CHAPTER 4

DATA SYSTEM MAINTENANCE OFFICER (DSMO) / MOS 5970 INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

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DATA SYSTEM MAINTENANCE OFFICER (DSMO) / MOS 5970
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

4.0 DSMO/5970 INDIVIDUAL TRAINING AND READINESS REQUIREMENTS. This T&R syllabus is based on specific goals and performance standards designed to ensure individual proficiency in Core and Mission skills. The goal of this chapter is to develop individual and unit warfighting capabilities.

4.1 MOS 5970 TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the average Data Systems Maintenance Officer. Units should use the model as a point of departure to generate individual training plans.

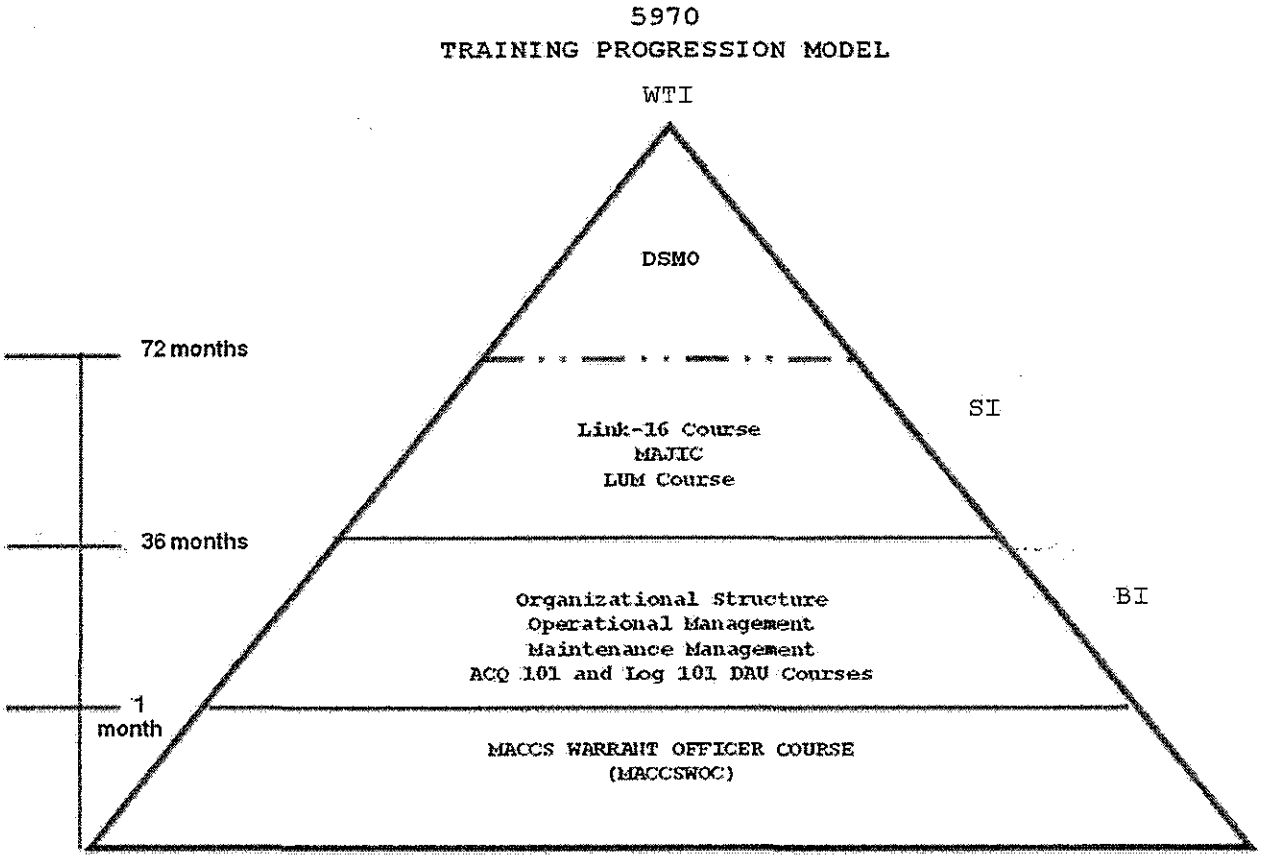

Figure 4-1. Data Systems Maintenance Officer (MOS 5970)
Training Progression Model

4.2 ABBREVIATIONS

MTACS MAINTENANCE MOS 5970	
CORE/MISSION/CORE PLUS SKILL ABBREVIATIONS	
CORE SKILL (2000 Phase)	
COMSEC	COMMUNICATION SECURITY
FAM	FAMILIARIZATION
MMGT	MAINTENANCE MANAGEMENT
OMGT	OPERATIONS MANAGEMENT
ORGS	ORGANIZATIONAL STRUCTURE
MISSION SKILL (3000 Phase)	
TACCOPS	TACC OPERATIONS
TACCINF	TACC INFRASTRUCTURE
INSTRUCTOR (5000 Phase)	
BI	BASIC INSTRUCTOR
SI	SENIOR INSTRUCTOR
WTI	WEAPONS AND TACTICS INSTRUCTOR
CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (6000 Phase)	
DSMO	DATA SYSTEMS MAINTENANCE OFFICER

4.3 DEFINITIONS

TERM	DEFINITION
Core Model	The Core Model is the basic foundation or standardized format by which all T&Rs are constructed. The Core model provides the capability of quantifying both unit and individual training requirements and measuring readiness. This is accomplished by linking community Mission Statements, Mission Essential Task Lists, Output Standards, Core Skill Proficiency Requirements and Combat Leadership Matrices
Core Skill	Fundamental, environmental, or conditional capabilities required to perform basic functions. These basic functions serve as tactical enablers that allow crews to progress to the more complex Mission Skills. Primarily 2000 Phase events but may be introduced in the 1000 Phase.
Mission Skill	Mission Skills enable a unit to execute a specific MET. They are comprised of advanced event(s) that are focused on MET performance and draw upon the knowledge, aeronautical abilities, and situational awareness developed during Core Skill training. 3000 Phase events.
Core Plus Skill	Training events that can be theater specific or that have a low likelihood of occurrence. They may be Fundamental, environmental, or conditional capabilities required to perform basic functions. 4000 Phase events.
Core Plus Mission	Training events that can be theater specific or that have a low likelihood of occurrence. They are comprised of advanced event(s) that are focused on Core Plus MET performance and draw upon the knowledge, aeronautical abilities, and situational awareness. 4000 Phase events.
Core Skill Proficiency (CSP)	CSP is a measure of training completion for 2000 Phase events. CSP is attained by executing all events listed in the Attain Table for each Core Skill. The individual must be simultaneously proficient in all events within that Core Skill to attain CSP.
Mission Skill Proficiency (MSP)	MSP is a measure of training completion for 3000 Phase events. MSP is attained by executing all events listed in the Attain Table for each Mission Skill. The individual must be simultaneously proficient in all events within that Mission Skill to attain MSP. MSP is directly related to Training Readiness.
Core Plus Skill Proficiency (CPSP)	CPSP is a measure of training completion for 4000 Phase "Skill" events. CPSP is attained by executing all events listed in the Attain Table for each Core Plus Skill. The individual must be simultaneously proficient in all events within that Core Plus Skill to attain CPSP

Core Plus Mission Proficiency (CPMP)	CPMP is a measure of training completion for 4000 Phase "Mission" events. CPMP is attained by executing all events listed in the Attain Table for each Core Plus Mission. The individual must be simultaneously proficient in all events within that Core Plus Mission to attain CPMP

4.4 INDIVIDUAL CORE/MISSION/CORE PLUS SKILL PROFICIENCY REQUIREMENTS

4.4.1 Management of individual CSP/MSP/CPSP/CPMP serves as the foundation for developing proficiency requirements in DRRS.

4.4.2 Individual CSP is a "Yes/No" status assigned to an individual by Core Skill. When an individual attains and maintains CSP in a Core Skill, the individual counts towards CMMR Unit CSP requirements for that Core Skill.

4.4.3 Proficiency is attained by individual Core/Mission/Core Plus skill where the training events for each skill are determined by POI assignment.

4.4.4 Once proficiency has been attained by Core/Mission/Core Plus Skill (by any POI assignment) then the individual maintains proficiency by executing those events noted in the maintain table and in the "Maintain POI" column of the T&R syllabus matrix. An individual maintains proficiency by individual Core/Mission/Core Plus Skill.

Note
Individuals may be attaining proficiency in some Core/Mission/Core Plus Skills while maintaining proficiency in other Core/Mission/Core Plus Skills.

4.4.5 Once proficiency has been attained, should one lose proficiency in an event in the "Maintain POI" column, proficiency can be re-attained by demonstrating proficiency in the delinquent event. Should an individual lose proficiency in all events in the "Maintain POI" column by Core/Mission/Core Plus Skill, the individual will be assigned to the Refresher POI for that Skill. To regain proficiency for that Core/Mission/Core Plus Skill the individual must demonstrate proficiency in all R-coded events for that Skill.

Note
See Chapter 2 for amplifying information on POI updating.

MTACS MAINTENANCE MOS 5970					
ATTAIN AND MAINTAIN CORE/MISSION/CORE PLUS PROFICIENCY MATRIX BY POI					
ATTAIN PROFICIENCY				MAINTAIN	
BASIC POI		REFRESHER POI		PROFICIENCY	
CORE SKILL (2000 Phase)					
STAGE	CODE	STAGE	CODE	STAGE	CODE
COMSEC	2600R	COMSEC	2600R	COMSEC	2600R
	2605R		2605R		2605R
	2610R		2610R		2610R
	2615R		2615R		2615R
	2620R		2620R		2620R

MTACS MAINTENANCE MOS 5970					
ATTAIN AND MAINTAIN CORE/MISSION/CORE PLUS PROFICIENCY MATRIX BY POI					
ATTAIN PROFICIENCY				MAINTAIN	
BASIC POI		REFRESHER POI		PROFICIENCY	
FAM	2650	FAM		FAM	
	2655				
	2660				
	2665R		2665R		2665R
	2670				
MMGT	2712R	MMGT	2712R	MMGT	2712R
	2724				
	2728R		2728R		2728R
	2730R		2730R		2730R
	2740				
	2746R		2746R		2746R
	2750R		2750R		2750R
	2752R		2752R		2752R
	2754				
	2756				
	2758				
	2760				
OMGT	2800R	OMGT	2800R	OMGT	2800R
	2802				
	2804				
	2806R		2806R		2806R
	2812R		2812R		2812R
	2814R		2814R		2814R
	2816R		2816R		2816R
	2818				
	2820				
	2830R		2830R		2830R
	2834				
	2842R		2842R		2842R
	2844				
	2846				
ORGS	2900	ORGS		ORGS	
	2905				
	2910				
	2915				

MTACS MAINTENANCE MOS 5970					
ATTAIN AND MAINTAIN CORE/MISSION/CORE PLUS PROFICIENCY MATRIX BY POI					
ATTAIN PROFICIENCY				MAINTAIN	
BASIC POI		REFRESHER POI		PROFICIENCY	
	2920				
	2925				
	2930				
	2935				
	2945				
	2950R		2950R		2950R
MISSION SKILL (3000 Phase)					
STAGE	CODE	STAGE	CODE	STAGE	CODE
TACCOPS	3200R	TACCOPS	3200R	TACCOPS	3200R
	3206R		3206R		3206R
	3208R		3208R		3208R
	3218R		3218R		3218R
	3220R		3220R		3220R
TACCINF	3200R	TACCINF	3200R	TACCINF	3200R
	3206R		3206R		3206R
	3208R		3208R		3208R
	3218R		3218R		3218R
	3220R		3220R		3220R
"S" PREFIX AND BLUE FONT = SIMULATOR EVENT					
R SUFFIX AND GREY HIGHLIGHT = R-CODED "REFRESHER" EVENT					

4.5 REQUIREMENT, CERTIFICATION, QUALIFICATION AND DESIGNATION TABLES. The tables below delineate T&R events required to be completed to attain proficiency for select certifications, qualifications and designations. In addition to event requirements, all required stage lectures, briefs, squadron training, prerequisites, and other criteria shall be completed prior to completing final events. Certification, qualification and designation letters signed by the commanding officer shall be placed in training Performance Records and NATOPS. See Chapter 6 of the Aviation T&R Program Manual on regaining lost qualifications.

4.5.1 Instructor Designations

MTACS MAINTENANCE MOS 5970 INSTRUCTOR DESIGNATIONS (5000 Phase)	
INSTRUCTOR DESIGNATION	EVENTS
BASIC INSTRUCTOR (BI)	5000, 5010, 5020
SENIOR INSTRUCTOR (SI)	5100, 5110, 5120, 5130, M-SHARP FORMAL TRAINING, 6320
WEAPONS AND TACTICS INSTRUCTOR (WTI)	SCHL 6000

4.5.2 Requirements, Certifications, Qualifications, and Designations

MTACS MAINTENANCE MOS 5970 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD) (6000 Phase)	
RCQD	**EVENTS**
BASIC INSTRUCTOR DESG 6320	5000, 5010, 5020
SENIOR INSTRUCTOR DESG 6321	5000, 5010, 5020, 5100, 5110, 5120, 5130, 6320
WTI DESG 6322	5000, 5010, 5020, 5100, 5110, 5120, 5130, 6320, 6321, SCHL-6000
DSMO DESG 6520	2600, 2605, 2610, 2615, 2620, 2650, 2655, 2660, 2665, 2670, 2712, 2724, 2728, 2730, 2740, 2746, 2750, 2752, 2754, 2756, 2758, 2760, 2800, 2802, 2804, 2806, 2812, 2814, 2816, 2818, 2820, 2830, 2834, 2842, 2844, 2846, 2900, 2905, 2910, 2915, 2920, 2925, 2930, 2935, 2945, 2950, 3200, 3206, 3208, 3218, 3220, 8000, 8020, 8060, 8080

4.6 5970 PROGRAMS OF INSTRUCTION (POI). These tables reflect average time-to-train versus the minimum to maximum time-to-train parameters in the Training Progression Model.

4.6.1 Basic POI

MTACS MAINTENANCE 5970 BASIC POI		
WEEKS[1]	**PHASE OF INSTRUCTION**	**UNIT RESPONSIBLE**
1-4	CORE SKILL INTRODUCTION TRAINING	MCCES
5-48	CORE SKILL TRAINING	TACTICAL SQUADRON
34-48	MISSION SKILL TRAINING	TACTICAL SQUADRON
N/A	CORE PLUS	TACTICAL SQUADRON

4.6.2 Refresher POI

MTACS MAINTENANCE MOS 5939 REFRESHER POI		
WEEKS[1]	**PHASE OF INSTRUCTION**	**UNIT RESPONSIBLE**
1-18	CORE SKILL TRAINING	TACTICAL SQUADRON
1-14	MISSION SKILL TRAINING	TACTICAL SQUADRON
N/A	CORE PLUS	TACTICAL SQUADRON

NOTE 1: TRAINING DURATIONS VARIES BY POSITION BEING TRAINED. SEE PROGRESSION MODEL FOR NOTIONAL TRAINING TIMES.

4.7 SYLLABUS NOTES.

4.7.1 Environmental Conditions Matrix.

Environmental Conditions	
Code	**Meaning**
D	Shall be conducted during hours of daylight: (by exception - there is no use of a symbol)
N	Shall be conducted during hours of darkness, may be aided or unaided
N*	Shall be conducted during hours of darkness must be flown unaided
(N*)	May be conducted during hours of darkness - If conducted during hours of darkness must be flown unaided
(N)	May be conducted during darkness - If conducted during hours of darkness; may be flown aided or unaided
NS	Shall be conducted during hours of darkness - Mandatory use of Night Vision Devices
(NS)	May be conducted during darkness - If conducted during hours of darkness; must be flown with Night Vision Devices
Note - If the event is to be conducted in the simulator the Simulator Instructor shall set the desired environmental conditions for the event.	

4.7.2 Device Matrix.

DEVICE	
Symbol	**Meaning**
L	Event shall be conducted live (conducted in the field/garrison, during an exercise, etc). Requires live (non-simulated) execution of the event.
L/S	Event performed live preferred/simulator optional.
S/L	Event performed in simulator preferred/live optional.
G	Ground/academic training. May include Distance Learning, CBT, lectures, self paced.
CBT	Computer Based Training
LAB	Laboratory
LEC	Lecture
CP	Command Post
TEN	Tactical Environment Network. Events designated as TEN require an approved tactical environment simulation capable of introducing both semi-autonomous threats and moving models controllable from the tactical operator station.
TEN+	Enhanced Tactical Environment Network. Events designated as TEN+ require an approved tactical environment simulation and at least one additional, networked, man-in-the-loop simulator to meet the training objectives. A moving model controlled from the operator station does not satisfy the man-in-the-loop requirement.

Note - If the event is to be flown in the simulator the Simulator Instructor shall set the desired environmental conditions for the event.

4.7.3 Program of Instruction Matrix.

PROGRAM OF INSTRUCTION MATRIX		
Program of Instruction (POI)	**Symbol**	**Aviation Ground**
Basic	B	Initial MOS Training
Refresher	R	Return to community from non (MOS/Skill) associated tour
Maintain	M	All individuals who have attained CSP/MSP/CPP by initial POI assignment are re-assigned to the M POI to maintain proficiency.

4.7.4 Event Terms.

EVENT TERMS	
TERM	**DESCRIPTION**
Discuss	An explanation of systems, procedures, or tactics during the brief, exercise, or debrief. Student is responsible for knowledge of procedures.
Demonstrate	The description and performance of a particular event by the instructor, observed by the student. The student is responsible for knowledge of the procedures prior to the demonstration of a required event.
Introduce	The instructor may demonstrate a procedure or event to a student, or may coach the student through the maneuver without demonstration. The student performs the procedures or maneuver with coaching as necessary. The student is responsible for knowledge of the procedures.
Practice	The performance of a maneuver or procedure by the student that may have been previously introduced in order to attain a specified level of performance.
Review	Demonstrated proficiency of an event by the student.
Evaluate	Any event designed to evaluate team/crew standardization that does not fit another category.
E-Coded	This term means an event evaluation form is required each time the event is logged. Requires evaluation by a certified standardization instructor (NATOPS I, WTI, INST Evaluator etc.)

4.8 CORE SKILL INTRODUCTION PHASE (1000)

4.8.1 Purpose. To provide classroom entry-level instruction to develop the basic skills necessary for a MOS 5970 Data System Maintenance Officer to attain the foundational knowledge on maintenance management and equipment systems for the TACC, TAOC, and DASC agencies. This training is completed upon graduation from the Marine Air Command and Control Systems (MACCS) Warrant Officer Course

4.8.2 General

4.8.2.1 Prerequisite. Meet the requirement delineated in the MOS Manual (MCBul 1200).

4.8.2.2 Admin Notes.

(1) Marine Air Command and Control Systems Warrant Officer Course, MCCES, located in 29 Palms, CA.

(2) While attending the MACCSWO Course, maintenance officers shall complete all events in the ACPM MACCS (8000) and ACE (8020) stages prior to graduating from the course. The formal school shall be annotated in each MACCSWO student's IPR as having completed these two ACPM modules, see the MAWTS-1 C3 Course Catalog for requirements.

4.8.2.3 Stages. The following stages are included in the Core Skill Introduction Phase of training.

PAR NO.	STAGE NAME
4.8.3	MACCS MAINTENANCE WARRANT OFFICER (MMWO)

4.8.3 MACCS MAINTENANCE WARRANT OFFICER (MMWO) STAGE

4.8.3.1 Purpose. To qualify Aviation Radar Maintenance Officers (MOS 5910) and Data System Maintenance Officers (MOS 5970) in Core Skills Introduction Phase (1000 level) Training and Readiness Events per NAVMC 3500.14.

4.8.3.2 General

Prerequisite. Must meet the prerequisites published in the current edition of MCO 1200.17 (MOS Manual) for the PMOS held. These include: a secret security clearance and prior qualification in a specified enlisted military occupational specialty.

Admin Notes. None

Crew Requirements: None

MMWO-1000 2.0 (*) B L

Goal. Conduct a Consolidated Memorandum Report (CMR) Review.

Requirement. IAW the reference and given a maintenance section's CMR, ensure equipment accountability and requirements by performing the following:

1. State the purpose of a CMR.
2. Review TE.
3. Conduct a CMR inventory.

a. Ensure SL-3 accountability for assumption and relief.
b. Determine UURI requirements.
c. Ensure equipment have record jackets.
d. Identify discrepancies, if any.

4. Write and submit a letter of discrepancy.

Performance Standard. Pass a practical exam with a minimum of 80%.

Reference.
1. MCO P4400.150E W/ERRATUM CH 1-2
2. CMR
3. MMO SOP

MMWO-1005 3.0 (*) B L

Goal. Reconcile Marine Corps Integrated Maintenance Management System (MIMMS) Automated Information System (AIS) reports.

Requirements. Given the AIS reports listed in item 1 below:

1. Identify the purpose of:
   a. Daily Process Report (DPR)
   b. Logistics Maintenance 2 (LM2)
   c. Daily Transaction List (DTL)
   d. Exceptions Report
   e. TAM report
   f. LM2 report
   g. Loaded unit balance file (LUBF)
   h. Due and status file (DASF)
   i. Equipment Record Order (ERO) NAVMC 10425
   j. Equipment Record Order Supply Listing (EROSL) NAVMC 10925
   k. Inspection repair tag (NAVMC 1018)
   l. Layette bin.
2. Identify the type of information contained in each of the forms listed above.
3. Identify the status of a parts requisition.
4. Identify proper use of UMMIPS priorities.
5. State item requisition priorities.
6. State any errors found within each of the forms listed above.
7. Reconcile all items listed above and list all errors found in each form.
8. Explain how to maintain a layette bin.

Performance Standard. Given a DPR and LM2 report, identify errors with a minimum of 80% accuracy.

Reference.
1. MCO P4790.2_
2. MCBUL 3000
3. NAVMC 10425
4. NAVMC 10925
5. UM 4790-5
6. MCO P4400.16
7. TM 4700.15/1_

MMWO-1010 2.0 (*) B L

Goal. Identify the float process.

Requirement. Given a practical application scenario, applicable maintenance and supply history documents, review and provide recommendations for organizational Critical Low Density Float (CLD) assets and required on-hand quantities:

1. Define the purpose of the float process.
2. Define the purpose of Critical Low Density float process.
3. Identify the key components of the float process.
4. Identify the key documentation within each component of the float process.
5. Identify the float re-computation process.
6. Identify Low Density Float assets.

Performance Standard. Define the float process and provide recommendations for organizational critical Low Density Float assets and required on-hand quantities to the instructor for approval.

Reference.
1. MCO 4790.2_
2. MCO P4400.150_
3. FEDLOG

MMWO-1015 2.0 (*) B L

Goal. Identify major funding lines.

Requirement. Given the references, identify major funding lines:

1. Operation & Maintenance (O&M) Funds
   a. Planning Estimate (PE)
      (1) Defense Subsistence Supply Center (DSSC)
      (2) Temporary Additional Duty
      (3) Fuel
      (4) Government-Wide Commercial Purchase Card Program (GCPC)
   b. Requisition Authority (RA) - Supported Activities Supply System (SASSY)
2. Research, Development, Test & Evaluation (RDT&E).
3. Procurement Marine Corps (PMC)
4. Military Construction (MILCON).
5. Blue Dollars (2F Funds)

Performance Standard. Pass a written exam with a minimum of 80%.

Reference.
1. MCO P4400.150_
2. MCO P7100.8_

MMWO-1020 3.0 (*) B L

Goal. Identify maintenance funding requirements.

Requirement. Given a scenario, equipment maintenance history and anticipated maintenance shortfalls, propose funding allocations for maintenance activities to create a maintenance budget.

1. Identify and prioritize funding requirements.
2. Provide a maintenance funding request based on requirements and prior year utilization.
3. Provide an anticipated maintenance funding request based on the unit's TEEP.
4. Submit a budget request to the instructor for validation.

Performance Standard. Complete the requirement items with a minimum of 80% accuracy and IAW the references.

Reference.
1. MCO P4400.150_
2. MCO P7100.8_

MMWO-1025 2.0 (*) B L

Goal. Validate induction of new equipment into service.

Requirement. Given a Material Fielding Plans (MFP) or Users Logistics Support Summary (ULSS), and applicable references, demonstrate and validate the induction of new equipment into service.

1. Review the Users Logistics Support Summary (ULSS) or Material Fielding Plan (MFP).
2. Validate new equipment is properly placed into service.
   a. Ensure record jacket was created with proper documentation IAW the reference.
   b. Ensure initial SL-3 was performed.
   c. Ensure an initial LTI was performed.
   d. Verify equipment is added to Major Subordinate Command (MSC) Mechanized Allowance List (MAL).
   e. Ensure induction of new equipment into calibration cycle as required.

Performance Standard. Pass a practical exam with a minimum of 80%.

Reference.
1. Supply Instructions (SI)
2. ULSS
3. Equipment SL-3
4. Initial Issuing Provision Inventories
5. MCO 5311.1_
6. MCCDC 1001
7. MCO P4400.82
8. UM 4400.124

MMWO-1030 2.0 (*) B L

Goal. Demonstrate the process to phase out obsolete equipment.

Requirement. Given a Phase Out Plan (POP) and applicable references, demonstrate and validate phase out of obsolete equipment, to include at minimum:

1. Review the POP and applicable references.
2. State the purpose of:
   a. Recoverable Items Report (WIR)
   b. WIR Online Process Handler program. (WOLPH)
   c. Material Returns (MTR) program.
3. Validate obsolete equipment was disposed of properly by ensuring the following:
   a. Ensure a final LTI was performed.
   b. Ensure a final SL-3 was performed.
   c. Ensure a final LTI was performed.
   d. Ensure a Recoverable Items Report (WIR) - request for disposition - was submitted using the WOLPH.
   e. Ensure equipment was disposed of IAW instructions in Phase out plan.
   f. Ensure the record jackets were completed and accompanied equipment.
   g. Ensure the equipment and proper documentation was sent to Supply for turn-in.
   h. Ensure supply received the proper documentation to remove equipment from the CMR.

Performance Standard. Complete the practical application and the requirement items. The instructor will validate that the process was completed per the reference.

Reference.
1. Supply Instructions (SI)
2. ULSS
3. Equipment SL-3
4. Initial Issuing Provision Inventories
5. MCO 5311.1C
6. MCCDC 1001
7. MCO P4400.82
8. UM 4400.124

MMWO-1035 2.0 (*) B L

Goal. Identify maintenance quality assurance procedures.

Requirement. Given unit MMSOP, desktop procedures, and the reference:

1. Identify maintenance QA procedures
2. List all the QA areas within your section.
3. State the frequency of the QA checks for each area.
4. Identify the local quality assurance checklists for PEIs.
5. Deadline criteria for Preliminary Equipment Index (PEI)
6. Identify The frequency of QA checks.

Performance Standard. Demonstrate an understanding of maintenance quality assurance procedures IAW the reference.

Reference. MCO P4790.2_

MMWO-1040 16.0 (*) B L

Goal. Conduct an inspection of maintenance functional areas.

Requirement. Given required references and a current inspection checklist, demonstrate the procedures for inspecting the following functional areas.

1. State the purpose for inspecting the functional areas.
2. Identify and review the references for each functional area and obtain applicable and current inspection lists for all.
3. Conduct an inspection of all areas to familiarize the trainee with the specifics of each.
   a. Calibration Control Program
   b. Publication Control Program
   c. Quality Assurance Program
   d. Preventative Maintenance Program
   e. Modification Control Program
   f. Tool Control Program
   g. MIMMS/AIS
   h. Training Program
   i. Records
   j. Safety Program
   k. Corrosion Prevention and Control CPAC
3. Explain the inspection procedures.
   a. Schedule the inspection.
   b. Inform functional area manager.
   c. Turn over folders are IAW the references.
   d. Submit an executive summary at the conclusion of the inspection.

Performance Standard. Pass a practical exam with a minimum of 80%. Each area must be inspected to ensure trainee understands the specifics of each.

Reference.
MCO 4790.2_
MCO P4400.82_
MCO P4400.160B
MCO P4400.150_
MCO 4855.10_
MCO 4790.18_
MCO 4733.1_
MCO 4450.12_
MCO 4400.16_
MCO 4105.2_
UM-PLMS W CH 1-2
NAVMC DIR 5100.8
NAVMC 2761 DTD 1 JUN 08
MCO P5215.17_
MCO P5102.1_
MCO P5090.2_
MCO 5104.2
MCO 5104.1_,
MCO 5100.8

MCO 5100.29_
MCO 3000.11_ M
MCO 3710.6
MCO 1553.3 (PRELIM)
MCO 3500.14

MMWO-1045 2.0 (*) B L

Goal. Demonstrate an understanding of the Total Force Structure Management System (TFSMS).

Requirement. Given access to TFSMS, complete the following:

1. View and interpret information on structure and equipment.
2. Create structure and equipment reports.
3. State the reason for submitting a Table of Organization and Equipment Change Request (T/OECR).
4. Demonstrate how to manipulate structure and equipment data using electronic TOECRs.

Performance Standard. Complete the Total Force Structure Management Systems (MC TFSMS) online training located on the TFMS website, https://tfsms.mccdc.usmc.mil

Reference.
1. URL https://tfsms.mccdc.usmc.mil
2. MCO 5311.1_

MMWO-1050 1.0 (*) B L

Goal. Identify the frequency request process.

Requirement. Given the references and a scenario with operational requirements, submit a frequency request.

1. Explain the frequency request process.
2. Determine required frequencies.
3. Identify the purpose and sections of:
   a. Frequency Request Form (SF-1494)
   b. Satellite Access Request (SAR) form.
4. Complete a SF-1494 form.
5. Complete a Satellite Access Request (SAR) form.

Performance Standard. Submit completed request forms to the Instructor for final approval.

Reference.
1. MCRP 3-40_
2. MCO 2400.2

MMWO-1055 2.0 (*) B L

Goal. Submit a request for equipment using the Marine Corps Urgent Needs Process (MCUNP).

Requirement. Given the references and an urgent equipment requirement, identify the process for submission and complete the MCUNP form.

1. State the purpose of the MCUNP.
2. State the purpose of the urgent UNS.
3. Describe the process of completing a Urgent UNS form.
4. Complete the Urgent UNS form to support the requirement.

Performance Standard. Pass a written exam with a minimum of 80%.

Reference.
1. NAVMC 11475
2. MCO 3900.17

MMWO-1060 2.0 (*) B L

Goal. Identify the key elements of Operational Orders (OPORD).

Requirement. Given an OPORD, identify those key elements pertaining to the unit's communications requirements.

1. Identify the purpose and major sections of the OPORD.
2. State the purpose and content of the Annex K.
3. State the purpose and content of the OPTASKLINK.
4. State the purpose and content of an EKMS Callout.

Performance Standard. Pass a written exam with a minimum of 80%.

Reference. MCWP 5-1

MMWO-1065 1.0 (*) B L

Goal. Identify the MACCS equivalent agencies provided by other services.

Requirement. Given the references, identify the major C2 agencies and functions for the following:

1. Theater Air Ground System (TAGS)
2. Navy Tactical Air Control System (NTACS)
3. Theater Air Control System (TACS)
4. Army Air Ground System (AAGS)

Performance Standard. Pass a written exam with a minimum of 80%.

Reference.
1. MCRP 3-22.2
2. MCRP 3-25
3. MCRP 3-25B
4. MCRP 3-25E
5. MCRP 3-25G
6. MCRP 3-25H
7. MCWP 3-25.3

MMWO-1070 2.0 (*) B L

Goal. Identify the maintenance and service support sections within the Marine Logistics Group (MLG).

Requirement. Given the references, identify the following:

1. Maintenance Support
   a. Repairable Issue Point (RIP)
   b. Electronics Maintenance Company (ELMACO)
2. Service Support
   a. Integrated Personnel Administrative Center (IPAC)
   b. Sustenance
   c. Medical/Dental

Performance Standard. Pass a written exam with a minimum of 80%.

Reference.
1. MCDP 6
2. MCWP 3-25.3
3. MCWP 3-25.4
4. MCWP 3-25.5
5. MCWP 3-25.6
6. MCWP 3-25.7
7. MCWP 3-25.8
8. MCWP 3-25.10
9. MCWP 5-1

MMWO-1075 2.0 (*) B L

Goal. Identify all the MACCS Maintenance 59xx MOS duties.

Requirement: Identify the duties of each 59xx MOS listed below:

1. 5902
2. 5910
3. 5939
4. 5942
5. 5948
6. 5950
7. 5952
8. 5953
9. 5954
10. 5959
11. 5970
12. 5974
13. 5979
14. 5993

Performance Standard. Pass a written exam with a minimum of 80%.

Reference. MOS Manual, MOS Road Maps

MMWO-1080 12.0 (*) B L

Goal. Identify the mission, headquarters and TACC sections, and major systems of the Marine Tactical Air Command Squadron (MTACS).

Requirement. Given the references, identify the following to include stating the mission, capabilities and limitations of the major systems and concept of employment of organizational units listed below:

1. Mission
2. Headquarters Sections
    a. S1
    b. S2
    c. S3
    d. S4
    e. S6
3. TACC sections and crew composition (maintenance and operations)
4. Major Systems and Subsystems
    a. AN/MRQ-12 Communication Information System (CIS)
    b. AN/TYY-2 Theater Battle Management Core Systems (TBMCS)
    c. AN/TYQ-101A Communication Data Links System (CDLS)
    d. AN/URC-107 (V)10 Joint Tactical Information Distribution System (JTIDS)
    e. AN/USC-55A Commanders Tactical Terminal (CTT)
    f. Link Management System - Multi TDL (LMS-MT)
    g. Intelligence Operations Workstation (IOW)
    h. Intelligence Operations Server (IOS)
    i. Advance Field Artillery Tactical Data System (AFATDS)
    j. AN/TSQ-239 V2 Combat Operations Center (COC)
    k. Common Connectivity Device (CCD)
    l. Joint Automated Deep Operations Coordination System (JADOCS)

Performance Standard. Without the aid of reference, pass a written exam with a minimum of 80%.

Reference.
1. MCRP 5-12D
2. MCWP 3-25.4
3. Approved Core METL applicable to the unit

MMWO-1085 12.0 (*) B L

Goal. Identify the mission, organizational units, and major systems of the Marine Air Control Squadron (MACS).

Requirement. Given the references, identify the following to include stating the mission, capabilities and limitations of the major systems and concept of employment of organizational units listed below:

1. Mission
2. Organizational Units
    a. HQ
        (1) S1
        (2) S2
        (3) S3
        (4) S4
        (5) S6
            (a) Communications Maintenance
            (b) Operations Communications

b. Tactical Air Operations Center (TAOC)
   (1) S3
   (2) S6
      (a) Radar
      (b) Tactical Data Systems Maintenance (TDSM)
   (3) TAOC sections and crew composition (maintenance and operations)
c. Early Warning and Control (EWC)
   (1) S3
   (2) Communication Electronics Maintenance Officer
      (a) Radar
      (b) Tactical Data Systems (TDS)
   (3) EW/C sections and crew composition (maintenance and operations)
d. Marine Air Traffic Control Detachments (MATCD) - describe sections and crew composition (maintenance and operations) for each.
   (1) Air Traffic Navigation, Integration, and Coordination Systems (ATNAVICS) MATCD
   (2) Marine Air Traffic Control All-Weather Landing System (MATCALS) MATCD
   (3) Tower/Tacan Detachment
   (4) MATC Mobile Team (MMT)

3. Major Systems Major Systems and Subsystems
   a. AN/TPS-59 Long Range Radar
   b. AN/TPS-63 Medium Range Radar
   c. AN/TYQ-23 Tactical Air Operations Module (TAOM)
   d. AN/MSQ-124 Air Defense Communication Platform (ADCP)
   e. AN/TYQ-87 Sector Anti Air Warfare Facility (SAAWF)
   f. AN/TSQ-239 V4 Combat Operations Center (COC)
   g. AN/USC-55A
   h. AN/TPN-31A Air Traffic Navigation, Integration, and Coordination Systems (ATNAVICS)
   i. AN/TSQ-131 (CCS)
   j. AN/TPN-73 Air Surveillance Radar (ASR)
   k. AN/TPN-22 Precision Approach Radar (PAR)
   l. AN/TSQ-120B Tower
   m. AN/TRN-44A Tactical Air Navigation (TACAN)
   n. AN/TSQ-216 Remote Landing Site Tower (RLST)
   o. AN/TRN-47 Tactical Air Navigation (TACAN)

Performance Standard. With the aid of reference, pass a written exam with a minimum of 80%.

Reference.
1. MCRP 5-12D
2. MCWP 3-25.6
3. MCWP 3-25.7
4. MCWP 3-25.8
5. Approved Core METL applicable to the unit
6. TM 10498B-OD TAOM Operations Maintenance Manual
7. UM 2005
8. TM 07736C
9. TM 07751B
10. TM 10200A-OI/1
11. TM 10446B-OI

12. TM 10389-12 CTT
13. TM 10389-30 CTT

MMWO-1090 12.0 (*) B L

Goal. Identify the mission, organizational units, and major systems of the Marine Air Support Squadron (MASS).

Requirement. Given the references, identify the following to include stating the mission, capabilities and limitations of the major systems and concept of employment of organizational units listed below:

1. Mission
2. Organizational Units
   a. HQ
      (1) S1
      (2) S2
      (3) S3
      (4) S4
   b. Communication Electronics
   c. Direct Air Support Center (DASC) - describe sections and crew composition (maintenance and operations) for each.
   d. DASC(Airborne) - describe sections and crew composition (maintenance and operations) for each
   e. Air Support Element (ASE) - describe sections and crew composition (maintenance and operations) for each
   f. Air Support Liaison Teams (ASLT) - describe crew composition.
3. Major Systems and Subsystems
   a. AN/MRQ-12 Communication Information System (CIS)
   b. AN/MRC-148 Radio Sets
   c. AN/MRC-145 Radio Sets
   d. AN/UYQ-3B Direct Air Support Central Air Support System (DASCAS)
   e. AN/TSQ-239 V4 Combat Operations Center (COC)

Performance Standard. With the aid of reference, pass a written exam with a minimum of 80%.

Reference.
1. MCRP 5-12D
2. MCWP 3-25.5
3. Approved Core METL applicable to the unit

MMWO-1095 8.0 (*) B L

Goal. Identify the embarkation procedures and restraints for MACCS systems.

Requirement. Given the reference:

1. List the HAZMAT requirements.
2. List the security requirements.
3. List the MHE requirements.
4. List the equipment specific transportation requirements.

5. Identify MAGTF Deployment Support System II (MDSS II) elements.

Performance Standard. With the aid of reference, pass a written exam with a minimum of 80%.

Reference.
1. MCO 4030.33
2. MCRP 4-11
3. MMO SOP
4. Agency-specific embarkation checklist

MMWO-1100 1.0 (*) B L

Goal. Identify 5900 staff actions

Requirement. Given the reference, explain staff actions a 5900 warrant officer will perform while assigned to a MTACS.

1. Maintenance management related correspondence.
3. Maintenance management systems and processes.
2. Equipment Status maintenance and reporting requirements.
4. Equipment capabilities and limitations
5. Deployment and employment considerations and advisement.

Performance Standard. Without the aid of reference, pass a written exam with a minimum of 80%.

Reference.
1. MCRP 5-12D
2. MCWP 3-25.4
3. MCO 4790.2
4. MCO P4400.150

MMWO-1105 4.0 (*) B L

Goal. Identify MACCS Data Links

Requirement. Given the reference, explain the following for MACCS data links:

1. List all the MACCS data links.
2. State the purpose, capabilities and limitations of each data link.
3. List what MACCS agencies can provide which data links.
4. List equipment requirements for each data link.
5. Explain how the different data links are used to integrate with the MACCS and other external agencies

Performance Standard. With the aid of reference, pass a written exam with a minimum of 80%.

Reference.
1. **MCWP 3-25C**
2. CJCSM 6120.01D

MMWO-1110 4.0 (*) B L

Goal. Identify Tactical Data Network (TDN) requirements.

Requirement. Given the reference, conduct the following for Tactical Data Networks used in the MACCS:

1. List all the Tactical Data Networks in the MACCS
2. Identify the purpose, capabilities and limitations for each TDN.
3. List the requirement equipment for each.
4. State the Bandwidth requirements for each.
5. Describe the IP Schemes for each.
6. Explain the planning requirements specific to each.

Performance Standard. With the aid of reference, pass a written exam with a minimum of 80%.

Reference.
1. MCWP 3-25C
2. CJCSM 6120.01D

MMWO-1115 2.0 (*) B L

Goal. Identify purpose and mission of Information Assurance (IA)

Requirement. Given the reference, state the purpose and mission of Information Assurance as it applies to the MACCS.

1. List Accreditation packages
2. List Certifications for system administrators
3. Explain the purpose and requirement to obtain Equipment Authority to Operate
4. Explain configuration management and its relationship to IA

Performance Standard. Without the aid of reference, pass a written exam with a minimum of 80%.

Reference.
1. DOD Directive 5200.28
2. DOD Directive 5200.40
3. MCO P5239.1B

MMWO-1120 4.0 (*) B L

Goal. Draw an Overview (OV) chart of the MACCS concept of employment.

Requirement. Given the references, draw an OV chart depicting how a notional MACCS could be employed. Include all the MACCS agencies and how they are employed in the battle area to include:

1. Major Systems
2. Agencies
3. Interoperability and lines of communications

(a) Data links (TDL)
(b) Voice comm
(c) Data comm
(d) Networks

4. Submit the OV chart to the instructor for review.
5. Develop and submit a brief on the OV chart.

Performance Standard. Draw the OV chart and submit it to the instructor who will review for correctness. Provide a brief to the instructor and the maintenance chief/maintenance officer. The instructor will ensure the brief and the OV chart covers all MACCS agencies and major systems (to include UAS and MWCS). Communications architecture should be IAW the reference.

Reference.
1. MCWP 3-2
2. MCWP 3-25.4

MMWO-1125 2.0 (*) B L

Goal. Understand Training and Readiness Processes.

Requirement. Conduct the following:

1. State the purpose and use of the Defense Readiness Reporting System (DRRS).
2. Identify the key training information required to assist the commanding officer in reporting DRRS status.
3. State the purpose and use of the AIRS checklist.
4. State the process for conducting an internal AIRS Inspection.
5. Explain the purpose of Course Content Review Boards (CCRB) and the approval processes.
6. Explain the process to obtain a class seat to attend a Skills Enhancement Course.
7. Explain the change recommendation process for community T&R Manual.

Performance Standard. Without the aid of reference, pass an exam with 80% accuracy.

Instructor. MCCES Formal School Instructor, WTI

Prerequisite.
1. 5100, 5110
2. Complete the System Approach to Training (SAT) MarineNet Course UT01A0, URL https:\\www.marinenet.usmc.mil/marinenet

Reference
1. NAVMC 3500.14_
2. SAT Manual
3. AIRS Website http://hqinet001.hqmc.usmc.mil/ig/div_inspections/AIRS
5. MAWTS-1 C3 Course Catalog, www.intranet.tecom.usmc.mil/sites/mawts1

4.9 CORE SKILL PHASE (2000)

4.9.1 Purpose. To provide the 5970 with the requisite skills and working knowledge relating to the maintenance management, deployment and organizational capabilities of the Marine Air Command and Control System and ancillary equipment that they are required to operate, maintain and employ.

4.9.2 General

4.9.2.1 Prerequisite. Core Skill Introduction training phase must be completed prior to beginning this phase of training.

4.9.2.2 Admin Notes.

(1) Training in this phase does not preclude simultaneous training in the Mission Skill phase.

(2) Individual core skills are learned and mastered using a varied combination of written exams, scenarios and practical demonstrations of proficiency.

4.9.2.3 Stages. The following stages are included in the Core Skill Phase of training.

PAR NO.	STAGE NAME
4.9.3	COMMUNICATION SECURITY (COMSEC)
4.9.4	FAMILIARIZATION (FAM)
4.9.5	MAINTENANCE MANAGEMENT (MMGT)
4.9.6	OPERATIONS MANAGEMENT (OMGT)
4.9.7	ORGANIZATIONAL STRUCTURE (ORGS)

4.9.3 COMMUNICATIONS SECURITY (COMSEC) STAGE

4.9.3.1 Purpose. To teach the trainee safe handling and storage of classified material, use of common fill devices, crew changeover procedures, and provide familiarization with the EKMS COMSEC callout.

4.9.3.2 General

Prerequisite. Complete MCI 2525B, Communications Security.

Admin Notes. NONE

Crew Requirements: NONE

COMSEC-2600 2.0 (365) B,R,M
L

Goal. Describe proper handling and storage of classified materials.

Requirement. Conduct the following:

1. State the different levels of classification.
2. State the marking requirements for each level of classification.
3. State the Two-Person Integrity (TPI) rule.
4. State storage procedures for each level of classification.
5. State the purpose of using control numbers for classified material.
6. State the purpose of the SF-153 and when you would use one.
7. Identify transportation requirements for classified material.
8. State the sections of the SF-702.
9. Identify the approved security containers utilized for storage.
10. Identify the procedures for handling Controlled Cryptographic Items (CCIs).

Performance Standard. Without the aid of reference, state the above requirement items without error.

Instructor. BI, SI

Prerequisite. MCI 2525B

Reference
1. MCO P5510.18_
2. EKMS-1
3. Local SOP
4. SECNAVINST 5510.36

COMSEC-2605 2.0 (365) B,R,M
L

Goal. Ensure physical security of classified areas.

Requirement. Given a scenario and references, illustrate personnel and equipment security procedures.

1. Create guard schedule.
2. Single entry control point.
3. Verify personnel on Access Roster.
4. Triple Strand Concertina Wire.
5. Entry points of communication lines.
6. Submit a physical security diagram.

Performance Standard. With the aid of reference, draw a diagram depicting the information listed in the requirement section; instructor will validate that the diagram supports the scenario.

Instructor. BI, SI

Prerequisite. MCI 2525B, 2600

Reference. MCO P5530.14_

COMSEC-2610 2.0 (365) B,R,M
L

Goal. Conduct crew change over security procedures.

Requirement. During a crew change over:

1. Conduct Classified Material Control Center inventory.
2. Conduct EKMS inventory.
3. Destroy superseded key materials.

Performance Standard. With the aid of reference, conduct the inventories and destroy key materials without discrepancy.

Instructor. BI, SI

Prerequisite. MCI 2525B, 2605

Reference
1. EKMS-1A
2. COMSEC Callout
3. Local unit SOP

COMSEC-2615 2.0 (365) B,R,M
L

Goal. Extract key material information from EKMS COMSEC callout.

Requirement. Given an EKMS COMSEC callout and references:

1. State the purpose of the EKMS COMSEC callout.
2. Identify the four main pieces of key information:
   a. Short Title
   b. Edition
   c. Segment
   d. Classification
   e. Supersession date
3. Identify segment roll over dates and time.

Performance Standard. With the aid of reference, state the purpose and identify the key information on the callout without error.

Instructor. BI, SI

Prerequisite. MCI 2525B, 2600

Reference
1. EKMS-1A
2. COMSEC Callout
3. Local SOP

COMSEC-2620 2.0 (365) B,R,M (1) SKL
L

Goal. Utilize Simple Key Loader (SKL) or Data Transfer Device (DTD).

Requirement. Given (2) loaded SKL or DTDs and a zeroized cryptographic device:

1. Describe the purpose of SKL.
2. Define a SKL loading procedure.
3. Configure the SKL.
4. Identify SKL indicators and messages.
5. Transfer key material to Controlled Cryptographic Item (CCI) equipment.
6. Given two (2) Simple Key Loader (SKL) and the reference, transfer cryptographic information from device to device.
7. Destroy superseded keying material within the cryptographic fill device.

Performance Standard. With the aid of reference, load keying material into appropriate COMSEC equipment using a fill device and destroy superseded keying material IAW the references.

Instructor. BI, SI

Prerequisite. MCI 2525B, 2600, 2615

Reference
1. EKMS-1A
2. COMSEC Callout
3. Local SOP

4.9.4 FAMILIARIZATION (FAM) STAGE

4.9.4.1 Purpose. To build the trainee's awareness in the fundamentals of MACCS maintenance communication system, tactical data links, system administration, and system networks to include radar and tactical data systems.

4.9.4.2 General

Prerequisite. NONE.

Admin Notes. The performance standard for all events in this stage will be conducted in a question and answer verbal format and with the aid of reference.

Crew Requirements. NONE.

FAM-2650 3.0 (*) B L

Goal. State the purpose and capability of Tactical Data Links.

Requirement. Given the references, state the purpose and capability of each data link.

1. TADIL A (Link 11A)
   a. UHF
   b. HF
2. TADIL B (Link 11B)

3. TADIL J (Link 16))
   a. JREAP A
   b. JREAP B
   c. JREAP C
   d. RF
4. ATDL-1
5. NATO Link 1
6. List the types of units that utilize each link.
7. Intelligence Broadcast System (IBS)
8. CST
9. Ground Based Data Link Enhanced (GBDLE)

Performance Standard. With the aid of reference, state the purpose and capability of each data link. Completion of the MACCS Maintenance Managers Course at MCCES satisfies the standard.

Instructor. BI, SI

Reference.
1. TM 10498B-OD TAOM Operations Maintenance Manual
2. TM 10200A-OI/1 ADCP Maintenance Manual
3. TO 31S5-2TYQ123-8-1 JRE Operations and Maintenance Instructions

FAM-2655 3.0 (*) B L

Goal. Describe Automated Data Processing Equipment (ADPE) equipment.

Requirement. Given the references:

1. Define Transfer Control Protocol/Internet Protocol (TCP/IP).
2. Identify types of network cables and their purpose.
3. Identify types of switches and their purpose.
4. Define Ethernet communication.
5. Identify types of routers and their purpose.
6. Identify the different types of networks and their purpose.

Performance Standard. With the aid of reference, pass a written examination with 80% accuracy.

Instructor. BI, SI

Reference
1. MCWP 3-25.3
2. MCWP 3-25.4
3. TCP/IP Network Administration ISBN #1-56592-322-7
4. Computer Network and Internets
5. Data Communication Network Devices ISBN #0-471-97515-x
6. Essential System Administration ISBN #0-596-00343-9
7. Cisco Router 24 Seven Sybex manual

FAM-2660 2.0 (*) B L

Goal. State HF, VHF, and UHF frequency spectrums.

Requirement. State the frequency spectrum for:

1. HF.
2. VHF.
3. UHF.

Performance Standard. With the aid of reference, state the frequency spectrum for HF, VHF, and UHF.

Instructor. BI, SI

Reference. MCRP 3-40.3B.

FAM-2665 2.0 (1460) B,R,M L

Goal. Describe HF, VHF, UHF radio characteristics.

Requirement. Given a list of radio equipment and applicable references, describe the following characteristics for each:

1. AN/GRC 171B(V)4
   a. Purpose and use of the radio
   b. Frequency range
   c. Power output
2. AN/VRC 104
   a. Purpose and use of the radio
   b. Frequency range
   b. Power output
3. AN/VRC 103
   a. Purpose and use of the radio
   b. Frequency range
   c. Power output
4. AN/VRC 110
   a. Purpose and use of the radio
   b. Frequency range
   c. Power output
5. AN/GRC 242
   a. Purpose and use of the radio
   b. Frequency range
   c. Power output
6. AN/GRC 256
   a. Purpose and use of the radio
   b. Frequency range
   c. Power output

Performance Standard. With the aid of reference, state the frequency and power output for all radios listed in the requirement.

Instructor. BI, SI

Reference. MCRP 3-40.3B.

FAM-2670 2.0 (*) B L

Goal. Demonstrate an earth ground installation.

Requirement. Given a grounding kit and PPE:

1. Install an earth ground using a:
   a. Grounding rod.
   b. MK-255IAU Grounding Kit (SWIG).
2. Verify proper grounding reading utilizing appropriate test equipment.

Performance Standard. With the aid of reference, install an earth ground. The Instructor shall verify the grounding was successful.

Instructor. BI, SI

Reference. MCRP 3-40.3B

4.9.5 MAINTENANCE MANAGEMENT (MMGT) STAGE

4.9.5.1 Purpose. To provide the 5970 with the requisite skills and working knowledge relating to maintenance management.

4.9.5.2 General

Prerequisite. None

Admin Notes. None

Crew Requirements: None

MMGT-2712 2.0 (730) B;R,M L

Goal. Identify the float process.

Requirement. Given a practical application scenario, applicable maintenance and supply history documents, review and provide recommendations for organizational Critical Low Density Float (CLD) assets and required on-hand quantities.

1. Define the purpose of the float process.
2. Define the purpose of Critical Low Density items.
3. Identify the key components of the float process.
4. Identify the key documentation within each component of the float process.
5. Identify the float re-computation process.
6. Review documentation provided and identify Low Density Float assets.
7. Provide justification for quantity changes for Low Density Items.

Performance Standard. With the aid of references, complete the requirement items IAW the references. Provide justification that supports the documentation provided. Instructor shall ensure the student provides valid justification based on documentation.

Instructor. BI, SI

Reference.
1. MCO 4790.2
2. MCO P4400.150
3. FEDLOG

MMGT-2724 16.0 (*) B L

Goal. Identify the process to submit a Table of organization and equipment (TO&E) Change Request (TOECR).

Requirement. Given a scenario and applicable references:

1. Pull TO&E via the Total Force Structure Management System (TFSMS).
2. Validate the requirement for change.
3. Complete TOECR form, NAVMC 11355.
4. Identify compensation for T/O changes when possible.
5. Provide an explanation/reason for change request on the change request form in plain English.
6. Provide a copy of the NAVMC 11355 to the instructor for review and validation.

Performance Standard. Complete the requirement items to support the scenario; instructor will ensure the NAVMC 11355 supports the scenario requirement.

Prerequisite. The requirement can be satisfied by completing the TFSMS Super User Course - instructions on how to obtain MTT training is located on the TFMS website, https://tfsms.mccdc.usmc.mil

Instructor. BI, SI

Reference
1. MCO 5311.1
2. Unit TO&E

MMGT-2728 16.0 (1460) B,R,M L

Goal. Develop a maintenance section budget.

Requirement. Utilizing equipment maintenance history and forecasting anticipated maintenance shortfalls, propose funding allocations for maintenance activities.

1. Provide maintenance funding request based on current requirements while considering prior year utilization history.
2. Draft an anticipated maintenance funding request based on the unit's TEEP to support
   a. Personnel travel requirements
   b. Administrative support requirements (SERVMART)
3. Submit funding request with justification.

Performance Standard. With the aid of reference, complete the requirement items. Submit the funding request to the instructor for validation.

Instructor. BI, SI

Prerequisite. 2752

Reference
1. MCO P4400.150_
2. MCO P7100.8_

MMGT-2730 20.0 (1460) B,R,M L

Goal. Conduct a Consolidated Memorandum Report (CMR) Review.

Requirement. Given the references and a maintenance section's CMR, ensure equipment accountability and requirements by performing the following:

1. State the purpose of a CMR.
2. Review TE.
3. Conduct a CMR inventory.
   a. Ensure SL-3 accountability for assumption and relief.
   b. Determine Using Unit Responsibility (UURI)/Government Furnished Equipment (GFE) requirements.
   c. Ensure equipment have record jackets.
   d. Identify discrepancies, if any.
4. Write and submit a letter of discrepancy within specified time period.

Performance Standard. With the aid of reference, complete a CMR review . Submit the discrepancy letter to the instructor for validation.

Instructor. BI, SI

Prerequisite. 2752

Reference
1. MCO P4400.150E W/ERRATUM CH 1-2
2. CMR
3. MMO SOP

MMGT-2740 1.0 (*) B L

Goal. Ensure classified and CCI material handling procedures are implemented.

Requirement. Given the references:

1. Verify classified material is stored in GSA approved container.
2. Verify proper and timely destruction of superseded segments.
3. Verify SF-702s are properly completed.
4. Verify classified material is transported properly.
5. Write and submit a report identifying discrepancies.

Performance Standard. With the aid of reference, ensure classified and CCI material handling procedures are being implemented by completing the requirement items. Submit the discrepancy report to the instructor for validation.

Instructor. BI, SI

Reference
1. EKMS-1A series
2. SECNAV M-5510.36_
3. MCO 5510.18_

MMGT-2746 4.0 (365) B,R,M L

Goal. Prepare and present a command level brief

Requirement. Given an OPORD and commander's intent

1. Prepare a brief that contains at minimum the following:
   a. State the OPORD mission
   b. Maintenance implied tasks extracted from the OPORD
   c. Brief essential communications mission items, to include at minimum:
      (1) Communications architecture
      (2) TDL architecture
      (3) Accreditation Package
      (4) TBMCS architecture
   d. List equipment requirements to support mission
   e. Define crew composition and management based on T&R CMMR
   f. Define the maintenance training plan per T&R requirements
   g. State the movement plan for deployment
   h. Embarkation
   i. Emplacement
   j. Setup
   k. Retrograde draft plan
   l. State maintenance sustainment plan
   m. State supply support required
   n. State logistical support required
   o. Issues of concern
   p. Way Ahead
2. Present the brief

Performance Standard. With the aid of reference, prepare the brief and present it in a confident and focused manner to the instructor and the maintenance officer. The instructor will ensure the brief contains the requirement items and that the overall planning supports the mission in the OPORD.

Instructor. BI, SI

Reference
1. OPORD
2. Local Unit SOP
3. Local MMO SOP

MMGT-2750 2.0 (1460) B,R,M L

Goal. Ensure Quality Control (QC) procedures are being performed correctly for organic unit systems.

Requirement. Given the references and TACC equipment records, ensure QC procedures are being performed by:

1. Identify maintenance QC procedures
2. State the frequency of the QC checks for each area.
3. Supervise a QC inspection on a selected piece of equipment:
   a. Ensure equipment is being maintained to equipment standards.
   b. Ensure quality controls are being adhered to.
   c. Ensure inspection standards, checklists or templates being used to inspect completed maintenance actions.
   d. Ensure equipment specifications are being recorded within tolerance levels IAW TM.
   e. Verify the repair process is properly implemented by ensuring that:
      (1) Proper tools were used
      (2) ESD procedures were used
      (3) Safety warnings were adhered to
      (4) Necessary defective parts were replaced
      (5) Correct software was used, as applicable
      (6) Proper MIMMS forms are used during maintenance cycle
4. Ensure NAVMC-1018 form was completed and verified.
5. Write a report identifying discrepancies.

Performance Standard. With the aid of reference, complete the requirement items and ensure QC procedures are being performed.

Instructor. BI, SI

Reference
1. MCO P4790.2_
2. MMO SOP
3. Appplicable TM

MMGT-2752 2.0 (1460) B,R,M L

Goal. Assess maintenance funding requirements.

Requirement. Utilizing a simulated budget spreadsheet and forecasting anticipated maintenance shortfalls, propose funding allocations for maintenance activities.

1. Identify and prioritize funding requirements.
2. Review the maintenance funding requests for prior year requirements and utilization.
3. Provide an anticipated maintenance funding request based on the unit's Training Exercise and Employment Plan (TEEP).
4. Submit the funding requests to the instructor for validation.

Performance Standard. Complete the requirement items IAW the references. Trainee will submit the funding request to the instructor who will ensure it supports unit and TEEP requirements.

Instructor. BI, SI

Reference.
1. MCO P4400.150_
2. MCO P7100.8

MMGT-2754 2.0 (*) B L

Goal. Draft a Using Unit Responsibility Items (UURI) authorization letter.

Requirement. Given the reference, complete the following:

1. Identify required UURI.
2. Draft a UURI authorization letter.

Performance Standard. Submit to the evaluator the correctly formatted UURI authorization letter that identifies required quantities of all UURI IAW the reference.

Instructor. BI, SI

Prerequisite. 2730

Reference.
1. MCO P4790.2_
2. Applicable end item SL-3
3. SecNavInst 5216.2_
4. Unit MMSOP
5. MCO P4400.150 PG 2-22

MMGT-2756 2.0 (*) B L

Goal. Explain Recoverable Items Report (WIR) procedures.

Requirement. Given the reference and a secondary repairable item or a scenario, conduct the following:

1. State the purpose of the WIR.
2. State the criteria under which an item should be processed for WIR.
3. State the information required to submit a WIR request.
4. State the submission procedures for a WIR request.

Performance Standard. Correctly state the items in the requirement without error and IAW the reference.

Instructor. BI, SI

Reference
1. MCO P4790.2_
2. UM-4400

MMGT-2758 2.0 (*) B L

Goal. Submit a maintenance cycle time extension letter.

Requirement. Given the reference, equipment, and applicable equipment records conduct the following:

1. Identify maintenance cycle time requirement.
2. Draft a maintenance cycle time extension letter.

Performance Standard. Submit to the evaluator a correctly formatted maintenance cycle time extension letter that provides justification to exceed maximum maintenance cycle time IAW the reference.

Instructor. BI, SI

Reference.
1. MCO P4790.2_
2. Applicable end item technical manual
3. NAVMC 5216.2_
4. Unit MMSOP

MMGT-2760 2.0 (*) B L

Goal. Explain product quality deficiency report (PQDR) procedures.

Requirement. Given the reference, an item of equipment or a scenario, identify the following:

1. Purpose of the PQDR.
2. Criteria under which a PQDR should be submitted.
3. Information required to submit a PQDR.

Performance Standard. With the aid of reference, complete the requirement items without error.

Instructor. BI, SI

Reference
1. MCO P4790.2_
2. UM-4400
3. Unit MMSOP

4.9.6 OPERATIONS MANAGEMENT (OMGT) STAGE

4.9.6.1 Purpose. To provide the 5970 with the requisite skills and working knowledge relating to the deployment and employment of equipment. This stage emphasizes the effective use of logistics, manpower and equipment capabilities.

4.9.6.2 General

Prerequisite. None

Admin Notes. None

Crew Requirements: None

OMGT-2800 4.0 (365) B,R,M L

Goal. Understand unit doctrinal nets and radio connectivity diagrams.

Requirement. Given a list of doctrinal net names in acronym format and references:

1. State the purpose for using doctrinal nets.
2. Define each net acronym.
3. State the purpose and function for each net.
4. Identify agencies required to guard each net.
5. Create a radio connectivity diagram.

Performance Standard. Without the aid of reference, pass an exam with 80% accuracy and draw a radio connectivity diagram.

Instructor. BI, SI

Reference
1. MCRP 3-40.3B
2. MWCP 3-25.5
3. MWCP 3-25.7
4. MWCP 3-25.4

OMGT-2802 2.0 (*) B L

Goal. Identify the purpose of key planning documents.

Requirement. Identify the purpose of the following:

1. Guard Chart.
2. Communication Electronic Operating Instruction (CEOI).
3. Operations Order.
4. Annex K of the Operations Order
5. Annex S of the Operations Order.
6. System Security Authorization Agreement
7. Site Diagram.
8. Operational Tasking Data Link (OPTASKLINK)

Performance Standard. Without the aid of reference, pass a written exam with 80% accuracy. Completion of the MACCS Aviation Communication System Managers at MCCES satisfies the standard.

Instructor. BI, SI

Reference. MCWP 5-1

OMGT-2804 2.0 (*) B L

Goal. Identify the purpose of key planning documents.

Requirement. Identify the purpose of the following:

1. Guard Chart.
2. Communication Electronic Operating Instruction (CEOI).
3. Operations Order.
4. Annex K of the Operations Order
5. Annex S of the Operations Order.
6. System Security Authorization Agreement
7. Site Diagram.
8. Operational Tasking Data Link (OPTASKLINK)

Performance Standard. Without the aid of reference, pass a written exam with 80% accuracy. Completion of the MACCS Aviation Communication System Managers at MCCES satisfies the standard.

Instructor. BI, SI

Reference. MCWP 5-1

OMGT-2806 2.0 (365) B,R,M L

Goal. Determine required equipment to support a mission.

Requirement. Given a mission, create a list of equipment that supports all aspects and requirements of the mission, to include the following:

1. Major end items.
2. TMDE.
3. Tools.
4. Utilities support equipment.
5. Supply support items.
6. Logistics/movement support items.

Performance Standard. With the aid of reference, produce a list of equipment needed to support the mission by completing the requirement items; the instructor will confirm the list supports the mission.

Instructor. BI, SI

Prerequisite. 2800

Reference. MCWP 3-25

OMGT-2812 8.0 (730) B,R,M L

Goal. Design a site layout.

Requirement. Given a scenario, the references, a TO/E and mission statement, determine an appropriate site for system emplacement by designing a site layout:

1. Conduct a site survey.
2. Determine a primary and secondary site location.
3. Analyze terrain to:

a. Determine tactical orientation and equipment emplacement.
b. Determine obstructions and hazards.
c. Determine communications requirements and obstacles.
d. Determine operational footprint.
e. Determine power and fuel requirements.
f. Determine the placement for vehicles.
g. Determine the placement for antennas.
h. Determine proper grounding system.
i. Determine protection from the elements.
j. Determine Terrain Masking.

4. Utilize planning tools (EMPRO, FalconView, AMP, SPEED, etc.) to determine terrain masking and line of sight connectivity.
5. Design a site layout.
   a. Ensure emitters are emplaced IAW Hazardous Electromagnetic Radiation to Fuels (HERF) regulations.
   b. Ensure emitters are emplaced IAW Hazardous Electromagnetic Radiation to Ordnance (HERO) regulations.
   c. Ensure emitters are emplaced IAW Hazardous Electromagnetic Radiation to Personnel (HERP) regulations.
   d. Ensure emitters are emplaced to support working area.
6. Submit the site layout to the instructor for validation.

Performance Standard. The trainee will provide the instructor with reasoning for the following (instructors are encouraged to discuss site survey in depth with the trainee):

1. Selection of the primary and secondary site.
2. Site limitations for each site (if any).
3. How each site will support mission requirements.
4. Determine a security plan.
5. Draw the site layout to support the scenario.

Instructor. BI, SI

Prerequisite. 2806, 2830

Reference.
1. MCDP 6
2. MCWP 3-25.3
3. MCWP 3-25.4
4. MCWP 3-25.5
5. MCWP 3-25.6
6. MCWP 3-25.7
7. MCWP 3-25.8
8. MCWP 3-25.10
9. MCWP 5-1
10. IEEE C95.1-1991
11. NAVSHIPS 0967-317-7010
12. TM 9406-15
13. DODINST 6055.11
14. BUMED 6470.23
15. OPNAVINST 5100.23 Series
16. NAVSEA OP 3565/NAVAIR 16-1-529/NAVELEX 0967-LP-624-6010/Volume II
17. Navy Safety Center
18. MCO 5100.29_
19. MCO 5104.2

20. MCO 5104.3_

OMGT-2814 2.0 (730) B,R,M L

Goal. Develop an embarkation plan.

Requirement. Given the references and a deployment order

1. State the purpose of an embarkation plan.
2. Prepare a deployment and retrograde plan.
3. Identify operational asset requirements
4. Produce an equipment density list (EDL) that lists the necessary equipment to support the specified mission.
5. Identify heavy equipment required to move EDL items.
6. Identify the modes of transportation required to move EDL items.
7. Identify personnel logistics support requirements.
8. Identify pre and/or post deployment inspections checklists.
9. Identify MAGTF Deployment Support System II (MDSS II) elements.
10. Develop the embarkation plan and submit it to the instructor for validation.

Performance Standard. Complete the requirement items IAW the references and develop an embarkation plan to support the mission. Instructor will ensure all essential information is provided in the embarkation plan and that it supports the deployment order.

Instructor. BI, SI

Prerequisite. 2730, 2806, 2846, 2830, 2812

Reference.
1. MCO 4030.33
2. MCRP 4-11
3. MMO SOP
4. Agency-specific embarkation checklist

OMGT-2816 2.0 (730) B,R,M L

Goal. Validate a Bill of Material (BOM) request.

Requirement. Given a deployment scenario, Training Exercise Employment Plan (TEEP) documents and required references, validate a BOM request.

1. Collect requests from maintenance sections.
2. Consolidate required materials into a BOM request.
3. Verify the request is sufficient to support 24-hour operations for the length of the exercise
4. Validate the content to ensure it meets the requirement.

Performance Standard. With the aid of reference, submit a BOM that supports the scenario to the instructor for review and validation.

Instructor. BI, SI

Prerequisite. 2806

Reference. MCO P4400.150_

OMGT-2818 25.0 (*) B L

Goal. Familiarization of acquisition management.

Requirement. Complete the subject course and become familiar with:

1. DoD systems acquisition process.
2. All phases of acquisition.
3. The Joint Capabilities Integration and Development Systems (JCIDS).
4. The planning, programming, budgeting, and execution process.
5. DoD 5000-series policy documents.
6. Current issues in systems acquisition management.

Performance Standard. Complete the ACQ 101 Fundamentals of Systems Acquisition Management Course online at DAU website.

Instructor. BI, SI

Prerequisite. Per course syllabus requirements. Course is designed for those with little or no experience in DoD acquisition management.

OMGT-2820 24.0 (*) B L

Goal. Familiarization with the fundamentals of acquisition logistics

Requirement. Complete the subject course and become familiar with:

1. An overview of the role of acquisition logistics in the systems acquisition life cycle and systems engineering processes.
2. Logistics-relevant aspects of:
   a. Requirements identification
   b. Life-cycle costing
   c. Integrated product and process development
   d. Sustainment logistics
   e. Supportability analysis
   f. Product support
   g. Contracting and contractor support.

Performance Standard. 2818, Complete the LOG 101 Acquisition Logistics Fundamentals online at DAU website.

Instructor. BI, SI

Prerequisite. Per course syllabus requirements.

OMGT-2830 8.0 (1460) B,R,M L

Goal. Conduct a site survey

Requirement. Given a scenario, applicable references, a TO/E and mission statement, determine an appropriate site for system emplacement:

1. Utilize planning tools (EMPRO, FalconView, AMP, SPEED, etc.) to determine terrain masking and line of sight connectivity.
2. Determine a primary and secondary site location.
3. Identify obstructions and hazards.
4. Determine tactical orientation and equipment emplacement.
   a. Ensure emitters are emplaced IAW Hazardous Electronic Radiation to Fuels (HERF) regulations.
   b. Ensure emitters are emplaced IAW Hazardous Electronic Radiation to Ordinance (HERO) regulations.
   c. Ensure emitters are emplaced IAW Hazardous Electronic Radiation to Personnel (HERP) regulations.
   d. Ensure emitters are emplaced to support working area.
5. Identify the placement for vehicles.
6. Identify the placement for antennas.
7. Determine communications obstacles.
8. Determine proper grounding system.
9. Identify power and fuel requirements.
10. Determine protection from the elements.
11. Determine Terrain Masking.
12. Determine operational footprint.
13. Design a site layout and submit to the instructor.
14. Develop a brief that addresses all event requirement items.

Performance Standard. With the aid of reference, complete the requirement items. The instructor will review/discuss the site layout and brief with the trainee to provide guidance as to content. The trainee will brief the instructor and maintenance officer and at minimum provide the reasoning for the below five items. Instructor will question the trainee during the brief to check for understanding of the site survey process and will mentor the trainee throughout.

1. Selection of the primary and secondary site.
2. Site limitations for each site (if any).
3. How each site will support mission requirements.
4. Determine a security plan.
5. Draw the site layout to support the scenario.

Instructor. BI, SI

Prerequisite. 2730, 2806

Reference
1. MCDP 6
2. MCWP 3-25.4
3. MCWP 5-1
4. Communications-Air Support Center (CASC) Common Shelter AN/TSQ-207 TM 10209A-14&P Equipment Description
5. Meshnet Ethernet Unit (MEU 1-2) TECH MANUAL 762326, Equipment Description
6. Network Access Unit (NAU 5-1) TECH MANUAL 762324 Equipment Description
7. User Control Device (UCD 1-4) TECH MANUAL 762325

8. System Description and Overview Communications Distribution System TECH MANUAL 762323
9. IEEE C95.1-1991
10. NAVSHIPS 0967-317-7010
11. TM 9406-15
12. DODINST 6055.11
13. BUMED 6470.23
14. OPNAVINST 5100.23 Series
15. NAVSEA OP 3565 / NAVAIR 16-1-529 / NAVELEX 0967-LP-624-6010 / Volume II
16. Navy Safety Center
17. MCO 5100.29A W/CH 1
18. MCO 5104.2
19. MCO 5104.3A

OMGT-2834 3.0 (*) B,R,M L

Goal. Determine supply support requirements.

Requirement. Given the reference and a specific mission:

1. Determine supply needs with consideration of the following:
   a. Length of deployment
   b. Location
   c. Equipment
   d. Daily operations
   e. Climate
2. Identify float requirements and deficiencies.
3. Identify Intelligence Information, Command and Control Equipment and Enhancement (ICE2) requirements.
4. Identify and validate bill of material (BOM) requirements.
   a. Validate the content to ensure it meets sustained operational requirements.
   b. List all discrepancies with recommended corrective action.
   c. Submit the BOM with adjustments and justification to the instructor for validation.

Performance Standard. With the aid of reference, write supply, float, BOM and ICE2 lists that support the given mission. Instructor will review the resulting lists/documentation to ensure they support the mission requirements.

Instructor. BI, SI

Prerequisite. 2806

Reference. MCWP 3-25

OMGT-2842 4.0 (365) B,R,M
L

Goal. Identify operational power requirements.

Requirement. Given a scenario, applicable technical manuals:

1. List all PEIs required to support the scenario.

2. Determine power requirements for each PEI.
3. Determine total power requirements to support all PEIs listed.
4. List the capabilities of MACCS organic generators:
   a. MEP 803A.
   b. MEP 805A/B.
   c. MEP 806A/B.
   d. MEP 816

Performance Standard. With the aid of reference, and without error, provide total operational power requirements for all equipment required to support the scenario.

Instructor. BI, SI

Prerequisite. 2806

Reference. Refer to equipment applicable TMs.

OMGT-2844 1.0 (*) B L

Goal. Submit a frequency request.

Requirement. Given the reference and a scenario with operational requirements and references:

1. Explain the frequency request process.
2. Determine required frequencies.
3. Identify the purpose and sections of:
   a. Frequency Request Form (SF-1494)
   b. Satellite Access Request (SAR) form.
4. Complete a SF-1494 form.
5. Complete a Satellite Access Request (SAR) form.

Performance Standard. With the aid of reference, submit completed request forms to the instructor for final approval.

Instructor. BI, SI

Prerequisite. 2806,

Reference
1. MCRP 3-40B
2. MCO 2400.2

OMGT-2846 1.0 (*) B L

Goal. Identify Logistics Support Requirements.

Requirement. Given a scenario, identify materials required to sustain operations for mission length.

1. Transport requirements
2. Heavy Equipment (MHE) requirements
3. Class 9 block
4. Supply requirements

Performance Standard. With the aid of reference, state to the instructor the required items.

Instructor. BI, SI

Prerequisite. 2806

Reference. MCO P4790.2_

4.9.7 ORGANIZATIONAL STRUCTURE (ORGS) STAGE

4.9.7.1 Purpose. To provide the 5970 with the requisite skills and working knowledge relating to the organizational capabilities of adjacent and higher agencies. This stage provides general information on the mission, concept of employment, organization and equipment of the MAW and supporting agencies.

4.9.7.2 General

Prerequisite. None

Admin Notes. None

Crew Requirements: None

ORGS-2900 4.0 (*) B,R,M L

Goal. Identify the mission, organizational units, and major systems of the Marine Air Control Squadron (MACS).

Requirement. Given the references, state or identify the below listed requirement items:

1. State the mission and concept of employment.
2. Identify the organizational units (state the structure of each unit and the function of the sections within).
   a. Headquarters sections, to include:
      (1) Communications Maintenance
      (2) Operations Communications
   b. Tactical Air Operations Center (TAOC)
      (1) S3
      (2) S6
         (a) Radar
         (b) Tactical Data Systems Maintenance (TDSM)
      (3) TAOC sections and crew composition (maintenance and operations)
   c. Early Warning and Control (EWC)
      (1) S3
      (2) Communication Electronics Maintenance Officer
         (a) Radar
         (b) Tactical Data Systems (TDS)

(3) EW/C sections and crew composition (maintenance and operations)

d. Marine Air Traffic Control Detachments (MATCD) - Describe sections and crew composition (maintenance and operations) for each.
   (1) Air Traffic Navigation, Integration, and Coordination Systems (ATNAVICS) MATCD
   (2) Marine Air Traffic Control All-Weather Landing System (MATCALS) MATCD
   (3) Tower/TACAN Detachment
   (4) MATC Mobile Team (MMT)

3. Identify the major systems and subsystems and state the capabilities and limitations of each.
   a. AN/TPS-59 Long Range Radar
   b. AN/TPS-63 Medium Range Radar
   c. AN/TYQ-23 Tactical Air Operations Module (TAOM)
   d. AN/MSQ-124 Air Defense Communication Platform (ADCP)
   e. AN/TYQ-87 Sector Anti Air Warfare Facility (SAAWF)
   f. AN/TSQ-239 V4 Combat Operations Center (COC)
   g. AN/USC-55A
   h. AN/TPN-31A Air Traffic Navigation, Integration, and Coordination Systems (ATNAVICS)
   i. AN/TSQ-131 (CCS)
   j. AN/TPN-73 Air Surveillance Radar (ASR)
   k. AN/TPN-22 Precision Approach Radar (PAR)
   l. AN/TSQ-120B Tower
   m. AN/TRN-44A Tactical Air Navigation (TACAN)
   n. AN/TSQ-216 Remote Landing Site Tower (RLST)
   o. AN/TRN-47 Tactical Air Navigation (TACAN)

Performance Standard. With the aid of reference, complete each requirement item by stating the required information correctly in written or verbal form; instructor's choice. Instructor may provide minor assistance.

Instructor. BI, SI

Prerequisite. 8004, 8005

Reference.
1. MCRP 5-12D
2. MCWP 3-25.6
3. MCWP 3-25.7
4. MCWP 3-25.8
5. Approved Core METL applicable to the unit
6. TM 10498B-OD TAOM Operations Maintenance Manual
7. UM 2005
8. TM 07736C
9. TM 07751B
10. TM 10200A-OI/1
11. TM 10446B-OI
12. TM 10389-12 CTT
13. TM 10389-30 CTT

ORGS-2905 2.0 (*) B,R,M
L

Goal. Identify the mission, organizational units, and major systems of the air traffic control units aboard Marine Corps air stations and facilities.

Requirement. Given the references, state or identify the below listed requirement items:

1. Identify the location of all Marine Corps Air Stations (MCAS) and facilities

2. State the mission of the air traffic unit

3. Identify the organizational sections and the function of each
   a. Headquarters sections
   b. Communications
   c. Radar
   d. Navigational Aids (NAVAIDS)
   e. Weather

4. Major systems and subsystems and state the capabilities and limitations of each.

   Marine Corps Air Stations (MCAS) typically have the following equipment (but not always all the equipment on this list):

   a. ETVS: AN/FSC-127, Enhanced Terminal Voice Switch
   b. ASR: Airport Surveillance Radar
   c. PAR: AN/FPN-63, Precision Approach Radar
   d. TACAN: AN/URN-25 or AN/URN-32, Tactical Air Navigation System
   e. STARS: AN/FSQ-204, Standard Terminal Automation Replacement System
   f. VISCOM: Visual Communications
   g. BRITE: Bright Radar Indicator Tower Equipment
   h. AN/GRC-211: VHF Radio set
   i. AN/GRC-171: UHF Radio Set
   j. CM-200: VHF/UHF TX or RX Set
   k. ASOS: Automated Surface Observing Systems
   l. ILS: Instrument Landing System

   Marine Air Control Squadron (MACS) Air Traffic Control Detachments typically have equipment from the following list, but usually not all:

   a. ATNAVICS: AN/TPN-31A, Air Traffic Navigation, Integration, and Coordination System
   b. CCS: AN/TSQ-131, Communication and Control Subsystem
   c. RLST: AN/TSQ-216, Remote Landing Site Tower
   d. AN/TSQ-120B: Air Traffic Control Central
   e. AN/GRC-211: VHF Radio set
   f. AN/GRC-171: UHF Radio Set
   g. AN/URC-94: HF/LVHF Radio Set
   h. AN/ARC-210: HF/VHF/UHF/SATCOM Radio Interface
   i. XTS-5000: Digital Portable Radio Set
   j. RT-1796: Radio Set
   k. RT-1694: Radio Set

l. TACAN: AN/TRN-44A, Tactical Air Navigation System,
m. MAN PORTABLE TACAN: AN/TRN-47, Tactical Air Navigation (TACAN) Set
n. ASR: AN/TPS-73, Airport Surveillance Radar
o. PAR: AN/TPN-22, Precision Approach Radar

Performance Standard. With the aid of reference, complete each requirement item by verbally stating the required information correctly. Instructor may provide minor assistance.

Instructor. BI

Reference.

1. AN/FPN-63 (NAVELEX EE216-LA-MMD-010/FPN-63)
2. AN/GPN-27 (NAVELEX 0967-LP-639-9011)
3. AN/GPN-30 DASR (FAA TI6310.57)
4. AN/FSQ-204 STARS (FAA TI6191.400)
5. AN/FYC-22A VISUAL INFORMATION DISPLAY SYSTEM (VIDS): NAVAIR 16-60FYC22A-1
6. AN/FYC-22B VISUAL INFORMATION DISPLAY SYSTEM (VIDS): NAVAIR 16-60FYC22B-1
7. AN/TPN-22 PAR (EE216-BA-SOM-01B)
8. AN/TPS-73 ASR (EE200-AB-MAN-010/AN/TPS-73)
9. AN/TPN-31A ATNAVICS (NAVAIR 16-60TPN31A-2)
10. AN/TSQ-263(V) TACTICAL TERMINAL CONTROL SYSTEM (TTCS): NAVAIR 16-60TSQ263-1
    a. TI 6650.53
    b. AE-VICOM-SYS-000
    c. NAVAIR 16-60TPN31A-2
    d. EE005-DM-OMI-010/PD70-TSQ131
    e. 16-60TSQ216-100/200
11. 11. AN/TSQ-120B: EE100-UQ-OMI-010/TSQ120B
12. AN/GRC-211: EE150-BK-OMI-010
13. AN/GRC-171: EE150-AS-MMC-010
14. AN/URC-94: EE111-AF-OMP-010
15. AN/ARC-210: Radio Receiver-Transmitter RT-1794 523-0778328
    a. XTS-5000: Commercial TM 6881094C25
    b. RT-1796: Harris Manual 10515-0109-4100
    c. RT-1694: Harris Manual 10515-0103-4100
    d. CM-200: TI 6610.15A/ TI 6620.7A
    e. TM: EE172-GA-OMI-010/TRN-44A
    f. 16-30TRN47-1

ORGS-2910 2.0 (*) B,R,M L

Goal. Identify the mission, organizational units, and major systems of the Marine Air Support Squadron (MASS).

Requirement. Given the references, state or identify the below listed requirement items:

1. State the mission and concept of employment
2. Identify the organizational units (state the structure of each unit and the function of the sections within).
   a. Headquarters sections

b. Communication Electronics
c. Direct Air Support Center (DASC) - describe sections and crew composition (maintenance and operations) for each.
d. DASC(Airborne) - describe sections and crew composition (maintenance and operations) for each
e. Air Support Element (ASE) - describe sections and crew composition (maintenance and operations) for each
f. Air Support Liaison Teams (ASLT) - describe crew composition.

3. Identify the major systems and subsystems and state the capabilities and limitations of each.
   a. AN/MRQ-12 Communication Information System (CIS)
   b. AN/MRC-148 Radio Sets
   c. AN/MRC-145 Radio Sets
   d. AN/UYQ-3B Direct Air Support Central Air Support System (DASCAS)
   e. AN/TSQ-239 V4 Combat Operations Center (COC)

Performance Standard. With the aid of reference, complete each requirement item by verbally stating the required information correctly. Instructor may provide minor assistance.

Instructor. BI, SI

Prerequisite. 8003

Reference.
1. MCRP 5-12D
2. MCWP 3-25.5
3. Approved Core METL applicable to the unit

ORGS-2915 2.0 (*) B,R,M L

Goal. Identify the mission, headquarters and TACC sections, and major systems of the Marine Tactical Air Command Squadron (MTACS).

Requirement. Given the references, state or identify the below listed requirement items:

1. State the mission and concept of employment
2. Identify the organizational units (state the structure of each unit and the function of the sections within).
   a. Headquarters Sections
   b. TACC sections and crew composition (maintenance and operations)
3. Identify the major systems and subsystems and state the capabilities and limitations of each.
   a. AN/MRQ-12 Communication Information System (CIS)
   b. AN/TYY-2 Theater Battle Management Core Systems (TBMCS)
   c. AN/TYQ-101A Communication Data Links System (CDLS)
   d. AN/URC-107 (V)10 Joint Tactical Information Distribution System (JTIDS)
   e. AN/USC-55A Commanders Tactical Terminal (CTT)
   f. Link Management System - Multi TDL (LMS-MT)
   g. Intelligence Operations Workstation (IOW)
   h. Intelligence Operations Server (IOS)

i. Advance Field Artillery Tactical Data System (AFATDS)
j. AN/TSQ-239 V2 Combat Operations Center (COC)
k. Common Connectivity Device (CCD)
l. Joint Automated Deep Operations Coordination System (JADOCS)

Performance Standard. With the aid of reference, complete each requirement item by stating or identifying the required information with a minimum of 80% accuracy. Instructor may provide minor assistance.

Instructor. BI, SI

Prerequisite. 8002

Reference.
1. MCRP 5-12D
2. MCWP 3-25.4
3. Approved Core METL applicable to the unit

ORGS-2920 2.0 (*) B,R,M L

Goal. Identify the missions, organizational units, and major systems of the Low Altitude Air Defense Battalion (LAAD Bn).

Requirement. Given the references, state or identify the below listed requirement items:

1. State the mission and concept of employment
   a. Primary
   b. Secondary
2. Identify the organizational units (state the structure of each unit and the function of the sections within).
   a. HQ Services Battery
   b. Firing Batteries
   c. Firing Sections
3. Identify the major systems and subsystems and state the capabilities and limitations of each.
   a. Advanced Man Portable Air Defense System (AMANPADS)
   b. AN/MRC-148 Radio Set
   c. AN/MRC-145 Radio Set
   d. Combat Operations Center (COC)

Performance Standard. With the aid of reference, complete each requirement item by stating or identifying the required information with a minimum of 80% accuracy. Instructor may provide minor assistance.

Instructor. BI, SI

Prerequisite. 8006

Reference.
1. MCRP 5-12D
2. MCWP 3-25.10
3. MCWP 3-25.10A
4. Approved Core METL applicable to the unit

ORGS-2925 2.0 (*) B,R,M L

Goal. Identify the mission, organizational units, and major systems of the VMU Squadron.

Requirement. Given the references, state or identify the below listed requirement items:

1. State the mission and concept of employment
2. Identify the organizational units (state the structure of each unit and the function of the sections within).
   a. Headquarters sections
   b. Unmanned Aircraft Systems Detachments (UASD)
      (1) Headquarters Detachment
      (2) UAS Detachments A, B, C
      (3) UAS sections and crew composition (maintenance and operations
3. Identify the major systems and subsystems and state the capabilities and limitations of each.
   a. Combat Operations Center (COC)
   b. Marine Corps Tactical Unmanned Aircraft System (Shadow, RQ-7B)

Performance Standard. With the aid of reference, complete each requirement item by stating or identifying the required information with a minimum of 80% accuracy. Instructor may provide minor assistance.

Instructor. BI, SI

Prerequisite. 8007

Reference.
1. MCRP 5-12D
2. MCWP 3-26
3. MCWP 3-42.1
4. Approved Core METL applicable to the unit

ORGS-2930 2.0 (*) B,R,M L

Goal. Identify the mission, organizational units, and major systems of the Marine Wing Communications Squadron (MWCS).

Requirement. Given the references, State or identify the below listed requirement items:

1. State the mission and concept of employment
2. Identify the organizational units (state the structure of each unit and the function of the sections within)
   a. HQ sections
   b. Detachments A, B, C, sections and crew composition (maintenance and operations)
3. Identify the major systems and subsystems and state the capabilities and limitations of each.
   a. LMST

b. MRC-148
c. MRC-145
d. MRC-142
e. VSAT
f. Phoenix
g. TSM
h. DDS-R
i. DTC
j. TDN Gateway
k. AN/TRC-170
l. Combat Operations Center (COC)

Performance Standard. With the aid of reference, complete each requirement item by stating or identifying the required information with a minimum of 80% accuracy. Instructor may provide minor assistance.

Instructor. BI, SI

Prerequisite. 8008

Reference.
1. MCRP 5-12D
2. Approved Core METL applicable to the unit

ORGS-2935 2.0 (*) B,R,M L

Goal. Identify the mission and support provided by the Marine Wing Support Squadron (MWSS).

Requirement. Given the references, State or identify the below listed requirement items:

1. State the mission and concept of employment
2. Identify the functional support areas
   a. Weather Services
   b. EAF Services
   c. Refueling
   d. Explosive Ordnance Disposal
   e. Essential Engineer Services
   f. Motor Transport
   g. Field Mess Facilities
   h. Sick-Call and Aviation Medical Functions
   i. Nuclear Biological and Chemical Defense
   j. Security and Law Enforcement Services
   k. Internal airfield communication
   l. Airbase Commandant functions

Performance Standard. With the aid of reference, complete each requirement item by stating or identifying the required information with a minimum of 80% accuracy. Instructor may provide minor assistance.

Instructor. BI, SI

Prerequisite. 8028

Reference.
1. MCRP 5-12D
2. Approved METL applicable to the unit.

ORGS-2945 8.0 (*) B

Goal. Identify the mission of Higher Headquarters and supporting establishments.

Requirement. Given the reference, identify the mission, organizational structure and location of each of the following:

1. Higher Headquarters
   a. Marine Air Control Group (MACG)
   b. Marine Air Group (MAG)
   c. Marine Aircraft Wing (MAW)
   d. Marine Expeditionary Forces (MEF)
   e. Marine Corps Installations (East and West)
   f. Marine Forces (MARFORCOM, MARFORPAC, MARFORRES)
   g. Headquarters Marine Corps (APX)
2. Supporting Establishments: Explain how each organization supports the MACCS:
   a. Marine Corps Systems Command (MARCORSYSCOM)
      (1) Marine Corps Tactical Systems Support Activity (MCTSSA)
      (2) Program Group 09 - Operational Forces Systems (OFS)
      (3) Program Group 11 - MAGTF C2, Weapons and Sensors Development and Integration (MC2I)
      (4) Program (PEO) Land Systems
      (5) Vendor support for commercial off-the-shelf (COTS) equipment.
   b. Marine Corps Combat Development Command (MCCDC)
   c. Training and Education Command (TECOM)
      (1) Aviation Training Branch (ATB)
      (2) Marine Corps Communication Electronics School (MCCES)
      (3) Marine Aviation Training Support Group (MATSG) 21)
   d. Aviation Program Expeditionary Enablers (APX)
   e. Marine Corps Logistics Command (MARCORLOGCOM)
   f. Naval Air Systems Command (NAVAIR) PMA-213 / 205
      (1) Space and Naval Warfare Systems Command (SPAWARS)
      (2) Naval Air Warfare Center Aircraft Division (NAWC-AD)
   g. Logistics Command
      (1) MCLB Barstow Maintenance Center
      (2) MCLB Albany item managers
      (3) Repairable Issue Point (RIP)

Performance Standard. Without the aid of reference, pass a written exam with a minimum of 80% accuracy.

Instructor. BI, SI

Prerequisite. 8063

Reference. MCWP 3-40.1 MAGTF C2

ORGS-2950 4.0 (1460) B,R,M L

Goal. Draw an Overview (OV) chart of the MACCS concept of employment.

Requirement. Given the references, draw an OV chart depicting how a notional MACCS could be employed. Include all the MACCS agencies and how they are employed in the battle area to include:

1. Major Systems
2. Agencies
3. Interoperability and lines of communications
   (a) Data links (TDL)
   (b) Voice comm
   (c) Data comm
   (d) Networks
4. Submit the OV chart to the instructor for review.
5. Develop and submit a brief on the OV chart.

Performance Standard. Draw the OV chart and submit it to the instructor who will review for correctness. Provide a brief to the instructor and the maintenance chief/maintenance officer. The instructor will ensure the brief and the OV chart covers all MACCS agencies and major systems (to include UAS and MWCS). Communications architecture should be IAW the reference.

Instructor. BI, SI

Prerequisite. 8001, 2900, 2905, 2910, 2915, 2920, 2925, 2930, 2935, 2945

Reference.
1. MCWP 3-2
2. MCWP 3-25.4

4.10 MISSION SKILL PHASE (3000)

4.10.1 Purpose. To provide the 5970 with the requisite advanced skills and working knowledge to employ the MACCS and ancillary equipment in order to accomplish the Tactical Air Command Center mission.

4.10.2 General

4.10.2.1 Prerequisite. Complete all events in the Core Skill phase of training.

4.10.2.2 Admin Notes. None

4.10.2.3 Stages. The following stages are included in the Mission Skill Phase of training.

PAR NO.	STAGE NAME
4.10.3	OPERATIONS MANAGEMENT (OMGT)

4.10.3 OPERATIONS MANAGEMENT (OMGT) STAGE

4.10.3.1 Purpose. To provide the maintenance officer with the requisite advanced skills and working knowledge to employ the MACCS and ancillary equipment in order to support the Tactical Air Command Center (TACC) mission.

4.10.3.2 General

Prerequisite. None

Admin Notes. None

Crew Requirements: None

OMGT-3200 2.0 (730) B,R,M L

Goal. Develop a maintenance communications plan to support an OPLAN.

Requirement. Given an OPLAN and command guidance, determine maintenance section communications requirements to support.

1. Identify mission requirements.
2. Determine the communications requirement to support the mission.
3. Determine mission essential equipment and write an Equipment Density List.
4. Identify maintenance personnel required to support mission requirements.

Performance Standard. With the aid of reference, complete the requirement items; equipment and personnel requirements shall support the OPLAN.

Instructor. SI, WTI

Prerequisite. 2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812, 2950, 3206

Reference
1. Communications-Air Support Center (CASC) Common Shelter AN/TSQ-207 TM 10209A-14&P Equipment Description
2. Meshnet Ethernet Unit (MEU 1-2) TECH MANUAL 762326, Equipment Description
3. Network Access Unit (NAU 5-1) TECH MANUAL 762324 Equipment Description
4. User Control Device (UCD 1-4) TECH MANUAL 762325
5. System Description and Overview Communications Distribution System TECH MANUAL 762323
6. Radio Set AN/GRC-171B(V)4 TM-09780A-12/2 & TM-09780A-13&P/1
7. RT-1694D(P)(C)/U (AN/VRC 104) TM 10822A-IN

8. AN/VRC-103(V)1 Veh Radio Comm TM 11255A-OR/1
9. AN/PRC-117F(V)(C) Radio Operation Manual (AN/VRC-103)
10. AN/PRC-152 Multiband Handheld Radio (AN/VRC-110) Digital
11. HF/SSB Transceiver model RT-9000 (AN/GRC-256) TM 11228A-OI/1

OMGT-3206 40.0 (1460) B,R,M L

Goal. Identify Operational Requirements (OPORD).

Requirement. Given an OPORD, determine the operational requirement of the maintenance section to support the mission, to include:

1. Communication electronics equipment required.
2. Engineering equipment.
   a. Air conditioners
   b. Heavy equipment
   c. Generators
3. Personnel required.
   a. Military Occupational Skill (MOS)
   b. Designation
   c. Qualifications
4. Cryptographic equipment required.
5. Logistics support required.
6. Supply support required.
   a. Bill of Material (BOM) requirements.
   b. Float requirements.
7. Frequencies required.
   a. Draft a frequency request
   b. Draft a satellite access request
8. Develop an Equipment Density List (EDL) for PEIs.
9. Site Layout Plan.

Performance Standard. Pass a practical application with a minimum of 80% accuracy. This event may be accomplished as part of an exercise or operation provided the requirement is fully met.

Instructor. SI, WTI

Prerequisite. 2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812

Reference.

1. Planning MCWP 5-1
2. MOS Manual
3. TM 2000
4. MCWP 3-25.4
5. CJCSM 6231
6. JT PUB Series 6-05

OMGT-3208 5.0 (365) B,R,M L

Goal. Perform in a Chemical Biological Radiological Nuclear (CBRN) environment.

Requirement. Perform daily assigned maintenance duties while in a simulated CBRN environment.

1. Begin in MOPP-0 and graduate to MOPP-IV over a four hours period.
2. Plan personnel rotations while in MOPP gear.

Performance Standard. Complete the requirement items IAW the reference for a period of four hours. The instructor may provide minimal guidance. ORM and safety precautions shall be adhered to.

Instructor. SI, WTI

Prerequisite. Complete annual mask confidence course.

External Syllabus Support. MOPP gear

Reference.
1. FM 11-1 NBC Operations
2. MCO P3440.4G

OMGT-3218 4.0 (1460) B,R,M L

Goal. Understand how to manage a maintenance section.

Requirement. During guided discussions, address the following:

1. List operational units and supporting establishments and their missions:
   a. MACG and subordinate squadrons
   b. Higher Headquarters up to HQMC
   c. Supporting establishments
2. List the external agencies (including Joint agencies) that traditionally integrate/communicate with the squadron during operations
3. List the PEIs for each MACCS agency and state the purpose, capabilities and limitations of each.
4. State those PEIs within each agency that function as an integrated system
5. State the community core METs and output standards for each.
6. State the implied maintenance tasks for each MET.
7. Explain the methods used to secure COMSEC items during operations.
8. Describe the architectures for:
   a. MACCS Integration
   b. Communications
   c. Data
9. List the doctrinal publications and key documents essential to determining mission and T&R requirements
   a. MCWP
   b. Concept of Employment
   c. OPLANs
   d. Annex K
   e. TEEP
   f. Community T&R Manual
10. For each publication and document listed above:
   a. State the purpose
   b. State the general content

c. State what pertinent information each provides

11. Describe the equipment reconciliation process
    a. LM2
    b. Daily Process Report (DPR)
    c. Daily Transaction Lists (DTL)
    d. Exceptions Report
12. Describe the float process
13. Describe the MIMMS process
14. Describe the QA process
15. Describe the process to change unit T/O and equipment allocation, to include:
    a. Purpose of a TOECR
    b. TOECR submission process and forms required
    c. System used to process (TFSMS).
    d. Reasons a TOECR would be submitted
16. Describe the UNS and UUNS process
17. Describe the frequency request process and timelines
18. Funding Lines
    a. O&EM
    b. Plan and Estimate (PE)
    c. Requisitions Authority (RA)
    d. MILCON
19. Identify and describe major milestones in the deployment planning process from mission through retrograde
20. List and explain the major deployment milestones and their importance, to include:
    a. Predeployment
    b. Deployment
    c. Retrograde
21. Explain how a new equipment item is acquired by the Marine Corps and how each step impacts the maintenance section:
    a. Identifying the requirement
    b. Appropriating
    c. Fielding
    d. Induction
    e. Disposal
    f. Sundown

Performance Standard. Without the aid of reference, complete the requirement items. Instructor will question and mentor the trainee throughout the discussion to ensure an understanding of each item.

Instructor. SI, WTI

Prerequisite. 2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812, 2746, 2814, 2842, 2830, 3200, 2950, 3206

Reference.

OMGT-3220 8.0 (730) B,R,M L

Goal. Deploy a maintenance section in support of unit operations.

Requirement. Given a scenario or operational deployment, commanders guidance, and a core competent crew,, deploy the maintenance section:

1. Review operational requirements and develop an EDL.
2. Coordinate for support equipment as required.
3. Verify and complete Bill of Materials.
4. Establish float requirements as required.
5. Supervise pack-up of equipment and validate EDL accuracy.
6. Ensure correct execution of the load plan for equipment handling and safety.

Performance Standard. With the aid of reference, plan and submit EDL, BOM, CLD requirements for maintenance section deployment. Perform the embarkation of the maintenance section in support of a training exercise or operational deployment.

Note: This event can be completed in garrison, however equipment must be physically moved for the trainee to be able to ensure the execution of the load plan.

Instructor. SI, WTI

Prerequisite. 2746, 2800, 2802, 2806, 2814, 2842, 2830, 2834, 2844, 2846, 2812, 3200,

Reference
1. MCO 3120.6
2. Communications-Air Support Center (CASC) Common Shelter AN/TSQ-207 TM 10209A-14&P Equipment Description

4.11 INSTRUCTOR UNDER TRAINING (IUT) SKILL PHASE (5000)

4.11.1 Purpose. The MACCS Maintenance Warrant Officer Course provides in depth instruction in train the trainer concepts (from assessing training requirements to training the event to evaluating and logging the event), detachment level readiness planning and training management, and the administration of the training and readiness program and M-SHARP.

4.11.2 General

4.11.2.1 Prerequisite. None

4.11.2.2 Admin Notes. None

4.11.2.3 Stages. The following stages are included in the Instructor Under Training Skill Phase of training.

PAR NO.	STAGE NAME
4.11.3	INSTRUCTOR UNDER TRAINING (IUT)

4.11.3 INSTRUCTOR UNDER TRAINING (IUT) STAGE

4.11.3.1 Purpose. To provide the maintenance officer the skills necessary to plan for, instruct, and document individual maintenance training at all phases.

4.11.3.2 General

Prerequisite. The System Approach to Training (SAT) MarineNet Course (UT01A0), URL https:\\www.marinenet.usmc.mil/marinenet

Admin Notes. None

Crew Requirements: None

IUT-5000 2.0 (*) B L

Goal. Introduce principles of instruction.

Requirement.

1. Introduce/discuss/demonstrate instruction techniques.
2. Introduce/discuss/demonstrate class management techniques
   a. How to use class resources to communicate with the student.
   b. How to properly organize the class for effective instruction.
3. Introduce/discuss/demonstrate how to prepare for a period of instruction.
   a. Schedule the class
   b. Prepare/access the training materials for the class
   c. Prepare the evaluation form to be used to evaluate the student's event performance, as applicable.

Performance Standard.

Instructor. WTI

Prerequisite. NONE.

Reference. NAVMC 3500.14

IUT-5010 1.0 (*) B L

Goal. Understand the structure of an event.

Requirement. Given an existing event containing all event sections:

1. State the purpose of a T&R event.
2. Describe the structure of a T&R event and explain the purpose and content for each event section.
3. Using the given event, explain each section as it pertains to the event.
   a. Explain the purpose and content of the goal.
   b. Explain the requirement condition and performance steps for the event and what needs to be done to prepare to instruct the event.
   c. Explain how the event performance standard is measured and

when the event has been completed.
d. State who can instruct the event.
e. State the event prerequisite and how to verify that it was completed.
f. Explain how the external syllabus support requirement will be resourced.
g. State the references required and how each would be used to train the event.

Performance Standard. During a discussion session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. SI, WTI.

Prerequisite. 5000

Reference. NAVMC 3500.14, Ch 6

IUT-5020 2.0 (*) B L

Goal. Conduct a period of instruction on a T&R event.

Requirement. The IUT under the supervision of an instructor will learn how to conduct a period of instruction on an event selected by the instructor. The event must be one the IUT is current and proficient in. The IUT will be able to:

1. State the instructor responsibilities.
2. Define the purpose and content of a T&R event per the Aviation T&R Program Manual.
3. Prepare to train the event.
   a. Review a trainee's IPR to identify required training for the event selected.
   b. Ensure the student has met prerequisites for the event to be trained.
   c. Develop a student training plan to ensure progression per this Manual.
   d. Schedule the training event (facilities and students).
   e. Gather the resources necessary to conduct the training (i.e., instructional materials, references and equipment)
   f. Prepare an evaluation form for each student to be evaluated.
4. Conduct training on the event selected:
   a. Ensure all training resources are properly staged/equipment if set up properly for training.
   b. Instruct the student in a thorough manner so as to cover all requirements for the event.
   c. Ensure continuous, objective assessment of the student's progress during training.
5. Asses student performance:
   a. Assess the student's performance to the performance standard.
   b. Correct student deficiencies in a timely manner and provide the student feedback.
   c. Complete the evaluation form on for each student trained.
   d. Debrief student on the performance and provide corrective action.

6. Route evaluation form as required.

Performance Standard. Complete the requirement items IAW the reference. Instructor shall question the IUT to check for understanding of the BI responsibilities.

Instructor. SI, WTI

Prerequisite. 5000, 5010

Reference. NAVMC 3500.14.

IUT-5100 2.0 (*) B L

Goal. Understand the Aviation Training and Readiness (T&R) Program.

Requirement. Given an existing event containing all event sections:

1. State T&R policies as they apply to the community.
2. State the purpose and use of the Core Model
   a. List all essential elements that make up the model
   b. Define each element.
3. Define and explain the purpose for the following:
   a. Core Skills (How to attain and maintain.)
   b. Mission Skills (How to attain and maintain.)
   c. Combat Leadership
   d. Instructors
   e. Certification
   f. Qualification
   g. Designation
   h. Core Mission Essential Task List (METL)
   i. Core Model Minimum Requirements (CMMR)
   j. Core Model Training Report (CMTR)
   k. TEEP
   l. Individual Performance Record (IPR)
4. Understand how to analyze the CMTR to determine training deficiencies and how to achieve CMMR, Chapter 7
5. Understand the structure of the T&R community manual to include the unit chapter and individual MOS chapter, Chapter 6
6. Explain how to submit changes to the Program manual. Chapter 5
7. Explain T&R conference procedures, Chapter 5

Performance Standard. With the aid of reference, pass an exam with 80% accuracy.

Instructor. WTI.

Prerequisite. 5000, 5010, 5020, 6320

Reference. NAVMC 3500.14_

IUT-5110 2.0 (*) B L

Goal. Understand the applicable community T&R program.

Requirement. State or explain the following:

1. State the mission and core METL for the community.
2. State the standards of each core MET in the core METL
   a. Personnel
   b. Equipment
   c. Training
   d. External Support
   e. Output Standard
3. State the unit CMMR requirement and how it applies to each crew.
4. Explain the training progression model for officers and enlisted as it applies to each position.
5. Explain the requirements to achieve:
   a. Each core skill (CSP)
   b. Each mission skill (MSP)
   c. Each certification (if applicable)
   d. Each qualification
   e. Each designation:
      (1) Combat Leadership requirements
      (2) Instructors
      (3) Others (if applicable)

Performance Standard. With the aid of reference, pass an exam with 80% accuracy.

Instructor. WTI.

Prerequisite. 5000, 5010, 5020, 5100, 6320

Reference
1. NAVMC 3500.14_
2. Applicable community T&R Manual

IUT-5120 2.0 (*) B L

Goal. Understand T&R administration.

Requirement. Explain how unit training is administered, to include:

1. Scheduling and conducting event training
2. Completing an evaluation form
3. Recommending and approving qualifications and designations
4. Describing the process for documenting training to include
   a. Eval Forms
   b. Qualification and Designation Letters
   c. IPR
   d. MSHARP

Performance Standard. With the aid of reference, pass an exam with 80% accuracy.

Instructor. WTI.

Prerequisite. 5000, 5010, 5020, 5100, 5110, 6320

Reference
1. NAVMC 3500.14_
2. Local WTTP SOP

3. http://msharpsupport.com

IUT-5130 2.0 (*) B L

Goal. Develop a training plan.

Requirement. Given a deployment scenario, determine individual, and crew training needed to meet crew manning requirements by developing a training plan that identifies:

1. State the purpose for a short-, mid- and long-term training plan/schedule.
2. Identify and schedule T&R training opportunities to achieve requirements.
3. Determine instructors required
4. Determine equipment required
5. Determine external support required
6. Write and present a brief to the instructor that shows:
   a. Crew manning and training requirements.
   b. Current training status
   c. Identify the training deficiencies and resource shortfalls
   d. Explain the training plan to correct the training deficiencies.

Performance Standard. With the aid of reference, write a training plan that addresses all requirement items and meets the scenario. The IUT will brief the plan. The instructor shall question and mentor the trainee throughout the training session to ensure a clear understanding of CMMR requirements.

Instructor. MCCES Formal School Instructor, WTI

Prerequisite. 5000, 5010, 5020, 5100, 5110, 5120, 6320

Reference
1. NAVMC 3500.14_
2. MCRP 3-0A
3. TEEP
4. http://msharpsupport.com

4.12 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS (6000)

4.12.1 Purpose. This phase provides community standardization for maintenance officer and instructor designations. This syllabus does not contain "one time" certification or qualification training.

4.12.2 General

4.12.2.1 Prerequisite. Per the applicable syllabus.

4.12.2.2 Admin Notes.

(1) This section enables units to document and track designations.

All syllabus training and administration requirements must be complete prior to being designated. A designation is not effective until all administration is completed.

(2) The squadron WTI shall review the IPR to ensure all required documentation and administrative actions have been completed prior to staffing designation recommendation for approval.

(3) Only once the maintenance officer is designated in writing, the signed letter is filed in the IPR, and all administrative actions are completed, and the event code has been logged in M-SHARP shall the designation be effective.

(4) Designations are command specific and expire when an individual transfers out of a command. In order to ensure proficiency is maintained, specific events throughout this syllabus have been R-coded. The gaining command shall review the IPR to ensure prerequisite R-coded events for a designation are current prior to approving that designation. If prerequisite R-coded events become delinquent, the individual shall update those events.

4.12.2.3 Stages. The following stages are included in the RCQD Skill Phase of training.

PAR NO.	STAGE NAME
4.12.3	DESIGNATION (DESG)
4.12.4	SCHOOL CODES (SCHL)

4.12.3 DESIGNATIONS (DESG) STAGE

4.12.3.1 Purpose. To provide for maintenance officer and instructor designations.

4.12.3.2 General

Prerequisite. Completion of applicable Core, Mission, and Instructor Stage evetns.

Admin Notes. Instructor training is conducted at the MACCSWO Course, MCCES.

Crew Requirements: Per the applicable events.

DESG-6320

Goal. Designation as a Basic Instructor.

Requirement. Be recommended for designation by the unit WTI and designated in writing by the commanding officer.

Prerequisite. 5000, 5010, 5020.

DESG-6321

Goal. Designation as a Senior Instructor.

Requirement. Be recommended for designation by the unit WTI and designated in writing by the commanding officer.

Prerequisite. 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6320.

DESG-6322

Goal. Designation as a Weapons and Tactics Instructor.

Requirement. Be certified by MAWTS-1 as a WTI, designated by the commanding officer in writing, appropriate entries made in M-SHARP and a letter filed in the PR.

Prerequisite. 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6320, 6321, SCHL-6000.

DESG-6520

Goal. Designation as a MACCSMO.

Requirement. Be recommended for designation by the unit WTI and designated in writing by the commanding officer.

Prerequisite. 2600, 2605, 2610, 2615, 2620, 2650, 2655, 2660, 2665, 2670, 2712, 2724, 2728, 2730, 2740, 2746, 2750, 2752, 2754, 2756, 2758, 2760, 2800, 2802, 2804, 2806, 2812, 2814, 2816, 2818, 2820, 2830, 2834, 2842, 2844, 2846, 2900, 2905, 2910, 2915, 2920, 2925, 2930, 2935, 2945, 2950, 3200, 3206, 3208, 3218, 3220, 8000, 8020, 8060, 8080

Note: To retain the eligibility and or designation as a MACCSMO, the maintenance officer must complete the following:

1. Within 24 months of completing the MACCSWO Course, complete the below listed events.

DAU DL	OMGT	ACPM
2818	3200R	8000
2820	3206R	8020
	3208R	8060
	3218R	8080
	3220R	

2. Within 48 months of completing the MACCSWO Course, complete event codes SCHL-6020, SCHL-6021, SCHL-6025 (see MAWTS C3 Course Catalog for details).

4.12.3 SCHOOL CODE (SCHL) STAGE

4.12.3.1 Purpose. To provide for school codes for skill enhancement training that the trainee may attend.

4.12.3.2 General

Prerequisite. Completion of applicable Core, Mission, and Instructor Stage events.

Admin Notes. NONE.

Crew Requirements: Per the applicable events.

COURSE NAME	LOCATION	CID/CIN	T&R CODE
Weapons and Tactics Instructor Course	MCAS Yuma, AZ	M14P2A1	SCHL-6000

4.13 ACADEMICS

In addition to those listed in the MAWTS-1 C3 Course Catalog, other specific distance learning opportunities that compliment this syllabus are listed below. Maintenance personnel in MACCS maintenance leadership positions are encouraged to complete these courses.

COURSE	**ACTIVITY**
ACQ 101 Fundamentals of Systems Acquisition Management	Defense Acquisition University (DAU)
ACQ 201A Intermediate Systems Acquisition	DAU
ACQ 201B Intermediate Systems Acquisition	DAU
BCF 102 Fundamentals of Earned Value Management	DAU
BCF 103 Fundamentals of Business Financial Management	DAU
BCF 106 Fundamentals of Cost Analysis	DAU
TST 102 Fundamentals of Test and Evaluation	DAU
PMT 250 Program Management Tools	DAU
LOG 101 Acquisition Logistics Fundamentals	DAU
SYS 101 Fundamentals of Systems Engineering	DAU
PMT 352A Program Management Office Course	DAU
PMT 352B Program Management Office Course	DAU
Total Force Structure Management Systems (MC TFSMS)	TFMS Website
TFSMS Super User Course	TFMS Website
Fiber Optic Tools And Test Equipment Operation And Maintenance CBT	TECOM/ATB
SUNAIR HF RT 9000 CBT	TECOM/ATB

4.14 AVIATION CAREER PROGRESSION MODEL (8000)

4.14.1 Purpose. To enhance the professional understanding of Marine Aviation and the MAGTF, and to ensure individuals possess the requisite skills to fill battle command and battle staff positions in support of the ACE and the MAGTF in a joint environment. The focus in the Aviation Career Progression Model (ACPM) is on academics in the following areas:

Marine Air Command and Control System (MACCS)
Aviation Combat Element (ACE)

Threat to the MAGTF
MAGTF Joint Air Operations

4.14.2 General. The ACPM is intended to be an integrated series of academic events contained within each phase of training. Accordingly, ACPM academic events are like any other academic event in that they serve as prerequisites to selected training events or stages. Additionally, several ACPM academic events are integrated as prerequisite for certain combat leadership syllabi.

ACPM events may be conducted in group session with an assigned instructor teaching the period of instruction or they may be accomplished by self-paced instruction.

MAWTS-1 is responsible for the update and validity of the ACPM periods of instruction. In the future, courses may be consolidated or revised to meet changing requirements. Refer to the MAWTS-1 ACPM link for the current ACPM program of instruction:

https://www.intranet.tecom.usmc.mil/sites/mawts1/mawts1%20webpages/Aviation%20Career%20Progression%20Model.aspx?PageView=Shared

Completed events shall be manually logged and tracked in M-SHARP.

ACPM academic events, along with their identifying prerequisite association with other training phases/stages/events, are listed below.

MACCS Maintenance (5900) personnel are not required to complete Module 8040 (Threat). The remaining four modules are aligned and set as requirements for designation throughout this training syllabus. See the MAWTS-1 C3 Course Catalog for content of the ACPM modules.

STAGE	TRNG CODE	T&R DESCRIPTION		ACAD TIME	TO BE COMPLETED DURING
ACPM	8000	MACCS		1	2000
ACPM	8001	MARINE AIR COMMAND AND CONTROL SYSTEM		4	2000
ACPM	8002	TACTICAL AIR COMMAND CENTER (TACC)		4	2000
ACPM	8003	DIRECT AIR SUPPORT CENTER (DASC)		4	2000
ACPM	8004	TACTICAL AIR OPERATIONS CENTER (TAOC)		4	2000
ACPM	8005	MARINE AIR TRAFFIC CONTROL (MATC)		4	2000
ACPM	8006	LOW ALTITUDE AIR DEFENSE (LAAD)		4	2000
ACPM	8007	UAS SUPPORT TO THE MAGTF		4	2000
ACPM	8008	MARINE WING COMMUNICATION SQUADRON (MWCS)		4	2000
ACPM	8020	ACE		1	3000
ACPM	8021	AVIATION OPERATIONS		4	3000
ACPM	8022	CONTROL OF AIRCRAFT AND MISSILES		4	3000
ACPM	8023	OFFENSIVE AIR SUPPORT (OAS)		4	3000
ACPM	8024	ASSAULT SUPPORT		4	3000
ACPM	8025	AIR RECONNAISSANCE		4	3000
ACPM	8026	ELECTRONIC WARFARE		4	3000

STAGE	TRNG CODE	T&R DESCRIPTION		ACAD TIME	TO BE COMPLETED DURING
ACPM	8027	ANTI-AIR WARFARE		4	3000
ACPM	8028	AVIATION GROUND SUPPORT		4	2000
ACPM	8040	**THREAT**		1	4000
ACPM	8041	SURFACE TO AIR THREAT TO THE MAGTF		4	4000
ACPM	8042	FIXED WING THREAT TO THE MAGTF		4	4000
ACPM	8043	ROTARY WING THREAT TO THE MAGTF		4	4000
ACPM	8044	MISSILE AND UAS THREAT TO THE MAGTF		4	4000
ACPM	8045	RADIO ELECTRONIC COMBAT THREAT TO THE MAGTF		4	3000
ACPM	8060	**MAGTF**		1	3000
ACPM	8061	GROUND COMBAT OPERATIONS		4	3000
ACPM	8062	FIRE SUPPORT COORDINATION IN THE GCE		4	3000
ACPM	8063	MAGTF COMMAND AND CONTROL		4	2000
ACPM	8064	MAGTF COMMUNICATIONS		4	3000
ACPM	8065	PHASING CONTROL ASHORE		4	3000
ACPM	8080	**JOINT AIR OPERATIONS**		1	3000
ACPM	8081	COMMAND AND CONTROL OF JOINT AIR OPERATIONS		4	3000
ACPM	8082	THEATER AIR CROUND SYSTEM (TAGS)		4	3000
ACPM	8083	JOINT FIRE SUPPORT		4	3000
ACPM	8084	CLOSE AIR SUPPORT		4	3000
ACPM	8085	JOINT TARGETING		4	3000
ACPM	8086	NORTH ATLANTIC TREATY ORGANIZATION (NATO)		4	3000
ACPM	8087	JOINT AIRSPACE CONTROL		4	3000
ACPM	8088	COUNTERING AIR AND MISSILE THREATS		4	3000
TOTAL ACPM STAGE			39	141	

4.15 T&R ATTAIN AND MAINTAIN TABLES

MTACS MAINTENANCE MOS 5970											
CORE/MISSION/CORE PLUS ATTAIN AND MAINTAIN MATRIX											
CORE SKILL (2000 Phase)											
T&R EVENT INFORMATION				BASIC POI		REFRESHER POI		MAINTAIN PROFICIENCY		PREREQS	CHAINING
T&R DESCRIPTION	STAGE	CODE	REFLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
HANDLING/STORAGE	COMSEC	2600R	365	COMSEC	2600R	COMSEC	2600R	COMSEC	2600R	MCI 2525B	-
PHYS SEC		2605R	365		2605R		2605R		2605R	MCI 2525B, 2600	-
CREW CHANGE		2610R	365		2610R		2610R		2610R	MCI 2525B, 2605	-
EKMS CALLOUT		2615R	365		2615R		2615R		2615R	MCI 2525B, 2600	-
SKL		2620R	365		2620R		2620R		2620R	MCI 2525B, 2600, 2615	-
TDL	FAM	2650	*	FAM	2650	FAM		FAM		-	-
ADPE		2655	*		2655					-	-
FREQ SPECTRUMS		2660	*		2660					-	-
FREQ CHAR		2665R	1460		2665R		2665R		2665R	-	-

MTACS MAINTENANCE MOS 5970											
CORE/MISSION/CORE PLUS ATTAIN AND MAINTAIN MATRIX											
CORE SKILL (2000 Phase)											
T&R EVENT INFORMATION				BASIC POI		REFRESHER POI		MAINTAIN PROFICIENCY		PREREQS	CHAINING
T&R DESCRIPTION	STAGE	CODE	REFLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
EARTH GRD		2670	*		2670					-	-
Identify Float Process		2712R	1460		2712R		2712R		2712R	-	-
Submit TOECR		2724	*		2724					-	-
Develop Budget		2728R	1460		2728R		2728R		2728R	2752	-
CMR Review		2730R	1460		2730R		2730R		2730R	2752	-
CCI Procedures Implemented		2740	*		2740					-	-
Command Level Brief	MMGT	2746R	365	MMGT	2746R	MMGT	2746R	MMGT	2746R	-	-
QC PROC		2750R	1460		2750R		2750R		2750R	-	-
Funding REQ		2752R	1460		2752R		2752R		2752R	-	-
UURI Authorization		2754	*		2754					2730	-
WIR Procedures		2756	*		2756					-	-
Maintenance Cycle		2758	*		2758					-	-
PDQR Procedures		2760	*		2760					-	-
Doctrinal Nets		2800R	365		2800R		2800R		2800R	-	-
Planning Documents		2802	*		2802					-	-
Key Sections of OP Ord		2804	*		2804					-	-
Equipment Requirements		2806R	365		2806R		2806R		2806R	2800	-
Design a site layout		2812R	730		2812R		2812R		2812R	2806, 2830	-
Develop embark plan		2814R	730		2814R		2814R		2814R	2730, 2806, 2846, 2830, 2812	-
Validation of Bill of Material (BOM)		2816R	730		2816R		2816R		2816R	-	-
Familiarization of acquisition management	OMGT	2818	*	OMGT	2818	OMGT		OMGT		-	-
Familiarization of fundamentals acquisition logistics		2820	*		2820					2820	-
Conduct a site survey		2830R	1460		2830R		2830R		2830R	2730, 2806	-
Supply Support Requirement		2834	*		2834					2806	-
Power Requirements		2842R	365		2842R		2842R		2842R	2806	-
Submit Frequency Request		2844	*		2844					2806	-
Logistics Support Request (LSR)		2846	*		2846					2806	-
Identify MACS	ORGS	2900	*	ORGS	2900	ORGS		ORGS		8004, 8005	-

MTACS MAINTENANCE MOS 5970

CORE/MISSION/CORE PLUS ATTAIN AND MAINTAIN MATRIX

CORE SKILL (2000 Phase)

T&R EVENT INFORMATION				BASIC POI		REFRESHER POI		MAINTAIN PROFICIENCY		PREREQS	CHAINING
T&R DESCRIPTION	STAGE	CODE	REFLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
Identify the MCAS ATC		2905	*		2905					8005	-
Identify MASS		2910	*		2910					8003	-
Identify MTACS		2915	*		2915					8002	-
Identify LAAD Bn		2920	*		2920					8006	-
Identify VMU		2925	*		2925					8007	-
Identify MWCS		2930	*		2930					8008	-
Identify MWSS		2935	*		2935					8028	-
HHQ Mission and Support Agencies		2945	*		2945					8063	-
MACCS OV		2950R	1460		2950R		2950R		2950R	8001, 2900, 2905, 2910, 2915, 2920, 2925, 2930, 2935, 2945	-

MISSION SKILL (3000 Phase)

T&R EVENT INFORMATION				BASIC POI		REFRESHER POI		MAINTAIN PROFICIENCY		PREREQS	CHAINING
T&R DESCRIPTION	STAGE	CODE	REFLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
Develop Comm Plan ISO OPLAN	TACCOPS	3200R	730	TACCOPS	3200R	TACCOPS	3200R	TACCOPS	3200R	2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812, 2950, 3206	-
Identify Operational Requirements		3206R	730		3206R		3206R		3206R	2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812	-
Perform CBRN		3208R	365		3208R		3208R		3208R	-	-
Understand Maint Sect Management		3218R	1460		3218R		3218R		3218R	2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812, 2746, 2814, 2842, 2830, 3200, 2950, 3206	-
Deploy Maint Sect		3220R	730		3220R		3220R		3220R	2746, 2800, 2802, 2806, 2814, 2842, 2830, 2834, 2844, 2846, 2812, 3200,	-
Develop Comm Plan ISO OPLAN	TACCINF	3200R	730	TACCINF	3200R	TACCINF	3200R	TACCINF	3200R	2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812, 2950, 3206	-
Identify Operational Requirements		3206R	730		3206R		3206R		3206R	2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812	-
Perform CBRN		3208R	365		3208R		3208R		3208R	-	-
Understand Maint Sect Management		3218R	1460		3218R		3218R		3218R	2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812, 2746, 2814, 2842, 2830, 3200, 2950, 3206	-
Deploy Maint Sect		3220R	730		3220R		3220R		3220R	2746, 2800, 2802, 2806, 2814, 2842, 2830, 2834, 2844, 2846, 2812, 3200,	-

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4.16 T&R SYLLABUS MATRIX

MTACS MAINTENANCE MOS 5970 T&R SYLLABUS MATRIX																				
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	GROUND/ ACADEMIC EVENTS		SIM EVENTS		LIVE EVENTS		PREREQ	NOTES	CHAIN	EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME				
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)																			
MMWO	1000	CMR Review	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1005	MIMMS/AIS	B	E	G	-	-	D	*		3.0		0		0	-	-	-	-
MMWO	1010	Float Process	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1015	Funding Lines.	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1020	Funding Requirements	B	E	G	-	-	D	*		3.0		0		0	-	-	-	-
MMWO	1025	Induction of new equipment.	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1030	Equipment phase out.	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1035	Quality Control Procedures	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1040	Inspections Maint Functional Areas	B	E	G	-	-	D	*		16.0		0		0	-	-	-	-
MMWO	1045	TO/ECRs.	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1050	Frequency Requests	B	E	G	-	-	D	*		1.0		0		0	-	-	-	-
MMWO	1055	UNP and Urgent UNS	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1060	MACCS Equivalent Agencies	B	E	G	-	-	D	*		1.0		0		0	-	-	-	-
MMWO	1065	MLG Org Structure	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1070	Operations Order	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1075	MACCS Maint OccFld Duties	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1080	Mission TACC	B	E	G	-	-	D	*		8.0		0		0	-	-	-	-
MMWO	1085	Mission MACS	B	E	G	-	-	D	*		8.0		0		0	-	-	-	-
MMWO	1090	Mission DASC	B	E	G	-	-	D	*		8.0		0		0	-	-	-	-
MMWO	1095	Embark Procedures for MACCS	B	E	G	-	-	D	*		8.0		0		0	-	-	-	-
MMWO	1100	5900 Staff Actions	B	E	G	-	-	D	*		1.0		0		0	-	-	-	-
MMWO	1105	MACCS Data Links	B	E	G	-	-	D	*		4.0		0		0	-	-	-	-
MMWO	1110	TDL Network Requirements	B	E	G	-	-	D	*		4.0		0		0	-	-	-	-
MMWO	1115	Information Assurance	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
MMWO	1120	MACCS	B	E	G	-	-	D	*		4.0		0		0	-	-	-	-
MMWO	1125	Understand T&R Processes	B	E	G	-	-	D	*		2.0		0		0	-	-	-	-
TOTAL CORE SKILL INTRODUCTION (1000 PHASE EVENTS)										26	95	0	0	0	0				

MTACS MAINTENANCE MOS 5970 T&R SYLLABUS MATRIX																				
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	GROUND/ ACADEMIC EVENTS		SIM EVENTS		LIVE EVENTS		PREREQ	NOTES	CHAIN	EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME				
CORE SKILL TRAINING (2000 PHASE EVENTS)																				
COMMUNICATION SECURITY (COMSEC)																				
COMSEC	2600	Describe handling and storage of classified materials.	B,R,M	-	-	-	-	-	365		0		0		2.0	MCI 2525B	-	-	-
COMSEC	2605	Ensure physical security requirements	B,R,M	-	-	-	-	-	365		0		0		2.0	MCI 2525B, 2600	-	-	-
COMSEC	2610	Conduct crew change over security procedures.	B,R,M	-	-	-	-	-	365		0		0		2.0	MCI 2525B, 2605	-	-	-
COMSEC	2615	Extract key material information from EKMS COMSEC callout.	B,R,M	-	-	-	-	-	365		0		0		2.0	MCI 2525B, 2600	-	-	-
COMSEC	2620	Utilize Simple Key Loader (SKL)	B,R,M	-	-	-	-	-	365		0		0		2.0	MCI 2525B, 2600, 2615	-	-	-
TOTAL COMMUNICATION SECURITY STAGE (COMSEC)										0	0	0	0	5	10				
FAMILIARIZATION (FAM)																				
FAM	2650	Tactical Data Links	B	-	-	-	-	-	*		0		0		3.0	-	-	-	-
FAM	2655	ADPE	B	E	-	-	-	-	*		0		0		3.0	-	-	-	-
FAM	2660	State HF, VF, and UHF frequency spectrums.	B	-	-	-	-	-	*		0		0		2.0	-	-	-	-
FAM	2665	Describe HF, VF, UHF radio characteristics.	B,R,M	-	-	-	-	-	1460		0		0		2.0	-	-	-	-
FAM	2670	Install Earth Ground	B	-	-	-	-	-	*		0		0		2.0	-	-	-	-
TOTAL FAMILIARIZATION SKILLS STAGE (FAM)										0	0	0	0	5	12				
MAINTENANCE MANAGEMENT (MMGT)																				
MMGT	2712	Identify Float Process	B,R,M	-	-	-	-	-	1460		0		0		2.0	-	-	-	-
MMGT	2724	Submit TOECR	B	-	-	-	-	-	*		0		0		16.0	-	-	-	-
MMGT	2728	Develop Budget	B,R,M	-	-	-	-	-	1460		0		0		16.0	2752	-	-	-
MMGT	2730	CMR Review	B,R,M	-	-	-	-	-	1460		0		0		40	2752	-	-	-
MMGT	2740	CCI Procedures Implemented	B	-	-	-	-	-	*		0		0		1.0	-	-	-	-
MMGT	2746	Command Level Brief	B,R,M	-	-	-	-	-	365		0		0		4.0	-	-	-	-
MMGT	2750	Quality Control Procedures	B,R,M	-	-	-	-	-	1460		0		0		2.0	-	-	-	-
MMGT	2752	Funding Requirements	B,R,M	-	-	-	-	-	1460		0		0		2.0	-	-	-	-
MMGT	2754	UURI Authorization	B		-	-	-	-	*		0		0		2.0	2730	-	-	-
MMGT	2756	WIR Procedures	B		-	-	-	-	*		0		0		2.0	-	-	-	-

MTACS MAINTENANCE MOS 5970 T&R SYLLABUS MATRIX																				
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	GROUND/ ACADEMIC EVENTS		SIM EVENTS		LIVE EVENTS		PREREQ	NOTES	CHAIN	EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME				
MMGT	2758	Maintenance Cycle	B		-	-	-	-	*		0		0		2.0	-	-	-	-
MMGT	2760	PDQR Procedures	B		-	-	-	-	*		0		0		2.0	-	-	-	-
TOTAL CORE SKILL MAINTENANCE MANAGEMENT STAGE (MMGT)										0	0	0	0	12	91				
OPERATIONS MANAGEMENT (OMGT)																			
OMGT	2800	Doctrinal Nets	B,R,M	-	-	-	-	-	365		0		0		4.0	-	-	-	-
OMGT	2802	Planning Documents	B	-	-	-	-	-	*		0		0		2.0	-	-	-	-
OMGT	2804	Key Sections of OP Ord	B	-	-	-	-	-	*		0		0		2.0	-	-	-	-
OMGT	2806	Equipment Requirements	B,R,M	-	-	-	-	-	365		0		0		2.0	2800	-	-	-
OMGT	2812	Design a site layout	B,R,M	-	-	-	-	-	730		0		0		8.0	2806, 2830	-	-	-
OMGT	2814	Develop embark plan	B,R,M	-	-	-	-	-	730		0		0		2.0	2730, 2806, 2846, 2830, 2812	-	-	-
OMGT	2816	Validation of Bill of Material (BOM)	B,R,M	-	-	-	-	-	730		0		0		2.0	2806	-	-	-
OMGT	2818	Familiarization of acquisition management	B	-	-	-	-	-	*		0		0		25.0	-	-	-	-
OMGT	2820	Familiarization of fundamentals acquisition logistics	B	-	-	-	-	-	*		0		0		24.0	2818	-	-	-
OMGT	2830	Conduct a site survey	B,R,M	E	-	-	-	-	1460		0		0		4.0	2730, 2806	-	-	-
OMGT	2834	Supply Support Requirement	B	E	-	-	-	-	*		0		0		3.0	2806	-	-	-
OMGT	2842	Power Requirements	B,R,M	E	-	-	-	-	365		0		0		4.0	2806	-	-	-
OMGT	2844	Submit Frequency Request	B	E	-	-	-	-	*		0		0		1.0	2806	-	-	-
OMGT	2846	Logistics Support Request (LSR)	B	E	-	-	-	-	*		0		0		1.0	2806	-	-	-
TOTAL OPERATIONS MANAGEMENT STAGE (OMGT)										0	0	0	0	14	84				
ORGANIZATIONAL STRUCTURE (ORGS)																			
ORGS	2900	Identify MACS	B	-					*						4.0	8004, 8005	-	-	-
ORGS	2905	Identify the MCAS ATC	B	-					*						2.0	8005	-	-	-
ORGS	2910	Identify MASS	B	-					*						2.0	8003	-	-	-
ORGS	2915	Identify MTACS	B	-					*						2.0	8002	-	-	-
ORGS	2920	Identify LAAD Bn	B	-					*						2.0	8006	-	-	-
ORGS	2925	Identify VMU	B	-					*						2.0	8007	-	-	-
ORGS	2930	Identify MWCS	B	-					*						2.0	8008	-	-	-
ORGS	2935	Identify MWSS	B	-					*						2.0	8028	-	-	-
ORGS	2945	HHQ Mission and Support Agencies	B	E					*						2.0	8063	-	-	-

MTACS MAINTENANCE MOS 5970 T&R SYLLABUS MATRIX																				
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	GROUND/ ACADEMIC EVENTS		SIM EVENTS		LIVE EVENTS		PREREQ	NOTES	CHAIN	EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME				
ORGS	2950	MACCS OV	B,R,M	-					1460						4.0	8001, 2900, 2905, 2910, 2915, 2920, 2925, 2930, 2935, 2945	-	-	-
TOTAL ORGANIZATIONAL STRUCTURE SKILLS STAGE (ORGS)										0	0	0	0	10	24				
TOTAL CORE SKILL PHASE (2000 PHASE)										0	0	0	0	46	221				
MISSION SKILL TRAINING (3000 PHASE EVENTS)																			
TACC OPERATIONS AND TACC INFRASTRUCTURE SKILL TRAINING EVENTS (TACCOPS) AND (TACCINF)																			
OMGT	3200	Develop Comm Plan ISO OPLAN	B,R,M	-					730		0		0		2.0	2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812, 2950, 3206	-	-	-
OMGT	3206	Identify Operational Requirements	B,R,M	-					730		0		0		40.0	2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812	-	-	-
OMGT	3208	Perform CBRN	B,R,M	-					365		0		0		5.0	-	-	-	-
OMGT	3218	Understand Maint Sect Management	B,R,M	-		-	-	D	1460		0		0		4.0	2800, 2802, 2806, 2842, 2834, 2844, 2846, 2812, 2746, 2814, 2842, 2830, 3200, 2950, 3206	-	-	-
OMGT	3220	Deploy Maint Sect	B,R,M	-	-	-	-	-	730		0		0		8.0	2746, 2800, 2802, 2806, 2814, 2842, 2830, 2834, 2844, 2846, 2812, 3200,	-	-	-
TOTAL TACC OPERATIONS AND TACC INFRASTRUCTURE SKILLS STAGE (TACCOPS) AND (TACCINF)										0	0	0	0	5	59				
TOTAL MISSION SKILL PHASE (3000 PHASE)										0	0	0	0	5	59				
TOTAL 2000, 3000, AND 4000 PHASE										0	0	0	0	51	280				

MTACS MAINTENANCE MOS 5970 T&R SYLLABUS MATRIX																				
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	GROUND/ ACADEMIC EVENTS		SIM EVENTS		LIVE EVENTS		PREREQ	NOTES	CHAIN	EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME				
INSTRUCTOR TRAINING (5000 PHASE EVENTS)																			
INSTRUCTOR UNDER TRAINING (IUT)																			
BASIC INSTRUCTOR (BI)																			
IUT	5000	Introduce principles of instruction	B	-	G	-	-	D	*		0		0		2	-	-	-	-
IUT	5010	Understand the structure of an event	B	-	G	-	-	D	*		0		0		1	5000	-	-	-
IUT	5020	Conduct a period of instruction on a T&R event	B	-	G	-	-	D	*		0		0		2	5000, 5010	-	-	-
TOTAL BASIC INSTRUCTOR SKILLS STAGE (BI)										0	0	0	0	3	5				
SENIOR INSTRUCTOR (SI)																			
IUT	5100	Understand Aviation T&R program	B	-	G	-	-	D	*		0		0		2	5000, 5010, 5020, 6320	-	-	-
IUT	5110	Understand Applicable Community T&R	B	-	G	-	-	D	*		0		0		2	5000, 5010, 5020, 5100, 6320	-	-	-
IUT	5120	Understand T&R Administration	B	-	G	-	-	D	*		0		0		2	5000, 5010, 5020, 5100, 5110, 6320	-	-	-
IUT	5130	Develop a training plan	B,R,M	-	G	-	-	D	365		0		0		2	5000, 5010, 5020, 5100, 5110, 5120, 6320	-	-	-
TOTAL SENIOR INSTRUCTOR SKILLS STAGE (SI)										0	0	0	0	4	8				
TOTAL INSTRUCTOR UNDER TRAINING SKILLS PHASE (IUT)										0	0	0	0	7	13				
REQUIREMENTS, QUALIFICATIONS, CERTIFICATIONS, AND DESIGNATIONS (RQCD) (6000 PHASE)																			
DESIGNATIONS (DESG)																			
DESG	6320	Basic Instructor	B	-	-	-	-	-	*		0		0		0	5000, 5010, 5020	-	-	-
DESG	6321	Senior Instructor	B		-	-	-	-	*		0		0		0	5000, 5010, 5020, 5100, 5110, 5120, 5130, 6320	-	-	-

MTACS MAINTENANCE MOS 5970 T&R SYLLABUS MATRIX																				
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	GROUND/ ACADEMIC EVENTS		SIM EVENTS		LIVE EVENTS		PREREQ	NOTES	CHAIN	EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME				
DESG	6322	WTI	B	-	-	-	-	-	-		0		0		0	5000, 5010, 5020, 5100, 5110, 5120, 5130, 6320, 6321, SCHL-6000	-	-	-
DESG	6520	DSMO	B	-	-	-	-	L	*		0		0		0	2600, 2605, 2610, 2615, 2620, 2650, 2655, 2660, 2665, 2670, 2712, 2724, 2728, 2730, 2740, 2746, 2750, 2752, 2754, 2756, 2758, 2760, 2800, 2802, 2804, 2806, 2812, 2814, 2816, 2818, 2820, 2830, 2834, 2842, 2844, 2846, 2900, 2905, 2910, 2915, 2920, 2925, 2930, 2935, 2945, 2950, 3200, 3206, 3208, 3218, 3220, 8000, 8020, 8060, 8080	-	-	-
TOTAL DESIGNATIONS STAGE (DESG)										0	0	0	0	4	0				
SCHOOL CODES (SCHL)																			
SCHL	6000	WEAPONS AND TACTICS INSTRUCTOR	B	-	-	-	-	L	*						0.0	-	-	-	-

MTACS MAINTENANCE MOS 5970 T&R SYLLABUS MATRIX																				
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	GROUND/ ACADEMIC EVENTS		SIM EVENTS		LIVE EVENTS		PREREQ	NOTES	CHAIN	EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME				
		COURSE																	
TOTAL SCHOOL CODES STAGE (SCHL)										0	0	0	0	1	0.0				
TOTAL REQUIREMENTS, QUALIFICATIONS, CERTIFCATIONS, AND DESIGNATIONS PHASE (RQCD)										0	0	0	0	4	0				

4.17 SYLLABUS EVALUATION FORMS. See paragraph 208.8 in this chapter. The MACCS Training Form (MTF) is located in the C3 Course Catalog and available online at the MAWTS-1 C-3 website,

https://www.intranet.tecom.usmc.mil/sites/mawts1/mawts1%20webpages/c3_wttp.aspx

4.18 TRAINING DEVICE EVENT ESSENTIAL SUBSYSTEM MATRIX (EESM). NONE.