STANDARD: Upon completion of the training, the Marine will be required to perform the minimum requirements of Terminal Area Security Officers as defined by the TASO Users Manual.

PERFORMANCE STEPS:

1. Obtain/review TASO Manual.
2. Prepare/review lesson plan.
3. Conduct training.
4. Conduct an evaluation on instructed individuals.

REFERENCE(S) :

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. OPNAVINST 5239.1A, DON ADP Security Procedures
3. MCO P5510.14, Marine Corps ADP Security Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4075.1.4 EVALUATE PROPOSED SOFTWARE PURCHASES**

CONDITION(S): Given the security regulations, proposed software documentation, and appropriate references.

STANDARD: Proposed software purchases will be evaluated as to its compatibility with site security regulations and a security statement prepared.

PERFORMANCE STEPS:

1. Obtain/review site security regulations.
2. Obtain and review proposed software information/documentation as defined by site requirements.
3. Prepare Security Posture Statement.
4. Distribute composed document to appropriate authorities.

REFERENCE(S) :

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. OPNAVINST 5239.1A, DON ADP Security Procedures
3. MCO P5510.14, Marine Corps ADP Security Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 2 - PHYSICAL SECURITY

TASK: 4075.2.1 IMPLEMENT SENSITIVE INFORMATION HANDLING  
PROCEDURE

CONDITION(S): Given the security regulations, site requirements as pertaining to types of sensitive data, and appropriate references.

STANDARD: Procedures will be installed to bring site into compliance with established security regulations. Periodic inspections will be conducted to insure established procedures for handling of sensitive information is complied with and a report as to level of compliance will be provided.

PERFORMANCE STEPS:

1. Obtain/review security regulations.
2. Obtain and review site requirements.
3. Establish procedures for sensitive information handling.
4. Conduct periodic inspections on compliance with procedures.
5. Prepare inspection report.
6. Distribute report to appropriate authority.

REFERENCE(S):

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. OPNAVINST 5239.1A, DON ADP Security Procedures
3. MCO P5510.14, Marine Corps ADP Security Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4075.2.2 CONTROL ACCESS TO SENSITIVE AREAS**

CONDITION(S): Given the security regulations, data center layout/floor plan, any other documents appropriate to establishing tempest zones, and appropriate references.

STANDARD: Physical sensitive areas as directed by security regulations will be defined. Physical access control system will be installed/maintained. Periodic inspection to insure physical access control procedures are being complied with will be conducted and a report as to level of compliance will be provided.

PERFORMANCE STEPS:

1. Obtain/review security regulations.
2. Develop/review sensitive areas as per security regulations.
3. Install/maintain physical access control system/method.
4. Conduct periodic inspection on compliance with control system method.
5. Prepare inspection report.
6. Distribute inspection report to appropriate authority.

REFERENCE(S):

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. OPNAVINST 5239.1A, DON ADP Security Procedures
3. MCO P5510.14, Marine Corps ADP Security Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4075.2.3 MONITOR PHYSICAL SECURITY ENVIRONMENT**

CONDITION(S): Given the security regulations, data center blueprints, any other documents appropriate to establishing tempest zones, and appropriate references.

STANDARD: Periodic inspections will be conducted to insure physical security environment is in compliance with security regulations. A report as to the level of compliance will be provided.

PERFORMANCE STEPS:

1. Obtain/review security regulations.
2. Conduct periodic inspection on compliance in physical security environment.
3. Prepare inspection report.
4. Distribute report to appropriate authority.

REFERENCE(S):

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. OPNAVINST 5239.1A, DON ADP Security Procedures
3. MCO P5510.14, Marine Corps ADP Security Manual
4. Rainbow Series, DOD Manuals CSC-STD-001 to CSC-STD-004

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4075.2.4 INSTRUCT PERSONNEL IN PHYSICAL SECURITY REQUIREMENTS**

CONDITION(S): Given the security regulations, appropriate training aids, and appropriate references.

STANDARD: Upon completion of the training, the trained individual will be required to state several of the basic physical security requirements, based upon a knowledge extractor system utilizing comparison methodology.

PERFORMANCE STEPS:

1. Obtain/review security regulations.
2. Prepare/review lesson plan.
3. Conduct training.

4. Conduct an evaluation on instructed individuals.

REFERENCE(S) :

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. OPNAVINST 5239.1A, DON ADP Security Procedures
3. MCO P5510.14, Marine Corps ADP Security Manual
4. Rainbow Series, DOD Manuals CSC-STD-001 to CSC-STD-004

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4075.2.5 IMPLEMENT SECURITY FOR THE NETWORK

CONDITION(S): Given the appropriate security regulations, vendor product manuals, network configuration, and classification level of data.

STANDARD: The network security will be implemented so that it will be secure against all known threats.

PERFORMANCE STEPS:

1. Analyze current network security procedures.
2. Recommend solutions to identified vulnerabilities.
3. Implement correction to secure network.

REFERENCE(S) :

1. OPNAVINST 5239.1, DON ADP Security Procedures
2. OPNAVINST 5510.1, Information and Personnel Security Program Regulations
3. MCO P5510.14, Marine Corps ADP Security Manual
4. IRM 5239 Series

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

DUTY AREA 3 - ACCREDITATION AND CONTINGENCY PLANNING

TASK: 4075.3.1 PERFORM RISK ANALYSIS

CONDITION(S): Given the equipment inventories, data center blueprints, interview time with personnel responsible for production, historical data on environment, SMF data, security regulations, equipment replacement costs, and appropriate references.

STANDARD: Valid loss figures will be produced based on historical data and in compliance with security regulations. Data in risk analysis with current equipment inventories and current environmental data will be maintained.

PERFORMANCE STEPS:

1. Gather historical data.
2. Interview responsible personnel.
3. Calculate risk and loss.
4. Produce report.
5. Distribute report to appropriate authority.

REFERENCE(S):

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. MCO P5510.14, Marine Corps ADP Security Manual
3. OPNAVINST 5239.1A, DON ADP Security Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4075.3.2 CREATE FACILITY SECURITY PROFILE (FSP)

CONDITION(S): Given the data center layout/floor plan, equipment inventories, SMF data, and appropriate references.

STANDARD: A Facility Security Profile (FSP) will be created from basic data that meets accreditation requirements and will be maintained current.

PERFORMANCE STEPS:

1. Write mission statement for unit.
2. Compile/list software on systems.
3. Compile/list equipment at data center.
4. Draft Facility Security Profile (FSP).
5. Distribute FSP to appropriate authority.

REFERENCE(S):

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. MCO P5510.14, Marine Corps ADP Security Manual
3. OPNAVINST 5239.1A, DON ADP Security Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4075.3.3 CREATE CONTINGENCY PLAN

CONDITION(S): Given the use of a valid risk analysis, a roster of key personnel in the site, site regulations, appropriate manuals, and the reference.

STANDARD: A contingency plan will be created and maintained which will provide instruction to personnel to react appropriately to a contingency situation and continue to process with minimal effect of normal processing.

PERFORMANCE STEPS:

1. Gather appropriate and necessary data.
2. Create/maintain contingency plan.
3. Review changes to contingency plan.
4. Test contingency plan.

MCO 1510.37C

5. Review test of contingency plan.
6. Make appropriate changes.
7. Create report of results and distribute to proper authorities.

REFERENCE(S):

1. IRM-5510-04, Automated Data Processing (ADP) Contingency Planning

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4075.3.4 INSTRUCT PERSONNEL ON CONTINGENCY PLANS**

CONDITION(S): Given a current contingency plan, site regulations, and the correct environment for instruction.

STANDARD: The Marine will instruct the personnel regarding the contingency plan.

PERFORMANCE STEPS:

1. Prepare/review lesson.
2. Conduct instruction.
3. Test individuals.
4. Review results of test.
5. Critique individuals.
6. Prepare paper on results of test and distribute to proper authorities.

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4075.3.5 PERFORM ANNUAL ACCREDITATION REVIEW**

CONDITION(S): Given the last accreditation document, current Facility Security Profile, current risk analysis, current near-term and long-term goals, current system security test and evaluation, and appropriate references.

STANDARD: Updated accreditation documents that meet security regulations will be produced and distributed to appropriate authorities.

PERFORMANCE STEPS:

1. Obtain/review risk analysis.
2. Obtain/review Facility Security Profile.
3. Obtain/review near-term and long-term goals.
4. Obtain/review accreditation documents.
5. Distribute updated documents to appropriate authority.

REFERENCE(S):

1. IRM-5510-01, Information Resources Management Data Access Security Manual
2. MCO P5510.14, Marine Corps ADP Security Manual
3. OPNAVINST 5239.1A, DON ADP Security Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

MOS 4099, DATA PROCESSING CHIEF

DUTY AREA 1 - DATA PROCESSING UNIT

TASK: 4099.1.1 MONITOR ALL PERSONNEL MATTERS

CONDITION(S): Given a listing of required appointments, annual training requirements and schedules, personnel records duty rosters, and LES's.

STANDARD: Personnel matters will be resolved. Appointments and training scheduled as appropriate and plans for corrective action will be developed in a manner that has minimal impact on the day to day operations.

PERFORMANCE STEPS:

1. Assess situation.
2. Determine appointment availability.
3. Check schedules.
4. Schedule appointments/training accordingly.
5. Plan corrective action.
6. Take corrective action.

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4099.1.2 ANALYZE PROBLEMS AND REFER ACTION

CONDITION(S): Given all pertinent information on a problem, as soon as possible after occurrence, either by telephone conversation, message, or personal conversation, local SOP, and applicable orders/directives.

STANDARD: Specific problems will be analyzed to determine appropriate action required to take action, valid completion/response date assigned, and actions required to resolve the problem taken in a timely manner.

PERFORMANCE STEPS:

1. Determine type of problem and assign to appropriate section.
2. If personnel problem:
  - a. Assess situation.
  - b. Perform appropriate counseling and determine need for higher-level professional counseling.
  - c. Inform section.
3. Set course of action.
4. Take course of action.

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4099.1.3 MONITOR PERSONNEL GAINS/LOSSES**

CONDITION(S): Given a copy of the activity T/O, personnel roster, a list of personnel inbound/outbound, and local SOP.

STANDARD: The T/O will be reviewed for staffing of personnel to ensure personnel are properly joined, dropped, or transferred.

PERFORMANCE STEPS:

1. Contact the CMC (MMEA) regarding incoming personnel.
2. Ensure proficiency/conduct marks and Fitness Reports are properly submitted for transfer personnel.
3. Check in all newly assigned personnel with orientation brief.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4099.1.4 SUPERVISE MAINTENANCE OF NAVY AND MARINE CORPS  
DIRECTIVE SYSTEMS

CONDITION(S): Given a current copy of MCBul 5215.

STANDARD: All files and directives will be checked to ensure  
currency.

PERFORMANCE STEPS:

1. Update directives as required.
2. Review directives and ensure filed in proper order.
3. Obtain missing required directives.

REFERENCE(S) :

1. MCO P5215.1G, The USMC Directives System

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

TASK: 4099.1.5 MAINTAIN INTERNAL CONTROL OF CORRESPONDENCE

CONDITION(S): Given receipt of naval messages from the  
communication center and messages/correspondence through the  
guard mail, local SOP, and the reference.

STANDARD: Messages and correspondence will be processed and  
assigned/routed to the appropriate section/work center for  
action/information.

PERFORMANCE STEPS:

1. Receive messages from communication center or through the  
guard mail.
2. Assign action to appropriate section and completion date.

Appendix L to  
ENCLOSURE (6)

MCO 1510.37C

3. Date and route to appropriate section.
4. Maintain file copy of route data.
5. Monitor progress, action must be completed by due date.
6. Maintain file copy of completed action.

REFERENCE(S):

1. NTP 3, Naval Message

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4099.1.6 ORGANIZE PERSONNEL FOR ADP OPERATIONS**

CONDITION(S): Given a mission, table of organization, and manning to support efficient ADP operations per the reference.

STANDARD: ADP personnel will be organized in a manner to support efficient ADP operations per the reference.

PERFORMANCE STEPS:

1. Determine the number of personnel available in the organizational structure.
2. Identify the major functional areas within the organization (MCCDPA, RASC, or RJE).
3. Assign tasks to the proper functional areas within the organizational structure.

REFERENCE(S):

1. MCO P5233.1, Marine Corps ADP Management Standards Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4099.1.7 ANALYZE OPERATIONAL RECORDS AND REPORTS**

CONDITION(S): Given official activity T/O, personnel rosters (to include PMOS and work section), shift assignments, working T/O, site SOP, and annual training plan.

STANDARD: Determine necessary personnel changes, overages and shortages, shift assignment requirements and ensure that proper staffing is maintained.

PERFORMANCE STEPS:

1. Compare official T/O to working T/O.
2. Compare personnel roster to T/O's.
3. Determine overages and shortages.
4. Compare shift assignments to TAD/LV/training assignments.
5. Take action to maintain proper staffing.

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4099.1.8 PROVIDE GUIDANCE IN SCHEDULING PERSONNEL**

CONDITION(S): Given official activity T/O, personnel roster (to include PMOS and work section), shift assignments, working T/O, and annual training plan.

STANDARD: Provide guidance to subordinates as to efficient utilization and scheduling of personnel to ensure that staffing is properly maintained.

PERFORMANCE STEPS:

1. Review staffing.
2. Determine staffing discrepancies.
3. Compare actual assignments to T/O, TAD, LV, and training assignments.

4. Provide guidance to section chiefs to ensure proper staffing is maintained.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4099.1.9 PERFORM ADMINISTRATIVE DUTIES**

CONDITION(S): Given a schedule of Fitness Report submissions, section morning reports, annual training plan, personnel roster, monthly cutting score, formal school annual class schedule, LES's, applicable formal school catalog, and appropriate references.

STANDARD: Administrative duties will be performed to ensure that all Fitness Reports and PRO/CON marks are submitted on time, request nominees for formal school seats, and all daily reports are submitted on time.

PERFORMANCE STEPS:

1. Proof FITREPS for correctness/completeness and submit to Activity Director.
2. Compile PRO/CON marks and submit to Activity Director.
3. Ensure FITREPS and PRO/CON marks are submitted to higher headquarters.
4. Verify correctness of section morning reports, combine into one, and submit to the appropriate authority.
5. Request formal school quotas and ensure all approved are filled.
6. Scan LES's for leave balances and other problems.
7. Counsel personnel as appropriate.
8. Submit all required reports in a timely manner.

REFERENCE(S) :

1. Applicable formal school catalog

2. NAVMC 2795, User's Guide to Counseling

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4099.1.10 PERFORM PERIODIC INSPECTION OF THE DATA PROCESSING FACILITY**

CONDITION(S): Given map/diagram of the building and grounds of the data processing facility and points of contact in each section, desk top procedures, and local SOP.

STANDARD: Check maintenance and up keep of building and grounds, areas for improvement will be identified and corrective action taken.

PERFORMANCE STEPS:

1. Become familiar with the area.
2. Tour area periodically and check on progress of past problems and for existence of new ones.
3. Ensure maintenance requests/corrective action is initiated.
4. Monitor progress of such.

REFERENCE(S):

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4099.1.11 PROVIDE ASSISTANCE IN PREPARATION OF FEASIBILITY STUDIES AND APPLICATION PLANS**

CONDITION(S): Given a description of the study, required output, and a list of required material.

STANDARD: Assistance will be provided in feasibility studies by ensuring all required equipment and materials are furnished to the head of the study group in a timely manner.

PERFORMANCE STEPS:

1. Obtain list of required equipment and material.
2. Determine where equipment/material may be obtained.
3. Obtain equipment/material and give to the head of study group.
4. Monitor progress of study group and need for additional requirements.
5. Ensure new requirements are met.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---

**TASK: 4099.1.12 EXPLAIN POLICIES OF ORGANIZATION TO SUBORDINATES**

CONDITION(S): Given installation policies, purposes and goals of the ADP facility/organization, and local SOP.

STANDARD: Develop procedures to ensure information is passed on to all personnel.

PERFORMANCE STEPS:

1. Pass all pertinent information by:
  - a. Unit formation.
  - b. Meeting with branch/section chiefs.
  - c. News grams or memorandum.
  - d. Maintaining a unit read/bulletin board.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 4099.1.13 ENSURE ADHERENCE TO DATA PROCESSING PROCEDURES AND SOP'S

CONDITION(S): Given assignment to a programming work section, local SOP's, technical manuals and directives, data processing standards, applicable application run books, and procedures.

STANDARD: Data Processing procedures and SOP's will be adhered to so as to ensure personnel follow rules, regulations, and guidelines established for the work place.

PERFORMANCE STEPS:

1. Identify existing directives.
2. Supervise the procedures established.

REFERENCE(S) :

1. None

ADMINISTRATIVE INSTRUCTIONS: (NONE)

---





