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Subj: MARINE AIR TRAFFIC CONTROL TRAINING AND READINESS MANUAL

Ref: (a) NAVMC 3500.14E

Encl: (1) MATC T&R Manual

1. Purpose. Per the reference, enclosure (1) provides revised training and readiness (T&R) standards, regulations, and policy regarding the training of Marine air traffic control personnel.

2. Cancellation. NAVMC 3500.94B.

3. Scope. Highlights of major T&R planning considerations included in this manual are as follows:

a. Chapter 1. Updated table of organization numbers for military occupational specialties 7257 and 7291.

b. Chapter 2 (formerly Chapter 7). Watch commander divided into two separate designations: senior air director and operations officer.

c. Chapter 3 (formerly Chapter 8). Several 6000 phase events have been removed from Marine air traffic control mobile team member, Marine air traffic control mobile team leader, Marine air traffic control mobile team instructor, and Marine air traffic control detachment operations chief designation prerequisites.

4. Information. Commanding General (CG), Training and Education Command (TECOM) will update this T&R manual as necessary to provide current and relevant training standards to commanders. All questions pertaining to this manual should be directed to: CG, TECOM, Policy and Standards Division (C 466), 1019 Elliot Road, Quantico, Virginia 22134.

5. Command. This manual is applicable to the Marine Corps Total Force.

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6. Certification. Reviewed and approved this date.



LEWIS A. CRAPAROTTA

By direction
Commanding General,
Training and Education Command

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CHAPTER 1
MARINE AIR TRAFFIC CONTROL
TRAINING AND READINESS UNIT REQUIREMENTS

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CHAPTER 1

MARINE AIR TRAFFIC CONTROL (MATC)

1.0 TRAINING AND READINESS REQUIREMENTS. The Marine Aviation Training and Readiness (T&R) Program provides the Marine Air-Ground Task Force (MAGTF) commander with an Aviation Combat Element (ACE) capable of executing the six functions of Marine Aviation. The T&R Program is the fundamental tool used by commanders to construct, attain, and maintain effective training programs. The standards established in this program are validated by subject matter experts to maximize combat capabilities for assigned Mission Essential Tasks (MET) while conserving resources. These standards describe and define unit capabilities and requirements necessary to maintain proficiency in mission skills and combat leadership. Training events are based on specific requirements and performance standards to ensure a common base of training and depth of combat capability.

1.1 MISSION. The mission of the Marine Air Control Squadron (MACS), which is accomplished partly by the Marine Air Traffic Control Detachment (MATCD), is to provide air surveillance and control of friendly aircraft and surface-to-air weapons in support of offensive air support and anti-air warfare, continuous all-weather radar, non-radar, tower air traffic control services, airspace management, and meteorological and oceanographic services in support of the Marine air-ground task force and joint force commander.

1.2 TABLE OF ORGANIZATION (T/O). Refer to the current T/O managed by Total Force Structure of Marine Corps Combat Development Command (MCCDC), for current authorized organizational structure and personnel strength. Information below depicts the MATCD T/O information as of the date of this NAVMC.

MATC T/O FOR DETACHMENT	
MACS-1, 2, 4, 24	
MOS	QTY/DET
7220	6
7257	52
7291*	6
TOTAL OFFICERS	6
TOTAL ENLISTED	58

*NOTE: In addition to the above listed quantities, the MACS rates two 7291s as part of the squadron headquarters special staff.

1.3 MISSION ESSENTIAL TASK LIST (METL). The unit METL consists of METs. Shading indicates Core Plus METs.

MATC		
MISSION ESSENTIAL TASK LIST (METL)		
CORE		
MET	ABBREVIATION	MCT DESCRIPTION
5.3.5.4.1.2	TWR	PROVIDE AIR TRAFFIC CONTROL (ATC) TOWER SERVICES
5.3.5.4.1.4	MMT	PROVIDE MARINE ATC MOBILE TEAM (MMT) SERVICES

5.3.5.4.1.5	APC	PROVIDE AIR TRAFFIC CONTROL (ATC) APPROACH SERVICES
5.3.5.4.1.6	ADC	PROVIDE AIR TRAFFIC CONTROL (ATC) ARRIVAL/DEPARTURE SERVICES

1.4 MISSION ESSENTIAL TASK TO SIX FUNCTIONS OF MARINE AVIATION.

MATC							
MISSION ESSENTIAL TASK LIST (METL)							
CORE							
MET	ABBREVIATION	SIX FUNCTIONS OF MARINE AVIATION					
		OAS	ASPT	AAW	EW	CoA&M	AerRec
5.3.5.4.1.2	TWR	-	-	-	-	X	-
5.3.5.4.1.4	MMT	-	-	-	-	X	-
5.3.5.4.1.5	APC	-	-	-	-	X	-
5.3.5.4.1.6	ADC	-	-	-	-	X	-

1.5 MET TO CORE/MISSION/CORE PLUS SKILL MATRIX. This table provides a pictorial view of the relationship between the Core Marine Corps Task (MCT) and each Core/Mission/Core Plus skill required to perform the MCT.

MATC														
MISSION ESSENTIAL TASK (MET) TO CORE/MISSION/CORE PLUS SKILL MATRIX														
MET	CORE SKILLS													
	ORNT	EQPT	EXPD	COMM	MMTL	MMTM	TERPS	TDL	RDR	FWO				
5.3.5.4.1.2	X	X	X	X	-	-	X	X	-	X				
5.3.5.4.1.4	X	X	X	X	X	X	X	-	-	X				
5.3.5.4.1.5	X	X	X	X	-	-	X	X	X	X				
5.3.5.4.1.6	X	X	X	X	-	-	X	X	X	X				

MET	MISSION SKILLS											
	3000 PHASE											
	ADMN	TWR	RDR	MMTL	TDL	EXPD	C2SYS	OPS				
5.3.5.4.1.2	X	X			X	X	X	X				

5.3.5.4.1.4	X			X		X		X			
5.3.5.4.1.5	X		X		X	X	X	X			
5.3.5.4.1.6	X		X		X	X	X	X			

CORE PLUS					
4000 PHASE					
MET	EXPD	COMM	C2SYS	TD L	TERPS
5.3.5.4.1.2	X	X			X
5.3.5.4.1.4	X	X	X	X	X
5.3.5.4.1.5	X	X	X	X	X
5.3.5.4.1.6	X	X	X	X	X

1.6 **MISSION ESSENTIAL TASKS OUTPUT STANDARDS.** Output standards are based on 24-hour continuous contingency/combat operations for one Marine Air Control Squadron.

MET	ABBREVIATION	OUTPUT STANDARDS	MACS 1/2/4 7200/5900	MACS 24 7200/5900
5.3.5.4.1.2	TWR	Y/N: Able to provide accurate survey data and develop terminal instrument procedures in conjunction with NAVFIG	6/6	3/2
		Y/N: Able to provide sustained (2) main air bases or air facilities with ATC tower services		
		Y/N: Able to provide sustained integration with the MACCS, other military command and control (C2) agencies, and civilian entities to include the Federal Aviation Administration (FAA) and International Civil Aviation Organization (ICAO)		

MET	ABBREVIATION	OUTPUT STANDARDS	MACS 1/2/4 7200/5900	MACS 24 7200/5900
		Y/N Able to provide sustained navigational guidance		
5.3.5.4.1.4	MMT	Y/N: Able to provide navigational guidance	4/4	3/2
		Y/N: Able to provide sustained integration with the MACCS, other military command and control (C2) agencies, and civilian entities to include the Federal Aviation Administration (FAA) and International Civil Aviation Organization (ICAO)		
		Y/N: Able to support MMT services at (4) remote air sites or points		
5.3.5.4.1.5	APC	Y/N: Able to provide accurate survey data and develop terminal instrument procedures in conjunction with NAVFIG	3/3	3/2
		Y/N: Able to provide sustained (1) main air base or air facility with ATC approach and en route radar services		

MET	ABBREVIATION	OUTPUT STANDARDS	MACS 1/2/4 7200/5900	MACS 24 7200/5900
		Y/N: Able to provide sustained integration with the MACCS, other military command and control (C2) agencies, and civilian entities to include the Federal Aviation Administration (FAA) and International Civil Aviation Organization (ICAO)		
		Y/N: Able to provide sustained navigational guidance		
		Y/N: Able to provide sustained radar air surveillance data to the MAGTF or joint force via tactical data link		
5.3.5.4.1.6	ADC	Y/N: Able to provide accurate survey data and develop terminal instrument procedures in conjunction with NAVFIG	3/3	3/2
		Y/N: Able to provide precision/non-precision approaches within a terminal area		
		Y/N: Able to provide sustained (1) main air base or air facility with ATC arrival/departure control radar services		
		Y/N: Able to provide sustained integration with the MACCS, other military command and control (C2) agencies, and civilian entities to include the Federal Aviation Administration (FAA) and International Civil Aviation Organization (ICAO)		

MET	ABBREVIATION	OUTPUT STANDARDS	MACS 1/2/4 7200/5900	MACS 24 7200/5900
		Y/N: Able to provide sustained navigational guidance		
		Y/N: Able to provide sustained radar air surveillance data to the MAGTF or joint force via tactical data link		

1.7 CORE MODEL MINIMUM REQUIREMENT (CMMR) SKILLS PROFICIENCY REQUIREMENTS. The CMMR is the number of personnel required to complete a MET capable element for each Core Skill depicted below. Core Plus skills are not required to complete a MET-capable element.

MATC		
CORE MODEL MINIMUM REQUIREMENTS		
Qualifications by crew		
CMMR	7220	7291/7257
MET 5.3.5.4.1.2 PROVIDE AIR TRAFFIC CONTROL (ATC) TOWER SERVICES		
TOWER FLIGHT DATA / GROUND CONTROLLER	0	1
TOWER LOCAL CONTROLLER	0	1
TOWER SUPERVISOR	0	1
MET 5.3.5.4.1.4 PROVIDE MARINE AIR TRAFFIC CONTROL MOBILE TEAM (MMT) SERVICES		
MMT MEMBER	0	3
MMT LEADER	1	1*
MET 5.3.5.4.1.5 PROVIDE AIR TRAFFIC CONTROL (ATC) APPROACH SERVICES		
RADAR APPROACH CONTROLLER	0	1
RADAR ARRIVAL/DEPARTURE CONTROLLER	0	1
TACTICAL INFORMATION MANAGER	0	1
RADAR FINAL CONTROLLER	0	2
RADAR SUPERVISOR	0	1
MET 5.3.5.4.1.6 PROVIDE AIR TRAFFIC CONTROL (ATC) ARRIVAL/DEPARTURE SERVICES		
RADAR ARRIVAL/DEPARTURE CONTROLLER	0	1
TACTICAL INFORMATION MANAGER	0	1
RADAR FINAL CONTROLLER	0	2
RADAR SUPERVISOR	0	1
COMBAT LEADERSHIP (By Detachment)		
DETACHMENT RADAR CHIEF	0	1
DETACHMENT TOWER CHIEF	0	1
DETACHMENT OPERATIONS / TRAINING CHIEF	0	1

MATC DETACHMENT SNCOIC	0	1
TERPS SPECIALIST	0	1
MATC DETACHMENT COMMANDER	1	0
MATC SENIOR AIR DIRECTOR	1	0
MATC OPERATIONS OFFICER	1	0

* MMTL can be performed by officer or enlisted.

1.8 CORE MODEL TRAINING STANDARDS. Not applicable.

1.9 INSTRUCTOR DESIGNATIONS.

INSTRUCTOR DESIGNATIONS	ATC DET 7220	ATC DET 7257/7291
BASIC INSTRUCTOR (BI)	4	6
SENIOR INSTRUCTOR (SI)	2	1
MATC MOBILE TEAM INSTRUCTOR (MMTI)	1	1
WEAPONS AND TACTICS INSTRUCTOR (WTI)*	2	1
FORMAL LEARNING CENTER INSTRUCTOR (FLC)**	1	1

**NOTE: The Formal Learning Center Instructor requirement is maintained at NATTC, Pensacola, FL

1.10 REQUIREMENT, CERTIFICATION, QUALIFICATION, AND DESIGNATION (R,C,Q,D) (6000 PHASE).

MATC		
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD)		
**Qualifications by crew		
RCQD	7220	7257
RADAR FINAL CONTROLLER	0	2
RADAR ARRIVAL/DEPARTURE CONTROLLER	0	1
RADAR APPROACH CONTROLLER	0	1
TOWER FLIGHT DATA CONTROLLER	0	1
TOWER GROUND CONTROLLER	0	1
TOWER LOCAL CONTROLLER	0	1
MMT MEMBER	0	3
MMT LEADER	1	1
TACTICAL INFORMATION MANAGER	0	1
CLEARANCE DELIVERY	0	1
TOWER SUPERVISOR	0	1
RADAR SUPERVISOR	0	1

COMBAT LEADERSHIP (by detachment)	7220	7257
DETACHMENT RADAR CHIEF	0	1
DETACHMENT TOWER CHIEF	0	1
DETACHMENT OPERATIONS / TRAINING CHIEF	0	1
MATC DETACHMENT SNCOIC	0	1
TERPS SPECIALIST	0	1
MATC DETACHMENT COMMANDER	1	0
SENIOR AIR DIRECTOR	1	0
OPERATIONS OFFICER	1	0

CHAPTER 2

MARINE AIR TRAFFIC CONTROL OFFICER (MATCO) 7220 INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

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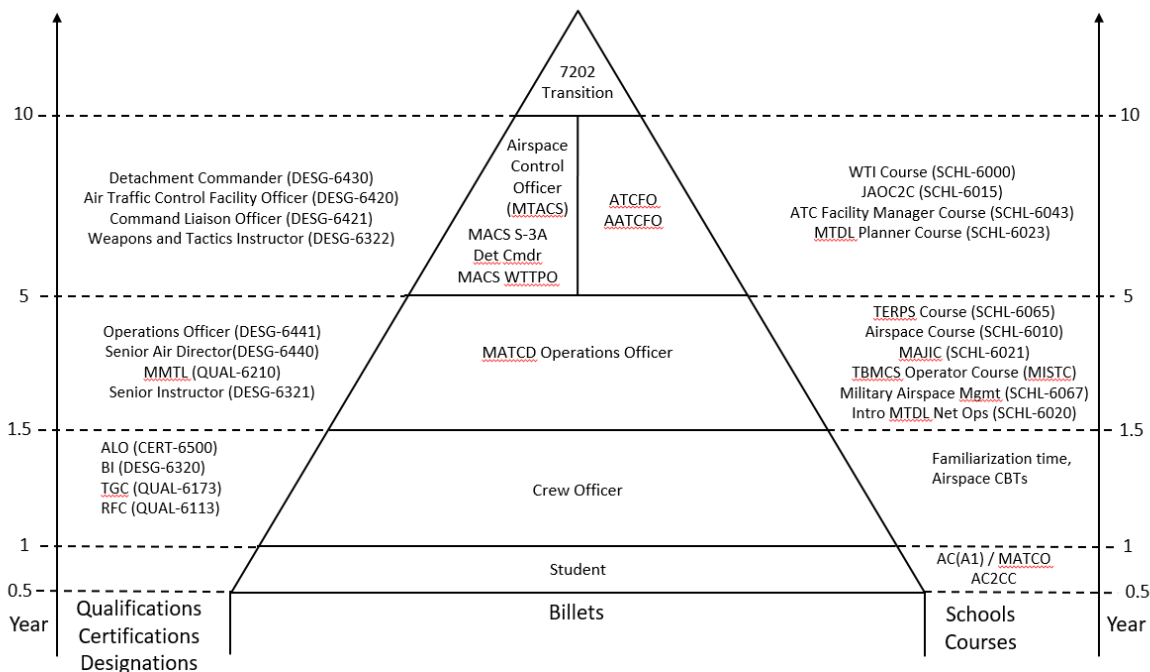
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CHAPTER 2

MARINE AIR TRAFFIC CONTROL OFFICER (MATCO) INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

2.0 MATCO 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.

2.1 MATCO (MOS 7220) TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the average MATCO. Units should use the model as a point of departure to generate individual training plans.



2.2 PROGRAMS OF INSTRUCTION.

2.2.1 General. Represents the average POI time-to-train by Phase.

2.2.2 Basic POI.

MATCO 7220		
BASIC POI		
WEEKS	PHASE OF INSTRUCTION	UNIT
1-16	Core Skill Introduction Training	MCCES/NATTC
17-125	Core Skill Training	MACS/ATCF
17-125	Mission Skill Training	MACS
126+	Core Plus Training	MACS

2.2.3 Refresher POI. MATC Officers may be required to maintain proficiency while assigned to a MCAS for initial qualification. MATC Officers assigned to duties that require C2SYS proficiency will attain and maintain proficiency in accordance with the MAWTS-1 C3 course catalog or by the TACC T&R manual if assigned to a MTACS. In the event a Marine is absent from the Marine Air Traffic Control MOS for a period of three years or more, they must complete the Refresher POI.

MATCO 7220		
REFRESHER POI		
WEEKS	PHASE OF INSTRUCTION	UNIT
Varies	Core Skill Training	MACS/ATCF
Varies	Mission Skill Training	MACS
Varies	Core Plus Training	MACS

2.3 PROFICIENCY AND CURRENCY.

2.3.1 Event Proficiency. Event proficiency is defined as successful completion of the performance standard as determined by the instructor or evaluator. Event completion is predicated upon demonstrated proficiency. Once completed, it is logged in M-SHARP by entering the appropriate event code. M-SHARP automatically updates the event proficiency date to reflect the completion date.

2.3.2 Skill Proficiency. Proficiency is a measure of achievement of a specific skill. To attain Individual Skill proficiency, an individual must be simultaneously proficient in all events for that Skill. Individuals may be attaining proficiency in some skills while maintaining proficiency in others.

2.3.2.1 Maintaining Skill Proficiency. Once attained, skill proficiency is maintained by executing those events which have a Proficiency Period (Maintain events). Proficiency Periods establish the maximum time between Event demonstration. Should proficiency be lost in any maintain event, for a specific skill, that skill proficiency is temporarily lost. Skill proficiency can be re-attained by again demonstrating proficiency in the Event(s) that are not proficient. For flying communities, an individual shall complete delinquent events with a proficient instructor, crewman/flight lead as delineated by the T/M/S Syllabus Sponsor (see Chapter 3 of the Aviation T&R Program Manual on specific instructor requirements for Low Altitude Flight, Night Systems, ACM, DM, DACM, DCM, FAC(A)).

2.3.2.2 Loss Of Individual Skill Proficiency. Should an individual lose proficiency in all maintain events in a skill, the individual will be assigned to the Refresher POI for the skill. To regain skill proficiency, the individual must demonstrate proficiency in all R-coded events for the skill.

2.3.2.3 Loss of Unit Skill Proficiency. If an entire unit loses proficiency in an Event, unit instructors shall regain proficiency by completing the Event with an instructor from a like unit. If not feasible, the instructor shall regain proficiency by completing the Event with another instructor. For flying communities, if a unit has only one instructor and cannot complete the Event with an instructor from another unit, the instructor shall regain proficiency with another aircraft commander or as designated by the commanding officer.

2.3.2.4 Proficiency Status. Proficiency is a “Yes/No” status by skill assigned to an individual. When an individual attains and maintains Core Skill Proficiency (CSP), Mission Skill Proficiency (MSP), Core Plus Skill Proficiency (CPSP), or Mission Plus Skill Proficiency (MPSP), the individual may count towards CMMR or CMTS.

2.3.3 Skill Currency. Currency is a control measure used to provide an additional margin of safety based on exposure frequency to a particular skill and applies to all MOS’s that must comply with NATOPS and OPNAV requirements. It is a measure of time since the last event demanding that specific skill. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for aircrew individual type mission profiles can be found in Chapter 3 of the Aviation T&R Program Manual.

2.4 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS 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, detachment or facility 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. See Chapter 6 of the Aviation T&R Program Manual on regaining lost qualifications.

2.4.1 INSTRUCTOR DESIGNATIONS.

MATC MOS 7220 INSTRUCTOR DESIGNATIONS (5000 Phase)	
INSTRUCTOR DESIGNATION	EVENTS
BASIC INSTRUCTOR (BI)	5000, 5010, 5020, 6320
SENIOR INSTRUCTOR (SI)	5000, 5010, 5020, 5100, 5110, 5120, 5130, 6320, 6321
WEAPONS AND TACTICS INSTRUCTOR (WTI)	6000, 6320, 6321, 6322, 8000, 8020, 8040, 8060, 8080
FORMAL LEARNING CENTER INSTRUCTOR (FLC)	6096, 6330

2.4.2 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS.

ATC MOS 7220	
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD)	
CERTIFICATION	EVENTS
AIRSPACE LIAISON OFFICER (ALO)	0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0532, 0533, 0534, 0535, 0538, 0550, 0551, 0552, 0553, 0554, 0555, 0556, 0557, 0558, 0560, 2000, 2003, 2206, 2600, 2602, 2604, 3001, 3002, 3620, 3710, 6113, 6173, 6320, 6500
MATCO 1417 (NITE LAB)	6520
QUALIFICATION	EVENTS
RADAR FINAL CONTROLLER (RFC)	0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0520, 0521, 0522, 0523, 0532, 0533, 0534, 0538, 2000, 2206, 3710, 6113

TOWER GROUND CONTROLLER (TGC)	0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 2000, 2003, 2206, 3620, 6173
DESIGNATION	EVENTS
ATC FACILITY OFFICER (ATCFO)	0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0532, 0533, 0534, 0535, 0538, 0550, 0551, 0552, 0553, 0554, 0555, 0556, 0557, 0558, 0560, 0723, 2000, 2003, 2019, 2206, 2600, 2602, 2604, 3001, 3002, 3620, 3710, 6113, 6173, 6420, 6500, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088
COMMAND AIRSPACE LIAISON OFFICER (CALO)	6421
MATC DETACHMENT COMMANDER	6430
DETACHMENT OPERATIONS OFFICER	0561, 0562, 0563, 0564, 0565, 0566, 0572, 0574, 0700, 2101, 2126, 2127, 2128, 2129, 2130, 2131, 3001, 3002, 3003, 3004, 3400, 3402, 3404, 3405, 3450, 6210, 6440, 6500,
SENIOR AIR DIRECTOR (SAD)	0571, 0701, 0703, 0704, 0705, 0720, 0721, 0722, 2001, 2002, 2005, 2006, 2009, 2010, 2011, 2012, 2102, 2104, 2120, 2121, 2122, 2123, 2135, 2208, 2209, 2900, 2906, 2909, 2910, 2940, 2941, 3402, 3404, 3406, 6321, 6440, 6500, 8000, 8020, 8040, 8060, 8080,

2.5 SYLLABUS NOTES. The purpose of this section is to provide a standardized training program for all MATC officers. The overall goal is to develop unit war fighting capabilities and not to measure the proficiency of individuals. Syllabi are based on specific performance standards designed to ensure proficiency in core competencies. An effective T&R program is the first step in providing the MAGTF commander with an Aviation Combat Element (ACE) capable of accomplishing any and all of its stated missions. The T&R program provides the fundamental tools for commanders to build and maintain unit combat proficiency and readiness. Using these tools, training managers can construct and execute an effective training plan that supports unit METs.

Due to the complexities of the the MATC training pipeline, the following guidance is given. Per NAVAIR 00-80T-114, ATC NATOPS Manual, CNO N980 is the ATC facility classification authority for the Department of the Navy (DON). The classification of an ATC facility determines which ATC skill sets DON air traffic controllers may train to and qualify for. In accordance with NAVAIR 00-80T-114, MARADMIN 229/04 lists ATC services provided, ATC skill sets trained to, and MOS and CTO/ATCS ratings available at MCAS and MCAF ATC facilities

based on CNO N980-assigned ATC facility classifications. The policy set forth in MARADMIN 229/04 remains in effect until cancelled by HQMC/Aviation (APX).

Written and practical exams shall be passed with a minimum score of 80%, unless otherwise specified.

2.5.1 Environmental Conditions Matrix.

Environmental Conditions	
Code	Meaning
(N)	May be conducted during darkness. If conducted during hours of darkness, may be flown aided or unaided

2.5.2 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 or self-paced learning, CBT, or lectures.
CBT	Computer-based training
Note: If the event is conducted in the simulator, the simulator instructor shall set the desired environmental conditions for the event.	

2.5.3 Program of Instruction Matrix.

PROGRAM OF INSTRUCTION MATRIX	
Program of Instruction (POI)	Symbol
B	Basic
R	Refresher
M	Maintain

2.5.4 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 the 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.

2.6 ACADEMIC PHASE (0000)

2.6.1 Purpose. To provide trainees the requisite standardized academic knowledge to perform their assigned duties. These events will serve as the baseline learning objectives for academic training. References provided shall be used during training. However, all ACAD events will be performed to proficiency without the aid of reference.

2.6.2 General

2.6.2.1 Prerequisite. None.

2.6.2.2 Administrative Note. The ACAD events are not stand-alone events for training, but form the knowledge prerequisites for training to Core, Mission, and Core Plus Skills.

2.6.2.3 Stages. The following stages are included in the Academic Phase of training:

PAR. NO	STAGE NAME	PAGE NUMBER
2.6.3	ACADEMIC (ACAD)	2-8

2.6.3 ACADEMIC (ACAD) STAGE

2.6.3.1 Purpose. To train Marine ATC officers in ground academic subjects needed to successfully complete Core, Mission and Core Plus training events.

2.6.3.2 General

Prerequisite. None.

Admin Notes. None.

Crew Requirements. None.

ACAD-0500 1.0 * B (N) G

Goal. Describe general ATC knowledge.

Requirement. Conduct the following IAW the reference:

1. Describe the purpose of ATC.
2. Describe the meaning of specific terms of references.
3. Describe ATC service, duty priority, operational priority, and procedural preference.
4. Describe flight plans and control information.
5. Describe team position responsibilities.
6. Describe criteria and phraseology for establishing two-way communications.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0501 1.0 * B (N) G

Goal. Describe general ATC terminology.

Requirement. Describe the following IAW the reference:

1. Additional service.
2. Advisory frequencies.
3. Aerial refueling.
4. Affirmative.
5. Roger.
6. Wilco.
7. Aircraft classes.
8. AirMet.
9. Approach gate.
10. Final approach fix.
11. Final approach course.
12. Decision altitude.
13. Overhead maneuver.
14. Pilot's discretion.
15. Pilot weather report.
16. Preferential routes.
17. Procedure turn.
18. Segments of an instrument approach procedure.
19. Short range clearances.
20. Simulated flameout.
21. Missed approach.
22. Go around.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0502 1.0 * B (N) G

Goal. Label the local airfield diagram.

Requirement. Given an airfield diagram, conduct the following:

1. Label runways, to include:
 - a. Numbering/markings.
 - b. Length and width.
2. Draw location of windsock(s).
3. Draw location of optical landing system.
4. Draw name/designation.
5. Label taxiways to include name or number.
6. Label special use areas, e.g. hazardous cargo, hot brakes, ordnance load/offload, and arm/dearm.
7. Label fuel pits and provide the numbering for each.

8. Label location of aircraft wash racks.
9. Label tenant squadrons' parking ramps.
10. Label transient aircraft parking ramps, to include VIP spots.
11. Label airfield rescue and firefighting building and hotspot locations.
12. Label hangars with their assigned units.
13. Label the location of the airfield beacon.
14. Label TACAN checkpoints and compass rose.
15. Identify and label obstructions on the airfield.
16. Label the ATC radar location.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. Airfield tour.

Reference.

1. Local directives and publications.

ACAD-0503	1.0	*	B	(N)	G
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Goal. Describe local area/airfield specific information.

Requirement. Conduct the following IAW the reference:

1. Describe when arresting system operations are in affect.
2. Describe the guidelines for runway selection.
3. Describe local airfield weather minimums.
4. List aircraft type, modex, and tactical callsigns of each tenant squadron.
5. Describe local traffic patterns and no-fly areas.
6. List alternate, divert, and adjacent airfields.
7. List local frequencies pertinent to air traffic or safety of flight.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0504	1.0	*	B	(N)	G
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Goal. Label the location of ATCF emergency/safety equipment.

Requirement. Given a diagram, conduct the following:

1. Label the location of all fire extinguishers.
2. Label the main power circuit breaker.
3. Label the location(s) of the fire bill.
4. Label the location(s) of the evacuation route.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. Tour of the ATCF or MATCD to observe safety and security procedures and equipment.

Reference.

1. Local directives and publications.

ACAD-0505	1.0	*	B	(N)	G
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Goal. Describe ATC emergency procedures and policies.

Requirement. Describe the following IAW the reference:

1. In-flight equipment malfunctions.
2. Minimum fuel.
3. Below minima report by pilot.
4. Emergency code assignment.
5. Emergency assistance.
6. Overdue aircraft.
7. Control actions.
8. Facility operation.
9. Security of facilities.
10. Aircraft accidents and incidents.
11. ATC Hazards (severe/routine).

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. OPNAVINST 3750.6, Naval Aviation Safety Management System.
4. Local directives and publications.

ACAD-0506	1.0	*	B	(N)	G
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Goal. Describe the handling of special flights procedures and policies.

Requirement. Describe the following IAW the reference:

1. Flight inspection aircraft.
2. Aircraft carrying dangerous materials.
3. IFR military training routes.
4. Military aerial refueling.
5. Open Skies Treaty aircraft.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0507 1.0 * B (N) G

Goal. Describe basic weather knowledge.

Requirement. Conduct the following IAW the reference:

1. Define hazardous in-flight weather advisory service (HIWAS).
2. Describe the criteria for reporting a PIREP.
3. Describe weather and chaff services.
4. Describe calm wind conditions.
5. Describe criteria for reporting weather conditions.
6. Describe criteria for disseminating weather information.
7. Describe where the current altimeter setting can be obtained.
8. Describe braking action.
9. Describe braking action advisories.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0508 1.0 * B (N) G

Goal. Identify information contained in local letters of agreement/procedure.

Requirement. Given the reference material, identify the key information contained in the references.

Performance Standard. During a guided discussion, complete the requirement. The instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

Reference.

1. Local letters of agreement/procedure.

ACAD-0509 1.0 * B (N) G

Goal. Identify knowledge of ATC publications.

Requirement. Given the reference material, identify the key information contained in the references.

Performance Standard. During a guided discussion, complete the requirement. The instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7220.1, Certification and Rating Procedures for DOD Personnel.
2. JO 7210.3, Facility Operation and Administration.
3. JO 7340.2, Contractions.
4. 14 CFR Part 91, General Operating and Flight Rules.
5. AIM, Airman's Information Manual.
6. AOM, Airfield Operations Manual.
7. ATC Facility Manual.
8. IFR Supplement.
9. VFR Supplement.
10. NOTAMS.
11. Area Planning AP/1B, Military Training Routes.
12. Local sectional chart(s).
13. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
14. Low Altitude Charts, United States.
15. High Altitude Charts, United States.

ACAD-0520 1.0 * B (N) G

Goal. Describe radio and interphone communications knowledge.

Requirement. Describe radios and interphone communications IAW the reference.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0521 1.0 * B (N) G

Goal. Describe aircraft movement data knowledge.

Requirement. Conduct the following IAW the reference:

1. Describe the terms for acknowledgement of clearances and instructions.
2. Describe interphone transmission priorities.
3. Describe the terms for priority interruption.
4. Describe the interphone message format.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0522 1.0 * B (N) G

Goal. Describe flight progress strip knowledge.

Requirement. Conduct the following IAW the reference:

1. Describe the methods for updating information on flight progress strips.
2. Label flight progress strips, to include:
 - a. Arrivals.
 - b. Departures.
 - c. Overflights.
 - d. Enroute aircraft.
3. List aircraft prefixes.
4. List aircraft suffixes.
5. List flight progress strip control information symbols.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0523 1.0 * B (N) G

Goal. Describe ATC clearance knowledge and phraseology.

Requirement. Conduct the following IAW the reference:

1. Identify the clearance items.
2. Describe how to relay clearances.
3. Describe the phraseology to issue route or altitude amendments.
4. Describe the phraseology to issue a through clearance.
5. Describe the phraseology to issue an altitude reservation (ALTRV) clearance.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0524 1.0 * B (N) G

Goal. Describe airfield lighting.

Requirement. Describe the following IAW the reference (as applicable):

1. Emergency lighting.
2. Runway end identifier lights.
3. VASI lights.

4. Approach lights.
5. ALS intensity.
6. Sequenced flashing lights.
7. MALSR.
8. ALSF-2.
9. Runway edge lights.
10. High intensity runway centerline light.
11. HIRL associated with MALSR.
12. HIRL changes.
13. Medium intensity runway lights.
14. Simultaneous approach/runway edge.
15. High-speed turnoff lights.
16. Taxiway lights.
17. Obstruction lights.
18. Rotating beacon.
19. Precision approach path indicators (PAPI).

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7210.3, Facility Operation and Administration.
3. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.
4. Local directives.

ACAD-0525 1.0 * B (N) G

Goal. Identify requirements and phraseology for special VFR operations.

Requirement. Identify the guidelines and criteria required for special VFR operations to include:

1. Authorization criteria.
2. Clearance phraseology.
3. SVFR priorities.
4. Separation requirements.
5. Altitude assignment.
6. Local operations.
7. Climb to VFR.
8. Ground visibility below one mile.
9. Flight visibility below one mile.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0526 1.0 * B (N) G

Goal. Explain visual separation, types of approaches, and VFR-on-top procedures.

Requirement. Conduct the following IAW the reference (as applicable):

1. Define VFR conditions.
2. Explain visual separation.
3. Explain VFR-on-top procedures.
4. List and define the types of approaches.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0527 1.0 * B (N) G

Goal. Define ATC phraseology/communications as it applies to ground control.

Requirement. Define the proper ATC phraseology/communications procedures as it applies to ground control.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0528 1.0 * B (N) G

Goal. Define proper separation to vehicle and aircraft movement as it applies to ground control.

Requirement. Define separation criteria for air traffic in the terminal area. Understand how to provide ATC services based upon observed or known traffic and airport conditions per the references.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0532 1.0 * B (N) G

Goal. Identify radar equipment usage.

Requirement. Identify radar equipment principles, to include the following:

1. Presentation and equipment performance.
2. Alignment accuracy check.
3. Radar use.
4. Beacon range accuracy.
5. Electronic cursor.
6. Altitude filters.
7. Standby/low sensitivity operation.
8. Inoperative interrogator.
9. In-flight deviations from transponder.
10. Automated Radar Terminal Systems (ARTS)–Terminal.
11. TPX-42–Terminal.
12. Facility equipment general.
13. Radar use.
14. Video maps.
15. Airport facilities.
16. Radar operations equipment.
17. Precision approach landing system approach criteria.
18. Facility equipment.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7210.3, Facility Operation and Administration.
3. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
4. Local directives and publications.

ACAD-0533	2.0	*	B	(N)	G
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Goal. Describe radar final control knowledge.

Requirement. Describe the following IAW the reference.

1. Wheels down Check.
2. Vectoring.
3. Speed adjustments.
4. No-gyro approach.
5. Lost communications.
6. Radar contact Lost.
7. Landing check.
8. Final controller changeover.
9. Communications check.
10. Transmission acknowledgment.
11. Missed approach.
12. Low approach and touch-and-go.
13. Tower clearance.
14. Final approach abnormalities.

15. Military single frequency approaches.
16. Surveillance approaches-terminal.
17. PAR approaches-terminal.
18. Use of PAR for approach monitoring.
19. Radar service termination.
20. Approach separation responsibility.
21. Establishing two-way communications.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0534	2.0	*	B	(N)	G
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Goal. Describe basic radar knowledge.

Requirement. Describe the following IAW the reference:

1. Formation flights.
2. Wake turbulence.
3. Wake turbulence cautionary advisories.
4. Observed abnormalities.
5. Landing area condition.
6. Timely information.
7. Traffic advisories.
8. Bird activity information.
9. Traffic information.
10. Altitude restricted approach.
11. Vertical separation minima.
12. Single frequency approaches (SFA).
13. Clearance relay.
14. Transfer of radar identification.
15. Circling approach.
16. Radar identification.
17. Radar separation.
18. Radar arrivals.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0535	1.0	*	B	(N)	G
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Goal. Describe radar special operations.

Requirement. Describe the following IAW the reference:

1. Special Use and ATC-assigned airspace.
2. Fuel dumping.
3. Jettisoning of external stores.
4. Parachute operations.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7610.4, Special Operations.
3. Local directives and publications.

ACAD-0538 1.0 * B (N) G

Goal. Describe radar coordination procedures.

Requirement. Describe the following IAW the reference:

1. Radio and interphone communication monitoring.
2. Authorized interruptions.
3. Authorized relays.
4. Clearance prefix.
5. Departure clearances.
6. Abbreviated departure clearance.
7. Delay sequencing.
8. Delays.
9. Forward departure delay info.
10. Coordination with receiving facility.
11. Forwarding departure times.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0550 4.0 * B (N) G

Goal. Describe the duties and responsibilities applicable to supervisor positions.

Requirement. Describe the following IAW the reference:

1. Control authority.
2. Daily operations log.

3. Operating positions.
4. Human performance and medical qualifications.
5. Use of intoxicating drugs and alcoholic beverages.
6. Blood donors.
7. Workload planning.
8. Time Standards.
9. Communications.
10. Security of facilities.
11. Incidents, mishaps, and hazards.
12. ATC Hazards (severe/routine).
13. Air Traffic Activity report.
14. Billet descriptions, USMC.
15. Workload planning.
16. FAA Form 7230-4, Daily Operations log.
17. Tower Team position responsibilities.
18. Applicable information contained in local directives.

Performance Standard. Pass a written examination.

Instructor. SI (Tower and/or Radar Supervisor).

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7210.3, Facility Operation and Administration.
3. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
4. Local directives and publications.

ACAD-0551 2.0 * B (N) G

Goal. Discuss the roles and responsibilities of the Training Chief and the training process.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. Training and standardization (USMC).
2. Suspension and revocation.
3. Long term and short term training plans.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

Reference.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

ACAD-0552 2.0 * B (N) G

Goal. Discuss the roles and responsibilities of the Tower Chief.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the

following:

1. Billet Description, Control Tower Chief.
2. Relationship to Tower Supervisors.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

ACAD-0553 2.0 * B (N) G

Goal. Discuss the roles and responsibilities of the Radar Chief.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. Billet Description, Radar Chief.
2. Relationship to Radar Supervisor.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

ACAD-0554 16.0 * B (N) G

Goal. Discuss aspects of facility management.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. ATCF classification standard.
2. Procedural agreements.
3. Facility logs.
4. Personnel management.
5. Procedures evaluation boards.
6. Facility operation.
7. Incidents, mishaps, and hazards.
8. Operational capability improvement request (OCIR) process.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. OPNAVINST 3750.6, Naval Aviation Safety Management System.
4. OPNAVINST 3721.5, Naval Air Traffic Control Air Navigation Aid and Landing Systems Program.
5. Local directives and publications.

ACAD-0555 1.0 * B (N) G

Goal. Discuss the roles and responsibilities of the ATC Facility Officer (ATCFO).

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. Roles and responsibilities of the ATCFO.
2. Relationships with higher and adjacent commands.
3. Relationship to the ATCF SNCOIC.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

ACAD-0556 2.0 * B (N) G

Goal. Discuss waiver request to required ATC regulations.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. Purpose.
2. Content.
3. Justification.
4. Controlling agencies involved.
5. Distribution.
6. Applicability.
7. Alternate and safe procedures.
8. Routing process.

Performance Standard. Describe the steps in the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. SECNAVINST 5216.5, Correspondence Manual.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. JO 7110.65, Air Traffic Control.

ACAD-0557 2.0 * B (N) G

Goal. Discuss NATOPS Evaluations.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. Air Traffic Control NATOPS program.
2. Unit NATOPS Evaluation.
3. Evaluation Team.
4. Schedule.
5. Orientation Briefing.
6. Competency Testing/Evaluation.
7. Definitions.
 - a. Finding
 - b. Discrepancy
 - c. Commendatory
8. Reports.
9. Inspection Checklist.

Performance Standard. Describe the steps in the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

Reference.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ACAD-0558 1.0 * B (N) G

Goal. Identify the roles and responsibilities of the Crew Chief.

Requirement. Discuss the duties and responsibilities of a Crew Chief.

1. Coordinate assignments of assigned personnel.
2. Prepare and promulgate appropriate military and professional matters pertaining to the ATCF.
3. Formulate and recommend policy and procedures for the administration and operation of the ATCF.
4. Provide assistance and make recommendations to the Crew Officers concerning improvement of spaces, working conditions, and welfare and morale of personnel.

Performance Standard. Complete the requirement items IAW the references.

Instructor. BI.

Prerequisite.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ACAD-0560 1.0 * B (N) G

Goal. Discuss airspace and MATC considerations in regard to the Federal Aviation Administration (FAA) or host-nation equivalent.

Requirement. During a guided discussion, describe or complete the following in regard to airspace and ATC considerations and the FAA:

1. Roles and responsibilities of the Command Airspace Liaison Officer (CALO).
2. Employment of MATC systems.
3. Operational tempo of civilian flights within local airspace.
3. Liaison between FAA and MATC representatives.
4. Information flow between civilian and military MATC personnel.
5. Control measures to deconflict military/civilian aircraft, to include:
 - a. IFR/VFR routes.
 - b. Special use airspace.
 - c. Military operating areas.

Performance Standard. Describe the steps in the requirement. Instructor will question and mentor the trainee throughout the discussion. This event can be accomplished by completion of SCHL-6010.

Instructor. SI.

Prerequisite. None.

References.

1. JO 7610.4, Special Operations.
2. Area Planning AP/1A, Special Use Airspace.
3. OPNAVINST 3770.2, Department of the Navy Airspace Procedures and Planning.
4. MCO 3550.10, Policies and Procedures for Range and Training Area Management.

ACAD-0561 1.0 * B (N) G

Goal. Discuss the supply requirements and considerations when deploying the MATCD.

Requirement. During a guided discussion, or during an actual deployment of a fully-equipped MATCD, and given the references, identify and explain purpose and use of the following:

1. Deployment support package for blue dollar ATC equipment.
2. Supply chain for requisitioning for (blue dollar) parts through the Marine aviation logistics squadron (MALS).
3. Green dollar IX Block package.
4. Green dollar requisition agencies and process.
5. Supporting establishment agencies responsible to support MATCD equipment.
6. Bill of materials (BOM).

Performance Standard. Complete the requirement steps IAW the references. The instructor will question and mentor the trainee throughout the discussion or execution of the event steps.

Instructor. SI.

Prerequisite. None.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

ACAD-0562 1.0 * B (N) G

Goal. Discuss the administrative process of embarkation.

Requirement. Given a mission, after reviewing the references, and during a guided discussion, identify and explain the purpose, use and process for the following:

1. Development of an equipment density list (EDL) to support operations.
2. Heavy equipment requirements for gear movement.
3. EDL submission process for development of MDSS II data through the squadron S-4.
4. MDSS II data conversion by the MAGTF Planner for Time Phased Force Deployment Data (TPFDD) database input.
5. Changes to the TPFDD and which require general officer letters.
6. Review of the TPFDD for accuracy and movement timelines/methods.

Performance Standard. Complete the requirement steps IAW the references. The instructor will question and mentor the trainee throughout the discussion or execution of the event steps.

Instructor. SI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCO 3000.18, Marine Corps Force Deployment Planning and Execution Manual.
3. CJCSM 3122.01, JOPES Vol. I., JOPES Vol. I.

ACAD-0563 1.0 * B (N) G

Goal. Discuss the process to submit a frequency request.

Requirement. During a guided discussion, and after reviewing the reference, describe the following:

1. Information required for submission of a frequency request:
 - a. Equipment nomenclature.
 - b. Antenna locations.
 - c. Frequency bands.
 - d. Required number of frequencies.
 - e. Power output.
2. JS-12.
3. Submission timelines.
4. Routing to the spectrum manager.

Performance Standard. Complete the requirement steps IAW the references. The instructor will question and mentor the trainee throughout the discussion or execution of the event steps.

Instructor. SI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCRP 3-30B.4, Multi-Service Tactics, Techniques, and Procedures for Internet Tactical Chat in Support of Operations.
3. MCRP 3.30B.2, MAGTF Communications Systems.
4. MCO 2400.2, Marine Corps Management of the Radio Frequency Spectrum.

ACAD-0570 1.0 * B (N) G

Goal. Discuss basic knowledge of the MMT.

Requirement. During a guided discussion:

1. Explain the historical background of the MMT.
2. Define the mission of the MMT.
3. Explain the functions of the MMT.
4. Explain the organization of the MMT.

Performance Standard. Describe the steps in the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MMT TACSOP.
3. MAWTS-1 Course Catalog.

ACAD-0571 2.0 * B (N) G

Goal. Discuss tactical communications terms and procedures.

Requirement. During a guided discussion and given the references:

1. Describe the authentication process.
2. Define the term gingerbread.
3. Define the term chattermark.
4. Describe the seven beadwindow codes.
5. Describe lost communication procedures.
6. Define EMCON and explain the procedures.

Performance Standard. Discuss each requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-40.3B, Radio Operator's Handbook.
2. MMT TACSOP.

ACAD-0572 2.0 * B (N) G

Goal. Discuss the Marine Corps Planning Processes.

Requirement. During a guided discussion, conduct the following:

1. Identify and explain the six steps of Rapid Response Planning Process (R2P2).
2. Identify and explain the six steps of Marine Corps Planning Process (MCP2)
3. Discuss key differences between R2P2 and MCP2.
4. Discuss the purpose of the two distinct planning processes.

Performance Standard. Discuss each requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. MCWP 5-10, Marine Corps Planning Process.
2. MCWP 5-10A, MAGTF Aviation Planning.

ACAD-0574 2.0 * B (N) G

Goal. Discuss forward arming and refueling point (FARP) operations.

Requirement. After receiving the MAWTS-1 MMT FARP Operations Presentation and the references, and during a guided discussion:

1. Explain the three types of aviation ground support (AGS) FARPs and NATOPS ground separation criteria associated to each.
2. Explain aviation-delivered ground refueling (ADGR) operations.
3. Explain tactical bulk fuel dispensing system (TBFDS) operations.

Performance Standard. Demonstrate an understanding the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. MMT TACSOP.
2. NAVAIR 00-80T-109, Aircraft Refueling NATOPS Manual.
3. ANTP 3-22.5, RW TACSOP.
4. ANTP 3-22.3, KC-130 TACSOP.
5. MAWTS-1 Course Catalog.

ACAD-0576 1.0 * B (N) G

Goal. Identify basic assault zone survey principles.

Requirement. Identify the following:

1. Difference between survey and assessment.
2. Publications used to define survey criteria.
3. Airfield categories.
4. Four phases of survey.

5. Equipment used to conduct an assault zone survey.

Performance Standard. Pass a written exam.

Instructor. MMTI.

Prerequisite. None.

References.

1. UFC 3-260-01, Airfield and Heliport Planning and Design.
2. ELT 02-19, Airfield Pavement Evaluation Standards and Procedures.
3. ELT 04-07, Engineering Technical Manual.
4. AFI 13-217, Drop Zone and Landing Zone Operations.
5. MCRP 3-40D.1, Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations – Road Design.
6. MAWTS-1 SAAZA Presentation.

ACAD-0577 1.0 * B (N) G

Goal. Identify criteria associated with conducting assault zone survey and assessment.

Requirement. Identify the following:

1. Identify the dimensions and gradients of the runway, to include shoulders, graded areas, maintained areas, and overruns.
2. Identify the dimensions of the clear zone.
3. Identify the dimensions of the imaginary surface, to include slope ratio.
4. Identify the required criteria for an HLZ.

Performance Standard. Pass a written exam.

Instructor. MMTI.

Prerequisite. None.

References.

1. UFC 3-260-01, Airfield and Heliport Planning and Design.
2. ELT 02-19, Airfield Pavement Evaluation Standards and Procedures.
3. ELT 04-07, Engineering Technical Manual.
4. AFI 13-217, Drop Zone and Landing Zone Operations.
5. MCRP 3-40D.1, Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Road Design.
6. MAWTS-1 SAAZA Presentation.

ACAD-0578 1.0 * B (N) G

Goal. Identify principles of mathematics and measurement used in survey and assault zone assessment.

Requirement. Conduct the following:

1. Determine angles, distances, and horizontal ranges with trigonometric functions.
2. Identify units of measurement used in conducting survey and assault zone assessment.
3. Convert horizontal units of measurement.

Performance Standard. Pass a written exam.

Instructor. MMTI.

References.

1. UFC 3-260-01, Airfield and Heliport Planning and Design.
2. ELT 02-19, Airfield Pavement Evaluation Standards and Procedures.
3. ELT 04-07, Engineering Technical Manual.
4. AFI 13-217, Drop Zone and Landing Zone Operations.
5. MCRP 3-40D.1, Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Road Design.
6. MAWTS-1 SAAZA Presentation.

ACAD-0579 1.0 * B (N) G

Goal. Identify the principles involved in conducting soil evaluation during survey and assault zone assessment.

Requirement. Conduct the following:

1. Identify soil classification, type, and characteristics.
2. Identify principles in determining the California Bearing Ratio.
3. Given (5) DCP measurements, determine:
 - a. Segregation of soil layers.
 - b. CBR for each soil layer.
 - c. Number of passes for a KC-130 for each location.
 - d. Controlling CBR/DCP location.

Performance Standard. Pass a written exam.

Instructor. MMTI.

Prerequisite. None.

References.

1. UFC 3-260-01, Airfield and Heliport Planning and Design.
2. ELT 02-19, Airfield Pavement Evaluation Standards and Procedures.
3. ELT 04-07, Engineering Technical Manual.
4. AFI 13-217, Drop Zone and Landing Zone Operations.
5. MCRP 3-40D.1, Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Road Design.
6. MAWTS-1 SAAZA Presentation.

ACAD-0580 1.0 * B (N) G

Goal. Identify the requirement items for completing survey and assault zone assessment forms.

Requirement. Conduct the following:

1. Identify the required items to complete AF IMT 3822, Landing Zone Survey Form.
2. Identify the required items to complete AF IMT 4303, Helicopter Landing Zone Form.

Performance Standard. Given a scenario, complete forms AF-4303 and AF-3822. Minor errors are acceptable, corrected by the instructor.

Instructor. MMTI.

Prerequisite. None.

References.

1. AFI 13-217, Drop Zone and Landing Zone Operations.
2. MMT TACSOP

ACAD-0700 1.0 * B (N) G

Goal. Develop plans for MATCD services in support of a forward operating base (FOB).

Requirement. During a guided discussion and given a tactical scenario, identify the level of required MATC services, the level of force protection required, lift assets required, planned location, and coordination requirements with adjacent agencies associated for a:

1. Main air base.
2. Air facility.
3. Air site.
4. Air point.
 - a. FARP.
 - b. Laager point.

Performance Standard. Discuss each requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-115, NATOPS Expeditionary Airfields.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
3. MCRP 3-20F.3, MAGTF Aviation Site Command Handbook.
4. MCTP 3-20B, Aviation Ground Support.

ACAD-0701 1.0 * B (N) G

Goal. Discuss MATCD communications assets and their associated capabilities.

Requirement. During a guided discussion and given a garrison or field setting, demonstrate knowledge of MATCD communications assets and its capabilities to include:

1. HF/VHF/UHF/SATCOM radios.
2. Communication equipment associated with the Marine Air Traffic Control and Landing Systems (MATCALs).
3. Encryption capabilities and COMSEC procedures.

Performance Standard. Complete the requirements IAW the reference. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

ACAD-0703 2.0 * B (N) G

Goal. Discuss rear area security planning.

Requirement. During a guided discussion and given the references, understand the concepts, design, and implementation of a security plan for the MATCD.

1. Describe the fundamentals for usage of and the relationships between the following:
 - a. Base defense operations center (BDOC).
 - b. Anti-terrorism officer (ATO).
 - c. Assistant anti-terrorism officer (AATO).
 - d. Patrol leader (PL).
 - e. Roving patrol.
 - f. Quick reaction force (QRF).
 - g. Entry control points (ECP).
 - h. Vehicle check points (VCP).
 - i. Observation posts (OP).
 - j. Listening posts (LP).
2. Describe passive security measures for a MATCD based on current threat assessments, to include:
 - a. Dispersion and camouflage.
 - b. Hardening of sites and installations (cover).
 - c. Establishment of defensive plans and positions, to include a barrier plan, obstacle emplacement, and sectors of fire for crew served and individual weapons.
3. Describe active security measures for a MATCD based on current threat assessments, to include:
 - a. Patrols to establish OPs, LPs, ECPs, VCPs, and other local security measures.
 - b. Convoy security.
 - c. Establish and coordinate security and quick reaction forces between adjacent units and geographical security areas.
 - d. Basic infantry skill training, to include patrolling and crew served weapons employment.
4. Account for general contingencies and associated Immediate Action (IA) Drills, to include:
 - a. Sniper fire.
 - b. Indirect fire.
 - c. Direct fire.
 - d. Improvised explosive devices (IED) and vehicle-borne IEDs (VBIED).
 - e. Aerial attack.

Performance Standard. Complete the requirement items IAW the references. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

Reference.

1. MCRP 3-30C.1, MAGTF Rear Area Security.

ACAD-0704 1.0 * B (N) G

Goal. Discuss the relationship between the MATCD and AGS units aboard a FOB.

Requirement. During a guided discussion, state and understand the capabilities of AGS.

Performance Standard. Complete the guided discussion to obtain an understanding of AGS functions. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. MCTP 3-20B, Aviation Ground Support.
2. MCRP 3-20F.3, MAGTF Aviation Site Command Handbook.

ACAD-0705 2.0 * B (N) G

Goal. Discuss key air C2 planning documents.

Requirement. During a guided discussion, and given an ACP, ATO/SPINS, ACO, and OPTASKLINK message, understand and identify critical information.

1. State the purpose and use of the:
 - a. ATO/SPINS.
 - b. ACP.
 - c. ACO.
 - d. OPTASKLINK.
2. Identify essential information contained in the ACP that supports airspace operations, to include:
 - a. ACM definitions.
 - b. Design of airspace.
 - c. Airspace procedures.
3. Identify essential information contained in the ATO/SPINS, to include:
 - a. Mission number/type.
 - b. Arrival/departure time(s).
 - c. Control point/controlling agencies.
 - d. Remarks.

Performance Standard. Complete the requirement items IAW the references. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. CJCSM 3150.01, United States Message Text Format User's Handbook.
2. CJCSM 6120.01, Joint Multi-Tactical Data Link Operating Procedures.
3. JP 3-52, Joint Airspace Control.
4. MCRP 3-20F.5, Direct Air Support Center Handbook.
5. ATO Primer, (MAWTS-1 Local Document).

ACAD-0720 2.0 * B (N) G

Goal. Discuss the Integrated Air Defense Systems (IADS) and how it applies to the MATCD.

Requirement. During a guided discussion and given the references:

1. Identify the purpose of an IADS.
2. Identify the composition of an IADS.
3. Identify the IADS doctrinal nets and information passing over them:
 - a. Handover/crosstell net
 - b. Combat information/detection net (CI/D).
4. State which USMC agencies and assets participate in the IADS.

5. Identify the means by which the MATCD participates in the IADS:
 - a. Exchanges air traffic information with air C2 units via data links and voice reports.
 - b. Uses organic radars to provide airspace control, management, and surveillance within its designated air defense sector.
 - c. Activates the base defense zone (BDZ).
6. Describe the impact of air defense operations on ATC activity.

Performance Standard. Complete the requirement items IAW the references. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. MCTP 10-10B, Integrated Air Defense System.
2. MCRP 3.30B.2, MAGTF Communications Systems.
3. MCTP 3-20C, Anti-Air Warfare.
4. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
5. MCRP 3-20F.9, Low Altitude Air Defense (LAAD) Gunner's Handbook.

ACAD-0721 2.0 * B (N) G

Goal. Discuss Electronic Protection (EP) as it pertains to MATCD.

Requirement. During a guided discussion and given the references:

1. Discuss how the MATCD employs EP, to include:
 - a. Passive measures.
 - b. Active measures.
2. Explain procedures for reporting electronic warfare (EW) occurrences.
 - a. Joint Spectrum Interference Resolution (JSIR) report.
 - b. Meaconing, Intrusion, Jamming, and Interference (MIJI) report.
3. Describe the following EP features and how they pertain to the MATCD:
 - a. Sector blanking.
4. Explain EMCON and the sub-elements of MINCOM and RADCON. For RADCON, understand the purpose behind developing a RADCON plan and the implications for the MATCD.

Performance Standard. Complete the requirement items IAW the reference; minor errors corrected by the trainee are acceptable.

Instructor. SI.

Prerequisite. None.

References.

1. JP 3-13.1, Electronic Warfare.
2. MCWP 3-40.5, Electronic Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.7, Tactical Air Operations Center Handbook.
4. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
5. MAWTS-1 C3 class, EP in the MACCS.

ACAD-0722 2.0 * B (N) G

Goal. Discuss the planning considerations for a BDZ.

Requirement. During a guided discussion and given the references:

1. State GBAD capabilities, limitations, and requirements.
2. State the three required components of a BDZ.
3. State when the BDZ reverts to point defense.
4. State which agency holds identification/engagement criteria and authority.
5. Describe the integration of GBAD assets with the MATCD.
 - a. Location of GBAD assets, e.g. teams and section leaders.
 - b. Plan for the integration of a LAAD section leader with the MATCD.
6. Describe the flow of friendly aircraft through the BDZ.

Performance Standard. Complete the requirement items IAW the references. Instructor will question and mentor the trainee throughout the planning and employment. Completion of the MAWTS-1 C3 WTI Course satisfies this requirement.

Instructor. SI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCRP 3-20F.9, Low Altitude Air Defense (LAAD) Gunner's Handbook.
3. MAWTS-1 C3 class, BDZ.

2.7 CORE SKILL INTRODUCTION PHASE (1000).

2.7.1 Purpose. To provide entry-level classroom instruction on ATC concepts, regulations, procedures, and operating techniques as well as MATC doctrine and capabilities. The instruction ensures basic understanding of the Marine Air Command and Control System and application of MATC rules and regulations required for a controller to qualify and perform ATC functions at a MATCD or MCAS. Upon completion of the ATC Course at NAS Pensacola, the Marine officer possesses the same certification obtained by FAA controller graduates from the National FAA Air Traffic Control School.

2.7.2 General.

2.7.2.1 Prerequisite. Meet the requirements delineated in the MOS Manual, MCO 1200.17.

2.7.2.2 Administrative Note. Aviation Command and Control Commons Course (CID M09C2A1) located at Marine Corps Communication-Electronics School (MCCES) in 29 Palms, CA. Marine Air Traffic Control Officer (MATCO) Course, NAS Pensacola, FL.

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

PAR NO.	STAGE NAME	PAGE NUMBER
2.7.3	COMMON AIR SCHOOL (CAIRS)	2-38
2.7.4	AIR TRAFFIC CONTROL (ATC)	2-49
2.7.5	MARINE AIR TRAFFIC CONTROL OFFICER (MATCO)	2-57

2.7.3 AVIATION COMMAND AND CONTROL COMMONS (CAIRS) STAGE

2.7.3.1 Purpose. To provide entry-level classroom instruction on Aviation Command and Control (AC2) concepts, regulations, procedures, and operating techniques as well as Marine Aviation Command and Control Systems

(MACCS) doctrine and capabilities. This stage is designed as a foundation for all AC2 officers prior to commencing their terminal course of instruction. The instruction ensures understanding and application of AC2 rules and regulations required for an AC2 officer to qualify and perform MACCS functions in a Tactical Air Operations Center, Direct Air Support Center, Low Altitude Air Defense section, Air Traffic Control facility, or Tactical Air Command Center.

2.7.3.2 General.

Prerequisite. None.

Administrative Notes. Written and practical exams in this stage shall be passed with a minimum score of 80%, unless otherwise specified.

Crew Requirements. None.

CAIRS-1000 0 * B (N) G

Goal. Explain the fundamentals of Aviation Command and Control (AC2) employment.

Requirement. Given a scenario-based Tactical Decision Game (TDG), required documents, and references perform the following:

1. Discuss planning considerations for Marine Air Command and Control System (MACCS) establishment and employment in support of the MAGTF mission.
2. Discuss how the Marine Corps implements its AC2 philosophy via the MACCS.
3. Discuss the role of each MACCS agency and how each supports the six functions of Marine aviation.
4. Discuss MACCS communication planning requirements.
5. Discuss the major end items provided by each MACCS agency.
6. Present a MACCS employment plan.

Performance Standard. Complete all the requirement items IAW the references. Instructor will discuss each item with the trainee. The presented plan must support the scenario.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCTP 3-20C, Anti-Air Warfare.
2. MCTP 3-20D, Offensive Air Support.
3. MCTP 3-20E, Assault Support.
4. MCTP 3-20F, Control of Aircraft and Missiles.
5. MCWP 3-25.3, MACCS Handbook.
6. MCRP 3-20F.2, Marine Tactical Air Coordination Center Handbook.
7. MCRP 3-20F.5, Direct Air Support Center Handbook.
8. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
9. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
10. MCRP 3-20F.8, Low Altitude Air Defense Battalion Handbook.
11. MCTP 3-20G, Air Reconnaissance.
12. MCRP 3-32D.1, Electronic Warfare.
13. MCRP 3-20.5, Unmanned Aircraft Systems Operations.

CAIRS-1002 0 * B (N) G

Goal. Identify the components of Marine Air Ground Task Force (MAGTF) Operations.

Requirement. Identify the following:

1. MAGTF Composition.
2. Composition and mission of the Marine Division.
3. The types of Expeditionary Operations and how/when the DASC phases control ashore.
4. The purpose of the FSCC.
5. How supporting Arms are used within the MAGTF, specific to direct air support operations.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JP 1-02, Joint Dictionary of Definition and Terms.
2. JP 3-09, Joint Fire Support.
3. MCDP 1-0, Marine Corps Operations.
4. MCDP 3, Expeditionary Operations.
5. MCTP 3-20F, Control of Aircraft and Missiles.
6. MCRP 3-20F.5, Direct Air Support Center Handbook.
7. MCRP 8-10B.10, Radio Operator's Handbook .
8. MCTP 3-10F, Fire Support Coordination in the Ground Combat Element.
9. MCRP 1-10.2, MC Supplement to DOD dictionary of military and associated terms.

CAIRS-1004	0	*	B	(N)	G
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Goal. Identify characteristics of Aviation Command and Control.

Requirement. Identify the following:

1. Identify the six functions of Marine Aviation.
2. Identify characteristics of organizations in the Marine Air Wing (MAW).
3. Identify characteristics of units in the Marine Air Control Group (MACG).
4. Identify characteristics of agencies in the Marine Air Command and Control System (MACCS).
5. Identify characteristics of U. S. ground-based air defense platforms.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCWP 3-2, MAGTF Aviation Operations.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.
4. MCRP 3-20F.8, Low Altitude Air Defense Battalion Handbook.
5. MCWP 3-25.3, Marine Air Command and Control System Handbook.
6. MCRP 3-20F.2, Marine Tactical Air Command Center Handbook.
7. MCRP 3-20F.5, Direct Air Support Center Handbook.
8. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
9. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

4. Marine Air Traffic Control Detachment (MATCD).
5. Marine Air Traffic Control Mobile Team (MMT).
6. Low Altitude Air Defense (LAAD) Battalion Extensions of the MACCS.
7. Marine Wing Communications Squadron (MWCS).

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCRP 3-20F.2, Marine Tactical Air Command Center Handbook.
2. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
3. MCRP 3-20F.5, Direct Air Support Center Handbook.
4. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
5. MCRP 3-20F.9, Low Altitude Air Defense (LAAD) Gunner's Handbook.
6. MCRP 3.30B.2, MAGTF Communications Systems.
7. MCRP 3-20.5, Unmanned Aircraft Systems Operations.

CAIRS-1012	0	*	B	(N)	G
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Goal. Identify characteristics of Aircraft.

Requirement. Identify the following:

1. Identify characteristics of U.S. Aircraft.
2. Identify characteristics of U. S. aviation ordnance.
3. Identify characteristics of threat aircraft.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. NTTP 3-22.1, FA18.
2. NTTP 2-22.1, EA6B.
3. AFTTP 3-1, vol. 1, Attachment 3.
4. AFTTP 3-1.2, Threat Reference guide and Counter tactics.
5. TOPGUN Manual, Chapter 14, Threat Aircraft.
6. TOPGUN Manual, Chapter 26, AIM-9/Aerial Gunnery.
7. TOPGUN Manual, Chapter 28, AIM-120.
8. ALSA JFIRE date January 2016.

CAIRS-1014	0	*	B	(N)	G
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Goal. Identify the components of the air picture.

Requirement. With the aid of reference, perform the following:

1. Define a track.
2. Identify the purpose of a track number.
3. Identify the definition of the Common Tactical Picture.
4. Describe the purpose of the Multi-TDL Network.

2. Active and Passive Air Defense.
3. Area Air Defense Plan.
4. The five types of air defense Weapon Engagement Zones.
5. The three subsets of Missile Engagement Zones.
6. The six components of an IADS.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JP 3-01, Countering Aircraft and Missiles.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 10-10B, MTTP for an Integrated Air Defense System (IADS).

CAIRS-1020 0 * B (N) G

Goal. Extract critical information from operations documents.

Requirement. With the aid of references, perform the following:

1. Extract direct air support information from an Air Tasking Order (ATO).
2. Extract direct air support information from an Airspace Control Order (ACO).
3. Extract Multi-TDL network information from an OPTASK LINK.
4. Extract information from ANNEX K of an Operations Order.
5. Extract direct air support communication information from the ACEOI.
6. Identify the communication path established between agencies.

Performance Standard. With the aid of references, pass a practical application exam without error.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. JP 6-0, Communications Systems.
2. MCTP 3-20F, Control of Aircraft and Missiles.
3. MCWP 3-25.3, MACCS Handbook.
5. MCTP 3-30A, Command and Staff Action.
6. MCTP 3-30B, Information Management.
7. MCRP 3-30B.2, MAGTF Communication System.
8. Guide to the USMTF User Formats - OPERATIONAL TASKING LINKS.
9. DISA USMTF Baseline, <https://www.us.army.mil/suite/community/15897960>.
10. CJCSM 6120.01, Joint Multi TDL Operating Procedures.
11. MIL-STD-6040, USMTF Interface Standard.

CAIRS-1022 0 * B (N) G

Goal. Define elements of information exchange within the MAGTF Communications System.

Requirement. With the aid of reference, perform the following:

1. Identify the four classes of information.
2. Identify the characteristics of quality information.

- d. Identify the procedures used within the DASC to report enemy Electronic Attack operations.
6. Control of Aircraft and Missiles.
 - a. Marine Corps' philosophy for Command and Control.
 - b. Purpose for Control of Aircraft and Missiles.
 - c. Structure of the MACCS and each agency's purpose.
 - d. Which agencies of the MACCS utilize positive control.
 - e. Which agencies of the MACCS utilize procedural control.
 - f. Agencies responsible for command and control of expeditionary operations.
 - g. Definitions of Air Direction and Air Control.
 - h. Become familiar with the Theater Air-Ground System (TAGS).
 - i. Become familiar with the doctrine for command and control of expeditionary operations.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JP 1-02, Joint Dictionary of Definition and Terms.
2. JP 3-02, Amphibious Operations.
3. JP 3-09.3, Close Air Support.
4. JP 3-13.1, Electronic Warfare.
5. JP 3-30, Command and Control of Joint Air Operations.
6. JP 3-50, Personnel Recovery.
7. JP 3-52, Joint Airspace Control.
8. JP 6-0, Communications Systems.
9. MCDP 3, Expeditionary Operations.
10. MCRP 1-10.2, Marine Corps Supplement to DOD dictionary of military and associated terms.
11. MCRP 2-10B.5, Imagery Intelligence.
12. MCTP 3-01B, Helicopterborne Operations.
13. MCWP 3-10, Ground Combat Operations.
14. MCWP 3-20, MAGTF Aviation Operations.
15. MCTP 3-20C, Anti-Air Warfare.
16. MCTP 3-20D, Offensive Air Warfare.
17. MCRP 3-20D.2, Deep Air Support.
18. MCTP 3-20E, Assault Support.
19. MCTP 3-20F, Control of Aircraft and Missiles.
20. MCTP 3-20G, Air Reconnaissance.
21. MCRP 3-20.1, MTTP for the Theater Air-Ground System (TAGS).
22. MCRP 3-20.5, Unmanned Aircraft Systems Operations.
23. MCTP 3-30A, Command and Staff Action.
24. MCTP 3-30B, Information Management.
25. MCRP 3-30B.2, MAGTF Communication Systems.
26. MCRP 3-31.2, Suppression of Enemy Air Defenses (SEAD).
27. MCRP 3-31.3, MTTP for J-SEAD.
28. MCRP 3-31.6, MTTP for Joint Application of Firepower(JFIRE).
29. MCWP 3-32D.1, Electronic Warfare.
30. MCTP 10-10B, MTTP for an Integrated Air Defense System (IADS).
31. CJCSM 6120.01, Joint Multi TDL Operating Procedures.

CAIRS-1026 0 * B (N) G

Goal. Introduce airspace, navigation, and time.

Requirement. Describe the National Airspace System (NAS), time conversions, and basic navigation.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80V-49, Air Navigation.

CAIRS-1028 0 * B (N) G

Goal. Introduce weather as applied to MACCS.

Requirement. Describe aviation weather to include:

1. Basic weather characteristics.
2. Weather hazards.
3. Aviation weather observations.
4. Aviation weather forecasts.
5. Weather advisories.
6. Weather observing programs.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVMETOCCOMINST 3141.2, Surface Weather Observation Procedures.

CAIRS-1030 0 * B (N) G

Goal. Introduce the Training and Readiness (T&R) Manual.

Requirement. Describe the T&R Program.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCO P3500.14, Aviation T&R Program.
2. NAVMC 3500.14_, Aviation T&R Program Manual.
3. Marine Sierra Hotel Aviation Readiness Program (MSHARP).

CAIRS-1032 0 * B (N) G

Goal. Conduct Information Security.

Requirement. With the aid of reference, perform the following:

1. Define information security.
2. Identify the components of information security.
3. Define communications security (COMSEC).
4. Identify the purpose of cryptographic security (CRYPTOSEC).
5. Identify the purpose of cryptographic keys.
6. Identify the purpose of code words.
7. Identify the purpose of user encryption keys.
8. Conduct message encryption.
9. Conduct message decryption.
10. Identify source documents for code words.
11. Identify the purpose of transmission security (TRANSSEC).
12. Describe the theory of frequency hopping operations.
13. Identify the purpose of radio discipline.
14. Identify the purpose of Radio/Telephone procedures.
15. Identify the purpose of brevity code words.
16. Describe the meaning of a given direct air support brevity code word.
17. Describe the appropriate response to enemy jamming.
18. Describe the method to report enemy jamming.
19. Identify the purpose of user authentication systems.
20. Conduct user authentication.
21. Conduct user time authentication.
22. Identify the purpose for disbursing communications equipment.
23. Identify the security concerns for wire transmissions.
24. Describe emission security techniques.
25. Define physical security.
26. Describe physical security measures.

Performance Standard. With the aid of reference, pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCRP 3-30B.2, MAGTF Communication System.
2. CJCSM 3320.02B, Joint Spectrum Interference Resolution (JSIR) Procedures.
3. KTCL Handling and Operating Instructions.
4. TM 12041A/12050A-OD2, CAC2S User Manual.

CAIRS-1034 0 * B (N) G

Goal. Introduce basic radar services provided by the MACCS.

Requirement. Describe basic radar services and procedures.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

1. AFTTP 3-1, Threat Guide.

2.7.4 AIR TRAFFIC CONTROL (ATC) STAGE.

2.7.4.1 Purpose. To provide entry-level classroom instruction on ATC concepts, regulations, procedures, and operating techniques as well as MATC doctrine and capabilities. The instruction ensures understanding and application of MATC rules and regulations required for a controller to qualify and perform ATC functions at a MATCD or MCAS.

2.7.4.2 General.

Prerequisite. None.

Administrative Notes. Written and practical exams shall be passed with a minimum score of 70%, unless otherwise specified.

Crew Requirements. None.

ATC-1100	0	*	B	(N)	G
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Goal. Introduce basic fundamentals.

Requirement. Describe the eligibility requirements, ATC facilities and services.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVMETOCCOMINST 3141.2, Surface Weather Observation Procedures.

ATC-1105	0	*	B	(N)	G
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Goal. Introduce weather as applied to ATC.

Requirement. Describe aviation weather to include:

1. Basic weather characteristics.
2. Weather hazards.
3. Aviation weather observations.
4. Aviation weather forecasts.
5. Weather advisories.
6. Weather observing programs.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVMETOCCOMINST 3141.2, Surface Weather Observation Procedures.

ATC-1110 0 * B (N) G

Goal. Introduce airspace, navigation, and time as applied in ATC.

Requirement. Describe the National Airspace System (NAS), time conversions, and basic navigation.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80V-49, Air Navigation.

ATC-1115 0 * B (N) G

Goal. Introduce special use airspace (SUA) used by the military.

Requirement. Describe SUA and controller responsibilities within each.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1120 0 * B (N) G

Goal. Introduce navigational aids (NAVAIDS).

Requirement. Describe basic radio theory and NAVAIDS.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-112, NATOPS Instrument Flight Manual.

ATC-1125 0 * B (N) G

Goal. Introduce charts and publications used in ATC.

Requirement. Given aeronautical charts and publications, locate information and complete statements per the Flight Information Publications (FLIP) program.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. General Planning (GP) section of DOD Flight Information Publication Program (FLIP).
2. 14 CFR Part 91, General Operating and Flight Rules.
3. 14 CFR Part 93, Special Air Traffic Rules.

ATC-1130 0 * B (N) G

Goal. Introduce communications as applied in ATC.

Requirement. Describe communication procedures used in ATC.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1135 0 * B (N) G

Goal. Introduce airport design and ATC equipment.

Requirement. Describe airport design and ATC equipment.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. UFC 2-000-05N (Appendix E, P-80.3), Airfield Safety Clearance.
3. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.
4. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
5. JO 7210.3, Facility Operation and Administration.

ATC-1140 0 * B (N) G

Goal. Introduce general control tower procedures.

Requirement. Describe general MATC procedures to include:

1. General control.
2. Weather information.
3. Federal Aviation Regulation (FAR) Part 91.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.
2. CFR Part 91, General Operating and Flight Rules.
3. OPNAVINST 3710.7, Naval Air Training and Operating Procedures Standardization Program.

ATC-1145 0 * B (N) G

Goal. Introduce ATC terminal procedures.

Requirement. Select statements that describe general MATC procedures used in a terminal environment.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1150 0 * B (N) G

Goal. Introduce emergencies and special handling.

Requirement. Describe handling of emergency aircraft and special situations in a control tower environment.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. OPNAVINST 3710.7, Naval Air Training and Operating Procedures Standardization Program.

ATC-1155 0 * B (N) G

Goal. Introduce non-radar procedures.

Requirement. Describe general non-radar procedures as applied in MATC.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1160 0 * B (N) G

Goal. Pass the Airmen's Written Test (AWT).

Requirement. Conduct a review of all information taught in ATC-1100 through ATC-1155.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. 14 CFR Part 65, Certification: Airmen Other Than Flight Crewmembers.
3. 14 CFR Part 67, Medical Standards and Certification.
4. 14 CFR Part 91, General Operating and Flight Rules.

ATC-1200 0 * B (N) G

Goal. Control tower indoctrination.

Requirement. Describe the different operating positions in a control tower and the individual responsibilities of each.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ATC-1205 0 * B (N) G

Goal. Control tower indoctrination.

Requirement. Perform IAW FAAO JO 7110.65 and applicable instructions while observing all safety precautions on the following operating positions:

1. Flight Data.
2. Ground Control.
3. Local Control.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ATC-1210 0 * B (N) G

Goal. Introduce basic radar knowledge.

Requirement. Complete the following:

1. Describe the different operating positions in a radar ATC facility.
2. Define basic radar theory.
3. Identify associated equipment.

Performance Standard. Perform the requirements.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ATC-1305 0 * B (N) G

Goal. Introduce basic radar services provided by ATC.

Requirement. Describe basic radar services and procedures.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1310 0 * B (N) G

Goal. Introduce the airport surveillance radar (ASR).

Requirement. Describe terms and procedures used by an ASR Final Controller.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1315 0 * B (N) G

Goal. Perform airport surveillance radar (ASR) services.

Requirement. Perform as a final controller in accordance with FAAO JO 7110.65 while observing all safety precautions.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. 1305, 1310.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1320	0	*	B	(N)	G
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Goal. Introduce the precision approach radar (PAR).

Requirement. Describe terms and procedures used by a PAR Final Controller.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1325	0	*	B	(N)	G
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Goal. Perform PAR services.

Requirement. Perform as a final controller in accordance with FAAO JO 7110.65 while observing all safety precautions.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. 1305, 1320.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1330	0	*	B	(N)	G
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Goal. Introduce arrival control.

Requirement. Describe terms and procedures used by an Arrival Controller.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1335 0 * B (N) G

Goal. Perform arrival control services.

Requirement. Perform as an Arrival Controller in accordance with FAAO JO 7110.65 while observing all safety precautions.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. 1305, 1330.

Reference.

1. JO 7110.65, Air Traffic Control.

2.7.5 MARINE AIR TRAFFIC CONTROL OFFICER (MATCO) STAGE

2.7.5.1 Purpose. To provide the MATCO with the background and understanding of the Marine air command and control system (MACCS) and the MATCD to effectively employ and manage MATCD assets in a deployed environment.

2.7.5.2 General

Prerequisite. None.

Administrative Notes. Written and practical exams in this stage shall be passed with a minimum score of 70%.

MATCO-1400 0 * B (N) G

Goal. Introduce the organization of MATC within the Marine Air Control Group and Marine Corps.

Requirement. Describe the organizational structure of MATC.

1. Supporting Establishments (NAVFIG, MAWTS-1, APX-8, MCICOM).
2. MACS Organization (MACS-1, 2, 4, 24)
3. FAP Agreement.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. OPNAVINST 3770.2, Department of the Navy Airspace Procedures and Planning.

MATCO-1401	0	*	B	(N)	G
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Goal. Introduce NATOPS Publication.

Requirement. Describe the management of an ATC Facility and the FAA flight inspection program, to include:

1. Types/priorities of flight inspections.
2. Periodicity of periodic flight inspections.
3. Post-flight inspection actions.
4. Facility status classification.
5. Military contingency.
6. Billet descriptions.
7. Unit NATOPS evaluation.
8. Control authority.
9. Integration into the national airspace system.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. JO 7110.65, Air Traffic Control.
3. JO 7400.2, Procedures for Handling Airspace.
4. FAAO 8200.1, US Standard Flight Inspection Manual.
5. MCO 3302.1, USMC Antiterrorism (AT) Program.

MATCO-1402 0 * B (N) G

Goal. Introduce personnel certification and MOS revocation.

Requirement. Identify controller qualifications and standard, and describe the controller revocation process.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. 14 CFR Part 65, Certification: Airmen Other Than Flight Crewmembers.
2. FAAO 7220.1, Certification and Rating Procedures for DoD Personnel.
3. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
4. NAVMED P-117, Manual of the Medical Department.
5. BUMEDINST 5300.8, Disposition of Rehabilitated Alcohol Dependent or Abuser Aircrew, Air Controller, Hypobaric Chamber Inside Observers and Instructors.
6. FAAO 8000.90, AOV Credentialing and Control Tower Operator Certification Programs.
7. ATC Policy Letter 1-19 dtd 14 Jun 19

MATCO-1403 0 * B (N) G

Goal. Introduce the training process.

Requirement. Determine training personnel requirements and explain the facility training Program.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local ATC Facility Manual.

MATCO-1404 0 * B (N) G

Goal. Introduce the Training and Readiness (T&R) Manual.

Requirement.

1. Discuss the purpose of the T&R manual.
2. Discuss how T&R assists unit commanders in preparation of unit training programs.
3. Discuss the purpose of MSHARP.
4. Discuss the MACS mission statement and MATC METs.
5. Discuss CMMR as it relates to MATC combat Readiness.
6. Discuss unit combat readiness reporting procedures.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCO P3500.14, Aviation T&R Program.
2. NAVMC 3500.14_, Aviation T&R Program Manual.
3. NAVMC 3500.94, Marine Air Traffic Control T&R Manual.
4. Marine Sierra Hotel Aviation Readiness Program (MSHARP).

MATCO-1405 0 * B (N) G

Goal. Introduce maintenance as it relates to MATC.

Requirement. Describe maintenance procedures:

1. Organization of supply procedures.
2. NAMP.
3. NAALS.
4. DOD Funding Sources
 - a. Blue dollar (AMSRR)
 - b. Green dollar (GCSS)

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. NAVSUP P-485, Naval Supply Procedures.
2. NAVSUP P-409, The Military Standard Requisitioning and Issue Procedures Desk Guide.
3. NAVICP 4441.170, Coordinated Shipboard Allowance List Use and Maintenance Manual.
4. FedLog User's Manual.

MATCO-1406	0	*	B	(N)	G
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Goal. Introduce inspection programs.

Requirement. Describe the NAALS program, and the elements of an aviation maintenance management team.

1. NAMP inspection.
2. FSMAO.
3. NATOPS.
4. CGI.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. OPNAVINST 3721.5, Naval Air Traffic Control Air Navigation Aid and Landing Systems Program.
2. OPNAVINST 4790.4, Ship's Maintenance and Material Management System Policy.

MATCO-1407 0 * B (N) G

Goal. Introduce Marine air traffic control company equipment.

Requirement. Describe the components and basic operation of the MATCD equipment.

1. RADAR.
2. NAVAIDS.
3. METOC.
4. Communications.
5. Utilities.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. NAVAIR 16-60TPN31A-2, Operator Manual, ATNAVICS, AN/TPN-31, Operations and Maintenance Instructions.
2. EE100-UQ-OMI-010, AN/TSQ-120 Air Traffic Control Central. NAVMC 3500.94B
3. NAVELEX 0913-LP-000-5010 TACAN AN/TRN-44 Technical Manual, Vol 1.
4. RLST Technical Manual AE-RLST-OMI-200.
5. NAVAIR 16-30TRN47-1.

6. 16-60TSQ216-100, RLST Organizational Level Deployment and Operating Procedures.
7. 16-60TSQ216-200, RLST Organizational Level Maintenance and Parts List vol 1.
8. 16-60TSQ216-210, RLST Organizational Level Maintenance and Parts List vol 2.
9. TM11082-OI Air Conditioner, B0014 ECU.
10. NAVAIR 19-45-5 Generator Set, PU-820/T.
11. TM9-6115-673-13&P.
12. 16-30TRN47-2.

MATCO-1408 0 * B (N) G

Goal. Introduce the concepts of employment for the MATCD.

Requirement. Identify and discuss the MATCD employment options in support of the MAGTF (IFR Det, Tower/TACAN, and MMT).

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

MATCO-1409 0 * B (N) G

Goal. Describe the four basing concepts for MAGTF forward operating bases.

Requirement. Identify planning considerations for an Air Base, Air Facility, Air Site, and Air Point.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. NAVAIR 00-80T-115, NATOPS Expeditionary Airfields.
2. MAWTS-1 AGS

MATCO-1410 0 * B (N) G

Goal. Discuss basic knowledge of the MMT.

Requirement. During a guided discussion:

1. Explain the historical background of the MMT.
2. Define the mission of the MMT.
3. Explain the functions of the MMT.
4. Explain the organization of the MMT.

Performance Standard. Discuss the steps in the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCRP 3-20F., Marine Air Traffic Control Detachment Handbook.
2. MMT TACSOP.
3. MAWTS-1 Course Catalog.

MATCO-1411 0 * B (N) G

Goal. Introduce MMT Landing Zone (LZ) Operations.

Requirement. During a guided discussion and given the reference:

1. Identify the billets and responsibilities associated with MMT.
2. Discuss assault landing zone (ALZ) operations.
3. Discuss helicopter landing zone (HLZ) operations.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MMT TACSOP.
2. MAWTS-1 Course Catalog.

MATCO-1412 0 * B (N) G

Goal. Introduce emission control (EMCON) in relation to MMT operations.

Requirement. During a guided discussion and given the reference:

1. Define EMCON.
2. Describe EMCON procedures as it relates to the MMT.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

- ### 1. MMT TACSOP.

MATCO-1413	0	*	B	(N)	G
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Goal. Discuss tactical communications terms and procedures.

Requirement. During a guided discussion and given the references:

1. Discuss the authentication process.
2. Define the term gingerbread.
3. Define the term chattermark.
4. Discuss the seven beadwindow codes.

Goal. Discuss forward arming and refueling point (FARP) operations.

Requirement. During a guided discussion and given the reference:

1. Explain the three types of aviation ground support (AGS) FARPs.
2. Explain aviation-delivered ground refueling (ADGR) operations.

Performance Standard. Demonstrate an understanding the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. MMT TACSOP.
2. NAVAIR 00-80T-109, Aircraft Refueling NATOPS Manual.
3. ANTTP 3-22.5, RW TACSOP.
4. ANTTP 3-22.3, KC-130 TACSOP.
5. MAWTS-1 Course Catalog.

MATCO-1417 0 * B (N) G

Goal. Complete the MATC NITE Lab course.

Requirement. While attending the MATC NITE Lab course:

1. Explain the basic operating principles of NVGs and their capabilities and limitations.
2. Explain the effects of the night environment on NVG performance.
3. Explain how human physiology impacts NVG operations.
4. Describe various misperceptions and illusions that occur when using NVGs operationally.
5. Describe the modifications required in order to make an ATC tower NVG compatible.
6. Be able to correctly preflight, adjust, and focus NVGs to provide maximum visual acuity.

Performance Standard. Demonstrate an understanding of the steps in the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. NITE Lab Instructor.

Prerequisite. None.

Reference.

1. MAWTS-1 NVD Manual.

MATCO-1418 0 * B (N) G

Goal. Describe the requirements for employing a Marine Air Traffic Control Mobile Team (MMT).

Requirement. Execute a mission analysis for MMT employment given a five paragraph order.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCO P3500.14, Aviation T&R Program.
2. NAVMC 3500.14_, Aviation T&R Program Manual.
3. NAVMC 3500.94, Marine Air Traffic Control T&R Manual.

2.8 CORE SKILL TRAINING PHASE (2000)

2.8.1 Purpose. To provide individual core skill training for the MATCO. This phase builds upon the foundation laid out during the core skill introduction phase. The MATCO also attains a broadened understanding of the garrison ATC facility (ATCF), its operation, and its management. This stage lays the groundwork for further employment with the MATCD. This phase also provides a working knowledge of TERPS.

2.8.2 General

2.8.2.1 Prerequisite. The Marine ATC trainee must have a current aeromedical clearance, valid ATCS, and be eligible for a secret security clearance.

2.8.2.2 Admin Notes. Shall adhere to the following:

1. Utilize a fully qualified/proficient crew (as appropriate).
2. MATCDs/ATCFs shall develop written examinations (for events requiring testing) and practical applications to evaluate events; at a minimum, they shall encompass the event requirement and performance standard. Examinations may be developed to encompass knowledge requirement of all events in this stage or to assess each event separately.

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

PAR NO.	STAGE NAME	PAGE NUMBER
2.8.3	ORIENTATION (ORNT)	2-61
2.8.4	EQUIPMENT (EQPT)	2-62
2.8.5	EXPEDITIONARY (EXPD)	2-69
2.8.6	COMMUNICATIONS (COMM)	2-75
2.8.7	TERMINAL INSTRUMENT PROCEDURES (TERPS)	2-78
2.8.8	AIRSPACE LIAISON OFFICER (ALO)	2-80
2.8.9	COMMAND AND CONTROL SYSTEMS (C2SYS)	2-82

2.8.3 ORIENTATION (ORNT) STAGE

2.8.3.1 Purpose. To provide the MATCO the initial knowledge required to understand the basics of ATC. This stage familiarizes controllers with general and location specific information as it applies to the ATCF.

2.8.3.2 General

Prerequisites. None.

Admin Notes. None.

Crew Requirements. None.

ORNT-2000 2.0 * B (N) G

Goal. Identify common ATC knowledge applicable to the control tower and radar ATC facility (RATCF).

Requirement. Complete the locally developed orientation training block.

Performance Standard. Pass a written exam.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Local directives.

2.8.4 EQUIPMENT (EQPT) STAGE

2.8.4.1 Purpose. To provide the MATCO with the basic knowledge of ATC equipment. This stage facilitates an understanding of the capabilities and utilization of equipment organic to the MATCD and ATCF. The stage is composed of familiarization with all the equipment employed by the MATCD and at the assigned ATCF.

2.8.4.2 General

Prerequisites. None.

Admin Notes. None.

Crew Requirements. None.

EQPT-2001	1.0	*	B	(N)	G
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Goal. Describe MATCD equipment.

Requirement. Given a list of MATCD equipment, identify and discuss the employment of each piece of equipment to include:

1. Generators.
2. Vehicles.
3. Mobile Maintenance Facility vans.
4. AN/TRN-44 TACAN.
5. AN/TRN-47 TACAN.
6. AN/TSQ-120 Air Traffic Control Central (Expeditionary Control Tower).
7. AN/TSQ-216 Remote Landing Site Tower.
8. AN/USQ-218 TWR Remote Kit.
9. AN/TPN-31 ATNAVICS.
10. AN/TSQ-263.
11. AN/TYQ-164 ADLS.
12. AN/TMQ-56 METEMF(R) NEXGEN.
13. AN/UMK-4(V)4 TESS/NITES.
14. ATNAVICS simulator.

Performance Standard. Identify each item and its concept of employment as it applies to varying levels of MATCD deployment.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2002 1.0 * B (N) G

Goal. Identify the capabilities and limitations of the AN/TSQ-120.

Requirement. Given the TSQ-120, identify and explain the following:

1. Number of operating positions supported and describe each.
2. Number of radios and nomenclature for each.
3. Number of radio nets and frequency spectrum breakdown.
4. Identification and number and types of landlines.
5. Recording equipment and its capabilities.
6. Weather reporting equipment and its capabilities.
7. ALDIS lamp.
8. ATIS.
9. Bailout alarm.
10. Configuration options.
11. Auxiliary support requirements for continuous operation.
12. Environmental limitations.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. EE100-UQ-OMI-010, AN/TSQ-120 Air Traffic Control Central.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2003 4.0 * B, M (N) L

Goal. Operate fixed control tower structure equipment.

Requirement. While in a fixed tower and given the required equipment, operate the following:

1. Operate Airfield lighting and visual landing aids control.
2. Use Digital Altimeter Setting Indicator (DASI), Wind direction and speed indicator, and Digital reading clock.
3. Navigational aide monitor(s) (unless located in the radar room), and identify equipment status.
4. Read weather dissemination or display device, Wind direction and speed indicator, and Automatic Terminal Information Service (ATIS).
5. Utilize counters for recording aircraft operations.
6. Operate tower radar display.
7. Operate Aircraft control, Inter/Intrafacility, Emergency communications and Crash/fire Net.
8. Operate Flight Data Input/Output (FDIO), and Flight progress strip Holders.
9. Operate VISCOM, Waveoff light controls (FLOLS and wheels-up/waveoff lights), and Air traffic control signal lamp.

10. Use Crash phone, crash alarm, evacuation alarm controls, and Crash grid per NAVAIR 00-80R-14.
11. Remote video camera display.
12. Use Binoculars (at least two pair of 7×50 power or stronger shall be available to control tower personnel).

Performance Standard. Complete the required items IAW the reference. Proper operation was demonstrated with no assistance from the instructor.

Instructor. BI.

Prerequisite. None.

References.

1. Applicable equipment operator manuals.
2. Local publications.

EQPT-2005	1.0	*	B	(N)	G
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Goal. Identify the capabilities of the AN/TSQ-216.

Requirement. Given the AN/TSQ-216, identify and explain the following:

1. Number of operating positions supported and describe each.
2. Number of radios and nomenclature for each.
3. Number of radio nets and frequency spectrum breakdown.
4. Number and types of landlines.
5. Recording equipment and its capabilities.
6. Weather reporting equipment and its capabilities.
7. ALDIS lamp.
8. ATIS.
9. Bailout alarm.
10. Configuration options.
11. Auxiliary support requirements for continuous operation.
12. Remote capability of the RLST.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. NAVAIR 16-60TSQ216-100.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2006	2.0	*	B	(N)	G
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Goal. Identify the capabilities and limitations of the AN/TPN-31.

Requirement. Given the AN/TPN-31, identify and explain the following:

1. Configuration options.
2. Number of operating positions supported.
3. System software configuration options.
4. Number of radio nets and frequency spectrum breakdown.

5. Number and types of landlines.
6. Recording capabilities.
7. Weather reporting equipment.
8. Airport surveillance radar (ASR) capabilities.
9. Precision approach radar (PAR) capabilities.
10. Auxiliary support requirements for operating continuously.
11. Remote capability of the AN/TPN-31.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. NAVAIR 16-60TPN31A-2.
2. NAVAIR 16-60TPN31A-2-1.
3. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2009	3.0	*	B	(N)	G
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Goal. Identify the capabilities and limitations of the AN/TSQ-263.

Requirement. Given the AN/TSQ-263, identify and explain the following:

1. Set-up time and requirements.
2. Configuration options.
3. Number of operating positions supported.
4. Auxiliary support requirements for operating continuously.
5. Remote capability of the AN/TSQ-263.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. NAVAIR 16-60TSQ263-1.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2010	3.0	*	B	(N)	G
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Goal. Identify the capabilities and limitations of the AN/TMQ-56.

Requirement. Given the AN/TMQ-56 METEMF(R) NEXGEN, identify and explain the following:

1. Meteorological Doppler radar.
2. Stand-alone meteorological satellite capabilities.
3. Local sensing capabilities.
4. Remote sensing capabilities.
5. Upper-air sensing capabilities.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. EM000 CD OMP 010, METEMF(R) NEXGEN Operations and Maintenance Manual.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
3. MCWP 3-35-7, MAGTF Meteorology and Oceanography Support.

EQPT-2011	1.0	*	B	(N)	G
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Goal. Identify the capabilities and limitations of the MATCD Tactical Air Navigation (TACAN) sets.

Requirement. Given the TACAN sets, identify and explain the following for each TACAN:

1. Configuration options.
2. Proper nomenclature.
3. Frequency spectrum.
4. Expected range and factors affecting range.
5. Power requirements.
6. Factors relating to site placement.
7. Electronic protection measures.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. NAVELEX 0913-LP-000-5010 TACAN AN/TRN-44 Technical Manual, Vol 1.
2. 16-30TRN47-1
3. 16-30TRN-47-2
4. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2012	1.0	*	B	(N)	G
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Goal. Identify the capabilities and limitations of the AN/MRQ-13.

Requirement. Given the AN/MRQ-13, identify and explain the following:

1. Configuration options.
2. Proper nomenclature.
3. Frequency spectrum.
4. Expected range and factors affecting range.
5. Power requirements.
6. Factors relating to site placement.
7. Electronic protection measures.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. TM 12039A/12041A/12045A-14/1 Operator and Field Maintenance Manual for Communication System
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2019 12.0 * B, M (N) L

Goal. Operate flight data and radar equipment.

Requirement. Given the required flight data and radar equipment, conduct the following (as applicable):

1. Use telephones.
2. Operate FDIO to include:
 - a. Input flight plans.
 - b. Amend flight plans.
 - c. Weather report.
 - d. General information message.
 - e. Hold message.
 - f. Departure message.
 - g. Progress report.
 - h. ARTS force flight progress data.
 - i. Restore database.
 - j. Stereo flight plan.
 - k. Input station altimeter.
1. Remove flight plan.
3. Configure the ASR scope for daily operations.
4. Configure PAR for daily operations.
5. Read altimeter, wind instruments, and clock information.
6. Ensure NAVAID monitors are operating properly, read indicators, and identify equipment status.
7. Operate the weather reporting monitor to extract information.
8. Operate the VISCOM.
9. Perform alignment checks.

Performance Standard. Complete the requirement items IAW the reference. Proper operation was demonstrated with no assistance from the instructor.

Instructor. BI.

Prerequisite. None.

Reference.

1. Applicable equipment operator manuals.

EQPT-2022 2.0 * B (N) L

Goal. Operate the dynamic cone penetrometer (DCP).

Requirement. Given a DCP and the references:

1. Describe the purpose and use of the DCP.
2. Describe the components of the DCP.
3. Operate the DCP.

4. Record measurements from a DCP for 5 locations to a depth of 36 inches.

Performance Standard. Complete the requirement items IAW the references.

Instructor. BI.

Prerequisite. None.

References.

1. DCP User's Manual.
2. Engineering Technical Letter 2-19, Airfield Pavement Evaluation Standards and Procedures.

EQPT-2023 2.0 * B (N) L

Goal. Operate a laser range finder (LRF).

Requirement. Given a LRF and the references:

1. Describe the purpose and use of a LRF.
2. Describe the modes and programming of a LRF.
3. Operate a LRF.
4. Record five measurements for obstacles or terrain, including distance and height above observer location.

Performance Standard. Complete the requirement items IAW the references.

Instructor. BI.

Prerequisite. None.

Reference.

1. LRF User's Manual

EQPT-2026 2.0 * B (N) L

Goal. Employ the MATCD TACANs.

Requirement. Given the AN/TRN-47 TACAN and generator:

1. Describe the purpose and use of the TACAN.
2. Identify the components and capabilities of the TACAN and generator.
3. Operate the generator.
4. Assist a NAVAIDS technician in the setup of the TACAN for operations.

Performance Standard. Complete the requirement items IAW the references.

Instructor. BI.

Prerequisite. None.

External Syllabus Support. ATC 5952.

Reference.

1. NAVAIR 16-30TRN47-1.

EQPT-2031 1.0 1460 B, R, M NS L

Goal. Perform ATC duties.

Requirement. During ATC operations, with the aid of a NVD:

1. Identify the position of an aircraft on movement areas using visual references.
2. Determine the position of an aircraft in flight with respects to the VFR pattern and position reports received from aircraft.
3. Demonstrate safe, orderly, and expeditious control of aircraft operating in assigned airspace.

Performance Standard. Complete the requirement items IAW the references.

Instructor. BI.

Prerequisite. 6520.

Reference.

1. MAWTS-1 Night Vision Device Manual.

2.8.5 EXPEDITIONARY (EXPD) STAGE

2.8.5.1 Purpose. To provide the MATCO with basic knowledge on the employment of the MATCD within the Marine Air Command and Control System (MACCS). It further includes familiarization of the TACC, TAOC, DASC, LAAD, and UAS operations; and applicable administrative/operational processes. It also includes significant information on the processes and administration of employing the MATCD.

2.8.5.2 General

Prerequisites. None.

Admin Notes. None.

Crew Requirements. None.

EXPD-2101	4.0	*	B	(N)	G
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Goal. State the considerations required to conduct a MATCD site survey.

Requirement. Describe the elements of a site survey necessary to deploy the MATCD, considering the following requirements:

1. Mission.
2. Tower site with best view of landing surfaces and airspace.
3. Instrument procedure design requirements.
4. Radar/NAVAID sites that provide minimal terrain masking.
5. Radar coverage of assigned airspace and/or the AO.
6. Site security.
7. Support equipment.
8. Power requirements.
9. Fuel requirements.
10. Host site limitations.
11. Wind survival tie-down procedures.
12. Communications.
13. Site location requirements to include:
 - a. Bivouac site.

- b. Field mess.
- c. Sanitation areas.
- d. Power sources.
- e. Improved areas for emplacement.
- f. Obstructions.
- g. Accessibility.
- h. Airfield restrictions.
- i. Heavy equipment requirements.

Performance Standard. Complete the requirement steps IAW the reference. The instructor will question and mentor the trainee throughout the instruction of the event.

Instructor. SI.

Prerequisite. 0563, 0700, 0703, 2001, 2002, 2005, 2006, 2009, 2011.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. Applicable operator manuals.

EXPD-2102 4.0 * B (N) G

Goal. Identify the purpose of required reports that are processed by the MATCD.

Requirement. Perform the following:

1. Define Battle Damage Assessment (BDA).
2. Identify three subcomponents of BDA.
3. Describe the types of information found in a mission report (MISREP).
4. Define Pilot Report (PIREP).
5. Identify COPS Cell associated with receiving engagement reports.
6. Identify the purpose of Joint Spectrum Interference Resolution (JSIR) report.
7. Identify which COPs watch standers will process Surface-to-Air Fire (SAFIRE) reports.

Performance Standard. Without the aid of reference, state (verbally or written) the requirement. Minor errors by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. MCTP 2-10B, MAGTF Intelligence Production and Analysis.
2. MCTP 3-20G, Air Reconnaissance.
3. MCRO 5-2A, Operational Terms and Graphics.
4. MCRP 3-20F.2, Marine Tactical Air Command Center Handbook.
5. CJCSI 3320.02, Joint Spectrum Interference Resolution.

EXPD-2104 2.0 365 B, R, M (N) S/L

Goal. Relay a completed casualty evacuation (CASEVAC) request.

Requirement. Given a blank CASEVAC request, the references, and scenario information:

1. State the purpose and use of a CASEVAC request.
2. Identify the information required for each line in a CASEVAC request.

3. Identify common submission procedures and methods of delivery.
4. Complete and relay the CASEVAC request information to the instructor verbally.

Performance Standard. Complete the requirement items IAW the reference. CASEVAC request must be completed with no errors.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-40A.7, Patient Movement.
2. ATP 4-25.13, Casualty Evacuation.

EXPD-2120 1.0 * B (N) G

Goal. Describe the configuration and operation of each MACCS agency.

Requirement. During an exercise or operation, observe an operational TACC. Identify its configuration and operational requirements.

Performance Standard. Conduct a guided discussion.

Instructor. SI.

Prerequisite. 8000.

References.

1. MCRP 3-20F.2, Marine Tactical Air Command Center Handbook.
2. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
3. MCRP 3-20F.5, Direct Air Support Center Handbook.
4. MCRP 3-20F.9, Low Altitude Air Defense (LAAD) Gunner's Handbook.

EXPD-2124 1.0 * B (N) G

Goal. Describe UAS operational requirements within the National Airspace System.

Requirement. During a guided discussion, discuss the following:

1. Federal Aviation Administration's requirements for operating a UAS in an ATC Facility tower airspace.
2. Federal Aviation Administration's requirements for operating a UAS in assigned airspace.
3. Purpose of a facility map, including the Certificate of Authorization process.
4. Five groups of U.S. military UASs, and what differentiates each group.

Performance Standard. Conduct a guided discussion.

Instructor. SI.

Prerequisite. None.

Reference.

1. MCRP 3-20.5, Unmanned Aircraft Systems Operations.

EXPD-2125 1.0 * B (N) G

Goal. State MATC company maintenance considerations in an operational environment.

Requirement. During a guided discussion and given the reference:

1. State the coordination requirements with HHQs in order to facilitate maintenance down-time of equipment.
2. State the method for off-setting radar downtime with other radars in theater in order to facilitate a continuous MAGTF airspace surveillance picture.
3. State the impact of limited ATC systems in regards to maintenance parts replacement.
4. State the coordination requirements with maintenance for the creation of power source and power plans.

Performance Standard. Complete the requirement items IAW the references. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EXPD-2126 4.0 * B (N) S/L

Goal. Develop a manning document for a MATC company.

Requirement. Given a scenario, develop a “billet only” manning document for the following echelons:

1. MMT.
2. Tower/TACAN Det.
3. PAR Det.
4. Arrival/Departure Det.
5. METOC Detachment.
6. Full IFR Detachment.

Performance Standard. Develop a manning document that meets mission requirements for the above echelons and are IAW the references.

Instructor. SI.

Prerequisite. 0565.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
3. MCRP 2-10B.6, MAGTF Meteorology and Oceanography Support.

EXPD-2127 8.0 * B (N) S/L

Goal. Provide a Concept of Employment (COE) Brief.

Requirement. Given a scenario and an operations order, develop a COE for the following echelons:

1. METOC Detachment.
2. Full IFR Detachment.
3. Tower/TACAN Detachment.

Performance Standard. Brief a COE for deployment of a MATC detachment to include Orientation, Situation, Mission, Execution, Administration and Logistics, and Command and Signal.

Instructor. SI.

Prerequisite. 0561, 0562, 0563, 0564, 0565, 0566, 0574, 0700, 0703, 0704, 0705.

Reference.

1. Local orders and directives.

EXPD-2128 4.0 * B (N) S/L

Goal. Develop an Equipment Density List (EDL) for a MATC company.

Requirement. Given a scenario and in conjunction with maintenance personnel, develop a Major End Item EDL for the following echelons:

1. Full IFR detachment.
2. Tower/TACAN detachment.
3. MMT.

Performance Standard. Develop a major end item EDL that supports each of the above echelons IAW the references.

Instructor. SI.

Prerequisite. 0562, 0704

Reference.

1. Local orders and directives.

EXPD-2129 2.0 730 B, R, M (N) S/L

Goal. Develop a Training Exercise and Employment Plan (TEEP).

Requirement. Given a list of training exercises, develop a TEEP that supports unit METs and includes the following for each event:

1. Name of exercise.
2. Number of personnel to be trained.
3. Major end items.
4. Training Objectives (T&R events).
5. MET trained.
6. Estimated cost.

Performance Standard. Develop a TEEP and exercise budget that provides opportunities for the unit to train to all its METs IAW the references.

Instructor. SI.

Prerequisite. 0566.

Reference.

1. Local orders and directives.

EXPD-2130 8.0 * B (N) G

Goal. Develop a Pre-deployment Training Program schedule.

Requirement. Given a scenario, develop a PTP schedule.

Performance Standard. Develop a PTP schedule that meets minimum USMC requirements within the timeframe provided.

Instructor. SI.

Prerequisite. None.

Reference.

1. PTP Order.
2. Local orders and directives.

EXPD-2131 1.0 * B (N) G

Goal. Identify tactical flight check requirements.

Requirement. Discuss the following requirements for a tactical flight check to be conducted:

1. Routing process and procedures.
2. Signing authorities.
3. Eligible Aircraft.

Performance Standard. Able to discuss requirements in order to conduct a tactical flight check and flight check certification process.

Instructor. SI.

Prerequisite. 2000

References.

1. FAAO 8200.1, US Standard Flight Inspection Manual.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Local orders and directives.

EXPD-2135 1.0 * B (N) S/L

Goal. Conduct a MATC Tactical crew brief.

Requirement. Prior to the beginning of a watch, conduct a crew brief to include, but not limited to, the following information:

1. Current/forecast weather.
2. Current/projected airport conditions.
3. Equipment status.
4. New facility directives.
5. Special operations.
6. Operating position/training assignments.
7. Identify air defense weapons conditions, control status.
8. Identify EMCON condition.
9. Identify security issues.
10. Conduct a brief.

Performance Standard. Complete the requirement items IAW the references.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Local directives.

2.8.6 COMMUNICATIONS (COMM) STAGE

2.8.6.1 Purpose. To provide the MATCO with the basic knowledge of the operation of MATCD communications equipment and associated COMSEC requirements. This training teaches MATCOs to utilize all communications equipment and EKMS/COMSEC protocol associated with the MATCD.

2.8.6.2 General.

Prerequisites. None.

Admin Notes. None.

Crew Requirements. None.

COMM-2200	4.0	730	B, R, M	(N)	L
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Goal. Operate UHF/VHF/SATCOM man-pack communications equipment.

Requirement. Given an UHF/VHF/SATCOM man-pack radio and the references:

1. Describe the purpose and use of an UHF/VHF/SATCOM man-pack radio.
2. Describe the capabilities and limitations of the man-pack radio.
3. Set up radio with applicable SL3.
4. Program radio and establish secure/non-secure UHF/VHF/SATCOM communications.
5. Demonstrate preventative maintenance procedures.

Performance Standard. Complete the requirement items IAW the references. Communication equipment was set up and programmed accurately and a radio check was performed without error.

Instructor. BI.

Prerequisite. 2210.

References.

1. Applicable equipment operator manuals.
2. Harris Premier website computer-based training.

COMM-2204	8.0	730	B, R, M	(N)	L
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Goal. Operate HF man-pack communications equipment.

Requirement. Given a HF man-pack radio and the references:

1. Describe the purpose and use of an HF man-pack radio.

2. Describe the capabilities and limitations of the radio.
3. Set up radio with applicable SL3.
4. Construct a field-expedient antenna.
5. Program radio and establish secure/non-secure HF communications.
6. Demonstrate preventative maintenance procedures.

Performance Standard. Complete the requirement items IAW the references. Communications equipment and field expedient antenna was set up and programmed accurately and a radio check was performed without error.

Instructor. BI.

Prerequisite. 2210.

References.

1. Applicable equipment operator manuals.
2. Harris Premier website computer-based training.
3. JSC-HDBK-98-091, Joint Spectrum Center Field Antenna Handbook.

COMM-2205 2.0 730 B, R, M (N) L

Goal. Operate intra-team communications equipment.

Requirement. Given an intra-team radio and the references:

1. Describe the purpose and use of an intra-team radio.
2. Describe the capabilities and limitations of the radio.
3. Set up radio with applicable SL3 gear.
4. Program radio and establish secure/non-secure intra-team communications.
5. Demonstrate preventative maintenance procedures.

Performance Standard. Complete the requirement items IAW the references. Communication equipment was set up and programmed accurately and a radio check was performed without error.

Instructor. BI.

Prerequisite. 2210.

Reference.

1. Applicable equipment operator manuals.

COMM-2206 2.0 * B (N) L

Goal. Operate ATC communications equipment.

Requirement. Operate the following communications equipment:

1. Transmitter/receiver control panel(s).
2. Backup/emergency transmitter/receiver location and controls.
3. Crash phone.
4. Intercom units.
5. Telephones.
6. VIDS (as applicable)

Performance Standard. Complete the requirement items IAW the references. Communication equipment was set up and programmed accurately and a line check was performed without error.

Instructor. BI.

Prerequisite. None.

Reference.

1. Applicable equipment operator manuals.

COMM-2208 2.0 * B (N) G

Goal. Describe proper handling and storage of classified materials.

Requirement. Given the references:

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 for TS material.
4. State storage procedures for each level of classification.
5. Identify transportation requirements for classified material.
6. State the sections of the SF-702.
7. Identify the approved security containers utilized for storage.
8. Identify the procedures for handling controlled cryptographic items (CCI).

Performance Standard. State the above requirement items without error.

Instructor. BI.

Prerequisite. None.

References.

1. SECNAVINST 5510.36, Department of the Navy Information Security Program Instruction.
2. EKMS-1, Electronic Key Management System.
3. MCO P5510.18, United States Marine Corps Information and Personnel Security Program Manual.
4. Unit EKMS SOP.

COMM-2209 2.0 * B (N) 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 local SOP and EKMS COMSEC callout, state the purpose of the EKMS COMSEC callout and identify the key information on the callout.

Instructor. BI.

Prerequisite. 2208.

References.

1. EKMS-1, Electronic Key Management System.
2. COMSEC callout.

COMM-2210 2.0 730 B, R, M (N) L

Goal. Operate a common fill device (CFD).

Requirement. Given a CFD, a tactical radio, and the references:

1. Describe the purpose and use of a CFD.
2. Identify the components of a CFD.
3. Transfer an encryption key to a tactical radio.

Performance Standard. Complete the requirement items IAW the references. Accurately transmit the encryption key and successfully conduct a secure radio check without error.

Instructor. BI.

Prerequisite. 2209.

Reference.

1. Applicable equipment operator manuals.

2.8.7 TERMINAL INSTRUMENT PROCEDURES (TERPS) STAGE

2.8.7.1 Purpose. To provide the MATCO with a functional understanding of the TERPS process and requirements. It encompasses training events required for the knowledge and skills to support the terminal instrument procedures specialist at the ATCF or while deployed with a MATCD.

2.8.7.2 General.

Prerequisistes. None.

Admin Notes.

1. The events in this stage are the same as in the enlisted TERPS stage. This ensures the MATCO has the same background understanding the TERPS specialist will have, but does not take the MATCO through the full process of developing approaches.
2. ATCFs and MATCDs shall develop written examinations for events requiring testing. Exams shall encompass, at a minimum, the event requirement and standard, including the use of the references listed. ATCFs and MATCDs shall develop scenarios that provide practical application to support the training requirements of this manual.

Crew Requirements. None.

TERPS-2500 2.0 * B (N) G

Goal. Identify the roles of organizations that support the development, approval and inspection of instrument procedures.

Requirement. Describe the roles of the organizations involved in instrument procedures to include:

1. MATCD.
2. Regional ATC T&R Office.
3. Host nation authorities.
4. Naval Flight Information Group (NAVFIG).
5. FAA Flight Standards Services, AFS-420.
6. FAA Flight Inspection Office.

Performance Standard. Pass an open-book written examination.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).

TERPS-2501 2.0 * B (N) G

Goal. Identify required publications and their usage in developing Navy/Marine Corps terminal instrument procedures.

Requirement. Identify the usage of the following manuals in instrument procedure development and approval:

1. FAAO 8260.3.
2. NAVAIR 00-80T-114.
3. FAAO 8260.19.
4. NAVAIR 51-50AAA-2.
5. FAAO 8200.1.

Performance Standard. Pass an open-book written examination.

Instructor. SI.

Prerequisite. None.

References.

1. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. FAAO 8260.19, Flight Procedures and Airspace.
4. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.
5. FAAO 8200.1, US Standard Flight Inspection Manual.

TERPS-2502 2.0 * B (N) G

Goal. Explain the administrative policies which govern the development of terminal instrument procedures.

Requirement. Explain administrative policies governing procedure development, to include:

1. Eligibility, approval, and retention.
2. Responsibility and jurisdiction.
3. Establishment of instrument procedures.
4. Coordination for approval of instrument procedures.

5. Identification of procedures.
6. Publication of procedures.

Performance Standard. Pass an open-book written examination.

Instructor. SI.

Prerequisite. None.

Reference.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
3. FAAO 8260.19, Flight Procedures and Airspace.

TERPS-2503	8.0	*	B	(N)	G
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Goal. Identify the general requirements for submission and approval of terminal instrument procedures.

Requirement. Identify the requirements for submission and approval of instrument procedures, to include:

1. Aeronautical charting requirements.
2. Environmental impact.
3. NAVAID/facility utilization and monitoring.
4. Implementation of Epoch Year Magnetic Variation.
5. Quality/Standardization of instrument flight procedures.
6. Navigational fixes.
7. Periodic review requirements of instrument procedures.
8. Obstacle data and accuracy requirements.
9. Waivers of standards.
10. Designations of controlled airspace.
11. Construction of military procedures.
12. Form use and preparation.
13. Certification, processing and review.
14. Requirements for airfield marking/lighting.

Performance Standard. Pass an open-book written examination.

Instructor. SI.

Prerequisite. None.

Reference.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
3. FAAO 8260.19, Flight Procedures and Airspace.
4. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.

2.8.8 AIRSPACE LIAISON OFFICER (ALO) STAGE.

2.8.8.1 Purpose. To train the MATCO in the function and management of the ATCF. The training includes higher level positions in the ATCF to ensure the MATCO gains an understanding of the training required to achieve higher level qualifications and the process of training Marines on those positions. It also provides training in the radar and tower branches beyond the basic qualifications required of MATCOs.

2.8.8.2 General.

Prerequisite. 2000.

Administrative Notes. None.

Crew Requirement. None.

ALO-2600 25.0 * B (N) L/S

Goal. Describe the duties and responsibilities of the Tower Watch Supervisor (TWS).

Requirement. Complete the following IAW the reference:

1. Complete all academic training requirements in the TWS syllabus.
2. Conduct twenty-five hours of familiarization time, monitoring TWS.

Performance Standard. Complete the requirement items IAW the references. Live training will be conducted during both day and night conditions, with at least ten hours of training at night. Exams will be open book.

Instructor. BI.

Prerequisite. 0526, 0551, 0558, 0560, 6173.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Local directives.

ALO-2602 25.0 * B (N) L/S

Goal. Describe the duties and responsibilities of the Radar Watch Supervisor (RWS).

Requirement. Complete the following IAW the reference:

1. Complete all academic training requirements in the RWS syllabus.
2. Conduct twenty-five hours of familiarization time, monitoring RWS.

Performance Standard. Complete the requirement items IAW the references. Live training will be conducted during both day and night conditions, with at least ten hours of training at night. Exams will be open-book.

Instructor. BI.

Prerequisite. 0535, 0551, 0558, 0560, 6113.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Local directives.

ALO-2604 1.0 * B (N) L

Goal. Conduct a standard ATC crew brief.

Requirement. Prior to start of a standard watch shift, conduct a crew brief to include the following information:

1. Current/forecast weather.
2. Current/projected airport conditions.
3. Equipment status.
4. New facility directives.
5. Special operations.
6. Operating position/training assignments.
7. Conduct a brief.

Performance Standard. Complete the requirement items IAW the references.

Instructor. SI.

Prerequisite. 2600, 2602.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Local directives.

2.8.9 COMMAND AND CONTROL SYSTEM (C2SYS) STAGE

2.8.9.1 Purpose. To provide MATC personnel the knowledge and skills required to operate command and control systems employed within Marine Aviation.

2.8.9.2 General

Prerequisite. MARINENET Courses as indicated within the C2SYS events or the virtual MISTC POIs for the associated C2 system.

Administrative Notes.

1. Command and control system events are located in the MAWTS-1 C3 Course Catalog [reference (b)] in order to maintain standardized training across the MACCS. Specific events for MATC are listed in the chart below. C2SYS training is offered by MISTCs or provided during MISTEX, MEFEX, or other Marine aircraft wing TEEP events.
2. Due to the highly-perishable nature of command and control systems (C2SYS) skills, these events are required to be refreshed every 365 days (12 months) to remain current.

Crew Requirement. None.

C2SYS-2900	.5	*	B, R	(N)	G
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Goal. Demonstrate proficiency logging on a TBMCS client.

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Log in to a client.
2. Change password.
3. Access CAOC central.
4. Select or de-select the warnings that are displayed for login or application access.

Performance Standard. With the aid of references, complete the required items IAW the reference.

Instructor. BI.

Prerequisite. None.

Reference.

1. TBMCS User's Manual

C2SYS-2906 4.0 B, R (N) G

Goal. Demonstrate proficiency with the TBMCS Web Based Airspace Deconfliction Software (WEBAD).

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Initiate a WEBAD Session
2. Connect WEBAD to WebMap
3. Create an airspace group for the utilization of theater airspace in current and future operations (airspace group becomes the ACO)
4. Enter Airspace Coordinating Measures (ACMs)
5. Create ACMs circle, corridor, line, orbit, point, polygon, poly-arc, rad-arc, track
6. Provide ACM comments using the comments tab
7. Create an ACM using a map
8. Create, edit and copy a Filter
9. Move ACMs to another airspace group
10. Copy ACMs to another airspace group
11. Change the state of ACMs
12. Set ACMs time
13. Shift ACMs in time
14. Shift ACMs in location
15. Map ACMs connect to the map
16. Clear ACMs from the map
17. Display the legend
18. Create a deconfliction filter
19. Determine a conflict between ACMs
20. Specify the criteria for determining a conflict between ACMs
21. Determine if a conflict may exist among ACMs
22. Create, edit, and copy deconfliction filters
23. Generate and print a conflict report
24. Determine airspace deconfliction over multiple ACM Groups based on:
 - a. Mean Sea Level (MSL)
 - b. Above Ground Level (AGL) calculations
 - c. Display ACMs and associated conflicts on a map
25. Edit and copy the airspace group
26. Create, edit and copy, preferences
27. Edit or view ACMs by filtering using:
 - a. ACM Groups
 - b. ACM Types
 - c. ACM Usages
28. Export ACMs to a file
29. Release an ACO

30. Create an Airspace Control Order (ACO) message
31. Change ACO tab information
32. Change Declassification tab information
33. Release tab information
34. Preview the ACO before it is released and approved
35. Publish the ACO
36. Generate the ACO Message
37. Validate ACO Message Body
38. Release the ACO message to AATWEB
39. Generate an ACO change message
40. Change an existing ACO
41. Publish the ACO change
42. Generate the ACO change message
43. Validate ACO change message body
44. Release the ACO change message to AATWEB.
45. Delete the following:
 - a. An ACO and all its changes
 - b. An airspace usage
 - c. A filter
 - d. An airspace group
 - e. Deconfliction filters
 - f. User preference

Performance Standard. With the aid of references, complete the required items IAW the reference.

Instructor. BI

External Syllabus Support.

- (1) MAWTS-1 Air Tasking Order Development (ATOD) Course, MCAS Yuma, AZ
- (2) MISTC C2 TECOE: <https://www.29palms.marines.mil/Staff-Offices/MISTC29/>

Reference.

1. TBMCS User's Manual

C2SYS-2909 2.0 B, R (N) G

Goal. Demonstrate proficiency using the TBMCS Force Status and Monitoring (FSTAT) tool to monitor and update Friendly Order of Battle (FrOB) status.

Requirement. Given an operational TBMCS and training materials, the operator will report, display, and modify FrOB status:

1. Select and describe the below listed status webpages:
 - a. ADA (Air Defense Artillery) Unit Status.
 - b. Aircraft Unit Status.
 - c. Base Status.
 - d. Surface C2 Unit Status.
 - e. Missile Unit Status.
 - f. Fire Unit Status.
2. Perform the following FSTAT functions for a selected status webpage.

- a. Drag and drop setting of column display order
- b. Show/hide columns
- c. Multi-level column complex sort capability
- d. Quick sort by clicking on the column header
- e. Dragging to adjust column widths
- f. Automatic restore of GUI customization settings
- g. Local/Zulu selectable time display with user selectable time zone
- h. Multi-column, multi-value filtering
- i. Saving of user defined filters
- j. Visual indication of update status
- k. Table printing
- l. Copy of main table to clipboard for paste into Microsoft (MS) Excel
- m. Status bar with appropriate record counts, queued transaction counts, and connectivity status
- n. Color coding of status values
- o. Plotting of information to the associated map product

Performance Standard. With the aid of references, perform five of the required items for a selected status webpage.

Instructor. BI

External Syllabus Support.

- 1. MAWTS-1 Air Tasking Order Development (ATOD) Course, MCAS Yuma, AZ
- 2. MISTC C2 TECOE: <https://www.29palms.marines.mil/Staff-Offices/MISTC29/>

Prerequisite. None.

Reference.

- 1. TBMCS User's Manual

C2SYS-2910 2.0 * B, R (N) G

Goal. Demonstrate proficiency with the TBMCS Execution Status and Monitoring.

Requirement. Given an operational TBMCS and training materials, update data on an Air Battle Plan (ABP) in the Air Operations database (AODB), to include:

- 1. In graphical and tabular style, open multiple, independently configurable, filterable, sortable and nameable displays of the retrieved data.
- 2. Save and restore customizations such as column order, visible columns, filter definitions and custom status color mappings.
- 3. Plot air and missile routes.
- 4. Plot operations data such as airspace, targets, bases, and unit locations.
- 5. Update the Current Execution Status of any Tasked Air or Missile Mission in the Selected ABP.
- 6. Review previously archived versions of a mission including its currently tasked (replanned) version.
- 7. Use ESTAT to update the following mission information:
 - a. ABP State.
 - b. Air Mission Status.
 - c. Estimated and Actual Mission Event Times.
 - d. Air Mission Results.
 - e. Capability to Group Missions.
 - f. Number of Canceled and/or Added Aircraft.

- g. Actual Mission Configuration/Standard Configuration Load (SCL).
- h. Comments.
- i. Create, Edit, and Delete Mission Deviations.
- j. Ground Alert Response Time.
- k. Residual Mission Code.
- l. Create, Edit, and Delete Wide Area Geographic (WAG) Activities.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI.

Prerequisite. None.

Reference.

1. TBMCS User's Manual

C2SYS-2940 1.0 B, R (N) G

Goal. Demonstrate proficiency utilizing tactical chat.

Requirement. Given operational data architecture and a tactical chat application perform the following:

1. Initiate the tactical chat application.
2. Connect to a chat server.
3. Set up user preference.
4. Access channels on the tactical chat server.
5. Know and understand terms specific to tactical chat.
6. Know and understand the basic limitations and weaknesses of tactical chat.
7. Know and understand the standard tactical chat terminology and abbreviations.
8. Know and understand proper acknowledgement procedures of tactical chat communications.
9. Know and understand the basic troubleshooting steps of tactical chat.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects. (Note: no two tactical chat programs are the same, thus this event is dependent upon the designated instructor to implement this event in accordance with MEF/MAW or AOR standards)

Instructor. BI

Prerequisite. None.

References.

1. MCRP 3-40.2B Tactical Chat MTTP
2. Local SOP

C2SYS-2941 1.0 * B, R (N) G

Goal. Demonstrate proficiency operating Web Development Software (i.e., SharePoint).

Requirement. Given a workstation and a functional communications network, perform the following:

1. Use the Quick Launch Bar
2. Delete an item
3. Search the site for an identified object
4. Add a link
5. Edit a list item

6. Export list items to Outlook
7. Export list items to a spreadsheet
8. Use project tracking
9. Open a document
10. Edit a document
11. Check out a document
12. Check in a document
13. Create a new folder
14. Create a new document
15. Upload a document

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects. Requirement is met by completion of MISTC SharePoint I.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MISTC SharePoint I, II, III courses.

Reference.

1. SharePoint Users Guide: www.microsoft.com/sharepoint.

2.9 MISSION SKILL TRAINING (3000)

2.9.1 Purpose. This phase provides events for a MATCO to achieve required proficiency on the Tower Flight Data, Tower Ground Control, Radar Flight Data, Radar Final Control positions, and MMT leader events in order to be eligible for recommendation for qualification. Additionally, the MATCO also attains a broadened understanding of ATC administrative processes and other expeditionary events required for designation as a MATCD Watch Commander.

2.9.2 General.

2.9.2.1 Prerequisite. Attain core skill proficiency for the position being trained on.

2.9.2.2 Admin Notes. MATCDs/ATCFs shall develop written examinations (for event requiring testing) and practical applications to evaluate events; at a minimum, they shall encompass the event requirement and performance standard. Examinations may be developed to encompass knowledge requirement of all events in this stage or to assess each event separately.

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

PAR NO.	STAGE NAME	PAGE NUMBER
2.9.3	ADMINISTRATIVE (ADMN)	2-87
2.9.4	MATC MOBILE TEAM LEADER (MMTL)	2-90
2.9.5	EXPEDITIONARY (EXPD)	2-93
2.9.6	TOWER (TWR)	2-97
2.9.7	RADAR (RDR)	2-99

2.9.3 ADMINISTRATIVE (ADMN) STAGE

2.9.3.1 Purpose. To provide the trainee with advanced knowledge of ATC administrative procedures. This stage familiarizes controllers with administrative procedures required for ATC operations as they apply to both an ATCF and the MATCD.

2.9.3.2. General

Prerequisite. None.

Admin Notes. None.

Crew Requirement. None.

ADMN-3001	4.0	*	B	(N)	L/S
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Goal. Prepare a flight inspection/certification for an ATCF or MATCD.

Requirement. After reviewing the references or through preparation for the completion of a flight inspection, perform the following:

1. State the purpose of a flight inspection.
2. Request a flight inspection from the appropriate agency.
3. Ensure NAVAID/radar operational status.
4. Ensure development of terminal instrument procedures the NAVAID or radar supports.
5. Conduct pre/post-flight inspection briefs with designated flight inspection aircrew, if able.

Performance Standard. Complete the requirement steps IAW the references. The instructor will evaluate the trainee throughout the process with minimal input. The trainee is allowed minor correction.

Instructor. SI.

Prerequisite. 2131.

References.

1. FAA Handbook 8200.1, U.S. Standard Flight Inspection Directive.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Facility Manual.

ADMN-3002	4.0	*	B	(N)	G
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Goal. Discuss the preparation of a Letter of Agreement (LOA)/Letter of Procedure (LOP) and a Memorandum of Understanding (MOU).

Requirement. Given a scenario, prepare a LOA/LOP and a MOU:

1. Discuss the following for each:
 - a. Purpose.
 - b. Content.
 - c. Controlling agencies involved.
 - d. Distribution.
 - e. Applicability.
2. Explain the staffing process for each.
3. Review one LOA/LOP and one MOU with the instructor.

Performance Standard. Complete the requirement items IAW the reference.

Instructor. SI.

Prerequisite. None.

References.

1. SECNAVINST 5216.5, Correspondence Manual.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ADMN-3003 4.0 730 B, R, M (N) L

Goal. Prepare a Tactical flight inspection/certification.

Requirement. After reviewing the references or through preparation for the completion of a flight inspection, perform the following:

1. Identify tactical flight inspection profiles associated with permissive and restrictive environments.
2. Identify the approving authority.
3. Identify the differences between a tactical and a Federal Aviation Administration (FAA) flight inspection.
4. Prepare a tactical flight check request.

Performance Standard. Complete the requirement steps IAW the references. The instructor will evaluate the trainee throughout the process with minimal input. The trainee is allowed minor correction.

Instructor. SI

Prerequisite. 2131.

References.

1. United States Standard Flight Inspection Manual (USSFIM), FAA Order 8200.1C
2. NATOPS Air Traffic Control Manual, NAVAIR 00-80T-114

ADMN-3004 8.0 * B (N) L

Goal. Develop a Plan of Actions and Milestones (POA&M).

Requirement. Given an exercise, develop a POA&M with corresponding event completion timelines for all necessary items to include the following:

1. Planning conferences and progress reviews
2. EDL/UMD creations and submission dates
3. Mission analysis, AAR reviews
4. Personnel requirements
5. UIF requests, Personal effects inventory
6. Site Surveys
7. SIAP Data
8. Communications requirements
9. Frequency request
10. COMSEC callout, ACEOI review
11. Budget data sheets
12. LOAs/MOUs
13. Flight checks requests
14. External support requests
15. PTP timelines
16. COMMEX
17. Gears Shipment dates

18. Briefs (Quad, COE, CB)
19. Exercise CMR
20. TAD requests, DTS order generation
21. SAAR generation for SIPR tokens

Performance Standard. Complete all the requirements. Instructor will discuss each item with the trainee. The written plan must support the scenario.

Instructor. SI.

Prerequisite. 2101, 2125, 2126, 2127, 2128, 2129, 2130, 2131.

Reference.

1. Local directives.

ADMN-3006	1.0	*	B	(N)	G
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Goal. Discuss the FAA credentialing process.

Requirments. Discuss the following:

1. Duties and assignment of a designated examiner.
2. Duties and assignment of proficiency/co-proficiency manager.
3. Naval certification procedures.

Performance Standard. During a guided discussion, become familiar with the requirements.

Instructor. SI.

Prerequisite. None.

References.

1. JO 7220.1, Certification and Rating Procedures for DOD Personnel.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

2.9.4 MARINE AIR TRAFFIC CONTROL MOBILE TEAM LEADER STAGE

2.9.4.1 Purpose. To train a MATCO to a required level of proficiency for qualification as an MMT leader. A MATCO is taught the necessary skills and knowledge to conduct expeditionary, austere ATC operations and become familiar with equipment organic to the MMT.

2.9.4.2 General.

Prerequisite. None.

Admin Notes. None.

Crew Requirement. One MMT.

MMTL-3300	2.0	730	B, R, M	(N)	L
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Goal. Develop and issue a five paragraph order.

Requirement. Given required information, develop and issue a five paragraph order.

Performance Standard. Order complete and accurate with no errors.

Instructor. BI.

Prerequisite. 6046.

Reference.

1. MCRP 3-30.7, Commander's Tactical Handbook.

MMTL-3301 8.0 730 B, R, M (N) L

Goal. Conduct an assault zone survey and assessment.

Requirement. While at a landing zone, given a blank AF Form 3822, determine the following:

1. Required LZ coordinates.
2. Approach end, departure end and highest elevation of LZ.
3. Distances to and heights of obstructions.
4. Composition and California Bearing Ratio of the LZ.
5. Longitudinal and transverse gradients of the LZ.
6. Dimensions of the LZ.
7. LZ axis.
8. Landing threshold based on criteria and required slope ratio.
9. Complete AF Form 3822 and submit to the instructor for validation.

Performance Standard. Complete requirement items IAW the reference. Information must be accurately recorded and the form completed without error. Instructor will validate that the information supports landing zone criteria. AF Assault Zone Survey Course satisfies the event requirement.

Instructor. MMTI.

Prerequisite. 0576, 0577, 0578, 0579, 0580, 2023, 2313, 8000, 8020.

References.

1. MMT TACSOP.
2. MAWTS-1 Course Catalog.
3. UFC 3-260-01, Airfield and Heliport Planning and Design.
4. Engineering Technical Letter 04-7, C-130 and C-17 Landing Zone Dimensional, Marking and Lighting Criteria.
5. Engineering Technical Letter 02-19, Airfield Pavement Evaluation Standards and Procedures.

MMTL-3302 2.0 730 B, R, M (N) S/L

Goal. Complete joint tactical airstrike request (JTAR) and assault support request (ASR) forms.

Requirement. Given blank JTAR and ASR forms, the references, and scenario information, conduct the following:

1. State the purpose and use of a JTAR and ASR.
2. Identify the information required for each line in a JTAR and ASR.
3. Complete one pre-planned and one immediate JTAR.
4. Complete one ASR.
5. Verbally relay the JTAR and ASR to the instructor.

Performance Standard. Complete the required items IAW the reference. Each JTAR or ASR must be completed with no errors.

Instructor. MMTI.

Prerequisite. 8000, 8020.

Reference.

1. JP 3-09.3, Joint Tactics, Techniques, and Procedures for Close Air Support (CAS).

MMTL-3303 12.0 730 B, R, M (N) L

Goal. Perform as a MMT Leader during operational planning.

Requirement. During an operation or training exercise under the supervision of a qualified MMT Leader:

1. Coordinate with S-2, S-3, S-4, and S-6 for logistics, communications, and operational requirements.
2. Develop and issue a five paragraph order. Coordinate and brief aircrew and adjacent units.
3. Ensure personnel and equipment readiness.
4. Conduct rehearsals with the MMT.

Performance Standard. Complete the requirement items IAW the reference.

Instructor. MMTI.

Prerequisite. 2313, 2602, 2604, 6520, 8000, 8020, 6046.

Reference.

1. MMT TACSOP.

MMTL-3304 2.0 730 B, R, M (N) L

Goal. Perform as a MMT Leader during ALZ operations.

Requirement. During an operation or training exercise, conduct the following:

1. Execute movement to objective.
2. Conduct hasty LZ assessment to ensure required criteria exists.
3. Ensure LZ markings are accurately and rapidly established.
4. Ensure accurate establishment of NAVAIDS.
5. Ensure the establishment of the control point.
6. Ensure C2 communications are established and maintained.
7. Effect coordination with adjacent units.
8. Ensure communications with aircraft are established and maintained.
9. Ensure the LZ is sanitized and secure.
10. Ensure that LZ marking repair is accomplished as required.
11. Ensure rapid retrograde of the LZ.
12. Ensure LZ marking repair is accomplished, as required.
13. Ensure the team maintains a tactical posture with regard to security, noise, and light discipline.

Performance Standard. Complete the requirement items IAW the reference. Requirements were thoroughly accomplished in support of the operational requirements.

Instructor. MMTI.

Prerequisite. 0576, 0577, 0578, 0579, 0580, 2023, 2104, 2120, 2122, 2123, 2124, 2300, 2301, 2302, 2313, 2602, 2604, 3300, 6520, 8000, 8020.

Range. ALZ.

External Syllabus Support. ALZ-capable fixed-wing aircraft.

Reference.

1. MMT TACSOP.

MMTL-3305 2.0 730 B, R (N) L

Goal. Perform as a MMT Leader during FARP operations.

Requirement. During an operation or training exercise, conduct the following:

1. Execute movement to objective.
2. Ensure establishment of separation procedures for the FARP, to include:
 - a. Entry points.
 - b. Exit points.
 - c. Altitude de-confliction procedures.
 - d. Wave off procedures.
 - e. Lost communication procedures.
3. Establish and maintain integration with the FARP OIC and/or aircraft commander.
4. Ensure C2 communications are established and maintained.
5. Effect coordination with adjacent units.
6. Ensure communications with aircraft are established and maintained.
7. Ensure accurate establishment of NAVAIDs, as applicable.

Performance Standard. Complete the requirement items IAW the reference with minimal assistance. Requirements were accomplished thoroughly and in support of operational requirements.

Instructor. MMTI.

Prerequisite. 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0529, 0530, 0531, 0576, 0577, 0578, 0579, 0580, 2000, 2003, 2023, 2104, 2120, 2124, 2206, 2300, 2301, 2302, 2313, 3300, 3630, 6180, 6520, 8000, 8020.

Range. FARP.

External Syllabus Support. Fixed or rotary-wing aircraft.

Reference.

1. MMT TACSOP.

2.9.5 EXPEDITIONARY (EXPD) STAGE.

2.9.5.1 Purpose. To provide the MATCO with advanced knowledge on the planning and employment of the MATCD within MACCS.

2.9.5.2 General.

Prerequisite. None.

Admin Notes. None.

Crew Requirement. None.

EXPD-3400 8.0 730 B, R, M (N) L/S

Goal. Conduct a MATC company site survey.

Requirement. Conduct a site survey to include the following:

1. Mission.
2. Tower site with best view of landing surfaces and airspace.
3. Instrument procedure design requirements.
4. Radar/NAVAID sites that provide minimal terrain masking.
5. Radar coverage of assigned airspace and/or the AO.
6. Site security.
7. Support equipment.
8. Power requirements, fuel delivery procedures
9. Host site limitations.
10. Wind survival tie-down procedures.
11. Communications.
12. Site location requirements to include:
 - a. tent area, field mess, sanitation areas
 - b. power sources
 - c. improved areas for placement
 - d. obstructions
 - e. accessibility
 - f. airfield restrictions
13. Heavy equipment, crane, forklift requirements

Performance Standard. Complete the requirement steps IAW the reference.

Instructor. SI.

Prerequisite. 0561, 0572, 0574, 0704, 2101.

External Syllabus Support. Maintenance support, site survey equipment.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. Applicable operator manuals.

EXPD-3402	4.0	*	B	(N)	G
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Goal. Describe airspace coordination measures.

Requirement. Given an airspace control area (ASCA) and a scenario, during an operation, training, or simulated exercise, identify, and describe the designated air control measures (ACMs):

1. Base defense zones (BDZ).
2. Minimum risk routes (MRR).
3. High-density airspace control zone (HIDACZ).
4. Standard use Army aircraft flight routes (SAFFR).
5. Low-level transit routes (LLTR).
6. Amphibious objective area (AOA).
7. Multi-use control points.

Performance Standard. Complete the requirement items IAW the reference. The ACMs shall be plotted without error. Minor errors corrected by the trainee are acceptable.

Instructor. WTI.

Prerequisite. 0705.

References.

1. JP 3-52, Joint Airspace Control.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EXPD-3404 8.0 * B (N) S/L

Goal. Plan base defense zone operations.

Requirement. Given a tactical scenario, plan a BDZ:

1. Identify the threat.
2. Identify the LAAD capabilities available.
3. Identify air defense priorities.
4. Identify the ID criteria, responsibilities and authorities.
5. Identify the rules of engagement.
6. Coordinate employment with adjacent MACCS agencies.
7. Identify entry and exit procedures.
8. Identify communication procedures with LAAD representative.
9. Identify the required air defense communication nets.

Performance Standard. Complete the requirements IAW the reference. Instructor will question and mentor the trainee throughout the evolution.

Instructor. SI.

Prerequisite. 0720, 0722.

External Syllabus Support. LAAD (7212).

References.

1. JP 3-52, Joint Airspace Control.
2. MCTP 10-10B, Integrated Air Defense Systems.
3. MCTP 3-20C, Anti-Air Warfare.
4. MCTP 3-20F, Control of Aircraft and Missiles.
5. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
6. MAWTS-1 BDZ class.

EXPD-3405 8.0 * B (N) S/L

Goal. Develop MATC company communications architecture.

Requirement. During a simulation or exercise, plan, develop, and implement the communications architecture for a MATCD by using an ACEOI and Annex K of an operations order (OPORD).

1. Identify communications requirements.
2. Draw a communications connectivity chart.
3. Submit communications requirement and architecture drawing to the instructor for validation.
4. Once instructor validation is received, implement the communications architecture.

Performance Standard. Complete the requirement steps IAW the references. Minor corrections by the trainee are acceptable. Instructor shall ensure the communications requirements and architecture support the simulation/exercise and are implemented properly.

Instructor. SI.

Prerequisite. 2001, 2002, 2005, 2006, 2009, 2011, 2026.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. Applicable operator manuals.

EXPD-3406	4.0	*	B	(N)	L/S
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Goal. Plan launch and recovery operations in EMCON conditions.

Requirement. Given a tactical scenario, perform the following:

1. Identify the threat.
2. Identify the EMCON conditions in effect.
3. Identify approval authority for changes to the EMCON condition.
4. Identify alternate means of communication to effect safe flow of traffic.
5. Identify circumstances that require the breaking of EMCON.
6. Plan launch and recovery operations.

Performance Standard. Complete the requirements IAW the reference. Instructor will question and mentor the trainee throughout the evolution.

Instructor. SI.

Prerequisite. 0571, 0721.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCWP 3-32D.1, Electronic Warfare.

EXPD-3420	4.0	*	B	(N)	L
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Goal. Utilize an execution checklist.

Requirement. Given appropriate operations documents, an execution checklist with an item that requires ATC action, and in accordance with the references:

1. Identify appropriate action to be taken.
2. Direct crew to perform appropriate action.
3. Supervise ATC crew information flow.
4. Coordinate with external agencies as required.

Performance Standard. Perform the required items. Trainee should immediately recognize the execution checklist item and determine the relevance to ATC. Instructor input should be minimal as possible, but minor input is allowed.

Instructor. SI.

Prerequisite. 0702.

References.

1. MCWP 3-25, Control of Aircraft and Missiles.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EXPD-3450 8.0 * B (N) S/L

Goal. Plan the deployment of a MATC company.

Requirement. Given a scenario, explain in detail the steps required to deploy a MATC detachment to include the following:

1. Manning document.
2. Equipment density list (EDL)-Level 4 and Level 6.
3. TPFDD.
4. Site survey requirement.
5. Communication requirements.
6. Logistics requirements.
7. Power requirements.
8. Unit line number (ULN) request.
9. Frequency request.
10. Letter of Instruction (LOI).
11. Concept of Employment (COE) brief.
12. Advance Party (ADVON).
13. DTS/orders.
14. Weapons transfer (LOT/1348).
15. Personal gear list.
16. Unit Issue facility (UIF).
17. Pre-deployment training program (PTP).
18. Equipment staging/inspection/Joint Limited Technical Inspection (JLTI).
19. Security clearance validation.
20. Confirmation Brief.

Performance Standard. Identify each item and the requirements associated with each one.

Instructor. SI.

Prerequisite. 0705, 3001, 3002, 3003, 3004, 3400, 3405.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

2.9.6 TOWER (TWR) STAGE

2.9.6.1 Purpose. To train a MATCO to a level of proficiency required for qualification on the Tower Flight Data and Tower Ground Control positions.

2.9.6.2 General.

Prerequisite. None.

Admin Notes. The length of time authorized to train toward position qualification shall not exceed the limits defined in NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual. Times associated with training for events in these stages are based on a 2 hours per day, 5 days per week, and 4 weeks per month at NAVAIR 00-80T-114 limits.

Crew Requirement. None.

TWR-3620 320.0 1460 B, R, M (N) L/S

Goal. Perform the duties of a Tower Ground Controller (TGC).

Requirement. In a control tower, perform the duties and responsibilities of a TGC:

1. Perform position turnover.
 - a. Evaluate equipment performance.
 - b. Preview position.
 - c. Scan tower cab environment.
 - d. Receive/conduct position relief briefing.
2. Operate communications equipment.
 - a. Communicate using standardized words and phrases.
 - b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/inter-facility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections as appropriate to items that have been read back incorrectly or incompletely.
 - i. Terminate intra/inter-facility transmissions.
 - j. Relay authorized operational information.
3. Coordinate safe and efficient use of airport runways and movement areas.
 - a. Ensure landing and departure areas to be used are free of all known ground vehicles.
 - b. Operate applicable airfield lighting.
 - c. Perform runway selection.
4. Apply taxi and ground movement procedures.
 - a. Provide closed and unsafe runway conditions.
 - b. Issue airport conditions necessary for safe operation of aircraft.
 - c. Relay traffic information.
 - d. Relay observed abnormalities.
 - e. Instruct aircraft to hold short of specified runway.
 - f. Instruct vehicle to hold short of specified runway.
 - g. Instruct aircraft to hold at specified point.
 - h. Instruct vehicle to hold at specified point.
 - i. Issue hover taxi instructions.
 - j. Obtain and relay braking action quality.
 - k. Relay arresting gear conditions.
 - l. Provide ATC services on a first come first served basis.
 - m. Respond to operational requests.
 - n. Provide conditional clearances to aircraft operating on movement areas.
 - o. Issue specific instructions to approve or disapprove aircraft movement.
 - p. Issue specific instructions to approve or disapprove vehicle movement.
 - q. Apply ground wake turbulence procedures.
 - r. Issue air taxi instructions.
 - s. Determine aircraft position.
 - t. Provide current departure information.
 - u. Visually scan runways.
 - v. Issue expeditious compliance instructions in order to avoid imminent situation.
 - w. Issue expeditious compliance instructions in order to avoid development of imminent situation.
5. Apply SVFR procedures.
 - a. Prioritize SVFR and IFR traffic to reduce undue delay.
 - b. Inform pilot of anticipated delay to their SVFR request.
6. Prepare and post flight progress strips.
7. Manage Special operations.
 - a. Coordinate tow target operations.
 - b. Coordinate unmanned aerial system operations.
 - c. Coordinate arm/de-arm operations.

- d. Coordinate hazardous cargo operations.
- 8. Provide emergency assistance.
 - a. Determine if emergency conditions exist.
 - b. Obtain emergency information from aircraft.
 - c. Provide assistance during airport ground emergency.
 - d. Issue ground movement instructions using ATC light signals.
 - e. Take actions to re-establish communication with NORDO aircraft.
- 9. Issue weather information.
 - a. Disseminate pertinent weather information.
 - b. Report the wind as calm.
 - c. Issue altimeter setting.
 - d. Solicit and record PIREP conditions when conditions dictate.
 - e. Relay PIREP information when conditions dictate.

Performance Standard. Demonstrate proficiency required to be recommended for qualification as a TGC.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 2000, 2003, 2206.

References.

- 1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
- 2. JO 7110.65, Air Traffic Control.
- 3. Local directives and publications.

2.9.7 RADAR (RDR) STAGE

2.9.7.1 Purpose. To train a MATCO to a required level of proficiency for qualification on the Radar Flight Data and Radar Final Control positions.

2.9.7.2 General

Prerequisite. None.

Administrative Notes. The length of time authorized to train toward position qualification shall not exceed the limits defined in NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual. Times associated with training for events in these stages are based on a 2 hours per day, 5 days per week, and 4 weeks per month at NAVAIR 00-80T-114 limits.

Crew Requirement. None.

RDR-3710 240.0 1460 B, R, M (N) L/S

Goal. Perform the duties of a Radar Final Controller (RFC).

Requirement. In a radar environment, utilizing simulated or live training, perform the the following tasks:

- 1. Perform position turnover.
 - a. Evaluate equipment performance.
 - b. Verify alignment accuracy.
 - c. Preview Position.
 - d. Receive/Conduct position relief briefing.
- 2. Apply Communication Procedures.
 - a. Communicate using standardized words and phrases.

- b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/inter-facility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections as appropriate to items that have been read back incorrectly or incompletely.
3. Coordinate tower clearance.
- a. Obtain tower clearance.
 - b. Relay tower clearance.
 - c. Relay instructions when tower clearance is not received or cancelled.
4. Provide Radar Services.
- a. Identify aircraft using primary radar methods.
 - b. Identify aircraft using secondary radar methods.
 - c. Verify aircraft altitude.
 - d. Issue altimeter setting.
 - e. Issue traffic advisories.
 - f. Issue safety alerts.
 - g. Disseminate weather information.
 - h. Solicit and record pilot weather reports (PIREPS) when conditions dictate.
 - i. Relay PIREPS when conditions dictate.
 - j. Initiate/Receive handoff.
 - k. Ensure run sheet or strip marking is completed.
 - l. Demonstrate methods for vectoring aircraft.
 - m. Demonstrate no-gyro procedures.
5. Issue final control information and instructions.
- a. Conduct communications check.
 - b. Relay lost communications check.
 - c. Issue missed approach procedures.
 - d. Issue climb-out instructions.
 - e. Issue landing check.
 - f. Provide position information.
 - g. Issue wheels down check.
 - h. Relay airport conditions.
 - i. Relay braking action quality.
 - j. Issue bird activity advisories.
 - k. Instruct aircraft not to acknowledge further transmissions.
 - l. Ensure radar separation is maintained between aircraft established on final approach.
 - m. Demonstrate no-gyro approach.
 - n. Apply vectors to maintain aircraft on final approach course.
6. Control aircraft conducting approaches using PAR.
- a. Issue glide path notification.
 - b. Instruct aircraft to begin descent.
 - c. Interpret and issue glide path information.
 - d. Interpret and issue course information.
 - e. Issue distance from touchdown.
 - f. Inform aircraft when it reaches the published decision height.
 - g. Provide glide path and course information inside decision height.
 - h. Demonstrate approach guidance termination.
 - i. Monitor aircraft conducting Navigational Aid approaches using PAR.
7. Control aircraft conducting approaches using ASR.
- a. Issue recommended altitudes on final approach.
 - b. Issue visual reference report instructions to pilot.
 - c. Issue descent notification.
 - d. Issue descent instructions.
 - e. Issue course guidance information.

- f. Demonstrate approach guidance termination.
- 8. Control final approach abnormalities.
 - a. Advise aircraft when safety limits are exceeded.
 - b. Advise aircraft when radical target deviations are observed.
 - c. Advise aircraft when position is in doubt.
 - d. Advise aircraft when identification is in doubt.
 - e. Advise aircraft when malfunctioning radar is suspected.
 - f. Advise aircraft when radar contact is lost.
 - g. Provide radar contact lost procedures.
 - h. Control aircraft during PAR elevation failure.
- 9. Provide emergency assistance.
 - a. Determine if emergency conditions or situation exists.
 - b. Take action to re-establish communications with no-radio (NORDO) aircraft.
 - c. Obtain information from emergency aircraft.
- 10. Provide special handling to flight check aircraft.

Performance Standard. Demonstrate proficiency required to be recommended for qualification as a RFC.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0520, 0521, 0522, 0532, 0533, 0534, 0538, 2000, 2206.

References.

- 1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
- 2. JO 7110.65, Air Traffic Control.
- 3. Local directives and publications.

2.10 CORE PLUS PHASE (4000)

2.10.1 Purpose. This phase contains training standards that have a low probability of execution, or are specific to geographic areas. These events may be deemed necessary by individual commanders based on mission requirements.

2.10.2 General.

2.10.2.1 Prerequisite. None.

2.10.2.2 Admin Notes.

- 1. Fully qualified/proficient crew (as appropriate).
- 2. MATCDs/ATCFs shall develop written examinations (for events requiring testing) and practical applications to evaluate events. At a minimum, these examinations shall encompass the event requirement and performance standard. Examinations may be developed to encompass the knowledge requirement of all events in this stage or to assess each event separately.

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

PAR NO.	STAGE NAME	PAGE NUMBER
2.10.3	EXPEDITIONARY (EXPD)	2-101
2.10.4	ADMINISTRATIVE (ADMN)	2-104
2.10.5	COMMAND AND CONTROL SYSTEMS (C2SYS)	2-106

2.10.3 EXPEDITIONARY (EXPD) STAGE

2.10.3.1 Purpose. To train the MATCO on the ability to act as a MATC liaison officer or further employ the MATCD in an expeditionary environment.

2.10.3.2 General

Prerequisite. None.

Admin Notes. None.

Crew Requirement. None.

EXPD-4000	1.0	*	B	(N)	L
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Goal. Perform as a MATC Liaison Officer.

Requirement. Given an exercise or operation:

1. Provide liaison between the MATCD and:
 - a. Adjacent military C2 agencies.
 - b. Host nation ATC.
 - c. Aviation units.
2. Explain to the instructor MATC responsibilities and relationships to other MACCS or ATC agencies (military/civilian).

Performance Standard. Perform MATC liaison duties during an exercise or operation. Instructor shall ensure the explanation provided is IAW applicable directives and documents. Instructor will question and mentor the trainee throughout the evolution.

Instructor. SI.

Prerequisite. None.

External Syllabus Support. Operational MACCS and/or other ATC agencies.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. Local Directives and Publications.

EXPD-4002	80.0	*	B	(N)	L
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Goal. Conduct an ATC timeshare.

Requirement. Given general guidance, plan, coordinate, and execute an ATC timeshare, to include:

1. Research a site location for unit / equipment employment.
2. Conduct a site survey for gear emplacement and TERPS data.
3. Staff waiver to airfield safety surfaces. Forward the results of the site survey to NAVFIG for the development of procedures, to include a flight inspection.
4. Develop a LOA or procedure between the MATCD and adjacent ATC /airspace control agencies.
5. Ensure the availability of required frequencies for all detachment equipment.
6. Identify maintenance / logistics requirements and request external support, as required.
7. Identify crew composition / currency requirements.

8. Supervise the embarkation, movement, and employment of the equipment.
9. Supervise the flight inspection.
10. Supervise the conduct of the timeshare.
11. Supervise the retrograde of the equipment.

Performance Standard. Complete the requirements IAW the reference. Instructor will question and mentor the trainee throughout the evolution.

Instructor. SI.

Prerequisite. 0506, 3001, 3002.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
3. UFC 2-000-05N (Appendix E, P-80.3), Airfield Safety Clearance.
4. FAAO 8260.19, Flight Procedures and Airspace.
5. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EXPD-4012 6.0 * B (N) G

Goal. Plan rear area operations.

Requirement. Given a tactical scenario, plan rear area operations to include:

1. Security.
2. Communications.
3. Sustainment.
4. Develop a brief

Performance Standard. Brief the instructor on the requirements. Instructor shall ensure all briefing items are thoroughly explained in a comprehensive and clear manner.

Instructor. SI.

Prerequisite. None.

References.

1. MCRP 3-20F.3, MAGTF Aviation Site Command Handbook.
2. MCRP 3-30C.1, MAGTF Rear Area Security.

EXPD-4014 2.0 * B (N) G

Goal. Plan physical security for classified areas.

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

1. Create guard schedule.
2. Single entry control point.
3. Verify personnel on the access roster.
4. Triple-strand concertina wire.
5. Entry points of communication lines.
6. Submit a physical security diagram.

Performance Standard. Develop a plan and provide a diagram for requirement items. Instructor will

validate that the plan supports the scenario.

Instructor. SI.

Prerequisite. None.

Reference.

1. MCO P5530.14, Marine Corps Physical Security Program Manual.

EXPD-4015	1.0	*	B	(N)	G
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Goal. Identify the purpose of documents that enable Tactical Data Link (TDL) operations.

Requirement. Given the documents below, identify their purpose:

1. Guard Chart.
2. Communications Electronic Operating Instruction (CEOI).
3. OPTASKLINK.

Performance Standard. Without the aid of reference, state (verbally or written) the required. Minor errors by the trainee are acceptable

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP)
2. MIL-STD-6011, Department of Defense Interface Standard, Tactical Data Link (TDL)16.

EXPD-4016	8.0	*	B	(N)	L/S
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Goal. Participate in tactical data link planning for an agency.

Requirement. Given an exercise or operational scenario:

1. Obtain the communications and data link source documentation for the specified exercise or operation.
2. Identify required crypto short titles in the COMSEC callout.
3. Identify communication nets required for TDL coordination.
4. Identify duties assigned to the unit in the OPTASK LINK.
5. Identify primary, secondary, and tertiary tactical data links.
6. Identify required TDL equipment and configuration to crew leadership.
7. Identify the required IDL needed for data link operations.
8. Construct the data link portion of the crew brief IAW the unit's Pocket Checklist.
9. Provide planning inputs to the Interface Control officer as required.

Performance Standard. Complete the requirement items IAW the references without error. Minor errors corrected by the trainee are acceptable.

Instructor. SI.

Prerequisite. None.

References.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP).
2. C3 Agency's Pocket Checklist.

2.10.4 ADMINISTRATIVE (ADMN) STAGE.

2.10.4.1 Purpose. To provide the trainee with advanced knowledge of ATC administrative procedures.

2.10.4.2 General.

Prerequisite. None.

Admin Notes. None.

Crew Requirement. None.

ADMN-4100 8.0 * B (N) L/S

Goal. Staff a waiver request to required ATC regulations.

Requirement. Given a scenario:

1. Prepare a request for waiver to applicable ATC regulations, to include:
 - a. Purpose.
 - b. Content.
 - c. Justification.
 - d. Controlling agencies involved.
 - e. Distribution.
 - f. Applicability.
 - g. Alternate and safe procedures.
2. Staff the waiver to the instructor for validation that it was correctly completed.

Performance Standard. Complete the requirement items IAW the reference. Instructor will verify that each letter was written thoroughly to support the scenario.

Instructor. SI.

Prerequisite. None.

References.

1. SECNAVINST 5216.5, Correspondence Manual.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ADMN-4110 4.0 * B (N) G

Goal. Describe the elements of Time Phased Force and Deployment Data (TPFDD).

Requirement. Describe the following items:

1. Definition and purpose of a TPFDD.
2. Unit Line Number (ULN) and structure.
3. Routing:
 - a. Origin.
 - b. Port or Embarkation (POE).
 - c. Port of Debarkation (POD).
 - d. Destination.
 - e. Intermediate Location.
 - f. Port of Support (POS).

4. Transportation Modes and Source Codes.
 - a. Ready To-Load Date (RLD).
 - b. Available to Load Date (ALD).
 - c. Earliest Arrival Date (EAD).
 - d. Latest Arrival Date (LAD).
 - e. Required Delivered Date (RDD).
 - f. Force Tracking Number (FTN).
 - g. Mode of transportation codes.
 - h. Source of transportation codes.
 - i. Cargo codes.
5. Cargo Lift Requirements.
 - a. Level I – Aggregate.
 - b. Level II – Summary.
 - c. Level III – Detail by cargo category.
 - d. Level IV – Detail by type of equipment.
 - e. Level V – Sustainment.
 - f. Level VI – Unit Designation List (UDL).
6. Measurements.
 - a. Short tons.
 - b. Measurement tons.
7. TPFDD Refinement.
8. TPFDD Maintenance.
9. TPFDD Validation.
10. Force Deployment and Execution Cycle.

Performance Standard. Complete the requirements IAW the references. The instructor will mentor and question the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. CJCSM 3122.01, JOPES Vol. I.
2. CJCSM 3122.02, JOPES Vol. III.
3. CJCSM 3122.03, JOPES Vol. II.
4. CJCSM 3150.01, United States Message Text Format User's Handbook.
5. MSTP Pamphlet, (FDP&E ISO MAGTF OPS).
6. MCO P3000.18, Marine Corps Planning Manual.
7. JP 5-0, Joint Operation Planning.
8. MCTP 13-10C, Unit Embarkation Handbook.

2.10.5 COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE

2.10.5.1 Purpose. To provide MATC personnel the knowledge and skills required to operate command and control systems employed within Marine Aviation.

2.10.5.2 General

Prerequisite. MARINENET Courses as indicated within the C2SYS events or the virtual MISTC POIs for the associated C2 system.

Administrative Notes.

1. Command and control system events are located in the MAWTS-1 C3 Course Catalog reference (b)

in order to maintain standardized training across the MACCS. Specific event for MATC are listed in the chart below. C2SYS training is offered by MISTCs or provided during MISTEX, MEFEX, or other Wing TEEP events.

2. Due to the highly perishable nature of command and control systems (C2SYS) skills, these events are required to be refreshed every 730 days (2 years) to remain current.

Crew Requirements. None.

C2SYS-4902 0.5 * B, R (N) G

Goal. Demonstrate proficiency with utilizing the TBMCS Alerts Service Web Applications.

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Select the Alert Services Link on CCWEB
2. Log into Alert Services.
3. Display, create, modify, copy, and delete alerts.

Performance Standard. With the aid of references, complete the required items IAW the reference.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MAWTS-1 Air Tasking Order Development (ATOD) Course, MCAS Yuma, AZ
2. MISTC C2 TECOE: <https://www.29palms.marines.mil/Staff-Offices/MISTC29/>

Reference.

1. TBMCS User's Manual

C2SYS-4904 1.0 * B, R (N) G

Goal. Demonstrate proficiency with TBMCS Web Mapping.

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Start Map Manager.
2. Initiate WEBEM Map Control Panel (EMMCP).
3. View a map from within a map plotting application.
4. Set Mouse Mode and Map Units.
5. Set the map projection, background and opacity.
6. Navigate a map.
7. Locate an object by entering coordinates.
8. Use the coordinates tool to convert between Lat/Long (decimal and degrees) and MGRS.
9. Use highlight.
10. Center and activate/remove functions.
11. Toggle layer visibility and change order of layers.
12. Set the Gestures Mouse Mode and Selection Tolerance.
13. Set line width, symbol size, highlight color and label visibility.
14. Save, restore and delete preference.
15. Save and print the current map display.
16. Stop Map Manager.

Performance Standard. With the aid of references, launch the Map Manager and manipulate a map with missions, ACMs, air bases, targets or units displayed.

Instructor. BI.

Prerequisite. None.

Reference.

1. TBMCS User's Manual

C2SYS-4905 1.0 * B, R (N) G

Goal. Demonstrate proficiency utilizing the Air Tasking Order Airspace Control Order Tool (AATWEB).

Requirement. Given an operational TBMCS and training materials, conduct the following for a total of five ATO and five ACO messages:

1. Initiate the AAT application.
2. View, sort, filter, and print received ATO and ACO messages.
3. Export into a document format (Excel, Text).
4. Delete ATO and ACO messages.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI.

Prerequisite. None.

Reference.

1. TBMCS User's Manual

C2SYS-4906 4.0 * B, R (N) G

Goal. Demonstrate proficiency with the TBMCS Web Based Airspace Deconfliction Software (WEBAD).

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Initiate a WEBAD Session.
2. Connect WEBAD to WebMap.
3. Create an airspace group for the utilization of theater airspace in current and future operations (airspace group becomes the ACO).
4. Enter Airspace Coordinating Measures (ACMs).
5. Create ACMs circle, corridor, line, orbit, point, polygon, poly-arc, rad-arc, track.
6. Provide ACM comments using the comments tab.
7. Create an ACM using a map.
8. Create, edit and copy a Filter.
9. Move ACMs to another airspace group.
10. Copy ACMs to another airspace group.
11. Change the state of ACMs.
12. Set ACMs time.
13. Shift ACMs in time.
14. Shift ACMs in location.
15. Map ACMs connect to the map.
16. Clear ACMs from the map.

17. Display the legend.
18. Create a deconfliction filter.
19. Determine a conflict between ACMs.
20. Specify the criteria for determining a conflict between ACMs.
21. Determine if a conflict may exist among ACMs.
22. Create, edit, and copy deconfliction filters.
23. Generate and print a conflict report.
24. Determine airspace deconfliction over multiple ACM Groups based on:
 - a. Mean Sea Level (MSL).
 - b. Above Ground Level (AGL) calculations.
 - c. Display ACMs and associated conflicts on a map.
25. Edit and copy the airspace group.
26. Create, edit and copy, preferences.
27. Edit or view ACMs by filtering using:
 - a. ACM Groups.
 - b. ACM Types.
 - c. ACM Usages.
28. Export ACMs to a file.
29. Release an ACO.
30. Create an Airspace Control Order (ACO) message.
31. Change ACO tab information.
32. Change Declassification tab information.
33. Release tab information.
34. Preview the ACO before it is released and approved.
35. Publish the ACO.
36. Generate the ACO Message.
37. Validate ACO Message Body.
38. Release the ACO message to AATWEB.
39. Generate an ACO change message.
40. Change an existing ACO.
41. Publish the ACO change.
42. Generate the ACO change message.
43. Validate ACO change message body.
44. Release the ACO change message to AATWEB.
45. Delete the following:
 - a. An ACO and all its changes.
 - b. An airspace usage.
 - c. A filter.
 - d. An airspace group.
 - e. Deconfliction filters.
 - f. User preference.

Performance Standard. With the aid of references, complete the required items IAW the reference.

Instructor. BI.

Prerequisite. None.

Reference.

1. TBMCS User's Manual

C2SYS-4913 4.0 * B, R (N) G

Goal. Demonstrate proficiency importing an airspace group in TBMCS.

Requirement. Given an operational TBMCS and training materials, complete the following in order to import airspace:

1. Open the ABP in setup mode.
2. Open the Airspace Group Import menu.
3. Perform an initial or incremental import of selected airspace.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI.

Prerequisite. None.

Reference.

1. TBMCS User's Manual

C2SYS-4921	4.0	*	B, R	(N)	G
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Goal. Demonstrate proficiency operating C2 Personal Computer (C2PC).

Requirement. Given a computer with the current version of C2PC installed, a functional network and Common Tactical Picture (CTP) architecture, perform the following:

1. Configure C2PC for communications with a gateway
2. Configure the display
3. Load and view digital map products
4. View and manipulate charts.
 - a. Center/width
 - b. Map pan
 - c. Create and view multiple maps/charts
 - d. Map colors
 - e. Blank map
 - f. Map features
 - g. Full screen (F11)
 - h. Copy map as bitmap or JPEG
5. Set plot options
6. Create, modify and filter tracks in a Common Tactical Picture (CTP)
7. Use declutter option
8. Use injector manager
9. Create, modify, display, and analyze C2PC routes
10. Create, modify, and save a C2PC overlay
11. Import and export coordinates from an overlay file
12. Export and transmit a C2PC overlay
13. Save map
14. Configure the Effects Management Tool (EMT) for communication to an AFATDS server
15. Demonstrate how to filter EMT data for the CTP

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MISTC C2 TECOE: <https://www.29palms.marines.mil/Staff-Offices/MISTC29/>

References.

1. Software User's Manual (SUM) for C2PC v8.0.4.0

C2SYS-4922 4.0 * B, R (N) G

Goal. Demonstrate proficiency operating Blue Force Tracker (BFT) equipment.

Requirement. Given a functional FBCB2 BFT system, perform the following:

1. Initialize and shut down the FBCB2-BFT equipment.
2. Manage the system Logs and Queues.
3. Identify system icons.
4. Manage different map views.
5. Access each function button's features.
6. Use the Quick Send Message buttons.
7. Configure the unit role.
8. Create, save, transmit, receive, and display overlay data.
9. Transmit messages.
10. Access received messages using the Flash, Immediate, Priority, Routine (FIPR) queue.
11. Save messages on the BFT System.
12. Identify warning messages in the Warning Marquee.
13. Utilize a Mission Data Loader to create, distribute, and receive Mission.
14. Transmit data from one BFT system to another.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI.

Prerequisite. None.

Reference.

1. TBMCS User's Manual

2.11 INSTRUCTOR UNDER TRAINING (IUT) (5000) PHASE

2.11.1 Purpose. To provide position-qualified personnel the additional skills necessary to instruct, evaluate, and recommend for completion / qualification of trainees within a crew. Upon completion of the required training, an individual may be considered for an instructor designation by the commanding officer, detachment commander, facility officer, or his/her direct representative, as applicable.

2.11.2 General

2.11.2.1 Prerequisites. None.

2.11.2.2 Admin Notes.

1. The MACCS instructor concept is a means to standardize all instructors across the MACCS in regards to the concepts of managing a WTTP, properly conducting training, performing evaluations, and recommending training plans.

2. There are four instructor designations in this syllabus. The intent is to train individuals with different levels of experience to instruct ATC personnel. Instructor experience is also gained while progressing through the different instructor designations. The MAWTS-1 C3 course catalog contains the common training requirements for instructors across the MACCS: Basic Instructor (BI), Senior Instructor (SI), Weapons and Tactics Instructor (WTI), and Marine ATC Mobile Team Instructor (MMTI). The catalog is located at the MAWTS-1 website, <https://mceits.usmc.mil/sites/mawts1/default.aspx>

3. ATC-specific instructors are listed below.

a. BI.

(1) ATC personnel must be designated before the OJTI can train events related to position qualifications in the MATC T&R.

(2) Deployed MATCDs/ATCFs shall develop an OJTI course that complies with NAVAIR 00-80T-114 Air Traffic Control NATOPS Manual, Chapter 7 for control position training. Once the OJTI training is complete, the BI shall be recommended in writing by a branch supervisor (RWS/TWS).

(3) ATC personnel must have been qualified on the position or skill for a minimum of 30 days prior to being allowed to instruct trainees on that position, waivable by the ATCFO or Detachment Commander.

b. SIs at ATCFs.

(1) SIs assigned to ATCFs will serve as primary assistants to the facility training chief.

(2) Before SI training can begin, the IUT must be qualified on all positions within the tower or radar branch, as applicable.

(3) A designated Examiner, Tower Chief, Radar Chief, or designated alternates with ATC position qualification authority shall complete the SI training requirements and be designated a SI.

c. MMTI. Graduates of MAWTS-1's MMT Leader/Instructor Course are certified to be a MMTI. The commanding officer may designate graduates as MMTIs.

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

PAR NO.	STAGE NAME	PAGE NUMBER
2.11.3	INSTRUCTOR UNDER TRAINING (IUT)	2-112

2.11.3 INSTRUCTOR UNDER TRAINING (IUT) STAGE

2.11.3.1 Purpose. To provide personnel the skills necessary to effectively plan for, instruct, evaluate, and document individual T&R event training. .

2.11.3.2 General

Prerequisite. The SI portion of the training shall occur only after completing the BI events and completing the MarineNet course, Systems Approach to Training (SAT).

Admin Notes. None.

Crew Requirements. None.

IUT-5000 2.0 * B (N) L

Goal. Introduce principals of instruction.

Requirement. Given the reference, the BIUT will demonstrate the following with the assistance of a unit instructor:

1. Adult learning principles.
 - a. Pedagogy to andragogy.
 - b. Characteristics of the adult learner.
 - c. Learning styles.
 - d. How adults learn.
 - e. Domains of learning.
 - f. Group dynamics.
 - g. Motivation.
 - h. Constructivist learning environments.
2. Introduce, discuss, and demonstrate instruction techniques.
3. Introduce, discuss, and demonstrate class management techniques.
 - a. How to select teaching resources to accommodate student learning styles.
 - b. How to properly organize the instructional environment for effective learning.

Performance Standard. With the aid of references, the BIUT shall demonstrate principles of instruction. During this session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. BI.

Prerequisite. None.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. NAVMC 1553.1, Systems Approach to Training

IUT-5010 2.0 * B (N) G

Goal. Describe the structure of an event.

Requirement. Using the Aviation T&R Program Manual, discuss the structure each of the following items with an instructor:

1. Programs of Instruction.
 - a. Basic.
 - b. Refresher.
 - c. Conversion.
 - d. Series Conversion.
 - e. Transition.
 - f. Maintain.
3. T&R attain and maintain tables.
4. Syllabus notes.
5. T&R syllabus structure.
 - a. Phase.
 - b. Stage.
 - c. Event.
 - d. Skill.

- e. Syllabus.
- 6. Event format.
 - a. Header.
 - (1) Event prefix - event code.
 - (2) Projected event duration.
 - (3) Proficiency period.
 - (4) Programs of instruction (POI).
 - (5) Event conditions.
 - (6) Device options.
 - (7) Device number.
 - (8) Device type.
 - b. Body.
 - (1) Goal.
 - (2) Requirement.
 - (3) Performance standard.
 - (4) Equipment.

Performance Standard. Without the aid of references and during a discussion session, the BIUT shall describe Individual T&R requirements. During this session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. BI.

Prerequisite. None.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. NAVMC 1553.1, Systems Approach to Training

IUT-5020	12.0	90	B, R, M	(N)	L
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Goal. Conduct a period of instruction on a core skill event.

Requirement. The BIUT, under the supervision of an instructor, will conduct three periods of instruction on three different T&R events selected by the instructor and should include as many different methods of instruction as possible (lecture or academic, demonstration, and practical application). The event must be one the BIUT is current and proficient in. The BIUT will complete the following for each of the three events instructed:

1. Prepare to train the event.
 - a. Review a trainee's performance record to identify required training for the event selected.
 - b. Ensure the student has met prerequisites for the event to be trained.
 - c. Gather the resources necessary to conduct the training (i.e., instructional materials, references, and equipment).
 - d. Conduct task analysis on each event to ensure all intended requirements and prerequisite skills, specified or implied, are trained IAW applicable references.
 - e. Schedule the training event (facilities and students).
 - f. Prepare an evaluation form for each student to be evaluated.
2. 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.
3. Assess 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.
- 4. Route evaluation form as required.

Performance Standard. Complete the requirement items IAW the reference and ensure training is doctrinally and technically current. Instructor shall use the instructor evaluation form from the SAT user's guide for each class and a mark of satisfactory must be achieved for each of the three classes.

Instructor. BI.

Prerequisite. 5000, 5010.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. NAVMC 1553.1, Systems Approach to Training
3. MCO 1553.2B, Formal Schools Management

IUT-5100 2.0 * B (N) L

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

Requirement. Using the community T&R manual discuss the following with an instructor:

1. Describe the Weapons and Tactics Training Program (WTPP).
2. Define each element of the Core Model:
 - a. Mission statements.
 - b. Core Mission Essential Task List (METL).
 - c. Output standards.
 - d. Core Skills (How to attain and maintain).
 - e. Mission Skills (How to attain and maintain).
 - f. Combat Leadership.
3. Define each of the following elements of unit training:
 - a. Training Exercise Employment Plan (TEEP).
 - b. Core Model Minimum Requirements (CMMR).
 - c. Instructors.
 - d. Core Model Training Report (CMTR).
 - e. T&R manual connection to readiness reporting.
4. Define each of the following elements of training:
 - a. Certification.
 - b. Qualification.
 - c. Designation.
 - d. Performance Record.
5. Explain how changes are made to the Program manual:
 - a. Explain T&R conference procedures.
 - b. Explain correspondence change procedures.

Performance Standard. Complete the requirements IAW the reference. Instructor will question the SIUT to check for thorough understanding of the Aviation T&R Program.

Instructor. SI.

Prerequisite. None.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. MCO 3500.109, Weapons and Tactics Training Program

IUT-5110 2.0 * B (N) L

Goal. Describe the applicable community T&R program.

Requirement. Using the community T&R manual discuss the following with an instructor:

1. Describe the Table of Organization.
2. Define each element of the Core Model:
 - a. Mission statements.
 - b. Core Mission Essential Task List (METL).
 - c. Output standards.
 - d. Core Skills (How to attain and maintain).
 - e. Mission Skills (How to attain and maintain).
 - f. Combat Leadership.
3. Define each of the following elements of unit training:
 - a. Training Exercise Employment Plan (TEEP).
 - b. Core Model Minimum Requirements (CMMR).
 - c. Instructors.
 - d. Core Model Training Report (CMTR).
 - e. T&R manual connection to readiness reporting.
4. Define each of the following elements of training:
 - a. Certification.
 - b. Qualification.
 - c. Designation.
 - d. Performance Record.
5. Explain how changes are made to the Program manual:
 - a. Explain T&R conference procedures.
 - b. Explain correspondence change procedures.

Performance Standard. Complete the requirements IAW the reference. Instructor will question the SIUT to check for thorough understanding of the Aviation T&R Program.

Instructor. SI.

Prerequisite. None.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. MCO 3500.109, Weapons and Tactics Training Program

IUT-5120 2.0 * B (N) L

Goal. Describe T&R administration.

Requirement. Document training to include:

1. Performance records.
2. Ensure MSHARP is updated appropriately.
3. Assemble recommendation package for certifications, qualifications, and designations IAW T&R manual.

Performance Standard. Complete the requirement items IAW the references. Instructor will question the trainee to check for understanding of the administration process.

Instructor. SI.

Prerequisite. 5100, 5110.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. Local WTTP SOP
3. <http://msharpsupport.com>

IUT-5130 2.0 * B (N) L

Goal. Develop a training plan.

Requirement. Given a deployment scenario develop a training plan to determine individual, and crew training needed to meet CMMR by completing the following:

1. Review Commander's training guidance.
2. Analyze the CMTR to determine training deficiencies and how to achieve CMMR.
3. Identify and schedule T&R training opportunities IAW the TEEP to achieve requirements.
4. Determine instructors required.
5. Determine equipment required.
6. Determine external support required.
7. Deliver a brief to the instructor that illustrates:
 - 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.
 - e. Training plan meets commander's guidance.

Performance Standard. Complete the requirement items IAW the references and commander's training guidance. Training plan will ensure adequate time is allocated to include preparation, instruction, assessment, documentation, and remediation.

Instructor. SI.

Prerequisite. 5120.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. Applicable Community T&R manuals

2.12 REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS, AND CERTIFICATIONS (6000)

2.12.1 Purpose. The phase provides for community standardization of MATCO qualification, combat leadership, and instructor designations.

2.12.2 General

2.12.2.1 Administrative Notes

1. The WTTP or designated individual shall review the PR to ensure all required training, documentation, and administrative actions are complete prior to administratively staffing qualification or designation recommendations for approval.

2. Only once an individual is qualified, certified, or designated in writing; the signed letter is filed in the PR, all administrative actions are complete, and the event code has been logged in M-SHARP will the

qualification or designation be effective.

2.12.2.2 Prerequisite. Per the applicable POI.

2.12.2.3 Stages. The following stages are included in the Requirement, Certification, Qualification, and Designation (RCQD) Phase of training.

PAR NO.	STAGE NAME	PAGE NUMBER
2.12.3	SCHOOL CODES (SCHL)	2-118
2.12.4	CERTIFICATION (CERT)	2-122
2.12.5	QUALIFICATION (QUAL)	2-123
2.12.6	DESIGNATION (DESG)	2-125

2.12.3 SCHOOL CODES (SCHL) STAGE

2.12.3.1 Purpose. To provide tracking codes for schools that are pertinent to the training of the 7220 in the skill progression of the Marine.

2.12.3.2 General

Prerequisite. None.

Admin Notes. Policies and prerequisites for attending the listed schools are maintained within MCTIMS.

Crew Requirements. None.

SCHL-6000 0.5 * B (N) G

Goal. Weapons and Tactics Instructor Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID M149731, MCAS Yuma, AZ

Instructor. N/A

Prerequisite. 6320, 6321, 8000, 8020, 8040, 8060, 8080.

Reference. None.

SCHL-6002 0.5 * B (N) G

Goal. Air Command and Control Officer's Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: M1467Q1, MCAS Yuma, AZ

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6003 0.5 * B (N) G

Goal. ACE Battlestaff Officer Course.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6010 0.5 * B (N) G

Goal. AOCQIT (Airspace) Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: F19KXD2, Hurlburt Field, FL

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6011 0.5 * B (N) G

Goal. AOCQIT (Personnel Recovery) Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: F19KXE2, Hurlburt Field, FL

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6015 0.5 * B (N) G

Goal. Joint Air and Space Operations Center Command and Control Course (JAOC2C).

Requirement. Successfully complete course curriculum.

Performance Standard. CID: F19L2W2, Hurlburt Field, FL

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6020	0.5	*	B	(N)	G
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Goal. Link 16 Basics Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: JTS-JT100, Joint Knowledge Online

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6021	0.5	*	B	(N)	G
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Goal. Introduction to Multi-TDL Network Operations (JT-101).

Requirement. Successfully complete course curriculum.

Performance Standard. CID: JTS-JT100, Joint Knowledge Online

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6022	0.5	*	B	(N)	G
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Goal. Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102).

Requirement. Successfully complete course curriculum.

Performance Standard. CID: A36L6Z1, Ft. Bragg, NC / MTT

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6023	0.5	*	B	(N)	G
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Goal. Link 16 Joint Interoperability Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: US-109, Joint Knowledge Online

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6025 0.5 * B (N) G

Goal. Link 16 Link Unit Manager Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: JT-220, Ft. Bragg, NC

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6027 0.5 * B (N) G

Goal. Advanced JICC Operator Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: JT-310, MTT

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6043 0.5 * B (N) G

Goal. Air Traffic Control Manager Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: N2372Z2, NATTC, FL

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6045 0.5 * B (N) G

Goal. Propagation of radio waves and antenna construction Marine Net course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: MCIZ0621ZZ, Marine Net

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6046	0.5	*	B	(N)	G
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Goal. MarineNet Course M00CO_0799, Combat Orders.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: M00CO0799, Marine Net

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6067	0.5	*	B	(N)	G
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Goal. Military Airspace Management Course.

Requirement. Successfully complete course curriculum.

Performance Standard. CID: F0273D1, Keesler AFB, MS

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6096	0.5	*	B	(N)	G
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Goal. Formal Learning Center (FLC) Instructor.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

2.12.4 CERTIFICATION (CERT) STAGE

2.12.4.1 Purpose. To provide for the certification of MATCOs in key positions of skill and leadership.

2.12.4.2 General.

Prerequisites. Prerequisites for certifications should be completed prior to certifying individuals.

Admin Notes.

1. The unit WTTP officer shall ensure the following are complete before an individual certification is effective:
 - a. All syllabus training requirements for the certification are complete prior to being considered for certification.
 - b. The trainee is recommended for certification as noted in the certification event, the certification letter is signed by the commanding officer and filed in the PR, and the certification event code is logged in M-SHARP. The certification is not effective until all actions are completed.
2. For certification as a facility watch officer, the facility-generated certification letter shall serve as a certification letter. The certification will expire upon leaving the ATCF, but the certification recognizes the attainment of necessary knowledge and skills for application beyond the garrison environment.
3. For completion of formal schools/courses, the student will submit the completion certificate to the WTTP prior to running the completion code in M-SHARP. The WTTP will include a copy of the certificate in the PR.

Crew Requirements. Per the applicable certification syllabus.

CERT-6500 1.0 * B (N) L

Goal. Certification as a Airspace Liaison Officer (ALO).

Requirement. Complete all prerequisites.

Performance Standard. Be designated in writing by the ATCFO.

Instructor. None.

Prerequisite. 0550, 0552, 0553, 0554, 0555, 0556, 0557, 2604, 6113, 6173.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives.

CERT-6520 4.0 1460 B, R (N) G

Goal. Complete the MATC NITE Lab course.

Requirement. While attending the MATC NITE Lab course:

1. Understand the basic operating principles of NVGs and appreciate their capabilities and limitations.
2. Understand the effects of the night environment on NVG performance.
3. Understand how human physiology impacts NVG operations.
4. Be familiar with various misperceptions and illusions that occur when using NVGs operationally.
5. Describe the modifications required in order to make an ATC tower NVG compatible.
6. Be able to correctly preflight, adjust, and focus NVGs to provide maximum visual acuity.

Performance Standard. Describe the steps in the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

Reference.

1. MAWTS-1 NVD Manual.

2.12.5 QUALIFICATION (QUAL) STAGE

2.12.5.1 **Purpose.** To evaluate MATCOs on their ability to perform proficiently on the following positions: TGC, RFC, MMTM, and MMTL.

2.12.5.2 General

Prerequisite. None.

Admin Notes.

1. During evaluation of the event performance standard, the instructor may provide minimal guidance. However, the instructor should guide and mentor the trainee during the training session and after an event evaluation.
2. Personnel being recommended for qualification must perform the evaluation event to a proficient level. A proficient level is defined as the ability to efficiently and skillfully correct errors without hesitation and with minimal input from the instructor.
3. Policy on attaining, maintaining, and regaining a qualification is contained in chapter 2 of reference (a).

Crew Requirement. A proficient crew, as needed.

QUAL-6113	1.0	*	B	(N)	L
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Goal. Qualify as a Radar Final Controller (RFC).

Requirement. Perform the duties and responsibilities of a RFC IAW the reference.

Performance Standard. Demonstrate the duties of a RFC to a level of proficiency expected of a qualified RFC under general supervision.

Instructor. SI.

Prerequisite. 3710.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives.

QUAL-6173	1.0	*	B	(N)	L
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Goal. Qualify as a Tower Ground Controller (TGC).

Requirement. Perform the duties and responsibilities of a TGC IAW the reference.

Performance Standard. Demonstrate the duties of a TGC to a level of proficiency expected of a qualified TGC under general supervision.

Instructor. SI.

Prerequisite. 3620.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives.

QUAL-6210 2.0 730 B, R, M (N) L

Goal. Qualify as a MMT Leader (MMTL).

Requirement. During an operation or exercise, while using required equipment, qualify as an MMT Leader by demonstrating proficiency to effectively and safely lead an MMT in the conduct of the mission.

Performance Standard. Without assistance, lead an MMT during the execution of the requirements. Completion of the MAWTS-1 MMTI course meets the requirement.

Instructor. MMTI.

Prerequisite. 0572, 0705, 0722, 3301, 3302, 3303, 3304, 3305, 3310, 3311, 3312, 3406, 6113, 6173, 6500, 8040.

Reference.

1. MMT TACSOP.

2.12.6 DESIGNATION (DESG) STAGE

2.12.6.1 Purpose. To provide for the designation of combat leaders, and instructors.

2.12.6.2 General.

Prerequisites. Prerequisites for designations should be complete prior to designating individuals. However, in the event that a commander deems it necessary to designate someone who has not completed the prerequisite, that person must complete the prerequisite within six months from the effective date of designation.

Admin Notes.

1. The unit WTTP officer shall ensure the following is completed before an individual designation is effective:

- a. All syllabus training requirements for the designation are completed prior to being considered for designation.
- b. The trainee is recommended for designation as noted in the designation event, the designation letter is signed by the commanding officer and filed in the PR, and the designation event code is logged in M-SHARP. The designation is not effective until all actions are complete.

2. Common MACCS instructor designation events are contained in the MAWTS-1 C3 Course Catalog to ensure standardization across the MACCS. ATC-specific instructor designation requirements are delineated in the IUT-5000 phase.

Crew Requirements. Per the applicable designation syllabus.

DESG-6310 1.0 * B (N) G

Goal. Designation as a proficiency/co-proficiency manager.

Requirements. Complete the prerequisite.

Performance Standard. Designated in writing by the commanding officer.

Instructor. None.

Prerequisites. 3006.

References.

1. JO 7220.1, Certification and Rating Procedures for DOD Personnel.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

DESG-6320	1.0	*	B	(N)	G
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Goal. Designation as Basic Instructor (BI).

Requirement. Recommended for designation by an SI and designated in writing by detachment commander or facility officer.

Performance Standard. Meet requirements per the BI POI in the MAWTS-1 C3 Course Catalog, and ATC NATOPS.

Instructor. SI.

Prerequisite. 5000, 5010, 5020.

Reference.

1. C3 Course Catalog.

DESG-6321	1.0	*	B	(N)	G
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Goal. Designation as Senior Instructor (SI).

Requirement. Recommended for designation by a WTI and designated in writing by the detachment commander or facility officer.

Performance Standard. Meet requirements per the SI POI in the MAWTS-1 C3 Course Catalog and ATC NATOPS.

Instructor. WTI.

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

Reference.

1. C3 Course Catalog.

DESG-6322	1.0	*	B	(N)	G
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Goal. Designation as Weapons and Tactics Instructor (WTI).

Requirement. Recommended for designation by a squadron WTI and designated in writing by the commanding officer.

Performance Standard. Complete the coursework prescribed in the WTI Course and be recommended and designated in writing by the Commanding Officer or their designated representative.

DESG-6430 1.0 * B (N) L

Goal. Designation as a MATCD Commander.

Requirement. Recommended for designation by a WTI and designated in writing by the detachment commander or facility officer.

Performance Standard. Designated in writing by the commanding officer.

Instructor. WTI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

DESG-6440 1.0 * B (N) G

Goal. Designation as a MATCD Senior Air Director (SAD).

Requirement. Given an operation or exercise, perform the duties and responsibilities of a SAD.

Performance Standard. Designated in writing by the MATCD commander.

Instructor. WTI.

Prerequisite. 0701, 0703, 0704, 2001, 2002, 2005, 2006, 2009, 2010, 2011, 2102, 2104, 212, 2120, 2121, 2122, 2123, 2135, 2209, 2900, 2906, 2909, 2910, 2940, 2941, 3402, 3404, 3406, 6500, 8020, 8040, 8060, 8080.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

DESG-6441 1.0 * B (N) G

Goal. Designate as a Detachment Operations Officer.

Requirement. Recommended for designation by a WTI and designated in writing by the detachment commander.

Performance Standard. Recommended for designation by a WTI and designated in writing by the detachment commander.

Instructor. WTI.

Prerequisite. 0561, 0562, 0563, 0564, 0565, 0566, 0572, 0574, 0700, 0703, 0704, 0705, 2101, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 3001, 3002, 3003, 3004, 3400, 3405, 3450, 6321, 6440.

2.13 MISSION ESSENTIAL TASK (MET) PHASE (7000)

2.13.1 Purpose. This phase takes CMMR proficient Marines from multiple PMOS, puts them in CMMR representative crews, and trains them as combat effective teams in combined events.

2.13.2 General

2.13.2.1 Prerequisite. Marines must either be CMMR crew position or non-aviation PMOS proficient to train in this phase. For those events requiring combat leaders, only Marines currently designated as such can train in this phase.

2.13.2.2 Admin Notes. Prerequisites for this phase of training cannot be waived. Multiple events can be trained at the same time as long as separate evaluations are being conducted.

2.13.2.3 Stages. The following stages are included in the Mission Essential Task (MET) Phase of training.

PAR NO.	STAGE NAME	PAGE NUMBER
2.13.3	CONDITION (COND)	2-129

2.13.3 CONDITION (COND) STAGE

2.13.3.1 Purpose. To train unit level teams in executing community specific MET(s) or MET preparatory events.

2.13.3.2 General

Prerequisite. If an event requires prerequisites in addition to those listed for the MET Phase, they will be covered in the individual event.

Admin Notes. All events in this stage will require the following administrative/operational documents to be identified or created:

1. Letter Of Intent (LOI).
2. Personnel Roster.
3. Bill Of Material (BOM).
4. Equipment Density List (EDL).

Crew Requirements. This stage requires that all crew members and combat leaders be qualified/designated and proficient (current) in the position they are assigned for the following events. Crews shall be task organized to meet the mission.

COND-7100 18.0 730 B, R, M (N) L

Goal. Provide ATC tower services.

Requirement. Given an expeditionary control tower, an FAA certifiable TACAN, and all ancillary equipment, conduct continuous expeditionary control tower operations.

Performance Standard. Perform the following:

1. Emplace an expeditionary control tower, an FAA certifiable TACAN, and ancillary equipment.
2. Establish applicable functional operating positions within 10 hours.
3. Establish two-way communications with aircraft and ground agencies.
4. Provide sustained integration with the MACCS, other military C2 and civilian entities to include FAA and the International Civil Aviation Organization (ICAO).
5. Control the movement of aircraft and/or vehicular traffic.
6. Control aircraft within assigned terminal airspace.
7. Pass a tactical or FAA flight inspection.
8. Provide sustained navigational assistance.
9. Perform a crew relief.

Prerequisite. Two CMMR crews.

Instructor. WTI.

Range. Airfield.

External Resource Requirement. Rotary-wing and/or fixed-wing aircraft, MWSS personnel, NAVFIG, and MHE.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. JO 7110.65, Air Traffic Control.
3. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

COND-7200 12.0 730 B, R, M (N) L

Goal. Provide ATC approach services.

Requirement. Given an airport surveillance radar, precision approach radar, FAA certifiable TACAN, and all ancillary equipment; conduct continuous expeditionary radar approach control operations.

Performance Standard. Perform the following:

1. Emplace an airport surveillance radar, precision approach radar, FAA certifiable TACAN, and ancillary equipment.
2. Establish six functional operating positions within eight hours.
3. Have maps available on operating positions.
4. Provide sustained integration with the MACCS, other military C2 and civilian entities to include FAA and ICAO.
5. Establish and maintain communication and radar identification of aircraft within the detachment's airspace.
6. Pass a tactical or FAA flight inspection.
7. Control aircraft within assigned airspace.
8. Provide sustained navigational assistance.
9. Provide sustained radar air surveillance data to the MAGTF or joint force via Tactical Data Link.
10. Perform a crew relief.

Prerequisite. Two CMMR crews.

Instructor. WTI.

Range Requirement. Assigned airspace.

External Resource Requirement. Rotary-wing and/or fixed-wing aircraft, MWSS personnel, NAVFIG, and MHE.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. JO 7110.65, Air Traffic Control.
3. Applicable technical manuals.

COND-7300 12.0 730 B, R, M (N) L

Goal. Provide ATC arrival/departure services.

Requirement. Given an airport surveillance radar, precision approach radar, FAA certifiable TACAN, and all ancillary equipment, conduct continuous expeditionary radar arrival/departure and final control operations.

Performance Standard. Perform the following:

1. Emplace an airport surveillance radar, precision approach radar, FAA certifiable TACAN, and all ancillary equipment.
2. Establish five functional operating positions within six hours.
3. Have maps available on operating positions.
4. Provide sustained integration with the MACCS, other military C2 and civilian entities to include FAA and ICAO.
5. Establish and maintain communication and radar identification of aircraft within the detachment's airspace.
6. Pass a tactical or FAA flight inspection.
7. Control aircraft within assigned airspace.
8. Provide precision/non-precision approaches within a terminal area.
9. Provide sustained navigational assistance.
10. Provide sustained radar air surveillance data to the MAGTF or joint force via Tactical Data Link.
11. Perform crew relief.

Prerequisite. Two CMMR crews.

Instructor. WTI.

Range. Airfield.

External Syllabus Support. Rotary-wing and/or fixed-wing aircraft, MWSS personnel, NAVFIG, and MHE.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. JO 7110.65, Air Traffic Control.
3. Applicable technical manuals.

COND-7400 2.0 730 B, R, M (N) L

Goal. Conduct Marine air traffic control mobile team (MMT) ALZ operations.

Requirement. Provided a Table of Equipment (T/E) and/or equipment density list (EDL), conduct ALZ operations.

Performance Standard. Perform the following during a minimum operational tempo of three air traffic control operations.

1. Conduct a hasty assault zone survey and assessment.
2. Travel to the landing zone.
3. Within five minutes of arrival at the site, establish visual control capability consisting of radios and/or appropriate signaling devices.
4. Within 30 minutes of arrival at the site, establish appropriate marking of the landing zone and emplace navigational aid.
5. Provide sustained integration with the MACCS and other military C2 agencies.
6. Control aircraft within assigned terminal airspace.
7. Provide sustained navigational assistance.

8. Provide limited non-certifiable weather observations and information.
9. Provide appropriate small unit defense capability and integrate with the defensive force established at the landing zone, if provided.
10. Retrograde from the landing zone with the last available transportation.

Prerequisite. One CMMR MMT.

Instructor. WTI.

Range. Assault landing zone.

External Resource Requirement. ALZ-capable fixed-wing aircraft.

References.

1. MMT TACSOP.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

COND-7500 2.0 730 B, R, M (N) L

Goal. Conduct Marine air traffic control mobile team (MMT) FARP operations.

Requirement. Given a Table of Equipment (T/E) and/or equipment density list (EDL), conduct FARP operations.

Performance Standard. Perform the following during a minimum operational tempo of three air traffic control operations.

1. Conduct a hasty survey and assessment.
2. Travel to the landing zone.
3. Within five minutes of arrival at the site, establish visual control capability consisting of radios and/or appropriate signaling devices.
4. Within 30 minutes of arrival at the site, establish appropriate marking of the landing zone and emplace navigational aid.
5. Provide sustained integration with the MACCS and other military C2 agencies.
6. Establish and maintain integration with the FARP OIC and/or aircraft commander.
7. Control aircraft within assigned terminal airspace.
8. Provide sustained navigational assistance.
9. Provide limited non-certifiable weather observations and information.
10. Provide appropriate small unit defense capability and integrate with the defensive force established at the landing zone, if provided.
11. Retrograde from the landing zone with the last available transportation.

Prerequisite. One CMMR MMT.

Instructor. WTI.

Range. Operational FARP.

External Resource Requirement. Fixed or rotary-wing aircraft.

References.

1. MMT TACSOP.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

2.14 AVIATION CAREER PROGRESSION MODEL (ACPM) (8000).

2.14.1 Purpose. To enhance professional understanding of Marine Aviation and the MAGTF and to provide MACG Marines with a knowledge of the doctrine and tactics techniques and procedures (TTPs) of aviation command and control. Additionally, the MACCS ACPM ensures that 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

2.14.2 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 instructor conducting the period of instruction or they may be accomplished by self-paced instruction.

MAWTS-1 is responsible to update and validate the ACPM periods of instruction. In the future, courses may be consolidated or revised to meet changing requirements. Refer to the MAWTS-1 link for the current ACPM program of instruction: <https://mceits.usmc.mil/sites/mawts1/default.aspx>.

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.

ACPM-8000 1.0 * B (N) G

Goal. Describe the MACCS stage.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8001, 8002, 8003, 8004, 8005, 8006, 8008.

Reference. C3 Course Catalog.

ACPM-8001 4.0 * B (N) G

Goal. Deescribe the Marine Air Command and Control System (MACCS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Describe how the control of aircraft and missiles relates to the other five functions of USMC aviation.
2. Define the control of aircraft and missiles and each of its subcomponents.
3. Define the Marine aviation's philosophy of centralized command and decentralized control.
4. Differentiate between Marine aviation philosophy and Joint aviation philosophy.
5. Identify the principle objectives of the MACCS.

6. Recall the primary role of each agency of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 MACCS Agencies, Functions and the Control of Aircraft and Missiles Class
2. MCTP 3-20F Control of Aircraft and Missiles

ACPM-8002	4.0	*	B	(N)	G
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Goal. Describe the Tactical Air Command Center (TACC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. State the mission of the TACC.
2. Identify the four organizations of the TACC.
3. List the primary responsibilities of Air Combat Intelligence (ACI).
4. List the primary responsibilities of Future Operations (FOPS).
5. List the primary responsibilities of Future Plans (FPLANS).
6. List the primary responsibilities of Current Operations (COPS).
7. List the major end items used by the TACC.
8. List the system limitations of the TACC.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 TACC Class
2. MCRP 3-20F.4 Marine TACC Handbook

ACPM-8003	4.0	*	B	(N)	G
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Goal. Describe the Direct Air Support Center (DASC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the DASC.
2. List the structure and task organization of the DASC.
3. Identify the major end items and their characteristics used by the DASC.
4. List the capabilities and limitations of the DASC.
5. Identify how the DASC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 DASC Class
2. MCRP 3-20F.5 DASC Handbook

ACPM-8004 4.0 * B (N) G

Goal. Describe the Tactical Air Operations Center (TAOC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the mission of the TAOC.
2. Identify the Mission Essential Tasks (METs) for the TAOC.
3. Identify the structure and task organization of the TAOC.
4. Identify the major end items and their characteristics used by the TAOC.
5. Identify the capabilities and limitations of the TAOC.
6. Identify how the TAOC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 TAOC Class
2. MCRP 3-20F.6 TAOC Handbook

ACPM-8005 4.0 * B (N) G

Goal. Describe the Marine Air Traffic Control (MATC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of MATC.
2. Identify the Mission Essential Tasks (METs) for MATC.
3. List the structure and task organization of MATC.
4. Identify the major end items and their characteristics used by MATC.
5. Identify the capabilities and limitations of MATC.
6. Identify how MATC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 MATC Employment Class
2. MCTP 3-20F
3. MCRP 3-20F.7 Marine Air Traffic Control Detachment Handbook

ACPM-8006 4.0 * B (N) G

Goal. Describe the Low Altitude Air Defense (LAAD).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the LAAD battalion.
2. Identify the structure and task organization of the LAAD battalion.
3. Identify the primary vehicle and surface-to-air weapon used by the LAAD Battalion.
4. Define the LAAD employed guidelines.
5. List the LAAD weapon applications.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 LAAD Employment Class
2. MCRP 3-20F.8 LAAD Battalion Handbook
3. MCRP 3-20F.9 LAAD Gunner's Handbook

ACPM-8008	4.0	*	B	(N)	G
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Goal. Describe the Marine Wing Communications Squadron (MWCS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the MWCS.
2. Identify the structure and task organization of the MWCS.
3. Identify the Mission Essential Tasks (METs) for the MWCS.
4. Identify the major end items and their characteristics used by MWCS.
5. Identify the capabilities and limitations of the MWCS.
6. Identify how the MWCS is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI

Prerequisite. None.

References.

1. MAWTS-1 MWCS Employment Class
2. MCRP 3-30B.2 MAGTF Communications Systems
3. NAVMC 3500.56 Communications Training and Readiness Manual

ACPM-8020	1.0	*	B	(N)	G
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Goal. Describe the ACE stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Reference. C3 Course Catalog.

ACPM-8021 4.0 * B (N) G

Goal. Describe the USMC aviation operations doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the six functions of Marine aviation to include all their subsets.
2. Identify the organization and mission of the Marine Aircraft Wing (MAW), to include each type of group and squadron.
3. Define who has operational control of organic MAGTF aviation assets during Joint operations.
4. List the four types of sorties the MAGTF Commander makes available to the Joint Force.
5. Identify the purpose of the Air Tasking Order (ATO).
6. Identify the six phases of the air tasking cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCWP 3-2 Aviation Operations

ACPM-8022 4.0 * B (N) G

Goal. Describe the USMC doctrine for the control of aircraft and missiles.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify how the control of aircraft and missiles relates to the other five functions of USMC aviation.
2. Identify distinctions between Marine aviation philosophy and that of the other services.
3. Identify the principle objectives of the Marine Air Command and Control System (MACCS).
4. Describe how the COMMARFOR may serve as the Joint Force Air
5. Component Commander (JFACC), Airspace Control Authority (ACA), and Area Air Defense Commander (AADC).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 Control of Aircraft and Missiles Class
2. MCTP 3-20F Control of Aircraft and Missiles

ACPM-8023 4.0 * B (N) G

Goal. Describe the USMC Offensive Air Support (OAS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the purpose of the MAGTF Commanders Single Battle Concept.
2. Define the subcategories of OAS.
3. Define the requirements for effective OAS.
4. Define the three types of Deep Air Support (DAS).
5. Define the capabilities and limitations of the OAS function.
6. Identify the elements of a Joint Tactical Air Strike Request (JTAR).
7. Identify the three types of control of Close Air Support (CAS).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 OAS Class
2. MCTP 3-20D Offensive Air Support

ACPM-8024	4.0	*	B	(N)	G
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Goal. Describe the USMC Assault Support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the types of assault support operations.
2. Identify which aircraft conduct each of the types of assault support operations.
3. Identify the elements of an Assault Support Request (ASR).
4. List assault support capabilities and limitations.
5. Define the role of the air mission commander and the assault force commander during air assault operations.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 Assault Support Class
2. MCTP 3-20E Assault Support

ACPM-8025	4.0	*	B	(N)	G
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Goal. Describe the USMC Air Reconnaissance doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the three categories of air reconnaissance.

2. Identify the four principals of air reconnaissance.
3. Identify the five prerequisites for effective air reconnaissance.
4. Identify the current USMC aircraft that have the mission of air reconnaissance.
5. Identify the form used to request air reconnaissance.
6. Identify the five supporting operations for effective air reconnaissance.
7. Identify the capabilities and limitations of air reconnaissance.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCTP 3-20G Air Reconnaissance

ACPM-8026	4.0	*	B	(N)	G
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Goal. Describe the USMC Electronic Warfare (EW) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define radar.
2. List the three basic radar types.
3. Identify the limitations and characteristics of radar systems.
4. Identify the six guidance systems and how they work.
5. List the three subdivisions of Electronic Warfare (EW).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-32D.1 Electronic Warfare

ACPM-8027	4.0	*	B	(N)	G
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Goal. Describe the USMC Antiair Warfare (AAW) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define AAW.
2. Define the two subsets of AAW.
3. Identify the principles of AAW.
4. Identify the types of Offensive Antiair Warfare (OAAW).
5. Identify the active air defense functions.
6. List three examples of passive air defense measures.
7. Define a Joint Engagement Zone (JEZ), Fighter Engagement Zone (FEZ), Missile Engagement Zone (MEZ), and Base Defense Zone (BDZ).
8. Define the air defense warning conditions.
9. Define the weapons control statuses.

10. Identify the responsibilities of the Regional Air Defense Commander (RADC) and the Sector Air Defense Commander (SADC).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCTP 3-20C Anti-air Warfare

ACPM-8028	4.0	*	B	(N)	G
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Goal. Describe the USMC Ground Support (AGS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the organization responsible for providing AGS to the Marine Aircraft Wing (MAW).
2. Identify the 13 functions of AGS.
3. Identify the five activities that the Marine Wing Support Squadron (MWSS) performs for the ACE when deployed.
4. Identify the four basing concepts for MAGTF Forward Operating Bases (FOBs).
5. List the four classifications of FOBs.
6. Differentiate the distinguishing characteristics of FOBs.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 AGS Class
2. MCTP 3-20B Aviation Ground Support

ACPM-8040	1.0	*	B	(N)	G
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Goal. Describe the Threat stage of the MACCS ACPM

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8041, 8042, 8043, 8044.

Reference. C3 Course Catalog.

ACPM-8041	4.0	*	B	(N)	G
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Goal. Describe the surface-to-air threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the system name with the guidance and target aspect for the following Man Portable Air Defense Systems (MANPADS):
 - a. SA-7
 - b. SA-14
 - c. SA-16
 - d. SA-18
2. Match the system name with the guidance and associated radars for the following Radio Frequency Surface-to-Air Missile Systems (RF SAMS):
 - a. SA-2
 - b. SA-6
 - c. SA-8
 - d. SA-10
 - e. SA-11
 - f. SA-15
 - g. SA-20
 - h. Roland-III
3. Match the system name with the type and associated radar for the following Air Defense Artillery (AAA):
 - a. ZPU 1, 2, 4
 - b. ZSU-23-4
 - c. 2S6
 - d. S-60

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8042	4.0	*	B	(N)	G
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Goal. Describe the fixed wing threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the AN-2 Colt.
2. Identify the role of the MIG-23 Flogger.
3. Identify the role of the MIG-29 Fulcrum.
4. Identify the role of the MIG-31 Foxhound.
5. Identify the role of the Su-24 Fencer.
6. Identify the role of the Su-25 Frogfoot.
7. Identify the role of the Su-27 Flanker.
8. Identify the role of the Su-30 Flanker.
9. Identify the role of the Tu-22M Backfire.
10. Identify the role of the Tu-95 Bear.
11. Identify the role of the Tu-160 Blackjack.
12. Identify the role of the J-7 Fishbed.
13. Identify the role of the JH-7 Flounder.

14. Identify the role of the J-8 Finback.
15. Identify the role of the J-10 Firebird.
16. Identify the role of the H-6 Badger.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8043	4.0	*	B	(N)	G
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Goal. Describe the rotary wing threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the Mi-24 Hind.
2. Identify the role of the SA 342 Gazelle.
3. Identify the role of the Ka-25 Hormone.
4. Identify the role of the Mi-6 Hook.
5. Identify the role of the Mi-28 Havoc.
6. Identify the role of the Mi-8 Hip.
7. Identify the role of the Ka-50 Kokum.
8. Identify the role of the Ka-29 Helix B.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8044	4.0	*	B	(N)	G
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Goal. Describe the missile and Unmanned Aircraft System (UAS) threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the system name with the terminal guidance for the following Air-to-Surface Missiles:
 - a. AS-10 Karen
 - b. AS-11 Kilter
 - c. AS-12 Kegler
 - d. AS-14 Kedge
 - e. AS-17 Krypton
2. Match the system name with the warhead and guidance for the following Surface-to-Surface Missiles:
 - a. FROG-7
 - b. SCUD-B
 - c. SCUD-C
 - d. Nodong 1

- e. C 801
- f. C 802
- 3. Identify the mission of the following threat UAS:
 - a. Ababil
 - b. Mohajer
 - c. Harpy
 - d. Heron
 - e. ASN-206
 - f. Pchela-1T

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

- 1. MAWTS-1 Marine Aviation Intelligence Reference
<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/newc3/default.aspx>
- 2. Marine Corps Intelligence Activity Iran Country Handbook (appendix A)
- 3. Marine Corps Intelligence Activity North Korea Country Handbook (page 86)
- 4. Marine Corps Intelligence Activity China Country Handbook (appendix A)
<https://www.intelink.gov/mcia/handbook.htm>
- 5. MCIA UAV Recognition Guide <https://www.intelink.gov/mcia/index.htm>

ACPM-8060	1.0	*	B	(N)	G
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Goal. Describe the MAGTF stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8061, 8062, 8063, 8064, 8065.

References. C3 Course Catalog.

ACPM-8061	4.0	*	B	(N)	G
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Goal. Describe the MAGTF ground combat operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

- 1. Identify how the Ground Combat Element (GCE) is employed as part of the MAGTF and the capabilities the GCE provides to the MAGTF commander
- 2. Define the following items related to command and control of ground combat operations:
 - a. Echelons of the GCE headquarters
 - b. Battlespace Organization
 - c. Battlespace Framework

3. Define the five types of amphibious operations.
4. Identify the following items related to offensive operations:
 - a. Types of offensive operations
 - b. Types of attack
 - c. Forms of maneuver
 - d. Distribution of forces
5. Identify the following items related to defensive operations:
 - a. Organization of the defense
 - b. Distribution of forces
 - c. Types of defensive operations
 - d. Defensive methods

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCDP 1-0 Marine Corps Operations

ACPM-8062	4.0	*	B	(N)	G
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Goal. Describe the fire support coordination in the Ground Combat Element (GCE).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the four fire support tasks.
2. List the functions of the senior fire support coordination center (FSCC) in the GCE.
3. List the four steps of the MAGTF Targeting Process.
4. Define the purpose of essential fire support tasks (EFST).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 MAGTF Targeting and Fire Support Planning Class
2. MCTP 3-10F Fire Support Coordination in the GCE

ACPM-8063	4.0	*	B	(N)	G
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Goal. Describe the MAGTF command and control.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify MAGTF command and support relationships.
2. Identify the purpose and role of the command and control centers in the CE, ACE, GCE, and LCE.
3. Identify the purpose and role of the amphibious command and control facilities.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCWP 3-30 MAGTF Command and Control

ACPM-8064 4.0 * B (N) G

Goal. Describe MAGTF communications.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the six characteristics of communications and information systems.
2. Identify the mission and organizational structure of the Communications Battalion.
3. Identify the purpose of the Communications-Electronics Operating Instructions (CEOI) and what information is usually included in it.
4. Identify what information can be found in Annex K of an operations order.
5. Identify the purpose of select fires, support, and ACE specific radio nets.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCRP 3-30B.2 MAGTF Communications System

ACPM-8065 4.0 * B (N) G

Goal. Describe phasing control ashore.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify types of amphibious operations and how command relationships may change during the conduct of each.
2. Identify how disputes among commanders during amphibious operations are resolved.
3. Identify the key commanders and command relationships.
4. Identify the key characteristics of each phase in phasing the MACCS ashore.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-02 Amphibious Operations
2. MCTP 3-20F Control of Aircraft and Missiles (Appendix C)

ACPM-8066 4.0 * B (N) G

Goal. Describe information management.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the principles of information management with their descriptions.
2. Define each of the classes of information within an information hierarchy.
3. List the characteristics of quality information.
4. Identify the role and responsibilities of an Information Management Officer (IMO).
5. Define C2 support structure and the three steps followed to develop one.
6. Identify the purpose of an information management matrix and the information management plan.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCTP 3-30B Information Management

ACPM-8067	4.0	*	B	(N)	G
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Goal. Describe Unmanned Aircraft Systems in support of MAGTF operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the four types of payloads.
2. Identify the three attributes that determine UAS Groups.
3. Identify the five different UAS Group Categories.
4. Identify the two types of VMU operational employment.
5. Identify the three components of the RQ-7B Communications Relay Package.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-42.1A
2. NTTP 3-22.3-VMU

ACPM-8080	1.0	*	B	(N)	G
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Goal. Describe the MAGTF stage of the joint air operations stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Reference. C3 Course Catalog.

ACPM-8081 4.0 * B (N) G

Goal. Describe the command and control of joint air operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the definition of joint air operations.
2. Identify the Joint Force Air Component Commander's responsibilities.
3. Identify the five sections that comprise the Joint Air Operations Center. Identify the six phases of the Joint Air Tasking Cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. DOCNET Course 3-30 (<http://www.dtic.mil/doctrine/docnet/>)
2. MAWTS-1 Joint Air Operations Class
3. JP 3-30 C2 of Joint Air Operations

ACPM-8082 4.0 * B (N) G

Goal. Describe theater air ground system (TAGS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. List the primary characteristics of the Theater Air Ground System (TAGS).
2. Identify the elements within the Air Force's Theater Air Control System (TACS) and their primary responsibilities.
3. Identify the aviation command and control elements with the Army Air and Ground System (AAGS) and their primary responsibilities.
4. Identify the aviation elements within the Navy's Composite Warfare Commander (CWC) architecture.
5. Identify the Amphibious Task Force (ATF) construct and its primary responsibilities.
6. Identify the aviation command and control elements within the Special Operations Air-Ground System.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-20.1 Multi-Service Tactics, Techniques, and Procedures for the Theater Air-Ground System

ACPM-8083 4.0 * B (N) G

Goal. Describe joint fire support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define joint fires.
2. Define joint fire support.
3. Identify the steps of the joint fire support planning process.
4. List the various elements of the component commander's fires command and control system.
5. Define the various joint control and coordination measures associated with joint fire support.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-09 Joint Fire Support

ACPM-8084	4.0	*	B	(N)	G
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Goal. Describe close air support (CAS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Explain key roles and responsibilities related to the planning and execution of CAS.
2. Detail key steps in the planning and execution of CAS.
3. Describe various coordination measures used in the planning and conduct of CAS.
4. Describe the manner in which the two types of CAS requests are fulfilled.
5. Identify the goal and purpose of synchronizing CAS with surface fires.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-09.3 Close Air Support

ACPM-8085	4.0	*	B	(N)	G
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Goal. Describe the joint targeting doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify types of targets.
2. Identify and describe the six phases of the joint targeting cycle.
3. Identify characteristics of a target.
4. Identify and describe steps in dynamic targeting.
5. Describe roles and responsibilities related to the joint targeting process.
6. Describe key products and processes of the joint targeting cycle.
7. Identify key terms related to the joint targeting process.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-60 Joint Targeting

ACPM-8086	4.0	*	B	(N)	G
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Goal. Describe the North Atlantic Treaty Organization (NATO).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the composition of the NATO alliance.
2. Identify the three key articles of the NATO alliance.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 NATO Class
2. North Atlantic Treaty Organization Handbook
3. "What is NATO" Brief (http://www.nato.int/welcome/intro_to_NATO_en.ppt)
4. AJP-01(D)

ACPM-8087	4.0	*	B	(N)	G
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Goal. Describe the joint airspace control doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the responsibilities of the airspace control authority (ACA).
2. Identify the basic principles for airspace control.
3. Identify the purpose of the airspace control plan (ACP).
4. Identify the purpose of the airspace control order (ACO).
5. Identify the methods of airspace control.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-30 C2 of Joint Air Operations
2. JP 3-52 Joint Airspace Control

ACPM-8088 4.0 * B (N) G

Goal. Describe the joint doctrine for countering air and missile threats.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the purposes of counter air missions (offensive and defensive).
2. Identify roles and responsibilities related to counter air missions.
3. Identify key considerations for the planning of offensive counter air operations.
4. Identify key considerations for the planning of defensive counter air operations.
5. Identify key principles and consideration related to the command and control of counter air operations

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference.

1. JP 3-01 Countering Air and Missile Threats

2.15 SYLLABUS MATRIX.

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)												
ACADEMIC (ACAD) STAGE												
ACAD	0500	Describe general ATC knowledge	B	G	(N)	*	*	1	*	*	*	
ACAD	0501	Describe general ATC terminology	B	G	(N)	*	*	1	*	*	*	
ACAD	0502	Label the local airfield diagram	B	G	(N)	*	*	1	*	*	*	
ACAD	0503	Describe local area/airfield specific information	B	G	(N)	*	*	1	*	*	*	
ACAD	0504	Label the location of ATCF emergency/safety equipment	B	G	(N)	*	*	1	*	*	*	
ACAD	0505	Describe ATC emergency procedures and policies	B	G	(N)	*	*	1	*	*	*	
ACAD	0506	Describe the handling of special flights procedures and policies	B	G	(N)	*	*	1	*	*	*	
ACAD	0507	Describe basic weather knowledge	B	G	(N)	*	*	1	*	*	*	
ACAD	0508	Identify information contained in local letters of agreement/procedure	B	G	(N)	*	*	1	*	*	*	
ACAD	0509	Identify knowledge of ATC publications	B	G	(N)	*	*	1	*	*	*	
ACAD	0520	Describe radio and interphone communications knowledge	B	G	(N)	*	*	1	*	*	*	
ACAD	0521	Describe aircraft movement data knowledge	B	G	(N)	*	*	1	*	*	*	
ACAD	0522	Describe flight progress strip knowledge	B	G	(N)	*	*	1	*	*	*	
ACAD	0523	Describe ATC clearance knowledge and phraseology	B	G	(N)	*	*	1	*	*	*	
ACAD	0524	Describe airfield lighting	B	G	(N)	*	*	1	*	*	*	
ACAD	0525	Identify requirements and phraseology for special VFR operations	B	G	(N)	*	*	1	*	*	*	
ACAD	0526	Explain visual separation, types of approaches, and VFR-on-top procedures	B	G	(N)	*	*	1	*	*	*	

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	0527	Define ATC phraseology/communications as it applies to ground control	B	G	(N)	*	*	1	*	*	*	
ACAD	0528	Define proper separation to vehicle and aircraft movement as it applies to ground control	B	G	(N)	*	*	1	*	*	*	
ACAD	0532	Identify radar equipment usage	B	G	(N)	*	*	1	*	*	*	
ACAD	0533	Describe radar final control knowledge	B	G	(N)	*	*	2	*	*	*	
ACAD	0534	Describe basic radar knowledge	B	G	(N)	*	*	2	*	*	*	
ACAD	0535	Describe radar special operations	B	G	(N)	*	*	1	*	*	*	
ACAD	0536	Describe arrival/departure/approach control knowledge	B	G	(N)	*	*	2	*	*	*	
ACAD	0537	Describe non-radar knowledge	B	G	(N)	*	*	4	*	*	*	
ACAD	0538	Describe radar coordination procedures	B	G	(N)	*	*	1	*	*	*	
ACAD	0539	Describe radar clearance knowledge	B	G	(N)	*	*	2	*	*	*	
ACAD	0540	Describe radar spacing and sequencing procedures	B	G	(N)	*	*	2	*	*	*	
ACAD	0550	Describe the duties and responsibilities applicable to supervisor positions	B	G	(N)	*	*	4	*	*	*	
ACAD	0551	Discuss the roles and responsibilities of the Training Chief and the training process	B	G	(N)	*	*	2	*	*	*	
ACAD	0552	Discuss the roles and responsibilities of the Tower Chief	B	G	(N)	*	*	2	*	*	*	
ACAD	0553	Discuss the roles and responsibilities of the Radar Chief	B	G	(N)	*	*	2	*	*	*	
ACAD	0554	Discuss aspects of facility management	B	G	(N)	*	*	16	*	*	*	
ACAD	0555	Discuss the roles and responsibilities of the ATC Facility Officer (ATCFO)	B	G	(N)	*	*	1	*	*	*	

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	0556	Discuss waiver request to required ATC regulations	B	G	(N)	*	*	2	*	*	*	
ACAD	0557	Discuss NATOPS Evaluations	B	G	(N)	*	*	2	*	*	*	
ACAD	0558	Identify the roles and responsibilities of the Crew Chief	B	G	(N)	*	*	1	*	*	*	
ACAD	0560	Discuss airspace and MATC considerations in regard to the Federal Aviation Administration (FAA) or host-nation equivalent	B	G	(N)	*	*	1	*	*	*	
ACAD	0561	Discuss the supply requirements and considerations when deploying the MATCD	B	G	(N)	*	*	1	*	*	*	
ACAD	0562	Discuss the administrative process of embarkation	B	G	(N)	*	*	1	*	*	*	
ACAD	0563	Discuss the process to submit a frequency request	B	G	(N)	*	*	1	*	*	*	
ACAD	0570	Discuss basic knowledge of the MMT	B	G	(N)	*	*	1	*	*	*	
ACAD	0571	Discuss tactical communications terms and procedures	B	G	(N)	*	*	2	*	*	*	
ACAD	0572	Discuss the Marine Corps Planning Process	B	G	(N)	*	*	2	*	*	*	
ACAD	0573	Discuss the MEU(SOC) mission	B	G	(N)	*	*	1	*	*	*	
ACAD	0574	Discuss forward arming and refueling point (FARP) operations	B	G	(N)	*	*	2	*	*	*	
ACAD	0576	Identify basic assault zone survey principles	B	G	(N)	*	*	1	*	*	*	
ACAD	0577	Identify criteria associated with conducting assault zone survey and assessment	B	G	(N)	*	*	1	*	*	*	
ACAD	0578	Identify principles of mathematics and measurement used in survey and assault zone assessment	B	G	(N)	*	*	1	*	*	*	

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	0579	Identify the principles involved in conducting soil evaluation during survey and assault zone assessment	B	G	(N)	*	*	1	*	*	*	
ACAD	0580	Identify the requirement items for completing survey and assault zone assessment forms	B	G	(N)	*	*	1	*	*	*	
ACAD	0700	Develop plans for MATCD services in support of a forward operating base (FOB)	B	G	(N)	*	*	1	*	*	*	
ACAD	0701	Discuss MATCD communications assets and their associated capabilities	B	G	(N)	*	*	1	*	*	*	
ACAD	0703	Discuss rear area security planning	B	G	(N)	*	*	2	*	*	*	
ACAD	0704	Discuss the relationship between the MATCD and AGS units aboard a FOB	B	G	(N)	*	*	1	*	*	*	
ACAD	0705	Discuss key air C2 planning documents	B	G	(N)	*	*	2	*	*	*	
ACAD	0720	Discuss the Integrated Air Defense Systems (IADS) and how it applies to the MATCD	B	G	(N)	*	*	2	*	*	*	
ACAD	0721	Discuss Electronic Protection (EP) as it pertains to MATCD	B	G	(N)	*	*	2	*	*	*	
ACAD	0722	Discuss the planning considerations for a BDZ	B	G	(N)	*	*	2	*	*	*	
TOTAL ACADEMIC (ACAD) STAGE				EVENTS		59	HOURS	97				
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)												
COMMON AIR SCHOOL (CAIRS) STAGE												
CAIRS	1000	Explain the fundamentals of Aviation Command and Control (Air C2) employment	B	G	(N)	*	*	0	*	*	*	
CAIRS	1002	Identify the components of Marine Air Ground Task Force (MAGTF) Operations	B	G	(N)	*	*	0	*	*	*	

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CAIRS	1004	Identify characteristics of Aviation Command and Control	B	G	(N)	*	*	0	*	*	*	
CAIRS	1006	State the proper procedures for handling and storage of classified materials	B	G	(N)	*	*	0	*	*	*	
CAIRS	1008	Identify Aviation Ground Support (AGS)	B	G	(N)	*	*	0	*	*	*	
CAIRS	1010	Introduce Marine Air Command and Control System (MACCS) equipment	B	G	(N)	*	*	0	*	*	*	
CAIRS	1012	Identify characteristics of Aircraft	B	G	(N)	*	*	0	*	*	*	
CAIRS	1014	Identify the components of the air picture	B	G	(N)	*	*	0	*	*	*	
CAIRS	1016	Identify operational graphics	B	G	(N)	*	*	0	*	*	*	
CAIRS	1018	Identify the elements of an Integrated Air Defense System (IADS)	B	G	(N)	*	*	0	*	*	*	
CAIRS	1020	Extract critical information from operations documents	B	G	(N)	*	*	0	*	*	*	
CAIRS	1022	Define elements of information exchange within the MAGTF Communications System	B	G	(N)	*	*	0	*	*	*	
CAIRS	1024	Introduce the six functions of Marine Aviation	B	G	(N)	*	*	0	*	*	*	
CAIRS	1026	Introduce airspace, navigation, and time	B	G	(N)	*	*	0	*	*	*	
CAIRS	1028	Introduce weather as applied to MACCS	B	G	(N)	*	*	0	*	*	*	
CAIRS	1030	Introduce the Training and Readiness (T&R) Manual	B	G	(N)	*	*	0	*	*	*	
CAIRS	1032	Conduct Information Security	B	G	(N)	*	*	0	*	*	*	
CAIRS	1034	Introduce basic radar services provided by the MACCS	B	G	(N)	*	*	0	*	*	*	

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CAIRS	1036	Identify the air command and control structure within the Joint Force	B	G	(N)	*	*	0	*	*	*	
CAIRS	1038	Identify threats to the MAGTF	B	G	(N)	*	*	0	*	*	*	
TOTAL HOURS COMMON AIR SCHOOL (CAIRS) STAGE				EVENTS		20	HOURS	0				
AIR TRAFFIC CONTROL (ATC) STAGE												
ATC	1100	Introduce basic fundamentals	B	G	(N)	*	*	0	*	*	*	
ATC	1105	Introduce weather as applied to ATC	B	G	(N)	*	*	0	*	*	*	
ATC	1110	Introduce airspace, navigation, and time as applied in ATC	B	G	(N)	*	*	0	*	*	*	
ATC	1115	Introduce special use airspace (SUA) used by the military	B	G	(N)	*	*	0	*	*	*	
ATC	1120	Introduce navigational aids (NAVAIDS)	B	G	(N)	*	*	0	*	*	*	
ATC	1125	Introduce charts and publications used in ATC	B	G	(N)	*	*	0	*	*	*	
ATC	1130	Introduce communications as applied in ATC	B	G	(N)	*	*	0	*	*	*	
ATC	1135	Introduce airport design and ATC equipment	B	G	(N)	*	*	0	*	*	*	
ATC	1140	Introduce general control tower procedures	B	G	(N)	*	*	0	*	*	*	
ATC	1145	Introduce ATC terminal procedures	B	G	(N)	*	*	0	*	*	*	
ATC	1150	Introduce emergencies and special handling	B	G	(N)	*	*	0	*	*	*	
ATC	1155	Introduce non-radar procedures	B	G	(N)	*	*	0	*	*	*	
ATC	1160	Pass the Airmen's Written Test (AWT)	B	G	(N)	*	*	0	*	*	*	
ATC	1200	Control tower indoctrination	B	G	(N)	*	*	0	*	*	*	
ATC	1205	Control tower indoctrination	B	G	(N)	*	*	0	*	*	*	
ATC	1210	Introduce basic radar knowledge	B	G	(N)	*	*	0	*	*	*	

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ATC	1305	Introduce basic radar services provided by ATC	B	G	(N)	*	*	0	*	*	*	
ATC	1310	Introduce the airport surveillance radar (ASR)	B	G	(N)	*	*	0	*	*	*	
ATC	1315	Perform airport surveillance radar (ASR) services	B	G	(N)	*	*	0	*	*	*	
ATC	1320	Introduce the precision approach radar (PAR)	B	G	(N)	*	*	0	*	*	*	
ATC	1325	Perform PAR services	B	G	(N)	*	*	0	*	*	*	
ATC	1330	Introduce arrival control	B	G	(N)	*	*	0	*	*	*	
ATC	1335	Perform arrival control services	B	G	(N)	*	*	0	*	*	*	
TOTAL ATC STAGE				EVENTS		23	HOURS	0				
MARINE AIR TRAFFIC CONTROL OFFICER (MATCO) STAGE												
MATCO	1400	Introduce the organization of MATC within the Marine Air Control Group and Marine Corps	B	G	(N)	*	*	0	*	*	*	
MATCO	1401	Introduce NATOPS Publication	B	G	(N)	*	*	0	*	*	*	
MATCO	1402	Introduce personnel certification and MOS revocation	B	G	(N)	*	*	0	*	*	*	
MATCO	1403	Introduce the training process	B	G	(N)	*	*	0	*	*	*	
MATCO	1404	Introduce the Training and Readiness (T&R) Manual	B	G	(N)	*	*	0	*	*	*	
MATCO	1405	Introduce maintenance as it relates to MATC	B	G	(N)	*	*	0	*	*	*	
MATCO	1406	Introduce inspection programs	B	G	(N)	*	*	0	*	*	*	
MATCO	1407	Introduce Marine air traffic control detachment (MATCD) equipment	B	G	(N)	*	*	0	*	*	*	
MATCO	1408	Introduce the concepts of employment for the MATCD	B	G	(N)	*	*	0	*	*	*	
MATCO	1409	Describe the four basing concepts for MAGTF forward operating bases	B	G	(N)	*	*	0	*	*	*	

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
MATCO	1410	Discuss basic knowledge of the MMT	B	G	(N)	*	*	0	*	*	*	
MATCO	1411	Introduce MMT Landing Zone (LZ) Operations	B	G	(N)	*	*	0	*	*	*	
MATCO	1412	Introduce emission control (EMCON) in relation to MMT operations	B	G	(N)	*	*	0	*	*	*	
MATCO	1413	Discuss tactical communications terms and procedures	B	G	(N)	*	*	0	*	*	*	
MATCO	1414	Discuss the Marine Corps Rapid Response Planning Process (R2P2)	B	G	(N)	*	*	0	*	*	*	
MATCO	1415	Discuss the MMT role within the MEU	B	G	(N)	*	*	0	*	*	*	
MATCO	1416	Discuss forward arming and refueling point (FARP) operations	B	G	(N)	*	*	0	*	*	*	
MATCO	1417	Complete the MATC NITE Lab course	B	G	(N)	*	*	0	*	*	*	
MATCO	1418	Describe the requirements for employing a Marine Air Traffic Control Mobile Team (MMT)	B	G	(N)	*	*	0	*	*	*	
TOTAL MARINE AIR CONTROL OFFICER STAGE				EVENTS		19	HOURS	0				
TOTAL HOURS CORE SKILL INTRODUCTION TRAINING (1000 PHASE)								0				
CORE SKILL TRAINING (2000 PHASE EVENTS)												
ORIENTATION (ORNT) STAGE												
ORNT	2000	Identify common ATC knowledge applicable to the control tower and radar ATC facility (RATCF)	B	G	(N)	*	*	2	0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509	*	*	2000
TOTAL HOURS ORIENTATION (ORNT) STAGE				EVENTS		1	HOURS	2				
EQUIPMENT (EQPT) STAGE												
EQPT	2001	Describe MATCD equipment	B	G	(N)	*	*	1	*	*	*	2001

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
EQPT	2002	Identify the capabilities and limitations of the AN/TSQ-120	B	G	(N)	*	*	1	*	*	*	2002
EQPT	2003	Operate fixed control tower structure equipment	B,M	L	(N)	*	*	4	*	*	*	2003
EQPT	2005	Identify the capabilities of the AN/TSQ-216	B	G	(N)	*	*	1	*	*	*	2005
EQPT	2006	Identify the capabilities and limitations of the AN/TPN-31	B	G	(N)	*	*	2	*	*	*	2006
EQPT	2009	Identify the capabilities and limitations of the AN/TSQ-263	B	G	(N)	*	*	3	*	*	*	2009
EQPT	2010	Identify the capabilities and limitations of the AN/TMQ-56	B	G	(N)	*	*	3	*	*	*	2010
EQPT	2011	Identify the capabilities and limitations of the MATCD Tactical Air Navigation (TACAN) sets	B	G	(N)	*	*	1	*	*	*	2011
EQPT	2012	Identify the capabilities and limitations of the AN/MRQ-13	B	G	(N)	*	*	1	*	*	*	*
EQPT	2019	Operate flight data and radar equipment	B,M	L	(N)	*	*	12	*	*	*	*
EQPT	2022	Operate the dynamic cone penetrometer (DCP)	B	L	(N)	*	*	2	*	*	*	2022
EQPT	2023	Operate a laser range finder (LRF)	B	L	(N)	*	*	2	*	*	*	2023
EQPT	2026	Employ the MATCD TACANs	B	L	(N)	*	*	2	*	*	*	2026
EQPT	2031	Perform ATC duties	B,R,M	L	NS	1460	*	1	6520	*	*	2031
TOTAL HOURS EQUIPMENT (EQPT) STAGE				EVENTS		14	HOURS	36				
EXPEDITIONARY (EXPD) STAGE												
EXPD	2101	State the considerations required to conduct a MATCD site survey	B	G	(N)	*	*	4	0563, 0700, 0703, 2001, 2002, 2005, 2006, 2009, 2011	*	*	*
EXPD	2102	Identify the purpose of required reports that are processed by the MATCD	B	G	(N)	*	*	4	*	*	*	*

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
EXPD	2104	Relay a completed casualty evacuation (CASEVAC) request	B,R,M	S/L	(N)	365	*	2	*	*	*	2104
EXPD	2120	Describe the configuration and operation of each MACCS agency	B	G	(N)	*	*	1	8000	*	*	*
EXPD	2124	Describe UAS operational requirements within the National Airspace System	B	G	(N)	*	*	1	*	*	*	*
EXPD	2125	State MATCD maintenance considerations in an operational environment	B	G	(N)	*	*	1	*	*	*	*
EXPD	2126	Develop a manning document for a MATC detachment	B	S/L	(N)	*	*	4	0565	*	*	*
EXPD	2127	Provide a Concept of Employment (COE) Brief	B	S/L	(N)	*	*	8	0561, 0562, 0563, 0564, 0565, 0566, 0574, 0700, 0703, 0704, 0705	*	*	*
EXPD	2128	Develop an Equipment Density List (EDL) for a MATC detachment	B	S/L	(N)	*	*	4	0562, 0704	*	*	*
EXPD	2129	Develop a Training Exercise and Employment Plan (TEEP)	B,R,M	S/L	(N)	730	*	2	0566	*	*	*
EXPD	2130	Develop a Pre-deployment Training Program schedule	B	G	(N)	*	*	8	*	*	*	*
EXPD	2131	Identify tactical flight check requirements	B	G	(N)	*	*	1	2000	*	*	*
EXPD	2135	Conduct a MATC Tactical crew brief	B	S/L	(N)	*	*	1	*	*	*	2135
TOTAL EXPEDITIONARY (EXPD) STAGE				EVENTS		13	HOURS	41				
COMMUNICATIONS (COMM) STAGE												
COMM	2200	Operate UHF/VHF/SATCOM man-pack communications equipment	B,R,M	L	(N)	730	*	4	2210	*	*	2200
COMM	2204	Operate HF man-pack communications equipment	B,R,M	L	(N)	730	*	8	2210	*	*	2204
COMM	2205	Operate intra-team communications equipment	B,R,M	L	(N)	730	*	2	2210	*	*	2205

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
COMM	2206	Operate ATC communications equipment	B	L	(N)	*	*	2	*	*	*	2206
COMM	2208	Describe proper handling and storage of classified materials	B	G	(N)	*	*	2	*	*	*	2208
COMM	2209	Extract key material information from EKMS COMSEC callout	B	L	(N)	*	*	2	2208	*	*	2209
COMM	2210	Operate a common fill device (CFD)	B,R,M	L	(N)	730	*	2	2209	*	*	2210
TOTAL AIRFIELD ARRESTING GEAR STAGE				EVENTS		7	HOURS	22				
TERMINAL INSTRUMENT PROCEDURES (TERPS) STAGE												
TERPS	2500	Identify the roles of organizations that support the development, approval and inspection of instrument procedures	B	G	(N)	*	*	2	*	*	*	2500
TERPS	2501	Identify required publications and their usage in developing Navy/Marine Corps terminal instrument procedures	B	G	(N)	*	*	2	*	*	*	2501
TERPS	2502	Explain the administrative policies which govern the development of terminal instrument procedures	B	G	(N)	*	*	2	*	*	*	2502
TERPS	2503	Identify the general requirements for submission and approval of terminal instrument procedures	B	G	(N)	*	*	8	*	*	*	2503
TOTAL TERPS STAGE				EVENTS		4	HOURS	14				
AIRSPACE LIAISON OFFICER (ALO) STAGE												
ALO	2600	Describe the duties and responsibilities of the Tower Watch Supervisor (TWS)	B	L/S	(N)	*	*	25	0526, 0551, 0558, 0560, 6173	*	*	*
ALO	2602	Describe the duties and responsibilities of the Radar Watch Supervisor (RWS)	B	L/S	(N)	*	*	25	0535, 0551, 0558, 0560, 6113	*	*	*

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ALO	2604	Conduct a standard ATC crew brief	B	L	(N)	*	*	1	2600, 2602	*	*	2604
TOTAL AIRSPACE LIAISON OFFICER STAGE				EVENTS		3	HOURS	51				
COMMAND AND CONTROL SYSTEM (C2SYS) STAGE												
C2SYS	2900	Demonstrate proficiency logging on a TBMCS client	B,R	G	(N)	*	*	0.5	*	*	*	*
C2SYS	2906	Demonstrate proficiency with the TBMCS Web Based Airspace Deconfliction Software (WEBAD)	B,R	G	(N)	*	*	4	*	*	*	*
C2SYS	2909	Demonstrate proficiency using the TBMCS Force Status and Monitoring (FSTAT) tool to monitor and update Friendly Order of Battle (FrOB) status	B,R	G	(N)	*	*	2	*	*	*	2909
C2SYS	2910	Demonstrate proficiency with the TBMCS Execution Status and Monitoring	B, R	G	(N)	*	*	2	*	*	*	2910
C2SYS	2940	Demonstrate proficiency utilizing tactical chat	B,R	G	(N)	*	*	1	*	*	*	2940
C2SYS	2941	Demonstrate proficiency operating Web Development Software (i.e., SharePoint)	B,R	G	(N)	*	*	1	*	*	*	2941
TOTAL C2SYS STAGE				EVENTS		6	HOURS	10.5				
TOTAL HOURS CORE SKILL TRAINING (2000 PHASE)								176.5				
MISSION SKILL TRAINING (3000 PHASE EVENTS)												
ADMINISTRATIVE (ADMN) STAGE												
ADMN	3001	Prepare a flight inspection/certification for an ATCF or MATCD	B	L/S	(N)	*	*	4	2131	*	*	3001

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ADMN	3002	Discuss the preparation of a Letter of Agreement (LOA)/Letter of Procedure (LOP) and a Memorandum of Understanding (MOU)	B	G	(N)	*	*	4	*	*	*	3002
ADMN	3003	Prepare a Tactical flight inspection/certification	B,R,M	L/S	(N)	730	*	4	2131	*	*	*
ADMN	3004	Develop a Plan of Actions and Milestones (POA&M)	B	L/S	(N)	*	*	8	2101, 2125, 2126, 2127, 2128, 2129, 2130, 2131	*	*	*
ADMN	3006	Discuss the FAA credentialing process	B	G	(N)	*	*	1	*	*	*	3006
TOTAL HOURS ADMINISTRATIVE STAGE				EVENTS		5	HOURS	21				
MATC MOBILE TEAM LEADER (MMTL) STAGE)												
MMTL	3300	Develop and issue a five paragraph order	B,R,M	L	(N)	730	*	2	6046, 6210	*	*	2300
MMTL	3301	Conduct an assault zone survey and assessment	B,R,M	L	(N)	730	*	8	0576, 0577, 0578, 0579, 0580, 2023, 2313, 6210, 8000, 8020	*	*	2301
MMTL	3302	Complete joint tactical airstrike request (JTAR) and assault support request (ASR) forms	B,R,M	S/L	(N)	730	*	2	6210, 8000, 8002	*	*	2302
MMTL	3303	Perform as a MMT Leader during operational planning	B,R,M	L	(N)	730	*	12	2313, 2602, 2604, 6210, 6520, 8000, 8020, 6046	*	*	3300
MMTL	3304	Perform as a MMT Leader during ALZ operations	B,R,M	L	(N)	730	*	2	0576, 0577, 0578, 0579, 0580, 2023, 2104, 2120, 2122, 2123, 2124, 2300, 2301, 2302, 2313, 2602, 2604, 4300, 6210, 6520, 8000, 8020	*	*	3301

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
MMTL	3305	Perform as a MMT Leader during FARP operations	B,R,M	L	(N)	730	*	2	0520, 0521, 0522, 0523, 0524, 0525, 0526, 0529, 0530, 0531, 0576, 0577, 0578, 0579, 0580, 2000, 2003, 2023, 2104, 2120, 2124, 2206, 2300, 2301, 2302, 2313, 4300, 3630, 6180, 6210, 6520, 8000, 8020	*	*	3302
TOTAL MATC MOBILE TEAM LEADER (MMTL) STAGE				EVENTS		6	HOURS	28				
EXPEDITIONARY (EXPD) STAGE												
EXPD	3400	Conduct a MATCD site survey	B,R,M	L/S	(N)	730	*	8	0561, 0572, 0574, 0704, 2101	*	*	*
EXPD	3402	Describe airspace coordination measures	B	G	(N)	*	*	4	0705	*	*	3402
EXPD	3404	Plan base defense zone operations	B	S/L	(N)	*	*	8	0702, 0722	*	*	3404
EXPD	3405	Develop MATCD communications architecture	B	S/L	(N)	*	*	8	2001, 2002, 2005, 2006, 2009, 2011, 2026	*	*	3405
EXPD	3406	Plan launch and recovery operations in EMCON conditions	B	L/S	(N)	*	*	4	0571, 0721	*	*	3406
EXPD	3420	Utilize an execution checklist	B	L	(N)	*	*	4	0702	*	*	*
EXPD	3450	Plan the deployment of a MATC detachment	B	S/L	(N)	*	*	8	0705, 3001, 3002, 3003, 3004, 3400, 3405	*	*	*
TOTAL EXPEDITIONARY (EXPD) STAGE				EVENTS		7	HOURS	44				
TOWER (TWR) STAGE												

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TWR	3620	Perform the duties of a Tower Ground Controller (TGC)	B,R,M	L/S	(N)	1460	*	320	0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 2000, 2003, 2206	*	*	3620
TOTAL TOWER (TWR) STAGE				EVENTS		1	HOURS	320				
RADAR (RDR) STAGE												
RDR	3710	Perform the duties of a Radar Final Controller (RFC)	B,R,M	L/S	(N)	1460	*	240	0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0520, 0521, 0522, 0532, 0533, 0534, 0538, 2000, 2206	*	*	3710
TOTAL RADAR (RDR) STAGE				EVENTS		1	HOURS	240				
TOTAL HOURS MISSION SKILL TRAINING (3000 PHASE)								625				
CORE PLUS SKILL TRAINING (4000 PHASE EVENTS)												
EXPEDITIONARY (EXPD) STAGE												
EXPD	4000	Perform as a MATC Liaison Officer	B	L	(N)	*	*	1	*	*	*	4000
EXPD	4002	Conduct an ATC timeshare	B	L	(N)	*	*	80	0506, 3001, 3002	*	*	4002
EXPD	4012	Plan rear area operations	B	G	(N)	*	*	6	*	*	*	4012
EXPD	4014	Plan physical security for classified areas	B	G	(N)	*	*	2	*	*	*	4014
EXPD	4015	Identify the purpose of documents that enable Tactical Data Link (TDL) operations	B	G	(N)	*	*	1	*	*	*	*
EXPD	4016	Participate in tactical data link planning for an agency	B	L/S	(N)	*	*	8	*	*	*	*

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TOTAL HOURS EXPEDITIONARY (EXPD) STAGE				EVENTS		6	HOURS	98				
ADMINISTRATIVE (ADMN) STAGE												
ADMN	4100	Staff a waiver request to required ATC regulations	B	L/S	(N)	*	*	8	*	*	*	4100
ADMN	4110	Describe the elements of Time Phased Force and Deployment Data (TPFDD)	B	G	(N)	*	*	4	*	*	*	4110
TOTAL HOURS ADMINISTRATIVE (ADMN) STAGE				EVENTS		2	HOURS	12				
COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE												
C2SYS	4902	Demonstrate proficiency with utilizing the TBMCS Alerts Service Web Applications	B,R	G	(N)	*	*	0.5	*	*	*	4902
C2SYS	4904	Demonstrate proficiency with TBMCS Web Mapping	B,R	G	(N)	*	*	1	*	*	*	*
C2SYS	4905	Demonstrate proficiency utilizing the Air Tasking Order Airspace Control Order Tool (AATWEB)	B,R	G	(N)	*	*	1	*	*	*	*
C2SYS	4906	Demonstrate proficiency with the TBMCS Web Based Airspace Deconfliction Software (WEBAD)	B,R	G	(N)	*	*	4	*	*	*	4906
C2SYS	4913	Demonstrate proficiency importing an airspace group in TBMCS	B,R	G	(N)	*	*	4	*	*	*	4913
C2SYS	4921	Demonstrate proficiency operating C2 Personal Computer (C2PC)	B,R	G	(N)	*	*	4	*	*	*	4921
C2SYS	4922	Demonstrate proficiency operating Blue Force Tracker (BFT) equipment	B,R	G	(N)	*	*	4	*	*	*	4922
TOTAL HOURS (C2SYS) STAGE				EVENTS		7	HOURS	18.5				
TOTAL HOURS CORE PLUS TRAINING (4000 PHASE)								128.5				
INSTRUCTOR TRAINING (5000 PHASE EVENTS)												

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
INSTRUCTOR UNDER TRAINING (IUT) STAGE												
IUT	5000	Introduce principals of instruction	B	L	(N)	*	*	2	*	*	*	5000
IUT	5010	Describe the structure of an event	B	G	(N)	*	*	2	*	*	*	5010
IUT	5020	Conduct a period of instruction on a core skill event	B,R,M	L	(N)	90	*	12	5000, 5010	*	*	5020
IUT	5100	Describe the Aviation Training and Readiness (T&R) Program	B	L	(N)	*	*	2	*	*	*	5100
IUT	5110	Describe the applicable community T&R program	B	L	(N)	*	*	2	*	*	*	5110
IUT	5120	Describe T&R administration	B	L	(N)	*	*	2	5100, 5110	*	*	5120
IUT	5130	Develop a training plan	B	L	(N)	*	*	2	5120	*	*	5130
TOTAL HOURS INSTRUCTOR UNDER TRAINING (IUT) STAGE								24				
TOTAL HOURS INSTRUCTOR TRAINING (5000 PHASE)								24				
REQUIREMENTS, QUALIFICATIONS, CERTIFICATIONS, AND DESIGNATIONS (RQCD) (6000 PHASE EVENTS)												
SCHOOL CODES												
SCHL	6000	Weapons and Tactics Instructor Course	B	G	(N)	*	*	0.5	6320, 6321, 8000, 8020, 8040, 8060, 8080	*	*	6000
SCHL	6002	Air Command and Control Officer’s Course	B	G	(N)	*	*	0.5	*	*	*	6002
SCHL	6003	ACE Battlestaff Officer Course	B	G	(N)	*	*	0.5	*	*	*	6003
SCHL	6010	AOCIQT (Airspace) Course	B	G	(N)	*	*	0.5	*	*	*	6010
SCHL	6011	AOCIQT (Personnel Recovery) Course	B	G	(N)	*	*	0.5	*	*	*	6011
SCHL	6015	Joint Air and Space Operations Center Command and Control Course (JAOC2C)	B	G	(N)	*	*	0.5	*	*	*	6015
SCHL	6020	Link 16 Basics Course	B	G	(N)	*	*	0.5	*	*	*	6020
SCHL	6021	Introduction to Multi-TDL Network Operations (JT-101)	B	G	(N)	*	*	0.5	*	*	*	6021

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SCHL	6022	Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102)	B	G	(N)	*	*	0.5	*	*	*	6022
SCHL	6023	Link 16 Joint Interoperability Course	B	G	(N)	*	*	0.5	*	*	*	6023
SCHL	6025	Link 16 Link Unit Manager Course	B	G	(N)	*	*	0.5	*	*	*	6025
SCHL	6027	Advanced JICC Operator Course	B	G	(N)	*	*	0.5	*	*	*	6027
SCHL	6043	Air Traffic Control Manager Course	B	G	(N)	*	*	0.5	*	*	*	6043
SCHL	6045	Propagation of radio waves and antenna construction Marine Net course	B	G	(N)	*	*	0.5	*	*	*	6045
SCHL	6046	MarineNet Course M00CO_0799, Combat Orders	B	G	(N)	*	*	0.5	*	*	*	6046
SCHL	6067	Military Airspace Management Course	B	G	(N)	*	*	0.5	*	*	*	6067
SCHL	6096	Formal Learning Center (FLC) Instructor	B	G	(N)	*	*	0.5	*	*	*	6096
TOTAL HOURS SCHOOL CODES (SCHL) STAGE				EVENTS		17	HOURS	8.5				
CERTIFICATION (CERT) STAGE												
CERT	6500	Airspace Liaison Officer (ALO)	B	L	(N)	*	*	1	0550, 0552, 0553, 0554, 0555, 0556, 0557, 2604, 6113, 6173	*	*	*
CERT	6520	MATC NITE Lab course	B,R	G	(N)	1460	*	4	*	*	*	6520
TOTAL HOURS CERTIFICATION (CERT) STAGE				EVENTS		2	HOURS	5				
QUALIFICATION (QUAL) STAGE												
QUAL	6113	Qualify as a Radar Final Controller (RFC)	B	L	(N)	*	*	1	3710	*	*	*
QUAL	6173	Qualify as a Tower Ground Controller (TGC)	B	L	(N)	*	*	1	3620	*	*	*

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
QUAL	6210	Qualify as a MMT Leader (MMTL)	B,R,M	L	(N)	730	*	2	0572, 0705, 0722, 3301, 3302, 3303, 3304, 3305, 3310, 3311, 3312, 3406, 6113, 6173, 6500, 8040	*	*	6210
TOTAL HOURS QUALIFICATION (QUAL) STAGE				EVENTS		3	HOURS	4				
DESIGNATION (DESG) STAGE												
DESG	6310	Proficiency/Co-Proficiency Manager	B	G	(N)	*	*	1	3006	*	*	*
DESG	6320	Basic Instructor (BI)	B	G	(N)	*	*	1	5000, 5010, 5020	*	*	6320
DESG	6321	Senior Instructor (SI)	B	G	(N)	*	*	1	5000, 5010, 5020, 5100, 5110, 5120, 5130	*	*	6321
DESG	6322	Weapons and Tactics Instructor (WTI)	B	G	(N)	*	*	1	6000	*	*	6322
DESG	6330	Formal Learning Center Instructor	B	G	(N)	*	*	1	6096	*	*	6330
DESG	6420	ATC Facility Officer (ATCFO)	B	G	(N)	*	*	1	6500, 8000, 8020, 8040, 8060, 8080	*	*	*
DESG	6421	Command Airspace Liaison Officer (CALO)	B	G	(N)	*	*	1	*	*	*	*
DESG	6430	MATCD Commander	B	G	(N)	*	*	1	*	*	*	6430
DESG	6440	MATCD Senior Air Director (SAD)	B	G	(N)	*	*	1	0701, 0703, 0704, 2001, 2002, 2005, 2006, 2009, 2010, 2011, 2102, 2104, 212, 2120, 2121, 2122, 2123, 2135, 2209, 2900, 2906, 2909, 2910, 2940, 2941, 3402, 3404, 3406, 6500, 8020, 8040, 8060, 8080	*	*	*

MATC 7220 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6441	Detachment Operations Officer	B	G	(N)	*	*	1	0561, 0562, 0563, 0564, 0565, 0566, 0572, 0574, 0700, 0703, 0704, 0705, 2101, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 3001, 3002, 3003, 3004, 3400, 3405, 3450, 6210, 6321, 6440	*	*	*
TOTAL HOURS DESIGNATION (DESG) STAGE				EVENTS		10	HOURS	10				
TOTAL HOURS RQCD (6000 PHASE)								27.5				
MISSION ESSENTIAL TASK (MET) (7000 PHASE EVENTS)												
CONDITION (COND) STAGE												
COND	7100	Provide ATC tower services	B,R,M	L	(N)	730	*	18	2 CMMR Crews	*	*	7100
COND	7200	Provide ATC approach services	B,R,M	L	(N)	730	*	12	2 CMMR Crews	*	*	7200
COND	7300	Provide ATC arrival/departure services	B,R,M	L	(N)	730	*	12	2 CMMR Crews	*	*	7300
COND	7400	Conduct Marine air traffic control mobile team (MMT) ALZ operations	B,R,M	L	(N)	730	*	2	1 CMMR MMT	*	*	7400
COND	7500	Conduct Marine air traffic control mobile team (MMT) FARP operations	B,R,M	L	(N)	730	*	2	1 CMMR MMT	*	*	7500
TOTAL HOURS CONDITION (COND) STAGE				EVENTS		5	HOURS	46				
TOTAL HOURS MISSION ESSENTIAL TASK (7000 PHASE)								46				

ACPM MATRIX									
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ
AVIATION CAREER PROGRESSION MODEL (ACPM) (8000 PHASE EVENTS)									
AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE									
ACPM	8000	MACCS	B	G	(N)	*	*	1	8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008
ACPM	8001	Marine Air Command and Control System	B	G	(N)	*	*	4	*
ACPM	8002	Tactical Air Command Center (TACC)	B	G	(N)	*	*	4	*
ACPM	8003	Direct Air Support Center (DASC)	B	G	(N)	*	*	4	*
ACPM	8004	Tactical Air Operations Center (TAOC)	B	G	(N)	*	*	4	*
ACPM	8005	Marine Air Traffic Control (MATC)	B	G	(N)	*	*	4	*
ACPM	8006	Low Altitude Air Defense (LAAD)	B	G	(N)	*	*	4	*
ACPM	8007	Marine Unmanned Aerial Vehicle Squadron (VMU)	B	G	(N)	*	*	4	*
ACPM	8008	Marine Wing Communications Squadron (MWCS)	B	G	(N)	*	*	4	*
ACPM	8020	ACE	B	G	(N)	*	*	1	8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028
ACPM	8021	Aviation Operations	B	G	(N)	*	*	4	*
ACPM	8022	Control of Aircraft and Missiles	B	G	(N)	*	*	4	*
ACPM	8023	Offensive Air Support (OAS)	B	G	(N)	*	*	4	*
ACPM	8024	Assault Support (AS)	B	G	(N)	*	*	4	*
ACPM	8025	Air Reconnaissance	B	G	(N)	*	*	4	*
ACPM	8026	Electronic Warfare (EW)	B	G	(N)	*	*	1	*
ACPM	8027	Anti-Air Warfare (AAW)	B	G	(N)	*	*	4	*
ACPM	8028	Aviation Ground Support	B	G	(N)	*	*	4	*
ACPM	8040	Threat	B	G	(N)	*	*	1	8041, 8042, 8043, 8044

ACPM MATRIX									
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ
ACPM	8041	Surface to Air threat to the MAGTF	B	G	(N)	*	*	4	*
ACPM	8042	Fixed Wing threat to the MAGTF	B	G	(N)	*	*	4	*
ACPM	8043	Rotary Wing threat to the MAGTF	B	G	(N)	*	*	4	*
ACPM	8044	Missile and UAS threat to the MAGTF	B	G	(N)	*	*	4	*
ACPM	8060	MAGTF	B	G	(N)	*	*	1	8061, 8062, 8063, 8064, 8065, 8066, 8067
ACPM	8061	Ground Combat Operations	B	G	(N)	*	*	4	*
ACPM	8062	Fire Support Coordination in the GCE	B	G	(N)	*	*	4	*
ACPM	8063	MAGTF Command and Control	B	G	(N)	*	*	4	*
ACPM	8064	MAGTF Communications	B	G	(N)	*	*	4	*
ACPM	8065	Phasing Control Ashore	B	G	(N)	*	*	4	*
ACPM	8066	Information Management	B	G	(N)	*	*	4	*
ACPM	8067	UAS support of the MAGTF	B	G	(N)	*	*	4	*
ACPM	8080	Joint Air Operations	B	G	(N)	*	*	1	8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088
ACPM	8081	Command and Control of Joint Air Operations	B	G	(N)	*	*	4	*
ACPM	8082	Theater Air Ground System (TAGS)	B	G	(N)	*	*	4	*
ACPM	8083	Joint Fire Support	B	G	(N)	*	*	4	*
ACPM	8084	Close Air Support (CAS)	B	G	(N)	*	*	4	*
ACPM	8085	Joint Targeting	B	G	(N)	*	*	4	*
ACPM	8086	North Atlantic Treaty Organization (NATO)	B	G	(N)	*	*	4	*
ACPM	8087	Joint Airspace Control	B	G	(N)	*	*	4	*
ACPM	8088	Countering Air and Missile Threats	B	G	(N)	*	*	4	*
TOTAL HOURS AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE								142	

ACPM MATRIX									
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ
TOTAL ACPM (8000 PHASE)								142	

CHAPTER 3

MARINE AIR TRAFFIC CONTROLLER (7257, 7291) INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

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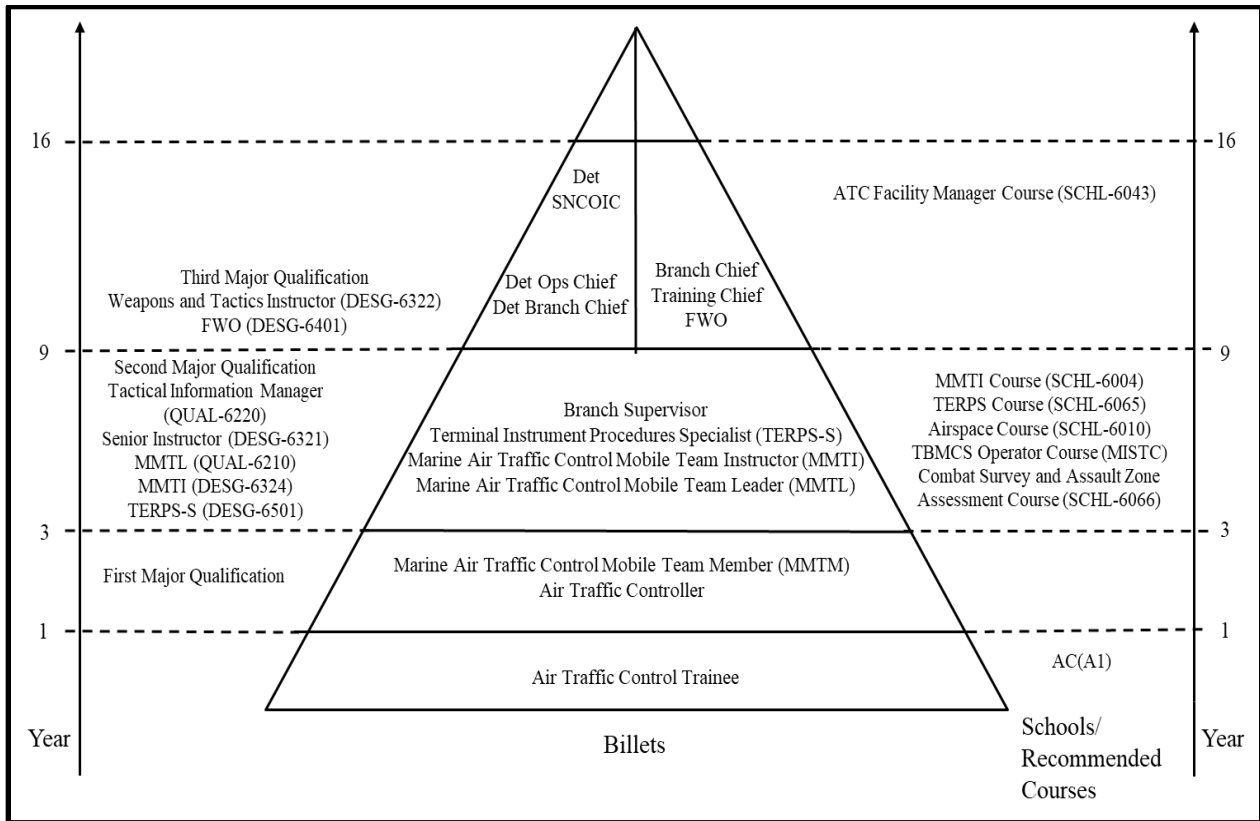
CHAPTER 3

MARINE AIR TRAFFIC CONTROLLER (7257, 7291) INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

3.0 MARINE AIR TRAFFIC CONTROLLER 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.

3.1 MARINE AIR TRAFFIC CONTROLLER TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the average Air Traffic Controller. Units should use the model as a point of departure to generate individual training plans.



3.2 PROGRAMS OF INSTRUCTION.

3.2.1 General. Represents the average POI time to train by Phase.

3.2.2 Basic POI.

MATCD (7257, 7291)		
BASIC POI		
WEEKS	PHASE OF INSTRUCTION	UNIT
1-16	CORE SKILL INTRODUCTION TRAINING	NATTC
18-125	CORE SKILL TRAINING	MACS/ATC FACILITY

18-125	MISSION SKILL TRAINING	MACS
126+	CORE PLUS TRAINING	MACS

3.2.3 Refresher POI. The Refresher POI shall apply only to air traffic controllers returning to a station where they previously held a qualification and/or when absence exceeds the requirements of the ATC NATOPS. Controllers previously qualified but assigned to a new station will be assigned to the basic POI. In the event a Marine is absent from the marine air traffic control MOS for a period of 3 years or more, they must complete the Refresher POI.

MATCD (7257, 7291)		
REFRESHER POI		
WEEKS	PHASE OF INSTRUCTION	UNIT
VARIES	CORE SKILL TRAINING	MACS/ATC FACILITY
VARIES	MISSION SKILL TRAINING	MACS
VARIES	CORE PLUS TRAINING	MACS

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

3.3 PROFICIENCY AND CURRENCY.

3.3.1 Event Proficiency. Event proficiency is defined as successful completion of the performance standard as determined by the instructor or evaluator. Event completion is predicated upon demonstrated proficiency. Once completed, it is logged in M-SHARP by entering the appropriate event code. M-SHARP automatically updates the event proficiency date to reflect the completion date.

3.3.2 Skill Proficiency. Proficiency is a measure of achievement of a specific skill. To attain Individual Skill proficiency, an individual must be simultaneously proficient in all events for that Skill. Individuals may be attaining proficiency in some skills while maintaining proficiency in others.

3.3.2.1 Maintaining Skill Proficiency. Once attained, skill proficiency is maintained by executing those events which have a Proficiency Period (Maintain events). Proficiency Periods establish the maximum time between Event demonstration. Should proficiency be lost in any maintain event, for a specific skill, that skill proficiency is temporarily lost. Skill proficiency can be re-attained by again demonstrating proficiency in the Event(s) that are not proficient. For flying communities, an individual shall complete delinquent events with a proficient instructor, crewman/flight lead as delineated by the T/M/S Syllabus Sponsor (see Chapter 3 of the Program Manual on specific instructor requirements for Low Altitude Flight, Night Systems, ACM, DM, DACM, DCM, FAC(A)).

3.3.2.2 Loss Of Individual Skill Proficiency. Should an individual lose proficiency in all maintain events in a skill, the individual will be assigned to the Refresher POI for the skill. To regain skill proficiency, the individual must demonstrate proficiency in all R-coded events for the skill.

3.3.2.3 Loss of Unit Skill Proficiency. If an entire unit loses proficiency in an Event, unit instructors shall regain proficiency by completing the Event with an instructor from a like unit. If not feasible, the instructor shall regain proficiency by completing the Event with another instructor. For flying communities, if a unit has only one instructor and cannot complete the Event with an instructor from another unit, the instructor shall regain proficiency with another aircraft commander or as designated by the commanding officer.

3.3.2.4 Proficiency Status. Proficiency is a “Yes/No” status by skill assigned to an individual. When an individual attains and maintains Core Skill Proficiency (CSP), Mission Skill Proficiency (MSP), Core Plus Skill Proficiency (CPSP), or Mission Plus Skill Proficiency (MPSP), the individual may count towards CMMR or CMTS.

3.3.3 Skill Currency. Currency is a control measure used to provide an additional margin of safety based on exposure frequency to a particular skill and applies to all MOS's that must comply with NATOPS and OPNAV requirements. It is a measure of time since the last event demanding that specific skill. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for aircrew individual type mission profiles can be found in Chapter 3 of the Aviation T&R Program Manual.

3.4 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS 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, detachment or facility 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. See Chapter 6 of the Aviation T&R Program Manual on regaining lost qualifications.

3.4.1 Instructor Designations. Unit instructors are designated by the commanding officer. Instructor designations are outlined in the MAWTS-1 C3 Course Catalog and applicable directives.

INSTRUCTOR DESIGNATION	EVENTS
BASIC INSTRUCTOR (BI) (6320)	5000, 5010, 5020
SENIOR INSTRUCTOR (SI) (6321)	5000, 5010, 5020, 5100, 5110, 5120, 5130
WEAPONS AND TACTICS INSTRUCTOR (WTI) (6322)	6000
FORMAL LEARNING CENTER (FLC) INSTRUCTOR (6330)	6096
MARINE AIR TRAFFIC CONTROL MOBILE TEAM INSTRUCTOR (6324)	6004, 6066, 6210

MATC MOS (7257, 7291)	
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD)	
QUALIFICATION	EVENTS
Radar Final Controller (RFC)	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0532, 0533, 0534, 0538, 2000, 2206, 3710, 6110
Radar Arrival/Departure Controller (ADC)	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2000, 2206, 3720, 3730, 6120, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008
Radar Approach Controller (APC)	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2000, 2206, 3730, 3731, 6130, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008
Tower Flight Data (TFD) Controller / Ground Controller (TGC)	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 2000, 2003, 2206, 2019, 2206, 3600, 3620, 6150, 6170
Tower Local Controller (TLC)	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0529, 0530, 0531, 2000, 2003, 2206, 3630, 6180, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008
MMT Member (MMTM)	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 0529, 0570, 0571, 0573, 0574, 2000, 2003, 2019, 2022, 2023, 2025, 2026, 2031, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2310, 2311, 2312, 2313, 3310, 3311, 3312, 3600, 3620, 6200, 8000, 8001, 8002,

	8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028
MMT Leader (MRTL)	0576, 0577, 0578, 0579, 0581, 2211, 3300, 3301, 3302, 3630, 6200.
Tactical Information Manager (TIM)	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0534, 0538, 0601, 0602, 0604, 2000, 2019, 2206, 2800, 2806, 2808, 2811, 2812, 2819, 2820, 2838, 2842, 2900, 2901, 2905, 2909, 2913, 2917, 2921, 2940, 3700, 6020, 6100, 6220
DESIGNATION	EVENTS
MATC Detachment Radar Chief (RDRC)	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 0551, 0553, 0554, 0560, 2000, 2019, 2206, 2209, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3005, 3006, 3401, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6100, 6110, 6120, 6130, 6240, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067.
MATC Detachment Tower Chief (TWRC)	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0550, 0551, 0552, 0554, 0560, 0571, 0705, 0721, 2000, 2001, 2002, 2003, 2005, 2006, 2007, 2009, 2011, 2019, 2025, 2026, 2031, 2101, 2104, 2120, 2121, 2122, 2123, 2124, 2130, 2131, 2200, 2203, 2204, 2206, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3400, 3401, 3402, 3406, 3600, 3620, 3630, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6150, 6170, 6180, 6242, 6249, 6321, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067
Detachment Operations Chief	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 0551, 0552, 0553, 0554, 0560, 0561, 0562, 0563, 0570, 0571, 0572, 0573, 0700, 0701, 0704, 0705, 0720, 0721, 0722, 2000, 2001, 2002, 2003, 2005, 2007, 2008, 2009, 2011, 2019, 2025, 2026, 2031, 2101, 2104, 2120, 2121, 2122, 2123, 2124, 2130, 2131, 2200, 2203, 2204, 2206, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3003, 3006, 3400, 3401, 3402, 3404, 3405, 3406, 3450, 3452, 3453, 3456, 3600, 3620, 3630, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6240, 6242, 6244, 6250, 6321, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.
Detachment Staff Non-Comissioned Officer in Charge	6251
TERPS Specialist	0500, 0501, 0502, 0576, 0577, 0578, 0579, 0580, 2024, 2025, 2101, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3401, 6501

3.5 SYLLABUS NOTES. The purpose of this section is to provide a standardized training program for all MATC Marines. The overall goal is to develop unit war fighting capabilities and not to measure the proficiency of individuals. Syllabi are based on specific performance standards designed to ensure proficiency in core competencies. An effective T&R program is the first step in providing the MAGTF commander with an Aviation

Combat Element (ACE) capable of accomplishing any and all of its stated missions. The T&R program provides the fundamental tools for commanders to build and maintain unit combat proficiency and readiness. Using these tools, training managers can construct and execute an effective training plan that supports unit METs.

Written and practical exams shall be passed with a minimum score of 80%, unless otherwise specified.

3.5.1 Environmental Conditions Matrix.

Environmental Conditions	
Code	Meaning
(N)	May be conducted during darkness – If conducted during hours of darkness; may be flown aided or unaided

3.5.2 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.

3.5.3 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/CPD by initial POI assignment are re-assigned to the M POI to maintain proficiency.

3.5.4 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.

3.6 ACADEMIC PHASE (0000)

3.6.1 Purpose. To provide trainees the requisite standardized academic knowledge to perform their assigned duties. These events will serve as the baseline learning objectives for academic training. References provided shall be used during training. However, all ACAD events will be performed to proficiency without the aid of reference.

3.6.2 General.

3.6.2.1 Prerequisite. None.

3.6.2.2 Administrative Notes. The ACAD events are not stand-alone events for training, but form the knowledge prerequisites for training to Core, Mission, and Core Plus Skills.

3.6.2.3 Stages. The following stages are included in the Academic Phase of training:

PAR NO.	STAGE NAME	PAGE NUMBER
3.6.3	ACADEMIC (ACAD)	3-9

3.6.3 ACADEMIC (ACAD) STAGE

3.6.3.1 Purpose. To train Marine ATC personnel in ground academic subjects needed to successfully complete Core, Mission and Core Plus training events.

3.6.3.2 General.

Prerequisite. None.

Admin Notes. None.

Crew Requirements. None.

ACAD-0500 1.0 * B (N) G

Goal. Describe general ATC knowledge.

Requirement. Conduct the following IAW the reference:

1. Describe the purpose of ATC.
2. Describe the meaning of specific terms of references.
3. Describe ATC service, duty priority, operational priority, and procedural preference.
4. Describe flight plans and control information.
5. Describe team position responsibilities.
6. Describe criteria and phraseology for establishing two-way communications.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0501 1.0 * B (N) G

Goal. Describe general ATC terminology.

Requirement. Describe the following IAW the reference:

1. Additional service.
2. Advisory frequencies.
3. Aerial refueling.
4. Affirmative.
5. Roger.
6. Wilco.
7. Aircraft classes.
8. AirMet.
9. Approach gate.
10. Final approach fix.
11. Final approach course.
12. Decision altitude.
13. Overhead maneuver.
14. Pilot's discretion.
15. Pilot weather report.
16. Preferential routes.
17. Procedure turn.
18. Segments of an instrument approach procedure.
19. Short range clearances.
20. Simulated flameout.
21. Missed approach.
22. Go around.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0502 1.0 * B (N) G

Goal. Label the local airfield diagram.

Requirement. Given an airfield diagram, conduct the following:

1. Label runways, to include:
 - a. Numbering/markings.
 - b. Length and width.
2. Draw location of windsock(s).
3. Draw location of optical landing system.
4. Draw name/designation.
5. Label taxiways to include name or number.
6. Label special use areas, e.g. dangerous cargo, hot brakes, ordnance load/offload, and arm/dearm.

7. Label fuel pits and provide the numbering for each.
8. Label location of aircraft wash racks.
9. Label tenant squadrons' parking ramps.
10. Label transient aircraft parking ramps, to include VIP spots.
11. Label airfield rescue and firefighting building and hotspot locations.
12. Label hangars with their assigned units.
13. Label the location of the airfield beacon.
14. Label TACAN checkpoints and compass rose.
15. Identify and label obstructions on the airfield.
16. Label the ATC radar location.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. Local directives and publications.

ACAD-0503 1.0 * B (N) G

Goal. Describe local area/airfield specific information.

Requirement. Conduct the following IAW the reference:

1. Describe when arresting system operations are in affect.
2. Describe the guidelines for runway selection.
3. Describe local airfield weather minimums.
4. List aircraft type, and tactical callsigns of each tenant squadron.
5. Describe local traffic patterns and no-fly areas.
6. List alternate, divert, and adjacent airfields.
7. List local frequencies pertinent to air traffic or safety of flight.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0506 1.0 * B (N) G

Goal. Describe the handling of special flights procedures and policies.

Requirement. Describe the following IAW the reference:

1. Flight inspection aircraft.
2. Aircraft carrying dangerous materials.
3. IFR military training routes.
4. Military aerial refueling.

5. Open Skies Treaty aircraft.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0507	1.0	*	B	(N)	G
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Goal. Describe basic weather knowledge.

Requirement. Conduct the following IAW the reference:

1. Define hazardous in-flight weather advisory service (HIWAS).
2. Describe the criteria for reporting a PIREP.
3. Describe weather and chaff services.
4. Describe calm wind conditions.
5. Describe criteria for reporting weather conditions.
6. Describe criteria for disseminating weather information.
7. Describe where the current altimeter setting can be obtained.
8. Describe braking action.
9. Describe braking action advisories.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0509	1.0	*	B	(N)	G
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Goal. Identify knowledge of ATC publications.

Requirement. Given the reference material, identify the key information contained in the references.

Performance Standard. During a guided discussion, complete the requirement. The instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7220.1, Certification and Rating Procedures for DOD Personnel.
2. JO 7210.3, Facility Operation and Administration.
3. JO 7340.2, Contractions.
4. 14 CFR Part 91, General Operating and Flight Rules.

5. AIM, Airman's Information Manual.
6. AOM, Airfield Operations Manual.
7. ATC Facility Manual.
8. IFR Supplement.
9. VFR Supplement.
10. NOTAMS.
11. Area Planning AP/1B, Military Training Routes.
12. Local sectional chart(s).
13. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
14. Low Altitude Charts, United States.
15. High Altitude Charts, United States.
16. Local letters of agreement/procedure.

ACAD-0510 1.0 * B (N) G

Goal. Airfield familiarization.

Requirement. Conduct the following IAW the reference:

1. Receive airfield tour to include:
 - a. Runways and taxiways
 - b. Arresting gear
 - c. Wind socks
 - d. Helo/VTOL spots
 - e. Naval Air Traffic Control, Air Navigation Aids and Landing System equipment
 - f. Agencies operating on the airport
2. Describe when arresting system operations are in affect.
3. Describe the guidelines for runway selection.
4. Describe local airfield weather minimums.
5. List aircraft type, modex, and tactical callsigns of each tenant squadron.
6. Describe local traffic patterns and no-fly areas.
7. List alternate, divert, and adjacent airfields.
8. List local frequencies pertinent to air traffic or safety of flight.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0520 1.0 * B (N) G

Goal. Describe radio and interphone communications.

Requirement. Describe radios and interphone communications IAW the reference.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0521 1.0 * B (N) G

Goal. Describe aircraft movement data.

Requirement. Conduct the following IAW the reference:

1. Describe the terms for acknowledgement of clearances and instructions.
2. Describe interphone transmission priorities.
3. Describe the terms for priority interruption.
4. Describe the interphone message format.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0522 1.0 * B (N) G

Goal. Describe flight progress strip.

Requirement. Conduct the following IAW the reference:

1. Describe the methods for updating information on flight progress strips.
2. Label flight progress strips, to include:
 - a. Arrivals.
 - b. Departures.
 - c. Overflights.
 - d. Enroute aircraft.
3. List aircraft prefixes.
4. List aircraft suffixes.
5. List flight progress strip control information symbols.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0523 1.0 * B (N) G

Goal. Describe ATC clearance and phraseology.

Requirement. Conduct the following IAW the reference:

1. Identify the clearance items.
2. Describe how to relay clearances.
3. Describe the phraseology to issue route or altitude amendments.
4. Describe the phraseology to issue a through clearance.
5. Describe the phraseology to issue an altitude reservation (ALTRV) clearance.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0524	1.0	*	B	(N)	G
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Goal. Describe airfield lighting knowledge.

Requirement. Describe the following IAW the reference (as applicable):

1. Emergency lighting.
2. Runway end identifier lights.
3. VASI lights.
4. Approach lights.
5. ALS intensity.
6. Sequenced flashing lights.
7. MALS.
8. ALSF-2.
9. Runway edge lights.
10. High intensity runway centerline light.
11. HIRL associated with MALSR.
12. HIRL changes.
13. Medium intensity runway lights.
14. Simultaneous approach/runway edge.
15. High-speed turnoff lights.
16. Taxiway lights.
17. Obstruction lights.
18. Rotating beacon.
19. Precision approach path indicators (PAPI).

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7210.3, Facility Operation and Administration.
3. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.
4. Local directives.

ACAD-0525	1.0	*	B	(N)	G
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Goal. Identify requirements and phraseology for special VFR operations.

Requirement. Identify the guidelines and criteria required for special VFR operations to include:

1. Authorization criteria.
2. Clearance phraseology.
3. SVFR priorities.
4. Separation requirements.
5. Altitude assignment.
6. Local operations.
7. Climb to VFR.
8. Ground visibility below one mile.
9. Flight visibility below one mile.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ACAD-0526 1.0 * B (N) G

Goal. Explain visual separation, types of approaches, and VFR-on-top procedures.

Requirement. Conduct the following IAW the reference (as applicable):

1. Define VFR conditions.
2. Explain visual separation.
3. Explain VFR-on-top procedures.
4. List and define the types of approaches.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0527 1.0 * B (N) G

Goal. Define ATC phraseology/communications as it applies to ground control.

Requirement. Define the proper ATC phraseology/communications procedures as it applies to ground control.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0528 1.0 * B (N) G

Goal. Define proper separation to vehicle and aircraft movement as it applies to ground control.

Requirement. Define separation criteria for air traffic in the terminal area. Understand how to provide ATC services based upon observed or known traffic and airport conditions per the references.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0529 2.0 * B (N) G

Goal. Define ATC phraseology/communications as it applies to local control.

Requirement. Define the proper ATC phraseology/communications procedures as it applies to local control.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0530 2.0 * B (N) G

Goal. Define proper separation to vehicle and aircraft movement as it applies to local control.

Requirement. Define separation criteria for air traffic in the terminal area. Describe how to provide ATC services based upon observed or known traffic and airport conditions per the references.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0531 2.0 * B (N) G

Goal. Describe spacing/sequencing/separation in the terminal environment.

Requirement. Describe criteria for spacing/sequencing/separation in the terminal environment.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0532 1.0 * B (N) G

Goal. Identify radar equipment usage.

Requirement. Identify radar equipment principles, to include the following:

1. Presentation and equipment performance.
2. Alignment accuracy check.
3. Radar use.
4. Beacon range accuracy.
5. Electronic cursor.
6. Altitude filters.
7. Standby/low sensitivity operation.
8. Inoperative interrogator.
9. In-flight deviations from transponder.
10. Radar Terminal Systems –Terminal.
11. TPX-42–Terminal.
12. Facility equipment general.
13. Radar use.
14. Video maps.
15. Airport facilities.
16. Radar operations equipment.
17. Precision approach landing system approach criteria.
18. Facility equipment.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7210.3, Facility Operation and Administration.
3. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
4. Local directives and publications.

ACAD-0533 2.0 * B (N) G

Goal. Describe radar final control.

Requirement. Describe the following IAW the reference.

1. Wheels down Check.
2. Vectoring.
3. Speed adjustments.
4. No-gyro approach.
5. Lost communications.
6. Radar contact Lost.
7. Landing check.
8. Final controller changeover.
9. Communications check.
10. Transmission acknowledgment.
11. Missed approach.
12. Low approach and touch-and-go.
13. Tower clearance.
14. Final approach abnormalities.
15. Military single frequency approaches.
16. Surveillance approaches-terminal.
17. PAR approaches-terminal.
18. Use of PAR for approach monitoring.
19. Radar service termination.
20. Approach separation responsibility.
21. Establishing two-way communications.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0534	2.0	*	B	(N)	G
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Goal. Describe basic radar.

Requirement. Describe the following IAW the reference:

1. Formation flights.
2. Wake turbulence.
3. Wake turbulence cautionary advisories.
4. Observed abnormalities.
5. Landing area condition.
6. Timely information.
7. Traffic advisories.
8. Bird activity information.
9. Traffic information.
10. Altitude restricted approach.
11. Vertical separation minima.
12. Single frequency approaches (SFA).
13. Clearance relay.
14. Transfer of radar identification.
15. Circling approach.

16. Radar identification.
17. Radar separation.
18. Radar arrivals.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0535	1.0	*	B	(N)	G
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Goal. Describe radar special operations.

Requirement. Describe the following IAW the reference:

1. Special Use and ATC-assigned airspace.
2. Fuel dumping.
3. Jettisoning of external stores.
4. Parachute operations.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7610.4, Special Operations.
3. Local directives and publications.

ACAD-0536	2.0	*	B	(N)	G
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Goal. Describe arrival/departure/approach control.

Requirement. Describe the following IAW the reference:

1. NAVAID malfunctions.
2. NAVAID terms.
3. NAVAIDS fixes.
4. Position information.
5. Beacon systems.
6. NAVAID use limitation.
7. Communications release.
8. Route use.
9. Route structure transitions.
10. Degree-distance route.
11. Alternative routes.
12. Holding aircraft.
13. Holding instructions.
14. Arrival procedures.

15. Switching ILS/MLS runways.
16. Approach information.
17. Terminal instrument approach procedures.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7210.3, Facility Operation and Administration.
3. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
4. Local directives and publications.

ACAD-0537	4.0	*	B	(N)	G
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Goal. Describe non-radar.

Requirement. Describe the following IAW the reference:

1. Flight progress strips.
2. Route and NAVAID description.
3. Approach clearance procedures.
4. General non-radar procedures.
5. Initial separation of successive departing aircraft.
6. Initial separation of departing and arriving aircraft.
7. Longitudinal separation.
8. Lateral separation.
9. Vertical separation.
10. Timed approaches.
11. Minimum altitude vectoring chart.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Local directives and publications.

ACAD-0538	1.0	*	B	(N)	G
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Goal. Describe radar coordination procedures.

Requirement. Describe the following IAW the reference:

1. Radio and interphone communication monitoring.
2. Authorized interruptions.
3. Authorized relays.
4. Clearance prefix.
5. Departure clearances.

6. Abbreviated departure clearance.
7. Delay sequencing.
8. Delays.
9. Forward departure delay info.
10. Coordination with receiving facility.
11. Forwarding departure times.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0539 2.0 * B (N) G

Goal. Describe radar clearance.

Requirement. Describe the following IAW the reference:

1. ALTRV clearances.
2. Clearance items.
3. Departure terminology.
4. Departure restrictions, clearance void times, hold for release, and release times.
5. VFR release of an IFR departure.
6. Flight direction.
7. Exceptions.
8. Lowest usable flight level.
9. Altitude assignment and verification
10. Clearance beyond fix.
11. Visual holding points.
12. Holding flight path deviation.
13. Unmonitored NAVAIDS.
14. ILS protection/critical areas.
15. Clearance information.
16. Approach clearance procedures.
17. Radar departures.
18. Clearance limit.
19. Anticipated altitude changes.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0540 2.0 * B (N) G

Goal. Describe radar spacing and sequencing procedures.

Requirement. Describe the following IAW the reference:

1. Missed approach.
2. Radar separation application.
3. Target separation.
4. Radar separation minima.
5. Passing or diverging.
6. Additional separation for formation flights.
7. Separation from obstructions.

Performance Standard. Pass a written examination.

Instructor. BI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

ACAD-0550 4.0 * B (N) G

Goal. Describe the duties and responsibilities applicable to supervisor positions.

Requirement. Describe the following IAW the reference:

1. Control authority.
2. Daily operations log.
3. Operating positions.
4. Human performance and medical qualifications.
5. Use of intoxicating drugs and alcoholic beverages.
6. Blood donors.
7. Workload planning.
8. Time Standards.
9. Communications.
10. Security of facilities.
11. Incidents, mishaps, and hazards.
12. ATC Hazards (severe/routine).
13. Air Traffic Activity report.
14. Billet descriptions, USMC.
15. Workload planning.
16. FAA Form 7230-4, Daily Operations log.
17. Tower Team position responsibilities.
18. Applicable information contained in local directives.

Performance Standard. Pass a written examination.

Instructor. SI (Tower and/or Radar Supervisor).

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7210.3, Facility Operation and Administration.
3. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

4. Local directives and publications.

ACAD-0551 2.0 * B (N) G

Goal. Discuss the roles and responsibilities of the Training Chief and the training process.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. Training and standardization (USMC).
2. Suspension and revocation.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

ACAD-0552 2.0 * B (N) G

Goal. Discuss the roles and responsibilities of the Tower Chief.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. Billet Description, Control Tower Chief.
2. Relation to Tower Supervisors.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

ACAD-0553 2.0 * B (N) G

Goal. Discuss the roles and responsibilities of the Radar Chief.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. Billet Description, Radar Chief.
2. Relation to Radar Supervisor.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

ACAD-0554 16.0 * B (N) G

Goal. Discuss aspects of facility management.

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. ATCF classification standard.
2. Procedural agreements.
3. Facility logs.
4. Personnel management.
5. Procedures evaluation boards.
6. Facility operation.
7. Incidents, mishaps, and hazards.
8. Operational capability improvement request (OCIR) process.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. OPNAVINST 3750.6, Naval Aviation Safety Management System.
4. OPNAVINST 3721.5, Naval Air Traffic Control Air Navigation Aid and Landing Systems Program.
5. Local directives and publications.

ACAD-0555 1.0 * B (N) G

Goal. Discuss the roles and responsibilities of the ATC Facility Officer (ATCFO).

Requirement. During a guided discussion, and after reviewing the references, identify and discuss the following:

1. Roles and responsibilities of the ATCFO.
2. Relationships with higher and adjacent commands.
3. Relationship to the ATCF SNCOIC.

Performance Standard. Complete the requirement items IAW the references. The instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

ACAD-0560 1.0 * B (N) G

Goal. Discuss airspace and MATC considerations in regard to the Federal Aviation Administration (FAA) or host-nation equivalent.

Requirement. During a guided discussion, describe or complete the following in regard to airspace and ATC considerations and the FAA:

1. Roles and responsibilities of the Command Airspace Liaison Officer (CALO).
2. Employment of MATC systems.
3. Operational tempo of civilian flights within local airspace.
3. Liaison between FAA and MATC representatives.
4. Information flow between civilian and military MATC personnel.
5. Control measures to deconflict military/civilian aircraft, to include:
 - a. IFR/VFR routes.
 - b. Special use airspace.
 - c. Military operating areas.

Performance Standard. Instructor will question and mentor the trainee throughout the discussion. This event can be accomplished by completion of SCHL-6010.

Instructor. SI.

Prerequisite. None.

References.

1. JO 7610.4, Special Operations.
2. Area Planning AP/1A, Special Use Airspace.
3. OPNAVINST 3770.2, Department of the Navy Airspace Procedures and Planning.
4. MCO 3550.10, Policies and Procedures for Range and Training Area Management.

ACAD-0561 1.0 * B (N) G

Goal. Discuss the supply requirements and considerations when deploying the MATCD.

Requirement. During a guided discussion, or during an actual deployment of a fully-equipped MATCD, and given the references, identify and explain purpose and use of the following:

1. Deployment support package for blue dollar ATC equipment.
2. Supply chain for requisitioning for (blue dollar) parts through the Marine aviation logistics squadron (MALs).
3. Green dollar IX Block package.
4. Green dollar requisition agencies and process.
5. Supporting establishment agencies responsible to support MATCD equipment.
6. Bill of materials (BOM).

Performance Standard. Complete the requirement steps IAW the references. The instructor will question and mentor the trainee throughout the discussion or execution of the event steps.

Instructor. SI.

Prerequisite. None.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

ACAD-0562 1.0 * B (N) G

Goal. Discuss the administrative process of embarkation.

Requirement. Given a mission, after reviewing the references, and during a guided discussion, identify and explain the purpose, use and process for the following:

1. Development of an equipment density list (EDL) to support operations.
2. Heavy equipment requirements for gear movement.
3. EDL submission process for development of MDSS II data through the squadron S-4.
4. MDSS II data conversion by the MAGTF Planner for Time Phased Force Deployment Data (TPFDD) database input.
5. Changes to the TPFDD and which require general officer letters.
6. Review of the TPFDD for accuracy and movement timelines/methods.

Performance Standard. Complete the requirement steps IAW the references. The instructor will question and mentor the trainee throughout the discussion or execution of the event steps.

Instructor. SI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCO 3000.18, Marine Corps Force Deployment Planning and Execution Manual.
3. CJCSM 3122.01, JOPES Vol. I., JOPES Vol. I.

ACAD-0563 1.0 * B (N) G

Goal. Discuss the process to submit a frequency request.

Requirement. During a guided discussion, and after reviewing the reference, describe the following:

1. Information required for submission of a frequency request:
 - a. Equipment nomenclature.
 - b. Antenna locations.
 - c. Frequency bands.
 - d. Required number of frequencies.
 - e. Power output.
2. JS-12.
3. Submission timelines.
4. Routing to the spectrum manager.

Performance Standard. Complete the requirement steps IAW the references. The instructor will question and mentor the trainee throughout the discussion or execution of the event steps.

Instructor. SI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCRP 3-30B.4, Multi-Service Tactics, Techniques, and Procedures for Internet Tactical Chat in Support of Operations.
3. MCRP 3.30B.2, MAGTF Communications Systems.
4. MCO 2400.2, Marine Corps Management of the Radio Frequency Spectrum.

ACAD 0564 4.0 * B (N) G

Goal. Describe the elements of Time Phased Force and Deployment Data (TPFDD).

Requirement. Describe the following items:

1. Definition and purpose of a TPFDD.
2. Unit Line Number (ULN) structure.
3. Routing:
 - a. Geographical Location.
 - b. Point of Embarkation.
 - c. Point of Debarkation.
 - d. Destination.
4. Transportation Modes and Source Codes:
 - a. Ready to Load Date (RLD).
 - b. Available to Load Date (ALD).
 - c. Earliest Arrival Date (EAD).
 - d. Latest Arrival Date (LAD).
 - e. Required Delivery Date (RDD).
 - f. Mode of transportation codes.
 - g. Source of transportation codes.
 - h. Cargo codes.
5. Cargo Lift Requirements:
 - a. Level I – Aggregate.
 - b. Level II – Summary.
 - c. Level III – Detail.
 - d. Level IV – Type Cargo.
 - e. Level V – Sustainment.
 - f. Level VI – UDL.
6. TPFDD Validation.
7. Force Deployment and Execution Cycle.

Performance Standard. Complete the requirements IAW the references. The instructor will mentor and question the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. CJCSM 3122.01, JOPES Vol. I.
2. CJCSM 3122.03, JOPES Vol. II.
3. CJCSM 3122.02, JOPES Vol. III.
4. MSTP Pamphlet (FDP&E ISO MAGTF OPS).
5. MCO P3000.18, Marine Corps Planning Manual.
6. JP 5-0, Doctrine for Planning Joint Ops.

ACAD 0565 2.0 * B (N) G

Goal. Describe manning requirements for a MATCD.

Requirement. Identify the manning requirements, to include controllers, maintainers, and METOC personnel, for each of the following requirements:

1. Full IFR services.
2. Arrival/PAR services.
3. Tower/TACAN services.
4. Tower only service.
5. MMT-type services at remote site.
6. METOC services.

Performance Standard. Complete the requirements IAW the references. The instructor will mentor and question the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCRP 2-10B.6, MAGTF Meteorology and Oceanography Support.

ACAD 0566 4.0 * B (N) G

Goal. Describe the development of a Training and Exercise Employment Plan (TEEP).

Requirement. Explain the following:

1. TEEP.
2. Unit training objectives.
 - a. Mission Essential Tasks.
 - b. Core Model Minimum Requirements.
 - c. Proficiency requirements.
3. Different levels of exercises (directed, unit, etc.)
4. Determination of number/type of personnel/equipment.
5. Determination of exercise costs.
 - a. TAD/per diem.
 - b. Transportation (personnel and equipment).
 - c. Fuel.
 - d. Consumables.
 - e. Contracted services.

Performance Standard. Complete the requirements IAW the references. The instructor will mentor and question the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References. None.

ACAD-0570 1.0 * B (N) G

Goal. Discuss basic knowledge of the MMT.

Requirement. During a guided discussion:

1. Explain the historical background of the MMT.
2. Define the mission of the MMT.
3. Explain the functions of the MMT.
4. Explain the organization of the MMT.

Performance Standard. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MMT TACSOP.
3. MAWTS-1 Course Catalog.

ACAD-0571 2.0 * B (N) G

Goal. Discuss tactical communications terms and procedures.

Requirement. During a guided discussion and given the references:

1. Describe the authentication process.
2. Define the term gingerbread.
3. Define the term chattermark.
4. Describe the seven beadwindow codes.
5. Understand lost communication procedures.
6. Define EMCON and explain the procedures.

Performance Standard. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-40.3B, Radio Operator's Handbook.
2. MMT TACSOP.

ACAD-0572 2.0 * B (N) G

Goal. Discuss the Marine Corps Rapid Response Planning Process (R2P2).

Requirement. During a guided discussion, conduct the following:

1. Identify and explain the six steps of R2P2.
2. Identify and describe the duties and responsibilities of the eight key billet holders for R2P2.

Performance Standard. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. MCWP 5-10, Marine Corps Planning Process.
2. MCWP 5-10A, MAGTF Aviation Planning.

ACAD-0573 1.0 * B (N) G

Goal. Discuss the Marine Expeditionary Unit MEU mission.

Requirement. Given the reference and during a guided discussion:

1. State the MEU mission.
2. State the MEU mission essential tasks (MET) and the output standards for each.
3. Describe the MEU certification policy.

Performance Standard. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCO 3120.13, Policy for Marine Expeditionary Units

ACAD-0574 2.0 * B (N) G

Goal. Discuss forward arming and refueling point (FARP) operations.

Requirement. After receiving the MAWTS-1 MMT FARP Operations Presentation and the references, and during a guided discussion:

1. Explain the three types of aviation ground support (AGS) FARPs and NATOPS ground separation criteria associated to each.
2. Explain aviation-delivered ground refueling (ADGR) operations.
3. Explain tactical bulk fuel dispensing system (TBFDS) operations.

Performance Standard. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

References.

1. MMT TACSOP.
2. NAVAIR 00-80T-109, Aircraft Refueling NATOPS Manual.
3. ANTP 3-22.5, RW TACSOP.
4. ANTP 3-22.3, KC-130 TACSOP.
5. MAWTS-1 Course Catalog.

ACAD-0576 1.0 * B (N) G

Goal. Identify basic assault zone survey principles.

Requirement. Identify the following:

1. Difference between survey and assessment.
2. Publications used to define survey criteria.
3. Airfield categories.

4. Four phases of survey.
5. Equipment used to conduct an assault zone survey.

Performance Standard. Pass a written exam.

Instructor. MMTI.

Prerequisite. None.

References.

1. UFC 3-260-01, Airfield and Heliport Planning and Design.
2. ELT 02-19, Airfield Pavement Evaluation Standards and Procedures.
3. ELT 04-07, Engineering Technical Manual.
4. AFI 13-217, Drop Zone and Landing Zone Operations.
5. MCRP 3-40D.1, Planning and Design of Roads, Airfields, and Heliports in the Theater Of Operations – Road Design.
6. MAWTS-1 SAAZA Presentation.

ACAD-0577 1.0 * B (N) G

Goal. Identify criteria associated with conducting assault zone survey and assessment.

Requirement. Identify the following:

1. Identify the dimensions and gradients of the runway, to include shoulders, graded areas, maintained areas, and overruns.
2. Identify the dimensions of the clear zone.
3. Identify the dimensions of the imaginary surface, to include slope ratio.
4. Identify the required criteria for an HLZ.

Performance Standard. Pass a written exam.

Instructor. MMTI.

Prerequisite. None.

References.

1. UFC 3-260-01, Airfield and Heliport Planning and Design.
2. ELT 02-19, Airfield Pavement Evaluation Standards and Procedures.
3. ELT 04-07, Engineering Technical Manual.
4. AFI 13-217, Drop Zone and Landing Zone Operations.
5. MCRP 3-40D.1, Planning and Design of Roads, Airfields, and Heliports in the Theater Of Operations - Road Design.
6. MAWTS-1 SAAZA Presentation.

ACAD-0578 1.0 * B (N) G

Goal. Utilize principles of mathematics and measurement used in survey and assault zone assessment.

Requirement. Conduct the following:

1. Determine angles, distances, and horizontal ranges with trigonometric functions.
2. Identify units of measurement used in conducting survey and assault zone assessment.
3. Convert horizontal units of measurement.

Performance Standard. Pass a written exam.

Instructor. MMTI.

External Syllabus Support. None.

References.

1. UFC 3-260-01, Airfield and Heliport Planning and Design.
2. ELT 02-19, Airfield Pavement Evaluation Standards and Procedures.
3. ELT 04-07, Engineering Technical Manual.
4. AFI 13-217, Drop Zone and Landing Zone Operations.
5. MCRP 3-40D.1, Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Road Design.
6. MAWTS-1 SAAZA Presentation.

ACAD-0579 1.0 * B (N) G

Goal. Identify the principles involved in conducting soil evaluation during survey and assault zone assessment.

Requirement. Conduct the following:

1. Identify soil classification, type, and characteristics.
2. Identify principles in determining the California Bearing Ratio.
3. Given (5) DCP measurements, determine:
 - a. Segregation of soil layers.
 - b. CBR for each soil layer.
 - c. Number of passes for a KC-130 for each location.
 - d. Controlling CBR/DCP location.

Performance Standard. Pass a written exam.

Instructor. MMTI.

Prerequisite. None.

References.

1. UFC 3-260-01, Airfield and Heliport Planning and Design.
2. ELT 02-19, Airfield Pavement Evaluation Standards and Procedures.
3. ELT 04-07, Engineering Technical Manual.
4. AFI 13-217, Drop Zone and Landing Zone Operations.
5. MCRP 3-40D.1, Planning and Design of Roads, Airfields, and Heliports in the Theater Of Operations - Road Design.
6. MAWTS-1 SAAZA Presentation.

ACAD-0580 1.0 * B (N) G

Goal. Identify the requirement items for completing survey and assault zone assessment forms.

Requirement. Conduct the following:

1. Identify the required items to complete AF IMT 3822, Landing Zone Survey Form.
2. Identify the required items to complete AF IMT 4303, Helicopter Landing Zone Form.

Performance Standard. Given a scenario, complete forms AF-4303 and AF-3822. Minor errors are acceptable, corrected by the instructor.

Instructor. MMTI.

Prerequisite. None.

References.

1. AFI 13-217, Drop Zone and Landing Zone Operations.
2. MMT TACSOP

ACAD-0581 4.0 730 B, R, M (N) G

Goal. Discuss the theory of radio wave propagation.

Requirement. Describe the following:

1. Frequency and wavelength.
2. Sky, ground, direct, and reflected-waves.
3. Vertical, horizontal, and circular polarization.
4. Frequency and amplitude modulation.
5. Line of sight limitations.
6. Atmospheric and environmental considerations.
7. Skip zones.
8. Near Vertical Incidence Sky-wave (NVIS)

Performance Standard. Pass a written exam.

Instructor. MMTI

Prerequisite. 6045.

References.

1. MCRP 8-10B.11 Antenna Handbook
2. MAWTS-1 MMT High Frequency Communications Courseware
3. Applicable equipment operator manuals

ACAD-0601 2.0 * B (N) G

Goal. Demonstrate interface coordination knowledge.

Requirement. With the aid of the reference, conduct the following:

1. State who controls the establishment of the multi-tactical data link interface.
2. Define the following:
 - a. Data registration.
 - b. Sensor registration.
 - c. Correlation.
 - d. Common track.
 - e. Dual designation.
3. List the steps of the data registration test.
4. State which unit will normally be assigned as the data registration reference unit in a multi-tactical data link environment.
5. List the five correlation restrictions for reported tracks.
6. List the eight operational contingency constraints (OCC) for a track.
7. List the six steps for voice resolution of a dual designation.
8. What is the single most important element of information of the tactical data link interface.
9. Outline, in detail, the ID difference resolution procedures.
10. Define a change data order (CDO).

11. State who on the interface may originate a CDO.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01, Joint Multi-Tactical Data Link Operating Procedures.
2. MIL-STD-6016, Tactical Data Link 16 Message Standard.

ACAD-0602 2.0 * B (N) G

Goal. Demonstrate link ops messages.

Requirement. Given the reference, conduct the following:

1. State the purpose of the OPTASKLINK.
2. Explain the information contained in the following sets:
 - a. "PERIOD" set.
 - b. "UNITFLTR" set.
 - c. "LKFREQ" set.
 - d. "REF" set.
 - e. "OPER" set.
 - f. "EXER" set
3. Explain the information contained in the following sets associated with Link-16:
 - a. "NETWORK" set.
 - b. "CRYPDAT" set.
 - c. "JUDATA" set.
 - d. "DUTY" set.

Performance Standard. Complete the requirement items IAW the reference; minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. Guide to the USMTF User Formats - Operational Tasking Links.
2. CJCSM 6120.01, Joint Multi-Tactical Data Link Operating Procedures.

ACAD-0604 2.0 * B (N) G

Goal. Identify characteristics of Link-16.

Requirement. With the aid of the reference, conduct the following:

1. State the definition of Link-16.
2. State the purpose of Link-16.
3. State the characteristics of Link-16.
4. State the legal and preferred IU address range for a Link-16 C2 JU.
5. State the definitions of:
 - a. Time division multiple access (TDMA).

- b. Network design load (NDL).
- c. Network time reference (NTR).
- d. Coarse synchronization (coarse sync).
- e. Fine synchronization (fine sync).
- f. Initial entry JTIDS unit (IEJU).
6. Define the following terms:
 - a. TSEC.
 - b. MSEC.
 - c. Stacked Net.
 - d. Multi-Net.
7. List and explain the components found in the Class 2/2H terminal.
8. List the systems capable of utilizing Link-16.
9. List the countries capable of utilizing Link-16.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

Reference.

1. CJCSM 6120.01, Joint Multi-Tactical Data Link Operating Procedures.

ACAD-0700	1.0	*	B	(N)	G
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Goal. Develop plans for MATCD services in support of a forward operating base (FOB).

Requirement. During a guided discussion and given a tactical scenario, identify the level of required MATC services, the level of force protection required, lift assets required, planned location, and coordination requirements with adjacent agencies associated for a:

1. Main air base.
2. Air facility.
3. Air site.
4. Air point.

Performance Standard. Demonstrate an understanding of the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-115, NATOPS Expeditionary Airfields.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
3. MCRP 3-20F.3, MAGTF Aviation Site Command Handbook.
4. MCTP 3-20B, Aviation Ground Support.

ACAD-0701	1.0	*	B	(N)	G
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Goal. Discuss MATCD communications assets and their associated capabilities.

Requirement. During a guided discussion and given a garrison or field setting, demonstrate knowledge of MATCD communications assets and its capabilities to include:

1. HF/VHF/UHF/SATCOM radios.
2. Communication equipment associated with the Marine Air Traffic Control and Landing Systems (MATCALS).
3. Encryption capabilities and COMSEC procedures.

Performance Standard. Complete the requirements IAW the reference. Instructor will question and mentor the trainee throughout the discussion.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

ACAD-0703	2.0	*	B	(N)	G
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Goal. Discuss rear area security planning.

Requirement. During a guided discussion and given the references, understand the concepts, design, and implementation of a security plan for the MATCD.

1. Describe the fundamentals for usage of and the relationships between the following:
 - a. Base defense operations center (BDOC).
 - b. Anti-terrorism officer (ATO).
 - c. Assistant anti-terrorism officer (AATO).
 - d. Patrol leader (PL).
 - e. Roving patrol.
 - f. Quick reaction force (QRF).
 - g. Entry control points (ECP).
 - h. Vehicle check points (VCP).
 - i. Observation posts (OP).
 - j. Listening posts (LP).
2. Describe passive security measures for a MATCD based on current threat assessments, to include:
 - a. Dispersion and camouflage.
 - b. Hardening of sites and installations (cover).
3. Describe active security measures for a MATCD based on current threat assessments, to include:
 - a. Patrols to establish OPs, LPs, ECPs, VCPs, and other local security measures.
 - b. Convoy security.

Performance Standard. Complete the requirement items IAW the references. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

Reference.

1. MCRP 3-30C.1, MAGTF Rear Area Security.

ACAD-0704	1.0	*	B	(N)	G
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Goal. Discuss the relationship between the MATCD and AGS units aboard a FOB.

Requirement. During a guided discussion, state and understand the capabilities of AGS.

Performance Standard. Complete the guided discussion to obtain an understanding of AGS functions. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. MCTP 3-20B, Aviation Ground Support.
2. MCRP 3-20F.3, MAGTF Aviation Site Command Handbook.

ACAD-0705 2.0 * B (N) G

Goal. Discuss key air C2 planning documents.

Requirement. During a guided discussion, and given an ACP, ATO/SPINS, ACO, and OPTASKLINK message, understand and identify critical information.

1. State the purpose and use of the:
 - a. ATO/SPINS.
 - b. ACP.
 - c. ACO.
 - d. OPTASKLINK.
 - e. Execution Checklist.
 - f. AADP.
2. Identify essential information contained in the ACP that supports airspace operations, to include:
 - a. ACM definitions.
 - b. Design of airspace.
 - c. Airspace procedures.
3. Identify essential information contained in the ATO/SPINS, to include:
 - a. Mission number/type.
 - b. Arrival/departure time(s).
 - c. Control point/controlling agencies.
 - d. Remarks.

Performance Standard. Complete the requirement items IAW the references. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. CJCSM 3150.01, United States Message Text Format User's Handbook.
2. CJCSM 6120.01, Joint Multi-Tactical Data Link Operating Procedures.
3. JP 3-52, Joint Airspace Control.
4. MCRP 3-20F.5, Direct Air Support Center Handbook.
5. ATO Primer, (MAWTS-1 Local Document).

ACAD-0720 2.0 * B (N) G

Goal. Discuss the Integrated Air Defense Systems (IADS) and how it applies to the MATCD.

Requirement. During a guided discussion and given the references:

1. Identify the purpose of an IADS.
2. Identify the composition of an IADS.
3. Identify the IADS doctrinal nets and information passing over them:
 - a. Handover/crosstell net
 - b. Combat information/detection net (CI/D).
4. State which USMC agencies and assets participate in the IADS.
5. Identify the means by which the MATCD participates in the IADS and activates the base defense zone (BDZ):
6. Describe the impact of air defense operations on ATC activity.

Performance Standard. Complete the requirement items IAW the references. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. MCTP 10-10B, Integrated Air Defense System.
2. MCRP 3.30B.2, MAGTF Communications Systems.
3. MCTP 3-20C, Anti-Air Warfare.
4. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
5. MCRP 3-20F.9, Low Altitude Air Defense (LAAD) Gunner's Handbook.

ACAD-0721	2.0	*	B	(N)	G
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Goal. Discuss Electronic Protection (EP) as it pertains to MATCD.

Requirement. During a guided discussion and given the references:

1. Discuss how the MATCD employs EP, to include:
 - a. Passive measures.
 - b. Active measures.
2. Explain procedures for reporting electronic warfare (EW) occurrences.
 - a. Joint Spectrum Interference Resolution (JSIR) report.
 - b. Meaconing, Intrusion, Jamming, and Interference (MIJI) report.
3. Describe the following EP features and how they pertain to the MATCD:
 - a. Sector blanking.
4. Explain EMCON and the sub-elements of MINCOM and RADCON. For RADCON, understand the purpose behind developing a RADCON plan and the implications for the MATCD.

Performance Standard. Complete the requirement items IAW the reference; minor errors corrected by the trainee are acceptable.

Instructor. SI.

Prerequisite. None.

References.

1. JP 3-13.1, Electronic Warfare.
2. MCWP 3-40.5, Electronic Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.7, Tactical Air Operations Center Handbook.
4. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
5. MAWTS-1 C3 class, EP in the MACCS.

ACAD-0722	2.0	*	B	(N)	G
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Goal. Discuss the planning considerations for a BDZ.

Requirement. During a guided discussion and given the references:

1. State GBAD capabilities, limitations, and requirements.
2. State the three required components of a BDZ.
3. State when the BDZ reverts to point defense.
4. State which agency holds identification/engagement criteria and authority.
5. Describe the integration of GBAD assets with the MATCD.
 - a. Location of GBAD assets, e.g. teams and section leaders.
 - b. Plan for the integration of a LAAD section leader with the MATCD.
6. Describe the flow of friendly aircraft through the BDZ.

Performance Standard. Complete the requirement items IAW the references. Instructor will question and mentor the trainee throughout the discussion.

Instructor. SI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCRP 3-20F.9, Low Altitude Air Defense (LAAD) Gunner's Handbook.
3. MAWTS-1 C3 class, BDZ.

3.7 CORE SKILL INTRODUCTION TRAINING (1000)

3.7.1 Purpose. To provide entry-level classroom instruction on ATC concepts, regulations, procedures, and operating techniques as well as MATC doctrine and capabilities. The instruction ensures understanding and application of MATC rules and regulations required for a controller to qualify and perform ATC functions at a MATCD or MCAS. Upon completion of the ATC Course at NAS Pensacola, the Marine receives the 7257 MOS and possesses the same certification obtained by FAA controller graduates from the National FAA Air Traffic Control School.

3.7.2 General.

3.7.2.1 Prerequisite. None.

3.7.2.2 Stage. Air Traffic Controller (ATC)

PAR NO.	STAGE NAME	PAGE NUMBER
3.7.3	AIR TRAFFIC CONTROL (ATC)	3-40

3.7.3 AIR TRAFFIC CONTROL (ATC) STAGE

3.7.3.1 Purpose. To provide entry-level classroom instruction on ATC concepts, regulations, procedures, and operating techniques as well as MATC doctrine and capabilities. The instruction ensures understanding and application of MATC rules and regulations required for a controller to qualify and perform ATC functions at a MATCD or MCAS.

3.7.3.2 General.

Prerequisite. None.

Administrative Notes. Written and practical exams in this stage shall be passed with a minimum score of 70%.

Crew Requirements. None.

ATC-1100 0 * B (N) G

Goal. Introduce basic fundamentals.

Requirement. Describe the eligibility requirements, ATC facilities and services.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVMETOCCOMINST 3141.2, Surface Weather Observation Procedures.

ATC-1105 0 * B (N) G

Goal. Introduce weather as applied to ATC.

Requirement. Describe aviation weather to include:

1. Basic weather characteristics.
2. Weather hazards.
3. Aviation weather observations.
4. Aviation weather forecasts.
5. Weather advisories.
6. Weather observing programs.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVMETOCCOMINST 3141.2, Surface Weather Observation Procedures.

ATC-1110 0 * B (N) G

Goal. Introduce airspace, navigation, and time as applied in ATC.

Requirement. Describe the National Airspace System (NAS), time conversions, and basic navigation.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80V-49, Air Navigation.

ATC-1115 0 * B (N) G

Goal. Introduce special use airspace (SUA) used by the military.

Requirement. Describe SUA and controller responsibilities within each.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1120 0 * B (N) G

Goal. Introduce navigational aids (NAVAIDS).

Requirement. Describe basic radio theory and NAVAIDS.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-112, NATOPS Instrument Flight Manual.

ATC-1125 0 * B (N) G

Goal. Introduce charts and publications used in ATC.

Requirement. Given aeronautical charts and publications, locate information and complete statements per the Flight Information Publications (FLIP) program.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. General Planning (GP) section of DOD Flight Information Publication Program (FLIP)
2. 14 CFR Part 91, General Operating and Flight Rules.
3. 14 CFR Part 93, Special Air Traffic Rules.

ATC-1130 0 * B (N) G

Goal. Introduce communications as applied in ATC.

Requirement. Describe communication procedures used in ATC.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1135	0	*	B	(N)	G
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Goal. Introduce airport design and ATC equipment.

Requirement. Describe airport design and ATC equipment.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. UFC 2-000-05N (Appendix E, P-80.3), Airfield Safety Clearance.
3. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.
4. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
5. JO 7210.3, Facility Operation and Administration.

ATC-1140	0	*	B	(N)	G
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Goal. Introduce general control tower procedures.

Requirement. Describe general MATC procedures to include:

1. General control.
2. Weather information.
3. Federal Aviation Regulation (FAR) Part 91.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. CFR Part 91, General Operating and Flight Rules.
3. OPNAVINST 3710.7, Naval Air Training and Operating Procedures Standardization Program.

ATC-1145	0	*	B	(N)	G
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Goal. Introduce ATC terminal procedures.

Requirement. Select statements that describe general MATC procedures used in a terminal environment.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1150 0 * B (N) G

Goal. Introduce emergencies and special handling.

Requirement. Describe handling of emergency aircraft and special situations in a control tower environment.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. OPNAVINST 3710.7, Naval Air Training and Operating Procedures Standardization Program.

ATC-1155 * B (N) G

Goal. Introduce non-radar procedures.

Requirement. Describe general non-radar procedures as applied in MATC.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1160 0 * B (N) G

Goal. Pass the Airmen's Written Test (AWT).

Requirement. Conduct a review of all information taught in ATC-1100 through ATC-1155.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. 14 CFR Part 65, Certification: Airmen Other Than Flight Crewmembers.
3. 14 CFR Part 67, Medical Standards and Certification.
4. 14 CFR Part 91, General Operating and Flight Rules.

ATC-1200 0 * B (N) G

Goal. Control tower indoctrination.

Requirement. Describe the different operating positions in a control tower and the individual responsibilities of each.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ATC-1205 0 * B (N) G

Goal. Control tower indoctrination.

Requirement. Perform IAW FAAO JO 7110.65 and applicable instructions while observing all safety precautions on the following operating positions:

1. Flight Data.
2. Ground Control.
3. Local Control.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ATC-1210 0 * B (N) G

Goal. Introduce basic radar knowledge.

Requirement. Complete the following:

1. Describe the different operating positions in a radar ATC facility.
2. Define basic radar theory.
3. Identify associated equipment.

Performance Standard. Perform the requirements.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JO 7110.65, Air Traffic Control.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ATC-1305 0 * B (N) G

Goal. Introduce basic radar services provided by ATC.

Requirement. Describe basic radar services and procedures.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1310 0 * B (N) G

Goal. Introduce the airport surveillance radar (ASR).

Requirement. Describe terms and procedures used by an ASR Final Controller.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1315 0 * B (N) G

Goal. Perform airport surveillance radar (ASR) services.

Requirement. Perform as a final controller in accordance with FAAO JO 7110.65 while observing all Safety precautions.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. 1300, 1305, 1310.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1320 0 * B (N) G

Goal. Introduce the precision approach radar (PAR).

Requirement. Describe terms and procedures used by a PAR Final Controller.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1325 0 * B (N) G

Goal. Perform PAR services.

Requirement. Perform as a final controller in accordance with FAAO JO 7110.65 while observing all safety precautions.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. 1300, 1305, 1320.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1330 0 * B (N) G

Goal. Introduce arrival control.

Requirement. Describe terms and procedures used by an Arrival Controller.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1335 0 * B (N) G

Goal. Perform arrival control services.

Requirement. Perform as an Arrival Controller in accordance with FAAO JO 7110.65 while observing all safety precautions.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. 1300, 1305, 1330.

Reference.

1. JO 7110.65, Air Traffic Control.

ATC-1440 0 * B (N) G

Goal. Introduce the Marine air ground task force (MAGTF) and the Six Functions of Marine Aviation.

Requirement. Describe the elements of the Marine air ground task force (MAGTF) and describe the six functions of Marine Aviation.

Performance Standard. Demonstrate a general understanding through an oral comprehensive review.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. MCWP 3-2 series, Aviation Operations.

ATC-1445 0 * B (N) G

Goal. Introduce the Marine air command and control system overview.

Requirement. Describe the units that comprise the Marine air command and control system to include:

1. Tactical Air Command Center (TACC).
2. Tactical Air Operations Center (TAOC).
3. Marine Air Traffic Control Detachment (MATCD).
4. Direct Air Support Center (DASC).
5. Low Altitude Air Defense (LAAD) Battalion.
6. Marine Wing Communication Squadron (MWCS)
7. Marine Unmanned Aerial Vehicle (VMU) Squadron.

Performance Standard. Demonstrate a general understanding through an oral comprehensive review.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. MCRP 3-20F, Control of Aircraft and Missiles.

ATC-1450 0 * B (N) G

Goal. Introduce the Marine air traffic control and landing system (MATCALs).

Requirement. Describe the basic subsystems and capabilities of the MATCALs, to include the AN/TPN-31_, Air Traffic Navigation Integration and Coordination System (ATNAVICS).

Performance Standard. Demonstrate a general understanding through an oral comprehensive review.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. NAVAIR 16-60TPN31A-2, Operator Manual, Air Traffic Navigation, Integration, and Coordination System (ATNAVICS), AN/TPN-31A Operations and Maintenance Instructions.

ATC-1460 0 * B (N) G

Goal. Introduce the Marine Air Traffic Control Detachment (MATCD) Tower Equipment.

Requirement. Describe the capabilities of the following MATCD Equipment:

1. AN/TSQ-120, Air Traffic Control Central.
2. AN/TSQ-216, Remote Landing Site Tower.

Performance Standard. Demonstrate a general understanding through an oral comprehensive review.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. EE100-UQ-OMI-010, AN/TSQ-120, Air Traffic Control Central.
2. RLST Technical Manual AE-RLST-OMI-200.

ATC-1465 0 * B (N) G

Goal. Introduce the Marine air traffic control detachment (MATCD) navigational aid equipment.

Requirement. Describe the capabilities of the following MATCD Equipment:

1. AN/TRN-44A, Tactical Air Navigational Aid (TACAN).
2. AN/TRN-47, TACAN.

Performance Standard. Demonstrate a general understanding through an oral comprehensive review.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. NAVELEX 0913-LP-000-5010 TACAN AN/TRN-44A Technical Manual, Vol 1.
2. NAVAIR 16-60TRN47-1.

3.8 CORE SKILL TRAINING (2000)

3.8.1 Purpose. To provide the trainee with the knowledge, training, and skill sets required to perform as an air traffic controller in an air traffic control facility, MATCD, or as part of a MMT. The trainee incrementally attains Core Skills by training on operating/crew positions at a Marine Corps air station/facility or other approved facility, under the direct supervision of qualified instructors in an OJT environment. This stage culminates with the controller able to perform ATC duties under general supervision.

3.8.2 General.

3.8.2.1 Prerequisite. Completion of AC(A1).

3.8.2.2. Admin Notes. Shall adhere to the following:

1. Utilize a fully qualified/proficient crew (as appropriate).
2. MATCDs/ATCFs shall develop written examinations (for events requiring testing) and practical applications to evaluate events; at a minimum, they shall encompass the event requirement and performance standard. Examinations may be developed to encompass knowledge requirement of all events in this stage or to assess each event separately.

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

PAR NO.	STAGE NAME	PAGE NUMBER
3.8.3	ORIENTATION (ORNT)	3-49
3.8.4	EQUIPMENT (EQPT)	3-50
3.8.5	EXPEDITIONARY (EXPD)	3-59
3.8.6	COMMUNICATIONS (COMM)	3-63
3.8.7	MARINE AIR TRAFFIC CONTROL MOBILE TEAM LEADER (MMTL)	3-67
3.8.8	MARINE AIR TRAFFIC CONTROL MOBILE TEAM MEMBER (MMTM)	3-69
3.8.9	TERMINAL INSTRUMENT PROCEDURES (TERPS)	3-71
3.8.10	TACTICAL DATA LINKS (TDL)	3-74
3.8.11	COMMAND AND CONTROL SYSTEMS (C2SYS)	3-80

3.8.3 ORIENTATION (ORNT) STAGE

3.8.3.1 Purpose. To provide the trainee the initial knowledge required to understand the basics of air traffic control. This stage familiarizes controllers with general and location specific information as it applies to the air traffic control facility (ATCF).

3.8.3.2 General.

Prerequisites. None.

Admin Notes. This stage shall be completed upon check-in at any ATCF in accordance with NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

Crew Requirements. None.

ORNT-2000 2.0 * B (N) G

Goal. Identify common ATC knowledge applicable to the control tower and radar ATC facility (RATCF).

Requirement. Complete the locally developed orientation training block.

Performance Standard. Pass a written exam.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509.

References.

1. JO 7110.65, Air Traffic Control.

2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Local directives.

3.8.4 EQUIPMENT (EQPT) STAGE

3.8.4.1 Purpose. To provide the trainee the basic knowledge on air traffic control equipment. This stage facilitates an understanding of the capabilities and utilization of equipment organic to the MATCD and ATCF. Training will be conducted under the direct supervision of qualified instructors in an OJT environment. The stage is composed of familiarization with all aspects of the MATCD and ATCF.

3.8.4.2 General.

Prerequisites. None.

Admin Notes. None.

Crew Requirements. None.

EQPT-2001	1.0	*	B	(N)	G
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Goal. Describe MATCD equipment.

Requirement. Given a list of MATCD equipment, identify and discuss the employment of each piece of equipment to include:

1. Generators.
2. Vehicles.
3. Expeditionary TACANs
4. Expeditionary Towers
5. AN/USQ-218 TWR Remote Kit.
6. AN/TPN-31 ATNAVICS.
7. AN/TSQ-263 TTCS.
8. AN/TYQ-164 ADLS.
9. AN/TMQ-56 METEMF(R) NEXGEN.
10. AN/UMK-4(V)4 TESS/NITES.
11. ATNAVICS simulator.

Performance Standard. Identify each item and its concept of employment as it applies to varying levels of MATCD deployment.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2002	1.0	*	B	(N)	G
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Goal. Identify the capabilities and limitations of the AN/TSQ-120.

Requirement. Given the TSQ-120, identify and explain the following:

1. Number of operating positions supported and describe each.
2. Number of radios and nomenclature for each.
3. Number of radio nets and frequency spectrum breakdown.

4. Identification and number and types of landlines.
5. Recording equipment and its capabilities.
6. Weather reporting equipment and its capabilities.
7. ALDIS lamp.
8. ATIS.
9. Bailout alarm.
10. Configuration options.
11. Auxiliary support requirements for continuous operation.
12. Environmental limitations.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. EE100-UQ-OMI-010, AN/TSQ-120 Air Traffic Control Central
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2003 4.0 * B (N) L

Goal. Operate fixed control tower structure equipment.

Requirement. While in a fixed tower and given the required equipment, operate the following:

1. Operate Airfield lighting and visual landing aids control.
2. Use Digital Altimeter Setting Indicator (DASI), Wind direction and speed indicator, and Digital reading clock.
3. Navigational aide monitor(s) (unless located in the radar room), and identify equipment status.
4. Read weather dissemination or display device, Wind direction and speed indicator, and Automatic Terminal Information Service (ATIS).
5. Utilize counters for recording aircraft operations.
6. Operate tower radar display.
7. Operate Aircraft control, Inter/Intrafacility, Emergency communications and Crash/fire Net.
8. Operate Flight Data Input/Output (FDIO), and Flight progress strip Holders.
9. VISCOM, and air traffic control signal lamp.
10. Use Crash phone, crash alarm, evacuation alarm controls, and Crash grid per NAVAIR 00-80R-14.
11. Remote video camera display.
12. Use Binoculars (at least two pair of 7×50 power or stronger shall be available to control tower personnel).

Performance Standard. Complete the required items IAW the reference. Proper operation was demonstrated with no assistance from the instructor.

Instructor. BI.

Prerequisite. None.

References.

1. Applicable equipment operator manuals.
2. Local publications.

EQPT-2005 1.0 * B (N) G

Goal. Identify the capabilities of the AN/TSQ-216.

Requirement. Given the AN/TSQ-216, identify and explain the following:

1. Number of operating positions supported and describe each.
2. Number of radios and nomenclature for each.
3. Number of radio nets and frequency spectrum breakdown.
4. Number and types of landlines.
5. Recording equipment and its capabilities.
6. Weather reporting equipment and its capabilities.
7. ALDIS lamp.
8. Bailout alarm.
9. Configuration options.
10. Auxiliary support requirements for continuous operation.
11. Remote capability.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. NAVAIR 16-60TSQ216-100.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2006 2.0 * B (N) G

Goal. Identify the capabilities and limitations of the AN/TPN-31.

Requirement. Given the AN/TPN-31, identify and explain the following:

1. Configuration options.
2. Number of operating positions supported.
3. System software configuration options.
4. Number of radio nets and frequency spectrum breakdown.
5. Number and types of landlines.
6. Recording capabilities.
7. Weather reporting equipment.
8. Airport surveillance radar (ASR) capabilities.
9. Precision approach radar (PAR) capabilities.
10. Auxiliary support requirements for operating continuously.
11. Remote capability of the AN/TPN-31.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

Reference.

1. NAVAIR 16-60TPN31A-2.
2. NAVAIR 16-60TPN31A-2-1.
3. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2007 1.0 730 B, R, M (N) L

Goal. Configure the AN/TPN-31 for operations.

Requirement. Given an operational AN/TPN-31, navigate the system menus to:

1. Initiate self-diagnostics test.
2. Interpret displayed system faults.
3. Set-up operating position for final control mode.
4. Set-up operating position for arrival/departure control mode.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. 2006.

References.

1. NAVAIR 16-60TPN31A-2.
2. NAVAIR 16-60TPN31A-2-1.

EQPT-2008 3.0 730 B, R, M (N) L

Goal. Configure video maps for the AN/TPN-31.

Requirement. Given an operational AN/TPN-31 and a scenario:

1. Enter video map creation mode on the operating position.
2. Create video maps to support the following:
 - a. Minimum vectoring altitude chart (MVAC).
 - b. Airspace boundaries.
 - c. Airways and/or routes.
 - d. Airport surveillance radar approach (ASR) procedures.
 - e. Fixes.
 - f. Obstructions.
3. Save video maps to the applicable device.
4. Load and activate video maps from the applicable device for operations.

Performance Standard. Complete the requirement items IAW the reference to support the scenario. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. 2006, 2007.

References.

1. NAVAIR 16-60TPN31A-2.
2. NAVAIR 16-60TPN31A-2-1.
3. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2009 3.0 * B (N) G

Goal. Identify the capabilities and limitations of the AN/TSQ-263.

Requirement. Given the AN/TSQ-263, identify and explain the following:

1. Set-up time and requirements.
2. Configuration options.
3. Number of operating positions supported.
4. Auxiliary support requirements for operating continuously.
5. Remote capability of the AN/TSQ-263.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

Reference.

1. NAVAIR 16-60TSQ263-1.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2011 1.0 * B (N) G

Goal. Identify the capabilities and limitations of the MATCD Tactical Air Navigation (TACAN) sets.

Requirement. Given the TACAN sets, identify and explain the following for the TACAN:

1. Configuration options.
2. Proper nomenclature.
3. Frequency spectrum.
4. Expected range and factors affecting range.
5. Power requirements.
6. Factors relating to site placement.
7. Electronic protection measures.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

Reference.

1. NAVELEX 0913-LP-000-5010 TACAN AN/TRN-44 Technical Manual, Vol 1.
2. 16-30TRN47-1
3. 16-30TRN47-2
4. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2012 1.0 * B (N) G

Goal. Identify the capabilities and limitations of the AN/MRQ-13.

Requirement. Given the AN/MRQ-13, identify and explain the following:

1. Configuration options.
2. Proper nomenclature.
3. Frequency spectrum.
4. Expected range and factors affecting range.
5. Power requirements.
6. Factors relating to site placement.
7. Electronic protection measures.

Performance Standard. Complete the requirement items IAW the reference. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. TM 12039A/12041A/12045A-14/1 Operator and Field Maintenance Manual for Communication System
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EQPT-2019	12.0	*	B	(N)	L
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Goal. Operate flight data and radar equipment.

Requirement. Given the required flight data and radar equipment, conduct the following (as applicable):

1. Use telephones.
2. Operate FDIO to include:
 - a. Input flight plans.
 - b. Amend flight plans.
 - c. Weather report.
 - d. General information message.
 - e. Hold message.
 - f. Departure message.
 - g. Progress report.
 - h. ARTS force flight progress data.
 - i. Restore database.
 - j. Stereo flight plan.
 - k. Input station altimeter.
 - l. Remove flight plan.
3. Configure the ASR scope for daily operations.
4. Configure PAR for daily operations.
5. Read altimeter, wind instruments, and clock information.
6. Ensure NAVAID monitors are operating properly, read indicators, and identify equipment status.
7. Operate the weather reporting monitor to extract information.
8. Operate the VISCOM.
9. Perform alignment checks.

Performance Standard. Complete the requirement items IAW the reference. Proper operation was demonstrated with no assistance from the instructor.

Instructor. BI.

Prerequisite. None.

Reference.

1. Applicable equipment operator manuals.

EQPT-2022	2.0	*	B	(N)	L
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Goal. Operate the dynamic cone penetrometer (DCP).

Requirement. Given a DCP and the references:

1. Describe the purpose and use of the DCP.
2. Describe the components of the DCP.
3. Operate the DCP.
4. Record measurements from a DCP for 5 locations to a depth of 36 inches.

Performance Standard. Complete the requirement items IAW the references.

Instructor. BI.

Prerequisite. None.

References.

1. DCP User's Manual.
2. Engineering Technical Letter 2-19, Airfield Pavement Evaluation Standards and Procedures.

EQPT-2023	2.0	*	B	(N)	L
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Goal. Operate a laser range finder (LRF).

Requirement. Given a LRF and the references:

1. Describe the purpose and use of a LRF.
2. Describe the modes and programming of a LRF.
3. Operate a LRF.
4. Record five measurements for obstacles or terrain, including distance and height above observer location.

Performance Standard. Complete the requirement items IAW the references.

Instructor. BI.

Prerequisite. None.

Reference.

1. LRF User's Manual

EQPT-2024	4.0	*	B	(N)	L
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Goal. Operate the theodolite.

Requirement. Given a theodolite and the references:

1. Establish a centerline of the runway.
2. Establish touchdown and threshold distances.
3. Determine minimum and maximum distances.
4. Record measurements for angles, heights, and distances for five obstacles determined from runway threshold.

Performance Standard. With supervision and a theodolite, determine the requirements with assistance of an instructor.

Instructor. BI.

Prerequisite. None.

Reference.

1. Theodolite User's Manual.

EQPT-2025 2.0 1460 B, R, M (N) L

Goal. Operate a handheld GPS receiver.

Requirement. Given a handheld GPS receiver and the references:

1. Describe the purpose and use of the device.
2. Describe the components of the device.
3. Report current location in both latitude/longitude and MGRS coordinates.
4. Fill the device with the appropriate crypto for precision positioning system (PPS) operations.
5. Report current location in both latitude/longitude and MGRS coordinates in PPS operations.

Performance Standard. Complete the requirement items IAW the references. Device was programmed properly, current position was accurate, and device was operated with appropriate crypto fills.

Instructor. BI.

Prerequisite. 2210.

References.

1. DAGR Operator's Pocket Guide.
2. AN/PSN-13A DAGR Computer Based Training.
3. DAGR Technical Manual 11-5820-1172-13.

EQPT-2026 2.0 * B (N) L

Goal. Employ the AN/TRN-47 Tactical Air Navigation System (TACAN).

Requirement. Given the AN/TRN-47 TACAN and generator:

1. Describe the purpose and use of the TACAN.
2. Identify the components and capabilities of the TACAN and generator.
3. Operate the generator.
4. Assist a NAVAIDS technician in the setup of the TACAN for operations.

Performance Standard. Complete the requirement items IAW the references.

Instructor. BI.

Prerequisite. None.

External Syllabus Support. 5952.

Reference.

1. NAVAIR 16-30TRN47-1.

EQPT-2031	1.0	1460	B, R, M	NS	L
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Goal. Operate a NVD while performing ATC duties.

Requirement. During ATC operations, with the aid of a NVD:

1. Identify the position of an aircraft on movement areas using visual references.
2. Determine the position of an aircraft in flight with respects to the VFR pattern and position reports received from aircraft.
3. Demonstrate safe, orderly, and expeditious control of aircraft operating in assigned airspace.

Performance Standard. Complete the requirement items IAW the references .

Instructor. BI.

Prerequisite. 6520.

Reference.

1. MAWTS-1 Night Vision Device Manual.

3.8.5 EXPEDITIONARY (EXPD) STAGE

3.8.5.1 Purpose. To provide the trainee an understanding of the mission, task, and organization of the MATCD; familiarization of the TACC, TAOC, DASC, and LAAD; and applicable administrative/operational processes. It also includes significant information on the processes and administration of employing the MATCD.

3.8.5.2 General.

Prerequisites. None.

Admin Notes. None.

Crew Requirements. None.

EXPD-2101	4.0	*	B	(N)	G
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Goal. State the considerations required to conduct a MATCD site survey.

Requirement. Describe the planning and execution of a site survey necessary to deploy the MATCD, considering the following:

1. Mission.
2. Tower site with best view of landing surfaces and airspace.
3. Instrument procedure design requirements.
4. Radar/NAVAID sites that provide minimal terrain masking.

5. Radar coverage of assigned airspace and/or the AO.
6. Site security.
7. Support equipment.
8. Power requirements.
9. Host site limitations.
10. Wind survival tie-down procedures.
11. Communications.

Performance Standard. Complete the requirement steps IAW the reference. The instructor will question and mentor the trainee throughout the instruction of the event.

Instructor. SI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. Applicable operator manuals.

EXPD-2104 2.0 365 B, R, M (N) S/L

Goal. Relay a completed casualty evacuation (CASEVAC) request.

Requirement. Given a blank CASEVAC request, the references, and scenario information:

1. State the purpose and use of a CASEVAC request.
2. Identify the information required for each line in a CASEVAC request.
3. Identify common submission procedures and methods of delivery.
4. Complete and relay the CASEVAC request information to the instructor verbally.

Performance Standard. Complete the requirement items IAW the reference. CASEVAC request must be completed with no errors.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-40A.7, Patient Movement.
2. ATP 4-25.13, Casualty Evacuation.

EXPD-2105 2.0 730 B, R, M (N) S/L

Goal. Complete joint tactical airstrike request (JTAR) and assault support request (ASR) forms.

Requirement. Given a scenario and blank forms:

1. State the purpose and use of a JTAR and an ASR.
2. Identify the required information to complete each form.
3. Complete one pre-planned, and one immediate JTAR.
4. Complete one ASR.
5. Verbally relay the JTAR and ASR to the instructor..

Performance Standard. Accurately relay information IAW the requirement, without errors.

Instructor. BI (MMTL)

Prerequisite. None.

Reference.

1. JP 3-09.3, Joint Tactics, Techniques, and Procedures for Close Air Support (CAS).

EXPD-2120 1.0 * B (N) G

Goal. Describe the configuration and operation of a Tactical Air Command Center (TACC).

Requirement. During an exercise or operation, observe an operational TACC. Understand its configuration and operational requirements.

Performance Standard. Conduct a guided discussion.

Instructor. SI.

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008.

External Syllabus Support. TACC

Reference.

1. MCRP 3-20F.2, Marine Tactical Air Command Center Handbook.

EXPD-2121 1.0 * B (N) G

Goal. Describe the configuration and operation of the Tactical Air Operations Center (TAOC).

Requirement. During an exercise or operation, observe an operational TAOC. Understand its configuration and operational requirements.

Performance Standard. Conduct a guided discussion.

Instructor. SI.

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008.

Reference.

1. MCRP 3-20F.6, Tactical Air Operations Center Handbook.

EXPD-2122 1.0 * B (N) G

Goal. Describe the configuration and operation of the Direct Air Support Center (DASC).

Requirement. During an exercise or operation, observe an operational DASC. Understand its configuration and operational requirements.

Performance Standard. Conduct a guided discussion.

Instructor. SI.

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008.

Reference.

1. MCRP 3-20F.5, Direct Air Support Center Handbook.

EXPD-2123 1.0 * B (N) G

Goal. Describe the employment and operation of a Low Altitude Air Defense (LAAD) section.

Requirement. During an exercise or operation, observe an operational LAAD section conducting GBAD operations. Understand its configuration and operational requirements.

Performance Standard. Conduct a guided discussion.

Instructor. SI.

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008.

Reference.

1. MCRP 3-20F.9, Low Altitude Air Defense (LAAD) Gunner's Handbook.

EXPD-2124 1.0 * B (N) G

Goal. Describe the configuration and operation of an Unmanned Aircraft System (UAS) site.

Requirement. During an exercise or operation, observe an operational UAS site. Understand its configuration and operational requirements.

Performance Standard. Conduct a guided discussion.

Instructor. SI.

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008.

Reference.

1. MCRP 3-20.5, Unmanned Aircraft Systems Operations.

EXPD-2130 4.0 730 B, R, M (N) L

Goal. Operate the Air Traffic Control Central (Expeditionary Control Tower—AN/TSQ-120) and associated equipment.

Requirement. Locate and operate the following equipment:

1. Power distribution panel.
2. Internal and external lights.
3. Light gun.
4. Overhead speaker and adjustment knobs.
5. Clocks.
6. Environmental Control Unit (ECU).
7. MET Sensor.
8. Communication Selection Panel.
 - a. Radios.
 - b. Telephones.

- c. Intercoms.
- 9. ATIS.
- 10. Crash alarm.
- 11. Fire Detector.

Performance Standard. Operate the requirement items in the AN/TSQ-120.

Instructor. BI.

Prerequisite. 2002.

Reference.

- 1. NAVAIR EE100-UQ-OMI-010.

EXPD-2131	2.0	730	B, R, M	(N)	L
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Goal. Operate the Remote Landing Site Tower (RLST—AN/TSQ-216) and associated equipment.

Requirement. Locate and operate the following equipment:

- 1. Power distribution panel.
- 2. Internal and external lights.
- 3. Aldis lamp.
- 4. Overhead speaker and adjustment knobs.
- 5. Clocks.
- 6. ECU.
- 7. MET Sensor.
- 8. Communications Selection Panel.
 - a. Radios.
 - b. Telephones.
 - c. Intercoms.
- 9. ATIS.
- 10. Antennas.
- 11. Generators.

Performance Standard. Complete the requirement steps.

Instructor. BI.

Prerequisite. 2005.

Reference.

- 1. NAVAIR 16-60TSQ216-100.

3.8.6 COMMUNICATIONS (COMM) STAGE

3.8.6.1 Purpose. To provide the trainee with the basic knowledge on the operation of MATCD communications equipment.

3.8.6.2 General.

Prerequisites. None.

Admin Notes. None.

Crew Requirements. None.

COMM-2200 4.0 730 B, R, M L

Goal. Operate VHF / UHF / SATCOM man-pack communications equipment.

Requirement. Given the appropriate equipment:

1. Describe the capabilities and limitations of the man-pack radio.
2. Program intra-team radio with assigned frequencies, appropriate modulation and crypto settings.
3. Program man-pack radio for Dedicated, DAMA, and IW SATCOM operations.
4. Fill intra-team radio with appropriate encryption key(s).
5. Select applicable SL-3 for bandwidth and configure radio accordingly.
6. Establish secure and non-secure two-way VHF / UHF / SATCOM communications with another team member or other agency.

Performance Standard. Establish secure and non-secure two-way voice communications IAW the requirement.

Instructor. BI

Prerequisite. 2208, 2209, 2210

References.

1. Applicable equipment operator manuals.
2. Harris Premier website computer based training.

COMM-2204 4.0 730 B, R, M (N) L

Goal. Operate high-frequency man-pack communications equipment.

Requirement. Given the appropriate information and equipment:

1. Describe the capabilities and limitations of the HF man-pack radio.
2. Program a single frequency for fixed-frequency operations.
3. Program multiple frequencies for 3G+/ALE multiband operations, use of the Radio or Computer Programming Application (CPA) is acceptable.
4. Determine the appropriate Short title, Edition and Segment for secure communications
5. Correctly fill the radio with the encryption key(s).
6. Select applicable SL-3 for voice communications and bandwidth, configure radio accordingly.
7. Configure radio for data communications.
8. Establish two-way secure and non-secure voice and data communications.
9. Describe troubleshooting steps.

Performance Standard. Establish secure and non-secure two-way voice and data communications IAW the requirement.

Instructor. BI.

Prerequisite. 2208, 2209, 2210.

References.

1. Applicable equipment operator manuals.
2. Harris Premier website computer-based training.

3. MAWTS-1 MMT High Frequency Communications Courseware

COMM-2205 4.0 730 B, R, M (N) L

Goal. Operate intra-team communications equipment.

Requirement. Given the appropriate equipment:

1. Describe the capabilities and limitations of the radio.
2. Program intra-team radio with assigned frequencies, appropriate modulation and crypto settings.
3. Fill intra-team radio with appropriate encryption key(s).
4. Select applicable SL-3 for bandwidth and configure radio accordingly.
5. Establish secure and non-secure two-way communications with another team member.

Performance Standard. Complete the requirement items IAW the references. Communication equipment was set up and programmed accurately and a radio check was performed without error.

Instructor. BI.

Prerequisite. 2208, 2209, 2210.

Reference.

1. Applicable equipment operator manuals.
2. Harris Premier website computer based training.

COMM-2206 2.0 1460 B, R, M (N) L

Goal. Operate ATC communications equipment.

Requirement. Operate the following communications equipment:

1. Transmitter/receiver control panel(s).
2. Backup/emergency transmitter/receiver location and controls.
3. Emergency communications system (ECS).
4. Crash phone
5. Intercom units.
6. Telephones.
7. VIDS (as applicable).

Performance Standard. Complete the requirement items IAW the references. Communication equipment was set up and programmed accurately and a line check was performed without error.

Instructor. BI.

Prerequisite. None.

Reference.

1. Applicable equipment operator manuals.

COMM-2208 2.0 * B (N) G

Goal. Describe proper handling and storage of classified materials.

Requirement. Given the references:

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 for TS material.
4. State storage procedures for each level of classification.
5. Identify transportation requirements for classified material.
6. State the sections of the SF-702.
7. Identify the approved security containers utilized for storage.
8. Identify the procedures for handling controlled cryptographic items (CCI).

Performance Standard. State the above requirement items without error.

Instructor. BI.

Prerequisite. None.

References.

1. SECNAVINST 5510.36, Department of the Navy Information Security Program Instruction.
2. CMS Policy and Procedures Manual, (CMS1).
3. MCO P5510.18, United States Marine Corps Information and Personnel Security Program Manual.
4. Unit EKMS SOP.

COMM-2209 2.0 * B (N) L

Goal. Extract key material information from Communications Security Material System (CMS) from COMSEC callout.

Requirement. Given an CMS COMSEC callout and references:

1. State the purpose of the CMS 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 local SOP and CMS COMSEC callout, state the purpose of the CMS COMSEC callout and identify the key information on the callout.

Instructor. BI.

Prerequisite. 2208.

References.

1. CMS Policy and Procedures Manual, (CMS1).
2. COMSEC callout.

COMM-2210 2.0 730 B, R, M (N) L

Goal. Operate a common fill device (CFD).

Requirement. Given a CFD, a tactical radio, and the references:

1. Describe the purpose and use of a CFD.
2. Identify the components of a CFD.
3. Transfer an encryption key to a tactical radio.

Performance Standard. Complete the requirement items IAW the references. Accurately transmit the encryption key and successfully conduct a secure radio check without error.

Instructor. BI.

Prerequisite. 2208, 2209.

Reference.

1. Applicable equipment operator manuals.

COMM-2211 8.0 730 B, R, M (N) L

Goal. Construct a functional single or multi-band field expedient antenna for secure and non-secure high frequency voice and data communications.

Requirement. Given the appropriate equipment:

1. Describe full, half, and quarter wave antenna-length formulas.
2. Describe Common field expedient antenna configurations and their optimal use; at a minimum:
 - a. Long-wire.
 - b. Dipole / folded dipole.
 - c. Sloping vee.
 - d. Omni-directional box.
3. Explain grounding and insulators.
4. Explain impedance and resistance.
5. Explain feed line considerations.
6. Describe a balanced to unbalanced (BALUN) connector.
7. Explain Vertical Standing Wave Ratio (VSWR).
8. Explain how to determine directionality and take-off angle.
9. Explain squelch.

Performance Standard. Establish two-way secure and non-secure voice and data communications with a field expedient antenna.

Instructor. MMTI

Prerequisite. 0581, 2204, 2208, 2209, 2210

References.

1. MAWTS-1 MMT High Frequency Communications Courseware
2. Applicable equipment operator manuals.

3.8.7 MARINE AIR TRAFFIC CONTROL MOBILE TEAM LEADER (MMTL) STAGE

3.8.7.1 Purpose. To develop knowledge and abilities in MMT tactics, techniques, and procedures to accomplish the MMT mission. This stage teaches the necessary skills and knowledge to conduct expeditionary, austere ATC operations and familiarizes controllers with equipment organic to the MMT. Training will be conducted under the direct supervision of qualified instructors in an OJT environment.

3.8.7.2 General.

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024,

8025, 8026, 8027, 8028.

Administrative Notes. None.

Crew Requirement. One MMT.

MMTL-2300 2.0 730 B, R, M (N) L

Goal. Develop and issue a five paragraph order.

Requirement. Given required information, develop and issue a five paragraph order.

Performance Standard. Order complete and accurate with no errors.

Instructor. BI.

Prerequisite. 6046

Reference.

1. MCRP 3-30.7, Commander's Tactical Handbook.

MMTL-2301 8.0 730 B, R, M (N) L

Goal. Conduct survey and assessment of a fixed-wing landing zone.

Requirement. Given appropriate equipment:

1. Determine distances to and heights of obstructions.
2. Determine arrival and departure threshold coordinates based on required glideslope criteria.
3. Determine LZ centerpoint coordinates.
4. Determine approach end, departure end, and highest LZ elevations.
5. Determine longitudinal and transverse gradients.
6. Determine usable surface dimensions of the LZ.
7. Determine magnetic heading of the LZ.
8. Determine soil layers, and California Bearing Ratio for each.
9. Determine allowable passes for requesting T/M/S.
10. Determine two-letter Unified Soil Classification System soil classification.
11. Produce an LZ diagram.
12. Complete AF IMT 3822, Landing Zone Survey Form.

Performance Standard. Submit survey form to instructor; must be complete and accurate without errors.

Instructor. MMTI

Prerequisite. 0576, 0577, 0578, 0579, 0580, 6200.

Reference.

1. MAWTS-1 SAAZA Courseware.

MMTL-2302 8.0 730 B, R, M (N) L

Goal. Conduct survey and assessment of a helicopter/tiltrotor landing zone.

Requirement. Given appropriate equipment:

1. Determine distances to and heights of obstructions.
2. Determine landing point coordinates based on required glideslope criteria.
3. Determine LZ centerpoint coordinates.
4. Determine longitudinal and transverse gradients.
5. Determine usable surface dimensions of the LZ.
6. Determine magnetic heading of the LZ.
7. Determine soil layers, and California Bearing Ratio for each.
8. Determine two-letter Unified Soil Classification System soil classification.
9. Produce an HLZ diagram.
10. Complete AF IMT 4303, Helicopter Landing Zone Form.

Performance Standard. Submit survey form to instructor; must be complete and accurate without errors.

Instructor. MMTI.

Prerequisite. 0576, 0577, 0578, 0579, 0580, 6200.

Reference.

1. MAWTS-1 SAAZA Courseware.

MMTL-2303	8.0	730	B, R, M	(N)	L
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Goal. Conduct survey and assessment of a drop zone.

Requirement. Given appropriate equipment:

1. Determine dimensions or radius of the DZ.
2. Determine point of impact (PI) distance from leading edge of DZ.
3. Determine magnetic, true, and grid axis data for DZ.
4. Determine elevations for each PI and highest DZ point.
5. Determine DZ corner coordinates.
6. Produce a DZ diagram.
7. Complete AF IMT 3823, Drop Zone Survey Form.

Performance Standard. Submit survey form to instructor; must be complete and accurate without errors.

Instructor. MMTI.

Prerequisite. 0576, 0577, 0578, 0579, 0580, 6200.

Reference.

1. MAWTS-1 SAAZA Courseware

MMTL-2304	2.0	730	B, R, M	(N)	S/L
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Goal. Submit a completed survey for inclusion in the Zone Availability Report database.

Requirement. Given appropriate equipment:

1. Complete an approved form for fixed-wing / helicopter / tiltrotor landing zone or drop zone.
2. Submit to requesting agency's safety office for routing and MAJCOM signature.
3. Scan and submit to database for publishing.

Performance Standard. Submit survey form to instructor; must be complete and accurate without errors.

Instructor. MMTI.

Prerequisite. 0576, 0577, 0578, 0579, 0580, 2301, 2302, 2303, 6200.

Reference.

1. MAWTS-1 SAAZA Courseware.

3.8.8 MARINE AIR TRAFFIC CONTROL MOBILE TEAM MEMBER (MMTM) STAGE

3.8.8.1 Purpose. To develop knowledge and abilities in MMT tactics, techniques, and procedures to accomplish the MMT mission. This stage teaches the necessary skills and knowledge to conduct expeditionary, austere ATC operations and familiarizes controllers with equipment organic to the MMT.

3.8.8.2 General.

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Administrative Notes. None.

Crew Requirement. One MMT.

MMTM-2310 6.0 730 B, R, M (N) L

Goal. Conduct assault landing zone (ALZ) operations.

Requirement. Given the required equipment, a six-member MMT and the references, conduct the following during day or night operations:

1. Establish and retrograde an airfield marking pattern (AMP)-1.
2. Establish and retrograde an AMP-2.
3. Establish and retrograde an AMP-3.

Performance Standard. Complete the requirement items IAW the references. Rapidly and accurately accomplish the requirement steps while serving in at least three of the six billets associated with the establishment of a C-130 ALZ. Panels or lights were properly aligned and securely fixed to the ground without error. This event shall be completed during daylight and nighttime hours.

Instructor. BI (MMTL).

Prerequisite. 0570, 0571, 0573, 0574, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

References.

1. MMT TACSOP.
2. MAWTS-1 Course Catalog.

MMTM-2311 4.0 730 B, R, M (N) L

Goal. Conduct Helicopter Landing Zone (HLZ) Operations.

Requirement. Given the required equipment at an HLZ or simulated HLZ and the references, conduct the following during day and night conditions:

1. Mark the HLZ utilizing Bullet Traps.

2. Mark the HLZ utilizing an Inverted T.
3. Mark the HLZ utilizing a NATO Y.
4. Establish visual initial terminal guidance (ITG) during night operations.

Performance Standard. Complete the requirement items IAW the references. Dimensions of the markings were accurate and the marking of the HLZ met criteria. ITG was established and easily identified from the air. This event shall be completed during daylight and nighttime hours.

Instructor. BI (MMTL).

Prerequisite. 0570, 0571, 0573, 0574, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Reference.

1. MMT TACSOP.

MMTM-2312 12.0 730 B, R, M (N) L

Goal. Conduct land navigation operations.

Requirement. Given the required equipment in a field environment and a list of five MGRS locations, complete a land navigation course. This event shall be completed during daylight and nighttime hours.

Performance Standard. Complete the requirement items IAW the references. Accurately locate the MGRS locations while navigating with a DAGR. The points must be found both during daylight and nighttime hours.

Instructor. BI (MMTL).

Prerequisite. 2025, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

References.

1. MCTP 3-01A, Scouting and Partrolling.
2. MCRP 8-10B.8, Marine Troop Leader's Guide.

MMTM-2313 12.0 730 B,R,M (N) L

Goal. Collect assault zone survey data using equipment organic to the MMT.

Requirement. Given the required equipment in a field environment, gather data for the completion of an assault zone survey to include as directed by the team leader:

1. Determine assault zone coordinates with DAGR.
2. Operate the laser range finder to determine distances and elevations of obstacles and terrain.
3. Operate a clinometer to determine vertical and horizontal angles.
4. Determine runway gradients using line levels/yard sticks.
5. Operate dynamic cone penetrometer and collect data for analysis.

Performance Standard. Collect data under the supervision of the instructor with minor errors and corrections to support the completion of an assault zone survey and assessment.

Instructor. BI (MMTL).

Prerequisite. 2022, 2023, 2025, 2208, 2209, 2210, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

References.

1. MMT TACSOP.
2. MAWTS-1 C3 Course Catalog.
3. UFC 3-260-01, Airfield and Heliport Planning and Design
4. Engineering Technical Letter 04-7: C-130 and C-17 Landing Zone Dimensional, Marking and Lighting Criteria.
5. Engineering Technical Letter 02-19: Airfield Pavement Evaluation Standards and Procedures.

3.8.9 TERMINAL INSTRUMENT PROCEDURES (TERPS) STAGE

3.8.9.1 Purpose. To train controllers to a required level of proficiency to be eligible to undergo evaluation for a TERPS Specialist designation. This stage provides academics necessary to understand the TERPS process to perform as a TERPS Specialist in an ATCF, a MATCD, an ATC T&R Office, or at the Naval Flight Information Group.

3.8.9.2 General.

Prerequisites. None.

Admin Notes. ATCFs and MATCDs shall develop written examinations for events requiring testing. Exams shall encompass, at a minimum, the event requirement and standard, including the use of the references listed.

Crew Requirements. None.

TERPS-2500	2.0	*	B	(N)	G
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Goal. Identify the roles of organizations that support the development, approval and inspection of instrument procedures.

Requirement. Describe the roles of the organizations involved in instrument procedures to include:

1. MATCD.
2. Regional ATC T&R Office.
3. Host nation authorities.
4. Naval Flight Information Group (NAVFIG).
5. FAA Flight Standards Services, AFS-420.
6. FAA Flight Inspection Office.

Performance Standard. Pass an open-book written examination.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).

TERPS-2501	2.0	*	B	(N)	G
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Goal. Identify required publications and their usage in developing Navy/Marine Corps terminal instrument procedures.

Requirement. Identify the usage of the following manuals in instrument procedure development and approval:

1. FAAO 8260.3.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. FAAO 8260.19, Flight Procedures and Airspace.
4. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.
5. FAAO 8200.1.

Performance Standard. Pass an open-book written examination.

Instructor. SI.

Prerequisite. None.

References.

1. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. FAAO 8260.19, Flight Procedures and Airspace.
4. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.
5. FAAO 8200.1, US Standard Flight Inspection Manual.

TERPS-2502	2.0	*	B	(N)	G
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Goal. Explain the administrative policies which govern the development of terminal instrument procedures.

Requirement. Explain administrative policies governing procedure development, to include:

1. Eligibility, approval, and retention.
2. Responsibility and jurisdiction.
3. Establishment of instrument procedures.
4. Coordination for approval of instrument procedures.
5. Identification of procedures.
6. Publication of procedures.

Performance Standard. Pass an open-book written examination.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
3. FAAO 8260.19, Flight Procedures and Airspace.

TERPS-2503	8.0	*	B	(N)	G
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Goal. Identify the general requirements for submission and approval of terminal instrument procedures.

Requirement. Identify the requirements for submission and approval of instrument procedures, to include:

1. Aeronautical charting requirements.
2. Environmental impact.
3. NAVAID/facility utilization and monitoring.
4. Implementation of Epoch Year Magnetic Variation.
5. Quality/Standardization of instrument flight procedures.
6. Navigational fixes.
7. Periodic review requirements of instrument procedures.
8. Obstacle data and accuracy requirements.
9. Waivers of standards.
10. Designations of controlled airspace.
11. Construction of military procedures.
12. Form use and preparation.
13. Certification, processing and review.
14. Requirements for airfield marking/lighting.

Performance Standard. Pass an open-book written examination.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
3. FAAO 8260.19, Flight Procedures and Airspace.
4. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.

TERPS-2504 8.0 * B (N) G

Goal. Describe general criteria that can be applied to the development of all instrument procedures.

Requirement. Describe general TERPS criteria to include:

1. Minimum sector altitudes.
2. Transitions from the en route environment.
3. Criteria for segments of an instrument approach, to include:
 - a. Initial approach.
 - b. Intermediate approach.
 - c. Final approach.
 - d. Visual area.
 - e. Missed approach.
4. Circling approach evaluation.
5. Obstacle evaluation.
6. Terminal fix usage.
7. Takeoff and landing minima.
8. Helicopter procedure general criteria.
9. Approach lighting equivalent systems.
10. Effects of airfield lighting/markings on the procedure.

Performance Standard. Pass an open-book written examination.

Instructor. SI.

Prerequisite. 2500, 2501, 2502, 2503.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
3. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.

3.8.10 TACTICAL DATA LINKS (TDL) STAGE

3.8.10.1 Purpose. To develop ATC experience in establishing and operating advanced datalinks.

3.8.10.2 General.

Prerequisites. None.

Admin Notes. Tactical Data Link events are located in the MAWTS-1 C3 Course Catalog in order to maintain standardized training across the MACCS. The below listed TDL events are to be completed by ATC personnel, position dependent.

Crew Requirements. None.

TDL-2800	2.0	*	B	(N)	G
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Goal. Identify the purpose of documents that enable Tactical Data Link (TDL) operations.

Requirement. Given the documents below, identify their purpose:

1. Guard Chart.
2. Communication Electronic Operating Instruction (CEOI).
3. Operations Order Annex K.
4. Operations Order Annex U.
5. Link 16 Network Description Document.
6. Communications Security (COMSEC) Callout.
7. Operational Tasking Data Link (OPTASK LINK).
8. Satellite Access Authorization (SAA).
9. Joint Multi-TDL Operating Procedures (JMTOP).

Performance Standard. With the aid of references, complete the required items IAW the reference. Minimal self-corrected errors allowed.

Instructor. BI.

Prerequisite. None.

References.

1. MCWP 5-1, Marine Corps Planning Process.
2. MCWP 3-40.3, MAGTF Communications Systems.
3. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).

TDL-2806	2.0	*	B	(N)	G
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Goal. Identify MATC voice and data communications equipment.

Requirement. Given the references, identify the following:

1. Radio systems.
2. Data link systems.
3. C2 Systems.

Performance Standard. Without the aid of reference, state (verbally or written) the required items. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 5-12D, Organization of Marine Corps Forces.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
3. Approved Core METL applicable to the unit.
4. MCBUL 3000, Marine Corps Readiness Reportable Ground Equipment.

TDL-2808	1.0	*	B	(N)	G
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Goal. Describe the Joint Data Network.

Requirement.

1. Define the Joint Data Network.
2. State the responsibilities of the Joint Data Network Operations Officer (JDNO).
3. State the purpose of the Global Command and Control System (GCCS) Family of Systems (FoS).
4. Define Common Operational Procedure (COP).
5. Define Common Tactical Procedure (CTP).
6. Define Tactical Picture.
7. State the components of the CTP.
8. Describe track management.

Performance Standard. Without the aid of reference, state (verbally or written),the required items. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 3115.01: Volume 1, Joint Data Network Operations.
2. CJCSM 3115.02: Volume 2, Common Tactical Picture Data Management.
3. CJCSI 3115.01: CTP Reporting Requirements.
4. CJCSI 3115.01B: GCCS COP Reporting Requirements.

TDL-2811	2.0	*	B	(N)	G
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Goal. Identify basic track data.

Requirement. Perform the following:

1. Define track number.
2. Identify the value and purpose of the following:
 - a. Low track numbers.

- b. High track numbers.
- c. Data forwarding track numbers.
3. Identify five track environments.
4. Identify the six standard track identifications.
5. Define Track Quality.
6. Define real-time track reports.
7. Identify how non real-time tracks are distinguished from real-time tracks.
8. Identify when non-real time tracks are used.
9. Define Reporting Responsibility (R2).
10. Define a common track.
11. Define correlation.
12. Define automatic correlation.
13. Describe track number negotiations during correlation.
14. Define Manual Correlation.
15. Explain de-correlation.
16. Define Dual Designation.

Performance Standard. Without the aid of reference, state (verbally or written) the required items. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.

TDL-2812	2.0	*	B	(N)	G
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Goal. Identify information contained within J-Series Messages that may be displayed to the operator.

Requirement. Define the following:

1. Identify the six Precise Participant Location and Identification (PPLI) message types.
2. Identify the information conveyed within J2.X PPLI messages.
3. Identify the main difference between a J2.0 Indirect PPLI message and the other J2.X PLI messages.
4. Identify the five Platform Status and System Status message types.
5. Identify the information conveyed within J13.X Platform and System Status messages.
6. Identify the eight Surveillance message types.
7. Identify information conveyed within J3.X Surveillance messages.
8. Identify the characteristics of each IFF/SIF Code.
9. Identify the differences between a sensor measured altitude, Mode IIIC altitude, and PPLI altitude.

Performance Standard. Without the aid of reference, state (verbally or written) the required items. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.

TDL-2819 2.0 * B (N) G

Goal. State the characteristics of the Joint Range Extension Application Protocol (JREAP).

Requirement. Perform the following:

1. Describe JREAP A.
2. Select the data rates of JREAP A.
3. Describe JREAP A roles.
4. Describe the JREAP A Transmission Sequence List (TSL).
5. Explain the difference between JREAP A and Satellite J.
6. Describe JREAP B.
7. Describe JREAP B modes of operation.
8. Select JREAP B data rates.
9. Describe JREAP C.
10. Describe JREAP C modes of operation.
11. Define the following terms associated with JREAP:
 - a. Common Time Reference
 - b. Demand Assigned Multiple Access (DAMA)
 - c. Joint Range Extension (JRE)
 - d. JRE Network Controller
 - e. JRE Source Track Number
 - f. Link 16 Zone
 - g. Multicast
 - h. Packet.
 - i. Port.
 - j. Secondary Track Number.
 - k. Token Passing.
 - l. Unicast.

Performance Standard. Without the aid of reference, state (verbally or written) the required items. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-3011, JREAP Interface Standard.

TDL-2820 2.0 * B (N) G

Goal. Identify mission essential segments, sets, and fields within the OPTASK LINK message.

Requirement. With the aid of reference, perform the following:

1. Identify the purpose of the OPTASK LINK.
2. Identify who is responsible for creating and disseminating the OPTASK LINK.
3. State the purpose of the Common Message Processor (CMP) and discuss its relationship to the OPTASK LINK.
4. Define Segment.
5. Define Set.

6. Define Field.
7. Identify the information contained in the Header of the OPTASK LINK to include the following sets:
 - a. GENTEXT/CONDUCT OF TDL OPERATIONS.
 - b. POCLINK.
 - c. DLRPGRID.
8. Identify the information contained in the IVCCN Segment.
9. Identify the information contained in the CORRDEC set.
10. Identify the information contained in THE HEADING/MULTILINK INTERFACE COORDINATION REQUIREMENTS set to include the following GENTEXT sets:
 - a. FORCE INTERFACE INFORMATION.
 - b. REGIONAL INTERFACE INFORMATION.
 - c. SECTOR INTERFACE INFORMATION.
 - d. CHANGE DATA ORDER AUTHORITIES.
 - e. CONTINGENCY PROCEDURES.
 - f. TRACK PRODUCTION AREA GUIDANCE.
11. Identify the information contained in the MULCDUTY set.
12. Identify the information contained in the Link 11 Segment to include the following sets:
 - a. POLLSEQ.
 - b. LSYSDATA.
 - c. CRYPTDAT.
 - d. DALKFREQ.
 - e. FORCFLTR.
 - f. LPUDATA.
 - g. UNITFLTR.
13. Identify the information contained in the Link 16 Segment to include the following sets:
 - a. JNETWORK.
 - b. CPD.
 - c. JCRYPDAT.
 - d. JTRNMODE.
 - e. JSTNETS.
 - f. JUDATA.
 - g. SQDDATA.
14. Identify the information contained in the Joint Range Extension (JRE) Data Segment to include the following sets:
 - a. UNITINFO.
 - b. LNKPROT.
 - c. SECTEL.
 - d. SECINTER.
 - e. SATCONN.
 - f. CONMATRX.
15. Identify the information contained in the 1MANCODE set.

Performance Standard. With the aid of reference, state (verbally or written) the required items.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures.
2. Guide to the USMTF User Formats - OPERATIONAL TASKING DATA LINKS.

TDL-2838 8.0 * B (N) L

Goal. Operate JREAP A.

Requirement. Given a MIL-STD-3011 compliant system, SATCOM radio assets, Satellite Access Authorization (SAA), OPTASK LINK, and assistance from maintenance and communications sections:

1. Extract satellite communications information from the SAA.
2. Verify proper radio configuration for JREAP A operations.
3. Verify cryptographic equipment is keyed.
4. Verify JREAP A equipment is connected.
5. Verify the SATCOM antenna has the correct elevation and azimuth.
6. Build the JREAP A link in the MIL-STD-3011 compliant system.
7. Enter and activate filters in the MIL-STD-3011 compliant system.
8. Enable and disable the correct link connections.
9. Enter/exit link IAW published procedures.
10. Demonstrate the ability to operate in the following modes:
 - a. Network Participant
 - b. Network Controller
 - c. Network Listener

Performance Standard. Successfully exchange tracks.

Instructor. SI

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.
5. SATCOM Radio Technical Manual.

TDL-2842	8.0	*	B	(N)	L
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Goal. Operate JREAP C.

Requirement. Given a MIL-STD-3011 compliant system, SIPRNET access, and assistance from maintenance and communications sections:

1. Verify the MIL-STD-3011 compliant system is configured with the correct IP address.
2. Verify the MIL-STD-3011 compliant system is connected to the network.
3. Build JREAP C IP links in the MIL-STD-3011 compliant system.
 - a. TCP
 - b. UDP Unicast
 - c. UDP Multicast
4. Enter and activate filters in the MIL-STD-3011 compliant system per the OPTASK LINK.
5. Enable and disable the correct link connections.
6. Activate and exchange information with JREAP-C (either TCP or UDP).

Performance Standard. Successfully exchange information/data.

Instructor. SI

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).

2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.

3.8.11 COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE

3.8.11.1 Purpose. To provide MATC personnel the knowledge and skills required to operate command and control systems employed within Marine Aviation.

3.8.11.2 General.

Prerequisite. MARINENET Courses as indicated within the C2SYS events or the virtual MISTC POIs for the associated C2 system.

Administrative Notes. Command and control system events are located in the MAWTS-1 C3 Course Catalog in order to maintain standardized training across the MACCS. Specific event for MATC are listed in the chart below. C2SYS training is offered by MISTCs or provided during MISTEX, MEFEX, or other Wing TEEP events.

Due to the highly-perishable nature of command and control systems (C2SYS) skills, these events are required to be refreshed every 365 days (12 months) to remain current.

Crew Requirement. None.

C2SYS-2900	0.5	B, R	(N)	G
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Goal. Demonstrate proficiency logging on a TBMCS client.

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Login to a client.
2. Change password.
3. Access CAOC Central.
4. Select or de-select the warnings that are displayed for login or application access.

Performance Standard. With the aid of references, complete the required items IAW the reference.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MAWTS-1 Air Tasking Order Development Course, MCAS Yuma, AZ
2. MISTC C2 TECOE: <http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-2901	0.5	B, R	(N)	G
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Goal. Demonstrate proficiency with accessing TBMCS Online Master Help Index.

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Access the online help function for the TBMCS system.
 - a. Help from CC Web.
 - b. Help from within the application.
2. Display the user manuals and procedural checklists.

Performance Standard. Without the aid of references, complete the required items IAW the reference.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MAWTS-1 Air Tasking Order Development Course, MCAS Yuma, AZ
2. MISTC C2 TECOE:<http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-2905 1.0 B, R (N) G

Goal. Demonstrate proficiency utilizing the Air Tasking Order Airspace Control Order Tool (AATWEB).

Requirement. Given an operational TBMCS and training materials, conduct the following for a total of five ATO and five ACO messages:

1. Initiate the AAT application.
2. View, sort, filter, and print received ATO and ACO messages.
3. Export into a document format (Excel, Text).
4. Delete ATO and ACO messages.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MAWTS-1 Air Tasking Order Development Course, MCAS Yuma, AZ
2. MISTC C2 TECOE:<http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-2906 4.0 B, R (N) G

Goal. Demonstrate proficiency with the TBMCS Web Based Airspace Deconfliction Software (WEBAD).

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Initiate a WEBAD Session
2. Connect WEBAD to WebMap
3. Create an airspace group for the utilization of theater airspace in current and future operations (airspace group becomes the ACO)
4. Enter Airspace Coordinating Measures (ACMs)

5. Create ACMs circle, corridor, line, orbit, point, polygon, poly-arc, rad-arc, track
6. Provide ACM comments using the comments tab
7. Create an ACM using a map
8. Create, edit and copy a Filter
9. Move ACMs to another airspace group
10. Copy ACMs to another airspace group
11. Change the state of ACMs
12. Set ACMs time
13. Shift ACMs in time
14. Shift ACMs in location
15. Map ACMs connect to the map
16. Clear ACMs from the map
17. Display the legend
18. Create a deconfliction filter
19. Determine a conflict between ACMs
20. Specify the criteria for determining a conflict between ACMs
21. Determine if a conflict may exist among ACMs
22. Create, edit, and copy deconfliction filters
23. Generate and print a conflict report
24. Determine airspace deconfliction over multiple ACM Groups based on:
 - a. Mean Sea Level (MSL)
 - b. Above Ground Level (AGL) calculations
 - c. Display ACMs and associated conflicts on a map
25. Edit and copy the airspace group
26. Create, edit and copy, preferences
27. Edit or view ACMs by filtering using:
 - a. ACM Groups
 - b. ACM Types
 - c. ACM Usages
28. Export ACMs to a file
29. Release an ACO
30. Create an Airspace Control Order (ACO) message
31. Change ACO tab information
32. Change Declassification tab information
33. Release tab information
34. Preview the ACO before it is released and approved
35. Publish the ACO
36. Generate the ACO Message
37. Validate ACO Message Body
38. Release the ACO message to AATWEB
39. Generate an ACO change message
40. Change an existing ACO
41. Publish the ACO change
42. Generate the ACO change message
43. Validate ACO change message body
44. Release the ACO change message to AATWEB.
45. Delete the following:
 - a. An ACO and all its changes

- b. An airspace usage
- c. A filter
- d. An airspace group
- e. Deconfliction filters
- f. User preference

Performance Standard. With the aid of references, complete the required items IAW the reference.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

- (1) MAWTS-1 Air Tasking Order Development (ATOD) Course, MCAS Yuma, AZ
- (2) MISTC C2 TECOE: <https://www.29palms.marines.mil/Staff-Offices/MISTC29/>

Reference.

- 1. TBMCS User's Manual

C2SYS-2909 2.0 B, R (N) G

Goal. Demonstrate proficiency using the TBMCS Force Status and Monitoring (FSTAT) tool to monitor and update Friendly Order of Battle (FrOB) status.

Requirement. Given an operational TBMCS and training materials, the operator will report, display, and modify FrOB status:

- 1. Select and describe the below listed status webpages:
 - a. ADA (Air Defense Artillery) Unit Status
 - b. Aircraft Unit Status
 - c. Base Status
 - d. Surface C2 Unit Status
 - e. Missile Unit Status
 - f. Fire Unit Status
- 2. Perform the following FSTAT functions for a selected status webpage:
 - a. Drag and drop setting of column display order.
 - b. Show/hide columns.
 - c. Multi-level column complex sort capability.
 - d. Quick sort by clicking on the column header.
 - e. Dragging to adjust column widths.
 - f. Automatic restore of GUI customization settings.
 - g. Local/Zulu selectable time display with user selectable time zone.
 - h. Multi-column, multi-value filtering.
 - i. Saving of user defined filters.
 - j. Visual indication of update status.
 - k. Table printing.
 - l. Copy of main table to clipboard for paste into Microsoft (MS) Excel.
 - m. Status bar with appropriate record counts, queued transaction counts, and connectivity status.
 - n. Color coding of status values.
 - o. Plotting of information to the associated map product.

Performance Standard. With the aid of references, perform five of the required items for a selected status webpage.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MAWTS-1 Air Tasking Order Development Course, MCAS Yuma, AZ
2. MISTC C2 TECOE:<http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-2913 4.0 B, R (N) G

Goal. Demonstrate proficiency importing an airspace group in TBMCS.

Requirement. Given an operational TBMCS and training materials, complete the following in order to import airspace:

1. Open the ABP in setup mode.
2. Open the Airspace Group Import menu.
3. Perform an initial or incremental import of selected airspace.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MAWTS-1 Air Tasking Order Development Course, MCAS Yuma, AZ
2. MISTC C2 TECOE:<http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-2917 1.0 B, R (N) G

Goal. Demonstrate proficiency publishing the ATO.

Requirement. Given an operational TBMCS and training materials, publish the completed ATO by performing the following:

1. Open the ABP.
2. Export the Friendly Order of Battle.
3. Approve missions.
4. Generate/Validate the ATO.
5. Send ATO to ATO / ACO Tool (AAT)/IRIS.
6. Set ABP to execute.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI

External Syllabus Support.

1. MAWTS-1 Air Tasking Order Development Course, MCAS Yuma, AZ

2. MISTC C2 TECOE:<http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-2921 4.0 B, R (N) G

Goal. Demonstrate proficiency operating C2 Personal Computer (C2PC).

Requirement. Given a computer with the current version of C2PC installed, a functional network and Common Tactical Picture (CTP) architecture, perform the following:

1. Initiate the C2PC application.
2. Describe key areas of the C2PC main window.
3. Configure C2PC for communications with a gateway.
4. Configure the display.
5. Load digital map products.
6. View digital map products.
7. View and manipulate charts.
 - a. Center/width
 - b. Map pan
 - c. Create and view multiple maps/charts
 - d. Map colors
 - e. Blank map
 - f. Map features
 - g. Full screen (F11).
 - h. Copy map as bitmap or JPEG
8. Set plot options.
9. Create, modify and filter tracks in a Common Tactical Picture (CTP).
10. Use declutter option.
11. Use injector manager.
12. Create, modify, display, and analyze C2PC routes.
13. Create, modify, and save a C2PC overlay.
14. Import and export coordinates from an overlay file.
15. Export and transmit a C2PC overlay.
16. Save map.
17. Configure the Effects Management Tool (EMT) for communication to an AFATDS server.
18. Demonstrate how to filter EMT data for the CTP.
19. Take a screenshot of the C2PC display.
20. Exit C2PC.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MarineNet C2PC Course (Course Code C2P001).
2. MISTC C2 TECOE:<http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>

References.

1. Manufacturer's Operating Instructions
2. Manufacturer's Technical Instructions and Publications

C2SYS-2940 1.0 B, R (N) G

Goal. Demonstrate proficiency utilizing tactical chat.

Requirement. Given operational data architecture and a tactical chat application perform the following:
(Note: no two tactical chat programs are the same, thus this event is dependent upon the designated instructor to implement this event in accordance with MEF/MAW or AOR standards)

1. Initiate the tactical chat application.
2. Connect to a chat server.
3. Set up user preference.
4. Access channels on the tactical chat server.
5. Know and understand terms specific to tactical chat.
6. Know and understand the basic limitations and weaknesses of tactical chat.
7. Know and understand the standard tactical chat terminology and abbreviations.
8. Know and understand proper acknowledgement procedures of tactical chat communications.
9. Know and understand the basic troubleshooting steps of tactical chat.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI

Prerequisite. None.

References.

1. MCRP 3-40.2B Tactical Chat MTTP
2. Local SOP

3.9 MISSION SKILL TRAINING (3000)

3.9.1 Purpose. This phase provides events for the trainee to achieve required proficiency on ATC positions. Once the trainee demonstrates the ability to perform the duties of an ATC position proficiently, that trainee is eligible to be recommended for evaluation for qualification on that position. ATC positions may be in an ATCF, MATCD, or MMT. This phase also provides TERPS training events.

3.9.2 General.

3.9.2.1 Prerequisite. Attain core skill proficiency for the position being trained on. Possess a current aeromedical clearance, valid AOV credentials, and eligible for a secret clearance.

3.9.2.2 Admin Notes.

1. These events shall be completed while part of a fully qualified/proficient crew/team (as appropriate).
2. MATCDs/ATCFs shall develop written examinations (for events requiring testing) and practical applications to evaluate events; at a minimum, they shall encompass the event requirement and performance standard. Examinations may be developed to encompass knowledge requirements of all events in this stage or to assess each event separately.
3. A qualified controller is required to conduct refresher training IAW annual over-the-shoulder requirements as prescribed in NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual. If the controller is absent from an ATC billet for 48 months or longer, upon return to an appropriate ATC billet, the controller will complete the R-coded events for the applicable Core and/or Mission Skill(s) that led to the position qualification which they are attempting to reattain, if returning to the same facility.

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

PAR NO.	STAGE NAME	PAGE NUMBER
3.9.3	ADMINISTRATIVE (ADMN)	3-86
3.9.4	MARINE AIR TRAFFIC CONTROL MOBILE TEAM LEADER (MMTL)	3-88
3.9.5	MARINE AIR TRAFFIC CONTROL MOBILE TEAM MEMBER (MMTM)	3-90
3.9.6	EXPEDITIONARY (EXPD)	3-92
3.9.7	MACS OPERATIONS (OPS)	3-96
3.9.8	TOWER (TWR)	3-99
3.9.9	RADAR (RDR)	3-105
3.9.10	COMMAND AND CONTROL SYSTEM (C2SYS)	3-112

3.9.3 ADMINISTRATIVE (ADMN) STAGE

3.9.3.1 Purpose. To provide the trainee with advanced knowledge of ATC administrative procedures. This stage familiarizes controllers with administrative procedures required for ATC operations as they apply to both an ATCF and the MATCD.

3.9.3.2 General.

Prerequisite. None.

Admin Notes. None.

Crew Requirement. None.

ADMN-3001 8.0 1095 B, R, M (N) L

Goal. Prepare a flight inspection/certification for an ATCF or MATCD.

Requirement. After reviewing the references or through preparation for the completion of a flight inspection, perform the following:

1. State the purpose of a flight inspection.
2. Request a flight inspection from the appropriate agency.
3. Ensure NAVAID/radar operational status.
4. Ensure development of terminal instrument procedures the NAVAID or radar supports.
5. Conduct pre/post-flight inspection briefs with designated flight inspection aircrew, if able.
6. Identify tactical flight inspection profiles associated with permissive and restrictive environments.
7. Identify the approving authority.
8. Identify the differences between a tactical and a Federal Aviation Administration (FAA) flight inspection.

Performance Standard. Complete the requirement steps IAW the references. The instructor will evaluate the trainee throughout the process with minimal input. The trainee is allowed minor correction.

Instructor. SI.

Prerequisite. 2024, 2025, 2101, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3401.

References.

1. FAA Handbook 8200.1, U.S. Standard Flight Inspection Directive.

2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Facility Manual.

ADMN-3002 4.0 * B (N) L

Goal. Prepare a Letter of Agreement (LOA)/Letter of Procedure (LOP) and a Memorandum of Understanding (MOU).

Requirement. Given a scenario, prepare a LOA/LOP and a MOU:

1. Prepare and include the following for each:
 - a. Purpose.
 - b. Content.
 - c. Controlling agencies involved.
 - d. Distribution.
 - e. Applicability.
2. Explain the staffing process for each.
3. Submit one LOA/LOP and one MOU to the instructor for validation.

Performance Standard. Complete the requirement items IAW the reference. Instructor will mentor the trainee to ensure that each letter was written thoroughly to support the scenario.

Instructor. SI.

Prerequisite. None.

References.

1. SECNAVINST 5216.5, Correspondence Manual.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ADMN-3003 4.0 * B (N) S/L

Goal. Submit an ATC MOS Qualification Waiver Package.

Requirement. Given a scenario, write a complete ATC waiver package for submission to MCICOM.

Performance Standard. IAW the references, write an ATC waiver package.

Instructor. SI.

Prerequisite. None.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local orders and directives.
3. MCO 1200.1, Military Occupational Specialties Manual.

ADMN-3005 8.0 * B (N) L

Goal. Staff a waiver request to required ATC regulations.

Requirement. Given a scenario:

1. Prepare a request for waiver to applicable ATC regulations, to include:
 - a. Purpose.
 - b. Content.
 - c. Justification.
 - d. Controlling agencies involved.
 - e. Distribution.
 - f. Applicability.
 - g. Alternate and safe procedures.
2. Staff the waiver to the instructor for validation that it was correctly completed.

Performance Standard. Complete the requirement items IAW the reference. Instructor will verify that each letter was written thoroughly to support the scenario.

Instructor. SI.

Prerequisite. None.

References.

1. SECNAVINST 5216.5, Correspondence Manual.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

ADMN-3006 1.0 * B (N) G

Goal. Discuss the FAA credentialing process.

Requirements. Discuss the following:

1. Duties and assignment of a designated examiner.
2. Duties and assignment of proficiency/co-proficiency manager.
3. Naval certification procedures.

Performance Standard. During a guided discussion, become familiar with the requirements.

Instructor. SI.

Prerequisites. None.

References.

1. JO 7220.1, Certification and Rating Procedures for DOD Personnel.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

3.9.4 MARINE AIR TRAFFIC CONTROL MOBILE TEAM LEADER (MMTL) STAGE

3.9.4.1 Purpose. To train controllers to a required level of proficiency for MMT qualifications. This stage provides the knowledge and Mission Skills in MMT tactics, techniques, and procedures to accomplish the MMT mission. Training includes how to conduct expeditionary, austere ATC operations and familiarization with equipment organic to the MMT. Training will be conducted under the direct supervision of qualified instructors in an OJT environment.

3.9.4.2 General.

Prerequisite. 6200.

Admin Notes. None.

Crew Requirement. One MMT.

MMTL-3300 12.0 730 B, R, M (N) L

Goal. Perform as a MMT Leader during operational planning.

Requirement. During an operation or training exercise under the supervision of a qualified MMT Leader:

1. Coordinate with S-2, S-3, S-4, and S-6 for logistics, communications, and operational requirements.
2. Develop and issue a five paragraph order.
3. Coordinate and brief aircrew and adjacent units.
4. Ensure personnel and equipment readiness.
5. Conduct rehearsals with the MMT.

Performance Standard. Complete the requirement items IAW the reference.

Instructor. MMTI.

Prerequisite. 0576, 0577, 0578, 0579, 0580, 0581, 2211, 2300, 2301, 2302, 2303, 2304, 3630, 6200.

Reference.

1. MMT TACSOP.

MMTL-3301 2.0 730 B, R, M (N) L

Goal. Perform as a MMT Leader during ALZ operations.

Requirement. During an operation or training exercise, conduct the following:

1. Execute movement to objective.
2. Conduct hasty LZ assessment to ensure required criteria exists.
3. Ensure LZ markings are accurately and rapidly established.
4. Ensure accurate establishment of NAVAIDS.
5. Ensure the establishment of the control point.
6. Ensure C2 communications are established and maintained.
7. Effect coordination with adjacent units.
8. Ensure communications with aircraft are established and maintained.
9. Ensure the LZ is sanitized and secure.
10. Ensure that LZ marking repair is accomplished as required.
11. Ensure rapid retrograde of the LZ.
12. Ensure LZ marking repair is accomplished, as required.
13. Ensure the team maintains a tactical posture with regard to security, noise, and light discipline.

Performance Standard. Complete the requirement items IAW the reference. Requirements were thoroughly accomplished in support of the operational requirements.

Instructor. MMTI.

Prerequisite. 3300, 3630, 6200

Range. ALZ

External Syllabus Support. ALZ-capable fixed-wing aircraft

Reference.

1. MMT TACSOP.

MMTL-3302 2.0 730 B, R, M (N) L

Goal. Perform as a MMT Leader during FARP operations.

Requirement. During an operation or training exercise, conduct the following:

1. Execute movement to objective.
2. Ensure establishment of separation procedures for the FARP, to include:
 - a. Entry points.
 - b. Exit points.
 - c. Altitude de-confliction procedures.
 - d. Waveoff procedures.
 - e. Lost communication procedures.
3. Establish and maintain integration with the FARP OIC and/or aircraft commander.
4. Ensure C2 communications are established and maintained.
5. Effect coordination with adjacent units.
6. Ensure communications with aircraft are established and maintained.
7. Ensure accurate establishment of NAVAIDs, as applicable.

Performance Standard. Complete the requirement items IAW the reference with minimal assistance. Requirements were accomplished thoroughly and in support of operational requirements.

Instructor. MMTI.

Prerequisite. 3300, 3630, 6200.

Range. FARP.

External Syllabus Support. Fixed or rotary-wing aircraft.

Reference.

1. MMT TACSOP.

3.9.5 MARINE AIR TRAFFIC CONTROL MOBILE TEAM MEMBER (MMTM) STAGE

3.9.5.1 Purpose. To train controllers to a required level of proficiency for MMT qualifications. This stage provides the knowledge and Mission Skills in MMT tactics, techniques, and procedures to accomplish the MMT mission. Training includes how to conduct expeditionary, austere ATC operations and familiarization with equipment organic to the MMT. Training will be conducted under the direct supervision of qualified instructors in an OJT environment.

3.9.5.2 General.

Prerequisite. None.

Admin Notes. None.

Crew Requirement. One MMT.

MMTM-3310 4.0 730 B, R, M (N) L

Goal. Perform as a MMT Member during operational planning.

Requirement. Given a warning or fragmentary order, during an operation or training exercise under the supervision of a qualified MMT Leader:

1. Prepare and account for team and individual equipment.
2. Conduct operational checks.
3. Program communication equipment.
4. State the team mission and describe individual assignments as they pertain to the mission.
5. Successfully complete all tasks assigned by the team leader.

Performance Standard. Complete the requirement items proficiently, IAW the reference and with no errors.

Instructor. BI (MMTL).

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 0529, 0570, 0571, 0573, 0574, 0581, 2000, 2003, 2009, 2022, 2023, 2025, 2026, 2031, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2310, 2311, 2312, 2313, 3600, 3620, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Reference.

1. MMT TACSOP.

MMTM-3311 2.0 730 B, R, M (N) L

Goal. Perform as a MMT Member during ALZ operations.

Requirement. During an operation or training exercise, demonstrate the following during both day and night operations:

1. Establish LZ markings.
2. Establish NAVAID.
3. Establish C2 communications.
4. Establish two-way communications with aircraft.
5. Sanitize and secure LZ.
6. Conduct LZ marking and repair, as required.
7. Conduct a retrograde of the LZ.
8. Throughout the evolution, display a tactical posture in regards to security, noise, and light discipline.

Performance Standard. Complete the requirement items proficiently, IAW the reference and with no errors. This event shall be conducted both during daylight and nighttime hours.

Instructor. BI (MMTL).

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 0529, 0570, 0571, 0573, 0574, 2000, 2003, 2009, 2022, 2023, 2025, 2026, 2031, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2310, 2311, 2312, 2313, 3310, 3600, 3620, 6150, 6170, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Range. ALZ.

External Syllabus Support. ALZ-capable fixed-wing aircraft.

Reference.

1. MMT TACSOP.

MMTM-3312 2.0 730 B, R, M (N) L

Goal. Perform as a MMT Member during FARP operations.

Requirement. During an operation or training exercise, demonstrate the following during both day and night operations:

1. Establish a control point that offers the best visibility of the LZ while incorporating integration with the FARP OIC and/or aircraft commander.
2. Establish NAVAID.
3. Establish C2 communications.
4. Establish two-way communications with aircraft.
5. Sanitize and secure LZ.

Performance Standard. Complete the requirement items proficiently, IAW the reference and with no errors. This event shall be conducted both during daylight and nighttime hours.

Instructor. MMTI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 0529, 0570, 0571, 0573, 0574, 2000, 2003, 2009, 2022, 2023, 2025, 2026, 2031, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2310, 2311, 2312, 2313, 3310, 3600, 3620, 6150, 6170, 6045, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Range. FARP.

External Syllabus Support. Fixed or rotary-wing aircraft.

Reference.

1. MMT TACSOP.

3.9.6 EXPEDITIONARY (EXPD) STAGE

3.9.6.1 Purpose. To provide the trainee functional proficiency in the expeditionary operations of the MATCD and proficiency in the corresponding administrative processes.

3.9.6.2 General.

Prerequisite. None.

Admin Notes. None.

Crew Requirement. None.

EXPD-3400	8.0	730	B, R, M	(N)	L
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Goal. Conduct a MATCD site survey.

Requirement. Given a scenario, execute a site survey necessary to deploy the MATCD, to include the following:

1. Tower site with best view of landing surfaces and airspace.
2. Radar/NAVAID sites that provide:
 - a. Minimal terrain masking.
 - b. Radar coverage of assigned airspace and/or the AO.
 - c. Instrument procedure compatibility.
3. Site security.

4. Support equipment.
5. Power requirements.
6. Host site limitations.
7. Communications.

Performance Standard. Complete the requirement steps IAW the reference. The instructor will question and mentor the trainee throughout the instruction of the event.

Instructor. SI.

Prerequisite. None.

External Syllabus Support. Maintenance support, site survey equipment.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. Applicable operator manuals.

EXPD-3401 8.0 365 B, R, M (N) L

Goal. Compile the necessary airport information to develop instrument procedures.

Requirement. Conduct a site survey and compile airport data required for the development of precision and non-precision terminal instrument procedures, to include:

1. Airport information:
 - a. Airport ID and location.
 - b. Airport reference point (ARP) (WGS-84).
 - c. Airport elevation (EGM-96).
 - d. Airport magnetic variation of record.
 - e. Local datum in use.
2. For each landing surface, provide at a minimum:
 - a. Runway end latitude/longitudes (WGS-84).
 - b. Runway end elevations (EGM-96).
 - c. Displaced threshold latitude/longitudes, if applicable (WGS-84).
 - d. Displaced threshold elevations, if applicable (EGM-96).
 - e. Runway length/width.
 - f. Runway heading (true/magnetic).
 - g. Runway surface.
 - h. Runway lighting and approach lighting.
 - i. Runway markings.
 - j. Runway profile elevations (EGM-96 or z values).
 - k. Touchdown zone elevations (EGM-96 or z values).
 - l. Visual glideslope indicator coordinates (WGS-84 or x/y values).
3. For each NAVAID/radar, provide at a minimum:
 - a. Latitude/longitude (WGS-84 or x/y value).
 - b. Ground elevation (EGM-96 or z value).
 - c. Antenna elevation (EGM-96 or z value).
4. For precision approach radars, provide:
 - a. PAR touchdown point (TDP)/runway point of intercept (RPI).
 - b. Coordinates (WGS-84 or x value).
 - c. TDP/RPI elevation (EGM-96 or z value).
5. Prominent obstacles within 5 NM of the ARP.
 - a. Coordinates (WGS-84).
 - b. MSL elevations (EGM-96).
 - c. Accuracy code for survey.

Performance Standard. Given a location, provide all required data at required accuracy necessary to develop instrument procedures.

Instructor. SI.

Prerequisite. 2024, 2025, 2101, 2208, 2209, 2210, 2501, 2502, 2503, 2504.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. NAVAIR 00-80T-115, NATOPS Expeditionary Airfields..
3. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
4. FAAO 8260.19, Flight Procedures and Airspace.
5. NAVAIR 51-50AAA-2, General Requirements for Shore Based Airfield Marking and Lighting.

EXPD-3402 4.0 * B (N) S/L

Goal. Describe airspace coordination measures.

Requirement. Given an airspace control area (ASCA) and a scenario, during an operation, training, or simulated exercise, identify, and describe the designated air control measures (ACMs):

1. Base defense zones (BDZ).
2. Minimum risk routes (MRR).
3. High-density airspace control zone (HIDACZ).
4. Standard use Army aircraft flight routes (SAFFR).
5. Low-level transit routes (LLTR).
6. Amphibious objective area (AOA).
7. Multi-use control points.

Performance Standard. Complete the requirement items IAW the reference. The ACMs shall be plotted without error. Minor errors corrected by the trainee are acceptable.

Instructor. WTI.

Prerequisite. 0705.

Reference.

1. JP 3-52, Joint Airspace Control.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

EXPD-3404 8.0 * B (N) S/L

Goal. Plan base defense zone operations.

Requirement. Given a tactical scenario, plan a BDZ:

1. Identify the threat.
2. Identify the LAAD capabilities available.
3. Identify air defense priorities.
4. Identify the ID criteria, responsibilities and authorities.
5. Identify the rules of engagement.
6. Coordinate employment with adjacent MACCS agencies.
7. Identify entry and exit procedures.
8. Identify communication procedures with LAAD representative.

9. Identify the required air defense communication nets.

Performance Standard. Complete the requirements IAW the reference. Instructor will question and mentor the trainee throughout the evolution.

Instructor. SI.

Prerequisite. 0720, 0722.

External Syllabus Support. LAAD (7212).

References.

1. JP 3-52, Joint Airspace Control.
2. MCTP 10-10B, Integrated Air Defense Systems.
3. MCTP 3-20C, Anti-Air Warfare.
4. MCTP 3-20F, Control of Aircraft and Missiles.
5. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
6. MAWTS-1 BDZ class.

EXPD-3405	8.0	*	B	(N)	S/L
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Goal. Develop MATCD communications architecture.

Requirement. During a simulation or exercise, plan, develop, and implement the communications architecture for a MATCD by using an ACEOI and Annex K of an operations order (OPORD).

1. Identify communications requirements.
2. Draw a communications connectivity chart.
3. Submit communications requirement and architecture drawing to the instructor for validation.
4. Once instructor validation is received, implement the communications architecture.

Performance Standard. Complete the requirement steps IAW the references. Minor corrections by the trainee are acceptable. Instructor shall ensure the communications requirements and architecture support the simulation/exercise and are implemented properly.

Instructor. SI.

Prerequisite. 2001, 2002, 2005, 2006, 2009, 2011, 2026.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. Applicable operator manuals.

EXPD-3406	4.0	*	B	(N)	L
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Goal. Plan launch and recovery operations in EMCON conditions.

Requirement. Given a tactical scenario, perform the following:

1. Identify the threat.
2. Identify the EMCON conditions in effect.
3. Identify approval authority for changes to the EMCON condition.
4. Identify alternate means of communication to effect safe flow of traffic.
5. Identify circumstances that require the breaking of EMCON.
6. Plan launch and recovery operations.

Performance Standard. Complete the requirements IAW the reference. Instructor will question and mentor the trainee throughout the evolution.

Instructor. SI.

Prerequisite. 0571, 0721.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCWP 3-32D.1, Electronic Warfare.

EXPD-3420 4.0 * B (N) L

Goal. Utilize an execution checklist.

Requirement. Given appropriate operations documents, an execution checklist with an item that requires ATC action, and in accordance with the references:

1. Identify appropriate action to be taken.
2. Direct crew to perform appropriate action.
3. Supervise ATC crew information flow.
4. Coordinate with external agencies as required.

Performance Standard. Perform the required items. Trainee should immediately recognize the execution checklist item and determine the relevance to ATC. Instructor input should be minimal as possible, but minor input is allowed.

Instructor. SI.

Prerequisite. None.

References.

1. MCWP 3-25, Control of Aircraft and Missiles.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

3.9.7 MACS OPERATIONS (OPS) STAGE

3.9.7.1 Purpose. To provide the trainee with the function proficiency necessary to perform as an operations chief in the Marine air control squadron (MACS). This stage introduces the manning requirements and planning techniques required to oversee general operations and deployment of the MATCD, EW/C and TAOC.

3.9.7.2 General.

Prerequisite. None.

Admin Notes. None.

Crew Requirement. None.

OPS-3450 8.0 * B (N) S/L

Goal. Plan the deployment of a MATC detachment.

Requirement. Given a scenario, explain in detail the steps required to deploy a MATC detachment to include the following:

1. Manning document.
2. Equipment density list (EDL)- Level 4 and Level 6.
3. TPFDD.
4. Site survey requirement.
5. Communication requirements.
6. Logistics requirements.
7. Power requirements.
8. Unit line number (ULN) request.
9. Frequency request.
10. Letter of Instruction (LOI).
11. Concept of Employment (COE) brief.
12. Advance Party (ADVON).
13. DTS/orders.
14. Weapons transfer (LOT/1348).
15. Personal gear list.
16. Unit Issue facility (UIF).
17. Pre-deployment training program (PTP).
18. Equipment staging/inspection/Joint Limited Technical Inspection (JLTI).
19. Security clearance validation.
20. Confirmation Brief.

Performance Standard. Identify each item and the requirements associated with each one.

Instructor. SI.

Prerequisite. 0561, 0562, 0563, 0564, 0565.

Reference.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

OPS-3451	4.0	365	B, R, M	(N)	S/L
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Goal. Develop a manning document for a MATC detachment.

Requirement. Given a scenario, develop a “billet only” manning document for the following echelons:

1. MMT.
2. Tower/TACAN Det.
3. PAR Det.
4. Arrival/Departure Det.
5. METOC Detachment.
6. Full IFR Detachment.

Performance Standard. Develop a manning document that meets mission requirements for the above echelons and are IAW the references.

Instructor. SI.

Prerequisite. 0565.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
3. MCRP 2-10B.6, MAGTF Meteorology and Oceanography Support.

OPS-3452 8.0 365 B, R, M (N) S/L

Goal. Provide a Concept of Employment (COE) Brief.

Requirement. Given a scenario and an operations order, develop a COE for the following echelons:

1. METOC Detachment.
2. Full IFR Detachment.

Performance Standard. Brief a COE for deployment of a MATC detachment to include Orientation, Situation, Mission, Execution, Administration and Logistics, and Command and Signal.

Instructor. SI.

Prerequisite. None.

Reference.

1. Local orders and directives.

OPS-3453 4.0 * B (N) S/L

Goal. Develop an Equipment Density List (EDL) for a MATC detachment.

Requirement. Given a scenario and in conjunction with maintenance personnel, develop an EDL for the following echelons:

1. MMT.
2. Tower/TACAN Detachment.
3. PAR Det.
4. Arrival/Departure Detachment.
5. METOC Detachment.
6. Full IFR Detachment.

Performance Standard. Develop a Level 4 EDL that supports each of the above echelons IAW the references.

Instructor. SI.

Prerequisite. 0562.

Reference.

1. Local orders and directives.

OPS-3455 2.0 730 B, R, M (N) S/L

Goal. Develop a Training Exercise and Employment Plan (TEEP).

Requirement. Given a list of training exercises, develop a TEEP that supports unit METs and includes the following for each event:

1. Name of exercise.
2. Number of personnel to be trained.
3. Major end items.
4. Training Objectives (T&R events).
5. MET trained.
6. Estimated cost.

Performance Standard. Develop a TEEP and exercise budget that provides opportunities for the unit to train to all its METs IAW the references.

Instructor. SI.

Prerequisite. 0566.

Reference.

1. Local orders and directives

OPS-3456	8.0	*	B	(N)	S/L
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Goal. Develop a Pre-deployment Training Program schedule.

Requirement. Given a scenario, develop a PTP schedule.

Performance Standard. Develop a PTP schedule that meets minimum USMC requirements within the timeframe provided.

Instructor. SI.

Prerequisite. None.

References.

1. PTP Order
2. Local orders and directives.

3.9.8 TOWER (TWR) STAGE

3.9.8.1 Purpose. To train controllers to a level of proficiency required for qualifications in the tower. This stage provides the knowledge and Mission Skills needed to perform as a tower controller in an ATCF or while deployed. The trainee incrementally attains Mission Skills by training in tower operating/crew positions at a MCAS, MCAF or a forward-deployed MATCD operating at a forward operating base under the direct supervision of qualified instructors in an OJT environment. This stage culminates with the controller achieving NATOPS certifications on ATC Tower operating positions.

3.9.8.2 General.

Prerequisite. None.

Admin Notes. The length of time authorized to train toward position qualification shall not exceed the limits defined in NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual. Times associated with training for events in these stages are based on a 2 hours per day, 5 days per week, 4 weeks per month at NAVAIR 00-80T-114 limits.

Crew Requirement. None.

TWR-3600	200.0	1460	B, R, M	(N)	L/S
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Goal. Perform as a Tower Flight Data (TFD) Controller.

Requirement. In a control tower, perform the duties and responsibilities of a TFD Controller:

1. Perform position turnover.
 - a. Evaluate equipment performance.

- b. Preview position.
- c. Scan tower cab environment.
- d. Receive/conduct position relief briefing.
- 2. Operate communications equipment.
 - a. Communicate using standardized words and phrases.
 - b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/inter-facility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections as appropriate to items that have been read back incorrectly or incompletely.
 - i. Terminate intra/inter-facility transmissions.
 - j. Relay authorized operational information.
- 3. Operate flight data equipment as appropriate.
 - a. FDIO.
 - b. VIDS.
 - c. ETVS.
 - d. ATIS.
 - e. NAVAID alarm.
 - f. Crash phone.
- 4. Prepare/post flight progress strips.
 - a. Update aircraft movement information.
 - b. Relay aircraft movement information.
 - c. Utilize correct flight strip marking.
- 5. Provide emergency assistance.
 - a. Determine if emergency conditions exist.
 - b. Receive, record, and relay information during aircraft emergencies and incidents.
 - c. Provide assistance during airport ground emergency.
- 6. Issue weather information.
 - a. Receive and post pertinent weather information.
 - b. Record PIREP conditions when conditions dictate.
 - c. Relay PIREP information when conditions dictate.
 - d. Conduct tower/prevaling visibility observations.
 - e. Relay tower/prevaling visibility observations.

Performance Standard. Demonstrate proficiency required to be recommended for qualification as a TFD.

Instructor. SI.

Prerequisite. 0520, 0521, 0522, 0523, 2000, 2003, 2019, 2206.

References.

- 1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
- 2. JO 7110.65, Air Traffic Control.
- 3. Local directives and publications.

TWR-3610 80.0 1460 B, R, M (N) L/S

Goal. Perform the duties of a Clearance Delivery (CD).

Requirement. Utilize simulated or live training, perform the following tasks:

- 1. Perform position turnover.
 - a. Evaluate equipment performance.
 - b. Preview position.

- c. Receive/conduct position relief briefing.
2. Operate communications equipment.
 - a. Communicate using standardized words and phrases.
 - b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/inter-facility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections as appropriate to items that have been read back incorrectly or incompletely.
 - i. Terminate intra/inter-facility transmissions.
 - j. Relay authorized operational information.
3. Complete required coordination.
4. Prepare/post flight progress strips.
 - a. Update aircraft movement information.
 - b. Relay aircraft movement information.
 - c. Utilize correct flight strip marking.
5. Create and issue ATC clearances.
 - a. Amend altitude in clearance.
 - b. Amend route in clearance.
 - c. Amend other portions of clearance.
 - d. Advise pilots of delays in receiving enroute/departure clearances.
 - e. Use alternate means to obtain, post, and relay ATC clearances and advisories.
6. Operate FDIO equipment.
 - a. Amendment message.
 - b. Departure message.
 - c. Flight plan.
 - d. Flight plan readout.
 - e. General information.
 - f. Hold message.
 - g. Progress reports.
 - h. Reboot system.
 - i. Remove strip.
 - j. ARTS force.
 - k. Stereo flight plan.
 - l. Strip request.
 - m. Test device.
 - n. Weather report.
 - o. Hold message cancel.
 - p. Reload FDIO printer.
6. Provide emergency assistance.
 - a. Determine if emergency conditions exist.
 - b. Receive, record, and relay information during aircraft emergencies and incidents.
 - c. Provide assistance during airport ground emergency.

Performance Standard. Demonstrate proficiency required to be recommended for qualification as a Clearance Delivery.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 2000, 2019, 2206.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. JO 7110.65, Air Traffic Control.
3. Local directives and publications.

TWR-3620 320.0 1460 B, R, M (N) L/S

Goal. Perform the duties of a Tower Ground Controller (TGC).

Requirement. In a control tower, perform the duties and responsibilities of a TGC:

1. Perform position turnover.
 - a. Evaluate equipment performance.
 - b. Preview position.
 - c. Scan tower cab environment.
 - d. Receive/conduct position relief briefing.
2. Operate communications equipment.
 - a. Communicate using standardized words and phrases.
 - b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/inter-facility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections as appropriate to items that have been read back incorrectly or incompletely.
 - i. Terminate intra/inter-facility transmissions.
 - j. Relay authorized operational information.
3. Coordinate safe and efficient use of airport runways and movement areas.
 - a. Ensure landing and departure areas to be used are free of all known ground vehicles.
 - b. Operate applicable airfield lighting.
 - c. Perform runway selection.
4. Apply taxi and ground movement procedures.
 - a. Provide closed and unsafe runway conditions.
 - b. Issue airport conditions necessary for safe operation of aircraft.
 - c. Relay traffic information.
 - d. Relay observed abnormalities.
 - e. Instruct aircraft to hold short of specified runway.
 - f. Instruct vehicle to hold short of specified runway.
 - g. Instruct aircraft to hold at specified point.
 - h. Instruct vehicle to hold at specified point.
 - i. Issue hover taxi instructions.
 - j. Obtain and relay braking action quality.
 - k. Relay arresting gear conditions.
 - l. Provide ATC services on a first come first served basis.
 - m. Respond to operational requests.
 - n. Provide conditional clearances to aircraft operating on movement areas.
 - o. Issue specific instructions to approve or disapprove aircraft movement.
 - p. Issue specific instructions to approve or disapprove vehicle movement.
 - q. Apply ground wake turbulence procedures.
 - r. Issue air taxi instructions.
 - s. Determine aircraft position.
 - t. Provide current departure information.
 - u. Visually scan runways.
 - v. Issue expeditious compliance instructions in order to avoid imminent situation.
 - w. Issue expeditious compliance instructions in order to avoid development of imminent situation.
4. Apply SVFR procedures.
 - a. Prioritize SVFR and IFR traffic to reduce undue delay.
 - b. Inform pilot of anticipated delay to their SVFR request.
5. Prepare and post flight progress strips.
6. Manage Special operations.

- a. Coordinate tow target operations.
- b. Coordinate unmanned aerial system operations.
- c. Coordinate arm/de-arm operations.
- d. Coordinate hazardous cargo operations.
7. Provide emergency assistance.
 - a. Determine if emergency conditions exist.
 - b. Obtain emergency information from aircraft.
 - c. Provide assistance during airport ground emergency.
 - d. Issue ground movement instructions using ATC light signals.
 - e. Take actions to re-establish communication with NORDO aircraft.
8. Issue weather information.
 - a. Disseminate pertinent weather information.
 - b. Report the wind as calm.
 - c. Issue altimeter setting.
 - d. Solicit and record PIREP conditions when conditions dictate.
 - e. Relay PIREP information when conditions dictate.

Performance Standard. Demonstrate proficiency required to be recommended for qualification as a TGC.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 2000, 2003, 2206.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. JO 7110.65, Air Traffic Control.
3. Local directives and publications.

TWR-3630	440.0	1460	B, R, M	(N)	L/S
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Goal. Perform the duties of a Tower Local Controller (TLC).

Requirement. In a control tower, perform the duties and responsibilities of a TLC:

1. Perform position turnover.
 - a. Evaluate equipment performance.
 - b. Preview position.
 - c. Scan tower cab environment.
 - d. Receive/conduct position relief briefing.
2. Operate communications equipment.
 - a. Communicate using standardized words and phrases.
 - b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/inter-facility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections as appropriate to items that have been read back incorrectly or incompletely.
 - i. Terminate intra/inter-facility transmissions.
 - j. Relay authorized operational information.
3. Manage area responsibility.
 - a. Ensure landing and departure areas to be used are free of all known ground vehicles.
 - b. Operate applicable airfield lighting.
 - c. Assign duty runway as prescribed by local directives, type of operations and wind/weather conditions.

- d. Intercept flight progress strips.
 - e. Determine aircraft position.
 - f. Issue airport conditions necessary for safe operation of aircraft.
 - g. Obtain and relay braking action quality as required.
 - h. Provide ATC services on a first come first served basis.
 - i. Respond to operational requests.
 - j. Issue bird activity information.
 - k. Ensure strip marking is completed.
 - l. Taxi aircraft across active runway.
 - m. Issue specific instructions to approve or disapprove aircraft movement.
 - n. Issue specific instructions to approve or disapprove vehicle movement.
 - o. Identify and coordinate use of movement areas other than active runways.
 - p. Issue traffic advisories utilizing tower radar display.
 - q. Determine and issue surface area restrictions.
 - r. Issue expeditious compliance instructions in order to avoid imminent situation.
 - s. Issue expeditious compliance instructions in order to avoid development of imminent situation.
 - t. Issue safety alerts.
 - u. Make exceptions to first come first served aircraft.
 - v. Control minimum fuel aircraft.
4. Apply departure procedures and separation.
- a. Transfer control of aircraft.
 - b. Hold aircraft clear of runway(s).
 - c. Inform aircraft to change to departure frequency.
 - d. Utilize line up and wait procedures for full length departure.
 - e. Issue runway and surface wind in takeoff clearance.
 - f. Specify direction of takeoff or turn on departure.
 - g. Initiate an intersection departure.
 - h. Establish sequence of departure aircraft.
 - i. Utilize line up and wait procedures.
 - j. Utilize anticipated separation.
 - k. Cancel takeoff clearance.
 - l. Issue helicopter clearance.
 - m. Provide helicopter departure separation.
 - n. Apply visual separation.
5. Apply arrival procedures and separation.
- a. Transfer control of aircraft.
 - b. Issue wheels down check.
 - c. Clear aircraft to land.
 - d. Clear aircraft for touch-and-go or stop-and-go.
 - e. Issue runway identifier and surface wind with landing clearance.
 - f. Clear aircraft for option approach.
 - g. Wave aircraft off.
 - h. Establish sequence of arrival aircraft.
 - i. Issue traffic pattern information.
 - j. Issue anticipated separation (sequential) landing clearance.
 - k. Issue runway exiting and hold short instructions.
 - l. Clear aircraft for altitude restricted low approach.
 - m. Provide aircraft with overhead maneuver information.
 - n. Instruct aircraft to break where desired for sequence.
 - o. Separate arriving helicopter from others by ensuring it does not land until preceding arriving helicopter has come to stop.
 - p. Separate arriving helicopter from others by ensuring it does not land until preceding arriving helicopter has taxied clear.
 - q. Separate arriving helicopter from others by ensuring it does not land until preceding departing helicopter has left landing area.
 - r. Issue landing clearances for helicopter.

- s. Apply visual separation.
- 6. Apply sequencing and separation procedures.
 - a. Apply wake turbulence procedures.
 - b. Issue wake turbulence cautionary advisories.
 - c. Provide traffic calls.
 - d. Apply basic radar separation.
 - e. Sequence arrivals and departures.
 - f. Direct aircraft to continue holding overhead.
 - g. Direct aircraft to conduct a turn to increase spacing from aircraft in front.
 - h. Conduct simultaneous same direction operations.
 - i. Conduct simultaneous opposition direction operations.
 - j. Utilize line up and wait procedures.
 - k. Apply same runway separation.
 - l. Apply wake turbulence separation for intersection departures.
 - m. Apply intersecting runway separation.
 - n. Issue landing clearances to aircraft not visually observed.
 - o. Conduct closed traffic operations.
 - p. Conduct simulated flameout or emergency landing pattern operations.
 - q. Authorize simultaneous helicopter landings and takeoffs.
 - r. Authorize side step maneuver.
 - s. Apply reduced runway separation.
- 7. Issue weather information.
 - a. Disseminate pertinent weather information.
 - b. Report the wind as calm.
 - c. Issue altimeter setting.
 - d. Solicit and record PIREP conditions when conditions dictate.
 - e. Relay PIREP information when conditions dictate.
- 8. Apply SVFR procedures.
 - a. Prioritize SVFR and IFR traffic to reduce undue delay.
 - b. Inform pilot of anticipated delay to their SVFR request.
 - c. Authorize local SVFR operations.
 - d. Authorize climb to VFR conditions.
 - e. Clear aircraft for SVFR operations.
 - f. Apply procedures to departing aircraft for reported ground visibility less than one mile.
 - g. Apply procedures to arriving aircraft for reported ground visibility less than one mile.
- 8. Manage special operations.
 - a. Conduct tow target operations.
 - b. Conduct unmanned aerial system operations.
 - c. Conduct arm/de-arm operations.
 - d. Conduct hazardous cargo operations.
 - e. Provide special handling to flight check aircraft.
 - f. Conduct parachute/drag chute operations.
 - g. Conduct Field Carrier Landing Practice.
 - h. Conduct arresting gear operations.
- 9. Provide emergency assistance.
 - a. Determine if emergency conditions exist.
 - b. Obtain emergency information from aircraft.
 - c. Provide assistance during airport ground emergency.
 - d. Operate ATC light gun.
 - e. Take actions to re-establish communication with NORDO aircraft.

Performance Standard. Demonstrate proficiency required to be recommended for qualification as a TLC.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0529,

0530, 0531, 2000, 2003, 2206.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. JO 7110.65, Air Traffic Control.
3. Local directives and publications.

3.9.9 RADAR (RDR) STAGE

3.9.9.1 Purpose. To train controller to a level of proficiency required for qualifications in a RATCF. This stage provides the knowledge and Mission Skills needed to perform as a radar controller in a RATCF or forward-deployed MATCD operating at a forward operating base authorized to grant qualification. The trainee incrementally attains Mission Skills by training on radar operating/crew positions under the direct supervision of qualified instructors in an OJT environment.

3.9.9.2 General.

Prerequisite. None.

Admin Notes. The length of time authorized to train toward position qualification shall not exceed the limits defined in NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual. Times associated with training for events in these stages are based on a 2 hours per day, 5 days per week, and 4 weeks per month at NAVAIR 00-80T-114 limits.

Crew Requirement. None.

RDR-3700	320.0	1460	B, R, M	(N)	L/S
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Goal. Perform as a Radar Flight Data (RFD) Controller.

Requirement. In a radar facility, perform the duties and responsibilities of a RFD Controller:

1. Perform position turnover.
 - a. Evaluate equipment performance.
 - b. Preview position.
 - c. Scan tower cab environment.
 - d. Receive/conduct position relief briefing.
2. Operate communications equipment.
 - a. Communicate using standardized words and phrases.
 - b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/inter-facility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections as appropriate to items that have been read back incorrectly or incompletely.
 - i. Terminate intra/inter-facility transmissions.
 - j. Relay authorized operational information.
3. Operate flight data equipment as appropriate.
 - a. FDIO.
 - b. VIDS.
 - c. ETVS.
 - d. ATIS.
 - e. NAVAID alarm.
4. Prepare/post flight progress strips.
 - a. Update aircraft movement information.

- b. Relay aircraft movement information.
- c. Utilize correct flight strip marking.
- 5. Provide emergency assistance.
 - a. Determine if emergency conditions exist.
 - b. Receive, record, and relay information during aircraft emergencies and incidents.
 - c. Provide assistance during airport ground emergency.
- 6. Issue weather information.
 - a. Receive and post pertinent weather information.
 - b. Record PIREP conditions when conditions dictate.
 - c. Conduct tower/prevailing visibility observations.
 - d. Relay tower/prevailing visibility observations.

Performance Standard. Demonstrate proficiency required to be recommended for qualification as a RFD.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0532, 0534, 0538, 2000, 2019, 2206.

References.

- 1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
- 2. JO 7110.65, Air Traffic Control.
- 3. Local directives and publications.

RDR-3710	240.0	1460	B, R, M	(N)	L/S
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Goal. Perform the duties of a Radar Final Controller (RFC).

Requirement. In a radar environment, utilizing simulated or live training, perform the following tasks:

- 1. Perform position turnover.
 - a. Evaluate equipment performance.
 - b. Verify alignment accuracy.
 - c. Preview Position.
 - d. Receive/Conduct position relief briefing.
- 2. Apply Communication Procedures.
 - a. Communicate using standardized words and phrases.
 - b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/inter-facility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections as appropriate to items that have been read back incorrectly or incompletely.
- 3. Coordinate tower clearance.
 - a. Obtain tower clearance.
 - b. Relay tower clearance.
 - c. Relay instructions when tower clearance is not received or cancelled.
- 4. Provide Radar Services.
 - a. Identify aircraft using primary radar methods.
 - b. Identify aircraft using secondary radar methods.
 - c. Verify aircraft altitude.
 - d. Issue altimeter setting.
 - e. Issue traffic advisories.
 - f. Issue safety alerts.
 - g. Disseminate weather information.

- h. Solicit and record pilot weather reports (PIREPS) when conditions dictate.
- i. Relay PIREPS when conditions dictate.
- j. Initiate/Receive handoff.
- k. Ensure run sheet or strip marking is completed.
- l. Demonstrate methods for vectoring aircraft.
- m. Demonstrate no-gyro procedures.
- 5. Issue final control information and instructions.
 - a. Conduct communications check.
 - b. Relay lost communications check.
 - c. Issue missed approach procedures.
 - d. Issue climb-out instructions.
 - e. Issue landing check.
 - f. Provide position information.
 - g. Issue wheels down check.
 - h. Relay airport conditions.
 - i. Relay braking action quality.
 - j. Issue bird activity advisories.
 - k. Instruct aircraft not to acknowledge further transmissions.
 - l. Ensure radar separation is maintained between aircraft established on final approach.
 - m. Demonstrate no-gyro approach.
 - n. Apply vectors to maintain aircraft on final approach course.
- 6. Control aircraft conducting approaches using PAR.
 - a. Issue glide path notification.
 - b. Instruct aircraft to begin descent.
 - c. Interpret and issue glide path information.
 - d. Interpret and issue course information.
 - e. Issue distance from touchdown.
 - f. Inform aircraft when it reaches the published decision height.
 - g. Provide glide path and course information inside decision height.
 - h. Demonstrate approach guidance termination.
 - i. Monitor aircraft conducting Navigational Aid approaches using PAR.
- 7. Control aircraft conducting approaches using ASR.
 - a. Issue recommended altitudes on final approach.
 - b. Issue visual reference report instructions to pilot.
 - c. Issue descent notification.
 - d. Issue descent instructions.
 - e. Issue course guidance information.
 - f. Demonstrate approach guidance termination.
- 8. Control final approach abnormalities.
 - a. Advise aircraft when safety limits are exceeded.
 - b. Advise aircraft when radical target deviations are observed.
 - c. Advise aircraft when position is in doubt.
 - d. Advise aircraft when identification is in doubt.
 - e. Advise aircraft when malfunctioning radar is suspected.
 - f. Advise aircraft when radar contact is lost.
 - g. Provide radar contact lost procedures.
 - h. Control aircraft during PAR elevation failure.
- 9. Provide emergency assistance.
 - a. Determine if emergency conditions or situation exists.
 - b. Take action to re-establish communications with no-radio (NORDO) aircraft.
 - c. Obtain information from emergency aircraft.
- 10. Provide special handling to flight check aircraft.

Performance Standard. Demonstrate proficiency required to be recommended for qualification as a RFC.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0532, 0533, 0534, 0538, 2000, 2206.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. JO 7110.65, Air Traffic Control.
3. Local directives and publications.

RDR-3720	440.0	1460	B, R, M	(N)	L/S
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Goal. Perform the duties of an Arrival/Departure Controller (ADC).

Requirement. In a radar environment, utilizing live or simulated training, perform the duties and responsibilities of an ADC:

1. Perform position turnover.
 - a. Evaluate equipment performance.
 - b. Verify alignment accuracy.
 - c. Preview position.
 - d. Receive/conduct position relief briefing.
2. Apply communication procedures.
 - a. Communicate using standard words and phrases.
 - b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/interfacility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections to items that have been read back incorrectly or incompletely.
3. Apply duty priority.
4. Provide radar services.
 - a. Radar identify aircraft using primary and secondary radar methods.
 - b. Radar identify aircraft using terminal automation systems identification methods.
 - c. Apply questionable identification procedures.
 - d. Issue position information.
 - e. Inform aircraft of radar identification.
 - f. Apply target marker procedures.
 - g. Verify aircraft altitude.
 - h. Issue altimeter setting.
 - i. Issue traffic advisories.
 - j. Disseminate weather information.
 - k. Solicit and record pilot weather reports (PIREPS) when conditions dictate.
 - l. Relay PIREPS when conditions dictate.
 - m. Initiate and receive handoff.
 - n. Initiate and receive point out.
 - o. Ensure strip marking is completed correctly.
 - p. Demonstrate methods for vectoring aircraft.
 - q. Apply vectors below minimum altitude.
 - r. Vector aircraft to intercept final approach course.
 - s. Apply vectors across final approach course.
 - t. Issue arrival instructions.
 - u. Demonstrate no-gyro procedures.
 - v. Demonstrate ATC surveillance source use.
 - w. Apply merging target procedures.
 - x. Demonstrate holding pattern surveillance.
 - y. Terminate radar services for identified aircraft.

- z. Assign beacon codes.
- aa. Identify unmanned aircraft systems (UAS) lost link beacon code.
- bb. Validate Mode C readout.
- cc. Confirm altitude non-mode C.
- dd. Instruct aircraft to stop automatic altitude reporting.
- ee. Apply procedures for inflight deviations from transponder/mode C requirements.
- ff. Demonstrate beacon termination.
- gg. Issue speed adjustments.
- hh. Relay approach information.
- ii. Issue ATC clearances.
- jj. Issue approach clearances.
- kk. Issue missed approach procedures.
- ll. Issue climb-out instructions.
- mm. Issue landing checks.
- nn. Issue lost communication instructions.
- oo. Issue radar contact lost procedures.
- pp. Apply use of military single frequency approaches.
- 5. Apply radar separation.
 - a. Application.
 - b. Apply target separation.
 - c. Apply target resolution criteria.
 - d. Minima.
 - e. Apply vertical separation.
 - f. Demonstrate exceptions to vertical separation minima.
 - g. Apply passing or diverging criteria.
 - h. Apply separation criteria to formation flights.
 - i. Apply separation from obstructions.
 - j. Apply separation from adjacent airspace.
 - k. Apply separation from edge of scope.
 - l. Apply beacon target displacement criteria.
 - m. Apply radar departures separation.
 - n. Apply separation between departures and arrivals.
 - o. Demonstrate approach separation responsibility.
 - p. Apply simultaneous dependent approach separation.
 - q. Apply transitional procedure separation.
- 6. Utilize Standard Terminal Automation Replacement System (STARS).
 - a. Input flight plan.
 - b. Inhibit minimum safe altitude warning (MSAW).
 - c. Take appropriate action to resolve CA/MCI alert.
 - d. Suspend track.
 - e. Initiate track.
 - f. Change between single sensor, multi sensor, or FUSION modes.
 - g. Apply altitude filters.
- 7. Provide emergency assistance.
 - a. Determine if an emergency condition or situation exists.
 - b. Take action to re-establish communications with no-radio (NORDO) aircraft.
 - c. Obtain information from emergency aircraft.

Performance Standard. Perform the duties and responsibilities of an ADC under general supervision.

Instructor. SI.

Prerequisite. 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2206.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

2. JO 7110.65, Air Traffic Control.
3. Local directives and publications.

RDR-3730 80.0 1460 B, R, M (N) S/L

Goal. Perform non radar operations.

Requirement. Provide appropriate non-radar separation for 3 arrivals, 3 departures and 2 overflights in assigned airspace during a 30 minute scenario simulating an unscheduled radar outage.

Performance Standard. Complete the requirement items to a level of proficiency expected of a qualified controller under general supervision.

Instructor. SI.

Prerequisite. 0537.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

RDR-3731 520.0 1460 B, R, M (N) L/S

Goal. Perform the duties of an Approach Controller (APC).

Requirement. In a radar environment, utilizing live or simulated training, perform the duties and responsibilities of an APC:

1. Perform position turnover.
 - a. Evaluate equipment performance.
 - b. Verify alignment accuracy.
 - c. Preview position.
 - d. Receive/conduct position relief briefing.
2. Apply communication procedures.
 - a. Communicate using standard words and phrases.
 - b. Prioritize interphone transmissions.
 - c. Use abbreviated transmissions.
 - d. Interrupt lower-priority messages using standardized phraseology.
 - e. Coordinate with intra/interfacility positions.
 - f. Transfer radio communications.
 - g. Ensure acknowledgement by pilot.
 - h. Make corrections to items that have been read back incorrectly or incompletely.
3. Apply duty priority.
4. Provide radar services.
 - a. Radar identify aircraft using primary and secondary radar methods.
 - b. Radar identify aircraft using terminal automation systems identification methods.
 - c. Apply questionable identification procedures.
 - d. Issue position information.
 - e. Inform aircraft of radar identification.
 - f. Apply target marker procedures.
 - g. Verify aircraft altitude.
 - h. Issue altimeter setting.
 - i. Issue traffic advisories.
 - j. Disseminate weather information.
 - k. Solicit and record pilot weather reports (PIREPS) when conditions dictate.
 - l. Relay PIREPS when conditions dictate.

- m. Initiate and receive handoff.
 - n. Initiate and receive point out.
 - o. Ensure strip marking is completed correctly.
 - p. Demonstrate methods for vectoring aircraft.
 - q. Apply vectors below minimum altitude.
 - r. Issue arrival instructions.
 - s. Demonstrate no-gyro procedures.
 - t. Demonstrate ATC surveillance source use.
 - u. Apply merging target procedures.
 - v. Demonstrate holding pattern surveillance.
 - w. Terminate radar services for identified aircraft.
 - x. Assign beacon codes.
 - y. Identify unmanned aircraft systems (UAS) lost link beacon code.
 - z. Validate Mode C readout.
 - aa. Confirm altitude non-mode C.
 - bb. Instruct aircraft to stop automatic altitude reporting.
 - cc. Apply procedures for inflight deviations from transponder/mode C requirements.
 - dd. Demonstrate beacon termination.
 - ee. Issue speed adjustments.
 - ff. Relay approach information.
 - gg. Issue ATC clearances.
 - hh. Issue approach clearances.
 - ii. Issue missed approach procedures.
 - jj. Issue climb-out instructions.
 - kk. Issue landing checks.
 - ll. Issue lost communication instructions.
 - mm. Issue radar contact lost procedures.
 - nn. Apply use of military single frequency approaches.
5. Apply radar separation.
- a. Application
 - b. Apply target separation.
 - c. Apply target resolution criteria.
 - d. Minima.
 - e. Apply vertical separation.
 - f. Demonstrate exceptions to vertical separation minima.
 - g. Apply passing or diverging criteria.
 - h. Apply separation criteria to formation flights.
 - i. Apply separation from obstructions.
 - j. Apply separation from adjacent airspace.
 - k. Apply separation from edge of scope.
 - l. Apply beacon target displacement criteria.
 - m. Apply radar departures separation.
 - n. Apply separation between departures and arrivals.
 - o. Demonstrate approach separation responsibility.
6. Utilize Standard Terminal Automation Replacement System (STARS).
- a. Input flight plan.
 - b. Inhibit minimum safe altitude warning (MSAW).
 - c. Take appropriate action to resolve CA/MCI alert.
 - d. Suspend track.
 - e. Initiate track.
 - f. Change between single sensor and multi-sensor, and FUSION modes.
 - g. Apply altitude filters.
7. Provide emergency assistance.
- a. Determine if an emergency condition or situation exists.
 - b. Take action to re-establish communications with no-radio (NORDO) aircraft.
 - c. Obtain information from emergency aircraft.

Performance Standard. Perform the duties and responsibilities of an APC under general supervision.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2000, 2206, 3730.

References.

1. JO 7110.65, Air Traffic Control.
2. Local directives and publications.

3.9.10 COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE

3.9.10.1 Purpose. To provide MATC personnel the knowledge and skills required to operate command and control systems employed within Marine Aviation.

3.9.10.2 General.

Prerequisite. MARINENET Courses as indicated within the C2SYS events or the virtual MISTC POIs for the associated C2 system.

Administrative Notes. Command and control system events are located in the MAWTS-1 C3 Course Catalog in order to maintain standardized training across the MACCS. Specific event for MATC are listed in the chart below. C2SYS training is offered by MISTCs or provided during MISTEX, MEFEX, or other Wing TEEP events.

Due to the highly-perishable nature of command and control systems (C2SYS) skills, these events are required to be refreshed every 365 days (12 months) to remain current.

Crew Requirement. None.

C2SYS-3910	2.0	B, R	(N)	G
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Goal. Demonstrate proficiency with the TBMCS Execution Status and Monitoring (ESTAT) tool.

Requirement. Given an operational TBMCS and training materials, update data on an Air Battle Plan (ABP) in the Air Operations Database (AODB), to include:

1. In graphical and tabular style, open multiple, independently configurable, filterable, sortable and nameable displays of the retrieved data.
2. Save and restore customizations such as column order, visible columns, filter definitions and custom status color mappings.
3. Plot air and missile routes.
4. Plot operations data such as airspace, targets, bases, and unit locations.
5. Update the Current Execution Status of any Tasked Air or Missile Mission in the Selected ABP.
6. Review previously archived versions of a mission including its currently tasked (replanned) version.
7. Use ESTAT to update the following mission information:
 - a. ABP State
 - b. Air Mission Status
 - c. Estimated and Actual Mission Event Times
 - d. Air Mission Results
 - e. Capability to Group Missions
 - f. Number of Canceled and/or Added Aircraft
 - g. Actual Mission Configuration/Standard Configuration Load (SCL)

- h. Comments
- i. Create, Edit, and Delete Mission Deviations
- j. Ground Alert Response Time
- k. Residual Mission Code
- l. Create, Edit, and Delete Wide Area Geographic (WAG) Activities

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

- 1. MAWTS-1 ACE Battlestaff Officer's Course (ABOC), MCAS Yuma, AZ
- 2. MISTC C2 TECOE: <http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
- 3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-3940 1.0 B, R, M 1460 (N) G

Goal. Demonstrate proficiency utilizing tactical chat.

Requirement. Given operational data architecture and a tactical chat application perform the following: (Note: no two tactical chat programs are the same, thus this event is dependent upon the designated instructor to implement this event in accordance with MEF/MAW or AOR standards).

- 1. Initiate the tactical chat application.
- 2. Connect to a chat server.
- 3. Set up user preference.
- 4. Access channels on the tactical chat server.
- 5. Know and understand terms specific to tactical chat.
- 6. Know and understand the basic limitations and weaknesses of tactical chat.
- 7. Know and understand the standard tactical chat terminology and abbreviations.
- 8. Know and understand proper acknowledgement procedures of tactical chat communications.
- 9. Know and understand the basic troubleshooting steps of tactical chat.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI

Prerequisite. None.

References.

- 1. MCRP 3-40.2B Tactical Chat MTTP
- 2. Local SOP

C2SYS-3941 4.0 B, R (N) G

Goal. Demonstrate proficiency operating Web Development Software (i.e., SharePoint).

Requirement. Given a workstation and a functional communications network, perform the following:

- 1. Use the Quick Launch Bar.
- 2. Delete an item.

3. Restore a deleted item.
4. Search the site for an identified object.
5. Create an announcement.
6. Create an event.
7. Add a link.
8. Create a task.
9. Create a contact.
10. Edit a list item.
11. Export list items to Outlook.
12. Export list items to a spreadsheet.
13. Use project tracking.
14. Open a document.
15. Edit a document.
16. Check out a document.
17. Check in a document.
18. Create a new folder.
19. Create a new document.
20. Upload a document.
21. View version history.
22. Upload a picture to a library.
23. Edit a picture.
24. Delete a picture.
25. Create an alert.
26. Create a new discussion thread.
27. Read and reply to a discussion thread.
28. Respond to a survey.
29. Export survey results.
30. View survey results.
31. Add a web part.
32. Remove a web part.
33. Modify a web part.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects. Requirement is met by completion of MISTC SharePoint I.

Instructor. BI

Prerequisite. None.

External Support. MISTC SharePoint I, II, III courses

Reference.

1. SharePoint Users Guide: www.microsoft.com/sharepoint

3.10 CORE PLUS TRAINING (4000)

3.10.1 Purpose. This phase contains training standards that have a low probability of execution, or are specific to geographic areas. These events may be deemed necessary by individual commanders based on mission requirements.

3.10.2 General.

3.10.2.1 Prerequisite. None.

3.10.2.2 Crew Requirement. None.

3.10.2.3 Academic Training. MATCDs/ATCFs shall develop written examinations (for events requiring testing) and practical applications to evaluate events. At a minimum, these examinations shall encompass the event requirement and performance standard. Examinations may be developed to encompass the knowledge requirement of all events in this stage or to assess each event separately.

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

PAR NO.	STAGE NAME	PAGE NUMBER
3.10.3	EXPEDITIONARY (EXPD)	3-115

3.10.3 EXPEDITIONARY (EXPD) STAGE

3.10.3.1 Purpose. To train the controller on the ability to act as a MATC liaison officer or further employ the MATCD in an expeditionary environment.

3.10.3.2 General.

Prerequisite. None.

Administrative Notes. None.

Crew Requirement. None.

EXPD-4000 1.0 * B (N) L

Goal. Perform as a MATC Liaison Officer.

Requirement. Given an exercise or operation:

1. Provide liaison between the MATCD and:
 - a. Adjacent military C2 agencies.
 - b. Host nation ATC.
 - c. Aviation units.
2. Explain to the instructor MATC responsibilities and relationships to other MACCS or ATC agencies (military/civilian).

Performance Standard. Perform MATC liaison duties during an exercise or operation. Instructor shall ensure the explanation provided is IAW applicable directives and documents. Instructor will question and mentor the trainee throughout the evolution.

Instructor. SI.

Prerequisite. None.

External Syllabus Support. Operational MACCS and/or other ATC agencies.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. Local Directives and Publications

EXPD-4001 1.0 * B (N) G

Goal. Describe the configuration and operation of an Unmanned Aircraft System (UAS) site.

Requirement. During an exercise or operation, observe an operational UAS site. Understand its configuration and operational requirements.

Performance Standard. Conduct a guided discussion.

Instructor. SI.

Prerequisite. 8000.

Reference.

1. MCRP 3-20.5, Unmanned Aircraft Systems Operations.

EXPD-4012	6.0	*	B	(N)	G
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Goal. Plan rear area operations.

Requirement. Given a tactical scenario, plan rear area operations to include:

1. Security.
2. Communications.
3. Sustainment.
4. Develop a brief.

Performance Standard. Brief the instructor on the requirements. Instructor shall ensure all briefing items are thoroughly explained in a comprehensive and clear manner.

Instructor. SI.

Prerequisite. 0703.

References.

1. MCRP 3-20F.3, MAGTF Aviation Site Command Handbook.
2. MCRP 3-30C.1, MAGTF Rear Area Security.

EXPD-4016	2.0	*	B	(N)	G
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Goal. Plan physical security for classified areas.

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

1. Create guard schedule.
2. Single entry control point.
3. Verify personnel on the access roster.
4. Triple-strand concertina wire.
5. Entry points of communication lines.
6. Submit a physical security diagram.

Performance Standard. Develop a plan and provide a diagram for requirement items. Instructor will validate that the plan supports the scenario.

Instructor. SI.

Prerequisite. None.

Reference.

1. MCO P5530.14, Marine Corps Physical Security Program Manual.

EXPD-4017 8.0 730 B, R, M (N) L

Goal. Perform as a Landing Zone Safety Officer (LZSO).

Requirement. Given a survey and LZ control requirement during an exercise or operation:

1. Conduct pre-mission planning.
2. Determine relevant criteria for T/M/S making request.
3. Conduct survey and assessment of assigned LZ.
4. Complete applicable survey form and submit for review.
5. Coordinate for required fire rescue personnel.
6. Establish Lost Communications and Emergency Procedures.
7. Establish LZ for live aircraft operations with appropriate marking/lighting.
8. Validate assessment prior to operations.
9. Supervise airfield operations, ensure safety of all ground personnel and aircrew.
10. Retrograde markings and personnel from LZ.
11. State the duties and responsibilities of an LZSO.

Performance Standard. Provide ATC services to participant aircraft after surveying and assessing an LZ for usability.

Instructor. MMTI (MAWTS-1 MMT Chief)

Prerequisite. (MMTM/L Syllabus), 0576, 0577, 0578, 0579, 0580, 2301, 2302, 2303, 2304

Reference.

1. MAWTS-1 SAAZA Courseware

EXPD-4018 8.0 730 B, R, M (N) L

Goal. Perform as a Landing Zone Controller (LZC).

Requirement. During an exercise or operation:

1. Determine a control position that provides best awareness of airspace and surfaces.
2. Establish two-way VHF / UHF communications with aircraft.
3. Provide ATC instructions, advisories, and clearances to participant aircraft.
4. Describe lost communications and emergency procedures for the exercise / operation.
5. Describe entry and exit procedures for the exercise / operation.
6. State the duties and responsibilities of an LZC.

Performance Standard. Provide ATC services to participant aircraft at a tactical LZ.

Instructor. MMTI (MAWTS-1 MMT Chief)

Prerequisite. (MMTM/LSyllabus), 0576, 0577, 0578, 0579, 0580, 2301, 2302, 2303, 2304

Reference.

1. MAWTS-1 SAAZA Courseware

3.11 MISSION PLUS TRAINING (4500)

3.11.1 Purpose. This phase contains training standards that have a low probability of execution, or are specific to geographic areas. These events may be deemed necessary by individual commanders based on mission requirements.

3.11.2 General.

3.11.2.1 Prerequisite. None.

3.11.2.2 Crew Requirement. None.

3.11.2.3 Academic Training. MATCDs/ATCFs shall develop written examinations (for events requiring testing) and practical applications to evaluate events. At a minimum, these examinations shall encompass the event requirement and performance standard. Examinations may be developed to encompass the knowledge requirement of all events in this stage or to assess each event separately.

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

PAR NO.	STAGE NAME	PAGE NUMBER
3.11.4	TERPS INSTRUMENT PROCEDURES (TERPS)	3-119
3.11.5	TACTICAL DATA LINKS (TDL)	3-120
3.11.6	COMMAND AND CONTROL SYSTEMS (C2SYS)	3-127

3.11.4 TERMINAL INSTRUMENT PROCEDURES (TERPS) STAGE

3.11.4.1 Purpose. To develop ATC experience in establishing and operating advanced datalinks.

3.11.4.2 General.

Prerequisite. None.

Administrative Notes. ATCFs and MATCDs shall develop written examinations for events requiring testing. Exams shall encompass, at a minimum, the event requirement and standard, including the use of the references listed.

Crew Requirement. None.

TERPS-4500 4.0 365 B, R, M (N) L

Goal. Develop a standard instrument departure procedure.

Requirement. Given a location, develop a standard instrument departure procedure.

Performance Standard. Develop a standard instrument departure under the supervision of an OJTI which meets required obstacle clearance.

Instructor. TERPSI.

Prerequisite. 2024, 2025, 2101, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 2510, 3401.

References.

1. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
2. FAAO 8260.46, Departure Procedure (DP) Program.
3. FAAO 8260.19, Flight Procedures and Airspace.

TERPS-4501 16.0 365 B, R, M (N) L

Goal. Describe criteria required to develop RNAV (GPS) procedures.

Requirement. Explain TERPS criteria required to develop RNAV (GPS) procedures.

Performance Standard. Pass an open-book written examination.

Instructor. TERPSI.

Prerequisite. 2500, 2501, 2502, 2503, 2504, 2505.

References.

1. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
2. FAAO 8260.19, Flight Procedures and Airspace.

TERPS-4502 16.0 365 B, R, M (N) L

Goal. Develop an RNAV (GPS) procedure.

Requirement. Given a location, develop an RNAV (GPS) approach procedure.

Performance Standard. Develop an RNAV (GPS) approach procedure which meets required obstacle clearance and provides lowest possible weather minima.

Instructor. TERPSI.

Prerequisite. 2024, 2025, 2101, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 2505.

Reference.

1. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
2. FAAO 8260.19, Flight Procedures and Airspace.

3.11.5 TACTICAL DATA LINKS (TDL) STAGE

3.11.5.1 Purpose. To develop ATC experience in establishing and operating advanced datalinks.

3.11.5.2 General.

Prerequisites. None.

Admin Notes. ATCFs and MATCDs shall develop written examinations for events requiring testing. Exams shall encompass, at a minimum, the event requirement and standard, including the use of the references listed.

Crew Requirements. None.

TDL-4808 1.0 * B (N) G

Goal. Describe the Joint Data Network.

Requirement.

1. Define the Joint Data Network (JDN).
2. State the responsibilities of the Joint Data Network Operations Officer (JDNO).

3. State the purpose of the Global Command and Control System (GCCS) Family of Systems (FoS).
4. Define Common Operational Picture (COP).
5. Define Common Tactical Picture (CTP).
6. Define Tactical Picture.
7. State the components of the CTP.
8. Describe track management.

Performance Standard. Without the aid of reference, state (verbally or written) the required items. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 3115.01: Volume 1, Joint Data Network Operations
2. CJCSM 3115.02: Volume 2, Common Tactical Picture Data Management
3. CJCSI 3115.01, CTP Reporting Requirements
4. CJCSI 3151.01B, GCCS COP Reporting Requirements

TDL-4809 1.0 * B (N) G

Goal. Describe the Multi-Tactical Data Link (TDL) Interface.

Requirement.

1. State the concept and information exchange of the Multi-TDL Interface.
2. State the technical functions of the Multi-TDL Interface.
3. List the three elements of the Multi-TDL Interface.
4. Define the Basic Interface and list its three data links.
5. Identify the characteristics of Link 16.
6. Define the Extended Interface.
7. Identify the purpose of the Joint Range Extension Application Protocol (JREAP).
8. Define the following interface voice coordination nets:
 - a. Air Defense Command and Control Net (ADCCN)
 - b. Engagement Control Net (ECN)
 - c. Datalink Coordination Net (DCN)
 - d. Track Supervision Net (TSN)
 - e. Voice Product Net (VPN)
9. Describe the delegation of responsibilities for the conduct of the Multi-TDL operations at the Joint Task Force (JTF) level and below.
10. State the two Interface Control Officer (ICO) execution functions.
11. State the responsibilities of the Link 16 Manager.
12. State the responsibilities of the Track Data Coordinator (TDC).
13. List the minimum requirements for Services that operate the Multi-TDL Interface.

Performance Standard. Without the aid of reference, state (verbally or written), the required items. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP)
2. MIL-STD-6016, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. MIL-STD-3011, JREAP Interface Standard

TDL-4817 3.0 * B (N) G

Goal. Define terms associated with Link 16.

Requirement. Perform the following:

1. Active Synchronization
2. Backlink
3. Command and Control JTIDS/MIDS Unit (C2 JU)
4. Conditional Radio Silence Mode
5. Contention Access Mode
6. Continuation Word
7. Dedicated Access Mode
8. Donor
9. Dynamic Network Management
10. Extension Word
11. Geodetic Position Quality
12. Header Message
13. Host System
14. Initial Entry
15. Initial Entry JTIDS/MIDS Unit (IEJU)
16. Initial Word
17. Machine Receipt
18. Multifunctional Information Distribution System (MIDS)
19. Minimum Implementation
20. Mode 1, 2, and 4 Communications
21. Net Number
22. Network Participation Group
23. Network Time Reference
24. Non-Command and Control JTIDS/MIDS Unit (NonC2 JU)
25. Pool
26. Passive Synchronization
27. Recurrence Rate
28. Reed-Solomon Code
29. Relative Position Quality
30. Relay Block
31. Round-Trip Timing (RTT)
32. Stacked Net
33. Synchronization
34. Time (System & Terminal)
35. Time Quality (QT)
36. Time Slot
37. Time Slot Reallocation Access Mode

Performance Standard. Without the aid of reference, state (verbally or written) the required items. Minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16

TDL-4818 3.0 * B (N) G

Goal. State the characteristics of Link 16.

Requirement. Perform the following:

1. Identify terminal capacity of a Link 16 terminal.
2. Identify spectral capacity of a Link 16 network.
3. Identify the two types of security used by Link 16.
4. Identify the organization of a Secure Data Unit (SDU).
5. Identify the purpose of the JANUS Table.
6. Identify the two range modes associated with Link 16.
7. Define direct connectivity.
8. Define relayed connectivity.
9. Identify the purpose of an Initialization Data Load (IDL).
10. Locate the website and phone number of the USMC Network Design Facility (NDF).
11. Define time division multiple access.
12. Identify the acceptable time error when initializing a Link 16 terminal.
13. Explain the synchronization process and the importance of each message in the synchronization process:
 - a. Precise Participate Location and Identification (PPLI)
 - b. Initial Entry Message (IEM)
 - c. Round Trip Timing (RTT) Message
14. Identify the two Link 16 duties that transmit the IEM.
15. Identify the frequency range used by Link 16.
16. State the purpose of pulse deconfliction.

Performance Standard. Without the aid of reference, state (verbally or written) the required items. Minor errors corrected by the trainee are acceptable.

Instructor. BI

Prerequisite. None

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. CJCSI 6232.01_, Link 16 Spectrum Deconfliction

TDL-4819 2.0 * B (N) L

Goal. Configure the Air Defense System Integrator (ADSI).

Requirement. Given ADSI hardware and software:

1. Emplace components.
2. Cable components.
3. Energize components.
4. Install the operating system(s).
5. Configure the operating system(s).
6. Install ADSI software.
7. Install software patches.
8. Configure ADSI software.

Performance Standard. Complete the requirements IAW the references.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. ADSI Software Users Guide.
3. ADSI Installation and Configuration Guide.

TDL-4820 2.0 * B (N) L

Goal. Operate an Air Defense Systems Integrator (ADSI).

Requirement. Given an OPTASK LINK and operational ADSI using TSD:

1. Inspect/Configure own unit configuration to include:
 - a. JU address.
 - b. PPLI Message Format.
 - c. Unit Position Source.
 - d. Unit Position Location.
 - e. Elevation.
 - f. J13.5 System Status.
2. Configure DERG for monitoring and recording.
3. Configure the ADSI for the following data links:
 - a. Link 16.
 - b. JREAP A.
 - c. JREAP B.
 - d. JREAP C (TCP/IP and UDP/IP).
4. Configure filters IAW the OPTASK LINK.
5. Inspect link configurations.
6. Utilize the forwarding matrix to transmit data over the appropriate link IAW the forwarding plan.
7. Utilize the forwarding matrix to receive data over the appropriate link.

Performance Standard. Complete the requirement items IAW the references; minor errors corrected by the trainee are acceptable.

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
2. ADSI Version 14.1.1 Software Users Guide.
3. ADSI Version 14.1.1 Installation and Configuration Guide.

TDL-4821 2.0 * B (N) L

Goal. Setup JREAP A equipment.

Requirement. Given a MIL-STD-3011 compliant data link manager, SATCOM radio assets, Satellite Access Authorization (SAA), and OPTASK LINK:

1. Extract satellite communications information from the SAA.
2. Emplace SATCOM antenna at correct azimuth and elevation determined from the SAA.
3. Connect SATCOM antenna to SATCOM radio via appropriate RF cable.

4. Verify that SATCOM radio and data link manager are properly cabled together for JREAP A operations.
5. Energize SATCOM radio.
6. Configure SATCOM radio for JREAP A operations per the SAA.
7. Load appropriate keying material into the SATCOM radio per the SAA.
8. Make a call to the satellite from the SATCOM radio.
9. Determine if call was successful.
10. Log into the data link manager and configure for JREAP A operations per the OPTASK LINK.
11. After verifying with ICO enter/exit link.

Performance Standard. Complete the requirement items IAW the reference; minor errors corrected by the trainee are acceptable.

Instructor. BI

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.
5. SATCOM Radio Technical Manual.

TDL-4823	2.0	*	B	(N)	L
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Goal. Setup JREAP B equipment.

Requirement. Given a MIL-STD-3011 compliant data link manager, serial line encryption device, OPTASK LINK, and ANNEX K:

1. From ANNEX K determine where appropriate telephone line for JREAP-B is being supplied.
2. Verify the serial line encryption device is connected to the MIL-STD-3011 compliant system and telephone line.
3. Build the JREAP B link in the MIL-STD-3011 compliant system.
4. Enter and activate filters in the MIL-STD-3011 compliant system per the OPTASK LINK.
5. Enable and disable the correct link connections.
6. Enter / exit link IAW published procedures.

Performance Standard. Complete the requirement items IAW the reference; minor errors corrected by the trainee are acceptable.

Instructor. BI

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.

TDL-4824	8.0	*	B	(N)	L
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Goal. Operate JREAP B.

Requirement. Given a MIL-STD-3011 compliant system, a serial line encryption device, and assistance from maintenance and communications sections:

1. Verify the serial line encryption device is configured for JREAP B operations.
2. Verify the serial line encryption device is connected to the MIL-STD-3011 compliant system and telephone line.
3. Build the JREAP B link in the MIL-STD-3011 compliant system.
4. Enter and activate filters in the MIL-STD-3011 compliant system per the OPTASK LINK.
5. Enable and disable the correct link connections.
6. Enter / exit link IAW published procedures.

Performance Standard. Successfully exchange information/data.

Instructor. SI

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.

TDL-4825 2.0 * B (N) L

Goal. Setup JREAP C equipment.

Requirement. Given a MIL-STD-3011 compliant data link manager, OPTASK LINK, and ANNEX K:

1. Determine the following network information for the JREAP C interface:
 - a. IP Address
 - b. Subnet Mask
 - c. Default Gateway
 - d. TCP/IP Port(s)
 - e. Role (Server or Client)
 - f. TCP/UDP Unicast or Multicast
2. Configure the required networking devices for JREAP C communication.
3. Build the JREAP C link in the MIL-STD-3011 compliant system.

Performance Standard. Complete the requirement items IAW the reference; minor errors corrected by the trainee are acceptable.

Instructor. BI

Prerequisite. None.

Reference.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.

TDL-4826 3.0 * B (N) L

Goal. Troubleshoot JREAP A.

Requirement. Given a C2 system with a malfunctioning JREAP A:

1. Use the SATCOM radio's receive signal strength orderwire (RSSOW) to troubleshoot antenna elevation and azimuth.
2. Troubleshoot the SATCOM radio's satellite connection status.
3. Determine if the unit's Interface Unit address is in the Network Controller's subscriber list.
4. Elevate unresolvable issues.

Performance Standard. Complete the requirement items IAW the references without error. Minor errors corrected by the trainee are acceptable.

Instructor. SI

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.
5. SATCOM Radio Technical Manual.

TDL-4827 3.0 * B (N) L

Goal. Troubleshoot JREAP B.

Requirement. Given a C2 system with a malfunctioning JREAP B:

1. Verify distant end and local settings on the STEs.
2. Verify KSV-21 has the appropriate crypto key.
3. Identify low quality phones lines to the crew chief.
4. Elevate unresolvable issues.

Performance Standard. Complete the requirement items IAW the references without error. Minor errors corrected by the trainee are acceptable.

Instructor. SI

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.

TDL-4828 3.0 * B (N) L

Goal. Troubleshoot JREAP C.

Requirement. Given a C2 system with a malfunctioning JREAP C:

1. Use the ping and trace route functions to determine if a network connection exists between two computers.
2. Identify firewall exemptions to the communication's section to open blocked ports.
3. Elevate unresolvable issues.

Performance Standard. Complete the requirement items IAW the references without error. Minor errors corrected by the trainee are acceptable.

Instructor. SI

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.

3.11.6 COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE

3.11.6.1 Purpose. To provide MATC personnel the knowledge and skills required to operate command and control systems employed within Marine Aviation.

3.11.6.2 General.

Prerequisite. MARINENET Courses as indicated within the C2SYS events or the virtual MISTC POIs for the associated C2 system.

Administrative Notes. Command and control system events are located in the MAWTS-1 C3 Course Catalog in order to maintain standardized training across the MACCS. Specific event for MATC are listed in the chart below. C2SYS training is offered by MISTCs or provided during MISTEX, MEFEX, or other Wing TEEP events.

Due to the highly-perishable nature of command and control systems (C2SYS) skills, these events are required to be refreshed every 365 days (12 months) to remain current.

Crew Requirement. None.

C2SYS-4902	0.5	B, R	(N)	G
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Goal. Demonstrate proficiency with utilizing the TBMCS Alerts Service Web Applications.

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Select the Alert Services Link on CCWEB
2. Log into Alert Services.
3. Display, create, modify, copy, and delete alerts.

Performance Standard. With the aid of references, complete the required items IAW the reference.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MAWTS-1 ACE Battlestaff Officer's Course (ABOC), MCAS Yuma, AZ
2. MISTC C2 TECOE:<http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-4904 1.0 B, R (N) G

Goal. Demonstrate proficiency with TBMCS Web Mapping.

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Start Map Manager.
2. Initiate WEBEM Map Control Panel (EMMCP).
3. View a map from within a map plotting application.
4. Set Mouse Mode and Map Units.
5. Set the map projection, background and opacity.
6. Navigate a map.
7. Locate an object by entering coordinates.
8. Use the coordinates tool to convert between Lat/Long (decimal and degrees) and MGRS.
9. Use highlight.
10. Center and activate/remove functions.
11. Toggle layer visibility and change order of layers.
12. Set the Gestures Mouse Mode and Selection Tolerance.
13. Set line width, symbol size, highlight color and label visibility.
14. Save, restore and delete preference.
15. Save and print the current map display.
16. Stop Map Manager.

Performance Standard. With the aid of references, launch the Map Manager and manipulate a map with missions, ACMs, air bases, targets or units displayed.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MAWTS-1 ACE Battlestaff Officer's Course (ABOC), MCAS Yuma, AZ
2. MISTC C2 TECOE:<http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-4906 4.0 B, R (N) G

Goal. Demonstrate proficiency with the TBMCS Web Based Airspace Deconfliction Software (WEBAD).

Requirement. Given an operational TBMCS and training materials, complete the following:

1. Initiate a WEBAD Session.
2. Connect WEBAD to WebMap.
3. Create an airspace group for the utilization of theater airspace in current and future operations (airspace group becomes the ACO).
4. Enter Airspace Coordinating Measures (ACMs).
5. Create ACMs circle, corridor, line, orbit, point, polygon, poly-arc, rad-arc, track.
6. Provide ACM comments using the comments tab.

7. Create an ACM using a map.
8. Create, edit and copy a Filter.
9. Move ACMs to another airspace group.
10. Copy ACMs to another airspace group.
11. Change the state of ACMs.
12. Set ACMs time.
13. Shift ACMs in time.
14. Shift ACMs in location.
15. Map ACMs connect to the map.
16. Clear ACMs from the map.
17. Display the legend.
18. Create a deconfliction filter.
19. Determine a conflict between ACMs.
20. Specify the criteria for determining a conflict between ACMs.
21. Determine if a conflict may exist among ACMs.
22. Create, edit, and copy deconfliction filters.
23. Generate and print a conflict report.
24. Determine airspace deconfliction over multiple ACM Groups based on:
 - a. Mean Sea Level (MSL).
 - b. Above Ground Level (AGL) calculations.
 - c. Display ACMs and associated conflicts on a map.
25. Edit and copy the airspace group.
26. Create, edit and copy, preferences.
27. Edit or view ACMs by filtering using:
 - a. ACM Groups.
 - b. ACM Types.
 - c. ACM Usages.
28. Export ACMs to a file.
29. Release an ACO.
30. Create an Airspace Control Order (ACO) message.
31. Change ACO tab information.
32. Change Declassification tab information.
33. Release tab information.
34. Preview the ACO before it is released and approved.
35. Publish the ACO.
36. Generate the ACO Message.
37. Validate ACO Message Body.
38. Release the ACO message to AATWEB.
39. Generate an ACO change message.
40. Change an existing ACO.
41. Publish the ACO change.
42. Generate the ACO change message.
43. Validate ACO change message body.
44. Release the ACO change message to AATWEB.
45. Delete the following:
 - a. An ACO and all its changes
 - b. An airspace usage
 - c. A filter
 - d. An airspace group
 - e. Deconfliction filters
 - f. User preference

Performance Standard. With the aid of references, complete the required items IAW the reference.

Instructor. BI

Prerequisite. None.

External Syllabus Support.

1. MAWTS-1 Air Tasking Order Development Course, MCAS Yuma, AZ
2. MISTC C2 TECOE: <http://www.29palms.marines.mil/Staff/G3OperationsandTraining/MISTC29.aspx>
3. TBMCS Computer Based Training available on MAWTS-1 MCALMS site

Reference. TBMCS User's Manual

C2SYS-4922 4.0 B, R (N) G

Goal. Demonstrate proficiency operating Blue Force Tracker (BFT) equipment.

Requirement. Given a functional FBCB2 BFT system, perform the following:

1. Initialize and shut down the FBCB2-BFT equipment.
2. Manage the system Logs and Queues.
3. Identify system icons.
4. Manage different map views.
5. Access each function button's features.
6. Use the Quick Send Message buttons.
7. Configure the unit role.
8. Create, save, transmit, receive, and display overlay data.
9. Transmit messages.
10. Access received messages using the Flash, Immediate, Priority, Routine (FIPR) queue.
11. Save messages on the BFT System.
12. Identify warning messages in the Warning Marquee.
13. Utilize a Mission Data Loader to create, distribute, and receive Mission.
14. Transmit data from one BFT system to another.

Performance Standard. With the aid of references, complete the required items with minimal errors provided the trainee self corrects.

Instructor. BI

Prerequisite. None.

References.

1. Manufacturer's Operating Instructions
2. Manufacturer's Technical Instructions and Publications

3.12 INSTRUCTOR UNDER TRAINING (IUT) (5000)

3.12.1 Purpose. To provide position-qualified personnel the additional skills necessary to instruct, evaluate and recommend for completion or qualification of trainees within a crew. Upon completion of the required training, an individual may be considered for an instructor designation by the commanding officer, detachment commander, facility officer, or his/her direct representative, as applicable.

3.12.2 General.

3.12.2.1 Administrative Notes

1. The MACCS instructor concept is a means to standardize all instructors across the MACCS in regards to the concepts of managing a WTPP, properly conducting training, performing evaluations, and recommending training plans.

2. There are five instructor designations in this syllabus. The intent is to train individuals with different levels of experience to instruct ATC personnel. Instructor experience is also gained while progressing through the different instructor designations. The MAWTS-1 C3 course catalog contains the common training requirements for instructors across the MACCS: Basic Instructor (BI), Senior Instructor (SI), and Weapons and Tactics Instructor (WTI). The catalog is located at the MAWTS-1 website, <https://mceits.usmc.mil/sites/mawts1/default.aspx>

3. ATC-specific instructors are listed below:

a. Basic Instructor (BI).

(1) ATC personnel must be designated before the OJTI can train events related to position qualifications in the MATC T&R.

(2) Deployed MATCDs/ATCFs shall develop an OJTI course that to complies with NAVAIR 00-80T-114 Air Traffic Control NATOPS Manual, Chapter 7 for control position training. Once the OJTI training is complete, the BI shall be recommended in writing by a branch supervisor (RWS/TWS).

(3) ATC personnel must have been qualified on the position or skill for a minimum of 30 days prior to being allowed to instruct trainees on that position, waiverable by the ATCFO or Detachment Commander.

b. SI at ATCFs.

(1) SIs assigned to ATCFs will serve as primary assistants to the facility training chief.

(2) Before SI training can begin, the IUT must be qualified on all positions within the tower or radar branch, as applicable.

(3) A designated examiner, Tower Chief, Radar Chief, or designated alternates with ATC position qualification authority shall complete the SI training requirements and be designated a SI.

c. Marine ATC Mobile Team Instructor (MMTI). Graduates of MAWTS-1's MMT Leader/Instructor Course are eligible to be a MMTI. The commanding officer may designate graduates as MMT Instructors.

d. TERPS Instructor (TERPSI). Personnel who are designated a TERPS specialist, completed the appropriate course of instruction, complete the appropriate IUT stages, and have been designated a SI are eligible for designation as TERPSI.

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

PAR NO.	STAGE NAME	PAGE NUMBER
3.12.3	INSTRUCTOR UNDER TRAINING (IUT)	3-132

3.12.3 INSTRUCTOR UNDER TRAINING (IUT) STAGE

3.12.3.1 Purpose. To provide personnel the skills necessary to effectively plan for, instruct, evaluate, and document individual T&R event training. .

3.12.3.2 General.

Prerequisite. The following requirements will be ensured for instructor designations:

1. The Senior Instructor (SI) portion of the training shall occur only after completing the Basic Instructor (BI) events and completing the MarineNet course, Systems Approach to Training (SAT).

2. Individuals shall be recommended for training and designation as a TERPSI by a currently designated

TERPSI. The commanding officer will designate the TERPSI in writing. The TERPS Instructor (TERPSI) shall have the following:

- a. Be designated a TERPS specialist.
- b. Complete the SI events in this manual, IUT-5100, 5110, 5120, 5130.
- c. A TERPSI shall be qualified and proficient in the events in which instructing.

Admin Notes. None.

Crew Requirements. None.

IUT-5000 2.0 * B (N) L

Goal. Introduce principals of instruction.

Requirement. Given the reference, the BIUT will demonstrate the following with the assistance of a unit instructor:

1. Adult learning principles.
 - a. Pedagogy to andragogy.
 - b. Characteristics of the adult learner.
 - c. Learning styles.
 - d. How adults learn.
 - e. Domains of learning.
 - f. Group dynamics.
 - g. Motivation.
 - h. Constructivist learning environments.
2. Introduce, discuss, and demonstrate instruction techniques.
3. Introduce, discuss, and demonstrate class management techniques.
 - a. How to select teaching resources to accommodate student learning styles.
 - b. How to properly organize the instructional environment for effective learning.

Performance Standard. With the aid of references, the BIUT shall demonstrate principles of instruction. During this session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. BI.

Prerequisite. None.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. NAVMC 1553.1, Systems Approach to Training

IUT-5010 2.0 * B (N) G

Goal. Describe individual T&R requirements.

Requirement. Using the Aviation T&R Program Manual, discuss the purpose of each of the following items with an instructor:

1. Training progression model.
2. Programs of Instruction.
 - a. Basic.
 - b. Refresher.

- c. Conversion.
- d. Series Conversion.
- e. Transition.
- f. Maintain.
- 3. T&R attain and maintain tables.
- 4. Syllabus notes.
- 5. T&R syllabus structure.
 - a. Phase.
 - b. Stage.
 - c. Event.
 - d. Skill.
 - e. Syllabus.
- 6. Event format.
 - a. Header.
 - (1) Event prefix - event code.
 - (2) Projected event duration.
 - (3) Proficiency period.
 - (4) Programs of instruction (POI).
 - (5) Event conditions.
 - (6) Device options.
 - (7) Device number.
 - (8) Device type.
 - b. Body.
 - (1) Goal.
 - (2) Requirement.
 - (3) Performance standard.
 - (4) Equipment.

Performance Standard. Without the aid of references and during a discussion session, the BIUT shall describe Individual T&R requirements. During this session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. BI.

Prerequisite. None.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. NAVMC 1553.1, Systems Approach to Training

IUT-5020	12.0	365	B, R, M	(N)	L
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Goal. Conduct T&R instruction.

Requirement. The BIUT, under the supervision of an instructor, will conduct three periods of instruction on three different T&R events selected by the instructor and should include as many different methods of instruction as possible (lecture or academic, demonstration, and practical application). The event must be one the BIUT is current and proficient in. The BIUT will complete the following for each of the three events instructed:

1. Prepare to train the event.
 - a. Review a trainee's performance record to identify required training for the event selected.
 - b. Ensure the student has met prerequisites for the event to be trained.
 - c. Gather the resources necessary to conduct the training (i.e., instructional materials, references, and equipment).
 - d. Conduct task analysis on each event to ensure all intended requirements and prerequisite skills, specified or implied, are trained IAW applicable references.

- e. Schedule the training event (facilities and students).
 - f. Prepare an evaluation form for each student to be evaluated.
2. 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.
3. Assess 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.
4. Route evaluation form as required.

Performance Standard. Complete the requirement items IAW the reference and ensure training is doctrinally and technically current. Instructor shall use the instructor evaluation form from the SAT user's guide for each class and a mark of satisfactory must be achieved for each of the three classes.

Instructor. BI.

Prerequisite. 5000, 5010.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. NAVMC 1553.1, Systems Approach to Training
3. MCO 1553.2B, Formal Schools Management

IUT-5100	2.0	*	B	(N)	L
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Goal. Describe the Aviation Training and Readiness (T&R) Program.

Requirement. Using the community T&R manual discuss the following with an instructor:

1. Describe the Weapons and Tactics Training Program (WTTP).
2. Define each element of the Core Model:
 - a. Mission statements.
 - b. Core Mission Essential Task List (METL).
 - c. Output standards.
 - d. Core Skills (How to attain and maintain).
 - e. Mission Skills (How to attain and maintain).
 - f. Combat Leadership.
3. Define each of the following elements of unit training:
 - a. Training Exercise Employment Plan (TEEP).
 - b. Core Model Minimum Requirements (CMMR).
 - c. Instructors.
 - d. Core Model Training Report (CMTR).
 - e. T&R manual connection to readiness reporting.
4. Define each of the following elements of training:
 - a. Certification.
 - b. Qualification.
 - c. Designation.
 - d. Performance Record.
5. Explain how changes are made to the Program manual:
 - a. Explain T&R conference procedures.
 - b. Explain correspondence change procedures.

Performance Standard. Complete the requirements IAW the reference. Instructor will question the SIUT to check for thorough understanding of the Aviation T&R Program.

Instructor. SI.

Prerequisite. None.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. MCO 3500.109, Weapons and Tactics Training Program

IUT-5110 4.0 365 B, R, M (N) L

Goal. Conduct instructor evaluations.

Requirement. Using the instructor evaluation checklist from the SAT manual, conduct two evaluations on instructors of equal or lower designation.

1. Provide notification of evaluation to the instructor being evaluated.
2. Do not interfere with or disrupt the instruction while taking place.
3. Thoroughly document observed items on the checklist.
4. Ensure student evaluation form is filled out correctly and the appropriate debrief took place.
5. Debrief the instructor being evaluated on their preparation, instruction, evaluation, and documentation.
6. Have the evaluated instructor complete the instructor improvement plan section and sign.
7. File a copy of the completed evaluation form in both the evaluator's and evaluated instructor's performance record.

Performance Standard. Complete the requirements IAW the reference.

Instructor. SI.

Prerequisite. 5100.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. Applicable community T&R Manual
3. MCO1553.2B, Formal Schools Management

IUT-5120 2.0 * B (N) L

Goal. Perform T&R administration.

Requirement. Document training to include:

1. Performance records.
2. Ensure MSHARP is updated appropriately.
3. Assemble recommendation package for certifications, qualifications, and designations IAW T&R manual.

Performance Standard. Complete the requirement items IAW the references. Instructor will question the trainee to check for understanding of the administration process.

Instructor. SI.

Prerequisite. 5100, 5110.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. Local WTPP SOP
3. <http://msharpsupport.com>

IUT-5130 2.0 * B (N) L

Goal. Develop a training plan.

Requirement. Given a deployment scenario develop a training plan to determine individual, and crew training needed to meet CMMR by completing the following:

1. Review Commander's training guidance.
2. Analyze the CMTR to determine training deficiencies and how to achieve CMMR.
3. Identify and schedule T&R training opportunities IAW the TEEP to achieve requirements.
4. Determine instructors required.
5. Determine equipment required.
6. Determine external support required.
7. Deliver a brief to the instructor that illustrates:
 - 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.
 - e. Training plan meets commander's guidance.

Performance Standard. Complete the requirement items IAW the references and commander's training guidance. Training plan will ensure adequate time is allocated to include preparation, instruction, assessment, documentation, and remediation.

Instructor. SI.

Prerequisite. 5120.

References.

1. NAVMC 3500.14, Aviation Program Manual
2. Applicable Community T&R manuals

3.13 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS

3.13.1 Purpose. This phase provides for community standardization of controller qualifications, certifications, combat leadership, and instructor designations.

3.13.2 General.

3.13.2.1 Administrative Notes

1. The WTPP or designated individual shall review the PR to ensure all required training, documentation, and administrative actions are complete prior to administratively staffing qualification or designation recommendations for approval.

2. Only once an individual is qualified, certified, or designated in writing; the signed letter is filed in the PR, all administrative actions are complete, and the event code has been logged in M-SHARP will the qualification or designation be effective.

3.13.2.2 Prerequisite. Per the applicable POI.

3.13.2.3 Stages.

PAR NO.	STAGE NAME	PAGE NUMBER
3.13.3	SCHOOL CODES (SCHL)	3-137

3.13.4	CERTIFICATION (CERT)	3-142
3.13.5	QUALIFICATION (QUAL)	3-144
3.13.6	DESIGNATION (DESG)	3-148

3.13.3 SCHOOLS CODE (SCHL) STAGE

3.13.3.1 Purpose. To record completion of formal schools/courses for ATC personnel as prerequisites and acknowledgment in M-SHARP.

3.13.3.2 General.

Prerequisite. None.

Admin Notes. Information on availability of formal school quotas is released by TECOM in the MACCS Skills Enhancement Message. Many of the courses are funded by TECOM.

Crew Requirements. None.

T&R CODE	COURSE NAME	LOCATION	CID/CIN
SCHL-6000	Weapons and Tactics Instructor Course	MCAS Yuma, AZ	M14P2A1
SCHL-6002	Air Command and Control Officer's Course	MCAS Yuma, AZ	M1467Q1
SCHL-6003	MAWTS-1 Air Tasking Order Development Course	MCAS Yuma, AZ	N/A
SCHL-6004	Marine Air Traffic Control Mobile Team Instructor Course	MCAS Yuma, AZ	ATCIC
SCHL-6010	AOCIQT (Airspace) Course	Hurlburt Field, FL	F19KXD2
SCHL-6011	AOCIQT (Personnel Recovery) Course	Hurlburt Field, FL	F19KXE2
SCHL-6015	Joint Air and Space Operations Center Command and Control Course (JAOC2C)	Hurlburt Field, FL	F19L2W2
SCHL-6020	Introduction to Multi-TDL Network Operations (JT-101)	Ft Bragg, NC	N/A
SCHL-6022	Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102)	Ft Bragg, NC / MTT	A05L6Z1
SCHL-6043	Air Traffic Control Manager Course	NATTC, FL	N2372Z2
SCHL-6045	Propagation of radio waves and antenna construction Marine Net course.	Marine Net	MCIZ0621ZZ
SCHL-6046	MarineNet Course M00CO_0799, Combat Orders	Marine Net	M00CO_0799
SCHL-6065	USAF Flight Procedures (TERPS-S)	Oklahoma City, OK	E5AZG1C17100FA
SCHL-6066	Combat Survey and Assault Zone Assessment Course	Fort Bragg, NC	N/A
SCHL-6067	Military Airspace Management Course	Keesler AFB, MS	F0273D1N/A
SCHL-6096	Formal Learning Center (FLC) Instructor	MCB Camp Lejeune, NC	M03WJBA
		MCB Camp Lejeune, NC (MTT)	M03WJBM

		MCB Camp Pendleton, CA	M10WJB1
		MCB Camp Pendleton, CA (MTT)	M10WJBM

SCHL-6000 0.5 * B (N) G

Goal. Weapons and Tactics Instructor Course.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. 6320, 6321, 8000, 8020, 8040, 8060, 8080.

Reference. None.

SCHL-6002 0.5 * B (N) G

Goal. Air Command and Control Officer's Course.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6003 0.5 * B (N) G

Goal. MAWTS-1 Air Tasking Order Development Course, MCAS Yuma, AZ.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6004 0.5 * B (N) G

Goal. Marine Air Traffic Control Mobile Team Instructor Course (ATCIC).

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. 6210.

Reference. None.

SCHL-6010	0.5	*	B	(N)	G
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Goal. AOCIQT (Airspace) Course.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6011	0.5	*	B	(N)	G
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Goal. AOCIQT (Personnel Recovery) Course.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6015	0.5	*	B	(N)	G
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Goal. Joint Air and Space Operations Center Command and Control Course.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6020	0.5	*	B	(N)	G
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Goal. Introduction to Multi-TDL Network Operations (JT-101).

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6022	0.5	*	B	(N)	G
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Goal. Multi-TDL Advanced Joint Interoperability Course (MAJIC-JT-102).

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6043	0.5	*	B	(N)	G
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Goal. Air Traffic Control Manager Course.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6045	0.5	*	B	(N)	G
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Goal. Propagation of radio waves and antenna construction Marine Net course.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6046	0.5	*	B	(N)	G
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Goal. MarineNet Course M00CO_0799, Combat Orders.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6065 0.5 * B (N) G

Goal. USAF Flight Procedures (TERPS-S).

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6066 0.5 * B (N) G

Goal. Certify as a MAWTS-1 Survey and Assault Zone Assessment MMT Leader.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. MMTI (MAWTS-1 MMT Chief)

Prerequisite. 6200, 6210, 6401, 6530, 6180, 6200, 6210, 6324, 6530, 6540.

Reference. None.

SCHL-6067 0.5 * B (N) G

Goal. Military Airspace Management Course.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

SCHL-6096 0.5 * B (N) G

Goal. Formal Learning Center (FLC) Instructor.

Requirement. Successfully complete course curriculum.

Performance Standard. N/A

Instructor. N/A

Prerequisite. None.

Reference. None.

3.13.4 CERTIFICATIONS (CERT) STAGE

3.13.4.1 Purpose. To record completion of formal schools/courses for ATC personnel as prerequisites and acknowledgment in M-SHARP.

3.13.4.2 General.

Prerequisite. None.

Administrative Notes. For completion of formal schools/courses, the student will submit the completion certificate to the WTTP prior to running the completion code in M-SHARP. The WTTP will include a copy of the certificate in the MPR.

Crew Requirements. None.

CERT-6520 4.0 * B (N) G

Goal. Complete the MATC NITE Lab course.

Requirement. While attending the MATC NITE Lab course:

1. Understand the basic operating principles of NVGs and appreciate their capabilities and limitations.
2. Understand the affects of the night environment on NVG performance.
3. Understand how human physiology impacts NVG operations.
4. Be familiar with various misperceptions and illusions that occur when using NVGs operationally.
5. Describe the modifications required in order to make an ATC tower NVG compatible.
6. Be able to correctly preflight, adjust, and focus NVGs to provide maximum visual acuity.

Performance Standard. Demonstrate an understanding of the steps in the requirement. Instructor will question and mentor the trainee throughout the discussion.

Instructor. NITE Lab Instructor.

Prerequisite. None.

Reference.

1. MAWTS-1 NVD Manual.

CERT-6530 40.0 * B (N) G

Goal. Certify as a MAWTS-1 Survey and Assault Zone Assessment (M-SAAZA) Landing Zone Safety Officer (LZSO).

Requirement. While attending the Marine Air Traffic Control Mobile Team embedded course during Weapons and Tactics Instructor Course:

1. Conduct a Helicopter Landing Zone Survey.
2. Conduct a Fixed-wing Landing Zone Survey.
3. Conduct a Drop-zone Survey.
4. Manage an LZ or DZ during live flight operations.
5. Describe the duties and responsibilities of a Landing Zone Safety Officer and Landing Zone Controller.

Performance Standard. Pass a locally generated exam with a minimum score of 80%, and complete practical application events described above.

Instructor. MMTI (MAWTS-1 MMT Chief)

Prerequisite. 4017, 4018

Reference.

1. MAWTS-1 SAAZA Courseware

CERT-6540 40.0 * B (N) G

Goal. Certify as a MAWTS-1 Survey and Assault Zone Assessment (M-SAAZA) Landing Zone Controller (LZC).

Requirement. While attending the Marine Air Traffic Control Mobile Team embedded course during Weapons and Tactics Instructor Course:

1. Describe the duties and responsibilities of an LZC.
2. Control live aircraft at an LZ IAW directives.

Performance Standard. Pass a locally generated exam with a minimum score of 80%, and complete practical application events described above.

Instructor. MMTI (MAWTS-1 MMT Chief)

Prerequisite. 4017, 4018

Reference.

1. MAWTS-1 SAAZA Courseware

3.13.5 QUALIFICATIONS (QUAL) STAGE

3.13.5.1 Purpose. To evaluate controllers on their ability to perform proficiently on ATC positions in an ATCF or MATCD.

3.13.5.2 General.

Prerequisite. None.

Administrative Notes.

1. During evaluation of the event performance standard, the instructor may provide minimal guidance. However, the instructor should guide and mentor the trainee during the training session and after an event evaluation.

2. Personnel being recommended for qualification must perform the evaluation event to a proficient level. A proficient level is defined as the ability to efficiently and skillfully correct errors without hesitation and with minimal input from the instructor.

3. Policy on attaining, maintaining, and regaining a qualification is contained in reference (a).

4. The refly interval detailed in this manual for position qualifications does not relieve the individual from maintaining proficiency as outlined in NAVAIR 00-80T-114 or applicable facility directives. Loss of proficiency has no impact on an assigned necessary MOS awarded at the initial qualification on a major position.

Crew Requirement. A proficient crew, as needed.

QUAL-6100 1.0 365 B, R, M (N) L

Goal. Qualify as Radar Flight Data Controller (RFD).

Requirement. Perform the duties and responsibilities of a RFD IAW the reference.

Performance Standard. Demonstrate the duties of RFD to a level of proficiency expected of a qualified RFD under general supervision.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0534, 0538, 2000, 2019, 2206, 3700.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

QUAL-6110 1.0 365 B, R, M (N) L

Goal. Qualify as a Radar Final Controller (RFC).

Requirement. Perform the duties and responsibilities of a RFC IAW the reference.

Performance Standard. Demonstrate the duties of a RFC to a level of proficiency expected of a qualified RFC under general supervision.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0523, 0532, 0533, 0534, 0538, 2000, 2206, 3710.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

QUAL-6120 1.0 365 B, R, M (N) L

Goal. Qualify as a Radar Arrival/Departure Controller (ADC).

Requirement. Perform the duties and responsibilities of a ADC IAW the reference.

Performance Standard. Demonstrate the duties of ADC to a level of proficiency expected of a qualified ADC under general supervision.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2000, 2206, 3720, 3730, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

QUAL-6130 1.0 365 B, R, M (N) L

Goal. Qualify as a Radar Approach Controller (APC).

Requirement. Perform the duties and responsibilities of a APC IAW the reference.

Performance Standard. Demonstrate the duties of RAPC to a level of proficiency expected of a qualified RAPC under general supervision.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2000, 2206, 3730, 3731, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

QUAL-6150 1.0 365 B, R, M (N) L

Goal. Qualify as a Tower Flight Data (TFD) Controller.

Requirement. Perform the duties and responsibilities of a TFD IAW the reference.

Performance Standard. Demonstrate the duties of a TFD to a level of proficiency expected of a qualified TFD under general supervision.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 2000, 2003, 2019, 2206, 3600.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

QUAL-6160 1.0 365 B, R, M (N) L

Goal. Qualify as Clearance Delivery (CD).

Requirement. Perform the duties and responsibilities of a CD IAW the reference.

Performance Standard. Demonstrate the duties of a CD to a level of proficiency expected of a qualified CD under general supervision.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 2000, 2019, 2206, 3610.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

QUAL-6170 1.0 365 B, R, M (N) L

Goal. Qualify as a Tower Ground Controller (TGC).

Requirement. Perform the duties and responsibilities of a TGC IAW the reference.

Performance Standard. Demonstrate the duties of a TGC to a level of proficiency expected of a qualified TGC under general supervision.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 2000, 2003, 2206, 3620.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

QUAL-6180 1.0 365 B, R, M (N) L

Goal. Qualify as a Tower Local Controller (TLC).

Requirement. Perform the duties and responsibilities of a TLC IAW the reference.

Performance Standard. Demonstrate the duties of a TLC to a level of proficiency expected of a qualified TLC under general supervision.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0529, 0530, 0531, 2000, 2003, 2206, 3630, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. FAAO 8000.90, Air Traffic Safety Oversight Credentialing and Control Tower Operator Certification Programs.
3. Local directives and publications.

QUAL-6200 2.0 730 B, R, M (N) L

Goal. Qualify as an MMT Member (MMTM).

Requirement. During an operation or exercise, while using required equipment, qualify as an MMT Member by demonstrating proficiency to effectively and safely perform as an MMT member in the conduct

of the mission.

Performance Standard. With no assistance, demonstrate proficiency effectively and safely performing as an MMT member in the conduct of the mission.

Instructor. WTI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 0529, 0570, 0571, 0573, 0574, 2000, 2003, 2019, 2022, 2023, 2025, 2026, 2031, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2310, 2311, 2312, 2313, 3310, 3311, 3312, 3600, 3620, 6150, 6170, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Reference.

1. MMT TACSOP.

QUAL-6210 2.0 730 B, R, M (N) L

Goal. Qualify as a MMT Leader (MMTL).

Requirement. During an operation or exercise, while using required equipment, qualify as an MMT Leader by demonstrating proficiency to effectively and safely lead an MMT in the conduct of the mission.

Performance Standard. Without assistance, lead an MMT during the execution of the requirements. Completion of the MAWTS-1 MMTI course meets the requirement.

Instructor. WTI.

Prerequisite. 6046, 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0570, 0571, 0573, 0574, 0576, 0577, 0578, 0579, 0580, 2000, 2003, 2005, 2019, 2022, 2023, 2025, 2026, 2031, 2104, 2120, 2122, 2123, 2124, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2300, 2301, 2302, 2310, 2311, 2312, 2313, 3300, 3301, 3302, 3310, 3311, 3312, 3600, 3620, 3630, 6150, 6170, 6180, 6200, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Reference.

1. MMT TACSOP.

QUAL-6220 2.0 730 B, R, M (N) L

Goal. Qualify as a Tactical Information Manager (TIM).

Requirement. Given required equipment, conduct the following:

1. Brief critical C2 information during an ATC crew brief.
2. Manage C2 systems and documents pertinent to the MATCD to include, but not limited to, ESTAT, FSTAT, current data link system, T-Chat, ATOs, and execution checklists.
3. Ensure timely information is input in to C2 systems.
4. Maintain equipment/airfield status boards.

Performance Standard. Complete all items with minimal instructor assistance.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0534, 0538, 0601, 0602, 0604, 2000, 2019, 2206, 2800, 2806, 2808, 2811, 2812, 2819, 2820, 2829, 2830, 2837, 2838, 2839, 2840, 2841, 2842, 2900, 2901, 2905, 2909, 2913, 2917, 2921, 2940, 3700, 3921, 6020, 6100.

Reference. None.

3.13.6 DESIGNATIONS (DESG) STAGE

3.13.6.1 Purpose. To provide for the designation of combat leaders, instructors, and select MATC positions.

3.13.6.2 General.

Prerequisites. None.

Administrative Notes.

1. Prerequisites for designations should be complete prior to designating individuals. However, in the event that a commander deems it necessary to designate someone who has not completed the prerequisite, that person must complete the prerequisite within six months from the effective date of designation.
2. The unit WTPP officer shall ensure the following is completed before an individual designation is effective:
 - a. All syllabus training requirements for the designation are completed prior to being considered for designation.
 - b. The trainee is recommended for designation as noted in the designation event, the designation letter is signed by the commanding officer and filed in the PR, and the designation event code is logged in M-SHARP. The designation is not effective until all actions are complete.
3. Common MACCS instructor designation events are contained in the MAWTS-1 C3 Course Catalog to ensure standardization across the MACCS. ATC-specific instructor designation requirements are delineated in the IUT-5000 phase.

Crew Requirements. Per the applicable designation syllabus.

DESG-6240	1.0	*	B	(N)	G
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Goal. Designation as a Radar Supervisor (RS).

Requirement. Be qualified and current on all ATC radar branch operating positions and recommended by a Senior Instructor.

Performance Standard. Display the following:

1. Supervise crew position relief and passdown.
 - a. Assign qualified personnel to watchstations.
 - b. Assign trainees to qualified controllers for supervision.
 - c. Brief watch team on preparation for, and potential problems associated with special evolutions (paradrop/drones/banner/target/airshow/UAS).
 - d. Conduct Position Relief.
 - e. Ensure proper operational performance of watch team.
 - f. Monitor human factors affecting personnel readiness.
2. Ensure proper interfacility/intrafacility coordination is completed to facilitate coordination.
 - a. Coordinate with interfacility/intrafacility supervisors.
 - b. Coordinate with required facility positions (example: FWS, Radar Sup).
3. Coordinate and direct control of aircraft operating in assigned airspace.
 - a. Ensure proper handling of SAR/MEDEVAC evolution.
 - b. Ensure PIREPS are solicited when required.

- c. Ensure appropriate action taken in response to INREQs/ALNOT.
- d. Demonstrate NOTAM procedures.
- e. Supervise radar flight inspections as applicable.
- f. Supervise hazardous cargo procedures.
- 4. Ensure proper documentation/maintenance of radar logs/records/equipment.
 - a. Ensure proper documentation/reporting of radar equipment.
 - b. Ensure all equipment checklists are complete as required.
 - c. Complete equipment status reports and trouble call logs.
 - d. Ensure necessary notification/coordination is completed for NAVAID outages.
 - e. Ensure watchstation complies with established recorder failure procedures.
 - f. Complete daily traffic counts.
- 5. Ensure proper handling/correction of ATC errors.
 - a. Demonstrate proper steps to be taken for a routine Air Traffic Control Hazard.
 - b. Demonstrate proper steps for Pilot Deviation/Flight Violation.
 - c. Understand aircraft Accident/Incident Procedures.
 - d. Demonstrate proper steps to be taken for Severe Air Traffic Control Hazard.
- 6. Ensure adherence to Facility contingency plan.
 - a. Brief the watch team of Evacuation procedures.
 - b. Supervise non-radar operations.
- 7. Pass a written NATOPS examination.

Instructor. SI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 2000, 2019, 2206, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 6100, 6110, 6120, 6130, 6320, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

References.

- 1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
- 2. Local directives and publications

DESG-6241 1.0 * B (N) G

Goal. Designation as a Radar Chief (RDRC).

Requirement. Complete all prerequisites.

Performance Standard. Be recommended by the facility officer and designated in writing by the commanding officer.

Instructor. None.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 0551, 0553, 0554, 0560, 2000, 2019, 2025, 2101, 2206, 2208, 2209, 2500, 2501, 2502, 2503, 2504, 2506, 3001, 3002, 3005, 3006, 3401, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6100, 6110, 6120, 6130, 6240, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067.

References.

- 1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
- 2. Local directives and publications.

DESG-6242 1.0 * B (N) G

Goal. Designation as a Tower Supervisor (TS).

Requirement. Qualified and current on all positions in the tower branch and recommended by a Senior Instructor.

Performance Standard. Demonstrate the following:

1. Supervise crew position relief and passdown.
 - a. Assign qualified personnel to watchstations.
 - b. Assign trainees to qualified controllers for supervision.
 - c. Brief watch team on preparation for, and potential problems associated with special evolutions (paradrop/drones/banner/target/airshow/UAS).
 - d. Conduct Position Relief.
 - e. Ensure proper operational performance of watch team.
 - f. Monitor human factors affecting personnel readiness.
2. Ensure proper interfacility/intrafacility coordination is completed to facilitate coordination.
 - a. Coordinate with interfacility/intrafacility supervisors.
 - b. Coordinate with required facility positions (example: FWS, Radar Sup).
3. Coordinate and direct control of aircraft operating in assigned airspace.
 - a. Ensure proper handling of emergency aircraft.
 - b. Ensure proper handling of SAR/MEDEVAC evolution.
 - c. Ensure proper handling/notification of suspicious aircraft/pilot activity.
 - d. Ensure PIREPS are solicited when required.
 - e. Ensure appropriate action taken in response to INREQs/ALNOT.
 - f. Demonstrate NOTAM procedures.
 - g. Demonstrate the actions required to suspend VFR operations.
 - h. Provide services to Transient Aircraft.
4. Ensure proper documentation/maintenance of tower logs/records/equipment.
 - a. Ensure proper documentation/reporting of tower equipment.
 - b. Ensure all equipment checklists are complete as required.
 - c. Complete equipment status reports and trouble call logs.
 - d. Ensure necessary notification/coordination is completed for NAVAID outages.
 - e. Ensure watchstation complies with established recorder failure procedures.
 - f. Complete daily traffic counts.
5. Ensure proper handling/correction of ATC errors.
 - a. Demonstrate proper steps to be taken for a routine Air Traffic Control Hazard.
 - b. Demonstrate proper steps for Pilot Deviation/Flight Violation.
 - c. Understand aircraft Accident/Incident Procedures.
 - d. Demonstrate proper steps to be taken for Severe Air Traffic Control Hazard.
6. Ensure adherence to Facility contingency plan.
 - a. Brief the watch team of Tower Evacuation procedures.
7. Pass a written NATOPS examination.

Instructor. None.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0550, 2000, 2003, 2019, 2206, 3600, 3610, 3620, 3630, 5000, 5010, 5020, 6150, 6160, 6170, 6180, 6320, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

References.

1. JO 7110.65, Air Traffic Control.
2. JO 7210.3, Facility Operation and Administration.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
3. Local directives and publications.

DESG-6243 1.0 * B (N) G

Goal. Designation as a Tower Chief (TWRC).

Requirement. Complete all prerequisites.

Performance Standard. Be recommended by the facility officer and designated in writing by the commanding officer.

Instructor. None.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0550, 0551, 0552, 0554, 0560, 2000, 2003, 2019, 2206, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3005, 3006, 3401, 3600, 3610, 3620, 3630, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6150, 6160, 6170, 6180, 6242, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

DESG-6244 1.0 * B (N) G

Goal. Designation as a Training Chief (TRNC).

Requirement. Complete the prerequisites.

Performance Standard. Be recommended by the facility officer and designated in writing by the commanding officer.

Instructor. None.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 0551, 0552, 0553, 0554, 2000, 2003, 2019, 2206, 2500, 2501, 2502, 2503, 2504, 3002, 3003, 3006, 3600, 3610, 3620, 3630, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6100, 6110, 6120, 6130, 6150, 6160, 6170, 6180, 6240, 6242, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

DESG-6247 1.0 * B (N) G

Goal. Designation as a MATC Detachment Radar Chief (RDRC).

Requirement. Complete the prerequisites and be recommended by a WTI.

Performance Standard. Be recommended by a WTI and designated in writing by the commanding officer.

Instructor. WTI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532,

0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 0551, 0553, 0554, 0560, 0571, 0705, 0720, 0721, 0722, 2000, 2001, 2002, 2005, 2006, 2007, 2008, 2009, 2011, 2019, 2025, 2026, 2101, 2104, 2120, 2121, 2122, 2123, 2124, 2130, 2131, 2203, 2206, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3400, 3401, 3402, 3404, 3405, 3406, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6100, 6110, 6120, 6130, 6240, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

DESG-6249 1.0 * B (N) G

Goal. Designation as a MATC Detachment Tower Chief (TWRC).

Requirement. Complete the prerequisites and be recommended by a WTI.

Performance Standard. Be recommended by a WTI and designated in writing by the commanding officer.

Instructor. WTI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0550, 0551, 0552, 0554, 0560, 0571, 0705, 0721, 2000, 2001, 2002, 2003, 2005, 2006, 2007, 2009, 2011, 2019, 2025, 2026, 2031, 2101, 2104, 2120, 2121, 2122, 2123, 2124, 2130, 2131, 2200, 2203, 2204, 2206, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3400, 3401, 3402, 3406, 3600, 3610, 3620, 3630, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6150, 6160, 6170, 6180, 6242, 6321, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067.

Reference.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local directives and publications.

DESG-6250 1.0 * B (N) G

Goal. Designate as a Detachment Operations Chief.

Requirement. Complete the prerequisites and be recommended by a WTI.

Performance Standard. Be recommended by a WTI and designated by the commanding officer.

Instructor. WTI.

Prerequisite. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0529, 0530, 0531, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0551, 0552, 0553, 0554, 0560, 0561, 0562, 0563, 0570, 0571, 0572, 0573, 0700, 0701, 0704, 0705, 0720, 0721, 0722, 2000, 2001, 2002, 2005, 2007, 2008, 2009, 2011, 2025, 2026, 2031, 2101, 2104, 2120, 2121, 2122, 2123, 2124, 2130, 2131, 2200, 2203, 2204, 2206, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3400, 3401, 3402, 3404, 3405, 3406, 3720, 3730, 3731, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. Local directives and publications.

DESG-6251 1.0 * B (N) G

Goal. Designation as a MATCD SNCOIC.

Requirement. Designated in writing by the commanding officer.

Performance Standard. Designated in writing by the commanding officer.

Instructor. WTI.

Prerequisite. None.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

DESG-6320 1.0 * B (N) G

Goal. Designation as Basic Instructor (BI).

Requirement. Recommended for designation by an SI and designated in writing by detachment commander or facility officer.

Performance Standard. Meet requirements per the BI POI in the MAWTS-1 C3 Course Catalog, and ATC NATOPS.

Instructor. SI.

Prerequisite. 5000, 5010, 5020.

Reference.

1. C3 Course Catalog

DESG-6321 1.0 * B (N) G

Goal. Designation as Senior Instructor (SI).

Requirement. Recommended for designation by a SI or WTI and designated in writing by the detachment commander or facility officer.

Performance Standard. Meet requirements per the SI POI in the MAWTS-1 C3 Course Catalog and ATC NATOPS.

Instructor. SI.

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

Reference.

1. C3 Course Catalog.

DESG-6322 1.0 * B (N) G

Goal. Designation as Weapons and Tactics Instructor (WTI).

Requirement. Recommended for designation by a squadron WTI and designated in writing by the

commanding officer.

Performance Standard. Complete the coursework prescribed in the WTI Course and be recommended and designated in writing by the Commanding Officer or their designated representative.

Instructor. WTI.

Prerequisite. 6000.

Reference.

1. C3 Course Catalog

DESG-6324	1.0	*	B	(N)	G
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Goal. Designation as MATC Mobile Team Instructor (MMTI).

Requirement. Complete the formal coursework for MMTI at MAWTS-1.

Performance Standard. Complete the prerequisite courses and be designated in writing by the commanding officer.

Instructor. WTI.

Prerequisite. 6004, 6066.

Reference.

1. C3 Course Catalog

DESG-6330	1.0	*	B	(N)	G
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Goal. Designation as Formal Learning Center Instructor

Requirement. Complete applicable formal learning center instructor's course.

Performance Standard. N/A

Instructor. WTI

Prerequisite. 6096

Reference. None.

DESG-6401	1.0	*	B	(N)	G
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Goal. Designation as Facility Watch Officer (FWO).

Requirement. Complete the prerequisites.

Performance Standard. Designated in writing by the facility officer.

Instructor. None.

Prerequisite. 0551, 0552, 0553, 0554, 0555, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

References.

1. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.
2. Local Directives.

DESG-6501 1.0 * B (N) G

Goal. Designation as a TERPS Specialist.

Requirement. Complete the prerequisites and be recommended for designation by the TERPSI.

Performance Standard. Be designated in writing by the commanding officer.

Instructor. None.

Prerequisite. 6065.

References.

1. FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).
2. FAAO 8260.46, Departure Procedure (DP) Program.
3. FAAO 8260.19, Flight Procedures and Airspace.

3.14 MISSION ESSENTIAL TASK (MET) PHASE (7000)

3.14.1 Purpose. This phase takes CMMR proficient Marines from multiple PMOS, puts them in CMMR representative crews, and trains them as combat effective teams in combined events.

3.14.2 General.

3.14.2.1 Prerequisite. Marines must either be CMMR crew position or non-aviation PMOS proficient to train in this phase. For those events requiring combat leaders, only Marines currently designated as such can train in this phase.

3.14.2.2 Admin Notes. Prerequisites for this phase of training cannot be waived. Multiple events can be trained at the same time as long as separate evaluations are being conducted.

3.14.2.3 Stages. The following stages are included in the Mission Essential Task (MET) Phase of training.

PAR NO.	STAGE NAME	PAGE NUMBER
3.14.3	CONDITION (COND)	3-156

3.14.3 CONDITION (COND) STAGE

3.14.3.1 Purpose. To train unit level teams in executing community specific MET(s) or MET preparatory events.

3.14.3.2 General.

Prerequisite. If an event requires prerequisites in addition to those listed for the MET Phase, they will be covered in the individual event.

Admin Notes. All events in this stage will require the following administrative/operational documents to be identified or created:

1. Letter Of Intent (LOI).
2. Personnel Roster.
3. Bill Of Material (BOM).
4. Equipment Density List (EDL).

Crew Requirements. This stage requires that all crew members and combat leaders be qualified/designated and proficient (current) in the position they are assigned for the following events. Crews shall be task organized to meet the mission.

COND-7100 18.0 730 B, R, M (N) L

Goal. Provide ATC tower services.

Requirement. Given an expeditionary control tower, an FAA certifiable TACAN, and all ancillary equipment, conduct continuous expeditionary control tower operations.

Performance Standard. Perform the following:

1. Emplace an expeditionary control tower, an FAA certifiable TACAN, and ancillary equipment.
2. Establish applicable functional operating positions within 10 hours.
 - a. Within TSQ-216 3 hours.
 - b. Within TSQ-120 10 hours.
3. Establish two-way communications with aircraft and ground agencies.
4. Provide sustained integration with the MACCS, other military C2 and civilian entities to include FAA and the International Civil Aviation Organization (ICAO).
5. Control the movement of aircraft and/or vehicular traffic.
6. Control aircraft within assigned terminal airspace.
7. Pass a tactical or FAA flight inspection.
8. Provide sustained navigational assistance.
9. Perform a crew relief.

Prerequisite. Two CMMR crews.

Instructor. WTI.

Range. Airfield.

External Resource Requirement. Rotary-wing and/or fixed-wing aircraft, MWSS personnel, NAVFIG, and MHE.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. JO 7110.65, Air Traffic Control.
3. NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual.

COND-7200 12.0 730 B, R, M (N) L

Goal. Provide ATC approach services.

Requirement. Given an airport surveillance radar, precision approach radar, FAA certifiable TACAN, and all ancillary equipment; conduct continuous expeditionary radar approach control operations.

Performance Standard. Perform the following:

1. Emplace an airport surveillance radar, precision approach radar, FAA certifiable TACAN, and ancillary equipment.
2. Establish six functional operating positions within eight hours.
3. Have maps available on operating positions.
4. Provide sustained integration with the MACCS, other military C2 and civilian entities to include FAA and ICAO.

5. Establish and maintain communication and radar identification of aircraft within the detachment's airspace.
6. Pass a tactical or FAA flight inspection.
7. Control aircraft within assigned airspace.
8. Provide sustained navigational assistance.
9. Provide sustained radar air surveillance data to the MAGTF or joint force via Tactical Data Link.
10. Perform a crew relief.

Prerequisite. Two CMMR crews.

Instructor. WTI.

Range Requirement. Assigned airspace.

External Resource Requirement. Rotary-wing and/or fixed-wing aircraft, MWSS personnel, NAVFIG, and MHE.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. JO 7110.65, Air Traffic Control.
3. Applicable technical manuals.

COND-7300 12.0 730 B, R, M (N) L

Goal. Provide ATC arrival/departure services.

Requirement. Given an airport surveillance radar, precision approach radar, FAA certifiable TACAN, and all ancillary equipment, conduct continuous expeditionary radar arrival/departure and final control operations.

Performance Standard. Perform the following:

1. Emplace an airport surveillance radar, precision approach radar, FAA certifiable TACAN, and all ancillary equipment.
2. Establish five functional operating positions within six hours.
3. Have maps available on operating positions.
4. Provide sustained integration with the MACCS, other military C2 and civilian entities to include FAA and ICAO.
5. Establish and maintain communication and radar identification of aircraft within the detachment's airspace.
6. Pass a tactical or FAA flight inspection.
7. Control aircraft within assigned airspace.
8. Provide precision/non-precision approaches within a terminal area.
9. Provide sustained navigational assistance.
10. Provide sustained radar air surveillance data to the MAGTF or joint force via Tactical Data Link.
11. Perform crew relief.

Prerequisite. Two CMMR crews.

Instructor. WTI.

Range. Airfield.

External Syllabus Support. Rotary-wing and/or fixed-wing aircraft, MWSS personnel, NAVFIG, and MHE.

References.

1. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
2. JO 7110.65, Air Traffic Control.
3. Applicable technical manuals.

COND-7400 2.0 730 B, R, M (N) L

Goal. Conduct Marine air traffic control mobile team (MMT) ALZ operations.

Requirement. Provided a Table of Equipment (T/E) and/or equipment density list (EDL), conduct ALZ operations.

Performance Standard. Perform the following during a minimum operational tempo of three air traffic control operations.

1. Conduct a hasty assault zone survey and assessment.
2. Travel to the landing zone.
3. Within five minutes of arrival at the site, establish visual control capability consisting of radios and/or appropriate signaling devices.
4. Within 30 minutes of arrival at the site, establish appropriate marking of the landing zone and emplace navigational aid.
5. Provide sustained integration with the MACCS and other military C2 agencies.
6. Control aircraft within assigned terminal airspace.
7. Provide sustained navigational assistance.
8. Provide limited non-certifiable weather observations and information.
9. Provide appropriate small unit defense capability and integrate with the defensive force established at the landing zone, if provided.
10. Retrograde from the landing zone with the last available transportation.

Prerequisite. One CMMR MMT.

Instructor. WTI.

Range. Assault landing zone.

External Resource Requirement. ALZ-capable fixed-wing aircraft.

References.

1. MMT TACSOP.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

COND-7500 2.0 730 B, R, M (N) L

Goal. Conduct Marine air traffic control mobile team (MMT) FARP operations.

Requirement. Given a Table of Equipment (T/E) and/or equipment density list (EDL), conduct FARP operations.

Performance Standard. Perform the following during a minimum operational tempo of three air traffic control operations.

1. Conduct a hasty survey and assessment.
2. Travel to the landing zone.
3. Within five minutes of arrival at the site, establish visual control capability consisting of radios and/or appropriate signaling devices.

4. Within 30 minutes of arrival at the site, establish appropriate marking of the landing zone and emplace navigational aid.
5. Provide sustained integration with the MACCS and other military C2 agencies.
6. Establish and maintain integration with the FARP OIC and/or aircraft commander.
7. Control aircraft within assigned terminal airspace.
8. Provide sustained navigational assistance.
9. Provide limited non-certifiable weather observations and information.
10. Provide appropriate small unit defense capability and integrate with the defensive force established at the landing zone, if provided.
11. Retrograde from the landing zone with the last available transportation.

Prerequisite. One CMMR MMT.

Instructor. WTI.

Range. Operational FARP.

External Resource Requirement. Fixed or rotary-wing aircraft.

References.

1. MMT TACSOP.
2. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.

3.15 AVIATION CAREER PROGRESSION MODEL (ACPM) (8000).

3.15.1 Purpose. To enhance professional understanding of Marine Aviation and the MAGTF and to provide MACG Marines with a knowledge of the doctrine and tactics techniques and procedures (TTPs) of aviation command and control. Additionally, the MACCS ACPM ensures that 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

3.15.2 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 conducting the period of instruction or they may be accomplished by self-paced instruction. MAWTS-1 is responsible to update and validate the ACPM periods of instruction. In the future, courses may be consolidated or revised to meet changing requirements. Refer to the MAWTS-1 link for the current ACPM program of instruction:

<https://mceits.usmc.mil/sites/mawts1/default.aspx>

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.

ACPM-8000	1.0	*	B	(N)	G
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Goal. Describe the MACCS stage.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8001, 8002, 8003, 8004, 8005, 8006, 8008.

Reference. C3 Course Catalog.

ACPM-8001	4.0	*	B	(N)	G
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Goal. Deescribe the Marine Air Command and Control System (MACCS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Describe how the control of aircraft and missiles relates to the other five functions of USMC aviation.
2. Define the control of aircraft and missiles and each of its subcomponents.
3. Define the Marine aviation's philosophy of centralized command and decentralized control.
4. Differentiate between Marine aviation philosophy and Joint aviation philosophy.
5. Identify the principle objectives of the MACCS.
6. Recall the primary role of each agency of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 MACCS Agencies, Functions and the Control of Aircraft and Missiles Class
2. MCTP 3-20F Control of Aircraft and Missiles

ACPM-8002	4.0	*	B	(N)	G
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Goal. Describe the Tactical Air Command Center (TACC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. State the mission of the TACC.
2. Identify the four organizations of the TACC.
3. List the primary responsibilities of Air Combat Intelligence (ACI).
4. List the primary responsibilities of Future Operations (FOPS).
5. List the primary responsibilities of Future Plans (FPLANS).
6. List the primary responsibilities of Current Operations (COPS).
7. List the major end items used by the TACC.
8. List the system limitations of the TACC.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 TACC Class
2. MCRP 3-20F.4 Marine TACC Handbook

ACPM-8003 4.0 * B (N) G

Goal. Describe the Direct Air Support Center (DASC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the DASC.
2. List the structure and task organization of the DASC.
3. Identify the major end items and their characteristics used by the DASC.
4. List the capabilities and limitations of the DASC.
5. Identify how the DASC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 DASC Class
2. MCRP 3-20F.5 DASC Handbook

ACPM-8004 4.0 * B (N) G

Goal. Describe the Tactical Air Operations Center (TAOC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the mission of the TAOC.
2. Identify the Mission Essential Tasks (METs) for the TAOC.
3. Identify the structure and task organization of the TAOC.
4. Identify the major end items and their characteristics used by the TAOC.
5. Identify the capabilities and limitations of the TAOC.
6. Identify how the TAOC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 TAOC Class
2. MCRP 3-20F.6 TAOC Handbook

ACPM-8005 4.0 * B (N) G

Goal. Describe the Marine Air Traffic Control (MATC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of MATC.
2. Identify the Mission Essential Tasks (METs) for MATC.
3. List the structure and task organization of MATC.
4. Identify the major end items and their characteristics used by MATC.
5. Identify the capabilities and limitations of MATC.
6. Identify how MATC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 MATC Employment Class
2. MCTP 3-20F
3. MCRP 3-20F.7 Marine Air Traffic Control Detachment Handbook

ACPM-8006 4.0 * B (N) G

Goal. Describe the Low Altitude Air Defense (LAAD).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the LAAD battalion.
2. Identify the structure and task organization of the LAAD battalion.
3. Identify the primary vehicle and surface-to-air weapon used by the LAAD Battalion.
4. Define the LAAD employed guidelines.
5. List the LAAD weapon applications.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 LAAD Employment Class
2. MCRP 3-20F.8 LAAD Battalion Handbook
3. MCRP 3-20F.9 LAAD Gunner's Handbook

ACPM-8008 4.0 * B (N) G

Goal. Describe the Marine Wing Communications Squadron (MWCS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the MWCS.
2. Identify the structure and task organization of the MWCS.
3. Identify the Mission Essential Tasks (METs) for the MWCS.

4. Identify the major end items and their characteristics used by MWCS.
5. Identify the capabilities and limitations of the MWCS.
6. Identify how the MWCS is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI

Prerequisite. None.

References.

1. MAWTS-1 MWCS Employment Class
2. MCRP 3-30B.2 MAGTF Communications Systems
3. NAVMC 3500.56 Communications Training and Readiness Manual

ACPM-8020	1.0	*	B	(N)	G
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Goal. Describe the ACE stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Reference. C3 Course Catalog.

ACPM-8021	4.0	*	B	(N)	G
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Goal. Describe the USMC aviation operations doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the six functions of Marine aviation to include all their subsets.
2. Identify the organization and mission of the Marine Aircraft Wing (MAW), to include each type of group and squadron.
3. Define who has operational control of organic MAGTF aviation assets during Joint operations.
4. List the four types of sorties the MAGTF Commander makes available to the Joint Force.
5. Identify the purpose of the Air Tasking Order (ATO).
6. Identify the six phases of the air tasking cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCWP 3-2 Aviation Operations

ACPM-8022	4.0	*	B	(N)	G
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Goal. Describe the USMC doctrine for the control of aircraft and missiles.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify how the control of aircraft and missiles relates to the other five functions of USMC aviation.
2. Identify distinctions between Marine aviation philosophy and that of the other services.
3. Identify the principle objectives of the Marine Air Command and Control System (MACCS).
4. Describe how the COMMARFOR may serve as the Joint Force Air
5. Component Commander (JFACC), Airspace Control Authority (ACA), and Area Air Defense Commander (AADC).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 Control of Aircraft and Missiles Class
2. MCTP 3-20F Control of Aircraft and Missiles

ACPM-8023 4.0 * B (N) G

Goal. Describe the USMC Offensive Air Support (OAS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the purpose of the MAGTF Commanders Single Battle Concept.
2. Define the subcategories of OAS.
3. Define the requirements for effective OAS.
4. Define the three types of Deep Air Support (DAS).
5. Define the capabilities and limitations of the OAS function.
6. Identify the elements of a Joint Tactical Air Strike Request (JTAR).
7. Identify the three types of control of Close Air Support (CAS).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 OAS Class
2. MCTP 3-20D Offensive Air Support

ACPM-8024 4.0 * B (N) G

Goal. Describe the USMC Assault Support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the types of assault support operations.
2. Identify which aircraft conduct each of the types of assault support operations.
3. Identify the elements of an Assault Support Request (ASR).

4. List assault support capabilities and limitations.
5. Define the role of the air mission commander and the assault force commander during air assault operations.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 Assault Support Class
2. MCTP 3-20E Assault Support

ACPM-8025	4.0	*	B	(N)	G
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Goal. Describe the USMC Air Reconnaissance doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the three categories of air reconnaissance.
2. Identify the four principals of air reconnaissance.
3. Identify the five prerequisites for effective air reconnaissance.
4. Identify the current USMC aircraft that have the mission of air reconnaissance.
5. Identify the form used to request air reconnaissance.
6. Identify the five supporting operations for effective air reconnaissance.
7. Identify the capabilities and limitations of air reconnaissance.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCTP 3-20G Air Reconnaissance

ACPM-8026	4.0	*	B	(N)	G
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Goal. Describe the USMC Electronic Warfare (EW) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define radar.
2. List the three basic radar types.
3. Identify the limitations and characteristics of radar systems.
4. Identify the six guidance systems and how they work.
5. List the three subdivisions of Electronic Warfare (EW).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-32D.1 Electronic Warfare

ACPM-8027 4.0 * B (N) G

Goal. Describe the USMC Anti-air Warfare (AAW) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define AAW.
2. Define the two subsets of AAW.
3. Identify the principles of AAW.
4. Identify the types of Offensive Anti-air Warfare (OAAW).
5. Identify the active air defense functions.
6. List three examples of passive air defense measures.
7. Define a Joint Engagement Zone (JEZ), Fighter Engagement Zone (FEZ), Missile Engagement Zone (MEZ), and Base Defense Zone (BDZ).
8. Define the air defense warning conditions.
9. Define the weapons control statuses.
10. Identify the responsibilities of the Regional Air Defense Commander (RADC) and the Sector Air Defense Commander (SADC).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCTP 3-20C Anti-air Warfare

ACPM-8028 4.0 * B (N) G

Goal. Describe the USMC Ground Support (AGS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the organization responsible for providing AGS to the Marine Aircraft Wing (MAW).
2. Identify the 13 functions of AGS.
3. Identify the five activities that the Marine Wing Support Squadron (MWSS) performs for the ACE when deployed.
4. Identify the four basing concepts for MAGTF Forward Operating Bases (FOBs).
5. List the four classifications of FOBs.
6. Differentiate the distinguishing characteristics of FOBs.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 AGS Class
2. MCTP 3-20B Aviation Ground Support

ACPM-8040 1.0 * B (N) G

Goal. Describe the Threat stage of the MACCS ACPM

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8041, 8042, 8043, 8044.

Reference. C3 Course Catalog.

ACPM-8041 4.0 * B (N) G

Goal. Describe the surface-to-antiair threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the system name with the guidance and target aspect for the following Man Portable Air Defense Systems (MANPADS):

- a. SA-7
- b. SA-14
- c. SA-16
- d. SA-18

2. Match the system name with the guidance and associated radars for the following Radio Frequency Surface-to-Air Missile Systems (RF SAMS):

- a. SA-2
- b. SA-6
- c. SA-8
- d. SA-10
- e. SA-11
- f. SA-15
- g. SA-20
- h. Roland-III

3. Match the system name with the type and associated radar for the following Air Defense Artillery (AAA):

- a. ZPU 1, 2, 4
- b. ZSU-23-4
- c. 2S6
- d. S-60

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8042 4.0 * B (N) G

Goal. Describe the fixed wing threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the AN-2 Colt.
2. Identify the role of the MIG-23 Flogger.
3. Identify the role of the MIG-29 Fulcrum.
4. Identify the role of the MIG-31 Foxhound.
5. Identify the role of the Su-24 Fencer.
6. Identify the role of the Su-25 Frogfoot.
7. Identify the role of the Su-27 Flanker.
8. Identify the role of the Su-30 Flanker.
9. Identify the role of the Tu-22M Backfire.
10. Identify the role of the Tu-95 Bear.
11. Identify the role of the Tu-160 Blackjack.
12. Identify the role of the J-7 Fishbed.
13. Identify the role of the JH-7 Flounder.
14. Identify the role of the J-8 Finback.
15. Identify the role of the J-10 Firebird.
16. Identify the role of the H-6 Badger.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magftfc/mawts1/departments1/newc3/default.aspx>)

ACPM-8043	4.0	*	B	(N)	G
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Goal. Describe the rotary wing threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the Mi-24 Hind.
2. Identify the role of the SA 342 Gazelle.
3. Identify the role of the Ka-25 Hormone.
4. Identify the role of the Mi-6 Hook.
5. Identify the role of the Mi-28 Havoc.
6. Identify the role of the Mi-8 Hip.
7. Identify the role of the Ka-50 Kokum.
8. Identify the role of the Ka-29 Helix B.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magftfc/mawts1/departments1/newc3/default.aspx>)

ACPM-8044 4.0 * B (N) G

Goal. Describe the missile and Unmanned Aircraft System (UAS) threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the system name with the terminal guidance for the following Air-to-Surface Missiles:
 - a. AS-10 Karen
 - b. AS-11 Kilter
 - c. AS-12 Kegler
 - d. AS-14 Kedge
 - e. AS-17 Krypton
2. Match the system name with the warhead and guidance for the following Surface-to-Surface Missiles:
 - a. FROG-7
 - b. SCUD-B
 - c. SCUD-C
 - d. Nodong 1
 - e. C 801
 - f. C 802
3. Identify the mission of the following threat UAS:
 - a. Ababil
 - b. Mohajer
 - c. Harpy
 - d. Heron
 - e. ASN-206
 - f. Pchela-1T

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 Marine Aviation Intelligence Reference
<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/nec3/default.aspx>
2. Marine Corps Intelligence Activity Iran Country Handbook (appendix A)
3. Marine Corps Intelligence Activity North Korea Country Handbook (page 86)
4. Marine Corps Intelligence Activity China Country Handbook (appendix A)
<https://www.intelink.gov/mcia/handbook.htm>
5. MCIA UAV Recognition Guide <https://www.intelink.gov/mcia/index.htm>

ACPM-8060 1.0 * B (N) G

Goal. Describe the MAGTF stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8061, 8062, 8063, 8064, 8065.

References. C3 Course Catalog.

ACPM-8061	4.0	*	B	(N)	G
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Goal. Describe the MAGTF ground combat operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify how the Ground Combat Element (GCE) is employed as part of the MAGTF and the capabilities the GCE provides to the MAGTF commander
2. Define the following items related to command and control of ground combat operations:
 - a. Echelons of the GCE headquarters
 - b. Battlespace Organization
 - c. Battlespace Framework
3. Define the five types of amphibious operations.
4. Identify the following items related to offensive operations:
 - a. Types of offensive operations
 - b. Types of attack
 - c. Forms of maneuver
 - d. Distribution of forces
5. Identify the following items related to defensive operations:
 - a. Organization of the defense
 - b. Distribution of forces
 - c. Types of defensive operations
 - d. Defensive methods

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCDP 1-0 Marine Corps Operations

ACPM-8062	4.0	*	B	(N)	G
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Goal. Describe the fire support coordination in the Ground Combat Element (GCE).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the four fire support tasks.
2. List the functions of the senior fire support coordination center (FSCC) in the GCE.
3. List the four steps of the MAGTF Targeting Process.
4. Define the purpose of essential fire support tasks (EFST).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 MAGTF Targeting and Fire Support Planning Class
2. MCTP 3-10F Fire Support Coordination in the GCE

ACPM-8063 4.0 * B (N) G

Goal. Describe the MAGTF command and control.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify MAGTF command and support relationships.
2. Identify the purpose and role of the command and control centers in the CE, ACE, GCE, and LCE.
3. Identify the purpose and role of the amphibious command and control facilities.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCWP 3-30 MAGTF Command and Control

ACPM-8064 4.0 * B (N) G

Goal. Describe MAGTF communications.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the six characteristics of communications and information systems.
2. Identify the mission and organizational structure of the Communications Battalion.
3. Identify the purpose of the Communications-Electronics Operating Instructions (CEOI) and what information is usually included in it.
4. Identify what information can be found in Annex K of an operations order.
5. Identify the purpose of select fires, support, and ACE specific radio nets.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCRP 3-30B.2 MAGTF Communications System

ACPM-8065 4.0 * B (N) G

Goal. Describe phasing control ashore.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify types of amphibious operations and how command relationships may change during the conduct of each.

2. Identify how disputes among commanders during amphibious operations are resolved.
3. Identify the key commanders and command relationships.
4. Identify the key characteristics of each phase in phasing the MACCS ashore.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-02 Amphibious Operations
2. MCTP 3-20F Control of Aircraft and Missiles (Appendix C)

ACPM-8066	4.0	*	B	(N)	G
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Goal. Describe information management.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the principles of information management with their descriptions.
2. Define each of the classes of information within an information hierarchy.
3. List the characteristics of quality information.
4. Identify the role and responsibilities of an Information Management Officer (IMO).
5. Define C2 support structure and the three steps followed to develop one.
6. Identify the purpose of an information management matrix and the information management plan.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCTP 3-30B Information Management

ACPM-8067	4.0	*	B	(N)	G
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Goal. Describe Unmanned Aircraft Systems in support of MAGTF operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the four types of payloads.
2. Identify the three attributes that determine UAS Groups.
3. Identify the five different UAS Group Categories.
4. Identify the two types of VMU operational employment.
5. Identify the three components of the RQ-7B Communications Relay Package.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-42.1A
2. NTTP 3-22.3-VMU

ACPM-8080 1.0 * B (N) G

Goal. Describe the MAGTF stage of the joint air operations stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Reference. C3 Course Catalog.

ACPM-8081 4.0 * B (N) G

Goal. Describe the command and control of joint air operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the definition of joint air operations.
2. Identify the Joint Force Air Component Commander's responsibilities.
3. Identify the five sections that comprise the Joint Air Operations Center. Identify the six phases of the Joint Air Tasking Cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. DOCNET Course 3-30 (<http://www.dtic.mil/doctrine/docnet/>)
2. MAWTS-1 Joint Air Operations Class
3. JP 3-30 C2 of Joint Air Operations

ACPM-8082 4.0 * B (N) G

Goal. Describe theater air ground system (TAGS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. List the primary characteristics of the Theater Air Ground System (TAGS).
2. Identify the elements within the Air Force's Theater Air Control System (TACS) and their primary responsibilities.
3. Identify the aviation command and control elements with the Army Air and Ground System (AAGS) and their primary responsibilities.
4. Identify the aviation elements within the Navy's Composite Warfare Commander (CWC) architecture.
5. Identify the Amphibious Task Force (ATF) construct and its primary responsibilities.

6. Identify the aviation command and control elements within the Special Operations Air-Ground System.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-20.1 Multi-Service Tactics, Techniques, and Procedures for the Theater Air-Ground System

ACPM-8083 4.0 * B (N) G

Goal. Describe joint fire support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define joint fires.
2. Define joint fire support.
3. Identify the steps of the joint fire support planning process.
4. List the various elements of the component commander's fires command and control system.
5. Define the various joint control and coordination measures associated with joint fire support.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-09 Joint Fire Support

ACPM-8084 4.0 * B (N) G

Goal. Describe close air support (CAS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Explain key roles and responsibilities related to the planning and execution of CAS.
2. Detail key steps in the planning and execution of CAS.
3. Describe various coordination measures used in the planning and conduct of CAS.
4. Describe the manner in which the two types of CAS requests are fulfilled.
5. Identify the goal and purpose of synchronizing CAS with surface fires.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-09.3 Close Air Support

ACPM-8085 4.0 * B (N) G

Goal. Describe the joint targeting doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify types of targets.
2. Identify and describe the six phases of the joint targeting cycle.
3. Identify characteristics of a target.
4. Identify and describe steps in dynamic targeting.
5. Describe roles and responsibilities related to the joint targeting process.
6. Describe key products and processes of the joint targeting cycle.
7. Identify key terms related to the joint targeting process.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-60 Joint Targeting

ACPM-8086 4.0 * B (N) G

Goal. Describe the North Atlantic Treaty Organization (NATO).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the composition of the NATO alliance.
2. Identify the three key articles of the NATO alliance.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 NATO Class
2. North Atlantic Treaty Organization Handbook
3. "What is NATO" Brief (http://www.nato.int/welcome/intro_to_NATO_en.ppt)
4. AJP-01(D)

ACPM-8087 4.0 * B (N) G

Goal. Describe the joint airspace control doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the responsibilities of the airspace control authority (ACA).

2. Identify the basic principles for airspace control.
3. Identify the purpose of the airspace control plan (ACP).
4. Identify the purpose of the airspace control order (ACO).
5. Identify the methods of airspace control.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. JP 3-30 C2 of Joint Air Operations
2. JP 3-52 Joint Airspace Control

ACPM-8088	4.0	*	B	(N)	G
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Goal. Describe the joint doctrine for countering air and missile threats.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the purposes of counter air missions (offensive and defensive).
2. Identify roles and responsibilities related to counter air missions.
3. Identify key considerations for the planning of offensive counter air operations.
4. Identify key considerations for the planning of defensive counter air operations.
5. Identify key principles and consideration related to the command and control of counter air operations

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference.

1. JP 3-01 Countering Air and Missile Threats

3.16 SYLLABUS MATRIX.

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)												
ACADEMIC (ACAD) STAGE												
ACAD	0500	Describe general ATC knowledge	B	G	(N)	*	*	1	*	*	*	0500
ACAD	0501	Describe general ATC terminology	B	G	(N)	*	*	1	*	*	*	0501
ACAD	0502	Label the local airfield diagram	B	G	(N)	*	*	1	*	*	*	0502
ACAD	0503	Describe local area/airfield specific information	B	G	(N)	*	*	1	*	*	*	0503
ACAD	0504	Label the location of ATCF emergency/safety equipment	B	G	(N)	*	*	1	*	*	*	0504
ACAD	0505	Describe ATC emergency procedures and policies	B	G	(N)	*	*	1	*	*	*	0505
ACAD	0506	Describe the handling of special flights procedures and policies	B	G	(N)	*	*	1	*	*	*	0506
ACAD	0507	Describe basic weather knowledge	B	G	(N)	*	*	1	*	*	*	0507
ACAD	0508	Identify information contained in local letters of agreement/procedure	B	G	(N)	*	*	1	*	*	*	0508
ACAD	0509	Identify knowledge of ATC publications	B	G	(N)	*	*	1	*	*	*	0509
ACAD	0510	Airfield familiarization	B	G	(N)	*	*	1	*	*	*	0510
ACAD	0520	Describe radio and interphone communications knowledge	B	G	(N)	*	*	1	*	*	*	0520
ACAD	0521	Describe aircraft movement data knowledge	B	G	(N)	*	*	1	*	*	*	0521

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	0522	Describe flight progress strip knowledge	B	G	(N)	*	*	1	*	*	*	0522
ACAD	0523	Describe ATC clearance knowledge and phraseology	B	G	(N)	*	*	1	*	*	*	0523
ACAD	0524	Describe airfield lighting	B	G	(N)	*	*	1	*	*	*	0524
ACAD	0525	Identify requirements and phraseology for special VFR operations	B	G	(N)	*	*	1	*	*	*	0525
ACAD	0526	Explain visual separation, types of approaches, and VFR-on-top procedures	B	G	(N)	*	*	1	*	*	*	0526
ACAD	0527	Define ATC phraseology/communications as it applies to ground control	B	G	(N)	*	*	1	*	*	*	0527
ACAD	0528	Define proper separation to vehicle and aircraft movement as it applies to ground control	B	G	(N)	*	*	1	*	*	*	0528
ACAD	0529	Define ATC phraseology/communications as it applies to local control	B	G	(N)	*	*	2	*	*	*	0529
ACAD	0530	Define proper separation to vehicle and aircraft movement as it applies to local control	B	G	(N)	*	*	2	*	*	*	0530
ACAD	0531	Describe spacing/sequencing/separation in the terminal environment	B	G	(N)	*	*	2	*	*	*	0531
ACAD	0532	Identify radar equipment usage	B	G	(N)	*	*	1	*	*	*	0532
ACAD	0533	Describe radar final control knowledge	B	G	(N)	*	*	2	*	*	*	0533

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	0534	Describe basic radar knowledge	B	G	(N)	*	*	2	*	*	*	0534
ACAD	0535	Describe radar special operations	B	G	(N)	*	*	1	*	*	*	0535
ACAD	0536	Describe arrival/departure/approach control knowledge	B	G	(N)	*	*	2	*	*	*	0536
ACAD	0537	Describe non-radar knowledge	B	G	(N)	*	*	4	*	*	*	0537
ACAD	0538	Describe radar coordination procedures	B	G	(N)	*	*	1	*	*	*	0538
ACAD	0539	Describe radar clearance knowledge	B	G	(N)	*	*	2	*	*	*	0539
ACAD	0540	Describe radar spacing and sequencing procedures	B	G	(N)	*	*	2	*	*	*	0540
ACAD	0550	Describe the duties and responsibilities applicable to supervisor positions	B	G	(N)	*	*	4	*	*	*	0550
ACAD	0551	Discuss the roles and responsibilities of the Training Chief and the training process	B	G	(N)	*	*	2	*	*	*	0551
ACAD	0552	Discuss the roles and responsibilities of the Tower Chief	B	G	(N)	*	*	2	*	*	*	0552
ACAD	0553	Discuss the roles and responsibilities of the Radar Chief	B	G	(N)	*	*	2	*	*	*	0553
ACAD	0554	Discuss aspects of facility management	B	G	(N)	*	*	16	*	*	*	0554
ACAD	0555	Discuss the roles and responsibilities of the ATC Facility Officer (ATCFO)	B	G	(N)	*	*	1	*	*	*	0555
ACAD	0556	Discuss waiver request to required ATC regulations	B	G	(N)	*	*	2	*	*	*	0556
ACAD	0557	Discuss NATOPS Evaluations	B	G	(N)	*	*	2	*	*	*	0557

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	0558	Identify the roles and responsibilities of the Crew Chief	B	G	(N)	*	*	1	*	*	*	0558
ACAD	0560	Discuss airspace and MATC considerations in regard to the Federal Aviation Administration (FAA) or host-nation equivalent	B	G	(N)	*	*	1	*	*	*	0560
ACAD	0561	Discuss the supply requirements and considerations when deploying the MATCD	B	G	(N)	*	*	1	*	*	*	0561
ACAD	0562	Discuss the administrative process of embarkation	B	G	(N)	*	*	1	*	*	*	0562
ACAD	0563	Discuss the process to submit a frequency request	B	G	(N)	*	*	1	*	*	*	0563
ACAD	0564	Describe the elements of Time Phased Force and Deployment Data (TPFDD)	B	G	(N)	*	*	4	*	*	*	0564
ACAD	0565	Describe manning requirements for a MATCD	B	G	(N)	*	*	2	*	*	*	0565
ACAD	0566	Describe the development of a Training and Exercise Employment Plan (TEEP)	B	G	(N)	*	*	4	*	*	*	0566
ACAD	0570	Discuss basic knowledge of the MMT	B	G	(N)	*	*	1	*	*	*	0570
ACAD	0571	Discuss tactical communications terms and procedures	B	G	(N)	*	*	2	*	*	*	0571
ACAD	0572	Discuss the Marine Corps Planning Process	B	G	(N)	*	*	2	*	*	*	0572
ACAD	0573	Discuss the MEU(SOC) mission	B	G	(N)	*	*	1	*	*	*	0573

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	0574	Discuss forward arming and refueling point (FARP) operations	B	G	(N)	*	*	2	*	*	*	0574
ACAD	0576	Identify basic assault zone survey principles	B	G	(N)	*	*	1	*	*	*	0576
ACAD	0577	Identify criteria associated with conducting assault zone survey and assessment	B	G	(N)	*	*	1	*	*	*	0577
ACAD	0578	Identify principles of mathematics and measurement used in survey and assault zone assessment	B	G	(N)	*	*	1	*	*	*	0578
ACAD	0579	Identify the principles involved in conducting soil evaluation during survey and assault zone assessment	B	G	(N)	*	*	1	*	*	*	0579
ACAD	0580	Identify the requirement items for completing survey and assault zone assessment forms	B	G	(N)	*	*	1	*	*	*	0580
ACAD	0581	Discuss the theory of radio wave propagation	B	G	(N)	*	*	4	6045	*	*	*
ACAD	0601	Demonstrate interface coordination knowledge	B	G	(N)	*	*	2	*	*	*	0601
ACAD	0602	Demonstrate link ops messages	B	G	(N)	*	*	2	*	*	*	0602
ACAD	0604	Identify characteristics of Link-16	B	G	(N)	*	*	2	*	*	*	0604
ACAD	0700		B	G	(N)	*	*	1	*	*	*	0700

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	0701	Discuss MATCD communications assets and their associated capabilities	B	G	(N)	*	*	1	*	*	*	0701
ACAD	0703	Discuss rear area security planning	B	G	(N)	*	*	2	*	*	*	0703
ACAD	0704	Discuss the relationship between the MATCD and AGS units aboard a FOB	B	G	(N)	*	*	1	*	*	*	0704
ACAD	0705	Discuss key air C2 planning documents	B	G	(N)	*	*	2	*	*	*	0705
ACAD	0720	Discuss the Integrated Air Defense Systems (IADS) and how it applies to the MATCD	B	G	(N)	*	*	2	*	*	*	0720
ACAD	0721	Discuss Electronic Protection (EP) as it pertains to MATCD	B	G	(N)	*	*	2	*	*	*	0721
ACAD	0722	Discuss the planning considerations for a BDZ	B	G	(N)	*	*	2	*	*	*	0722
TOTAL ACADEMIC (ACAD) STAGE				EVENTS		59	HOURS	97				
AIR TRAFFIC CONTROL (ATC) STAGE												
ATC	1100	Introduce basic fundamentals	B	G	(N)	*	*	0	*	*	*	1100
ATC	1105	Introduce weather as applied to ATC	B	G	(N)	*	*	0	*	*	*	1105
ATC	1110	Introduce airspace, navigation, and time as applied in ATC	B	G	(N)	*	*	0	*	*	*	1110
ATC	1115	Introduce special use airspace (SUA) used by the military	B	G	(N)	*	*	0	*	*	*	1115
ATC	1120	Introduce navigational aids (NAVAIDS)	B	G	(N)	*	*	0	*	*	*	1120
ATC	1125	Introduce charts and publications used in ATC	B	G	(N)	*	*	0	*	*	*	1125

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ATC	1130	Introduce communications as applied in ATC	B	G	(N)	*	*	0	*	*	*	1130
ATC	1135	Introduce airport design and ATC equipment	B	G	(N)	*	*	0	*	*	*	1135
ATC	1140	Introduce general control tower procedures	B	G	(N)	*	*	0	*	*	*	1140
ATC	1145	Introduce ATC terminal procedures	B	G	(N)	*	*	0	*	*	*	1145
ATC	1150	Introduce emergencies and special handling	B	G	(N)	*	*	0	*	*	*	1150
ATC	1155	Introduce non-radar procedures	B	G	(N)	*	*	0	*	*	*	1155
ATC	1160	Pass the Airmen’s Written Test (AWT)	B	G	(N)	*	*	0	*	*	*	1160
ATC	1200	Control tower indoctrination	B	G	(N)	*	*	0	*	*	*	1200
ATC	1205	Control tower indoctrination	B	G	(N)	*	*	0	*	*	*	1205
ATC	1210	Introduce basic radar knowledge	B	G	(N)	*	*	0	*	*	*	1210
ATC	1305	Introduce basic radar services provided by ATC	B	G	(N)	*	*	0	*	*	*	1305
ATC	1310	Introduce the airport surveillance radar (ASR)	B	G	(N)	*	*	0	*	*	*	1310
ATC	1315	Perform airport surveillance radar (ASR) services	B	G	(N)	*	*	0	*	*	*	1315
ATC	1320	Introduce the precision approach radar (PAR)	B	G	(N)	*	*	0	*	*	*	1320
ATC	1325	Perform PAR services	B	G	(N)	*	*	0	*	*	*	1325
ATC	1330	Introduce arrival control	B	G	(N)	*	*	0	*	*	*	1330
ATC	1335	Perform arrival control services	B	G	(N)	*	*	0	*	*	*	1335
TOTAL ATC STAGE				EVENTS		23	HOURS	0				
TOTAL HOURS CORE SKILL INTRODUCTION TRAINING (1000 PHASE)								0				

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CORE SKILL TRAINING (2000 PHASE EVENTS)												
ORIENTATION (ORNT) STAGE												
ORNT	2000	Identify common ATC knowledge applicable to the control tower and radar ATC facility (RATCF)	B	G	(N)	*	*	2	0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509	*	*	2000
TOTAL HOURS ORIENTATION (ORNT) STAGE				EVENTS		1	HOURS	2				
EQUIPMENT (EQPT) STAGE												
EQPT	2001	Describe MATCD equipment	B	G	(N)	*	*	1	*	*	*	2001
EQPT	2002	Identify the capabilities and limitations of the AN/TSQ-120	B	G	(N)	*	*	1	*	*	*	2002
EQPT	2003	Operate fixed control tower structure equipment	B	L	(N)	*	*	4	*	*	*	2003
EQPT	2005	Identify the capabilities of the AN/TSQ-216	B	G	(N)	*	*	1	*	*	*	2005
EQPT	2006	Identify the capabilities and limitations of the AN/TPN-31	B	G	(N)	*	*	2	*	*	*	2006
EQPT	2007	Configure the AN/TPN-31 for operations	B,R,M	L	(N)	730	*	1	2006	*	*	2007
EQPT	2008	Configure video maps for the AN/TPN-31	B,R,M	L	(N)	730	*	3	2006, 2007	*	*	2008
EQPT	2009	Identify the capabilities and limitations of the AN/TSQ-263	B	G	(N)	*	*	3	*	*	*	2009
EQPT	2011	Identify the capabilities and limitations of the MATCD Tactical Air Navigation (TACAN) sets	B	G	(N)	*	*	1	*	*	*	2011

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
EQPT	2012	Identify the capabilities and limitations of the AN/MRQ-13	B	G	(N)	*	*	1	*	*	*	*
EQPT	2019	Operate flight data and radar equipment	B	L	(N)	*	*	12	*	*	*	*
EQPT	2022	Operate the dynamic cone penetrometer (DCP)	B	L	(N)	*	*	2	*	*	*	2022
EQPT	2023	Operate a laser range finder (LRF)	B	L	(N)	*	*	2	*	*	*	2023
EQPT	2024	Operate the theodolite	B	L	(N)	*	*	4	*	*	*	2024
EQPT	2025	Operate a handheld GPS receiver	B,R,M	L	(N)	1460	*	2	2210	*	*	2025
EQPT	2026	Employ the AN/TRN-47 Tactical Air Navigation System (TACAN)	B	L	(N)	*	*	2	*	*	*	2026
EQPT	2031	Operate a NVD while performing ATC duties	B,R,M	L	NS	1460	*	1	6520	*	*	2031
TOTAL HOURS EQUIPMENT (EQPT) STAGE				EVENTS		17	HOURS	43				
EXPEDITIONARY (EXPD) STAGE												
EXPD	2101	State the considerations required to conduct a MATCD site survey	B	G	(N)	*	*	4	*	*	*	2101
EXPD	2104	Relay a completed casualty evacuation (CASEVAC) request	B,R,M	S/L	(N)	365	*	2	*	*	*	2104
EXPD	2105	Complete joint tactical airstrike request (JTAR) and assault support request forms	B,R,M	S/L	(N)	730	*	2	*	*	*	*
EXPD	2120	Describe the configuration and operation of a Tactical Air Command Center (TACC)	B	G	(N)	*	*	1	8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008	*	*	2020

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
EXPD	2121	Describe the configuration and operation of Tactical Air Operations Center (TAOC)	B	G	(N)	*	*	1	8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8009	*	*	2121
EXPD	2122	Describe the configuration and operation of Direct Air Support Center (DASC)	B	G	(N)	*	*	1	8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8010	*	*	2122
EXPD	2123	Describe the configuration and operation of a Low Altitude Air Defense (LAAD) section	B	G	(N)	*	*	1	8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8011	*	*	2123
EXPD	2124	Describe the configuration and operation of an Unmanned Aircraft System (UAS) site	B	G	(N)	*	*	1	8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8012	*	*	2124
EXPD	2130	Operate the Air Traffic Control Central (AN-TSQ-120) and associated equipment	B,R,M	L	(N)	730	*	4	2002	*	*	2130
EXPD	2131	Operate the Remote Landing Site Tower (AN-TSQ-216) and associated equipment	B,R,M	L	(N)	730	*	2	2005	*	*	2131
TOTAL EXPEDITIONARY (EXPD) STAGE				EVENTS		10	HOURS	19				
COMMUNICATIONS (COMM) STAGE												
COMM	2200	Operate UHF/VHF/SATCOM man-pack communications equipment	B,R,M	L	(N)	730	*	4	2208, 2209, 2210	*	*	2200
COMM	2204	Operate HF man-pack communications equipment	B,R,M	L	(N)	730	*	4	2208, 2209, 2210	*	*	2204

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
COMM	2205	Operate intra-team communications equipment	B,R,M	L	(N)	730	*	4	2208, 2209, 2210	*	*	2205
COMM	2206	Operate ATC communications equipment	B,R,M	L	(N)	1460	*	2	*	*	*	2206
COMM	2208	Describe proper handling and storage of classified materials	B	G	(N)	*	*	2	*	*	*	2208
COMM	2209	Extract key material information from CSM COMSEC callout	B	L	(N)	*	*	2	2208	*	*	2209
COMM	2210	Operate a common fill device (CFD)	B,R,M	L	(N)	730	*	2	2208, 2209	*	*	2210
COMM	2211	Construct a functional single or multi-band field expedient antenna for secure and non-secure high frequency voice and data communications	B,R,M	L	(N)	730	*	8	0581, 2204, 2208, 2209, 2210	*	*	*
TOTAL AIRFIELD COMMUNICATION STAGE				EVENTS		8	HOURS	28				
MATC MOBILE TEAM LEADER (MMTL) STAGE)												
MMTL	2300	Develop and issue a five paragraph order	B,R,M	L	(N)	730	*	2	6046	*	*	2300
MMTL	2301	Conduct survey and assessment of a fixed-wing landing zone	B,R,M	L	(N)	730	*	8	0576, 0577, 0578, 0579, 0580, 6200	*	*	2301
MMTL	2302	Conduct survey and assessment of a helicopter/tiltrotor landing zone	B,R,M	L	(N)	730	*	8	0576, 0577, 0578, 0579, 0580, 6200	*	*	*
MMTL	2303	Conduct survey and assessment of a drop zone	B,R,M	L	(N)	730	*	8	0576, 0577, 0578, 0579, 0580, 6200	*	*	*

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
MMTL	2304	Submit a completed survey for inclusion in the Zone Availability Report database	B,R,M	S/L	(N)	730	*	2	0576, 0577, 0578, 0579, 0580, 2301, 2302, 2303, 6200	*	*	*
TOTAL MATC MOBILE TEAM LEADER (MMTL) STAGE				EVENTS		5	HOURS	28				
MATC MOBILE TEAM MEMBER (MMTM) STAGE												
MMTM	2310	Conduct assault landing zone (ALZ) operations	B,R,M	L	(N)	730	*	6	0570, 0571, 0573, 0574, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	2310
MMTM	2311	Conduct Helicopter Landing Zone (HLZ) Operations	B,R,M	L	(N)	730	*	4	0570, 0571, 0573, 0574, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	2311
MMTM	2312	Conduct land navigation operations	B,R,M	L	(N)	730	*	12	2025, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	2312
MMTM	2313	Collect assault zone survey data using equipment organic to the MMT	B,R,M	L	(N)	730	*	12	2022, 2023, 2025, 2208, 2209, 2210, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	2313
TOTAL MATC MOBILE TEAM MEMBER (MMTM) STAGE				EVENTS		4	HOURS	34				
TERMINAL INSTRUMENT PROCEDURES (TERPS) STAGE												

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TERPS	2500	Identify the roles of organizations that support the development, approval and inspection of instrument procedures	B	G	(N)	*	*	2	*	*	*	2500
TERPS	2501	Identify required publications and their usage in developing Navy/Marine Corps terminal instrument procedures	B	G	(N)	*	*	2	*	*	*	2501
TERPS	2502	Explain the administrative policies which govern the development of terminal instrument procedures	B	G	(N)	*	*	2	*	*	*	2502
TERPS	2503	Identify the general requirements for submission and approval of terminal instrument procedures	B	G	(N)	*	*	8	*	*	*	2503
TERPS	2504	Describe general criteria that can be applied to the development of all instrument procedures	B	G	(N)	*	*	8	2500, 2501, 2502, 2503	*	*	2504
TOTAL TERPS STAGE				EVENTS		5	HOURS	22				
TACTICAL DATA LINKS (TDL) STAGE												
TDL	2800	Identify the purpose of documents that enable Tactical Data Link (TDL) operations	B	G	(N)	*	*	2	*	*	*	2800
TDL	2806	Identify MATC voice and data communications equipment	B	G	(N)	*	*	2	*	*	*	2806
TDL	2808	Describe the Joint Data Network	B	G	(N)	*	*	1	*	*	*	2808

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TDL	2811	Identify basic track data	B	G	(N)	*	*	2	*	*	*	2811
TDL	2812	Identify information contained within J-Series Messages that may be displayed to the operator	B	G	(N)	*	*	2	*	*	*	2812
TDL	2819	State the characteristics of the Joint Range Extension Application Protocol (JREAP)	B	G	(N)	*	*	2	*	*	*	2819
TDL	2820	Identify mission essential segments, sets, and fields within the OPTASK LINK message	B	G	(N)	*	*	2	*	*	*	2820
TDL	2838	Operate JREAP A	B	L	(N)	*	*	8	*	*	*	2838
TDL	2842	Operate JREAP C	B	L	(N)	*	*	8	*	*	*	2842
TOTAL TACTICAL DATA LINKS (TDL) STAGE				EVENTS		9	HOURS	29				
COMMAND AND CONTROL SYSTEM (C2SYS) STAGE												
C2SYS	2900	Demonstrate proficiency logging on a TBMCS client	B,R	G	(N)	*	*	0.5	*	*	*	2900
C2SYS	2901	Demonstrate proficiency with accessing TBMCS Online Master Help Index	B,R	G	(N)	*	*	0.5	*	*	*	2901
C2SYS	2905	Demonstrate proficiency utilizing the Air Tasking Order Airspace Control Order Tool (AATWEB)	B,R	G	(N)	*	*	1	*	*	*	2905
C2SYS	2906	Demonstrate proficiency with the TBMCS Web Based Airspace Deconfliction Software (WEBAD)	B,R	G	(N)	*	*	4	*	*	*	*

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
C2SYS	2909	Demonstrate proficiency using the TBMCS Force Status and Monitoring (FSTAT) tool to monitor and update Friendly Order of Battle (FrOB) status	B, R	G	(N)	*	*	2	*	*	*	2909
C2SYS	2913	Demonstrate proficiency importing an airspace group in TBMCS	B,R	G	(N)	*	*	4	*	*	*	2913
C2SYS	2917	Demonstrate proficiency publishing the ATO	B,R	G	(N)	*	*	1	*	*	*	2917
C2SYS	2921	Demonstrate proficiency operating C2 Personal Computer (C2PC)	B,R	G	(N)	*	*	4	*	*	*	2921
C2SYS	2940	Demonstrate proficiency utilizing tactical chat	B,R	G	(N)	*	*	1	*	*	*	2940
TOTAL C2SYS STAGE				EVENTS		8	HOURS	18				
TOTAL HOURS CORE SKILL TRAINING (2000 PHASE)								223				
MISSION SKILL TRAINING (3000 PHASE EVENTS)												
ADMINISTRATIVE (ADMN) STAGE												
ADMN	3001	Prepare a flight inspection/certification for an ATCF or MATCD	B,R,M	L	(N)	1095	*	8	2024, 2025, 2101, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3401	*	*	3001
ADMN	3002	Prepare a Letter of Agreement (LOA)/Letter of Procedure (LOP) and a Memorandum of Understanding (MOU)	B	L	(N)	*	*	4	*	*	*	3002
ADMN	3003	Submit an ATC T&RMOS Qualification Waiver Package	B	S/L	(N)	*	*	4	*	*	*	3003
ADMN	3005	Staff a waiver request to required ATC regulations	B	L	(N)	*	*	8	*	*	*	3005

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ADMN	3006	Discuss the FAA credentialing process	B	G	(N)	*	*	1	*	*	*	3006
TOTAL HOURS ADMINISTRATIVE STAGE				EVENTS		5	HOURS	25				
MARINE AIR TRAFFIC CONTROL MOBILE TEAM LEADER (MMTL) STAGE												
MMTL	3300	Perform as a MMT Leader during operational planning	B,R,M	L	(N)	730	*	12	0576, 0577, 0578, 0579, 0580, 0581, 2211, 2300, 2301, 2302, 2303, 2304, 3630, 6200	*	*	3300
MMTL	3301	Perform as a MMT Leader during ALZ operations	B,R,M	L	(N)	730	*	2	3300, 3630, 6200	*	*	3301
MMTL	3302	Perform as a MMT Leader during FARP operations	B,R,M	L	(N)	730	*	2	3300, 3630, 6200	*	*	3302
TOTAL MMTL STAGE				EVENTS		3	HOURS	16				
MARINE AIR TRAFFIC CONTROL MOBILE TEAM MEMBER (MMTM) STAGE												
MMTM	3310	Perform as a MMT Member during operational planning	B,R,M	L	(N)	730	*	4	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 0529, 0570, 0571, 0573, 0574, 0581, 2000, 2003, 2009, 2022, 2023, 2025, 2026, 2031, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2310, 2311, 2312, 2313, 3600, 3620, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	3310

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
MMTM	3311	Perform as a MMT Member during ALZ operations	B,R,M	L	(N)	730	*	2	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 0529, 0570, 0571, 0573, 0574, 2000, 2003, 2009, 2022, 2023, 2025, 2026, 2031, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2310, 2311, 2312, 2313, 3310, 3600, 3620, 6150, 6170, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	3311
MMTM	3312	Perform as a MMT Member during FARP operations	B,R,M	L	(N)	730	*	2	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 0529, 0570, 0571, 0573, 0574, 2000, 2003, 2009, 2022, 2023, 2025, 2026, 2031, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2310, 2311, 2312, 2313, 3310, 3600, 3620, 6150, 6170, 6045, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	3312
TOTAL MMTM STAGE				EVENTS		3	HOURS	8				
EXPEDITIONARY (EXPD) STAGE												

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
EXPD	3400	Conduct a MATCD site survey	B,R,M	L	(N)	730	*	8	*	*	*	3400
EXPD	3401	Compile the necessary airport information to develop instrument procedures	B,R,M	L	(N)	365	*	8	2024, 2025, 2101, 2208, 2209, 2210, 2501, 2502, 2503, 2504	*	*	3401
EXPD	3402	Describe airspace coordination measures	B	S/L	(N)	*	*	4	0705	*	*	3402
EXPD	3404	Plan base defense zone operations	B	S/L	(N)	*	*	8	0720, 0722	*	*	3404
EXPD	3405	Develop MATCD communications architecture	B	S/L	(N)	*	*	8	2001, 2002, 2005, 2006, 2009, 2011, 2026	*	*	3405
EXPD	3406	Plan launch and recovery operations in EMCON conditions	B	L	(N)	*	*	4	0571, 0721	*	*	3406
EXPD	3420	Utilize an execution checklist	B	L	(N)	*	*	4	*	*	*	*
TOTAL EXPEDITIONARY (EXPD) STAGE				EVENTS		7	HOURS	44				
MACS OPERATIONS (OPS) STAGE												
OPS	3450	Plan the deployment of a MACS MATC detachment	B	S/L	(N)	*	*	8	0561, 0562, 0563, 0564, 0565	*	*	3450
OPS	3451	Develop a manning document for a MACS MATC detachment	B,R,M	S/L	(N)	365	*	4	0565	*	*	3451
OPS	3452	Provide a Concept of Employment (COE) Brief	B,R,M	S/L	(N)	365	*	8	*	*	*	3452
OPS	3453	Develop an Equipment Density List (EDL) for a MACS MATC detachment	B	S/L	(N)	*	*	4	0562	*	*	3453
OPS	3455	Develop a Training Exercise and Employment Plan (TEEP)	B,R,M	S/L	(N)	730	*	2	0566	*	*	3455
OPS	3456	Develop a Pre-deployment Training Program schedule	B	S/L	(N)	*	*	8	*	*	*	3456

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TOTAL MACS OPERATIONS (OPS)) STAGE				EVENTS		6	HOURS	34				
TOWER (TWR) STAGE												
TWR	3600	Perform as a Tower Flight Data (TFD) Controller	B,R,M	L/S	(N)	1460	*	200	0520, 0521, 0522, 0523, 2000, 2003, 2019, 2206	*	*	3600
TWR	3610	Perform the duties of a Clearance Delivery (CD)	B,R,M	L/S	(N)	1460	*	80	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 2000, 2019, 2206	*	*	3610
TWR	3620	Perform the duties of a Tower Ground Controller (TGC)	B,R,M	L/S	(N)	1460	*	320	0500, 0501, 0502, 0503, 0506, 0507, 0509, 00520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 2000, 2003, 2206	*	*	3620
TWR	3630	Perform the duties of a Tower Local Controller (TLC)	B,R,M	L/S	(N)	1460	*	440	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0529, 0530, 0531, 2000, 2003, 2206	*	*	3630
TOTAL TOWER (TWR) STAGE				EVENTS		4	HOURS	1040				
RADAR (RDR) STAGE												
RDR	3700	Perform the duties of a Radar Flight Data Controller (RFD)	B,R,M	L/S	(N)	1460	*	320	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0532, 0534, 0538, 2000, 2019, 2206	*	*	3700
RDR	3710	Perform the duties of a Radar Final Controller (RFC)	B,R,M	L/S	(N)	1460	*	240	0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0520, 0521, 0522, 0532, 0533, 0534, 0538, 2000, 2206	*	*	3710

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
RDR	3720	Perform the duties of an Arrival/Departure Controller (ADC)	B,R,M	L/S	(N)	1460	*	440	0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2206	*	*	3720
RDR	3730	Perform non radar operations	B,R,M	S/L	(N)	1460	*	80	0537	*	*	*
RDR	3731	Perform the duties of an Approach Controller (APC)	B,R,M	L/S	(N)	1460	*	520	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2000, 2206, 3730	*	*	3731
TOTAL RADAR (RDR) STAGE				EVENTS		5	HOURS	1600				
COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE												
C2SYS	3910	Demonstrate proficiency with the TBMCS Execution Status and Monitoring (ESTAT) tool	B,R	G	(N)	*	*	2	*	*	*	3910
C2SYS	3940	Demonstrate proficiency utilizing tactical chat	B,R,M	G	(N)	1460	*	1	*	*	*	3940
C2SYS	3941	Demonstrate proficiency operating Web Development Software (i.e., SharePoint)	B,R	G	(N)	*	*	4	*	*	*	3941
TOTAL C2SYS STAGE				EVENTS		3	HOURS	7				
TOTAL HOURS MISSION SKILL TRAINING (3000 PHASE)								2770				
CORE PLUS SKILL TRAINING (4000 PHASE EVENTS)												
EXPEDITIONARY (EXPD) STAGE												
EXPD	4000	Perform as a MATC Liaison Officer	B	L	(N)	*	*	1	*	*	*	4000

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
EXPD	4001	Describe the configuration and operation of an Unmanned Aircraft System (UAS) site	B	G	(N)	*	*	1	8000	*	*	*
EXPD	4012	Plan rear area operations	B	G	(N)	*	*	6	0703	*	*	4012
EXPD	4016	Plan physical security for classified areas	B	G	(N)	*	*	2	*	*	*	4016
EXPD	4017	Perform as a Landing Zone Safety Officer (LZSO)	B,R,M	L	(N)	730	*	8	*	*	*	*
EXPD	4018	Perform as a Landing Zone Controller (LZC)	B,R,M	L	(N)	730	*	8	0576, 0577, 0578, 0579, 0580, 2301, 2302, 2303, 2304	*	*	*
TOTAL HOURS EXPEDITIONARY (EXPD) STAGE				EVENTS		6	HOURS	26				
TOTAL HOURS CORE PLUS SKILL TRAINING (4000 PHASE)								26				
MISSION PLUS SKILL TRAINING (4500 PHASE)												
TERPS INSTRUMENT PROCEDURES (TERPS) STAGE												
TERPS	4500	Develop a standard instrument departure procedure	B,R,M	L	(N)	365	*	4	2024, 2025, 2101, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 2510, 3401	*	*	4500
TERPS	4501	Describe criteria required to develop RNAV (GPS) procedures	B,R,M	L	(N)	365	*	16	2500, 2501, 2502, 2503, 2504, 2505	*	*	4501
TERPS	4502	Develop an RNAV (GPS) procedure	B,R,M	L	(N)	365	*	16	2024, 2025, 2101, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 2505	*	*	4502
TOTAL HOURS TERPS STAGE				EVENTS		3	HOURS	36				
TACTICAL DATA LINKS (TDL) STAGE												
TDL	4808	Describe the Joint Data Network	B	G	(N)	*	*	1	*	*	*	4808

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TDL	4809	Describe the Multi-Tactical Data Link (TDL) Interface	B	G	(N)	*	*	1	*	*	*	4809
TDL	4817	Define terms associated with Link 16	B	G	(N)	*	*	3	*	*	*	4817
TDL	4818	State the characteristics of Link 16	B	G	(N)	*	*	3	*	*	*	4818
TDL	4819	Configure the Air Defense System Integrator (ADSI)	B	L	(N)	*	*	2	*	*	*	2829
TDL	4820	Operate an Air Defense Systems Integrator (ADSI)	B	L	(N)	*	*	2	*	*	*	2830
TDL	4821	Setup JREAP A equipment	B	L	(N)	*	*	2	*	*	*	2837
TDL	4823	Setup JREAP B equipment	B	L	(N)	*	*	2	*	*	*	2839
TDL	4824	Operate JREAP B	B	L	(N)	*	*	8	*	*	*	2840
TDL	4825	Setup JREAP C equipment	B	L	(N)	*	*	2	*	*	*	2841
TDL	4826	Troubleshoot JREAP A	B	L	(N)	*	*	3	*	*	*	2846
TDL	4827	Troubleshoot JREAP B	B	L	(N)	*	*	3	*	*	*	2847
TDL	4828	Troubleshoot JREAP C	B	L	(N)	*	*	3	*	*	*	2848
TOTAL HOURS TDL STAGE				EVENTS		13	HOURS	35				
COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE												
C2SYS	4902	Demonstrate proficiency with utilizing the TBMCS Alerts Service Web Applications	B,R	G	(N)	*	*	0.5	*	*	*	4902
C2SYS	4904	Demonstrate proficiency with TBMCS Web Mapping	B,R	G	(N)	*	*	1	*	*	*	4904
C2SYS	4906	Demonstrate proficiency with the TBMCS Web Based Airspace Deconfliction Software (WEBAD)	B,R	G	(N)	*	*	4	*	*	*	4906

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
C2SYS	4922	Demonstrate proficiency operating Blue Force Tracker (BFT) equipment	B,R	G	(N)	*	*	4	*	*	*	4922
TOTAL HOURS TDL STAGE				EVENTS		4	HOURS	9.5				
TOTAL HOURS MISSION PLUS SKILL TRAINING (4500 PHASE)								80.5				
INSTRUCTOR TRAINING (5000 PHASE EVENTS)												
INSTRUCTOR UNDER TRAINING (IUT) STAGE												
IUT	5000	Introduce principals of instruction	B	L	(N)	*	*	2	*	*	*	5000
IUT	5010	Describe individual T&R requirements	B	G	(N)	*	*	2	*	*	*	5010
IUT	5020	Conduct T&R instruction	B,R,M	L	(N)	365	*	12	5000, 5010	*	*	5020
IUT	5100	Describe the Aviation Training and Readiness (T&R) Program	B	L	(N)	*	*	2	*	*	*	5100
IUT	5110	Conduct instructor evaluations	B,R,M	L	(N)	365	*	4	5100	*	*	5110
IUT	5120	Perform T&R administration	B	L	(N)	*	*	2	5100, 5110	*	*	5120
IUT	5130	Develop a training plan	B	L	(N)	*	*	2	5120	*	*	5130
TOTAL HOURS INSTRUCTOR UNDER TRAINING (IUT) STAGE								26				
TOTAL HOURS INSTRUCTOR TRAINING (5000 PHASE)				EVENTS		7	HOURS	26				
REQUIREMENTS, QUALIFICATIONS, CERTIFICATIONS, AND DESIGNATIONS (RQCD) (6000 PHASE EVENTS)												
SCHOOL CODES												
SCHL	6000	Weapons and Tactics Instructor Course	B	G	(N)	*	*	0.5	6320, 6321, 8000, 8020, 8040, 8060, 8080	*	*	6000
SCHL	6002	Air Command and Control Officer's Course	B	G	(N)	*	*	0.5	*	*	*	6002
SCHL	6003	MAWTS-1 Air Tasking Order Development Course, MCAS Yuma, AZ	B	G	(N)	*	*	0.5	*	*	*	6003

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SCHL	6004	Marine Air Traffic Control Mobile Team Instructor Course (ATCIC)	B	G	(N)	*	*	0.5	*	*	*	6004
SCHL	6010	AOCIQT (Airspace) Course	B	G	(N)	*	*	0.5	*	*	*	6010
SCHL	6011	AOCIQT (Personnel Recovery) Course	B	G	(N)	*	*	0.5	*	*	*	6011
SCHL	6015	Joint Air and Space Operations Center Command and Control Course (JAOC2C)	B	G	(N)	*	*	0.5	*	*	*	6015
SCHL	6020	Introduction to Multi-TDL Network Operations (JT-101)	B	G	(N)	*	*	0.5	*	*	*	6020
SCHL	6022	Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102)	B	G	(N)	*	*	0.5	*	*	*	6022
SCHL	6043	Air Traffic Control Manager Course	B	G	(N)	*	*	0.5	*	*	*	6043
SCHL	6045	Propagation of radio waves and antenna construction Marine Net course	B	G	(N)	*	*	0.5	*	*	*	6045
SCHL	6046	MarineNet Course M00CO_0799, Combat Orders	B	G	(N)	*	*	0.5	*	*	*	6046
SCHL	6065	USAF Flight Procedures (TERPS-S)	B	G	(N)	*	*	0.5	*	*	*	6065
SCHL	6066	Certify as a MAWTS-1 Survey and Assault Zone Assessment MMT Leader	B	G	(N)	*	*	0.5	6200, 6210, 6401, 6530, 6180, 6200, 6210, 6324, 6530, 6540	*	*	6066
SCHL	6067	Military Airspace Management Course	B	G	(N)	*	*	0.5	*	*	*	6067
SCHL	6096	Formal Learning Center (FLC) Instructor	B	G	(N)	*	*	0.5	*	*	*	6096
TOTAL HOURS SCHOOL CODES (SCHL) STAGE				EVENTS		17	HOURS	8.5				

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CERTIFICATION (CERT) STAGE												
CERT	6520	Complete the MATC NITE Lab course	B	G	(N)	*	*	4	*	*	*	6520
CERT	6530	Certify as a MAWTS-1 Survey and Assault Zone Assessment (M-SAAZA) Landing Zone Safety Officer (LZSO)	B	G	(N)	*	*	40	4017, 4018	*	*	*
CERT	6540	Certify as a MAWTS-1 Survey and Assault Zone Assessment (M-SAAZA) Landing Zone Controller (LZC)	B	G	(N)	*	*	40	4017, 4018	*	*	*
TOTAL HOURS CERTIFICATION (CERT) STAGE				EVENTS		3	HOURS	84				
QUALIFICATION (QUAL) STAGE												
QUAL	6100	Qualify as Radar Flight Data Controller (RFD)	B,R,M	L	(N)	365	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0534, 0538, 2000, 2019, 2206, 3700	*	*	6100
QUAL	6110	Qualify as a Radar Final Controller (RFC)	B,R,M	L	(N)	365	*	1	. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0523, 0523, 0532, 0533, 0534, 0538, 2000, 2206, 3710	*	*	6110

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
QUAL	6120	Qualify as a Radar Arrival/Departure Controller (ADC)	B,R,M	L	(N)	365	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2000, 2206, 3720, 3730, 8000, , 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008	*	*	6120
QUAL	6130	Qualify as a Radar Approach Controller (APC)	B,R,M	L	(N)	365	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 2000, 2206, 3730, 3731, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008	*	*	6130
QUAL	6150	Qualify as a Tower Flight Data (TFD) Controller	B,R,M	L	(N)	365	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 2000, 2003, 2019, 2206, 3600	*	*	6150
QUAL	6160	Qualify as Clearance Delivery (CD)	B,R,M	L	(N)	365	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 2000, 2019, 2206, 3610	*	*	6160
QUAL	6170	Qualify as a Tower Ground Controller (TGC)	B,R,M	L	(N)	365	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 2000, 2003, 2206, 3620	*	*	6170

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
QUAL	6180	Qualify as a Tower Local Controller (TLC)	B,R,M	L	(N)	365	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0529, 0530, 0531, 2000, 2003, 2206, 3630, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008	*	*	6180
QUAL	6200	Qualify as an MMT Member (MMTM)	B,R,M	L	(N)	730	*	2	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0527, 0528, 0529, 0570, 0571, 0573, 0574, 2000, 2003, 2019, 2022, 2023, 2025, 2026, 2031, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2310, 2311, 2312, 2313, 3310, 3311, 3312, 3600, 3620, 6150, 6170, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	6200

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
QUAL	6210	Qualify as a MMT Leader (MMTL)	B,R,M	L	(N)	730	*	2	6046, 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0570, 0571, 0573, 0574, 0576, 0577, 0578, 0579, 0580, 2000, 2003, 2005, 2019, 2022, 2023, 2025, 2026, 2031, 2104, 2120, 2122, 2123, 2124, 2200, 2204, 2205, 2206, 2208, 2209, 2210, 2300, 2301, 2302, 2310, 2311, 2312, 2313, 3300, 3301, 3302, 3310, 3311, 3312, 3600, 3620, 3630, 6150, 6170, 6180, 6200, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	6210
QUAL	6220	Qualify as a Tactical Information Manager (TIM)	B,R,M	L	(N)	730	*	2	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0520, 0521, 0522, 0523, 0534, 0538, 0601, 0602, 0604, 2000, 2019, 2206, 2800, 2806, 2808, 2811, 2812, 2819, 2820, 2829, 2830, 2837, 2838, 2839, 2840, 2841, 2842, 2900, 2901, 2905, 2909, 2913, 2917, 2921, 2940, 3700, 3921, 6020, 6100	*	*	6220
TOTAL HOURS QUALIFICATION (QUAL) STAGE				EVENTS		3	HOURS	4				

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESIGNATION (DESG) STAGE												
DESG	6240	Designation as a Radar Supervisor (RS)	B	G	(N)	*	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 2000, 2019, 2206, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 6100, 6110, 6120, 6130, 6320, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	6240

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6241	Designation as a Radar Chief (RC)	B	G	(N)	*	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 0551, 0553, 0554, 0560, 2000, 2019, 2024, 2025, 2101, 2206, 2208, 2209, 2500, 2501, 2502, 2503, 2504, 2506, 3001, 3002, 3005, 3006, 3401, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6100, 6110, 6120, 6130, 6240, 6241, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067	*	*	6241

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6242	Designation as a Tower Supervisor (TS)	B	G	(N)	*	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0550, 2000, 2003, 2019, 2206, 3600, 3610, 3620, 3630, 5000, 5010, 5020, 6150, 6160, 6170, 6180, 6320, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	6242

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6243	Designation as a Tower Chief (TC)	B	G	(N)	*	*	1	. 0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0550, 0551, 0552, 0554, 0560, 2000, 2003, 2019, 2024, 2025, 2101, 2206, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3005, 3006, 3401, 3600, 3610, 3620, 3630, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6150, 6160, 6170, 6180, 6242, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067	*	*	6243

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6244	Designation as a Training Chief (TRNC)	B	G	(N)	*	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 0551, 0552, 0553, 0554, 2000, 2003, 2019, 2206, 2500, 2501, 2502, 2503, 2504, 3002, 3003, 3006, 3600, 3610, 3620, 3630, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6100, 6110, 6120, 6130, 6150, 6160, 6170, 6180, 6240, 6242, 6244, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067	*	*	6244

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6247	Designation as a MATC Detachment Radar Chief (RDRC)	B	G	(N)	*	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0525, 0526, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0550, 0551, 0553, 0554, 0560, 0571, 0705, 0720, 0721, 0722, 2000, 2001, 2002, 2005, 2006, 2007, 2008, 2009, 2011, 2019, 2024, 2025, 2026, 2101, 2104, 2120, 2121, 2122, 2123, 2124, 2130, 2131, 2203, 2206, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3400, 3401, 3402, 3403, 3404, 3404, 3405, 3406, 3700, 3710, 3720, 3730, 3731, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6100, 6101, 6110, 6111, 6120, 6121, 6130, 6131, 6240, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067	*	*	6247

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6249	Designation as a MATC Detachment Tower Chief (TWRC)	B	G	(N)	*	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0550, 0551, 0552, 0554, 0560, 0571, 0705, 0721, 2000, 2001, 2002, 2003, 2005, 2006, 2007, 2009, 2011, 2019, 2024, 2025, 2026, 2031, 2101, 2104, 2120, 2121, 2122, 2123, 2124, 2130, 2131, 2200, 2203, 2204, 2206, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3400, 3401, 3402, 3403, 3406, 3600, 3610, 3620, 3630, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6150, 6160, 6170, 6180, 6242, 6320, 6321, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067	*	*	6249

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6250	Designate as a Detachment Operations Chief	B	G	(N)	*	*	1	0500, 0501, 0502, 0503, 0506, 0507, 0509, 0510, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0529, 0530, 0531, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0551, 0552, 0553, 0554, 0560, 0561, 0562, 0563, 0570, 0571, 0572, 0573, 0700, 0701, 0704, 0705, 0720, 0721, 0722, 2000, 2001, 2002, 2005, 2006, 2006, 2007, 2008, 2009, 2011, 2024, 2025, 2026, 2031, 2031, 2101, 2104, 2120, 2121, 2122, 2123, 2124, 2130, 2131, 2200, 2203, 2204, 2206, 2208, 2209, 2210, 2500, 2501, 2502, 2503, 2504, 3001, 3002, 3400, 3401, 3402, 3403, 3404, 3405, 3406, 3631, 3720, 3721, 3730, 3731, 3732, 6000, 6181, 6322, 6520, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	6250
DESG	6251	Designation as a MATCD SNCOIC	B	G	(N)	*	*	1	*	*	*	*

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6320	Basic Instructor (BI)	B	G	(N)	*	*	1	5000, 5010, 5020	*	*	6320
DESG	6321	Senior Instructor (SI)	B	G	(N)	*	*	1	5000, 5010, 5020, 5100, 5110, 5120, 5130	*	*	6321
DESG	6322	Weapons and Tactics Instructor (WTI)	B	G	(N)	*	*	1	6000	*	*	6322
DESG	6324	Designation as MATC Mobile Team Instructor (MMTI)	B	G	(N)	*	*	1	6004, 6066	*	*	6324
DESG	6330	Formal Learning Center Instructor	B	G	(N)	*	*	1	6096	*	*	6330
DESG	6401	Facility Watch Officer (FWO)	B	G	(N)	*	*	1	0551, 0552, 0553, 0554, 0555, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	6401
DESG	6501	Designation as a TERPS Specialist	B	G	(N)	*	*	1	6065	*	*	6501
TOTAL HOURS DESIGNATION (DESG) STAGE				EVENTS		16	HOURS	16				
TOTAL HOURS RQCD (6000 PHASE)								112.5				
MISSION ESSENTIAL TASK (MET) (7000 PHASE EVENTS)												
CONDITION (COND) STAGE												
COND	7100	Provide ATC tower services	B,R,M	L	(N)	730	*	18	2 CMMR Crews	*	*	7100
COND	7200	Provide ATC approach services	B,R,M	L	(N)	730	*	12	2 CMMR Crews	*	*	7200
COND	7300	Provide ATC arrival/departure services	B,R,M	L	(N)	730	*	12	2 CMMR Crews	*	*	7300
COND	7400	Conduct Marine air traffic control mobile team (MMT) ALZ operations	B,R,M	L	(N)	730	*	2	1 CMMR MMT	*	*	7400

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MATC 7257, 7291 T&R SYLLABUS MATRIX													
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV	
COND	7500	Conduct Marine air traffic control mobile team (MMT) FARP operations	B,R,M	L	(N)	730	*	2	1 CMMR MMT	*	*	7500	
TOTAL HOURS CONDITION (COND) STAGE				EVENTS		5	HOURS	46					
TOTAL HOURS MISSION ESSENTIAL TASK (7000 PHASE)								46					
ACPM MATRIX													
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	CHAIN	EVENT CONV		
AVIATION CAREER PROGRESSION MODEL (ACPM) (8000 PHASE EVENTS)													
AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE													
ACPM	8000	MACCS	B	G	(N)	*	*	1	8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008	*		8000	
ACPM	8001	Marine Air Command and Control System	B	G	(N)	*	*	4	*	*		8001	
ACPM	8002	Tactical Air Command Center (TACC)	B	G	(N)	*	*	4	*	*		8002	
ACPM	8003	Direct Air Support Center (DASC)	B	G	(N)	*	*	4	*	*		8003	
ACPM	8004	Tactical Air Operations Center (TAOC)	B	G	(N)	*	*	4	*	*		8004	
ACPM	8005	Marine Air Traffic Control (MATC)	B	G	(N)	*	*	4	*	*		8005	
ACPM	8006	Low Altitude Air Defense (LAAD)	B	G	(N)	*	*	4	*	*		8006	
ACPM	8007	Marine Unmanned Aerial Vehicle Squadron (VMU)	B	G	(N)	*	*	4	*	*		8007	
ACPM	8008	Marine Wing Communications Squadron (MWCS)	B	G	(N)	*	*	4	*	*		8008	
ACPM	8020	ACE	B	G	(N)	*	*	1	8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*		8020	
ACPM	8021	Aviation Operations	B	G	(N)	*	*	4	*	*		8021	

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACPM	8022	Control of Aircraft and Missiles	B	G	(N)	*	*	4	*	*	8022	
ACPM	8023	Offensive Air Support (OAS)	B	G	(N)	*	*	4	*	*	8023	
ACPM	8024	Assault Support (AS)	B	G	(N)	*	*	4	*	*	8024	
ACPM	8025	Air Reconnaissance	B	G	(N)	*	*	4	*	*	8025	
ACPM	8026	Electronic Warfare (EW)	B	G	(N)	*	*	1	*	*	8026	
ACPM	8027	Anti-Air Warfare (AAW)	B	G	(N)	*	*	4	*	*	8027	
ACPM	8028	Aviation Ground Support	B	G	(N)	*	*	4	*	*	8028	
ACPM	8040	Threat	B	G	(N)	*	*	1	8041, 8042, 8043, 8044	*	8040	
ACPM	8041	Surface to Air threat to the MAGTF	B	G	(N)	*	*	4	*	*	8041	
ACPM	8042	Fixed Wing threat to the MAGTF	B	G	(N)	*	*	4	*	*	8042	
ACPM	8043	Rotary Wing threat to the MAGTF	B	G	(N)	*	*	4	*	*	8043	
ACPM	8044	Missile and UAS threat to the MAGTF	B	G	(N)	*	*	4	*	*	8044	
ACPM	8060	MAGTF	B	G	(N)	*	*	1	8061, 8062, 8063, 8064, 8065, 8066, 8067	*	8060	
ACPM	8061	Ground Combat Operations	B	G	(N)	*	*	4	*	*	8061	
ACPM	8062	Fire Support Coordination in the GCE	B	G	(N)	*	*	4	*	*	8062	
ACPM	8063	MAGTF Command and Control	B	G	(N)	*	*	4	*	*	8063	
ACPM	8064	MAGTF Communications	B	G	(N)	*	*	4	*	*	8064	
ACPM	8065	Phasing Control Ashore	B	G	(N)	*	*	4	*	*	8065	
ACPM	8066	Information Management	B	G	(N)	*	*	4	*	*	8066	
ACPM	8067	UAS support of the MAGTF	B	G	(N)	*	*	4	*	*	8067	
ACPM	8080	Joint Air Operations	B	G	(N)	*	*	1	8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	8080	

MATC 7257, 7291 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACPM	8081	Command and Control of Joint Air Operations	B	G	(N)	*	*	4	*	*	8081	
ACPM	8082	Theater Air Ground System (TAGS)	B	G	(N)	*	*	4	*	*	8082	
ACPM	8083	Joint Fire Support	B	G	(N)	*	*	4	*	*	8083	
ACPM	8084	Close Air Support (CAS)	B	G	(N)	*	*	4	*	*	8084	
ACPM	8085	Joint Targeting	B	G	(N)	*	*	4	*	*	8085	
ACPM	8086	North Atlantic Treaty Organization (NATO)	B	G	(N)	*	*	4	*	*	8086	
ACPM	8087	Joint Airspace Control	B	G	(N)	*	*	4	*	*	8087	
ACPM	8088	Countering Air and Missile Threats	B	G	(N)	*	*	4	*	*	8088	
TOTAL HOURS AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE								142				
TOTAL ACPM (8000 PHASE)								142				