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Subj: TACTICAL AIR OPERATIONS CENTER (TAOC) TRAINING AND READINESS (T&R)
MANUAL

Ref: (a) NAVMC 3500.14C

Encl: (1) TAOC T&R MANUAL

1. Purpose. To publish revised standards and regulations regarding the training of TAOC Operations crews in accordance with reference (a).

2. Cancellation. NAVMC 3500.43

3. Scope. Highlights of major training and readiness planning considerations are as follows:

a. All T-Coded Academics were removed and added as Core Skill/Core Plus Phase standardized training events. Command and Control Systems events and Aviation Career Progression Model (ACPM) Academics were added from the Command, Control and Communications Course Catalog to each syllabus.

b. Surveillance Coordinator and Crew Chief qualifications were removed from the 7234 and 7236 syllabus.

c. A Surveillance Identification Director (SID) position has been added to the 7236 syllabus. Senior Traffic Director (STD) and Senior Air Director (SAD) positions have been added to the 7236 Core Plus Phase.

d. All Deep Air Operations events were added to the Core Plus Phase.

e. Core Skill Phase events for 7210 have been restructured.

f. Air Intercept Controller (AIC) events have been added to the SAD Core Skill Phase to provide more weapons-based familiarization.

g. Instructor events have been added to the 7210 syllabus.

h. Air Battle Manager (ABM) and selected AIC events have been moved to the Core Plus Phase.

4. Information. Recommended changes to this Manual are invited and may be submitted via the appropriate chain of command to: Commanding General (CG), Training and Education Command (TECOM), Attn: Aviation Training Division (ATD) using standard naval correspondence or the Automated Message

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5. Command. This Manual is applicable to the Marine Corps Total Force.
6. Certification. Reviewed and approved this date.


R. C. FOX
By direction

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CHAPTER 1

TACTICAL AIR OPERATIONS CENTER (TAOC) / EARLY WARNING AND CONTROL (EW/C)
TRAINING AND READINESS UNIT REQUIREMENTS

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CHAPTER 1

TACTICAL AIR OPERATIONS CENTER (TAOC) / EARLY WARNING AND CONTROL (EW/C)
TRAINING AND READINESS UNIT REQUIREMENTS

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 METs 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. Support the MAGTF Commander by providing task organized agencies to perform airspace surveillance, air direction and control, coordination, information exchange and weapons systems integration for the six functions of Marine aviation in support of MAGTF operations and joint/combined operations.

1.2 TABLE OF ORGANIZATION (T/O). Refer to the T/Os listed below for current authorized organizational structure and personnel strength; they are managed by Total Force Structure, MCCDC. Information below depicts the TAOC T/O information as of the date of this directive.

1.2.1 TABLE OF ORGANIZATION

MACS 1, MACS 2				
T/O 8642 (TAOC) OFFICERS -- 9 (7210) -- 1 (7202) ENLISTED -- 23 (7234) -- 15 (7236)				
MACS 23				
T/O 8642A (TAOC) OFFICERS -- 11 (7210) -- 0 (7202) ENLISTED -- 23 (7234) -- 12 (7236)				
MACS 24				
T/O 8642A (TAOC) OFFICERS -- 14 (7210) -- 0 (7202) ENLISTED -- 29 (7234) -- 14 (7236)				
CREW COMPOSITION	7210	7236	7234	7202
DETACHMENT COMMANDER				1
DETACHMENT SNCOIC		1		
SENIOR AIR DIRECTOR	2			
SURVEILLANCE IDENTIFICATION DIRECTOR	2			
SENIOR TRAFFIC DIRECTOR	2			
SENIOR WEAPONS DIRECTOR		2		
SYSTEM CONFIGURATION COORDINATOR			2	
SURVEILLANCE OPERATOR			6	
DATA LINK COORDINATOR			4	
TACTICAL AIR TRAFFIC CONTROLLER			4	
DEEP AIR CONTROLLER		2		
AIR INTERCEPT CONTROLLER		4		
MISSILE CONTROLLER		2		

1.2.2 EARLY WARNING AND CONTROL OPERATIONS T/O

MACS 1, MACS 2				
T/O 8644 (EW/C) OFFICERS -- 4 (7210) -- 1 (7202) ENLISTED -- 11 (7234) -- 11 (7236)				
MACS 23				
T/O 8644A (EW/C) OFFICERS -- 2 (7210) -- 0 (7202) ENLISTED -- 6 (7234) -- 3 (7236)				
CREW COMPOSITION	7210	7236	7234	7202
DETACHMENT COMMANDER				1
DETACHMENT SNCOIC		1		
SENIOR AIR DIRECTOR	2			
SURVEILLANCE IDENTIFICATION DIRECTOR	2			
SENIOR WEAPONS DIRECTOR		2		
SYSTEM CONFIGURATION COORDINATOR			2	
SURVEILLANCE OPERATOR			3	
DATA LINK COORDINATOR			3	
AIR INTERCEPT CONTROLLER		4		
MISSILE CONTROLLER		2		

* Equipment is not reflected for aviation ground communities.

1.3 SIX FUNCTIONS OF MARINE AVIATION

SIX FUNCTIONS OF MARINE AVIATION		
FUNCTION	ABBREVIATION	DESCRIPTION
Offensive Air Support	OAS	OAS involves air operations that are conducted against enemy installations, facilities, and personnel in order to directly assist in the attainment of MAGTF objectives by destroying enemy resources or isolating enemy military forces. Its primary support of the warfighting functions is to provide fires and force protection through CAS and DAS.
Assault Support	ASPT	ASPT contributes to the warfighting functions of maneuver and logistics. Maneuver warfare demands rapid, flexible maneuverability to achieve a decision. Assault support uses aircraft to provide tactical mobility and logistic support to the MAGTF for the movement of high priority personnel and cargo within the immediate area of operations (or the evacuation of personnel and cargo).
Anti-Air Warfare	AAW	AAW is the actions used to destroy or reduce the enemy air and missile threat to an acceptable level. The primary purpose of AAW is to gain and maintain whatever degree of air superiority is required; this permits the conduct of operations without prohibitive interference by opposing air and missile forces. AAW's other purpose is force protection.
Electronic Warfare	EW	EW is any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. EW supports the warfighting functions of fires, command and control, and intelligence through the three major subdivisions: electronic attack, electronic protection, and electronic warfare support.
Control of Aircraft & Missiles	CoA&M	The control of aircraft and missiles supports the warfighting function of Command and Control. The ACE commander maintains centralized command, while control is decentralized and executed through the Marine Air Command and Control System (MACCS). CoA&M integrates the other five functions of Marine Aviation by providing the commander with the ability to exercise Command and Control authority over Marine Aviation assets.
Aerial Reconnaissance	AerRec	AerRec employs visual observation and/or sensors in aerial vehicles to acquire intelligence information. It supports the intelligence warfighting function and is employed tactically, operationally, and strategically. The three types of air reconnaissance are visual, multi-sensor imagery, and electronic.

1.4 CORE/MISSION/CORE PLUS ABBREVIATIONS. Shading indicates Core Plus Skills.

TAOC AND EW/C OPERATIONS	
CORE/MISSION/CORE PLUS SKILL ABBREVIATIONS	
CORE SKILLS (2000 Phase)	
ACAD	ACADEMICS
C2SYS	COMMAND AND CONTROL SYSTEMS
SURV	SURVEILLANCE
DLC	DATALINK COORDINATOR
TATC	TACTICAL AIR TRAFFIC CONTROLLER
SCC	SYSTEM CONFIGURATION COORDINATOR
MC	MISSILE CONTROLLER
AIC	AIR INTERCEPT CONTROLLER
SID	SURVEILLANCE IDENTIFICATION DIRECTOR
SWD	SENIOR WEAPONS DIRECTOR
SAD	SENIOR AIR DIRECTOR
MISSION SKILLS (3000 Phase)	
TAOC	TACTICAL AIR OPERATIONS CENTER
EW/C	EARLY WARNING AND CONTROL OPERATIONS
CORE PLUS (4000 Phase)	
ACAD	ACADEMICS
AIC	AIR INTERCEPT CONTROLLER
AWC	ASSISTANT WEAPONS CONTROLLER
DAC	DEEP AIR CONTROLLER
DAOC	DEEP AIR OPERATIONS COORDINATOR
SAD	SENIOR AIR DIRECTOR
STD	SENIOR TRAFFIC DIRECTOR
C2SYS	COMMAND AND CONTROL SYSTEMS

1.5 MISSION ESSENTIAL TASK LIST (METL). The METL is a list of specified tasks a specific unit designed to perform. Core METs are drawn from the Marine Corps Task List (MCTL), are standardized by type unit, and are used for unit readiness. Core Plus METs are additional METs that are theater specific and/or have a low likelihood of occurrence. Core Plus METs may be included in readiness reporting when contained within an Assigned Mission METL. An Assigned Mission METL consists of only the selected METs (drawn from the MCTL, Core, or Core Plus METs) necessary for that Assigned Mission.

The METL consists of Mission Essential Tasks (METs). Shading indicates Core Plus METs.

TAOC AND EW/C OPERATIONS		
MISSION ESSENTIAL TASK LIST (METL)		
CORE		
MET	ABBREVIATION	MCT DESCRIPTION
MCT 5.3.2.7.1	TAOC	ESTABLISH AND CONDUCT TACTICAL AIR OPERATIONS CENTER (TAOC) OPERATIONS
MCT 5.3.2.7.1.2	EWC	ESTABLISH AND CONDUCT EARLY WARNING AND CONTROL OPERATIONS

1.6 MISSION ESSENTIAL TASK (MET) TO SIX FUNCTIONS OF MARINE AVIATION

TAOC AND EW/C OPERATIONS							
MISSION ESSENTIAL TASK LIST (METL)							
CORE							
MET	ABBREVIATION	SIX FUNCTIONS OF MARINE AVIATION					
		DAS	ASPT	AAW	EW	CoA&M	AerRec
MCT 5.3.2.7.1	TAOC	X	X	X		X	
MCT 5.3.2.7.1.2	EWC	X	X	X		X	

1.7 MISSION ESSENTIAL TASKS (MET) OUTPUT STANDARDS

TAOC AND EW/C OPERATIONS					
CORE MET OUTPUT STANDARDS					
MET	ABBREVIATION	OUTPUT STANDARDS	OUTPUT HOURS (PER DAY SUSTAINED FOR 90 DAYS)		
			MAX HRS PER CREW	HRS PER DAY	TOTAL NUMBER OF CREWS
MCT 5.3.2.7.1	TAOC	ABLE TO DISPLAY AND DISSEMINATE AIR/GROUND SURVEILLANCE INFORMATION TO DESIGNATED ADJACENT, HIGHER, SUBORDINATE AGENCIES AND AIRCRAFT	12	24	2 TAOC OPERATOR CREWS
		ABLE TO PROVIDE AIRSPACE CONTROL FOR ALL ASSIGNED AND ITINERANT AIRCRAFT IN THE ASSIGNED SECTOR			
		ABLE TO CONDUCT AAW OPERATIONS THAT RESULT IN THE REDUCTION OF THE EFFECTS OF ENEMY AIRCRAFT, SURFACE-TO-AIR WEAPONS, AND THEATER MISSILES WITHIN THE ASSIGNED SECTOR			
		ABLE TO CONDUCT SUSTAINED OPERATIONS			
MCT 5.3.2.7.1.2	EWC	ABLE TO DISPLAY AND DISSEMINATE AIR/GROUND SURVEILLANCE INFORMATION TO DESIGNATED ADJACENT, HIGHER, SUBORDINATE AGENCIES AND AIRCRAFT	12	24	2 EW/C OPERATOR CREWS
		ABLE TO PROVIDE AIRSPACE CONTROL FOR ALL ASSIGNED AND ITINERANT AIRCRAFT IN THE ASSIGNED SECTOR			
		ABLE TO DETECT AND IDENTIFY AIR THREATS OUT TO 160NM FROM ORIGIN			
		ABLE TO PROVIDE LIMITED CONTROL OF AIR OR GROUND BASED WEAPONS SYSTEMS			
		ABLE TO CONDUCT SUSTAINED OPERATIONS			

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

TAOC AND EW/C OPERATIONS																			
MISSION ESSENTIAL TASK (MET) TO CORE/MISSION/CORE PLUS SKILL MATRIX																			
MET	CORE SKILLS 2000 PHASE										MISSION SKILLS 3000 PHASE		CORE PLUS SKILLS 4000 PHASE						
	C2SYS	SURV	DLC	TATC	SCC	MC	AIC	SID	SWD	SAD	TAOC	EWC	AIC	AWC	DAC	DAOC	SAD	C2SYS	STD
MCT 5.3.2.7.1	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
MCT 5.3.2.7.1.2	X	X	X	X	X	X	X	X	X	X		X	X	X			X	X	X

1.9 CORE MODEL MINIMUM REQUIREMENT (CMMR) SKILLS PROFICIENCY REQUIREMENTS.
The CMMR is the minimum number of crew members, per crew position, to be trained per stage, MOS and skill.

1.9.1 TACTICAL AIR OPERATIONS CENTER (TAOC) CMMR

TAOC OPERATIONS															
CORE MODEL MINIMUM REQUIREMENTS (CMMR)															
CORE/MISSION/CORE PLUS SKILLS CREW POSITION PROFICIENCY REQUIREMENTS AIR DEFENSE CONTROL OFFICER (7202/7210)/ENLISTED AIR DEFENSE (7236/7234)															
CORE SKILLS (2000 Phase)															
CORE SKILLS	SAD	SCC	SWD	AIC	AWC	MC	STD	TATC	SID	DLC	SO	DAC	DAOC	DET CHF	DET CMDR
CZSYS	0	0	0	0	0	0	0	0	2/2	0	0	0	0	0	0
SURV	0	0	0	0	0	0	0	0	0	0/4	0/6	0	0	0	0
DLC	0	0	0	0	0	0	0	0	0	0/4	0	0	0	0	0
TATC	0	0	0	0	0	0	0	0/4	0	0	0	0	0	0	0
SCC	0	0/2	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	0	0	0	0	0	0/2	0	0	0	0	0	0	0	0	0
AIC	0	0	0	0/4	0	0	0	0	0	0	0	0	0	0	0
SID	0	0	0	0	0	0	0	0	2/2	0	0	0	0	0	0
SWD	0	0	2/2	0	0	0	0	0	0	0	0	0	0	0	0
SAD	2/0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MISSION SKILLS (3000 Phase)															
TAOC	2/0	0/2	0/2	0/4	0/4	0/2	2/0	0/4	2/0	0/4	0/6	2/0	2/0	0/1	1
EWC	2/0	0/2	0/2	0/4	0/4	0/2	2/0	0/4	2/0	0/4	0/6	2/0	2/0	0/1	1
CORE PLUS SKILLS (4000 Phase)															
AIC	0	0	0	4/0	0	0	0	0	0	0	0	0	0	0	0
AWC	0	0	0	0	0/4	0	0	0	0	0	0	0	0	0	0
DAC	0	0	0	0	0	0	0	0	0	0	0	0/2	0	0	0
DAOC	0	0	0	0	0	0	0	0	0	0	0	0	2/2	0	0
SAD	0/2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STD	0	0	0	0	0	0	0/2	0	0	0	0	0	0	0	0
CZSYS	0	0	0	0	0	0	0/2	0	0	0	0	0	2/2	0	0

1.9.2 EARLY WARNING AND CONTROL (EW/C) SITE CMMR

EWC OPERATIONS															
CORE MODEL MINIMUM REQUIREMENTS (CMMR)															
CORE/MISSION/CORE PLUS SKILLS CREW POSITION PROFICIENCY REQUIREMENTS AIR DEFENSE CONTROL OFFICER (7210)/ENLISTED AIR DEFENSE (7236/7234)															
CORE SKILLS (2000 Phase)															
CORE SKILLS	SAD	SCC	SWD	AIC	AWC	MC	STD	TATC	SID	DLC	SO	DAC	DAOC	DET CHF	DET CMDR
C2SYS	0	0	0	0	0	0	0	0	2/0	0	0	0	0	0	0
SURV	0	0	0	0	0	0	0	0	0	0/3	0/3	0	0	0	0
DLC	0	0	0	0	0	0	0	0	0	0/3	0	0	0	0	0
TATC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SCC	0	0/2	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	0	0	0	0	0	0/2	0	0	0	0	0	0	0	0	0
AIC	0	0	0	0/4	0	0	0	0	0	0	0	0	0	0	0
SID	0	0	0	0	0	0	0	0	2/0	0	0	0	0	0	0
SWD	0	0	0/2	0	0	0	0	0	0	0	0	0	0	0	0
SAD	2/0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MISSION SKILLS (3000 Phase)															
TAOC	2/0	0/2	0/2	0/4	0/0	0/2	0/0	0/0	2/0	0/3	0/3	0/0	0/0	0/1	1/0
EWC	2/0	0/2	0/2	0/4	0/0	0/2	0/0	0/0	2/0	0/3	0/3	0/0	0/0	0/1	1/0
CORE PLUS SKILLS (4000 Phase)															
AIC	0	0	0	4/0	0	0	0	0	0	0	0	0	0	0	0
AWC	0	0	0	0	0/4	0	0	0	0	0	0	0	0	0	0
DAC	0	0	0	0	0	0	0	0	0	0	0	0/2	0	0	0
DAOC	0	0	0	0	0	0	0	0	0	0	0	0	2/2	0	0
SAD	0/2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STD	0	0	0	0	0	0	0/2	0	0	0	0	0	0	0	0
C2SYS	0	0	0	0	0	0	0/2	0	0	0	0	0	2/2	0	0

1.10 READINESS REPORTING. The paragraphs and tables below delineate the minimum crew qualifications and designations required to contribute to unit readiness. Chapter 7 of the Aviation T&R Program Manual provides additional guidance and a detailed description of readiness reporting using the Defense Readiness Reporting System-Marine Corps (DRRS-MC) and the Current Readiness program.

1.10.1 Combat Leadership requirements for readiness reporting are per paragraph 1.12.

1.11 INSTRUCTOR DESIGNATIONS (5000 Phase)

1.11.1 TACTICAL AIR OPERATIONS CENTER (TAOC) INSTRUCTOR REQUIREMENTS

TAOC OPERATIONS		
INSTRUCTOR DESIGNATIONS (5000 Phase) CMMR		
INSTRUCTOR DESIGNATIONS	7202/7210	7236/7234
BASIC INSTRUCTOR	2	2
SENIOR INSTRUCTOR	1	1
WEAPONS AND TACTICS INSTRUCTOR	1	1
AIR INTERCEPT CONTROL INSTRUCTOR	0	1

1.11.2 EARLY WARNING AND CONTROL (EW/C) SITE INSTRUCTOR REQUIREMENTS

EW/C OPERATIONS		
INSTRUCTOR DESIGNATIONS (5000 Phase) CMMR		
INSTRUCTOR DESIGNATIONS	7202/7210	7236/7234
BASIC INSTRUCTOR	1	1
SENIOR INSTRUCTOR	1	1
WEAPONS AND TACTICS INSTRUCTOR	1	1
AIR INTERCEPT CONTROL INSTRUCTOR	0	1

1.12 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, DESIGNATIONS (RCQD) (6000 Phase)

1.12.1 TAOC RCQD

TAOC AND EW/C OPERATIONS		
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD) (6000 Phase)		
TAOC		
RCQD	7202/7210	7236/7234
SAD	2	0
SCC	0	2
SWD	0	2
AIC	0	4
AWC	0	0
MC	0	2
DAC	0	2
DAOC	1	2
STD	2	0
TATC	0	2
SID	2	0
DLC	0	3
SO	0	4
COMBAT LEADERSHIP		
DET CMDR	1	0
DET SNCOIC	0	1
SAD	2	0
SWD	0	2

1.12.2 EW/C RCQD

TAOC AND EW/C OPERATIONS		
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD) (6000 Phase)		
EW/C		
RCQD	7202/7210	7236/7234
SAD	2	0
SCC	0	2
SWD	0	2
AIC	0	4
AWC	0	0
MC	0	2
DAC	0	0
DAOC	0	0
STD	0	0
TATC	0	2
SID	2	0
DLC	0	3
SO	0	4
COMBAT LEADERSHIP		
DET CMDR	1	0
DET SNCOIC	0	1
SAD	0	0
SWD	0	1

CHAPTER 2

AIR DEFENSE CONTROL OFFICER/MOS 7210
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

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CHAPTER 2

AIR DEFENSE CONTROL OFFICER/MOS 7210
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

2.0. AIR DEFENSE CONTROL OFFICER/7210 INDIVIDUAL TRAINING AND READINESS REQUIREMENTS. This T&R Syllabus is based on specific goals and performance standards designed to ensure individual proficiency in Core, Mission, and Core Plus Skills. The goal of this chapter is to develop individual and unit warfighting capabilities.

2.1. MOS 7210 TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the average 7210 crew member. Units should use the model as a point of departure to generate individual training plans.

7210 TRAINING PROGRESSION MODEL

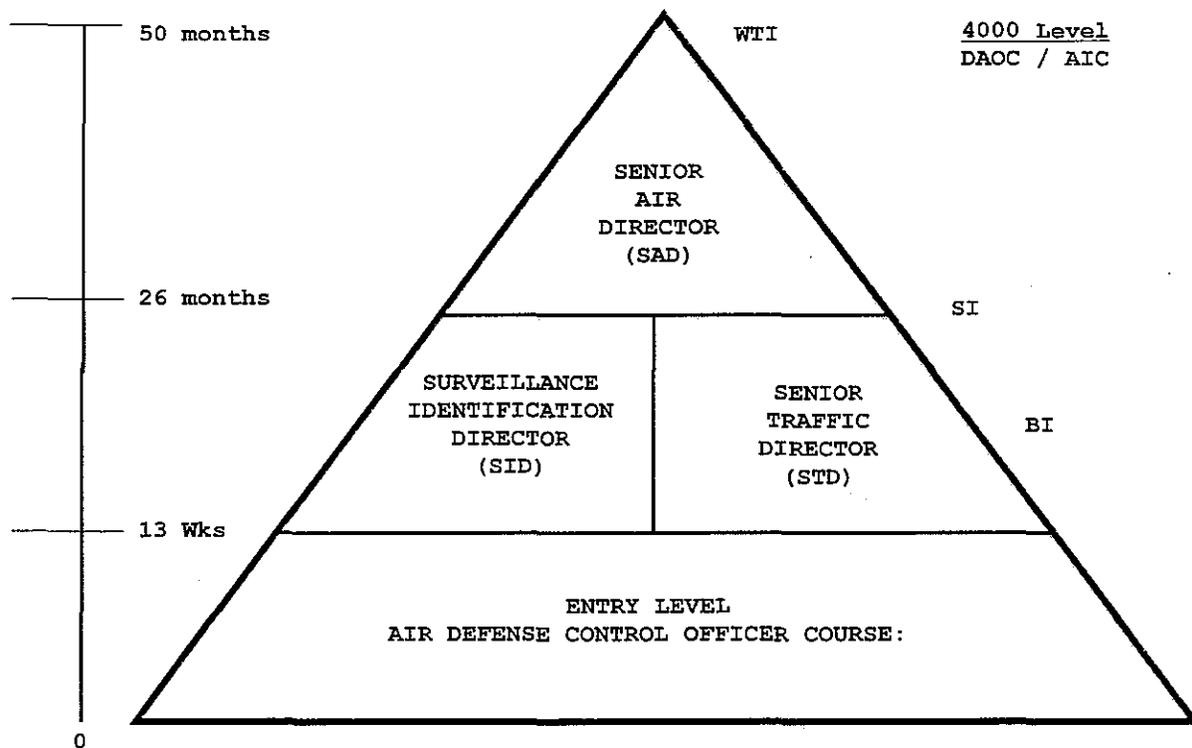


Figure 2-1. Air Defense Control Officer (MOS 7210)
Training Progression Model

2.2 ABBREVIATIONS

AIR DEFENSE CONTROL OFFICER (7210)	
CORE/MISSION/CORE PLUS SKILL ABBREVIATIONS	
CORE SKILL (2000 Phase)	
ACAD	ACADEMIC
SURV	SURVEILLANCE
DLC	DATA LINK COORDINATOR
TATC	TACTICAL AIR TRAFFIC CONTROLLER
SWD	SENIOR WEAPONS DIRECTOR
SAD	SENIOR AIR DIRECTOR
C2SYS	COMMAND AND CONTROL SYSTEMS
MISSION SKILL (3000 Phase)	
TAOC	TACTICAL AIR OPERATIONS CENTER
EWC	EARLY WARNING AND CONTROL
CORE PLUS (4000 Phase)	
AIC	AIR INTERCEPT CONTROLLER
DAOC	DEEP AIR OPERATIONS COORDINATOR
C2SYS	COMMAND AND CONTROL SYSTEMS
INSTRUCTOR (5000 Phase)	
BI	BASIC INSTRUCTOR
SI	SENIOR INSTRUCTOR
AICI	AIR INTERCEPT CONTROL INSTRUCTOR
WTI	WEAPONS AND TACTICS INSTRUCTOR
CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (6000 Phase)	
SID	SURVEILLANCE IDENTIFICATION DIRECTOR
STD	SENIOR TRAFFIC DIRECTOR
SAD	SENIOR AIR DIRECTOR
AIC	AIR INTERCEPT CONTROLLER
DAOC	DEEP AIR OPERATIONS COORDINATOR
DET CMDR	TAOC DETACHMENT COMMANDER
BI	BASIC INSTRUCTOR
SI	SENIOR INSTRUCTOR
AICI	AIR INTERCEPT CONTROL INSTRUCTOR
WTI	WEAPONS AND TACTICS INSTRUCTOR

2.3 DEFINITIONS

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

2.4 INDIVIDUAL CORE/MISSION/CORE PLUS SKILL PROFICIENCY REQUIREMENTS

2.4.1 Management of individual CSP/MSP/CPSP/CPMP serves as a foundation for developing proficiency requirements in DRRS-MC.

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

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

2.4.4 Once proficiency has been attained by Core/Mission/Core Plus Skill (by any POI assignment) then the individual maintains proficiency by executing

those events noted in the maintain table and in the "Maintain POI" column of the T&R syllabus matrix. An individual maintains proficiency by individual Core/Mission/Core Plus Skill.

Note

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

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

Note

See Chapter 2 of the Aviation Program Manual for amplifying information on POI updating.

TAOC AND EW/C 7210					
ATTAIN AND MAINTAIN CORE/MISSION/CORE PLUS PROFICIENCY MATRIX BY POI					
ATTAIN PROFICIENCY			MAINTAIN		
BASIC POI		REFRESHER POI		PROFICIENCY	
CORE SKILL (2000 Phase)					
STAGE	CODE	STAGE	CODE	STAGE	CODE
SURV	2100	SURV		SURV	
	2101				
	2102R		2102R		2102R
	2103R		2103R		2103R
	2104				
	2105				
	2106R		2106R		2106R
DLC	2120R	DLC	2120R	DLC	2120R
	2121				
	2122R		2122R		2122R
	2123R		2123R		2123R
	2124R		2124R		2124R
TATC	52200R	TATC	52200R	TATC	52200R
	52201R		52201R		52201R
TRFC	2220	TRFC		TRFC	
	2221R		2221R		2221R
	2222R		2222R		2222R

SWD	2300R	SWD	2300R	SWD	2300R
SAD	2400R	SAD	2400R	SAD	2400R
	2401				
	S2402				
	S2403				
	2404				
	2410R		2410R		2410R
	S2411				
	2412				
	2413R		2413R		2413R
C2SYS	2900R	C2SYS	2900R	C2SYS	2900R
	2901R		2901R		2901R
	2902R		2902R		2902R
	2903R		2903R		2903R
	2905R		2905R		2905R
	2910R		2910R		2910R
	2917R		2917R		2917R
	2921R		2921R		2921R
	2923R		2923R		2923R
	2940R		2940R		2940R
	2941R		2941R		2941R
MISSION SKILL (3000 Phase)					
STAGE	CODE	STAGE	CODE	STAGE	CODE
TAOC	DRCTR 3100R	TAOC	DRCTR 3100R	TAOC	DRCTR 3100R
	DRCTR 3200R		DRCTR 3200R		DRCTR 3200R
	DRCTR 3400R		DRCTR 3400R		DRCTR 3400R
EWC	DRCTR 3100R	EWC	DRCTR 3100R	EWC	DRCTR 3100R
	DRCTR 3200R		DRCTR 3200R		DRCTR 3200R
	DRCTR 3400R		DRCTR 3400R		DRCTR 3400R
CORE PLUS (4000 Phase)					
STAGE	CODE	STAGE	CODE	STAGE	CODE
AIC	4100R	AIC	4100R	AIC	4100R
	S4101				
	S4102				
	4103				
	4104				
	4105R		4105R		4105R
	4106				
	4107R		4107R		4107R
DAOC	4200	DAOC		DAOC	

	4201			
	S4202			
	S4203			
	S4204R		S4204R	S4204R
C2SYS	4920R	C2SYS	4920R	C2SYS
	4924R		4924R	4924R
"S" PREFIX AND BLUE FONT = SIMULATOR EVENT				
"R" SUFFIX AND GRAY HIGHLIGHT = R-CODED "REFRESHER" EVENT				

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

2.5.1 Instructor Designations

TAOC AND EW/C 7210 INSTRUCTOR DESIGNATIONS (5000 Phase)	
INSTRUCTOR DESIGNATION	EVENTS
BASIC INSTRUCTOR (BI)	5000, 5010, 5020
SENIOR INSTRUCTOR (SI)	5100, 5110, 5120, 5130, M-SHARP FORMAL TRAINING, 6240
AIR INTERCEPT CONTROL INSTRUCTOR (AICI)	SCHL 6006 OR SCHL 6069, 6204, 6240
WEAPONS AND TACTICS INSTRUCTOR (WTI)	SCHL 6000

2.5.2 Requirements, Certifications, Qualifications, and Designations

TAOC AND EW/C 7210 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD) (6000 Phase)	
RCQD	EVENTS
QUAL AS SID	2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2027, 2036, 2046, 2047, 2055, 2059, 2060, 2100, 2101, 2102R, 2103R, 2104, 2105, 2106R, 2120R, 2121, 2122R, 2123R, 2124R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 6100R, 8000, 8080.
QUAL AS STD	2004, 2016, 2017, 2022, 2023, 2025, 2027, 2032, 2033, 2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2059, 2060, 2101, 2200R, 2201, 2220, 2221R, 2222R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 6200R, 8000, 8020, 8080.
QUAL AS DAOC	2024, 2026, 2028, 2029, 2030, 2031, 2048, 2053, 2200R, 4200, 4201, 4202, 4203, 4920R, 4924R, 4200, 4201, 4202, 4203, 4204R, 8020, 8040, 8060.

QUAL AS AIC	2004, 2025, 2027, 2039, 2041, 2043, 2044, 2046, 2048, 2049, 2050, 2051, 2200R, 2201, 2402, 2403, 4100R, 4101, 4102, 4103, 4104, 4105R, 4106, 4107R, 8040.
QUAL AS SAD	2024, 2026, 2028, 2029, 2031, 2037, 2038, 2039, 2041, 2042, 2043, 2044, 2048, 2049, 2051, 2052, 2053, 2054, 2056, 2057, 2102, 2200R, 2300R, 2400R, 2410R, 2411, 2412, 2413R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 3200R, 6100R, 6200R, 8060.
TAOC DET CMDR (DESG 6210)	COMMANDING OFFICER DISCRETION
AIC (DESG 6220)	6204
DAOC (DESG 6230)	6203
BASIC INSTRUCTOR (DESG 6240)	5000, 5010, 5020.
SENIOR INSTRUCTOR (DESG 6241)	5100, 5110, 5120, 5130, M-SHARP FORMAL TRAINING, 6240
WTI (DESG 6242)	SCHL 6000
AICI (DESG 6243)	5000, 5010, 5020, 6240, SCHL 6006 OR SCHL 6069, 6204
SENIOR AIR DIRECTOR (DESG 6401)	3400, 6400

2.6 7210 PROGRAMS OF INSTRUCTION (POI). These tables reflect average time-to-train versus the minimum to maximum time-to-train parameters in the Training Progression Model.

2.6.1 Basic POI

TAOC AND EW/C 7210 BASIC POI		
WEEKS ¹	PHASE OF INSTRUCTION	UNIT RESPONSIBLE
1-12	CORE SKILL INTRODUCTION TRAINING	MCCES
13-104	CORE SKILL TRAINING	TACTICAL SQUADRON
VARIES	MISSION SKILL TRAINING	TACTICAL SQUADRON
VARIES	CORE PLUS	TACTICAL SQUADRON

2.6.2 Refresher POI

TAOC AND EW/C 7210 REFRESHER POI		
WEEKS ¹	PHASE OF INSTRUCTION	UNIT RESPONSIBLE
VARIES	CORE SKILL TRAINING	TACTICAL SQUADRON
VARIES	MISSION SKILL TRAINING	TACTICAL SQUADRON
VARIES	CORE PLUS	TACTICAL SQUADRON

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

2.7 SYLLABUS NOTES

2.7.1 Environmental Conditions Matrix

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

2.7.2 Device Matrix.

DEVICE	
Symbol	Meaning
L	Event shall be conducted live (conducted in the field/garrison, during an exercise, etc). Requires live (non-simulated) execution of the event.
I/S	Event performed live preferred/simulator optional.
S/L	Event performed in simulator preferred/live optional.
G	Ground/academic training. May include Distance Learning, CBT, lectures, self paced.
CBT	Computer Based Training
LAB	Laboratory
LEC	Lecture
CP	Command Post
TEN	Tactical Environment Network. Events designated as TEN require an approved tactical environment simulation capable of introducing both semi-autonomous threats and moving models controllable from the tactical operator station.

TEN+	Enhanced Tactical Environment Network. Events designated as TEN+ require an approved tactical environment simulation and at least one additional, networked, man-in-the-loop simulator to meet the training objectives. A moving model controlled from the operator station does not satisfy the man-in-the-loop requirement.
Note - If the event is to be flown in the simulator the Simulator Instructor shall set the desired environmental conditions for the event.	

2.7.3 Program of Instruction Matrix.

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

2.7.4 Event Terms.

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

2.8 CORE SKILL INTRODUCTION PHASE (1000 PHASE)

2.8.1 Purpose. To provide entry-level instruction to develop the basic skills necessary for an officer to meet the requirements to be assigned MOS 7210, Air Defense Control Officer. This training includes TAOC operations

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within the Marine Air Command and Control System (MACCS), employment of the Tactical Air Operations Module (TAOM), Air Defense Communications Platform (ADCP), and Theater Battle Management Core Systems (TBMCS) with emphasis on duties as a Surveillance Identificaiton Director (SID), and Senior Traffic Director (STD), and air defense weapons control functions. Upon graduation from the Air Defense Control Officer Course (ADCOC), the Marine Officer is designated with the MOS 7210.

2.8.2 General

2.8.2.1 Prerequisite. Meet the requirements delineated in the MCO 1200.17 (MOS Manual).

2.8.2.2 Academic Training. ADCOC (CID M0972M1) located at Marine Corps Communication-Electronics School (MCCES) in 29 Palms, CA.

2.8.2.3 Stage. The following stage is included in the Core Skill Introduction Phase of training.

PAR NO.	STAGE NAME
2.8.3	AIR DEFENSE CONTROL OFFICER (ADCO)

2.8.3 AIR DEFENSE CONTROL OFFICER (ADCO) STAGE

2.8.3.1 Purpose. To teach the Marine Officer in the required skills to perform as a basic Air Defense Control Officer, MOS 7210.

2.8.3.2 General

Total Training Events. 11 events, 307 hours.

ADCO-1000 24.0

B,E

L

Goal. Identify characteristics of Tactical Air Operation Center (TAOC) operations.

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 the Marine Air Control Squadron (MACS).
6. Identify characteristics of the TAOC cellular framework.
7. Identify characteristics of agencies in the Theater Air Ground System (TAGS).
8. Identify characteristics of Integrated Air Defense Systems (IADS).
9. Identify characteristics of U. S. tactical aircraft.
10. Identify characteristics of the different types of air requests.
11. Identify characteristics of U. S. aviation ordnance.
12. Identify characteristics of U. S. ground-based air defense platforms.

13. Identify characteristics of threat aircraft.
14. Identify characteristics of threat air defense systems.
15. Identify characteristics of the Aviation T&R program in the TAOC.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing a written test with a minimum score of 80%.

Reference

1. JP 1-02 DOD Dictionary of Military and Associated Terms
2. JP 3-52 Joint Doctrine For Airspace Control In A Combat Zone
3. JP 3-56.1 Command and Control of Joint Air Operations
4. MCM 3-1 Threat Reference Guide and Countertactics (U), VOL II
5. MCRP 3-25B Multiservice Air-Air, Surface-Air, Air-Surface Brevity Codes.
6. MCRP 3-25D Multiservice Procedures for Integrated Combat Airspace Command and Control
7. MCRP 3-25E Multiservice Procedures for Joint Integrated Air Defense System
8. MCWP 3-2 Aviation Operations
9. MCWP 3-22 Antiair Warfare
10. MCWP 3-25 Control of Aircraft and Missiles
11. MCWP 3-25.10 Low Altitude Air Defense Handbook
12. MCWP 3-25.3 Marine Air Command and Control System Handbook
13. MCWP 3-25.4 Tactical Air Command Center Handbook
14. MCWP 3-25.5 Direct Air Support Center Handbook
15. MCWP 3-25.7 Tactical Air Operations Center Handbook
16. MCWP 3-25.8 Marine Air Traffic Control Detachment Handbook
17. SECNAVINST 5510.30B Department of the Navy Personal Security Program
18. SECNAVINST 5510.36_ Dept of the Navy Information and Personnel Security Program Regulations
19. TM 08565A-CD-1 TAOM System Manual
20. TOP GUN MANUAL TOP GUN Manual, Volumes I and II
21. U-TAOC-PCL-03862 TAOC Pocket Checklist
22. Jane's All The World's Radar and Electronic Warfare Systems
23. Jane's All The World's C4I Systems
24. Jane's All The World's Aircraft
25. CJCSM 3115.01B Joint Data Network

ADCO-1010 43.0 B,E TAOC L

Goal. Configure Tactical Air Operations Center (TAOC) platforms for operations.

Requirement. Given required TAOC equipment and materials, complete the following:

1. Identify the proper procedures for handling classified material.
2. Identify characteristics of TAOC equipment.
3. Cable TAOC equipment.
4. Apply power to TAOC equipment.
5. Conduct planning for TAOC emplacement.
6. Initialize a workstation.
7. Set TAOC operational parameters from source documents.
8. Enter map/overlay information from source documents.
9. Enter RADAR information.

10. Operate recording equipment.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing both written and practical application tests with minimum scores of 80%.

Prerequisite. 1000

Reference

1. FM 21-26 Map Reading and Land Navigation
2. MCRP 5-12A Operational Terms and Symbols
3. TM 08565A-CD-1 TAOM System Manual
4. U-TAOC-PCL-03862 TAOC Pocket Checklist

ADCO-1020 10.0 B,E TAOC L

Goal. Operate TAOC voice communications equipment.

Requirement. Given a TAOM and required materials, complete the following:

1. Operate internal communications using source documents Aviation Communications Electronic Operating Instruction (ACEOI).
2. Operate voice encryption devices.
3. Select antennas for TAOC communications.
4. Set-up work station for radio communications with a distant station.
5. Communicate via voice with a distant station.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing both written and practical application tests with minimum scores of 80%.

Prerequisite. 1000, 1010

Reference

1. TM 08565A-CD-1 TAOM System Manual
2. U-TAOC-PCL-03862 TAOC Pocket Checklist
3. MCRP 3-40.3C, Antenna Handbook

ADCO-1030 23.0 B,E TBMCS L

Goal. Operate Command, Control, Communications, Computer and Intelligence (C4I) systems.

Requirement. Given required C4I systems, operate the following:

1. Operate Theater Battle Management Core System (TBMCS) ESTAT.
2. Operate TBMCS FSTAT.
3. Operate TBMCS the ATO/ACO tool.
4. Operate C2PC.
5. Operate TBMCS IRC.
6. Operate Falconview.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing a practical application test with a minimum score of 80%.

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17. TM 08565A-CD-1 TAOM System Manual
18. TOP GUN MANUAL TOP GUN Manual, Volumes I and II
19. U-TAOC-PCL-03862 TAOC Pocket Checklist

ADCO-1050 7.0 B, E TAOC L

Goal. Operate Link 11.

Requirement. Given a TAOM and required materials, complete the following:

1. Extract Link 11 information from source documents.
2. Identify characteristics of Link 11.
3. Configure Link 11 hardware for operations.
4. Set-up a workstation for Link 11 operations.
5. Exchange Link 11 messages.
6. Send/receive digital orders.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing both written and practical application tests with minimum scores of 80%.

Prerequisite. 1000, 1010, 1020, 1040

Reference

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. TM 08565A-CD-1 TAOM System Manual
3. U-TAOC-PCL-03862 TAOC Pocket Checklist
4. Understanding Link 11 Guidebook

ADCO-1060 7.0 B, E TAOC L

Goal. Operate Link 11B.

Requirement. Given a TAOM and require materials, complete the following:

1. Extract Link 11B information from the reference documents.
2. Identify characteristics of Link 11B.
3. Configure Link 11B hardware.
4. Set-up a work station for Link 11B operations.
5. Exchange Link 11B messages.
6. Send/receive digital orders.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing both written and practical application tests with minimum scores of 80%.

Prerequisite. 1000, 1010, 1020, 1040

Reference

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. TM 08565A-CD-1 TAOM System Manual
3. U-TAOC-PCL-03862 TAOC Pocket Checklist

ADCO-1070 9.0 B, E TAOC L

Goal. Operate Link 16.

Requirement. Given a TAOM and required materials, complete the following:

1. Extract Link 16 information from the reference documents.
2. Identify characteristics of Link 16.
3. Set-up a work station for Link 16 operations.
4. Configure Link 16 hardware.
5. Exchange Link 16 messages.
6. Send/receive text messages.
7. Operate JTIDS Voice.
8. Send/receive digital orders.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing both written and practical application tests with minimum scores of 80%.

Prerequisite. 1000, 1010, 1020, 1040

Reference

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. TM 08565A-CD-1 TAOM System Manual
3. U-TAOC-PCL-03862 TAOC Pocket Checklist

ADCO-1080 12.0 B,E TAOC L

Goal. Operate a Beyond Line of Site (BLOS) gateway.

Requirement. Given a TAOM, ADCP and required materials, complete the following:

1. Extract Joint Range Extension Application Protocol (JREAP) information from the reference documents.
2. Identify characteristics of JREAP.
3. Configure a BLOS gateway for JREAP.
4. Operate JREAP-A.
5. Operate JREAP-B.
6. Operate JREAP-C.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing both written and practical application tests with minimum scores of 80%.

Prerequisite. 1000, 1010, 1020, 1040, 1070

Reference

1. CJCSM 6120.01 Joint Multi-Tactical Data Link (TDL) Operating Procedures
2. Mil Std 3011_, Joint Range Extension Application Protocol
3. TM 08565A-CD-1 TAOM System Manual
4. U-TAOC-PCL-03862 TAOC Pocket Checklist

ADCO-1090 40.0 B,E TAOC S

Goal. Perform air defense weapons control functions.

Requirement. Given a TAOM and required materials, complete the following:

1. Identify characteristics of the TAOC weapons section.
2. Identify characteristics of AAW missions.
3. Perform intercept control with a simulated section of fighter aircraft.
4. Perform Missile Control with simulated GBAD assets.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing both written and practical application tests with minimum scores of 80%.

Prerequisite. 1000, 1010, 1020, 1040

Reference

1. JP 1-02, DOD Dictionary of Military and Associated Terms
2. JP 3-30, Command and Control of Joint Air Operations
3. JP 3-52, Joint Doctrine for Airspace Control in a Combat Zone
4. JP 3-56.1, Command and Control of Joint Air Operations
5. MCM 3-1, Threat Reference Guide and Countertactics (U), VOL II
6. MCRP 3-25B, Multi Service Air-Air, Air-Surface, Surface-Air, Brevity Codes
7. MCRP 3-25E Multiservice Procedures for Joint Integrated Air Defense System
8. MCWP 3-2 Aviation Operations
9. MCWP 3-22 Antiair Warfare
10. MCWP 3-25 Control of Aircraft and Missiles
11. MCWP 3-25.10 Low Altitude Air Defense Handbook
12. MCWP 3-25.3 Marine Air Command and Control System Handbook
13. MCWP 3-25.4 Tactical Air Command Center Handbook
14. MCWP 3-25.5 Direct Air Support Center Handbook
15. MCWP 3-25.7 Tactical Air Operations Center Handbook
16. TM 08565A-CD-1 TAOM System Manual
17. TOP GUN MANUAL TOP GUN Manual, Volumes I and II
18. U-TAOC-PCL-03862 TAOC Pocket Checklist

ADCO-1100 80.0 B,E TAOC S

Goal. Perform traffic functions.

Requirement. Given a TAOM and required materials, complete the following:

1. Identify characteristics of the TAOC Traffic Section.
2. Set-up a workstation for traffic operations.
3. Perform TATC procedures.
4. Perform emergency procedures.
5. Perform traffic deconfliction.
6. Communicate required information to aircrews.
7. Communicate required information to higher/adjacent agencies.
8. Control aerial refueling operations.
9. Conduct mission planning for traffic operations.
10. Conduct a Traffic Brief.

Performance Standard. Without the aid of references, complete the requirement items IAW with the ADCOC POI at MCCES, passing both written

and practical application tests with minimum scores of 80%.

Prerequisite. 1000, 1010, 1020, 1030, 1040, 1090

Reference

1. JP 1-02 DOD Dictionary of Military and Associated Terms
2. JP 3-30 Command and Control of Joint Air Operations
3. JP 3-52 JOINT DOCTRINE FOR AIRSPACE CONTROL IN A COMBAT ZONE
4. JP 3-56.1 Command and Control of Joint Air Operations
5. MCM 3-1 Threat Reference Guide and Countertactics (U), VOL II
6. MCRP 3-25B MULTI SERVICE AIR-AIR, AIR-SURFACE, SURFACE-AIR, BREVITY CODES
7. MCRP 3-25D Multiservice Procedures for Integrated Combat Airspace Command and Control
8. MCRP 3-25E Multiservice Procedures for Joint Integrated Air Defense System
9. MCWP 3-2 Aviation Operations
10. MCWP 3-22 Antiair Warfare
11. MCWP 3-25 Control of Aircraft and Missiles
12. MCWP 3-25.10 Low Altitude Air Defense Handbook
13. MCWP 3-25.3 Marine Air Command and Control System Handbook
14. MCWP 3-25.4 Tactical Air Command Center Handbook
15. MCWP 3-25.5 Direct Air Support Center Handbook
16. MCWP 3-25.7 Tactical Air Operations Center Handbook
17. TM 08565A-CD-1 TAOM System Manual
18. TOP GUN MANUAL TOP GUN Manual, Volumes I and II
19. U-TAOC-PCL-03862 TAOC Pocket Checklist

2.9 CORE SKILL PHASE (2000 PHASE)

2.9.1 Purpose. To train the ADCO in surveillance identification, traffic director and air direction as prerequisite training for SID, STD and SAD qualifications. Focus of this phase is to train the ADCO to execute methods, exercise practical application of skill sets, and plan/manage MACS operational capabilities. While assigned to a Marine Air Control Squadron (MACS), under the direct supervision, the ADCO moves from an introductory understanding of core skills to core skill proficiency.

2.9.2 General.

2.9.2.1 Prerequisite. Complete Core Skill Introduction phase of training.

2.9.2.2 Admin Notes

- (1) The SID and STD training can be conducted concurrently.
- (2) The ADCO must complete the SID and STD qualifications prior to moving on to the SAD skill set.

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

PAR NO.	STAGE NAME
2.9.3	ACADEMICS (ACAD)
2.9.4	SURVEILLANCE (SURV)
2.9.5	DATA LINK COORDINATOR (DLC)

2.9.6	TACTICAL AIR TRAFFIC CONTROLLER (TATC)
2.9.7	TRAFFIC (TRFC)
2.9.8	SENIOR WEAPONS DIRECTOR (SWD)
2.9.9	SENIOR AIR DIRECTOR (SAD)
2.9.10	COMMAND AND CONTROL SYSTEMS (C2SYS)

2.9.3 ACADEMICS (ACAD) STAGE

2.9.3.1 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. Academic events are one-time events unless otherwise stated.

2.9.3.2 General

Total Training Events. 59 events, 59 hours.

ACAD 2000 (1.0) B L

Goal. Know how to properly configure and initialize the Air Defense Communications Platform (ADCP)

Requirement. Given the reference:

1. State the mission of the AN/MSQ-124 Air Defense Communications Platform (ADCP).
2. State the operational characteristics of the AN/MSQ-124 ADCP.
3. List the five suites found within the AN/MSQ-124 ADCP and describe the components that make up those suites.
4. State the types of voice communications and equipment available within the AN/MSQ-124 ADCP.
5. List the components that comprise the Link 16 equipment.
6. State the different forms of data communications that the AN/MSQ-124 ADCP is capable of conducting.
7. State the primary difference when setting up the AN/MSQ-124 ADCP as a stand-alone system vice setting it up as part of a TAOM system.
8. List the steps for loading the KGV-8C.
9. List the steps within the AN/MSQ-124 ADCP for the initialization of Link 16 when it is part of a TAOM system.
10. List the steps within the AN/MSQ-124 ADCP for the initialization of Link 16 when it is a stand-alone system.

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

Instructor. BI qualified DLC; SI qualified SID or SAD; or a WTI

Reference.

1. ADCP Tech Manual
2. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook

ACAD 2001 (1.0) B L

Goal. Understand the TAOC's Electronic Protection (EP) Capabilities

Requirement. Given the reference:

1. Define the following:
 - a. Electronic Attack (EA).
 - b. Electronic Support (ES).
 - c. Electronic Attack (EA).
 - d. Electronic Protection (EP).
 - e. Operations Security (OPSEC).
 - f. Communications Security (COMSEC).
2. Explain the TAOC's procedure for reporting Electronic Warfare (EW) occurrences.
3. State who is responsible for EW control. Describe their responsibilities.
4. Describe the following EMCON available in the AN/TYQ-23 (v)4:
 - a. Blinking.
 - b. Blanking.
5. State the six planning considerations for the TAOC in an EW environment.

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

Instructor. SI qualified SID or SAD; or a WTI

Reference.

1. MCWP 3-40.5, Electronic Warfare
2. JP 3-13.1, Electronic Warfare
3. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
4. TM 07751A-14/10 Technical Manual AN/TPS-59 RADAR

ACAD 2002 (1.0) B L

Goal. Know the data links and characteristics of the Extended Interfaces.

Requirement. Given the reference, state the purpose and characteristics of the following extended Interfaces TDLs:

1. Link 4A
2. ATDL-1
3. Variable Message Format (VMF)
4. Link 1

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

Instructor. BI qualified DLC; SI qualified SID or SAD; or a WTI

Reference. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP) Manual

ACAD 2003 (1.0) B L

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

Instructor. SI qualified SID or SAD; or a WTI

Reference.

1. MCWP 3-22, Antiair Warfare
2. MCWP 3-25, Control of Aircraft and Missiles
3. MCWP 3-25.11, Multi-Service Tactics, Techniques, and Procedures for Mark XII IFF Mode 4 Security Issues in a Joint Integrated Air Defense System (SECRET)
4. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual

ACAD 2005 (1.0) B L

Goal. Know the purpose of Interface Coordination.

Requirement. Given the reference:

1. State who controls the establishment of the Multi-TDL 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-TDL environment.
5. List the five correlation restrictions for reported tracks.
6. List the eight operational contingency constraints (OCCs) for a track.
7. List the six steps for voice resolution of a dual designation.
8. IAW the JMTOP, what is the single most important element of information of the TDL 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 qualified DLC; SI qualified SID or SAD; or a WTI

Reference.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. MIL STD 6016_

ACAD 2006 (1.0) B L

Goal. Know the capabilities, limitations, and equipment associated with Joint Range Extension Application Protocol (JREAP).

Requirement. Given the reference:

1. Define Joint Range Extension Application Protocol (JREAP).
2. State the exchange mediums for:

- a. JREAP-A
 - b. JREAP-B
 - c. JREAP-C
3. State the limiting factors for:
- a. JREAP-A
 - b. JREAP-B
 - c. JREAP-C
4. List the characteristics of the following systems are available for JREAP operations:
- a. Joint Range Extension (JRE)
 - b. Air Defense System Integrator (ADSI)

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

Instructor. BI qualified DLC; SI qualified SID or SAD; or a WTI

Reference.

1. ESD 070001 JRE Setup Guide
2. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
3. MIL-STD 3011, Joint Range Extension Application Protocol (JREAP)

ACAD 2007 (1.0) B L

Goal. Understand the procedures for conducting Multi-Tactical Data Link (TDL) Interface Operations.

Requirement. Given the reference:

1. Define the Multi-TDL Interface.
2. State the primary mission of the Interface Management duty assignments.
 - a. Joint Interface Control Officer (JICO)
 - b. Link 11/11B Manager
 - c. Link 16 Manager
 - d. Track Data Coordinator (TDC)
3. State who is responsible for assigning each of the above players.
4. List the interface responsibilities of the Joint Interface Control Officer/Unit.
5. List the interface responsibilities of the Track Data Coordinator.
6. State the document that contains the primary and alternate assignments for interface control and coordination responsibilities.
7. List and describe the three typical planning inputs required during Multi-TDL interface planning.
8. List and describe the five steps in Multi-TDL interface design.
9. Describe the procedures for entering into a mature TDL network.
10. Define Reporting Responsibility.
11. Explain how a unit can have reporting responsibility for a track not in its track number block.
12. State the purpose of Fidelity Drills on the JTAO Interface.

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

Instructor. BI qualified DLC; SI qualified SID or SAD; or a WTI

Reference. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual

ACAD 2008 (1.0) B L

Goal. Know the characteristics of and equipment configuration for Link 16 operations.

Requirement. With the aid of the reference:

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 qualified DLC; SI qualified SID or SAD; or a WTI

Reference.

1. TM-02013A 24/3, Tactical Air Operations Module Technical Manual
2. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual

ACAD 2009 (1.0) B L

Goal. Know the characteristics of and equipment configuration for Link 11 operations.

Requirement. Given the reference:

1. Define Link 11.
2. List and define the station modes of operation.
3. List and define the net modes of operation.
4. List the encryption devices used for Link 11 and state which one can be found in the AN/TYQ-23(v)4 .
5. Describe the characteristics for the following encryption modes:
 - a. A1
 - b. A2
 - c. B
 - d. Plain Text
6. State the purpose of the KGX-40

7. State the supported data rates for Link 11 and give a brief description of each.
8. Describe the NCS responsibilities.
9. Describe Link 11 Gridlock.
10. State the message format for Link 11.
11. Define Data Link Reference Point.

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

Instructor. BI qualified DLC; SI qualified SID or SAD; or a WTI

Reference.

1. TAOM tech manual
2. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTO) Manual

ACAD 2010 (1.0) B L

Goal. Know the characteristics of and equipment configuration for Link 11B operations.

Requirement. Given the reference:

1. State the definition of Link 11B.
2. State the communications mediums that Link 11B can be transmitted over.
3. State the encryption devices used for Link 11B.
4. State the interoperability differences between a KG-84A and KG-84C.
5. State the device necessary for Army LINK 11B units utilizing MSE equipment to communicate with the TAOC, who provides it, and why it is necessary.
6. State the data rates by which LINK 11B can be transmitted.
7. Give and explain the LINK 11B link states.
8. State what size "data message" is utilized for LINK 11B.
9. State the three LINK 11B data message groups.
10. State the purpose of the LINK 11B standby signal.
11. State the differences between Full Transmission of Data and Limited Transmission of Data.
12. State the valid unit address range for LINK 11B.

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

Instructor. BI qualified DLC; SI qualified SID or SAD; or a WTI

Reference.

1. TM-02013A 24/3, Tactical Air Operations Module Technical Manual
2. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTO) Manual

ACAD 2011 (1.0) B L

Goal. Know the purpose of and the information within Operational Tasking Data Links (OPTASK LINK).

Requirement. Given the reference:

1. State the purpose of the OPTASK LINK.

2. State the purpose of the Common Message Processor (CMP) and discuss its relationship to the OPTASK LINK.
3. Explain the information contained in the following sets:
 - a. "CONDUCT OF TDL OPERATIONS" set.
 - b. "CONTINGENCY PROCEDURES" set.
 - c. "TRACK PRODUCTION AREA GUIDANCE" set.
 - d. "GENTEXT" set.
 - e. "AMPN" set.
 - f. "NARR" set.
 - g. "PERIOD" set.
 - h. "UNITFLTR" set.
 - i. "IVCCN" set.
 - j. "REF" set.
 - k. "OPER" set.
 - l. "EXER" set
4. Explain information in the following sets associated with Link 11:
 - a. "DUTY" set.
 - b. "LSYSDATA" set.
 - c. "LPUDATA" set.
 - d. "POLLSEQ" set.
5. Explain the information contained in the following sets associated with Link 11B:
 - a. "DUTY" set.
 - b. "LRUDATA" set.
 - c. "LRULINK" set.
6. 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 qualified DLC; SI qualified SID or SAD; or a WTI

Reference.

1. Guide to the USMTF User Formats - OPERATIONAL TASKING LINKS
2. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual

ACAD 2012 (1.0) B L

Goal. Know the types and purpose of data filters.

Requirement. Given the reference:

1. State the purpose of the data filters.
2. State the personnel responsible for data filters and their associated duties.
3. describe the characteristics of prearranged and non-prearranged data filters.
4. state the function of filter numbers and identify codes associated with the following types of unit filter types:
 - a. Link 11 Transmit filter.
 - b. Link 11B Transmit filter.
 - c. Link 16 Transmit filter.

- d. Data forwarding filter for data forwarded from Link 11 to Link 11B.
 - e. Data forwarding filter for data forwarded from Link 11B to Link 11
 - f. Transmit filter for all data links in a multi-link interface.
 - g. Data forwarding filter for data forwarded from Link 16 to Link 11.
 - h. Data forwarding filter for data forwarded from Link 16 to Link 11B.
 - i. Data forwarding filter for data forwarded from Link 16 to Link 11/11B
 - j. Data forwarding filter for data forwarded from Link 11 or Link 11B to Link 16.
5. List essential information that should be included when establishing a data filter.
 6. State the purpose of the following data filter types:
 - a. Geographic filters
 - b. Fixed or slaved filters
 - c. Identification filters
 - d. Environment filters
 - e. Reference point filters
 - f. EW filters
 - g. Special Processing Indicator (SPI) filters
 7. State operational factors that may dictate the use of data filters.
 8. State the doctrinal restrictions on the establishment of data filters.

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

Instructor. BI qualified DLC; SI qualified SID

Reference. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual

ACAD 2013 (1.0) B L

Goal. Know the purpose of National Data Systems.

Requirement. Given the reference state the purpose of the following systems.

1. Commanders' Tactical Terminal
2. DATA HAWK
3. Gale Lite
4. Intelligence Broadcast Service
 - a. TIBS
 - b. TRAP
5. National Systems Cueing

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

Instructor. SI qualified SID or SAD; or a WTI

Reference.

1. Guide to the USMTE User Formats - OPERATIONAL TASKING LINKS
2. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTO) Manual

ACAD 2014 (1.0) B L

Goal. Understand the factors for Radar Employment and Performance.

Requirement. Given the reference:

1. Plan for RADAR employment.
2. Explain the performance characteristics of the TAOC's RADARS.
3. Given a scenario, map, and mission, emplaces the TAOC RADARS to maximize the objective performance of the systems.
4. State the primary limiting factor of the TAOC's RADARS.
5. Describe two measures that can be taken to minimize terrain masking on the TAOC's RADARS.
6. State the environmental considerations when employing a RADAR system to include:
 - a. Terrain
 - b. Soil composition
 - c. Ducting
7. State the nine considerations for selecting a RADAR site.
8. State how the following affect RADAR emplacement.
 - a. Mission
 - b. Threat axis
 - c. Threat analysis
 - d. Adjacent agencies
 - e. Adjacent sensors
 - f. Data link architecture
9. State the specific planning considerations for the emplacement of the following RADARS:
 - a. An/TPS-59(v3)
 - b. An/TPS-63B
10. State the following specifications for each RADAR:
 - a. Power requirements
 - b. Antenna height
 - c. Required surface area for site
 - d. Frequency spectrum and associated bands
 - e. Number of shelters
 - f. Transportability
 - g. Set up time
 - h. Crew size for 24 hour operations
 - i. Mission capabilities
11. State the inherent modes available with each RADAR system to enhance performance of the system

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

Instructor. SI qualified SID or SAD; or a WTI

Reference.

1. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
2. TM 07751 Technical Manual AN/TPS-59 RADAR
3. TM 07736C AN/TPS-63B
4. MAWTS-1 Basic RADAR Principles student handout

ACAD 2015 (1.0) B L

Goal. Understand the advantages, disadvantages, and characteristics for Remote Radar.

Requirement. Given the reference:

1. Give the tactical advantages/disadvantages of utilizing the remote radar functionality.
2. List the mediums on which are available to run a remote radar link.
3. List the steps to establish a remote radar link for each medium.
4. Establish an RIU test target to check the circuitry of the link.
5. Perform trouble shooting for the link.

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

Instructor. SI qualified SID or SAD; or a WTI

Reference.

1. TM 02013B 14/12, TAOM Technical Manual
2. U-TAOM-PCL-03862, TAOC Pocket Checklist

ACAD 2016 (1.0) B L

Goal. Know the role of the TAOC Surveillance Section

Requirement. With the aid of the reference:

1. Of the doctrinal roles of the TAOC, state the roles that are assisted and performed by the SID.
2. Of the doctrinal tasks of the TAOC, state the roles that are assisted and performed by the SID.
3. State the doctrinal responsibilities of the SID.
4. State the doctrinal mission of the surveillance section.
5. State the doctrinal responsibilities of the Data Link Coordinator.
6. State the doctrinal responsibilities of the Surveillance Operator
7. State the type of information that is passed over the following nets: Track Supervision Net (TSN)
 - a. Data Link Coordination Net (DCN)
 - b. Combat Identification and Detection Net (CI/D)
 - c. Voice Production Net (VPN)
8. State the surveillance personnel that use the following nets:
 - a. TSN
 - b. DCN
 - c. CI/D
 - d. VPN
9. State the NCS for the following nets:
 - a. TSN
 - b. DCN
 - c. CI/D
 - d. VPN

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

Instructor. SI qualified SID or SAD; or a WTI

Reference.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOF) Manual
2. MCWP 3-40.3, Communications and Information Systems
3. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook

ACAD 2017 (1.0) B L

Goal. Identify the components of the TAOC Communications Equipment

Requirement. Given the reference:

1. State the following the equipment within each of the following equipment groups:
 - a. Internal Radio Equipment (IRE)
 - b. Voice Communication Equipment (VCE)
2. State the total communication assets within a 1, 2, 3, and 4 TAOM system.
3. The operator interface for communication in the TAOM.
4. The use of the Voice Communication Access Software (VCAS).

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

Instructor. BI qualified SCC; SI qualified SID, STD, or SAD; or a WTI

Reference.

1. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
2. U-TAOC-PCL5623, TAOC Pocket Checklist
3. TM 02013B-24/7, Internal Radio Equipment
4. TM 02013B-24/4, Voice Communication Equipment

ACAD 2018 (1.0) B L

Goal. Know the TAOC's Data Link Capabilities

Requirement. Given the reference:

1. List the data links the AN/TYQ-23 (V)4 is capable of processing.
2. List the data links the AN/MSQ-124 is capable of processing.
3. State the number of data links available in a one TAOM configuration with one and two computers.
3. State the number of data links available in a two, three, and four TAOM configuration.
4. State how many separate track number blocks can the TAOM maintain
5. State the maximum number of PU's that may be active in a Link 11 net in which a TAOM system is acting as Net Control Station and as a Picket.
6. State how many separate data link addresses the TAOM can use simultaneously for different links.
7. State the data link capabilities and limitations of the Air Defense Communications Platform.

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

Instructor. BI qualified DLC; SI qualified SID or SAD; or a WTI

Reference.

1. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
2. U-TAOC-PCL-6005, TAOC Pocket Checklist
3. 2005 Marine Corps Tactical Data Systems Reference Guide
4. TM 06565B 10/1,

ACAD 2019 (1.0) B L

Goal. Identify the capabilities of Joint Tactical Data Systems (TDS) Platforms

Requirement. Given the reference:

1. State the data link capabilities of USMC TDS Platforms.
2. State the data link capabilities of Navy TDS Platforms.
3. State the data link capabilities of Air Force TDS Platforms.
4. State the data link capabilities of Army TDS Platforms.

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

Instructor. SI qualified SID or SAD; or a WTI

Reference. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual

ACAD 2020 (1.0) B L

Goal. Know the responsibilities of the Track Data Coordinator (TDC).

Requirement. Given the reference:

1. State who assigns the Tack Data Coordinator.
2. Understand different names for the TDC used by other branches of service.
3. Understand the 10 responsibilities of the TDC.
4. Be familiar with the TDC's voice net and what info is passed on it.

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

Instructor. SI qualified SID or SAD; or a WTI

Reference. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual

ACAD 2021 (1.0) B L

Goal. Understand the concept of Theater Missile Defense

Requirement. Given the reference:

1. Identify the major TMD systems in each service and their associated defense segment.
2. State the four pillars of DOD's TMD philosophy.

3. State the three tiers of TMD.
4. State the three phases of flight for Ballistic Missiles.

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

Instructor. SI qualified SWD or a WTI

Reference.

1. Missile Defense Agency website www.mda.mil
2. Joint Pub 3-01, Joint Doctrine for Countering Air and Missile Threats
3. Joint Pub 3-01.5 Joint TMD Doctrine
4. Naval Warfare Publication 32, "Anti Air Warfare"

ACAD 2022 (1.0) B L

Goal. Know the agencies, personnel, and source documentation related to airspace management.

Requirement. Given the reference:

1. Define two types of control exercised by the Marine Air Command and Control system (MACCS).
2. Explain the different types of Air Defense Control Measures.
3. Define the following:
 - a. Air Control
 - b. Airspace Management
4. List and explain the different types of Airspace Control Methods.
5. Explain the different Airspace Control Measures.
6. Identify the responsibilities of the following:
 - a. Joint Force Air Component Commander (JFACC)
 - b. Airspace Control Authority (ACA)
 - c. Area Air Defense Commander (AADC)
 - d. Identify the purpose of the following joint air command and control documents:
 - e. Airspace Control Plan (ACP)
 - f. Area Air Defense Plan (AADP)
 - g. Airspace Control Order (ACO)
 - h. Tactical Operation Data (TACOPDAT)
 - i. Air Tasking Order (ATO)

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

Instructor. SI qualified SID, STD, SWD, or SAD; or a WTI

Reference.

1. MCWP 3-22, Antiair Warfare
2. MCWP 3-25, Control Of Aircraft and Missiles
3. MCRP 3-25 ICAC2, Multiservice procedures for integrated combat airspace command and control

ACAD 2023 (1.0) B L

Goal. Understand the phases of and the information contained in Air Tasking Orders (ATOs) and Frags.

Requirement. Given the reference:

1. Explain the six phases of the ATO generation cycle:
 - a. Phase I - Command Aviation Guidance
 - b. Phase II - Target/Air Support Mission Development
 - c. Phase III - Air Allocation and Allotment
 - d. Phase IV - Tasking
 - e. Phase V - Force Execution
 - f. Phase VI - Combat Assessment
2. State the information contained within the ATO/FRAG.
3. Explain the use of the Airspace Control Order (ACO).
4. Break down the information contained within an ATO for use on a TATC/RIO Log.

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

Instructor. SI qualified STD or SAD; or a WTI

Reference.

1. MCWP 3-2, Aviation Operations
2. MCWP 3-25, Control of Aircraft and Missiles
3. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
4. JP 1-02, DoD Dictionary of Military and Associated Terms
5. JP 3-52, Joint Doctrine for Airspace Control in a Combat Zone
6. JP 3-56.1, Command and Control for Joint Operations

ACAD 2024 (1.0) B L

Goal. Understand the capabilities and limitations of the various types of Aviation Ordnance.

Requirements. Given the reference:

1. State the caps of a given type of ordnance.
2. State best type of ordnance needed to combat a certain target.
3. State the description of a given type of ordnance.

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

Instructor. SI qualified SWD

Reference.

1. Air Force Weapons File
2. MAWTS-1 Marine Aviation Intelligence Reference

ACAD 2025 (1.0) B L

Goal. Understand the communications brevity used in aviation command and control combat vocabulary.

Requirement. Given the reference, define the following terms from the unclassified communications brevity handout:

a. Action
b. Active
c. Alligator
d. As Fragged
e. Autocat
f. Bandit
g. Banzai
h. Bead Window
i. Beaming
j. Bent
k. Bingo
l. Bird
m. Bittersweet
n. Bogey
o. Buzzer
p. Chattermark
q. Chicks
r. Cleared
s. Cleared Hot
t. Cold
u. Cons
v. Cover
w. Cutoff
x. Cyclops
y. Dash (#)
z. Divert
aa. Dolly
bb. Drag
cc. Duck
dd. Estimate
ee. Faded
ff. Fast
gg. Father
hh. Feet Wet/Dry
ii. Flank
jj. Friendly
kk. Furball
ll. Gadget
mm. Go Active
nn. Go Clear
oo. Gorilla
pp. Go Secure
qq. Grandslam
rr. Group
ss. Heavy
tt. Home Plate
uu. Hostile
vv. Hot
ww. India
xx. Jackal
yy. Joker
zz. Judy
aaa. Leakers
bbb. Magnum
ccc. Mickey
ddd. Midnight
eee. Outlaw

fff. Parrot
ggg. Pigeons
hhh. POGO
iii. Reference
jjj. Retrograde
kkk. Rider
lll. Saunter
mmm. Shadow
nnn. Skate
ooo. Slide
ppp. Sour
qqq. Spades
rrr. Strangle
sss. Sunrise
ttt. Sweet
uuu. Trespass
vvv. Tumbleweed
www. What State
xxx. Winchester
yyy. Words
zzz. Yardstick

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

Instructor. SI qualified STD, SWD, or SAD, AICI or a WTI

Reference.

1. NFWS communications brevity handout
2. MCRP 3-25B Multi-Service Air-to-Air, Air-to-Surface,
3. Surface-to-Air Brevity (ALSA Handbook)

ACAD 2026 (1.0) B L

Goal. Understand Deep Air Support (DAS)

Requirement. Given the reference:

1. Define the (3) types of Deep Air Support.
2. Discuss the differences between "Deep Air Operations Manager" and the "Deep Air Operations Coordinator".
3. Identify the tools available to facilitate effective Command and Control.

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

Instructor. SI qualified SWD or a WTI

Reference.

1. MCWP 3-23.2, Deep Air Support
2. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
3. MCWP 3-25, Control of Aircraft and Missiles

ACAD 2027 (1.0) B L

Goal. Know the procedures, terms, and squawks associated with emergency procedures.

Requirements. Given the reference:

1. List the definitions for the following code words:
 - a. EVERGREEN
 - b. MAYDAY
 - c. PEDRO
 - d. PAN
2. List the meaning of the following IFF/SIF codes:
 - a. 7500
 - b. 7600
 - c. 7700
3. List the actions taken for a controlled emergency.
4. List the actions taken for an uncontrolled emergency.
5. State the actions taken for an aircraft with lost communications.
6. List the SAR frequencies.
7. State the procedures taken for a ditched/downed aircraft.

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

Instructor. SI qualified STD, SWD, or SAD; or a WTI

Reference.

1. U-TAOM-PCL-6005, Tactical Air Operations Center Pocket Checklist
2. Unit SOP

ACAD 2028 (1.0) B L

Goal. Understand the types of Fire Support Coordination Measures (FSCMs).

Requirement. Given the reference:

1. List 2 types of FSCMs.
2. Identify 3 types of permissive FSCMs.
3. List 4 types of restrictive FSCMs.
4. Identify where most FSC occurs in the USMC.

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

Instructor. SI qualified STD, SWD or WTI

Reference.

1. MCWP 3-25, Control of Aircraft and Missiles
2. MCRP 3-25H, Multi-Service Tactics, Techniques, and Procedures For Kill Box Employment
3. MCWP 3-16, Fire Support Coordination in the Ground Combat Element

ACAD 2029 (1.0) B L

Goal. Understand Joint Close Air Support (JCAS)

Requirements. Given the reference:

1. List the types of control referenced in JP 3.
2. List the new requirements of effective JCAS.
3. Define CAS.
4. Describe Type I, II, and III CAS.

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

Instructor. SI qualified SWD or a WTI

Reference.

1. Joint Pub 3-09.3, Joint Tactics, Techniques, and Procedures for Close Air Support (CAS)
2. ACE MOUT Manual Edition IX
3. MCWP 3-23.1, CAS
4. MCWP 3-16.2, TTP for Fire Support Coordination

ACAD 2030 (1.0) B L

Goal. Understand Joint Tactical Air Request (JTAR)

Requirement. Given the reference:

1. Describe the purpose of the Joint Tactical Air Request.
2. State how JTARs are numbered.
3. Receive and process a JTAR.

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

Instructor. SI qualified SWD or a WTI

Reference.

1. MCWP 3-25.5, Direct Air Support Center (DASC) Handbook
2. JP 3-09.3, Joint Tactics, Techniques, and Procedures for Close Air Support (CAS)

ACAD 2031 (1.0) B L

Goal. Understand Offensive Air Support (OAS)

Requirement. Given the reference:

1. List 2 major subcategories of OAS.
2. Define CAS, AI, AR, SCAR.
3. Identify the requirements for effective OAS.

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

Instructor. SI qualified SWD or a WTI

Reference.

1. MCWP 3-23, Offensive Air Support

2. JP 3-09.3, Joint Tactics Techniques and Procedures for Close Air Support (CAS)
3. MCWP 3-23.1, Close Air Support
4. FMFM 3-23.2, Deep Air Support

ACAD 2032 (1.0) B L

Goal. Understand the types, key elements, planning considerations for personnel recovery.

Requirement. Given the reference:

1. Identify the prerequisites for conducting a personnel recovery mission.
2. Identify the key elements of personnel recovery mission.
3. Identify the 2 types of personnel recovery.
4. Identify the primary authentication methods for a particular threat level.
5. List the planning considerations for conducting urban personnel recovery.

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

Instructor. SI qualified STD, SWD, or SAD; or a WTI

Reference.

1. JP 1-02, DoD Dictionary of Military and Associated Terms
2. JP 3-50.2, Doctrine for Joint Combat Search and Rescue
3. JP 3-50.21, Joint TTPs for Combat Search and Rescue
4. NWP 19-2, Combat Search and Rescue Procedures

ACAD 2033 (1.0) B L

Goal. Understand the TAOC's role in, and associated planning considerations for tanker management.

Requirement. Given the reference:

1. Identify the basic numbers and locations of all KC-130 units and the capabilities and limitations of their associated aircraft.
2. Describe the role of the tanker aircraft in support of the AAW plan.
3. List the management problems associated with asset tasking and actual integration of the tanker asset into the overall plan.
4. Describe the method in determining available tanker assets.
5. Describe how to manage the tanker flow.
6. Describe the TAOC's role in other than defensive aerial refueling operations.
7. List the crew responsibilities and command relationships for all managing agencies.

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

Instructor. SI qualified STD or SAD; or a WTI

Reference.

1. MCWP 3-21, Marine Aviation
2. MCWP 3-24, Assault Support
3. NAVAIR 00-80T-110, NATOPS, Air to Air Refueling Manual
4. NWP 3-22.5-KC-130 Vol 1, KC-130 Tactical Manual

ACAD 2034 (1.0) B L

Goal. Know procedures and associated communications nets for the TAOC's Traffic Section communications responsibilities.

Requirement. Given the reference:

1. Describe voice handover procedures.
2. Describe the TAOC's tanker management procedures.
3. Explain the purpose of the following nets:
 - a. TATC
 - b. Handover/Cross-tell
 - c. Tanker
4. Describe the internal communications within the Traffic section.
5. Explain the information passed over the following nets:
 - a. TATC
 - b. Handover/Cross-tell
 - c. Tanker
 - d. Search and Rescue (SAR) Net

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

Instructor. BI qualified TATC; SI qualified STD or SAD; or a WTI

Reference. MCWP 3-40.3, Communications and Information Systems

ACAD 2035 (1.0) B L

Goal. Know the TAOC's Traffic Section responsibilities.

Requirement. Given the reference:

1. State the roles that are assisted and performed by the STD.
2. State the tasks that are assisted and performed by the STD.
3. State the doctrinal responsibilities of the STD.
4. State the doctrinal mission of the traffic section.
5. State the doctrinal responsibilities of the TATC.

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

Instructor. SI qualified STD or SAD; or a WTI

Reference. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook

ACAD 2036 (1.0) B L

Goal. Know the TAOM and AN/TPS-59's weather requirements.

Requirement. Given the reference:

1. State how to enter the following weather items into the TAOC database:
 - a. Weather Forecast
 - b. Airfield weather
 - c. Current area weather
2. State the required AN/TPS-59 weather information entries and their effects on radar data.
3. Describe the criteria for VFR/IFR.

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

Instructor. SI qualified SID, STD, or SAD; or a WTI

Reference.

1. TM 02013B-10/1, Technical Manual for AN/TYQ-23 TAOM
2. TM 07751B-14/10, Technical Manual AN/TPS-59 RADAR

ACAD 2037 (1.0) B L

Goal. Understand the types, purpose, and goals of Antiair Warfare (AAW).

Requirement. Given the reference:

1. Define AAW and its two basic types.
2. Give three examples of passive air defense measures.
3. State the principles of AAW and state the primary goal of each.
4. Determine which AAW method is appropriate for a given scenario.
5. State the primary purpose of AAW.

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

Instructor. SI qualified SWD or a WTI

Reference. MCWP 3-22, Antiair Warfare

ACAD 2038 (1.0) B L

Goal. Describe the Air Defense Cell Responsibilities.

Requirements. Given the reference:

1. State the MACS facility and crew member that assumes the ADC responsibility in the alt TACC role.
2. State the doctrinal responsibility of the TACC ADC.
3. List 11 specific responsibilities of the ADC.
4. List 5 specific items that the ADC and SWO will coordinate with the TAOC SADC OPS.
5. List what additional doctrinal nets the TAOC will monitor, guard or assume net control on.

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

Instructor. SI qualified SWD or a WTI

Reference.

1. MCWP 3-25.4, Marine Tactical Air Command Center Handbook
2. MCWP 3-25.6, Sector Antiair Warfare Coordinator Handbook
3. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook

ACAD 2039 (1.0) B L

Goal. Know the phases of an air intercept and the associated terminology.

Requirement. Given the reference:

1. Define the five phases of the intercept.
2. Define the following terms and the phase of the intercept (to include terms from the brief) where they are most likely used.

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

Instructor. BI qualified AIC or AICS; SI qualified SWD; r an AICI

Reference.

1. NFWS Intercept Control
2. MAWTS-1 Tactical Terminology Handout
3. MAWTS-1 Air Intercept Control Class
4. ALSA Manual

ACAD 2040 (1.0) B L

Goal. Understand the concepts associated with Combat Air Patrol (CAP) Management.

Requirement. Given the reference:

1. State the advantages and disadvantages of fighter strip versus fighter CAP.
2. List the factors that determine the fighter time/distance analysis
3. State the considerations needed to optimize CAP effectiveness in the MAGTF IADS.
4. State the nine factors that should be considered for Cap placement.
5. List and define the States of Alert for fighter aircraft.
6. State the items that comprise responsiveness to the Threat Timeline.

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

Instructor. SI qualified SWD or an AICI

Reference. MCWP 3-22, Antiair Warfare

ACAD 2041 (1.0) B L

Goal. Understand the types of fighter missions.

Requirement. Without the aid of the references,

1. Explain DCA
2. Explain OCA
3. Explain Self-escort strike
4. Explain Drag to Defend tactics
5. Explain Notch to Defend tactics

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

Instructor. SI qualified SWD or an AICI

Reference. TOPGUN Manual

ACAD 2042 (1.0) B L

Goal. Understand the data and voice communications requirements for Ground-Based Air Defense (GBAD).

Requirements. Given the reference:

1. Identify the doctrinal definition, establishment and information passed over the following nets:
 - a. AAI/AAC (Antiaircraft Intel/Antiaircraft Control)
 - b. AOC (Air Ops Control)
 - c. CID (Combat ID)
 - d. ADA (Air Defense Alert)
2. Identify the Data Link used by different GBAD units

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

Instructor. SI qualified SWD or a WTI

Reference.

1. MCWP 3-25.10, Low Altitude Air Defense (LAAD) Handbook
2. MCWP 3-40.3, Communication and Information Systems
3. MCWP 3-22, Antiair Warfare

ACAD 2043 (1.0) B,R L

Goal. Know the characteristics and concepts of an Integrated Air Defense Systems (IADS) Employment.

Requirement. Given the reference:

1. Name the three objectives of an IADS.
2. Name the four components of an IADS.
3. Name the three levels of control.
4. Describe the characteristics of a manual grid system, semi-automated system, and automated system.
5. Compare and contrast a territorial and tactical IADS.

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

Instructor. SI qualified SWD or a WTI

Reference.

1. Joint Pub 3-01.4 J-SEAD
2. Joint Pub 3-10.1 J-TTP for Base Defense
3. Joint Pub 3-13.1 J-C2W
4. Air Force TTP 3-1.2 Threat Reference Guide

ACAD 2044 (1.0) B L

Goal. Understand the fundamentals of intercept control.

Requirement. Given the reference:

1. List and define the different types of control.
2. List and define different anchor points.
3. Describe the communication goals and tools.
4. Describe the parts of the CORE format.
5. Know the definitions and standardized examples of Names and Labels.
6. Know the definition and proper use of the following words:
 - a. Arms
 - b. Maneuver
 - c. Package
 - d. New/Additional group
 - e. Descriptive Updates
 - f. Groups Passing
 - g. Status
 - h. Separation
 - i. Spike
 - j. Strobe
 - k. Music
7. State and give examples of the five types of control.
8. Be able to properly label the following:
 - a. VIC
 - b. CHAMPAGNE
 - c. BOX
 - d. LADDER
 - e. ECHELON
 - f. WALL

Performance Standard. State the definition of the items IAW the reference; minor errors corrected by the trainee are acceptable.

Instructor. BI qualified AIC or AICS; SI qualified SWD; r an AICI

Reference. TOPGUN Manual Chapter 47

ACAD 2045 (1.0) B L

Goal. Understand the purpose of and information contained in Operations Plans (OPLANS) and Operations Orders (OPORDERS).

Requirement. Given the reference:

1. Define the following terms:
 - a. Operations Order
 - b. Operations Plan
2. State the two categories of planning.
3. State the definition of operational planning.
4. State what operational planning involved at the strategic, operational, and tactical level of planning.
5. State the two basic types of directives.
6. State the three types of directives.
7. List the phases of planning a Joint OPLAN and the entities that are responsible for completing it.
8. Identify the main sections within the Joint Operations Plan.

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

Instructor. SI qualified SAD or a WTI

Reference.

1. JP 1-02, DoD Dictionary of Military and Associated Terms
2. JP 3-56.1, Command and Control for Joint Operations
3. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
4. MCDP 5, Planning
5. MCDP 6, Command and Control

ACAD 2046 (1.0) B L

Goal. Understand the purpose and intent of Rules of Engagement (ROE).

Requirement. Given the reference:

1. Define:
 - a. Law of War
 - b. Rules of Engagement (ROE)
 - c. Supplemental Measures
 - b. Hostile Act
 - e. Hostile Intent
2. State the purpose of the Law of War
3. State the intent of Standing Rules of Engagement (SROE)

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

Instructor. SI qualified SWD or SAD; or a WTI

Reference.

1. CJCSI 3121.01 Standing ROE for US Forces
2. DOD Inst 5100.77
3. DOD Law of Armed War Program
4. MCO 3300 Marine Corps Law of War Program
5. JP 1-02, DoD Dictionary of Military and Associated Terms

ACAD 2047 (1.0) B L

Goal. Understand the concepts associated with and the elements of a threat analysis.

Requirement. Given the reference:

1. List and understand the 3 elements of threat analysis
2. Build and effectively use a threat analysis timeline
3. Understand threat assessment and counter-tactics

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

Instructor. SI qualified SWD or a WTI

Reference.

1. AFTTP 3-1

ACAD 2048 (1.0) B L

Goal. Know the capabilities and limitations of U.S. and Allied Aircraft.

Requirement. Given the reference, describe the unclassified max speed, combat radius, role, and the type of armament the following US/ Allied aircraft can carry:

1. F-5
2. F-15
3. F-16
4. F/A-18
5. AV-8B
6. F-22
7. JSF
8. EA-6B
9. A-10
10. GR-4 Tornado

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

Instructor. SI qualified SWD, AICI.

Reference.

1. MAWTS-1 Aviation Intelligence Reference
2. Air Combat Command Systems Training Guide Aircraft Capabilities SG-716

ACAD 2049 (1.0) B L

Goal. Know the capabilities and limitations of U.S. and Allied Air-to-Air missiles.

Requirement. Given the reference, describe the type of terminal guidance, and the unclassified max effective range of the following missiles:

1. AIM-7
2. AIM-9
3. AIM-120

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

Instructor. BI qualified AIC or AICS; SI qualified SWD; r an AICI

Reference.

1. MAWTS-1 Aviation Intelligence Reference
2. Air Force Weapons File

ACAD 2050 (1.0) B L

Goal. Know the communications associated with the TAOC's Weapons Section.

Requirement. Given the reference:

1. What information is passed internally between the weapons section and the following positions:
 - a. SADC Ops
 - b. SAD
2. Discuss the purpose, type, and composition of the following nets:
 - a. Air Defense Alert
 - b. Air Operations Control
 - c. Combat Information/Detection
 - d. Fighter Air Direction
 - e. Antiaircraft Intelligence
 - f. Antiaircraft Control
 - g. Air Defense Command and Control Net
3. Identify and state the purpose of the nets that are used by the weapons section in the alternate TACC role.

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

Instructor. SI qualified SWD

Reference.

1. MCWP 3-40.3, Communications and Information Systems
2. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
3. MCWP 3-25, Control of Aircraft and Missiles

ACAD 2051 (1.0) B L

Goal. Know the functions of the TAOC's Weapons Data Link orders.

Requirement. Given the reference:

1. Describe the functions of the following outgoing orders:
 - a. MODE 3
 - b. SECURE RADIO
 - c. V/CONT FREQ
 - d. PRIMARY
 - e. ALTERNATE
2. List the 7 "pairing MADs" (Mission Assignment Discrete).
3. List the 7 "Engagement MADs".
4. List the 7 "Simple MADs".
5. State the purpose of the MSN ASSIGNMENTS VFS.

6. List the 9 NON-VECTORED PAIRING MADs contained in the MSN ASSIGNMENT VFS.
7. List the 6 NON-VECTORED ENGAGEMENT MADs contained in the MSN ASSIGN VFS.
8. List the 8 OTHER MADs contained in the MSN ASSIGN VFS.
9. State the purpose of the INCPTR ASSIGN VFS.
10. List the 9 OS's associated with the INTCPTR ASSIGN VFS.

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

Instructor. BI qualified AIC or AICS; SI qualified SWD; r an AICI

Reference.

1. TM 08056B 10/1
2. AN/TYQ-23(V)4 OCU Upgrade Training Course Weapons Control Study Guide
3. SWAC (Switch Action) DIC

ACAD 2052 (1.0) B L

Goal. Know the responsibilities of the TAOC's Weapons Section.

Requirement. Given the reference:

1. Of the doctrinal roles of the TAOC, state the roles that are assisted and performed by the SWD.
2. Of the doctrinal tasks of the TAOC, state the tasks that are assisted and performed by the SWD.
3. State the doctrinal responsibilities of the Senior Weapons Director.
4. State the doctrinal mission of the weapons section.
5. State the doctrinal responsibilities of the Air Intercept Controller.
6. State the doctrinal responsibilities of the Missile Controller.
7. State the doctrinal responsibilities of the Assistant Weapons Controller.

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

Instructor. SI qualified SWD

Reference. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook

ACAD 2053 (1.0) B L

Goal. Understand the requirements of the TAOC to perform as an Alternate TACC.

Requirements. Given the reference:

1. State the conditions that must be met to establish the Alternate TACC.
2. State the additional required radio nets for the TAOC to assume the Alternate TACC role.

3. State the role of the ATACC.
4. State the additional personnel needed by the TAOC to assume the ATACC role.
5. State the additional responsibilities for the SADF staff and the TAOC crew in the ATACC role.

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

Instructor. SI qualified SAD or a WTI

Reference.

1. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
2. JP 3-01, Countering Air and Missile Threats

ACAD 2054 (1.0) B L

Goal. Know the capabilities and limitations of Joint Command and Control systems (C2SYS) and Agencies.

Requirement. Given the reference:

1. Describe the capabilities of United States Marine Corps (USMC) Systems/ Agencies:
 - a. Tactical Air Command Center (TACC)
 - b. Tactical Air Operations Center (TAOC)
 - c. Marine Air Traffic Control Aircraft Landing Systems (MATCAL)
 - d. Direct Air Support Center (DASC)
2. Describe the capabilities of United States Navy (USN) Systems/Agencies:
 - a. E2-C Hawkeye Group 0 Aircraft
 - b. E2-C Hawkeye Group 2 Aircraft
 - c. AEGIS Cruiser/Destroyer
 - d. CVN
3. Describe the capabilities of United States Air Force Systems/Agencies
 - a. USAF Aerospace Operations Center (AOC)
 - b. Control and Reporting Center (CRC)
 - c. E-3 Sentry Block 3035 Aircraft
 - d. E-8A JSTARS Aircraft
 - e. Rivet Joint

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

Instructor. SI qualified SAD or a WTI

Reference.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. JP 3-13.1, Joint Doctrine for Command and Control Warfare
3. MCWP 3-25.2, TAGS, Multiservice Procedures for the Theater Air-Ground System

ACAD 2055 (1.0) B L

Goal. Understand the process of MACCS information flow.

Requirement. Given the reference:

1. List the categories of information hierarchy.
2. Explain the 2 basic principles of information management theory.
3. List the 4 principles of sound information managements.
4. List the 6 characteristics of a communication and information system.
5. List and explain the 3 categories of information required for situational awareness (SA).
6. Define the goal of information management.
7. State the purpose of Commanders Critical Information Requirements (CCRIs).
8. List and explain the 3 types of CCRIs.
9. Define the following:
 - a. Request for Information (RFI)
 - b. Delegation of Authority
 - c. Air Direction
 - d. Air Control
 - e. Track Production Area (TPA)

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

Instructor. SI qualified SAD or WTI

Reference.

1. MCDP 6, Command and Control
2. MCWP 3-40.3, Communications and Information Systems
3. MCWP 3-25.2, TAGS, Multiservice Procedures for the Theater Air-Ground System

ACAD 2056 (1.0) B L

Goal. Understand the process of Phasing Control Ashore for amphibious operations.

Requirement. Given the reference:

1. Identify the facilities the CLF must have ashore IOT control OAS & Assault Support
2. Identify the Navy agency equivalent to the landing force FSCC
3. Identify what must be established ashore for C2 to shift from Navy TACC to the Landing Force
4. Identify the section of the Navy TACC that is responsible for AAW
5. Identify who has overall control of artillery fires during all phases of an amphibious assault

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

Instructor. SI qualified SAD or a WTI

Reference.

1. Joint Pub 3-02, Joint Doctrine for Amphibious Operations
2. MCWP 3-25.3, Marine Command and Control System Handbook
3. MCDP-3, Expeditionary Operations
4. MCWP 0-1, Marine Corps Operations

5. MCWP 3-16.2, Fire Support Coordination in the Ground Combat Element

ACAD 2057 (1.0) B L

Goal. Know the TAOC emplacement and power requirements.

Requirement. Given the reference:

1. Determine the Mission tasking of the TAOC and the available sites for deployment.
2. Conduct a Site survey for the TAOC and assess the following:
 - a. Supportability
 - b. Radar Coverage
 - c. Tactical Dispersion
 - d. Communications Connectivity
 - e. Suitable site characteristics
 - f. Selection of alternate sites
3. State the power requirements for the following:
 - a. AN/TPS-59 (v)3
 - b. AN/TPS-63B
 - c. AN/TYQ-23 (v)4
 - d. AN/TYQ-87 Sector Antiair Warfare Facility (SAAWF)
 - e. AN/TSQ-124 Air Defense Communications Platform (ADCP)
4. State the type of generator used with each of the following and the minimum number required for each.
 - a. AN/TPS-59 (v)3
 - b. AN/TPS-63B
 - c. AN/TYQ-23 (v)4
 - d. AN/TYQ-87 Sector Antiair Warfare Facility (SAAWF)
 - e. AN/TSQ-124 Air Defense Communications Platform (ADCP)
5. State the difference between running the generators in parallel and series

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

Instructor. SI qualified SAD or a WTI

Reference.

1. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
2. TM 02013B 10/1

ACAD-2058 (1.0) B L

Goal. Describe key communications planning documents.

Requirement. Given an operational scenario, describe key communication documents required for TAOC operations:

1. The Annex K of an Operations Order.
2. The cryptographic data sets of an operational tasking links.
3. An Electronic Key Management System (EKMS) Communications Security (COMSEC) callout.

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

Instructor. SI qualified SID, SWD, STD, SAD or WTI

Reference.

1. Exercise Operations Order
2. MCI 2540, Communication Plans and Orders

ACAD-2059 (1.0) B L

Goal. Extract key material information from Electronic Key Management System (EKMS) Communications Security (COMSEC) callout.

Requirement. Given an operational scenario, describe key communication documents required for TACC operations:

1. Identify the four main pieces of key information:
 - a. Short Title
 - b. Edition
 - c. Segment
 - d. Classification
2. Identify segment roll over dates and time.

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

Instructor. BI qualified SCC; SI qualified SID, SWD, STD, SAD or WTI

Reference. MCI 2525B, Communications Security

ACAD-2060 (1.0) B L

Goal. Review proper handling and storage of classified materials.

Requirement. Given the references, conduct a self paced review to ensure understanding of the following learning objectives:

1. State the different levels of classification.
2. State the marking requirements for each level of classification.
3. State the two-person integrity (TPI) rule.
4. State storage procedures for each level of classification.
5. Identify transportation requirements for classified material.
6. State the sections of the SF-702.
7. Identify the approved security containers utilized for storage.

Performance Standard. Although self paced, instructors may assist trainees as required. Upon completion of the requirement, the student will notify the instructor who will log the event as complete.

Instructor. BI qualified DLC or SCC

Reference

1. MCO P5510.1A
2. EKMS-1

2.9.4 SURVEILLANCE (SURV) STAGE

2.9.3.1 Purpose. To train the Air Defense Control Officer (ADCO) in Surveillance Identification Director (SID) duties that include detection,

- d. Applicable map/overlay features.
2. Conduct briefed ID and classification procedures:
 - a. Correlate SIF codes with published directives.
 - b. Interrogate Mode IV and post results as required.
 - c. Adhere to published ID criteria/Rules of Engagement (ROE) when evaluating unknown tracks.
 - d. Classify tracks in a timely manner, per SID direction.
3. Manage symbols with a focus on data entry/updating.
4. Compile and forward Joint Spectrum Interference Resolution (JSIR) report.

Performance Standard. Complete the requirement items IAW the references. Setup the surveillance database and accurately classify all tracks within assigned sector; correctly update track data. Instructor assistance is not allowed.

Instructor. BI qualified SO; SI qualified SID, SAD; or a WTI

Prerequisite. 2004, 2016, 2027.

Reference.

1. MCWP 3-25.7 TAOC Handbook
2. USMTF Baseline
3. TM 08565B-10/1

SURV-2102 2.0 1095 B, R 1 TAOM, 1 AN/TPS-59 or AN/TPS-63 L

Goal. Maximize RADAR performance.

Requirement. Given a TAOM and one sensor, conduct the following:

1. Coordinate RADAR employment/utilization plan with RADAR section.
2. Ensure radar alignment by coordinating with RADAR section or external RADAR units.
3. Achieve data registration by utilizing one of the following variable function switches:
 - a. Sensor Registration
 - b. JTIDS Unit (JU) Registration
 - c. Remote Interface Unit Registration
4. Provide RADAR section with timely weather updates.
5. Properly set low speed filter
6. Build a Sector Inhibit and Censor Area as applicable
7. Operate remote RADAR by utilizing one of the following communication methods:
 - a. UHF radios
 - b. Wire

Performance Standard. Complete the requirement items IAW the references. Event is considered complete when RADAR is aligned, data is registered, and preventable clutter is minimized. Requirement item (3) may be simulated.

Instructor. SI qualified SID, SAD or a WTI

Prerequisite. 2014, 2015, 2036

External Syllabus Support. External RADAR unit.

Prerequisite. 2008, 2013, 2019, 2021, 2046, 2055, 2100, 2122, 2123R, 2124R, 8040

Reference.

1. AN/TPS-59 V3 Technical Manual
2. AN/TPS-59 V3 Employment Manual
3. TMD Operations Manual

SURV-2106 8.0 (1095) B, R L

Goal. Conduct Tactical Planning for the surveillance section.

Requirement. Given a scenario, required source documentation, and a proficient surveillance crew:

1. Develop a radar coverage diagram for system radars that identify potential gaps in coverage due to terrain masking and radar horizon limitations.
2. Recommend emplacement/employment of the AN/TPS-59 and AN/TPS-63 radars.
3. Recommend a radar degradation plan.
4. Coordinate with subordinate, adjacent and higher units for data link architecture and implementation per the OPTASK LINK.
5. Extract an identification (ID) matrix from the ATO SPINS.
6. Identify Surveillance Section communications requirements and assignments.
7. Recommend Emissions Control (EMCON)/Radiation Control (RADCON) for subordinate agencies based on Operations Order (OPORD), Airspace Control Plan (ACP), and Airspace Control Order (ACO) direction.
8. Plan for AN/TPS-59 decoy employment.
9. Develop SO and DLC responsibilities.
10. Plan for employment of a remote radar, if applicable.
11. Identify surveillance DB requirements.
12. Submit the radar coverage diagram and the radar degradation plan to the instructor for validation.
13. Prepare and deliver a Surveillance Section crew brief per TAOC Handbook.

Performance Standard. Complete the requirement items IAW the references. Instructor will validate that the diagram and plan support the scenario. Brief must address all requirement items, and should support the scenario. Instructor will question the trainee during the brief to check understanding of the tactical planning process.

Instructor. SI qualified SID, SAD or a WTI

Prerequisite. 2000, 2001, 2004, 2005, 2006, 2007, 2016, 2017, 2018, 2020, 2047, 2054, 2058, 2059, 2060, 2100, 2101, 2102, 2104, 2105, 2120, 2121, 2122, 2123, 2124

Reference.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. MCWP 3-25.7
3. USMTF Baseline

2.9.4 DATA LINK COORDINATOR (DLC) STAGE

2.9.3.1 Purpose. To train the Air Defense Control Officer (ADCO) in Surveillance Identification Director (SID) duties that include:

- (1) Coordinate the TAOC's data link configuration,
- (2) Manage the DLC coordinating with subordinate agencies concerning making changes to degraded links.
- (3) Recommend changes to adjacent and senior agencies concerning degraded links.

2.9.3.2 General

Crew Requirements. A core/mission skill proficient surveillance crew will be required for higher level evaluated events.

Total Training Events. 5 events, 34 hours.

DLC-2120 8.0 1095 B, R 1 TAOM L

Goal. Operate a serial Tactical Data Link (TDL).

Requirement. Given a scenario and a TAOM:

1. Enter required database entries.
2. Ensure TAOC TDL equipment is set up and keyed.
3. Ensure required TDL filters are entered and activated per the OPTASK LINK.
4. Perform proper link entry and exit procedures.
5. Activate, determine the status of, and troubleshoot each link as applicable.
6. Perform order functions associated with the appropriate link.
7. Perform link management functions.

Performance Standard. Complete the requirement items IAW the references. Proper link entry/exit procedures are completed without error per reference (1). TDL has been initialized and is operating with tracks being exchanged. Training may be conducted between TAOM's utilizing any serial TDL (Link 11B, ATDL-1, NATO Link 1).

Instructor. Senior Instructor (SI) qualified SID, SAD or a WTI

Prerequisite. 2002, 2003, 2010, 2011, 2012, 2018, 2059, 2060, 2101

Reference.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
3. MIL STD 6011
4. STANAG 5501
5. TM 08565B-10/1

DLC-2121 8.0 (*) B 1 TAOM L

Goal. Operate Link 11.

Requirement. Given a scenario and a TAOM:

1. Enter required database entries.
2. Ensure TAOC TDL equipment is set up and keyed.
3. Ensure required TDL filters are entered and activated per the OPTASK LINK.
4. Perform proper net entry and exit procedures.
5. Activate, determine the status of, and troubleshoot link as applicable.
6. Operate in Simulcast.
7. Operate in the following modes:
 - a. Radio Silent (RADSIL).
 - b. Net Control Station (NCS).
 - c. Picket.
8. Perform link management functions per SID direction.
9. Perform TDL coordination responsibilities over designated voice nets.

Performance Standard. Complete the requirement items IAW the references. Proper link entry/exit procedures are completed without error per reference (1). Link 11 has been initialized and is operating with tracks being exchanged between Link 11 systems. Simulcast has been completed when both HF and UHF radios simultaneous transmit. Training may be conducted between TAOMs.

Instructor. SI qualified SID, SAD or a WTI

Prerequisite. 2009, 2011, 2012, 2018

Reference.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTO) Manual
2. MCWP3-25.7, Tactical Air Operations Center (TAOC) Handbook
3. MIL STD 6011
4. TM 08565B-10/1

DLC-2122 8.0 (1095) B,R 1 TAOM, 1 ADCP L

Goal. Operate Link 16.

Requirement. Given a scenario, a TAOM and an ADCP:

1. Ensure TDL database entries are entered and correct.
2. Ensure TAOC TDL equipment is set up/keyed.
3. Ensure required TDL filters are entered and activated per OPTASK LINK.
4. Identify Stacked Net # assignments as per OPTASK LINK for voice and air control; ensure they are entered and validated in the DB.
5. Load appropriate time and IDL into Link 16 terminal from TAOM.
6. Load IDL into Link 16 terminal with each of the following methods:
 - a. Enter information into database by extracting information from the slot block allocation sheet in the NDD.
 - b. Load the supplied initialization data load.
7. Demonstrate proper link entry and exit procedures.

8. Achieve fine synchronization in Link 16 network, determine status of, and troubleshoot the link as appropriate.
9. Operate in/as the following:
 - a. Radio Silent or data silent
 - b. Network Time Reference (NTR)
 - c. Initial Entry JTIDS Unit (IEJU)

Performance Standard. Complete the requirement items IAW the references. Proper link entry/exit procedures are completed without error per reference (1). Link 16 is completed when the Link 16 terminal achieves fine synchronization and information/data has been exchanged between platforms.

Instructor. SI qualified SID, SAD or a WTI

Prerequisite. 2008, 2011, 2012, 2018, 2101

External Syllabus Support. Link 16 capable platform

Reference.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTO) Manual
2. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
3. Understanding Link 16 Handbook, A Guidebook for US Navy and US Marine Corps Operators
4. MIL STD 6016
5. TM 08565B-10/1

DLC-2123 8.0 (1095) B,R 1 TAOM, 1 ADCP, 1 JRE-GW L

Goal. Configure and operate Joint Range Extension-Gateway (JRE-GW).

Requirement. Given a TAOM, ADCP, JRE-GW, and assistance from maintenance and communications section:

1. Configure JRE-GW into each of the following modes:
 - a. Transparent Gateway
 - b. Link 16 Terminal Host
 - c. Terminal Emulation
2. Configure communication hardware associated with JREAP A.
3. Configure communication hardware associated with JREAP B.
4. Enter unit data into the JRE-GW.
5. Build each of the following JREAP links in the JRE-GW:
 - a. JREAP A
 - b. JREAP B
 - c. JREAP C
6. Ensure required TDL filters are entered and activated per the OPTASK LINK.
7. Operate the JRE-GW to include the minimum:
 - a. Ensure proper net entry and exit procedures.
 - b. Activate, determine the status of, and troubleshoot any one of the three JREAP protocols.

Performance Standard. Complete the requirement items IAW the references. JRE-GW is configured for operations when requirement items (1) through (6) have been completed. Requirement item (7) is completed when one of the three JREAP protocols goes operational. Maintenance

and/or communications personnel and the instructor may assist with items (1) through (3) only.

Instructor. SI qualified SID, SAD or a WTI

Prerequisite. 2006, 2122

External Syllabus Support. External JREAP capable system

Reference.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
3. JRE-GW Users Guide
4. MIL STD 3011

DLC-2124 2.0 (1460) B, R 1 TAOM, 1 ADCP L

Goal. Set up and utilize ADCP in TAOM configuration.

Requirement. Given an ADCP, a TAOM, and with assistance of maintenance personnel:

1. Ensure Multi-Channel Interface Unit (MCIU) hard drive is installed.
2. Pull the IDL from the DST or Link 16 Terminal to the TAOM.
3. Utilize software on DST laptop to convert IDL file formats.
4. Interpret Link 16 Terminal status utilizing one of the following:
 - a. ADCP operator station
 - b. DST Laptop
 - c. JRE-GW.

Performance Standard. Complete the requirement items IAW the references. Maintenance personnel may assist in requirement number one. Demonstrate requirements items (2) through four without assistance.

Instructor. SI qualified SID, SAD or a WTI

Prerequisite. 2000, 2008, 2011, 2012, 2018, 2101

Reference.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. JRE-GW Users Guide
3. TM 10200A-14&P
4. TM 08565B-10/1

2.9.4 TACTICAL AIR TRAFFIC CONTROLLER (TATC) STAGE

2.9.3.1 Purpose. To train the Air Defense Control Officer (ADCO) in TATC duties that include sector airspace control, providing navigational assistance to friendly aircraft, and tanker control. This stage supports ADCO training towards STD qualification requirements.

2.9.3.2 General

Crew Requirements. A core/mission skill proficient TAOC crew will be required for higher-level evaluated events.

Total Training Events. 2 events, 9 hours.

TATC-2200 1.0 365 B, R 1 TAOM S

Goal. Provide flight information during and after an aircraft emergency.

Requirement. Given a TAOM and during a simulated emergency (controlled & uncontrolled), provide flight information during and after the aircraft emergency per the TAOC pocket checklist and squadron Standard Operating Procedures (SOPs) as applicable.

Performance Standard. Complete squadron aircraft emergency SOP checklist using proper switch actions IAW the references during a simulated emergency with a section of fighters. Minor errors self corrected by the trainee are acceptable. Errors the instructor deems to have a negative impact on operations shall result in event failure.

Instructor. Basic Instructor (BI) qualified TATC; Senior Instructor (SI) qualified STD, SAD; or a WTI

Prerequisite. 2027, 2032.

Reference.

1. TAOC Pocket Checklist
2. Squadron SOP

TATC-2201 8.0 (1460) B, R 1 TAOM 1 AN/TPS-59 or AN/TPS-63 S/L

Goal. Conduct TATC functions.

Requirement. Given a scenario, a TAOM, and while performing as a TATC:

1. Enter and maintain the Traffic database per STD direction.
2. RIO aircraft, to include:
 - a. Covered comm.
 - b. Authentication procedures.
3. Conduct SIF/Mode IV checks on all applicable aircraft.
4. Conduct external/internal handovers of aircraft as required.
5. Conduct Aerial Refueling (AR) operations.
 - a. Route tanker on the appropriate track and provide flight following as required.
 - b. Execute the Slide/Retrograde plan as the threat dictates or per STD direction.
 - c. Monitor, record, and report tanker fuel status.
 - d. Route aircraft to the tanker.
 - e. Route aircraft departing the tanker and handover to the appropriate controller/agency.
6. Maintain proper symbol management.
7. Assist the STD in traffic management functions.
8. Maintain appropriate TATC logs.

Performance Standard. Complete the required items IAW planning documents and references. Demonstrate consistent proficiency. Minor errors are allowed as long as the trainee self corrects. Errors that

the instructor deems to have a negative impact on operations shall result in event failure.

Instructor. SI qualified STD, SAD, or a WTI

Prerequisite. 2017, 2023, 2033, 2034, 2035, 2036, 2046, 2055, 2101, 2200

External Syllabus Support. External C3 agencies and tactical/ support aircraft.

Reference. MCWP 3-25.7

2.9.4 TRAFFIC (TRFC) STAGE

2.9.3.1 Purpose. To train the ADCO in STD duties that include sector airspace management, providing navigational assistance to friendly aircraft, and tanker management. STD supervisory duties are also trained to in this stage.

2.9.3.2 General

Crew Requirements. A core/mission skill proficient TAOC crew will be required for higher-level evaluated events.

Total Training Events. 3 events, 18 hours.

TRFC-2220 2.0 (*) B 1 TAOM L

Goal. Set up organic radios.

Requirement. Given one TAOM and two of each UHF, VHF, HF, and SATCOM radios:

1. Setup each radio:
 - a. Load voice crypto.
 - b. Make appropriate RPP/SEPP settings and crypto assignments.
 - c. Prepare UHF radios for active communications (HAVEQUICK).
2. Channelize radios.
3. Radio checks for each radio.

Performance Standard. Perform each requirement item IAW the references. Instructor shall verify the communications checks are complete.

Instructor. BI qualified SCC, TATC; SI qualified STD, SAD; or a WTI

Prerequisite. 2017, 2059, 2060.

Reference

1. TM 08565B-10/1
2. U-TAOC-PCL-03862

TRFC-2221 8.0 1095 B, R 1 TAOM 1 AN/TPS-59 or AN/TPS-63 L/S

Goal. Perform traffic section functions.

Requirement. Given a TAOM and while performing in the traffic section:

1. Enter and maintain the Traffic database per SAD direction.
2. RIO aircraft, to include:
 - a. Covered communications.
 - b. Authentication procedures.
3. Conduct SIF/Mode IV checks on all applicable aircraft.
4. Conduct external/internal handovers of aircraft as required.
5. Coordinate Aerial Refueling operations.
 - a. Route tanker to the appropriate track and provide flight following as required.
 - b. Execute the Slide/Retrograde plan as the threat dictates or per SAD direction.
 - c. Monitor, record, and report tanker fuel status.
 - d. Route aircraft to the tanker.
 - e. Route aircraft departing the tanker and handover to the appropriate controller/agency.
6. Maintain proper symbol management.
7. Maintain position log.

Performance Standard. Complete the required items IAW planning documents and references. Minor errors are allowed provided the trainee self corrects. Errors the instructor deems have a negative impact on operations shall result in event failure.

Instructor. SI qualified STD, SAD or a WTI

Prerequisite. 2017, 2022, 2023, 2025, 2033, 2034, 2036, 2046, 2055, 2200, 2201

Reference. MCWP 3-25.7

TRFC-2222 8.0 (1460) B, R L

Goal. Conduct mission analysis for the Traffic Section.

Requirement. Given a scenario and planning documents:

1. Extract relevant Airspace Control Measures (ACM) and theater specific control procedures from the planning documents for traffic operations.
2. Identify all traffic data base requirements.
3. Establish coordination procedures between the traffic section, and subordinate, adjacent and higher units to ensure implementation of handover procedures and ACMs.
4. Identify the Traffic Section communications requirements and assignments.
5. Interpret plans for aerial refueling (AR) operations and High Value Airborne Asset (HVAA) protection to determine:
 - a. Safe high value asset
 - b. Efficient refueling operations
6. Determine TATC responsibilities.
7. Conduct a threat analysis.
8. Recommend airspace control measures (ACM) to be used within the TAOC Area of Operations (AO).

9. Prepare and present the Traffic Section crew brief.

Performance Standard. Complete the required items IAW planning documents and references. The brief shall contain all required information and be presented in a confident and informed manner. The instructor shall evaluate and mentor the trainee throughout the event. During the brief instructor shall ask questions to check trainee's understanding of the mission analysis conducted.

Instructor. SI qualified STD, SAD or a WTI

Prerequisite. 2016, 2022, 2023, 2027, 2032, 2033, 2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2060

Reference. MCWP 3-25.7

2.9.4 SENIOR WEAPONS DIRECTOR (SWD) STAGE

2.9.3.1 Purpose. To familiarize the Air Defense Control Officer (ADCO) in weapons planning functions.

2.9.3.2 General

Crew Requirements. A core/mission skill proficient TAOC crew.

Total Training Events. 1 event, 8 hours.

SWD-2300 8.0 (1460) B, R L

Goal. Conduct tactical planning for a weapons section.

Requirement. Given required source documents and publications for an exercise or mission:

1. Develop a destruction area within the Tactical Air Operations Center (TAOC) assigned air defense sector by ensuring the following:
 - a. Coordinate with Ground Based Air Defense (GBAD) assets for employment/emplacement and Missile Engagement Zone (MEZ)/Joint Engagement Zone (JEZ) employment.
 - b. Coordinate with higher headquarters for Combat Air Patrol (CAP) employment and Fighter Engagement Zone (FEZ)/JEZ employment.
 - c. Analyze threat/time distance to Defended Asset List (DAL).
2. Determine CAP management/control responsibilities and procedures.
3. Coordinate Air Defense Artillery Fire Control Officer (ADAFCO) communications, roles and responsibilities.
4. Coordinate with an Senior Traffic Director (STD) for development of handover procedures and symbol management functions.
5. Coordinate reporting Anti-Air Warfare (AAW) asset status, strip alert procedures and CAP reconstitution.
6. Establish procedures for target assignments.
7. Develop Weapons Engagement Zone (WEZ) casualty procedures.
8. Disseminate TAOC and subordinate agency specific Rules of Engagement (ROE) procedures/requirements per published ROE.
9. Prepare and execute a Weapons Section brief per the TAOC Handbook.

10. Identify Weapons Section communications requirements and assignments.
11. Ensure all weapons database items are entered.

Performance Standard. Complete the requirement items IAW the references. Conduct all tactical planning during an exercise or mission. Provide a Weapons Section Brief in accordance with the references. The instructor shall ask the trainee questions during the brief to check for understanding of tactical planning process and content of the brief.

Instructor. SI qualified SWD, SAD, or a WTI.

Prerequisite. 2024, 2026, 2028, 2029, 2031, 2037, 2038 2039, 2040, 2041, 2042, 2044, 2048, 2049, 2050, 2051, 2052, 6100, 6200

Reference.

1. MCWP 3-22
2. MCWP 3-25
3. JP 3.01

2.9.4 SENIOR AIR DIRECTOR (SAD) STAGE

2.9.3.1 Purpose. To train the Air Defense Control Officer (ADCO) in SAD duties that include:

- (1) Plan for the deployment and employment of TAOC assets,
- (2) Ensure proper coordination among and within the TAOC sections,
- (3) Provide an operational system by directing ongoing maintenance through the system configuration coordinator, and assign casualty roles to crew members.

2.9.3.2 General

Admin Notes. For evaluation purposes, a mission will consist of a brief, execution and debrief of each event. Completing either of the events that correlate shall result in being given credit for both.

Crew Requirements. A core/mission skill proficient TAOC crew.

Total Training Events. 10 event, 92 hours.

SAD-2400	16.0	1095	B,R	L
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Goal. Conduct tactical planning.

Requirement. Given a scenario and required source documentation:

1. Identify system limitations for the Air Combat Element (ACE) Commander.
2. Develop operating procedures based on mission analysis for the traffic, weapons and surveillance sections.
3. Develop system configuration plan.

4. Draw a site emplacement plan to include:
 - a. Location of Principal End Items (PEIs)
 - b. List communications and power requirements.
 - b. RADAR and EW/C locations
5. List system data base entries to support the scenario.
6. Develop a crew watch schedule and change over procedures.
7. Develop a casualty/degradation plan and detailed restoration priorities plan.
8. Present the procedures and plan to the traffic, weapons and surveillance directors.
9. Ensure traffic, weapons and surveillance sections implement the operating procedures.
10. Monitor the conduct of a detailed threat analysis.
11. Submit the following to the instructor:
 - a. Operating procedures
 - b. configuration plan
 - c. site plan
 - d. Database list of entries
 - e. Crew schedule
 - f. Casualty degradation plan
 - g. A SAD brief.
12. Once approved by the instructor, present the brief to the crew.

Performance Standard. Complete each requirement item IAW the references. Instructor shall review submitted products to ensure they support the scenario and provide feedback. Instructor shall question the trainee during the brief to check for understanding of mission analysis process.

Instructor. SI qualified SAD or a WTI

Prerequisite. 2053, 2054, 2056, 6100, 6200

Reference. MCWP 3-25.7

SAD-2401 2.0 (*) B L

Goal. Conduct a site survey

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

1. Utilize planning tools (EMPRO, FalconView, AMP, SPEED, etc.) to determine terrain masking and line of sight connectivity.
2. Determine a primary and secondary site location.
3. Identify obstructions and hazards.
4. Determine tactical orientation and equipment emplacement.
 - a. Ensure emitters are emplaced IAW Hazardous Electronic Radiation to Fuels (HERF) regulations.
 - b. Ensure emitters are emplaced IAW Hazardous Electronic Radiation to Ordinance (HERO) regulations.
 - c. Ensure emitters are emplaced IAW Hazardous Electronic Radiation to Personnel (HERP) regulations.
 - d. Ensure emitters are emplaced to support working area.
5. Identify the placement for radars.

conduct an intercept using the TOP GUN communication format and IAW the reference. Minor errors self corrected by the trainee are acceptable. Errors the instructor deems to have a negative impact on operations will result in event failure.

Instructor. SI qualified SWD, AIC, AICS; or an AICI.

Prerequisite. 2200R, 2402.

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

SAD-2404 2.0 (*) B 1 TAOM 1 AN/TPS-59 or AN/TPS-63 L

Goal. Control a live section of fighter aircraft against an unknown threat.

Requirement. Using an operational TAOM and one RADAR, and given a section of fighter aircraft and unknown threat groups:

1. Provide threat information using core information/ communications format as briefed.
2. Provide broadcast control transitioning to tactical control after "the commit."
3. Utilize briefed procedures.
4. Tactics per AFTTP 3-1 Vol. 2

Performance Standard. Control a section against unknown threat groups and conduct an intercept using the TOP GUN communication format and IAW the reference. Minor errors self corrected by the trainee are acceptable. Errors the instructor deems to have a negative impact on operations will result in event failure.

Instructor. SI qualified SWD, AIC, AICS; or an AICI.

Prerequisite. 2200R, 2403.

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

SAD-2410 8.0 1095 B,R 2 TAOM, 1 AN/TPS-59 or AN/TPS-63 L

Goal. Perform system troubleshooting.

Requirement. Given a faulted TAOM system and functioning radar:

1. Reset failed components of a TAOM system in order to sustain operations.
2. Perform a multi-TAOM system echelon by:
 - a. Echelon in / out a TAOM
 - b. Echelon in / out a radar
3. Utilize system PM & Test FFS to locate and re-configure around faulted system components.
4. Reconfigure around problems with voice communications equipment.
5. Perform multi-TAOM system turn up and turn down.

Performance Standard. Complete each requirement item IAW the references. Recognize TAOM system problems and direct and perform

system reconfiguration to minimize operational impacts IAW the references with minimal error and guidance.

Instructor. SI qualified SAD or a WTI

Reference.

1. TM-08565B 10/1
2. MCWP 3-25.7

SAD-2411 12.0 (*) B 1 TAOM S

Goal. Perform the duties of a SAD during a TAOC only simulation exercise (SIMEX).

Requirement. Given required source documents and information, requisite equipment, and a simulated event:

1. Conduct crew brief.
2. Identify system failures/degradations:
 - a. Troubleshoot and perform fault isolation.
 - b. Utilize corrective action
 - c. Manage SCC during the process
3. Implement casualty procedures / restoration plan as the situation dictates.
4. Record events during crew watch in appropriate reports and logbooks.
5. Conduct system maintenance management via the SCC.
6. Conduct crew debrief.

Performance Standard. Complete each requirement item IAW the references and with minimal errors. The trainee may self correct if the error does not result in equipment or mission failure.

Instructor. SI qualified SAD or a WTI

Prerequisite. 2400, 2410, 6100, 6200.

Reference. MCWP 3-25.7

SAD-2412 8.0 (*) B 1 TAOM 1 AN/TPS-59 or AN/TPS-63 L/S

Goal. Perform the duties of a SAD during an exercise.

Requirement. Given a TAOM and one RADAR, and required source documents and information, requisite equipment, and a simulated or live event:

1. Conduct crew brief.
2. Identify system failures/degradations:
 - a. Troubleshoot and perform fault isolation.
 - b. Utilize corrective action
 - c. Manage SCC during the process.
3. Implement casualty procedures / restoration plan as the situation dictates.
4. Record events during crew watch in appropriate reports and logbooks.
5. Conduct system maintenance management via the SCC.

6. Implement integration procedures between senior, adjacent, and subordinate agencies.
7. Ensure critical information is disseminated accurate and timely.
8. Conduct crew debrief

Performance Standard. Complete each requirement item IAW the references and with minimal errors. The trainee may self correct if the error does not result in equipment or mission failure.

Instructor. SI qualified SAD or a WTI

Prerequisite. 2411, 6100, 6200.

External Support. Other Marine Aviation Command and Control Systems (MACCS), or Joint agencies.

Reference. MCWP 3-25.7

SAD-2413 16.0 (1460) B,R 1 TAOM 1 AN/TPS-59 or AN/TPS-63 L

Goal. Perform as a SAD.

Requirement. Given one TAOM and one RADAR, and required source documents and information, during a live event:

1. Conduct crew brief.
2. Implement system configuration plan.
3. Verify system data base entries are accurate.
4. Manage the following:
 - a. Communications drills
 - b. Fidelity drills
 - c. Casualty plan/system restoration
5. Direct and manage crew functions.
6. Implement integration procedures between senior, adjacent, and subordinate agencies.
7. Ensure critical information is disseminated accurate and timely.
8. Record events during crew watch in appropriate reports and logbooks.
9. Conduct crew debrief.

Performance Standard. Complete each requirement item IAW the references and with minimal errors. The trainee may self correct if the error does not result in equipment or mission failure.

Instructor. SI qualified SAD or WTI

Prerequisite. 2412, 6100, 6200.

External Syllabus Support. External C3 agencies

Reference. MCWP 3-25.7

2.9.4 COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE

2.9.3.1 Purpose. To develop proficiency in utilizing the command and control systems used in TAOC operations.

2.9.3.2 General

Admin Notes. Command and control system events are located in the MAWTS-1 C3 Course Catalog in order to maintain standardized training across the MACCS. The table below lists all C2SYS events that are to be completed by TAOC personnel by position. See the MAWTS-1 C3 Course Catalog for the events listed in the table below.

Total Training Events. 11 event, 11 hours.

T&R CODE	EVENT DESCRIPTION	POSITION
C2SYS-2900R	Set up profile on TBMCS client	SID, STD, SAD
C2SYS-2901R	Access TBMCS Online Master Help Index	SID, STD, SAD
C2SYS-2902R	Utilize the TBMCS Alerts Service Web Applications	SID, STD, SAD
C2SYS-2903R	Use TBMCS Map Manager	SID, STD, SAD
C2SYS-2905R	Utilize the Air Tasking Order Airspace Control Order Tool (AATWEB)	SID, STD, SAD
C2SYS-2910R	Use the Execution Status and Monitoring (ESTAT) tool	SID, STD, SAD
C2SYS-2917R	Publish the ATO	SID, STD, SAD
C2SYS-2921R	Operate C2 Personal Computer (C2PC)	SID, STD, SAD
C2SYS-2923R	Operate Command Post of the Future (CPoF)	SID, STD, SAD
C2SYS-2940R	Set up and establish communications utilizing an IRC network	SID, STD, SAD
C2SYS-2941R	Operate Web Development Software (i.e. SharePoint)	SID, STD, SAD

2.10 MISSION SKILL PHASE (3000)

2.10.1 Purpose.

(1) To provide standardized training standards for individuals operating tactical data systems in the TAOC.

(2) To evaluate the ADCO on the director position for which being trained in once all core skill training requirements have been completed. Mission skill training consists of events required to be recommended for position qualification. Upon qualification, the individual has achieved the mission skill proficiency to support the unit MET(s) and counts towards CMMR.

2.10.2 General

2.10.2.1 Admin Notes.

(1) The SID and STD qualifications are normally accomplished during the first two years of assignment to an operational MACS while the SAD qualification is normally accomplished in the third year of assignment.

(2) Mission skill events are aligned by position. When a mission skill event is completed, it remains current for 1460 days (48 months). During the 48 month interval, if the ADCO refreshes the qualification event,

the corresponding mission skill event will be chain-updated. However, if the ADCO goes delinquent in a qualification, policy on regaining a qualification applies, see chapter 2 of reference (a). Delinquent qualifications do not count towards CMMR.

2.10.2.2 Stages. The following stage is included in the Mission Skill Phase of training. This stage includes events for SID, STD, and SAD.

PAR NO.	STAGE NAME
2.10.3	DIRECTORS (DRCTR)

2.10.2.3 Total Training Events. 3 events, 32 hours.

2.10.3 DIRECTOR (DRCTR) STAGE

2.10.3.1 Purpose. To train the ADCO in Surveillance, Traffic and Air Direction to fill the crew positions of SID, STD and SAD on a TAOC crew. Each of the events listed below are required for qualification of the ADCO and for their inclusion on the CMMR for Mission Skills TAOC and EWC METs.

2.10.3.2 General

Prerequisites. Core Skill complete for the Mission Skill attempting to attain.

Crew Requirements. A Core/Mission Skill proficient crew.

DRCTR-3100 16.0 (1460) B,R,E 1 TAOM, 1 AN/TPS-59 or AN/TPS-63 L

Goal. Perform as a Surveillance Identification Director (SID).

Requirement. Given an operational TAOM and one radar, a surveillance crew, published ID criteria, ACO, ATO, and OPTASK LINK:

1. Validate surveillance database entries including EMCON, data links, radar parameters, and ACM's.
2. Ensure all aircraft are identified and classified IAW published ID criteria.
4. Ensure data links are initialized IAW OPTASK LINK or senior ICO direction.
5. Perform functions of the TDC or ICO if directed and applicable.
6. Activate EP/EMCON plan for TAOC and/or subordinate agencies at appropriate time.
7. Ensure manual crosstell procedures are accomplished correctly.
8. Compile and forward Joint Spectrum Interference Resolution (JSIR) report.
9. Maintain an accurate and detailed logbook.

Performance Standard. Complete the requirement items IAW the references. The trainee shall demonstrate a level of proficiency expected of a qualified SID under general supervision. The instructor shall ensure the trainee maintains situational awareness and effects proper coordination.

Instructor. SI qualified SID, SAD or a WTI

Prerequisite. 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2027, 2036, 2046, 2047, 2055, 2059, 2060, 2100, 2101, 2102R, 2103R, 2104, 2105, 2106R, 2120R, 2121, 2122R, 2123R, 2124R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 8000, 8080

External Syllabus Support. External C2 Agency with TDL capability

Reference.

1. CJCSM 6120.01, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. MCWP 3-25.7
3. USMTF Baseline

DRCTR-3200 8.0 (1460) B,R,E 1 TAOM 1 AN/TPS-59 or AN/TPS-63 L

Goal. Perform as Senior Traffic Director (STD).

Requirement. Given an operational TAOM and radar, and while performing STD duties, demonstrate proficiency in the following:

1. Direct and validate all traffic data base entries.
2. Ensure effective employment and adherence to published ACMs and RIO procedures.
3. Supervise the execution of AR operations.
4. Assist in coordinating SAR/TRAP missions in assigned sector.
5. Coordinate Aerial Refueling operations.
6. Conduct handovers with the Weapons Section and external agencies.
7. Maintain STD log.

Performance Standard. Complete the required items IAW planning documents and references. Demonstrate the consistent proficiency level expected of a qualified STD under general supervision. Minor errors are allowed as long as the trainee self corrects. Errors that the instructor deems have a negative impact on operations shall result in event failure. The instructor shall ensure the trainee maintains situational awareness and effects proper coordination.

Instructor. SI qualified STD, SAD or a WTI

Prerequisite. 2004, 2016, 2017, 2022, 2023, 2025, 2027, 2032, 2033, 2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2059, 2060, 2101, 2200R, 2201, 2220, 2221R, 2222R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 8000, 8020, 8080

External Syllabus Support. External C3 agencies, tactical/ support aircraft.

Reference. MCWP 3-25.7

DRCTR-3400 8.0 (1460) B, R, E 1 TAOM 1 AN/TPS-59 or AN/TPS-63 L

Goal. Perform as a Senior Air Director (SAD).

Requirement. Given an operational TAOM and a radar, required source documents and information, while performing SAD duties a live event:

1. Develop surveillance, traffic, and or weapons management section requirements.
3. Identify TAOC section communications requirements.
4. Identify system requirements.
5. Conduct crew brief
6. Implement casualty procedures / restoration plan as the situation dictates.
7. Direct and manage crew functions.
8. Record events during crew watch in appropriate reports and logbooks.
9. Conduct crew debrief.

Performance Standard. Complete each requirement item IAW the references and with minimal errors. The trainee may self correct if the error does not result in equipment or mission failure. The instructor shall ensure the trainee maintains situational awareness and effects proper coordination.

Instructor. SI qualified SAD or a WTI.

Prerequisite. 2024, 2026, 2028, 2029, 2031, 2037, 2038, 2039, 2041, 2042, 2043, 2044, 2048, 2049, 2051, 2052, 2053, 2054, 2056, 2057, 2102, 2200R, 2300R, 2400R, 2410R, 2411, 2412, 2413R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 6100R, 6200R, 8060

External Syllabus Support. External C3 agencies.

Reference. MCWP 3-25.7

2.11 CORE PLUS SKILL PHASE (4000)

2.11.1 Purpose. To train the ADCO in air intercept control skills and deep air operations. This phase contains core plus training that includes completion of Air Intercept Controller (AIC) and Deep Air Operations Coordinator (DAOC) qualification training requirements. Personnel trained in the Core Plus phase are those Marines a commanding officer feels are capable of directing the actions of subordinates during wartime scenarios. A certain number of trained individuals or crews may be required to accomplish special missions or tasks.

2.11.2 General

2.11.2.1 Admin Notes. A comprehensive brief and debrief will be conducted for each mission per squadron SOPs.

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

PAR NO.	STAGE NAME
2.11.3	AIR INTERCEPT CONTROLLER (AIC)

2.11.4	DEEP AIR OPERATIONS COORDINATOR (DAOC)
2.11.5	COMMAND AND CONTROL SYSTEMS (C2SYS)

2.11.2.3 Total Training Events. 14 events, 76 hours.

2.11.3 AIR INTERCEPT CONTROLLER (AIC) STAGE

2.11.3.1 Purpose. To train the ADCO on communications procedures and tactics associated with Ground Controlled Intercepts (GCI).

2.11.3.2 General

Admin Notes.

(1) For evaluation purposes, a mission will consist of a brief, execution and debrief of each event.

(2) The AIC will become proficient in controlling simulated and live fighter aircraft employing section and division tactics.

(3) The AIC will become proficient in controlling during live and simulated integrated air defense exercises with multiple fighters.

(4) Briefing and debriefing standards will be per squadron SOP to include flight safety and emergency procedures.

(5) Link 16 will be used to the fullest extent possible.

(6) Missions will be executed per ROE established by published AAW directives, operational planning orders/documents, or individual mission briefs.

(7) TACTS facilities should be used when available for debriefing purposes.

(8) All AIC events should be performed in the TAOM during initial qualification.

(9) T&R events will not be credited for control from non-TAOM system i.e. TACTS, RADS, MARTS, etc. Credit may be logged for control from non-TAOM facilities (runs/hours recorded in blue book).

Crew Requirements. A core/mission skill proficient TAOC crew will be required for the exercise events.

Total Training Events. 7 events, 32 hours.

AIC-4100 2.0 (365) B, R, E 1 TAOM, 1 AN/TPS-59 or AN/TPS-63 L

Goal. Perform as AIC for a section of fighter aircraft against unknown threat groups.

Requirement. Given a TAOM, a radar, and a section of fighter aircraft and unknown threat groups:

1. Provide threat information using core information/Communication format as briefed.

2. Provide broadcast control transitioning to tactical control after the commit.
3. Utilize briefed procedures.
4. Tactics per AFTTP 3-1 Vol. 2

Performance Standard. Complete each requirement item IAW the references. Control a section against unknown threat groups and conduct an intercept using the TOP GUN communication format and IAW the reference. Minor errors self corrected by the trainee are acceptable.

Instructor. BI qualified AIC; SI qualified AICS or SWD; or an AICI.

Prerequisite. 2200R, 2403.

External Syllabus Support. Fighter and aggressor aircraft

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

AIC-4101 6.0 B 1 TAOM, 1 AN/TPS-59 or AN/TPS-63 L/S

Goal. Perform as AIC for fighter aircraft on DCA missions.

Requirement. Given a TAOM, a radar, a Defensive Counter Air (DCA) mission (Point, Area Defense, or HVAA Protection) against an unknown threat, conduct the following on three separate missions with a minimum of one division mission:

1. Utilize intercept procedures IAW TOP GUN procedures.
2. Utilize proper brief/debrief procedures per TOP GUN standards.

Performance Standard. Complete each requirement item IAW the references. Control three separate DCA missions with consistent proficiency and IAW the reference. At least one of the missions controlled will have a minimum of a division of fighters. Minor errors self corrected by the trainee are acceptable.

Instructor. BI qualified AIC; SI qualified AICS or SWD; or an AICI.

Prerequisite. 2200R, 2403.

External Syllabus Support. Fighter and aggressor aircraft

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

AIC-4102 6.0 B 1 TAOM, 1 AN/TPS-59 or AN/TPS-63 L/S

Goal. Perform as AIC for fighter aircraft on OCA missions.

Requirement. Given a TAOM, a radar, and an Offensive Counter Air (OCA) mission (Strike Escort, Screen, or Sweep) against an unknown threat, conduct the following on three separate missions with a minimum of one division mission:

1. Utilize GCI procedures as briefed by aircrew or IAW TOP GUN procedures.
2. Utilize proper brief/debrief procedures IAW TOP GUN standards.

Performance Standard. Complete each requirement item IAW the references. Control three separate OCA missions with consistent proficiency and IAW the reference. At least one of the missions controlled will have a minimum of a division of fighters. Minor errors self corrected by the trainee are acceptable.

Instructor. BI qualified AIC; SI qualified AICS or SWD; or an AICI.

Prerequisite. 2200R, 2403.

External Syllabus Support. Fighter and aggressor aircraft

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

AIC-4103 6.0 B 1 TAOM, AN/TPS-59 or AN/TPS 63 L/S

Goal. Perform as AIC for fighter aircraft on Self-escort Strike missions.

Requirement. Given a TAOM and during a self-escort strike mission against an unknown threat, on three separate missions with a minimum of one division mission, conduct the following:

1. Utilize intercept procedures as briefed or IAW TOP GUN procedures.
2. Utilize proper brief/debrief procedures IAW TOP GUN standards.

Performance Standard. Complete the requirement items IAW the reference. Control three separate self-escort strike missions with consistent proficiency and IAW the reference. At least one of the missions controlled will have a minimum of a division of fighters. Minor errors self corrected by the trainee are acceptable.

Instructor. BI qualified AIC; SI qualified AICS or SWD; or an AICI.

Prerequisite. 2200R, 2403.

External Syllabus Support. Fighter and aggressor aircraft

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

AIC-4104 2.0 B 1 TPS-59 or TPS-63 L

Goal. Perform as AIC from a TAOC TPS-59 or TPS-63 radar operator console.

Requirement. Given either a TPS-59 or TPS-63 radar operator scope and live fighters, perform AIC functions by conducting the following:

1. Ensure proper UHF and ICS communications setup.
2. Ensure proper radar console setup.
3. Control flight of aircraft utilizing briefed GCI procedures.

Performance Standard. Complete each requirement item IAW the references. Setup of communications and radar console and control a section or division of fighters from the radar scope. Minor errors self corrected by the trainee are acceptable.

Instructor. BI qualified AIC; SI qualified AICS or SWD; or an AICI.

Prerequisite. 2200R, 4100.

External Syllabus Support. Fighter and aggressor aircraft.

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

AIC-4105 2.0 (730) B, R, E 1 TAOM 1 AN/TPS-59 or AN/TPS-63 L

Goal. Perform as AIC for a division of fighter aircraft.

Requirement. Given a mission, an operational TAOM and a radar, conduct the following:

1. Ensure all AIC related DB entries are entered and correct.
2. Initiate and employ Link 16 as briefed.
3. Utilize briefed GCI procedures to control CAP aircraft using broadcast/tactical control methods.
4. Ensure effective cross-boundary coordination between engagement zones per SWD direction.
5. Disseminate current threat status and appropriate WCS, ADWC and SOA to the fighters.

Performance Standard. Complete each requirement item IAW the reference while controlling a division under the instruction of an AICI. Minor errors self corrected by the trainee are acceptable.

Instructor. BI qualified AIC; SI qualified AICS or SWD; or an AICI

Prerequisite. 2200R, 4100.

External Syllabus Support. Fighter and aggressor aircraft

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

AIC-4106 2.0 B 1 TAOM S

Goal. Perform as AIC for fighter aircraft in a simulated IADS.

Requirement. Given a TAOM and simulated fighter aircraft transiting through the IADS, control and handover the aircraft by conducting the following:

1. Ensure all AIC DB entries are correct.
2. Utilize briefed GCI procedures.
3. Ensure effective cross-boundary coordination between engagement zones per SWD direction.
4. Disseminate current threat status via WCS, ADWC and SOA to the fighters.

Performance Standard. Complete the requirement items IAW the reference. Control and handover the fighter aircraft IAW the reference. Relay all pertinent information to the fighter aircraft, and safely route them through the IADS. Minor errors self corrected by the trainee are acceptable.

Instructor. BI qualified AIC; SI qualified AICS or SWD; or an AICI

Prerequisite. 2200R, 2403R, 4101, 4102, 4103, 4105R

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

AIC-4107 2.0 (1460) E, R 1 TAOM 1 AN/TPS-59 or AN/TPS-63 L

Goal. Perform as an AIC during an exercise.

Requirement. Given a mission, a TAOM and a radar, while performing AIC duties during an exercise, perform as an AIC.

1. Ensure all AIC related DB entries are entered and correct.
2. Initiate and employ Link 16 as briefed.
3. Utilize briefed GCI procedures to control CAP aircraft using broadcast/tactical control methods.
4. Ensure effective cross-boundary coordination between engagement zones per SWD direction.
5. Disseminate current threat status and appropriate WCS, ADWC and SOA to the fighters.
6. Perform appropriate switch actions.

Performance Standard. Complete each requirement item IAW the reference while controlling a division of fighters. Minor errors self corrected by the trainee are acceptable.

Instructor. BI qualified AIC; SI qualified AICS or SWD; or an AICI

Prerequisite. 2004, 2025, 2027, 2039, 2041, 2043, 2044, 2046, 2048, 2049, 2050, 2051, 2200R, 2201, 2402, 2403, 4100R, 4101, 4102, 4103, 4104, 4105R, 4106, 8040

External Syllabus Support. AAW exercise with fighter and aggressor aircraft.

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

2.11.4 DEEP AIR OPERATIONS COORDINATOR (DAOC) STAGE

2.11.4.1 Purpose. To train the ADCO on DAOC responsibilities that include targeting, weaponeering, and general safety of flight for aircraft under the DBC's control. This stage contains training required to be eligible for qualification as a DAOC. This training will allow the commander flexibility for ADCOs to fill the role as a DAOC when needed.

2.11.4.2 General

Prerequisites. Be qualified as an STD.

Admin Notes.

(1) Due to unique battlespace requirements and limited asset availability, there are no live fly requirements to achieve DAOC. It is highly encouraged for DAOCs to train during live operations as able.

(2) All DAOC students will be supervised by a qualified DAOC.

(3) For evaluation purposes, a mission will consist of a brief, execution and debrief of each event.

(4) For officers, the SWD qualification as a prerequisite is dropped.

Crew Requirements. A core/mission skill proficient TAOC crew.

Total Training Events. 5 events, 42 hours.

DAOC-4200 10.0 B L

Goal. Conduct mission analysis.

Requirement. Given a scenario, required source documentation and requisite communication equipment:

1. Extract targets from the Joint Integrated Prioritized Target List (JIPTL), High Value Target (HVT) list, High Payoff Target (HPT) list and the Reactive Attack Guidance Matrix (RAGM).
2. Explain the effects of weather and terrain on weapons employment.
3. Recommend airspace control measures (ACM) to be used within the TAOC Area of Operations (AO) as applicable.
4. Coordinate with subordinate, adjacent, and higher units for implementation of handover procedures and ACM.
5. Plan for the execution of the Airspace Control Order (ACO), Airspace Control Plan (ACP), and Operations Order (OPORD).
6. Appraise applicable data base entries.
7. Prepare the Deep Air Operations brief per standards.

Performance Standard. Complete each requirement item IAW the references and with minimal error; the trainee may self correct. Data base entries and the Deep Air Operations brief shall be completed without error. Instructor shall the trainee questions during the brief to check for understanding of mission analysis process.

Instructor. SI qualified SWD, DAOC or a WTI

Prerequisite. 2024, 2026, 2028, 2029, 2030, 2048, 2049, 2053, 6200, 8020, 8040, 8060

Reference.

1. JP 3.60
2. MCWP 3-25.7

3. MCWP 3-16
4. MCWP 3-43.3

DAOC-4201 12.0 B 1 AFTDS/JDOCS Terminal L

Goal. Conduct weaponeering for the Deep Air Operations section.

Requirement. Given an Army Field Artillery Tactical Data System (AFATDS)/ Joint Automated Deep Air Operations Computer System (JDOCS) terminal and required source documents and information, requisite communications equipment, or an equivalent system:

1. Match available aviation assets with requests.
2. Demonstrate appropriate weapon to target pairing.
3. Coordinate with external agencies for collateral damage estimates (CDE).
4. Utilize the JADOCS or an equivalent.
5. Utilize the AFATDS or an equivalent.

Performance Standard. Complete each requirement item IAW the references. Identify the standard conventional load (SCL). Matching of assets and the ability to pair weapons with targets shall be completed without error. JADOCS, AFATDS, or equivalent systems requirements can be completed with minimal error provided the trainee self corrects.

Instructor. SI qualified SWD or DAOC, or a WTI

Prerequisite. 2024, 2026, 2028, 2029, 2030, 2048, 2049, 2053, 6200, 8020, 8040, 8060

Reference.

1. JP 3.60
2. MCWP 3-25.7
3. MCWP 3-16
4. MCWP 3-43.3

DAOC-4202 12.0 B 1 TAOM S/L

Goal. Integrate fires for deep air operations.

Requirement. Given a TAOM with requisite communications equipment; required information and source documents; and a simulation:

1. Deconflict long-range artillery fires.
2. Deconflict Naval Surface Fire Support assets.
3. Deconflict MAGTF and Joint aviation assets.

Performance Standard. Complete each requirement item IAW the references and with minimal errors. The trainee may self correct if the error does not result in fratricide or the wrong target being struck due to erroneous information being passed by the operator.

Instructor. SI qualified SWD or DAOC, or a WTI

Prerequisite. 2024, 2026, 2028, 2029, 2030, 2048, 2049, 2053, 4920R, 4924R, 6200, 8020, 8040, 8060

Reference.

1. JP 3.60
2. MCWP 3-25.7
3. MCWP 3-16
4. MCWP 3-43.3

DAOC-4203 6.0 B 1 TAOM S/L

Goal. Perform traffic management of assigned airspace.

Requirement. Given a TAOM with requisite communications equipment; required information and source documentation; and a simulation:

1. Ensure effective employment and adherence to published Airspace Control Measure (ACM)s and Radio In/Out (RIO) procedures.
2. Ensure effective employment of Deep Air Controller (DAC) or Tactical Air Traffic Controller (TATC).
3. Oversee control of Aerial Refueling operations.
4. Assist in coordinating Search and Rescue (SAR)/Tactical Recovery of Aircraft and Personnel (TRAP) missions in assigned sector.
5. Conduct handovers with the weapons adjacent and external agencies.
6. Ensure Theater Battle Management Core System (TBMCS) is properly utilized to receive and parse an Air Tasking Order (ATO).
7. Pass aircraft and mission updates via TBMCS.

Performance Standard. Complete each requirement item IAW the references and with minimal errors provided trainee self corrects and error did not result in fratricide.

Instructor. SI qualified STD, SWD, SAD, or DAOC; or a WTI

Prerequisite. 2026, 2028, 6200.

Reference.

1. JP 3.60
2. MCWP 3-25.7
3. MCWP 3-16
4. MCWP 3-43.3

DAOC-4204 2.0 (1460) B, R 1 TAOM S/L

Goal. Perform as a DAOC.

Requirement. Given a TAOM with requisite communications equipment; required information and source documentation; and a scenario that includes the control of aircraft during integrated deep air operations:

1. Manage pre-planned and immediate Joint Strike Tactical Air Request (JTAR)s.
2. Demonstrate weaponeering.
3. Deconflict long-range artillery fires.
4. Deconflict Naval Surface Fire Support assets.
5. Deconflict MAGTF and Joint aviation assets.

Performance Standard. Complete each requirement item IAW the references and with minimal errors. The trainee may self correct if the error does not result in fratricide or the wrong target being struck.

Instructor. SI qualified SWD or DAOC; or a WTI

Prerequisite. 2024, 2026, 2028, 2029, 2030, 2031, 2048, 2053, 2200R, 4200, 4201, 4202, 4203, 4920R, 4924R, 4200, 4201, 4202, 4203, 8020, 8040, 8060

External syllabus support. TACC

Reference.

1. JP 3.60
2. MCWP 3-25.7
3. MCWP 3-16
4. MCWP 3-43.3

2.11.5 COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE

2.11.5.1 Purpose. To provide standardized training standards for individuals operating tactical data systems in the TAOC.

2.11.5.2 General

Admin Notes. Command and control system events are located in the MAWTS-1 C3 Course Catalog in order to maintain standardized training across the MACCS. Events are numbered at the 4000 level to allow inclusion in the Core Plus stage. The table below lists all C2SYS events that are to be completed by TAOC COPS personnel as noted by position.

Total Training Events. 2 events, 2 hours.

T&R CODE	EVENT DESCRIPTION	POSITION
C2SYS-4920R	Operate Advanced Field Artillery Tactical Data System (AFATDS)	SAD, DAOC
C2SYS-4924R	Operate Joint Automated Deep Operations Coordination System (JADOCS)	SWD, SAD, DAOC

2.12 INSTRUCTOR UNDER TRAINING PHASE (IUT) (5000)

2.12.1 Purpose. To provide position qualified personnel the additional skills necessary to instruct, evaluate and recommend for completion / qualification "trainees" within a crew. Upon completion of the required training, an individual may be considered for instructor designation by the Commanding Officer, WTPP Officer, or direct representative as delineated.

2.12.2 General

2.12.2.1 Admin Notes

a. 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.

b. There are four instructor designations (listed below). The intent is to train individuals with different levels and areas of experience to instruct personnel. Instructor experience is also gained while progressing through the different instructor designations.

- (1) Basic Instructor (BI)
- (2) Senior Instructor (SI)
- (3) Air Intercept Control Instructor (AICI)
- (4) Weapons and Tactics Instructor (WTI)

2.12.2.2 Stages. The following stage is included in the Instructor Under Training Phase of training.

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

2.12.2.3 Total Training Events. 7 events, 13 hours.

2.12.3 INSTRUCTOR UNDER TRAINING (IUT) STAGE.

2.12.3.1 General. The MAWTS-1 C3 Course catalog contains the training requirements for above listed instructors. The catalog is located at the MAWTS-1 website, <https://www.intranet.tecom.usmc.mil/sites/mawts1/default.aspx>. The table below lists all IUT events.

T&R CODE	EVENT DESCRIPTION	INSTRUCTOR
5000	Introduce principles of instruction	BI
5010	Understand the structure of an event	BI
5020	Conduct a period of instruction on a T&R event	BI
5100	Understand the Aviation Training and Readiness (T&R) Program	SI
5110	Understand the applicable community T&R program	SI
5120	Understand T&R administration	SI
5130	Develop a training plan	SI

The table below outlines the events that each instructor can train, evaluate, and approve or recommend for approval.

INSTRUCTOR	Event Training, Evaluation and Approval
BI	Core Skill events in which proficient
SI	Core Skill and Mission Skills, and qualifications as noted below: <ul style="list-style-type: none"> - SAD or WTI for: SID, STD, DAOC, SAD - SAD or SWD for: SWD - AIC qualified SAD or SWD for: AIC, AICS

AICI	Core Skill and Mission Skill events for AIC and AICS
WTI	Mission Skill and Qualification events. WTI: - Evaluate and recommend for qualification - Endorse recommendations for position designations
Notes	1. The Commanding Officer is the approving authority for qualifications and designations. 2. For events in the AIC syllabus, MAWTS-1 TAOC Division instructors and TOPGUN Strike Fighter Tactics Instructors may evaluate qualification.

2.13 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD) (6000)

2.13.1 Purpose. This phase provides for community standardization of TAOC position qualifications, combat leadership and instructor designations. This syllabus does not include "one time" certification training.

2.13.2 General

2.13.2.1 Prerequisiste. Completion of the ACPM, academics, Core, Mission, and or Core Plus Skill events required for the position being trained.

2.13.2.2 Admin Notes.

(1) The squadron WTI shall review the IPR to ensure all required training, documentation and administrative actions have been completed prior to staffing qualification or designation recommendations for approval.

(2) Only once an individual is qualified or designated in writing, the signed letter is filed in the IPR, and all administrative actions are completed and the event code has been logged in M-SHARP will the qualification or designation be effective.

2.13.2.3 Stages. The following stages are included in the Requirements, Certifications, Qualifications, and Designations Phase of training.

PAR NO.	STAGE NAME
2.13.3	QUALIFICATIONS (QUAL)
2.13.4	DESIGNATIONS (DESG)

2.13.3 QUALIFICATIONS (QUAL) STAGE

2.13.3.1 Purpose. To qualify personnel in the various TAOC positions as TAOC crewmembers.

2.13.3.2 General.

Prerequisite. Completion of the required academic modules and core skill and mission skill events for the position being trained in.

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 or no input from the Instructor.

(3) All TAOC qualification events will be evaluated by a SI or WTI, and recommended by a WTI for approval. If a squadron does not have a WTI, the commanding officer can assign an SI who is proficient in the position being evaluated to serve as the evaluator.

(4) Policy on attaining, maintaining and regaining a qualification is contained in chapter 2 of reference (a).

(5) All qualifications in this syllabus are E-coded, therefore, the event evaluation forms used for qualification events shall be retained in the IPR permanently.

Crew Requirement. A mission skill proficient TAOC crew.

Total Training Events. 6 events, 40 hours.

QUAL-6100 8.0 (1095) B,R,E 1 TAOM, 1 AN/TPS-59 or AN/TPS-63 L/S

Goal. Qualify as SID.

Requirement. Given an operational TAOM and one radar, a surveillance crew, published ID criteria, ACO, ATO, and OPTASK LINK:

1. Validate surveillance database entries including EMCON, data links, radar parameters, and ACM's.
2. Ensure all aircraft are identified and classified IAW published ID criteria.
4. Ensure data links are initialized IAW OPTASK LINK or senior ICO direction.
5. Perform functions of the TDC or ICO if directed and applicable.
6. Activate EP/EMCON plan for TAOC and/or subordinate agencies at appropriate time.
7. Ensure manual crosstell procedures are accomplished correctly.
8. Compile and a forward Joint Spectrum Interference Resolution (JSIR) report.
9. Maintain an accurate and detailed logbook.

Performance Standard. Complete the required items IAW planning documents and references. Minor errors are allowed provided the trainee self corrects. Errors the instructor deems have a negative impact on operations shall result in event failure.

Instructor. SI qualified SID or SAD; or a WTI

Prerequisite. 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020,

2021, 2027, 2036, 2046, 2047, 2055, 2059, 2060, 2100, 2101, 2102R,
2103R, 2104, 2105, 2106R, 2120R, 2121, 2122R, 2123R, 2124R, 2900R,
2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R,
6100R, 8000, 8080

External Syllabus Support. If Live, External C2 Agency with TDL
capability

Reference.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOF) Manual
2. MCWP 3-25.7
3. USMTF Baseline

QUAL-6200 8.0 (1095) B, R, E TAOC L/S

Goal. Qualify as STD.

Requirement. Complete the required STD training POI events, be
recommended by a Senior Instructor or WTI and qualified by the
commanding officer or his/her direct representative.

1. Enter and maintain the Traffic database per SAD direction.
2. RIO aircraft, to include:
 - a. Covered communications.
 - b. Authentication procedures.
3. Conduct SIF/Mode IV checks on all applicable aircraft.
4. Conduct external/internal handovers of aircraft as required.
5. Coordinate Aerial Refueling operations.
 - a. Route tanker to the appropriate track and provide flight following as required.
 - b. Execute the Slide/Retrograde plan as the threat dictates or per SAD direction.
 - c. Monitor, record, and report tanker fuel status.
 - d. Route aircraft to the tanker.
 - e. Route aircraft departing the tanker and handover to the appropriate controller/agency.
6. Maintain proper symbol management.
7. Maintain position log.

Performance Standard. Complete the required items IAW planning
documents and references. Minor errors are allowed provided the
trainee self corrects. Errors the instructor deems have a negative
impact on operations shall result in event failure.

Instructor. SI qualified STD or SAD; or a WTI

Prerequisite. 2004, 2016, 2017, 2022, 2023, 2025, 2027, 2032, 2033,
2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2059, 2060, 2101,
2200R, 2201, 2220, 2221R, 2222R, 2900R, 2901R, 2902R, 2903R, 2905R,
2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 6200R, 8000, 8020, 8080

Reference. MCWP 3-25.7

QUAL-6400 8.0 (1095) B, R, E TAOC L/S

Goal. Qualify as a SAD.

Requirement. Complete the required SAD training POI events, be recommended by a SI qualified SAD or WTI and qualified by the commanding officer or direct representative. Given an operational TAOM and a radar, required source documents and information, while performing SAD duties a live event:

1. Develop surveillance, traffic, and or weapons management section requirements.
3. Identify TAOC section communications requirements.
4. Identify system requirements.
5. Conduct crew brief
6. Implement casualty procedures / restoration plan as the situation dictates.
7. Direct and manage crew functions.
8. Record events during crew watch in appropriate reports and logbooks.
9. Conduct crew debrief.

Performance Standard. Complete each requirement item IAW the references and with minimal errors. The trainee may self correct if the error does not result in equipment or mission failure. The instructor shall ensure the trainee maintains situational awareness and effects proper coordination.

Instructor. SI qualified SAD or a WTI.

Prerequisite. 2024, 2026, 2028, 2029, 2031, 2037, 2038, 2039, 2041, 2042, 2043, 2044, 2048, 2049, 2051, 2052, 2053, 2054, 2056, 2057, 2102, 2200R, 2300R, 2400R, 2410R, 2411, 2412, 2413R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 3200R, 6100R, 6200R, 8060

External Syllabus Support. External C3 agencies.

Reference. MCWP 3-25.7

QUAL-6203 4.0 (1095) B, R, E TAOC S/L

Goal. Qualify as a DAOC.

Requirement. Complete the required DAOC training POI events, be recommended by SI qualified DAOC or WTI and qualified by the commanding officer or direct representative. Given a TAOM with requisite communications equipment; required information and source documentation; and a scenario that includes the control of aircraft during integrated deep air operations:

1. Manage pre-planned and immediate JTARS.
2. Demonstrate weaponeering.
3. Deconflict long-range artillery fires.
4. Deconflict Naval Surface Fire Support assets.
5. Deconflict MAGTF and Joint aviation assets.

Performance Standard. Complete each requirement item IAW the references and with minimal errors. The trainee may self correct if

the error does not result in fratricide or the wrong target being struck.

Instructor. SI qualified SWD/DAOC or WTI

Prerequisite. 2024, 2026, 2028, 2029, 2030, 2031, 2048, 2053, 2200R, 4200, 4201, 4202, 4203, 4920R, 4924R, 4200, 4201, 4202, 4203, 4204R, 8020, 8040, 8060

External syllabus support. TACC

Reference.

1. JP 3.60
2. MCWP 3-25.7
3. MCWP 3-16
4. MCWP 3-43.3

QUAL-6204 4.0 (1095) B, R, E TAOC L

Goal. Qualify as an AIC.

Requirement. Complete the required AIC training POI events, be recommended by BI qualified AIC, AICS/AICI, SI qualified SWD and qualified by the commanding officer or direct representative. Given a mission, a TAOM and a radar, while performing AIC duties during an exercise, perform as an AIC.

1. Ensure all AIC related DB entries are entered and correct.
2. Initiate and employ Link 16 as briefed.
3. Utilize briefed GCI procedures to control CAP aircraft using broadcast/tactical control methods.
4. Ensure effective cross-boundary coordination between engagement zones per SWD direction.
5. Disseminate current threat status and appropriate WCS, ADWC and SOA to the fighters.
6. Perform appropriate switch actions.

Performance Standard. Complete each requirement item IAW the reference while controlling a division of fighters. Minor errors self corrected by the trainee are acceptable.

Instructor. BI qualified AIC, SI qualified AICS/AICI or SWD

Prerequisite. 2004, 2025, 2027, 2039, 2041, 2043, 2044, 2046, 2048, 2049, 2050, 2051, 2200R, 2201, 2402, 2403, 4100R, 4101, 4102, 4103, 4104, 4105R, 4106, 4107R, 8040

External Syllabus Support. AAW exercise with fighter and aggressor aircraft.

Reference. Naval Strike and Air Warfare Center TOP GUN Manual

2.13.4 DESIGNATIONS (DESG) STAGE

2.13.4.1 Purpose. To provide for the designation of combat leaders, instructors, and positions.

2.13.4.2 General

Admin Notes

(1) This section enables units to document and track combat leaders, position designations, and unit instructors. The unit WTTP 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) When 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 IPR, and the designation event code is logged in M-SHARP. The designation is not effected until all actions have been completed.

(2) MACCS Instructor designation events are contained in the MAWTS-1 C3 Course Catalog to ensure standardization across the MACCS.

Crew Requirements. Per the applicable designation syllabus.

DESG-6401

Goal. Designation as a Senior Air Director (SAD).

Requirement. Complete required SAD training events, be recommended by a WTI and designated by the commanding officer.

Prerequisite. 3400, 6400

DESG-6210

Goal. Tracking Code for designation as a TAOC Detachment Commander.

Requirement. Be designated by the commanding officer.

Prerequisite. Commanding Officer discretion

DESG-6220

Goal. Designation as an Air Intercept Controller (AIC).

Requirement. Complete required AIC training events, be recommended by a WTI and designated by the commanding officer.

Prerequisite. 6204

DESG-6230

Goal. Designation as a Deep Air Operations Coordinator (DAOC).

Requirement. Complete required DAOC training events, be recommended by a WTI and designated by the commanding officer.

Prerequisite. 6203

DESG-6240

Goal. Designation as a Basic Instructor (BI).

Requirement. Be recommended for BI designation by a unit SI or WTI. The commanding officer will designate the BI in writing.

Prerequisite. 5000, 5010, 5020.

DESG-6241

Goal. Designation as a Senior Instructor (SI).

Requirement. Be recommended for SI designation by a SI or WTI. The commanding officer will designate the SI in writing.

Prerequisite. 5100, 5110, 5120, 5130, M-SHARP formal training, 6240.

DESG-6242

Goal. Designation as Weapons and Tactics Instructor (WTI).

Requirement. Be certified by MAWTS-1 as a WTI and recommended for designation by the squadron WTI. The commanding officer will designate the WTI in writing.

Prerequisite. Graduate the MAWTS-1 WTI Course.

DESG-6243

Goal. Designation as Air Intercept Control Instructor (AICI).

Requirement. Be recommended for designation by the squadron WTI. The commanding officer will designate AICI in writing.

Prerequisite. Complete BI training requirements set forth in the C3 Course Catalog. Complete SCHL 6006 or SCHL 6069 (see C3 Course Catalog), 6204.

2.14 AVIATION CAREER PROGRESSION MODEL (ACPM) (8000)

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

- Marine Air Command and Control System (MACCS)
- Aviation Combat Element (ACE)
- Threat to the MAGTF
- Marine Air Ground Task Force (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 assigned instructor teaching the period of instruction or they may be accomplished by self-paced instruction.

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

<https://www.intranet.tecom.usmc.mil/sites/mawts1/aviation%20career%20progression%20model/forms/allitems.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.

STAGE	TRNG CODE	T&R DESCRIPTION	ACAD TIME	TO BE COMPLETED DURING
ACPM	8000	MACCS	1	3000 PHASE
ACPM	8001	MARINE AIR COMMAND AND CONTROL SYSTEM	4	3000 PHASE
ACPM	8002	TACTICAL AIR COMMAND CENTER (TACC)	4	3000 PHASE
ACPM	8003	DIRECT AIR SUPPORT CENTER (DASC)	4	3000 PHASE
ACPM	8004	TACTICAL AIR OPERATIONS CENTER (TAOC)	4	3000 PHASE
ACPM	8005	MARINE AIR TRAFFIC CONTROL (MATC)	4	3000 PHASE
ACPM	8006	LOW ALTITUDE AIR DEFENSE (LAAD)	4	3000 PHASE
ACPM	8007	UAS SUPPORT TO THE MAGTF	4	3000 PHASE
ACPM	8008	MARINE WING COMMUNICATION SQUADRON (MWCS)	4	3000 PHASE
ACPM	8020	ACE	1	3000 PHASE
ACPM	8021	AVIATION OPERATIONS	4	3000 PHASE
ACPM	8022	CONTROL OF AIRCRAFT AND MISSILES	4	3000 PHASE
ACPM	8023	OFFENSIVE AIR SUPPORT (OAS)	4	3000 PHASE
ACPM	8024	ASSAULT SUPPORT	4	3000 PHASE
ACPM	8025	AIR RECONNAISSANCE	4	3000 PHASE
ACPM	8026	ELECTRONIC WARFARE	4	3000 PHASE
ACPM	8027	ANTI-AIR WARFARE	4	3000 PHASE
ACPM	8028	AVIATION GROUND SUPPORT	4	3000 PHASE
ACPM	8040	THREAT	1	2000 PHASE
ACPM	8041	SURFACE TO AIR THREAT TO THE MAGTF	4	2000 PHASE
ACPM	8042	FIXED WING THREAT TO THE MAGTF	4	2000 PHASE
ACPM	8043	ROTARY WING THREAT TO THE MAGTF	4	2000 PHASE
ACPM	8044	MISSILE AND UAS THREAT TO THE MAGTF	4	2000 PHASE
ACPM	8045	RADIO ELECTRONIC COMBAT THREAT TO THE MAGTF	4	2000 PHASE
ACPM	8060	MAGTF	1	3000 PHASE
ACPM	8061	GROUND COMBAT OPERATIONS	4	3000 PHASE
ACPM	8062	FIRE SUPPORT COORDINATION IN THE GCE	4	3000 PHASE

ACPM	8063	MAGTF COMMAND AND CONTROL		4	3000 PHASE
ACPM	8064	MAGTF COMMUNICATIONS		4	3000 PHASE
ACPM	8065	PHASING CONTROL ASHORE		4	3000 PHASE
ACPM	8080	JOINT AIR OPERATIONS		1	3000 PHASE
ACPM	8081	COMMAND AND CONTROL OF JOINT AIR OPERATIONS		4	3000 PHASE
ACPM	8082	THEATER AIR CROUND SYSTEM (TAGS)		4	3000 PHASE
ACPM	8083	JOINT FIRE SUPPORT		4	3000 PHASE
ACPM	8084	CLOSE AIR SUPPORT		4	3000 PHASE
ACPM	8085	JOINT TARGETING		4	3000 PHASE
ACPM	8086	NORTH ATLANTIC TREATY ORGANIZATION (NATO)		4	3000 PHASE
ACPM	8087	JOINT AIRSPACE CONTROL		4	3000 PHASE
ACPM	8088	COUNTERING AIR AND MISSILE THREATS		4	3000 PHASE
TOTAL ACPM STAGE				39	141

2.15 T&R ATTAIN AND MAINTAIN TABLES

TAOC 7210 ADCO											
CORE/MISSION/CORE PLUS ATTAIN AND MAINTAIN MATRIX											
CORE SKILL (2000 Phase)											
T&R EVENT INFORMATION				BASIC POI		REFRESHER POI		MAINTAIN PROFICIENCY		PREREQS	CHAINING
T&R DESCRIPTION	STAGE	CODE	REFLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
SID	SURV	2100	*	SURV	2100	SURV		SURV		2014, 2047, 8040	
SID	SURV	2101	*	SURV	2101	SURV		SURV		2004, 2016, 2027	
SID	SURV	2102R	1095	SURV	2102R	SURV	2102R	SURV	2102R	2014, 2015, 2036	
SID	SURV	2103R	1095	SURV	2103R	DLC	2103R	DLC	2103R	2005, 2007, 2018, 2020R, 2120, 2121R, 2122R, 2123R, 2124R	
SID	SURV	2104	*	SURV	2104	DLC		DLC		2001, 8040	
SID	SURV	2105	*	SURV	2105	DLC		DLC		2008, 2013, 2019, 2021, 2046, 2055, 2100, 2122, 2123r, 2124r, 8040	
SID	SURV	2106R	1095	SURV	2106R	DLC	2106R	DLC	2106R	2000, 2001, 2004, 2005, 2006, 2007, 2016, 2017, 2018, 2020, 2047, 2054, 2058, 2059, 2060, 2100, 2101, 2102, 2104, 2105, 2120, 2121, 2122, 2123, 2124	
SID	DLC	2120R	1095	DLC	2120R	DLC	2120R	DLC	2120R	2002, 2003, 2010, 2011, 2012, 2018, 2059, 2060, 2101	
SID	DLC	2121	*	DLC	2121	DLC		DLC		2009, 2011, 2012, 2018	
SID	DLC	2122R	1095	DLC	2122R	DLC	2122R	DLC	2122R	2008, 2011, 2012, 2018, 2101	
SID	DLC	2123R	1095	DLC	2123R	DLC	2123R	DLC	2123R	2006, 2122	2122
SID	DLC	2124R	1460	DLC	2124R	DLC	2124R	DLC	2124R	2000, 2008, 2011, 2012, 2018, 2101	

SID	C2SYS	2900R	1460	C2SYS	2900R	C2SYS	2900R	C2SYS	2900R		
SID	C2SYS	2901R	1460	C2SYS	2901R	C2SYS	2901R	C2SYS	2901R		
SID	C2SYS	2902R	1460	C2SYS	2902R	C2SYS	2902R	C2SYS	2902R		
SID	C2SYS	2903R	1460	C2SYS	2903R	C2SYS	2903R	C2SYS	2903R		
SID	C2SYS	2905R	1460	C2SYS	2905R	C2SYS	2905R	C2SYS	2905R		
SID	C2SYS	2910R	1460	C2SYS	2910R	C2SYS	2910R	C2SYS	2910R		
SID	C2SYS	2917R	1460	C2SYS	2917R	C2SYS	2917R	C2SYS	2917R		
SID	C2SYS	2921R	1460	C2SYS	2921R	C2SYS	2921R	C2SYS	2921R		
SID	C2SYS	2923R	1460	C2SYS	2923R	C2SYS	2923R	C2SYS	2923R		
SID	C2SYS	2940R	1460	C2SYS	2940R	C2SYS	2940R	C2SYS	2940R		
SID	C2SYS	2941R	1460	C2SYS	2941R	C2SYS	2941R	C2SYS	2941R		
STD	TATC	S2200R	365	TATC	S2200R	TATC	S2200R	TATC	S2200R	2027, 2032	
STD	TATC	S2201R	1460	TATC	S2201R	TATC	S2201R	TATC	S2201R	2017, 2023, 2033, 2034, 2035, 2036, 2046, 2055, 2101, 2200	
STD	TRFC	2220	*	TRFC	2220	TRFC		TRFC		2017, 2059, 2060	
STD	TRFC	2221R	1095	TRFC	2221R	TRFC	2221R	TRFC	2221R	2017, 2022, 2023, 2025, 2033, 2034, 2036, 2046, 2055, 2200, 2201	2200, 2201
STD	TRFC	2222R	1460	TRFC	2222R	TRFC	2222R	TRFC	2222R	2016, 2022, 2023, 2027, 2032, 2033, 2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2060	
STD	C2SYS	2900R	1460	C2SYS	2900R	C2SYS	2900R	C2SYS	2900R		
STD	C2SYS	2901R	1460	C2SYS	2901R	C2SYS	2901R	C2SYS	2901R		
STD	C2SYS	2902R	1460	C2SYS	2902R	C2SYS	2902R	C2SYS	2902R		
STD	C2SYS	2903R	1460	C2SYS	2903R	C2SYS	2903R	C2SYS	2903R		
STD	C2SYS	2905R	1460	C2SYS	2905R	C2SYS	2905R	C2SYS	2905R		
STD	C2SYS	2910R	1460	C2SYS	2910R	C2SYS	2910R	C2SYS	2910R		
STD	C2SYS	2917R	1460	C2SYS	2917R	C2SYS	2917R	C2SYS	2917R		
STD	C2SYS	2921R	1460	C2SYS	2921R	C2SYS	2921R	C2SYS	2921R		
STD	C2SYS	2923R	1460	C2SYS	2923R	C2SYS	2923R	C2SYS	2923R		
STD	C2SYS	2940R	1460	C2SYS	2940R	C2SYS	2940R	C2SYS	2940R		
STD	C2SYS	2941R	1460	C2SYS	2941R	C2SYS	2941R	C2SYS	2941R		
SAD	SWD	2300R	1460	SWD	2300R	SWD	2300R	SWD	2300R	2024, 2026, 2028, 2029, 2031, 2037, 2038, 2039, 2040, 2041, 2042, 2044, 2048, 2049, 2050, 2051, 2052, 6100, 6200	
SAD	SAD	2400R	1095	SAD	2400R	SAD	2400R	SAD	2400R	2053, 2054, 2056, 6100, 6200	2103, 2222
SAD	SAD	2401	*	SAD	2401	SAD		SAD		2057, 2400R	
SAD	SAD	S2402	*	SAD	S2402	SAD		SAD		2004, 2025, 2039, 2041, 2043, 2044, 2046, 2048, 2049, 2050, 2051, 2200R	4100
SAD	SAD	S2403	*	SAD	S2403	SAD		SAD		2200R, 2402	4101
SAD	SAD	2404	*	SAD	2404	SAD		SAD		2200R, 2403	2402, 4102
SAD	SAD	2410R	1095	SAD	2410R	SAD	2410R	SAD	2410R		
SAD	SAD	S2411	*	SAD	S2411	SAD		SAD		2400, 2410, 6100, 6200	

SAD	SAD	2412	*	SAD	2412	SAD		SAD		2411, 6100, 6200	2221, 2102
SAD	SAD	2413R	1095	SAD	2413R	SAD	2413R	SAD	2413R	2412, 6100, 6200	2221, 2102
SAD	C2SYS	2900R	1460	C2SYS	2900R	C2SYS	2900R	C2SYS	2900R		
SAD	C2SYS	2901R	1460	C2SYS	2901R	C2SYS	2901R	C2SYS	2901R		
SAD	C2SYS	2902R	1460	C2SYS	2902R	C2SYS	2902R	C2SYS	2902R		
SAD	C2SYS	2903R	1460	C2SYS	2903R	C2SYS	2903R	C2SYS	2903R		
SAD	C2SYS	2905R	1460	C2SYS	2905R	C2SYS	2905R	C2SYS	2905R		
SAD	C2SYS	2910R	1460	C2SYS	2910R	C2SYS	2910R	C2SYS	2910R		
SAD	C2SYS	2917R	1460	C2SYS	2917R	C2SYS	2917R	C2SYS	2917R		
SAD	C2SYS	2921R	1460	C2SYS	2921R	C2SYS	2921R	C2SYS	2921R		
SAD	C2SYS	2923R	1460	C2SYS	2923R	C2SYS	2923R	C2SYS	2923R		
SAD	C2SYS	2940R	1460	C2SYS	2940R	C2SYS	2940R	C2SYS	2940R		
SAD	C2SYS	2941R	1460	C2SYS	2941R	C2SYS	2941R	C2SYS	2941R		
MISSION SKILL (3000 Phase)											
T&R EVENT INFORMATION				BASIC POI		REFRESHER POI		MAINTAIN PROFICIENCY		PREREQS	CHAINING
T&R DESCRIPTION	STAGE	CODE	REFLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
SID	TAOC	3100R	1095	TAOC	3100R	TAOC	3100R	TAOC	3100R	2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2027, 2036, 2046, 2047, 2055, 2059, 2060, 2100, 2101, 2102R, 2103R, 2104, 2105, 2106R, 2120R, 2121, 2122R, 2123R, 2124R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 8000, 8080	
STD		3200R	1460		3200R		3200R		3200R	3200R	2004, 2016, 2017, 2022, 2023, 2025, 2027, 2032, 2033, 2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2059, 2060, 2101, 2200R, 2201, 2220, 2221R, 2222R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 8000, 8020, 8080

SAD		3400R	1460		3400R	3400R	3400R	2024, 2026, 2028, 2029, 2031, 2037, 2038, 2039, 2041, 2042, 2043, 2044, 2048, 2049, 2051, 2052, 2053, 2054, 2056, 2057, 2102, 2200R, 2300R, 2400R, 2410R, 2411, 2412, 2413R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 6100R, 6200R, 8060	2413, 3100, 3200
SID		3100R	1460		3100R	3100R	3100R	2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2027, 2036, 2046, 2047, 2055, 2059, 2060, 2100, 2101, 2102R, 2103R, 2104, 2105, 2106R, 2120R, 2121, 2122R, 2123R, 2124R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 8000, 8080	
STD	EWC	3200R	1460	EWC	3200R	3200R	3200R	2004, 2016, 2017, 2022, 2023, 2025, 2027, 2032, 2033, 2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2059, 2060, 2101, 2200R, 2201, 2220, 2221R, 2222R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 294R1, 8000, 8020, 8080	2210, 2221, 2222
SAD		3400R	1460		3400R	3400R	3400R	2024, 2026, 2028, 2029, 2031, 2037, 2038, 2039, 2041, 2042, 2043, 2044, 2048, 2049, 2051, 2052, 2053, 2054, 2056, 2057, 2102, 2200R, 2300R, 2400R, 2410R, 2411, 2412, 2413R, 2900R, 2901R,	2413, 3100, 3200

										2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 6100R, 6200R, 8060	
CORE PLUS SKILL (4000 Phase)											
T&R EVENT INFORMATION				BASIC POI		REFRESHER POI		MAINTAIN PROFICIENCY		PREREQS	CHAINING
T&R DESCRIPTION	STAGE	CODE	REFLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
AIC	AIC	4100R	730	AIC	4100R	AIC	4100R	AIC	4100R	2200R, 2403	2402, 2404, 4100
AIC	AIC	S4101	*	AIC	S4101	AIC		AIC		2200R, 2403	2402, 2404, 4100, 4102
AIC	AIC	S4102	*	AIC	S4102	AIC		AIC		2200R, 2403	2402, 2404, 4100, 4102
AIC	AIC	4103	*	AIC	4103	AIC		AIC		2200R, 2403	2402, 2404, 4100, 4102
AIC	AIC	4104	*	AIC	4104	AIC		AIC		2200R, 4100	
AIC	AIC	4105R	730	AIC	4105R	AIC	4105R	AIC	4105R	2200R, 4100	2402, 2403, 2404, 4101, 4102
AIC	AIC	4106	*	AIC	4106	AIC		AIC		2200R, 2403R, 4101, 4102, 4103, 4105R	
AIC	AIC	4107R	730	AIC	4107R	AIC	4107R	AIC	4107R	2004, 2025, 2027, 2039, 2041, 2043, 2044, 2046, 2048, 2049, 2050, 2051, 2200R, 2201, 2402, 2403, 4100R, 4101, 4102, 4103, 4104, 4105R, 4106, 8040	2402, 2404, 4100, 4102
DAOC	DAOC	4200	*	DAOC	4200	DAOC		DAOC		2024, 2026, 2028, 2029, 2030, 2048, 2049, 2053, 6200, 8020, 8040, 8060	
DAOC	DAOC	4201	*	DAOC	4201	DAOC		DAOC		2024, 2026, 2028, 2029, 2030, 2048, 2049, 2053, 6200, 8020, 8040, 8060	
DAOC	DAOC	S4202	*	DAOC	S4202	DAOC		DAOC		2024, 2026, 2028, 2029, 2030, 2048, 2049, 2053, 4920R, 4924R, 6200, 8020, 8040, 8060	
DAOC	DAOC	S4203	*	DAOC	S4203	DAOC		DAOC		2026, 2028, 6200	

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DAOC	DAOC	S4204R	1460	DAOC	S4204R	DAOC	S4204R	DAOC	S4204R	2024, 2026, 2028, 2029, 2030, 2031, 2048, 2053, 2200R, 4200, 4201, 4202, 4203, 4920R, 4924R, 4200, 4201, 4202, 4203, 8020, 8040, 8060
DAOC	C2SYS	4920R	1460	C2SYS	4920R	C2SYS	4920R	C2SYS	4920R	
DAOC	C2SYS	4924R	1460	C2SYS	4924R	C2SYS	4924R	C2SYS	4924R	

2.16 T&R SYLLABUS MATRIX. The below matrix summarizes T&R syllabus event information.

TAOC 7210 T&R SYLLABUS MATRIX																			
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	GROUND/ACADEMIC EVENTS		SIM EVENTS		LIVE EVENTS		PREREQ	NOTES	CHAIN	EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME				
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)																			
ADCO	1000	Identify characteristics of Tactical Air Operation Center (TAOC) operations.	B	E	G	-	-	D	*	0	0	0	0	24	-	-	-	FAM 100, 101, 102	
ADCO	1010	Configure Tactical Air Operations Center (TAOC) platforms for operations.	B	E	G	-	-	D	*	0	0	0	43	1000	-	-	-	FAM 102, 103	
ADCO	1020	Operate TAOC voice communications equipment.	B	E	G	-	-	D	*	0	0	0	10	1000, 1010	-	-	-	FAM 103, 107, 108, 109	
ADCO	1030	Operate Command, Control, Communications, Computer and Intelligence (C4I) systems.	B	E	G	-	-	D	*	0	0	0	23	1000	-	-	-	FAM 118	
ADCO	1040	Perform surveillance functions.	B	E	G	-	-	D	*	0	0	0	52	1000, 1010, 1020, 1030	-	-	-	FAM 102, 103, 104, 106, 111	
ADCO	1050	Operate Link 11.	B	E	G	-	-	D	*	0	0	0	7	1000, 1010, 1020, 1040	-	-	-	FAM 102, 103, 105	
ADCO	1060	Operate Link 11B.	B	E	G	-	-	D	*	0	0	0	7	1000, 1010, 1020, 1040	-	-	-	FAM 102, 103, 105	
ADCO	1070	Operate Link 16.	B	E	G	-	-	D	*	0	0	0	9	1000, 1010, 1020, 1040	-	-	-	FAM 102, 103, 105	
ADCO	1080	Operate a Beyond Line of Site (BLOS) gateway.	B	E	G	-	-	D	*	0	0	0	12	1000, 1010, 1020, 1040, 1070	-	-	-	FAM 102, 103, 105, 111	
ADCO	1090	Perform air defense weapons control functions.	B	E	G	-	-	D	*	0	0	0	40	1000, 1010, 1020, 1040	-	-	-	FAM 102, 103, 107, 108	
ADCO	1100	Perform traffic functions.	B	E	G	-	-	D	*	0	0	0	80	1000, 1010, 1020, 1030, 1040, 1090	-	-	-	-	
TOTAL CORE SKILL INTRODUCTION (1000 PHASE EVENTS)										0	0	0	0	11	307				
CORE SKILL TRAINING (2000 PHASE EVENTS)																			
CORE SKILL ACADEMICS (ACAD)																			
ACAD	2000	Know how to properly configure and initialize the Air Defense Communications Platform (ADCP)	B	-	G	-	-	D	*	1	0	0	0	-	-	-	-	-	
ACAD	2001	Understand the TAOC's Electronic Protection (EP) Capabilities	B	-	G	-	-	D	*	1	0	0	0	-	-	-	-	-	

ACAD	2002	Know the data links and characteristics of the Extended Interfaces	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2003	Understand the equipment and capabilities of Ground-Based Data Link (GBDL)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2004	Understand the purpose and criteria for Identification Procedures	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2005	Know the purpose of Interface Coordination	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2006	Know the capabilities, limitations, and equipment associated with Joint Range Extension Application Protocol (JREAP)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2007	Understand the procedures for conducting Multi-Tactical Data Link (TDL) Interface Operations	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2008	Know the characteristics of and equipment configuration for Link 16 operations	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2009	Know the characteristics of and equipment configuration for Link 11 operations	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2010	Know the characteristics of and equipment configuration for Link 11B operations	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2011	Know the purpose of and the information within Operational Tasking Data Links (OPTASK LINK)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2012	Know the types and purpose of data filters	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2013	Know the purpose of National Data Systems	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2014	Understand the factors for Radar Employment and Performance	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2015	Understand the advantages, disadvantages, and characteristics for Remote Radar	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2016	Know the role of the TAOC Surveillance Section	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2017	Identify the components of the TAOC Communications Equipment	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2018	Know the TAOC's Data Link Capabilities	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2019	Identify the capabilities of Joint Tactical Data Systems (TDS) Platforms	B	-	G	-	-	D	*		1		0		0	-	-	-	-

ACAD	2020	Know the responsibilities of the Track Data Coordinator (TDC)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2021	Understand the concept of Theater Missile Defense	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2022	Know the agencies, personnel, and source documentation related to airspace management	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2023	Understand the phases of and the information contained in Air Tasking Orders (ATOs) and Frags	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2024	Understand the capabilities and limitations of the various types of Aviation Ordnance	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2025	Understand the communications brevity used in aviation command and control combat vocabulary	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2026	Understand Deep Air Support (DAS)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2027	Know the procedures, terms, and squawks associated with emergency procedures	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2028	Understand the types of Fire Support Coordination Measures (FSCMs)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2029	Understand Joint Close Air Support (JCAS)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2030	Understand Joint Tactical Air Request (JTAR)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2031	Understand Offensive Air Support (OAS)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2032	Understand the types, key elements, planning considerations for personnel recovery	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2033	Understand the TAOC's role in, and associated planning considerations for tanker management	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2034	Know procedures and associated communications nets for the TAOC's Traffic Section communications responsibilities	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2035	Know the TAOC's Traffic Section responsibilities	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2036	Know the TAOM and AN/TPS-59's weather requirements	B	-	G	-	-	D	*		1		0		0	-	-	-	-

ACAD	2037	Understand the types, purpose, and goals of Antiair Warfare (AAW)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2038	Describe the Air Defense Cell Responsibilities	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2039	Know the phases of an air intercept and the associated terminology	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2040	Understand the concepts associated with Combat Air Patrol (CAP) Management	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2041	Understand the types of fighter missions	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2042	Understand the data and voice communications requirements for Ground-Based Air Defense (GBAD)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2043	Know the characteristics and concepts of an Integrated Air Defense Systems (IADS) Employment	B, R	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2044	Understand the fundamentals of intercept control	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2045	Understand the purpose of and information contained in Operations Plans (OPLANS) and Operations Orders (OPORDERS)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2046	Understand the purpose and intent of Rules of Engagement (ROE)	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2047	Understand the concepts associated with and the elements of a threat analysis	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2048	Know the capabilities and limitations of U.S. and Allied Aircraft	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2049	Know the capabilities and limitations of U.S. and Allied Air-to-Air missiles	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2050	Know the communications associated with the TAOC's Weapons Section	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2051	Know the functions of the TAOC's Weapons Data Link orders	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2052	Know the responsibilities of the TAOC's Weapons Section	B	-	G	-	-	D	*		1		0		0	-	-	-	-
ACAD	2053	Understand the requirements of the TAOC to perform as an Alternate TACC	B	-	G	-	-	D	*		1		0		0	-	-	-	-

ACAD	2054	Know the capabilities and limitations of Joint Command and Control systems (C2SYS) and Agencies	B	-	G	-	-	D	*	1	0	0	-	-	-	-
ACAD	2055	Understand the process of MACCS information flow	B	-	G	-	-	D	*	1	0	0	-	-	-	-
ACAD	2056	Understand the process of Phasing Control Ashore for amphibious operations	B	-	G	-	-	D	*	1	0	0	-	-	-	-
ACAD	2057	Know the TAOC emplacement and power requirements	B	-	G	-	-	D	*	1	0	0	-	-	-	-
ACAD	2058	Describe key communications planning documents	B	-	G	-	-	D	*	1	0	0	-	-	-	-
ACAD	2059	Extract key material information from Electronic Key Management System (EKMS) Communications Security (COMSEC) callout	B	-	G	-	-	D	*	1	0	0	-	-	-	-
ACAD	2060	Review proper handling and storage of classified materials	B	-	G	-	-	D	*	1	0	0	-	-	-	-
TOTAL CORE SKILL ACADEMIC STAGE (ACAD)										61	61	0	0	0	0	
SURVEILLANCE SKILLS (SURV)																
SURV	2100	Conduct threat analysis	B	-	L	-	-	D	*	0	0	5	2014, 2047, 8040	-	-	
SURV	2101	Identify and classify surveillance tracks	B	-	L/S	-	-	D	*	0	0	4	2004, 2016, 2027	-	-	SID 200
SURV	2102	Maximize RADAR performance	B, R	-	L	-	-	D	1095	0	0	2	2014, 2015, 2036	-	-	SID 208
SURV	2103	Conduct fidelity drills	B, R	-	L/S	-	-	D	1095	0	0	2	2005, 2007, 2018, 2020R, 2120, 2121R, 2122R, 2123R, 2124R	-	-	SID 210
SURV	2104	Perform EW operations using TAOC equipment	B	-	L/S	-	-	D	*	0	0	4	2001, 8040	-	-	SID 213
SURV	2105	Plan for emplacement and employment of a TMD site	B	-	L	-	-	D	*	0	0	3	2008, 2013, 2019, 2021, 2046, 2055, 2100, 2122, 2123R, 2124R, 8040	-	-	SID 209
SURV	2106	Conduct Tactical Planning for the surveillance section.	B,R	-	L	-	-	D	1095	0	0	8	2000, 2001, 2004, 2005, 2006, 2007, 2016, 2017, 2018, 2020, 2047, 2054, 2058, 2059, 2060, 2100, 2101, 2102, 2104, 2105, 2120, 2121, 2122, 2123, 2124	-	-	SID 207

TOTAL SURVEILLANCE SKILLS STAGE (SURV)										0	0	0	0	7	28				
										DATALINK COORDINATOR (DLC)									
DLC	2120	Operate a serial TDL.	B,R	-	L	-	-	D	1095	0	0	8	2002, 2003, 2010, 2011, 2012, 2018, 2059, 2060, 2101	-	-	SID 201			
DLC	2121	Operate Link 11.	B	-	L	-	-	D	*	0	0	8	2009, 2011, 2012, 2018	-	-	SID 202			
DLC	2122	Operate Link 16.	B,R	-	L	-	-	D	1095	0	0	8	2008, 2011, 2012, 2018, 2101	-	-	SID 203			
DLC	2123	Configure and operate Joint Range Extension-Gateway (JRE-GW).	B,R	-	L	-	-	D	1095	0	0	8	2006, 2122	-	2122				
DLC	2124	Set up and utilize ADCP in TAOM configuration.	B,R	-	L	-	-	D	1460	0	0	2	2000, 2008, 2011, 2012, 2018, 2101	-	-	SID 205			
TOTAL DATALINK COORDINATOR SKILLS STAGE (DLC)										0	0	0	0	5	34				
										TACTICAL AIR TRAFFIC CONTROLLER (TATC)									
TATC	2200	Provide flight information during and after an aircraft emergency	B,R	-	S	-	-	D	365	0	1	0	2027, 2032	-	-	SAD 300/AIC 410			
TATC	2201	Conduct TATC functions.	B,R	-	S/L	-	-	D	1460	0	8	0	2017, 2023, 2033, 2034, 2035, 2036, 2046, 2055, 2101, 2200	-	-	STD 221			
TOTAL TACTICAL AIR TRAFFIC CONTROLLER SKILLS STAGE (TATC)										0	0	2	9	0	0				
										TRAFFIC (TRFC)									
TRFC	2220	Set up organic radios.	B	-	L	-	-	D	*	0	0	2	2017, 2059, 2060	-	-	STD 220			
TRFC	2221	Perform traffic section functions.	B,R	-	L/S	-	-	D	1095	0	0	8	2017, 2022, 2023, 2025, 2033, 2034, 2036, 2046, 2055, 2200, 2201	-	2200, 2201	STD 221			
TRFC	2222	Conduct mission analysis for the Traffic Section.	B,R	-	L	-	-	D	1460	0	0	8	2016, 2022, 2023, 2027, 2032, 2033, 2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2060	-	-	STD 222			
TOTAL TRAFFIC SKILLS STAGE (TRFC)										0	0	0	0	3	18				
										SENIOR WEAPONS DIRECTOR (SWD)									

SWD	2300	Conduct tactical planning for a weapons section.	B,R	-	L	-	-	D	1460	0	0	8	2024, 2026, 2028, 2029, 2031, 2037, 2038 2039, 2040, 2041, 2042, 2044, 2048, 2049, 2050, 2051, 2052, 6100, 6200	-	SAD 304		
TOTAL SENIOR WEAPONS DIRECTOR SKILLS STAGE (SWD)										0	0	0	0	1	8		
SENIOR AIR DIRECTOR (SAD)																	
SAD	2400	Conduct tactical planning.	B,R	-	L	-	-	D	1095	0	0	16	2053, 2054, 2056, 6100, 6200	-	2103, 2222	SAD 307	
SAD	2401	Conduct site survey	B	-	L	-	-	D	*	0	0	2	2057, 2400R	-	-	SAD 310	
SAD	2402	Control a simulated section of fighter aircraft against an unknown threat	B	-	S/L	-	-	D	*	0	2	0	2004, 2025, 2039, 2041, 2043, 2044, 2046, 2048, 2049, 2050, 2051, 2200R	-	4100	SAD 301 or AIC 411 or AIC 412	
SAD	2403	Control a simulated division of fighter aircraft against an unknown threat	B	-	S/L	-	-	D	*	0	2	0	2200R, 2402	-	4101	SAD 302 or AIC 413	
SAD	2404	Control a section of fighter aircraft against an unknown threat	B	-	L	-	-	D	*	0	0	2	2200R, 2403	-	2402, 4102	SAD 303 or AIC 411	
SAD	2410	Perform system troubleshooting	B, R	-	L	-	-	D	1095	0	0	8	-	-	-	SAD 305	
SAD	2411	Perform the duties of the SAD during a SIMEX	B	-	S	-	-	D	*	0	12	0	2400, 2410, 6100, 6200	-	-	SAD 308	
SAD	2412	Perform the duties as SAD during an exercise	B	-	L/S	-	-	D	*	0	0	8	2411, 6100, 6200	-	2221, 2102	SAD 309	
SAD	2413	Perform as a SAD	B, R	-	L	-	-	D	1095	0	0	16	2412, 6100, 6200	-	2221, 2102	SAD 312	
TOTAL SENIOR AIR DIRECTOR SKILLS STAGE (SAD)										0	0	3	16	6	52		
COMMAND AND CONTROL SYSTEMS (C2SYS)																	
C2SYS	2900	Login to TBMCS	B,R	-	G	-	-	CBT	D	1460	0	0	1	-	TBMCS	-	-
C2SYS	2901	Access TBMCS Online Master Help Index	B,R	-	G	-	-	CBT	D	1460	0	0	1	-	TBMCS	-	-
C2SYS	2902	Utilize the TBMCS Alerts Service Web Applications	B,R	-	G	-	-	CBT	D	1460	0	0	1	-	TBMCS	-	-
C2SYS	2903	Use TBMCS Map Manager	B,R	-	G	-	-	CBT	D	1460	0	0	1	-	TBMCS	-	-
C2SYS	2905	Utilize the Air Tasking Order Airspace Control Order (ATO/ACO) Tool (AATWEB)	B,R	-	G	-	-	CBT	D	1460	0	0	1	-	TBMCS	-	-
C2SYS	2910	Use the Execution Status and Monitoring (ESTAT)	B,R	-	G	-	-	CBT	D	1460	0	0	1	-	TBMCS	-	-

C2SYS	2917	Publish the ATO	B,R	-	G	-	CBT	D	1460	0	0	1	-	TBMCS	-	-
C2SYS	2921	Operate C2 Personal Computer (C2PC)	B,R	-	G	-	CBT	D	1460	0	0	1	-	TBMCS	-	-
C2SYS	2923	Operate Command Post of the Future (CPoF)	B,R	-	G	-	CBT	D	1460	0	0	1	-	TBMCS	-	-
C2SYS	2940	Set up and establish communications utilizing an IRC network	B,R	-	G	-	CBT	D	1460	0	0	1	-	C2PC	-	-
C2SYS	2941	Operate Web Development Software (i.e. SharePoint)	B,R	-	G	-	CBT	D	1460	0	0	1	-	JADOCS	-	-
TOTAL COMMAND AND CONTROL SYSTEMS SKILLS STAGE (C2SYS)										0	0	0	0	11	11	
TOTAL CORE SKILL PHASE (2000 PHASE)										61	61	5	25	33	151	
MISSION SKILL TRAINING (3000 PHASE EVENTS)																
TAOC AND EWG SKILL TRAINING EVENTS (TAOC) AND (EWG)																
DRCTR	3100	Perform as a Surveillance Identification Director (SID)	B,R	E	L	-	-	D	1095	0	0	16	2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2027, 2036, 2046, 2047, 2055, 2059, 2060, 2100, 2101, 2102R, 2103R, 2104, 2105, 2106R, 2120R, 2121, 2122R, 2123R, 2124R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 8000, 8080	-	-	DESG 615
DRCTR	3200	Perform as Senior Traffic Director (STD)	B,R	E	L	-	-	D	1460	0	0	8	2004, 2016, 2017, 2022, 2023, 2025, 2027, 2032, 2033, 2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2059, 2060, 2101, 2200R, 2201, 2220, 2221R, 2222R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 8000, 8020, 8080	-	2201, 2221, 2222	DESG 625

DRCTR	3400	Perform as a Senior Air Director (SAD)	B,R	E	L	-	-	D	1460	0	0	8	2024, 2026, 2028, 2029, 2031, 2037, 2038, 2039, 2041, 2042, 2043, 2044, 2048, 2049, 2051, 2052, 2053, 2054, 2056, 2057, 2102, 2200R, 2300R, 2400R, 2410R, 2411, 2412, 2413R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 6100R, 6200R, 8060	-	2413, 3100, 3200	DESG613		
TOTAL TAOC AND EWC SKILLS STAGE (TAOC) AND (EWC)										0	0	0	0	3	32			
TOTAL MISSION SKILL PHASE (3000 PHASE)										0	0	0	0	3	32			
MISSION PLUS SKILL TRAINING (4000 PHASE EVENTS)																		
AIR INTERCEPT CONTROLLER (AIC)																		
AIC	4100	Perform as AIC for a section of fighter aircraft against unknown threat groups.	B,R	E	L	-	-	D	730	0	0	2	2200R, 2403	-	2402, 2404	AIC 416 or AIC 417 or AIC 418		
AIC	4101	Perform as AIC for fighter aircraft on DCA missions.	B	-	L/S	-	-	D	*	0	0	6	2200R, 2403	-	2402, 2404, 4100	AIC 416		
AIC	4102	Perform as AIC for fighter aircraft on OCA missions.	B	-	L/S	-	-	D	*	0	0	6	2200R, 2403	-	2402, 2404, 4100, 4101	AIC 417		
AIC	4103	Perform as AIC for fighter aircraft on Self-escort Strike missions.	B	-	L/S	-	-	D	*	0	0	6	2200R, 2403	-	2402, 2404, 4100, 4102	AIC 418		
AIC	4104	Perform as AIC from a TAOC TPS-59 or TPS-63 radar operator console.	B	-	L	-	-	D	*	0	0	2	2200R, 4100R	-	-	AIC 415		
AIC	4105	Perform as AIC for a division of fighter aircraft.	B,R	E	L	-	-	D	730	0	0	2	2200R, 4100R	-	2402, 2403, 2404, 4101, 4102	AIC 414		
AIC	4106	Perform as AIC for fighter aircraft in a simulated IADS.	B	-	S	-	-	D	*	0	2	0	2200R, 2403R, 4101, 4102, 4103, 4105R	-	-	AIC 419		

AIC	4107	Perform as an AIC during an exercise.	B,R	-	L	-	-	D	730	0	0	2	2004, 2025, 2027, 2039, 2041, 2043, 2044, 2046, 2048, 2049, 2050, 2051, 2200R, 2201, 2402, 2403, 4100R, 4101, 4102, 4103, 4104, 4105R, 4106, 8040	-	2402, 2404, 4100, 4102	DESG 620	
TOTAL AIR INTERCEPT CONTROLLER SKILLS STAGE (AIC)										0	0	1	2	7	26		
DEEP AIR OPERATIONS COORDINATOR (DAOC)																	
DAOC	4200	Conduct mission analysis.	B	-	L	-	-	D	*	0	0	10	2024, 2026, 2028, 2029, 2030, 2048, 2049, 2053, 6200, 8020, 8040, 8060	-	-	-	
DAOC	4201	Conduct weaponeering for the Deep Air Operations section.	B	-	L	-	-	D	*	0	0	12	2024, 2026, 2028, 2029, 2030, 2048, 2049, 2053, 6200, 8020, 8040, 8060	-	-	-	
DAOC	4202	Integrate fires for deep air operations.	B	-	S/L	-	-	D	*	0	12	0	2024, 2026, 2028, 2029, 2030, 2048, 2049, 2053, 4920R, 4924R, 6200, 8020, 8040, 8060	-	-	-	
DAOC	4203	Perform traffic management of assigned airspace.	B	-	S/L	-	-	D	*	0	6	0	2026, 2028, 6200	-	-	-	
DAOC	4204	Perform as a DAOC	B,R	-	S/L	-	-	D	1460	0	2	0	2024, 2026, 2028, 2029, 2030, 2031, 2048, 2053, 2200R, 4200, 4201, 4202, 4203, 4920R, 4924R, 4200, 4201, 4202, 4203, 8020, 8040, 8060	-	-	-	
TOTAL DEEP AIR OPERATIONS COORDINATOR SKILLS STAGE (DAOC)										0	0	3	20	2	22		
COMMAND AND CONTROL SYSTEMS (C2SYS)																	
C2SYS	4920	Operate Advanced Field Artillery Tactical Data System (AFATDS)	B,R	-	G	-	CBT	D	1460	0	0	1	-	TBMCS	-	-	
C2SYS	4924	Operate Joint Automated Deep Operations Coordination System (JADOCs)	B,R	-	G	-	CBT	D	1460	0	0	1	-	AFATDS	-	-	
TOTAL COMMAND AND CONTROL SYSTEMS SKILLS STAGE (C2SYS)										0	0	0	0	2	2		

TOTAL MISSION PLUS SKILL PHASE (4000 PHASE)										0	0	4	22	11	50				
TOTAL 2000, 3000, AND 4000 PHASE										61	61	9	47	47	233				
INSTRUCTOR TRAINING (5000 PHASE EVENTS)																			
INSTRUCTOR UNDER TRAINING (IUT) FOR BASIC INSTRUCTOR																			
IUT	5000	Introduce principles of instruction	B	-	G	-	-	D	*		0		0		2	Recommended by SI or WTI	-	-	-
IUT	5010	Understand the structure of an event	B	-	G	-	-	D	*		0		0		1	Recommended by SI or WTI	-	-	-
IUT	5020	Conduct a period of instruction on a T&R event	B	-	G	-	-	D	*		0		0		2	Recommended by SI or WTI	-	-	-
TOTAL INSTRUCTOR UNDER TRAINING SKILLS STAGE (IUT) FOR BASIC INSTRUCTOR										0	0	0	0	3	5				
INSTRUCTOR UNDER TRAINING (IUT) FOR SENIOR INSTRUCTOR																			
IUT	5100	Understand Aviation T&R program	B	-	G	-	-	D	*		0		0		2	5000, 5010, 5020, 6320	-	-	-
IUT	5110	Understand Applicable Community T&R	B	-	G	-	-	D	*		0		0		2	5000, 5010, 5020, 6320	-	-	-
IUT	5120	Understand T&R Administration	B	-	G	-	-	D	*		0		0		2	5000, 5010, 5020, 6320	-	-	-
IUT	5130	Develop a training plan	B,R	-	G	-	-	D	365		0		0		2	5000, 5010, 5020, 6320	-	-	-
TOTAL INSTRUCTOR UNDER TRAINING SKILLS STAGE (IUT) FOR SENIOR INSTRUCTOR										0	0	0	0	4	8				
TOTAL INSTRUCTOR UNDER TRAINING SKILLS PHASE (IUT)										0	0	0	0	7	13				
REQUIREMENTS, QUALIFICATIONS, CERTIFICATIONS, AND DESIGNATIONS (RQCD) (6000 PHASE)																			
QUALIFICATIONS (QUAL)																			
QUAL	6100	Qualify as SID	B,R	E	L/S	-	-	-	1095		0		0		8	2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2027, 2036, 2046, 2047, 2055, 2059, 2060, 2100, 2101, 2102R, 2103R, 2104, 2105, 2106R, 2120R, 2121, 2122R, 2123R, 2124R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 6100R, 8000, 8080	-	3100	SID 214

QUAL	6200	Qualify as STD	B,R	E	L/S	-	-	-	1095	0	0	8	2004, 2016, 2017, 2022, 2023, 2025, 2027, 2032, 2033, 2034, 2035, 2036, 2043, 2045, 2046, 2047, 2055, 2058, 2059, 2060, 2101, 2200R, 2201, 2220, 2221R, 2222R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 294R1, 6200R, 8000, 8020, 8080	-	2201, 2222, 3200	STD 224
QUAL	6400	Qualify as a SAD	B,R	E	L/S	-	-	-	1095	0	0	8	2024, 2026, 2028, 2029, 2031, 2037, 2038, 2039, 2041, 2042, 2043, 2044, 2048, 2049, 2051, 2052, 2053, 2054, 2056, 2057, 2102, 2200R, 2300R, 2400R, 2410R, 2411, 2412, 2413R, 2900R, 2901R, 2902R, 2903R, 2905R, 2910R, 2917R, 2921R, 2923R, 2940R, 2941R, 3200R, 6100R, 6200R, 8060	-	2413	SAD 312
QUAL	6203	Qualify as a DAOC	B,R	E	S/L	-	-	-	1095	0	4	0	2024, 2026, 2028, 2029, 2030, 2031, 2048, 2053, 2200R, 4200, 4201, 4202, 4203, 4920R, 4924R, 4200, 4201, 4202, 4203, 4204R, 8020, 8040, 8060	-	4204	-

QUAL	6204	Qualify as an AIC	B,R	E	L	-	-	-	1095	0	0	4	2004, 2025, 2027, 2039, 2041, 2043, 2044, 2046, 2048, 2049, 2050, 2051, 2200R, 2201, 2402, 2403, 4100R, 4101, 4102, 4103, 4104, 4105R, 4106, 4107R, 8040	-	2402, 2403, 2404, 4145	AIC 420	
TOTAL QUALIFICATIONS STAGE (QUAL)										0	0	1	4	4	28		
DESIGNATIONS (DESG)																	
DESG	6210	Designation as a TAOC Detachment Commander	B	-	-	-	-	-	*	0	0	0	Commanding Officer discretion	-	-	-	
DESG	6230	Designation as a Deep Air Operations Coordinator (DAOC)	B	-	-	-	-	-	*	0	0	0	6203	-	-	-	
DESG	6240	Designation as a Basic Instructor (BI)	B	-	-	-	-	-	*	0	0	0	5000, 5010, 5020	-	-	-	
DESG	6241	Designation as a Senior Instructor (SI)	B	-	-	-	-	-	*	0	0	0	5100, 5110, 5120, 5130, M-SHARP formal training, 6240	-	-	-	
DESG	6242	Designation as a Weapons and Tactics Instructor (WTI)	B	-	-	-	-	-	*	0	0	0	MAWTS-1 WTI graduate	-	-	-	
DESG	6243	Designation as an Air Intercept Control Instructor (AICI)	B	-	-	-	-	-	*	0	0	0	5000, 5010, 5020, SCHL 6006, SCHL 6069, 6204	-	-	-	
TOTAL DESIGNATIONS STAGE (DESG)										0	0	0	0	6	0		
TOTAL REQUIREMENTS, QUALIFICATIONS, CERTIFICATIONS, AND DESIGNATIONS PHASE (RQCD)										0	0	1	4	10	28		

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28 Nov 11

2.17 SYLLABUS EVALUATION FORM. This form is found within Appendix B of the C3 Course Catalog. The Course Catalog can be found on the MAWTS-1 website at the following URL.

[https://www.intranet.tecom.usmc.mil/sites/mawts1/C3%20Course%20Catalog/C3%20Course%20Catalog%20\(May%202011\).pdf](https://www.intranet.tecom.usmc.mil/sites/mawts1/C3%20Course%20Catalog/C3%20Course%20Catalog%20(May%202011).pdf)