



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
3000 MARINE CORPS PENTAGON
WASHINGTON, DC 20350-3000

NAVMC 3500.119B
PSD

DEC 03 2021

NAVMC 3500.119B

From: Commandant of the Marine Corps
To: Distribution List

Subj: TACTICAL AIR OPERATIONS CENTER TRAINING AND READINESS MANUAL

Ref: (a) NAVMC 3500.14E

Encl: (1) TAOC T&R Manual

1. Purpose. Per the reference, the Tactical Air Operations Center (TAOC) Training and Readiness (T&R) Manual, contained in enclosure (1) provides revised standards, regulations, and policy regarding the training of TAOC Marines.

2. Cancellation. NAVMC 3500.119A.

3. Scope. Highlights of major changes are:

a. Chapter 1

(1) Readiness metrics, instructor designations, certifications, qualifications, and designations have been revised to align more closely with updates to readiness reporting directives and a recent update to reference (a).

(2) The Assistant Controller designation has been renamed Weapons Operator.

(3) The Senior Air Director designation has been replaced by Air and Missile Defense Officer as combat leader.

b. Chapter 2

(1) Created a Sector Air Defense Commander (SADC) Operations program of instruction.

(2) Created a SADC designation.

c. Chapter 3. Simulation events have been integrated into the 5000 Phase Basic Instructor and Senior Instructor events.

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

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

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



K. M. IIAMS
Commanding General
Training and Education Command
By direction

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CHAPTER 1

TACTICAL AIR OPERATIONS CENTER
TRAINING AND READINESS AGENCY REQUIREMENTS

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CHAPTER 1

TACTICAL AIR OPERATIONS CENTER
TRAINING AND READINESS AGENCY REQUIREMENTS

1.0 TRAINING AND READINESS REQUIREMENTS. The goal of Marine Aviation is to attain and maintain combat readiness to support expeditionary maneuver warfare while conserving resources. The standards established in this program are validated by subject matter experts to maximize combat capabilities for assigned mission essential tasks (MET). 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. Provide air surveillance and control of friendly aircraft and surface-to-air weapons in support of offensive air support and anti-air warfare, continuous all-weather radar, non-radar, tower air traffic control services, airspace management, and meteorological and oceanographic (METOC) services in support of the MAGTF and Joint Force Commander.

1.2 TABLE OF ORGANIZATION (T/O). Information contained in the following table depicts the Marine Air Control Squadron garrison structure and highlights the subordinate Air Defense Companies. The MACS T/O should only be used to create a CMMR which is no greater than 70% T/O. Creating a CMMR that is any greater than 70% T/O creates impossibilities in terms of numbers of qualified personnel. For example, if T/O authorizes (12) 7210 Air Defense Control Officers (ADCO) and CMMR requires (12) 7210 ADCOs, then every officer would have to be qualified at all times, to include officers just graduated from MCCES and those officers filling a squadron collateral billet. Failure to account for this would result in less than nominal readiness reporting. As of this publication date, the MACS were authorized:

Marine Air Control Squadron				
MOS	MACS-1	MACS-2	MACS-4	MACS-24
7202	5	5	4	6
7210	16	16	27	15
7236	66	66	102	66

Note: The following table contains TFSMS data.

MARINE AIR CONTROL SQUADRON						
ROLL-UP UNIT	UIC's (HQTS Co., Air Defense Co. A, Air Defense Co. B.)			T/Os (HQTS Co., Air Defense Co. A, Air Defense Co. B.)		
MACS-1	M00885	M00881	M00886	8641	8642	8644
MACS-2	M00871	M00872	M00873	8641	8642	8644
MACS-4	M00861	M00862	M00866	8641	8642	8644
MACS-24	M01309	M01235	M01335	8641A	8642A	8644A

1.3 MISSION ESSENTIAL TASK LIST. The METL is comprised of specified capabilities-based Mission Essential Tasks (MET) which a unit is designed to execute. METs are drawn from the Marine Corps Task List (MCTL), are standardized by unit type, and are defined as Core or Core Plus METs. Core METs are those tasks that a unit is expected to execute at all times, and are the only METs used in reporting the Training Level (T-Level) for the Core Mission (C-Mission) in the Defense Readiness Reporting System – Marine Corps (DRRS-MC). Core Plus METs identify additional capabilities to support mission or plans which are limited in scope, theater specific, or have a lower probability of execution. Core Plus METs may be included in readiness reporting when contained within an Assigned Mission METL. An assigned mission METL consists of only selected METs (drawn from Core and Core Plus METs) necessary to conduct the assigned mission. MCO 3000.13 Readiness Reporting and Chapter 7 of the Aviation T&R Program Manual provide additional information on Aviation Training readiness reporting. During the preparation for this T&R manual, the TAOC community evaluated and changed its METs to answer the fundamental question of "Why does this unit exist?"

MARINE AIR CONTROL SQUADRON		
MISSION ESSENTIAL TASK LIST (METL)		
MET	ABBR	MCT DESCRIPTION
CORE METs		
MCT 5.3.5.3.2	SURV	CONDUCT AIRSPACE SURVEILLANCE
MCT 5.3.5.4.1	CTRL	CONDUCT POSITIVE CONTROL
MCT 6.1.1.7.2	ADACT	COORDINATE AIR AND MISSILE DEFENSE ACTIONS
MCT 6.1.1.7.3	DSOPS	CONDUCT DUAL SITE AIR AND MISSILE DEFENSE OPERATIONS
CORE PLUS METs		
MCT 6.1.1.7.1	ADCAPS	INTEGRATE OPERATIONAL AIR DEFENSE CAPABILITIES

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

MARINE AIR CONTROL SQUADRON							
MISSION ESSENTIAL TASK (MET) TO SIX FUNCTIONS OF MARINE AVIATION							
MET	ABBR	SIX FUNCTIONS OF MARINE AVIATION					
		OAS	ASPT	AAW	EW	CoA&M	AerRec
CORE METs							
MCT 5.3.5.3.2	SURV	X	X	X		X	
MCT 5.3.5.4.1	CTRL	X	X	X		X	
MCT 6.1.1.7.2	ADACT	X	X	X		X	
MCT 6.1.1.7.3	DSOPS	X	X	X		X	
CORE PLUS METs							
MCT 6.1.1.7.1	ADCAPS	X	X	X		X	

1.5 MET TO CORE/MISSION/CORE PLUS/MISSION PLUS SKILL MATRIX

MACS								
MET TO CORE/MISSION/CORE PLUS/MISSION PLUS SKILL MATRIX								
	METs		MCT 5.3.5.3.2	MCT 5.3.5.4.1	MCT 6.1.1.7.2	MCT 6.1.1.7.3	MCT 6.1.1.7.1	
			SURV	CTRL	ADACT	DSOPS		ADCAPS
CORE SKILLS	ACAD	CORE METs	X	X	X	X	CORE PLUS METs	X
	AFAM			X	X	X		X
	AIC			X	X	X		X
	C2SYS		X	X	X	X		X
	CC		X	X	X	X		X
	DLC		X	X	X	X		X
	EQUIP		X	X	X	X		X
	FAM			X	X	X		X
	LFAM			X	X	X		X
	MC			X	X	X		X
	SAD		X	X	X	X		X

MACS								
MET TO CORE/MISSION/CORE PLUS/MISSION PLUS SKILL MATRIX								
	METs		MCT 5.3.5.3.2 SURV	MCT 5.3.5.4.1 CTRL	MCT 6.1.1.7.2 ADACT	MCT 6.1.1.7.3 DSOPS		MCT 6.1.1.7.1 ADCAPS
	SD		X	X	X	X		X
	SO		X	X	X	X		X
	TDL		X	X	X	X		X
	TATC			X	X	X		X
	WD			X	X	X		X
	WO			X	X	X		X
MISSION SKILLS	AIC				X	X		X
	C2SYS		X	X	X	X		X
	CC		X	X	X	X		X
	DLC		X		X	X		X
	EQUIP		X	X	X	X		X
	SAD			X	X	X		X
	SD		X	X	X	X		X
	SO		X	X	X	X		X
	TATC			X	X	X		X
	WD			X	X	X		X
	WO			X	X	X		X
	CORE PLUS SKILLS	ACAD						
AFAM								X
AIC1,2,3								X
DAC								X
MC								X
SAD								X
WD								X
MISSION PLUS SKILLS	SADC							X
	SADCOPS							X

1.6 MISSION ESSENTIAL TASKS (MET) OUTPUT STANDARDS

MARINE AIR CONTROL SQUADRON		
MET	ABBR	OUTPUT HOURS (PER DAY SUSTAINED FOR 90 DAYS)
		TOTAL NUMBER OF CREWS
CORE MET OUTPUT STANDARDS		
MCT 5.3.5.3.2	SURV	2 SURV CMMR CREWS
MCT 5.3.5.4.1	CTRL	2 WPNS CMMR CREWS
MCT 6.1.1.7.2	ADACT	2 WPNS CMMR CREWS
MCT 6.1.1.7.3	DSOPS	4 CMMR CREWS
CORE PLUS MET OUTPUT STANDARDS		
MCT 6.1.1.7.1	ADCAPS	2 SADC CREWS

1.7 CORE MODEL MINIMUM REQUIREMENT (CMMR) TRAINING STANDARDS FOR READINESS REPORTING (DRRS-MC). The CMMR is the minimum number of crew personnel, per crew position, to be trained per stage as detailed below. The CMMR is based upon supporting MCTs and associated baseline capabilities. The Marine Air Control Squadron task-organizes its subordinate agencies to fulfill mission requirements; the CMMR is the minimum requirement associated with the MCTs above. 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.

MARINE AIR CONTROL SQUADRON								
CMMR / ADVANCED AND BASELINE READINESS REPORTING MATRIX								
			MCT 5.3.5.3.2 SURV	MCT 5.3.5.4.1 CTRL	MCT 6.1.1.7.2 ADACT	MCT 6.1.1.7.3 DSOPS		MCT 6.1.1.7.1 ADCAPS
CREW POSITION	SAD	CORE METs		SAD, SAD Qual	SAD, SAD Qual	SAD, SAD Qual	CORE PLUS METs	SAD, SAD Qual
	WD			WD, WD Qual	WD, WD Qual	WD, WD Qual		WD, WD Qual
	SD		SD, SD Qual	SD, SD Qual	SD, SD Qual	SD, 2 SD Qual		SD, 2 SD Qual
	DLC		DLC, DLC Qual		DLC, DLC Qual	DLC, DLC Qual		DLC, DLC Qual
	SO		2 SO, 2 SO Qual	2SO, 2SO Qual	2 SO, 2 SO Qual	2 SO, 2 SO Qual		2 SO, 2 SO Qual
	CC			CC, CC Qual	CC, CC Qual	CC, CC Qual		CC, CC Qual
	TATC			TATC, TATC Qual	TATC, TATC Qual	TATC, TATC Qual		TATC, TATC Qual
	AIC				AIC, AIC Qual	AIC, AIC Qual		AIC, AIC Qual
	WO			WO, WO Qual	2 WO, 2 WO Qual	2 WO, 2 WO Qual		2 WO, 2 WO Qual
	AMDO							
CREWS TRAINED	MACS-1		2(2)	2(2)	2(2)	4(4)		4(2)
	MACS-2		2(2)	2(2)	2(2)	4(4)		4(2)
	MACS-4		2(2)	2(2)	2(2)	4(4)		4(2)
	MACS-24		2(2)	2(2)	2(2)	4(4)		4(2)

Note: Crew position is based on a 12 hour construct for 1 crew. Crews Trained supports 24 hours.

Note 2: SADC and SADC Ops are implemented to support Core Plus MCT IAW Table 1.9.

CMMR/ADVANCED AND BASELINE READINESS REPORTING MATRIX			
	Crew Positions	AMDO	
MACS-1	SAD		
	WD		
	SD		
	DLC		
	SO		
	CC		
	TATC		
	AIC		
	WO		
	AMDO		1
	MACS-2	SAD	
WD			
SD			
DLC			
SO			
CC			
TATC			
AIC			
WO			

CMMR/ADVANCED AND BASELINE READINESS REPORTING MATRIX		
	Crew Positions	AMDO
	AMDO	1
MACS-4	SAD	
	WD	
	SD	
	DLC	
	SO	
	CC	
	TATC	
	AIC	
	WO	
	AMDO	1
	MACS-24	SAD
WD		
SD		
DLC		
SO		
CC		
TATC		
AIC		
WO		
AMDO		1

Note 1: Air and Missile Defense Officer can be a 7202 OR 7210

1.8 INSTRUCTOR DESIGNATIONS

MACS AIR CONTROL SQUADRON			
INSTRUCTOR DESIGNATIONS			
CMMR			
INSTRUCTOR DESIGNATIONS	7202	7210	7236
BASIC INSTRUCTOR	0	6	12
SENIOR INSTRUCTOR	0	4	4
WEAPONS AND TACTICS INSTRUCTOR	2	2	2
AICI	0	0	2
AICS	0	0	2

1.9 CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (CQD)

MARINE AIR CONTROL SQUADRON			
CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (CQD)			
CREW COMPOSITION	7202	7210	7236
Senior Air Director (SAD)	0	4	0
Surveillance Director (SD)	0	4	0
Weapons Director (WD)	0	4	0
Crew Chief (CC)	0	0	4
Air Intercept Controller Level 1 (AIC1)	0	0	2

Air Intercept Controller Level 2 (AIC2)	0	0	2
Air Intercept Controller (AIC)	0	0	4
Air Intercept Controller Supervisor (AICS)	0	2	
Air Intercept Controller Instructor (AICI)	0	2	
Missile Controller (MC)	0	0	4
Deep Air Controller (DAC)	0	0	4
Tactical Air Traffic Controller (TATC)	0	0	4
Data Link Coordinator (DLC)	0	0	4
Surveillance Operator (SO)	0	0	8
Weapons Operator (WO)	0	0	12
Joint Interface Control Officer (JICO)	3 (See Note A)		
COMBAT LEADERSHIP (See Note B)			
CREW COMPOSITION	7202	7210	7236
Air and Missile Defense Officer (Note 1)	1		0
Sector Air Defense Commander Crew (CORE PLUS) (CQD) (See Note C)			
CREW COMPOSITION	7202	7210	7236
Sector Air Defense Commander (SADC)	1		
Sector Air Defense Commander Operations Officer (SADC OPS)	2		
Sector Air Defense Operations Chief (SADC CC)			2

Notes:

- a. Reserve MACS is only required to have (2) Joint Interface Control Officers (JICO). JICOs can be from the 7202, 7210, or 7236 MOS
- b. Combat Leadership requirements for readiness reporting are per paragraph 1.9. The goal of the combat leadership program is to create a Marine capable of employing their section, agency, or unit, as a cohesive team in accomplishing the unit MET(s).
- c. A Sector Air Defense Commander Crew may require external augmentation to accomplish mission requirements.

1.10 CREW POSITIONS

Command Section

Senior Air Director. The SAD is responsible for the TAOC's detailed operations. The SAD ensures that proper coordination occurs among the various TAOC sections, directly coordinates operations with external command and control agencies, directs ongoing maintenance and assigns casualty roles to crew members.

Crew Chief. The Crew Chief is the most qualified senior staff non-commissioned officer on the TAOC crew and works under the direction of the SAD. The CC is the SME on all TAOC tactics and procedures. The CC assists the SAD by coordinating all aspects of internal crew coordination, advising subordinate directors and crew members of appropriate actions and supervises ongoing maintenance directed by the SAD.

Weapons Section

Weapons Director. The WD is responsible to the SAD for the proper employment of air and missile defense weapons and the management of aviation assets under the weapons section control. The WD evaluates the threat and, in accordance with the aviation combat element (ACE) commander's AAW plan and rules of engagement (ROE), assigns weapons to negate the threat. The WD also assumes responsibility for the control of aircraft not engaged in DCA operations and conducts aircraft handovers with other agencies as required. The WD oversees air control functions executed by the TATC and manages AAR assets IAW the fuel plan. During the supervision of engagements, the WD coordinates friendly actions amongst various AMD assets across multiple weapons engagement zones (WEZs) (i.e., assignments, disengagements, reengagements).

Air Intercept Controller. The AIC is responsible for the control of AAW missions from the point the aircraft is handed off from the TATC until that mission is returned to the TATC. The AIC is responsible for the successful intercept of hostile airborne targets assigned by the WD. The AIC controls combat air patrol (CAP) aircraft and augments surveillance efforts in his assigned zone with CAP aircraft radar.

Deep Air Controller. The DAC is responsible to the WD for control and de-confliction of aircraft within the TAOC's assigned sector for OAS missions not under DASC control. The DAC is not a JTAC, but instead performs battle tracking and terminal guidance operations for OAS aircraft. (CORE PLUS)

Tactical Air Traffic Controller. The TATC is responsible to the WD for detailed airspace management within the TAOC's assigned sector for all missions not controlled by the AIC or DAC. In addition to providing navigational assistance, the TATC transmits friendly and threat situational awareness information to aircraft entering or transiting through the assigned sector.

Missile Controller. The MC controls applicable engagements within the TAOC's sector. The MC position can be supplemented by an AMD fires liaison (e.g ADAFCO, LAAD, Other) CORE PLUS)

Weapons Operator (WO). The WO is responsible to the WD and is employed within the weapons section. The WO is responsible for tasks that may include but are not limited to: internal / external communication with the Air Defense Cell in the TACC per the WD direction, weapons overlay and symbology management, inputting ATO updates, and digital air control. There is no air control expectation by the WO.

Surveillance Section

Surveillance Director. The SD is responsible to the SAD for the detection, identification, and classification of all sensor inputs within the TAOC's assigned sector and for coordinating electronic protection (EP) within the sector. The SD also maximizes organic sensor performance to support advanced kill chains, supervises the exchange and correlation of aircraft position and identification with other control agencies, and supervises all TAOC data link operations.

Data Link Coordinator. The DLC is responsible to the SD for the TAOC's data link configuration. The DLC manages data link configuration by initiating directed changes to degraded links with subordinate agencies and recommending changes to degraded links to adjacent and senior agencies.

Surveillance Operator. The SO, under the direction of the SD, monitors radar input, initiates or monitors the acquisition of air tracks, performs preliminary identification, and updates track data as required.

Sector Air Defense Commander (SADC) Crew

SADC (LtCol). The SADC is the MAGTF's DCA battle manager and is responsible to the ACE commander, who is second only to the Area Air Defense Commander (AADC) or Regional Air Defense Commander (RADC) for the effective management of air and missile defense assets within the assigned sector. The SADC must be experienced in air and missile defense operations and thoroughly knowledgeable on the capabilities and limitations of AMD assets within the assigned sector. The SADC will coordinate with the ACE commander / Senior Watch Officer as well as higher and adjacent air defense commanders during joint operations (e.g. other SADCs, RADC, and/or AADC).

SADC Operations Officer (SADC Ops) (Maj/Capt). The SADC operations officer facilitates the interface between the TAOC and the tactical air command center (TACC) and makes recommendations to the SADC for the employment of air and missile defense assets. The SADC operations officer typically coordinates DCA operations with the TACC's air defense coordinator and the TAOC's weapons director.

SADC Operations Chief (SNCO). When assigned, the SADC Operations chief is responsible for the set-up, organization, and administrative functions of the SADF in accordance with the SADC / SADC operations officer's direction. During operations, the SADC operations chief will assist the AMD fires liaison (e.g ADAFCO, LAAD, Other) with aviation, surface, and land fires integration, proactively translating requests for targeting received from aviation assets to AMD liaison personnel as a means to reduce kill chain timelines.

Intelligence Representative. The intelligence representative coordinates amongst intelligence personnel at various units and the intelligence watch officer at the TACC. The intelligence representative is responsible for collecting, processing, and analyzing all available intelligence and disseminating that information throughout the TAOC and SADF. Based on available information, the intelligence representative may provide insight concerning probable enemy courses of action to the SADC.

SADC Augments:

Anti-Air Warfare Aviation Representative (75XX). When feasible, the SADC staff should be augmented by an aviation representative to provide specialized knowledge on matters concerning MAGTF aviation. When available, the aviation representative could assist the SADC and TAOC crew members on matters including fighter tactics, weapons parameters and loadouts, aircraft capabilities and limitations, tanker operations, and interpretation of threat tactics.

Ground Based Air Defense Representative / Low Altitude Air Defense Liaison. The ground-based air defense (GBAD) / Low Altitude Air Defense (LAAD) Liaison collects and manages information from LAAD units and advises the SADC and/or Weapons Director (WD) on LAAD capabilities and employment options. In addition, they recommend states of alert for LAAD teams to the SADC and/or WD and pass threat and intelligence information to LAAD units. Location of the GBAD Rep/ LAAD Liaison will be determined by the SADC. This member can be located in the SADF or in the TAOC (or similar C2 agency) fully integrated into the weapons section.

Air Defense Artillery Fire Control Officer (ADAFCO). Brigade ADAFCOs deploy to any region or sector where Army lower-tier engagement capabilities are employed. Primarily located with the RADC or SADC the ADAFCO coordinates and integrates Army lower-tier fires into the IADS by controlling the fires of subordinate units. The ADAFCO gives all fire control orders to subordinate units. The ADAFCO can be located with either the SADC crew or with the actual TAOC Weapons crew dependent upon how the SADC determines they want to fight the current Air Defense situation based on mission planning factors such as Rules of Engagement, Threat Analysis, etc.

CHAPTER 2

AIR COMMAND AND CONTROL OFFICER (MOS 7202)
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

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CHAPTER 2

AIR COMMAND AND CONTROL OFFICER (MOS 7202)
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

2.0 AC2O INDIVIDUAL TRAINING AND READINESS REQUIREMENTS. This T&R Syllabus is based on specific goals and performance standards designed to ensure individual proficiency. The goal of this chapter is to develop individual and unit warfighting capabilities.

2.1 AC2O TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the 7202. Units should use the model as a point of departure to generate individual training plans. This model represents minimum to maximum time to train.

7202 Career Progression Model		
		<p>Assumptions: -ACPM requirements previously met -7202s with 7210 background will have reduced training timelines</p> <p>Note: *7202s may have completed WTI</p>
SADC (O-5)* (Designation)		Designation
SADC Ops (O-4)* (Designation)		
WTI*		
6	12	18
Months assigned to MACS		

2.2 7202 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.

2.2.1 Basic POI.

AC2O MOS 7202 POI		
WEEKS	PHASE OF INSTRUCTION	UNIT RESPONSIBLE
0-52	CORE PLUS & MISSION PLUS	TACTICAL SQUADRON

Note: Training duration varies by position being trained and background of 7202. See progression model for notional training times.

2.2.2 Refresher POI.

AC2O MOS 7202 REFRESHER POI		
WEEKS	PHASE OF INSTRUCTION	UNIT RESPONSIBLE
VARIES	MISSION PLUS	TACTICAL SQUADRON

Note 1: Training duration varies by duration that the 7202 has been away from the SADC or SADC Ops POI.

2.3 PROFICIENCY AND CURRENCY.

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

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

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

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

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

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

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

2.4 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.

AC2O MOS 7202	
CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (CQD) (6000 Phase)	
Designations	EVENTS
Basic Instructor (BI)	5000, 5010, 5020, 6320
Senior Instructor (SI)	5100, 5110, 5120, 5130, 6321
Weapons and Tactics Instructor (WTI)	6000, 6322
Sector Air Defense Commander Operations Officer (SADCOPS)	4000, 4026, 4028, 4030, 4034, 4038, 4050, 4054, 4056, 4068, 4070, 4072, 4102, 4226, 4265, 4500, 4504, 6290, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088
Sector Air Defense Commander (SADC)	4201, 4305, 6292, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088
Air and Missile Defense Officer (AMDO)	6294

2.5 SYLLABUS NOTES.

2.5.1 All events, to include simulations, shall begin with a comprehensive brief with emphasis on administrative procedures, ORM, mission performance standards and crew expectations.

2.5.2 All events terminate with a comprehensive debrief with emphasis on crew performance utilizing all evaluation techniques available.

2.5.3 A MACCS Training Form (MTF) is required for any performance event completed within the basic or refresher POI, or as recommended by squadron WTTP. If the CO has waived/deferred a syllabus event, the squadron WTTP officer shall place a waiver/deferral letter inside the Marine’s MACCS Performance Record.

2.5.4 Event Conditions. Refer to the following table for required event conditions.

Code	Environmental Conditions
(N)	May be conducted day or night. – If at night, aided or unaided.

2.5.5 Device Matrix.

DEVICE	
Symbol	Meaning
L	Conducted using unit T/E Equipment (See Note 1)
L/S	Live preferred / simulator acceptable
S/L	Simulator preferred/live acceptable
G	Ground/academic training.
GE	Ground event requiring evaluation

Note: Device matrix standardized per NAVMC 3500.14E. Unit personnel can accomplish live events using C2 system with similar capabilities to T/E equipment or available range systems supporting live flight operations.

2.5.6 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.

2.5.7 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.

2.6 CORE SKILL INTRODUCTION PHASE (1000)

Purpose. There are no core skill introductory events associated with this MOS.

General

Admin Notes. None.

Prerequisite. None.

Stages. None.

2.7 CORE SKILL TRAINING (2000)

Purpose. There are no core skill events associated with this MOS.

General

Admin Notes. There are Chapter 3, 7210 Core Skill academic events that are mirrored to this chapter and captured at the 4000 level.

Prerequisite. None

Stages. None.

2.8 MISSION SKILL TRAINING (3000)

Purpose. There are no mission skill events associated with this MOS.

General

Admin Notes. None.

Prerequisite. None.

Stages. None.

2.9 CORE PLUS TRAINING (4000)

Purpose. Core Plus Skills are intended to train the individual to utilize the tools, systems and/or procedures which have a reduced probability of execution or are theater specific.

General. Core Plus skills in this chapter serve as a baseline knowledge for SADC Ops and SADC functions.

Admin Notes. 4000 level academics are mirrored from the 7210 POI in Chapter 3. Unit instructors qualified and current on the corresponding 2000 level events in the 7210 and 7236 Chapters may instruct 7202s. See the 7202 T&R Matrix (4000 Level) at the end of this chapter for a synopsis of mirrored events.

Prerequisite. None.

2.9 Stages.

PAR NO.	STAGE NAME	PAGE NUMBER
2.9.1	ACADEMIC (ACAD)	2-7
2.9.2	AIR INTERCEPT FAMILIARIZATION (AFAM)	2-17

2.9.1 ACADEMIC (ACAD)

Purpose. To develop the 7202's academic understanding of command relationships, AMD asset capabilities, limitations, combat identification, threat considerations, and weapons and fuel management as prerequisites to training for the SADC Operations Officer designation. 7202s who have previously completed the 7210 POI will receive credit for corresponding academics.

General.

Admin Notes. In addition to the events listed in this phase, all trainees will complete ACPM-8000, 8020, 8040, 8060, and 8080. Academic events listed in this stage have a corresponding 2000 level event within the 7210 and 7236 chapters. Academic events may be evaluated by 7210s or 7236s that are current instructors in the corresponding academic event.

Prerequisites. None.

ACAD-4000 2.0 * B (N) G

Goal. Define combat identification capabilities and procedures.

Requirement. Given the references:

1. Define the purpose and criteria for Positive Control.
2. Define the purpose and criteria for an Air Defense Identification Zone (ADIZ).
3. Explain how the following are used to identify aircraft:
 - a. Control points.
 - b. Airspace Control Area.
 - c. Ingress/Egress routes/Minimum Risk Routes.
 - d. Identify Friend or Foe (IFF) (Modes 1-5).
 - e. Air Tasking Order (ATO).
4. Explain the relationship between I.D. Criteria and ROE.
5. Explain the purpose of challenge and reply authentication procedures.
6. Define the 6 standard track identifications, in accordance with the Joint Multi-TDL Operating Procedures (JMTOP).
7. List the five track environment categories, in accordance with the JMTOP.
8. List and describe the electronic identification capabilities of the following platforms.(Classified if filled out)
 - a. E-3 AWACS.
 - b. E- 2/D Hawkeye.
 - c. AEGIS equipped ships.
 - d. E-8 JSTARS.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MCTP 3-20C Anti-Air Warfare
2. MCRP 3-25, Control of Aircraft and Missiles
3. CJCSM 6120G_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
4. JP 3-52, Joint Airspace Control
5. MCTP 10-10B Multi-Service Tactics, Techniques, and Procedures for Air and Missile Defense
6. TOPGUN C2 Bluebook (SECRET)
7. MCRP 8-10B.10 Radio Operator's Handbook

ACAD-4026 0.5 * B _____ (N) G

Goal. Identify key personnel and responsibilities during air and missile defense operations.

Requirement. Given the references, explain the responsibilities of the following:

1. Joint Forces Commander (JFC).
2. Joint Forces Air Component Commander (JFACC).
3. Area Air Defense Commander (AADC).
4. Regional Air Defense Commander (RADC).
5. Sector Air Defense Commander (SADC).
6. Deputy Area Air Defense Commander (DAADC).
7. Joint Force Maritime Component Commander (JFMCC)

8. Composite Warfare Commander
9. Air and Missile Defense Commander “W”

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

Instructor. SI, WTI.

Prerequisite. None.

References.

1. JP 3-0, Joint Operations
2. JP 3-01, Countering Air and Missile Threats
3. JP 3-30, Joint Air Operations
4. MCTP 3-20C, Antiair Warfare
5. JP 3-32, Joint Maritime Operations
6. MCTP 10-10B, ALSA MTTP Air and Missile Defense

ACAD-4028 2.0 * B (N) G

Goal. State 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.
 - d. 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. Without the aid of reference, state (verbally or written) the required items. Minor errors by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. None.

References.

1. CJCSI 3121.01B, Standing ROE for US Forces
2. DOD Directive 2311.01 Law of War Program
3. MCO 3300.4A, Marine Corps Law of War Program
4. Joint Pub 1-02, DOD Dictionary of Military and Associated Terms
5. MCTP 11-10A War Crimes

ACAD-4030 1.0 * B (N) G

Goal. Discuss Missile Defense (Classified when filled in).

Requirement. Given the reference:

1. State the purpose of Missile Defense.

Goal. Define the characteristics of the Phased Array Tracking Intercept of Target (PATRIOT), AEGIS, and Stinger and how they integrate into an IADS.

Requirement. Given the references:

1. Outline the structure of a PATRIOT Battalion:
 - a. Number of firing batteries within a battalion.
 - b. Number of launchers within a battery.
 - c. Number and types of missiles per launcher.
2. List the characteristics of the PAC-2, PAC-3, MSE and GEM-T as they relate to the following (SECRET when filled in):
 - a. Maximum effective range.
 - b. Max effective altitude for ABT, TBM, and CM.
 - c. Target to weapon match for ABT, TBM, and CM.
 - d. Missile guidance system.
 - e. PATRIOT Operating Area (POA)
3. List the characteristics of the AN/MPQ-65 PATRIOT Radar System (SECRET when filled in):
 - a. Modes of operation.
 - b. Surveillance and targeting Radar ranges.
 - c. Maximum number of simultaneous target tracking.
4. List and define the Detect-to-Engage Kill chain Sequence.
5. Identify Target Centered Deconfliction for PAC 2 and PAC 3
6. Identify the data link capabilities of the ADA Battalion.
7. State the purpose and employment considerations for the PATRIOT ADAFCO as member of the TAOC Crew.
8. List AEGIS employment considerations for Standard Missile (SM) 2, SM-3, and SM-6
 - a. Sensor
 - b. Max effective Range
 - c. Missile to threat relationship
 - d. Typical Cruiser, Destroyer Inventory
 - e. Friendly deconfliction considerations
8. Discuss potential naval kill chains and integration with Whiskey (W)
9. Stinger Block II/ LAAD Employment
 - a. Max Range
 - b. Max Altitude
 - c. 360° Coverage
 - d. Weighted Coverage
 - e. Base Defense Zone (BDZ)
10. Discuss Terminal High Altitude Air Defense (THAAD)
 - a. Sensor
 - b. Type of Defense / Threat mitigated

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

Instructor. SI, WTI

Prerequisite. None.

References.

1. FM 3-01.13, PATRIOT TOPGUN Manual
2. MCTP 10-10B, ALSA MTTP Air and Missile Defense
3. MCTP 10-10B, ALSA MTTP Air and Missile Defense, (Classified Appendix)
4. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
5. TOPGUN C2 Blue Book (SIPR)
6. NTPP 3-01.11 Maritime Air and Missile Defense Planning

7. NTTP 3-01.12 Maritime Air and Missile Defense Employment (Classified)

ACAD-4050 2.5 * B (N) G

Goal. State the characteristics and employment considerations of TACAIR Navy and USMC Aircraft.

Requirement. Given the references, state the capabilities and limitations and employment considerations of the following aircraft during AAW, OAS, and AAR missions: (Classified when filled in)

1. F/A-18 C-D Hornet.
2. F/A-18E-F Super Hornet.
3. EA-18G Growler.
4. F-35 B/C.
5. AV-8B Harrier.
6. E-2 C/D Hawkeye.
7. KC-130.
8. MQ-9 Reaper

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

Instructor. AICS, AICI

Prerequisite. None.

References.

1. MCTP 10-10B, ALSA MTTP Air and Missile Defense
2. Multi-Service Tactics, Techniques, and Procedures for Joint Application of Firepower (JFIRE)
3. TOPGUN Manual, Chapter 42, F/A-18E/F, Air-to-Air Employment, Chapter 43, Strike Fighter Integration, Chapter 45, CAS/AR/SCAR (SIPR)
4. <https://www.nasic.wrightpatterson.af.smil.mil>
5. Air Naval Tactics, Techniques, and Procedures 3-22.1 F/A-18C/D (SIPR)
6. Airborne Electronic Attack Weapons School HAVOC Manual, Chapter 2, EA-18G Air-to-Air, Chapter 25, SEAD Employment (SIPR)
7. Air Naval Tactics, Techniques, and Procedures 3-22.7 AV-8B (SIPR)
8. TOPGUN C2 Blue Book (SIPR)
9. Air Naval Tactics, Techniques, and Procedures 3-22.1 KC-130 (SIPR)

ACAD-4054 1.5 * B (N) G

Goal. Describe the capabilities of US Air-to-Air Weapons. (classified when filled in).

Requirement. Given the reference describe Capabilities and Limitations for each of the following weapons:(Classified when filled in)

1. AIM-9M Sidewinder.
 - a. Lethal Radius
 - b. Gimbal limits
 - c. Rmax
2. AIM-9X Sidewinder.
 - a. Lethal Radius
 - b. Gimbal Limits
 - c. Max Range Rule of Thumb (ROT)
3. AIM-120 AMRAAM.
 - a. Guidance type

- b. Data link Antenna Field of View
 - 1. C7 variant
 - 2. D variant
- c. Electromagnetic Attack (EA) considerations

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

Instructor. AICI

Prerequisite. None.

References.

- 1. TOPGUN Manual, Chapter 26, AIM-9 Sidewinder (SIPR)
- 2. TOPGUN Manual, Chapter 28, AIM-120 AMRAMM(SIPR)
- 3. TOPGUN Manual, Chapter 30, F/A-18 Combat Systems(SIPR)
- 4. MAWTS-1 SIPR SharePoint, F/A-18 AIM-9X/M
- 5. MAWTS-1 SIPR SharePoint, F/A-18 Combat Systems

ACAD-4056 2.0 * B (N) G

Goal. Describe Air and Missile Defense terminology.

Requirement. Given the references, define the following:

- 1. Offensive Counter Air.
- 2. Defensive Counter Air.
- 3. Air Superiority.
- 4. Air Supremacy.
- 5. Defense in-depth.
- 6. Vital Area.
- 7. Identification.
- 8. Engagement Area.
- 9. Surveillance Area.
- 10. Positive Identification.
- 11. Positive Friendly Identification.
- 12. Positive Hostile Identification.

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

- 1. JP 3-0, Joint Operations
- 2. JP 3-01, Countering Air and Missile Threats
- 3. JP 3-30, Joint Air Operations
- 4. MCTP 3-20C, Antiair Warfare

ACAD-4068 1.0 * B (N) G

Goal. Define Integrated Fire Control terms and roles.

Requirement. Perform the following (SECRET when filled in):

1. Define Integrated Fire Control (IFC).
2. Identify and define the Types of Engagements.
3. Define Weapons Quality Track (WQT).
4. Define Fire Control Quality Track (FCQT).
5. Define Cooperative Tracker (CT).
6. Define Cooperative Shooter (CS).
7. Define Weapons Controller (WC).
8. State the track requirements to conduct IFC using AC2S.
9. State Link 16 network requirements to conduct IFC.
10. Identify the types of engagements USMC platforms can currently execute.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. NAWDC – CAEWWS Manual - Tactical Networks, Aug 2020. (SECRET)
Web: intelshare.intelink.sgov.gov/sites/NAWDC/weapons-schools/sitepages/CAEWWS/CAEWWS.aspx
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. Marine Corps Primer on Expeditionary Integrated Fire Control.
4. MAWTS-1 – C3/Air Defense - IFC Quicklook – Oct 2020 (SECRET)
Web: intelshare.intelink.sgov.gov/sites/mawts1
5. AC2S Help Menu (TDF)

ACAD-4070 2.0 * B (N) G

Goal. Describe the technical and tactical considerations involved in tanker management.

Requirement. Given the reference:

1. Identify the different types of U.S. tanker aircraft and their capabilities.
2. Understand the following planning considerations for AAR operations.
 - a. Configuration
 - b. Max Offload
 - c. Burn Rate
 - d. Slide/Scram
3. Understand the following terms:
 - e. AAR Control Time (ARCT)
 - f. AAR initial Point (ARIP)
 - g. AAR Control Point (ARCP)
 - h. AAR Entry Point (AREP)
 - i. AAR Track
 - j. Boom
 - k. Boom Drogue Adapter (BDA)
 - l. Multi-Point Refueling System (MPRS)
 - m. Probe and Drogue

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. JP 3-17, Air Mobility Operations
2. NATO Standard ATP 3.3.4.2 Air-to-Air Refueling ATP-56
3. United States ATP 3.3.4.2

ACAD-4072 2.0 * B (N) G

Goal. Describe Airspace Coordinating Measures, Fire Support Coordination, Air Reference Measures, and Air Defense Measures.

Requirement. Given the references: Define the following measures and identify the overlay shape associated with TDF:

1. Airspace Coordinating Measures (ACMs).
 - a. Air Corridor (AIRCOR)
 - b. Minimum-Risk Route (MRR)
 - c. Restricted Operations Zone (ROZ)
 - d. Air-to-Air Refueling Area (AAR)
 - e. Close Air Support Area (CAS Stack)
 - f. Combat Air Patrol (CAP)
 - g. Coordinating Altitude (CA)
 - h. Coordination Level (CL)
 - i. High Density Airspace Control Zone (HIDACZ)
 - j. No Fly Area (NOFLY)
 - k. Surface-to-Surface Munitions (SSM)
2. Fire Support Coordination Measures (FSCMs).
 - a. Airspace Coordination Area (ACA)
 - b. Coordinated Fire Line (CFL)
 - c. Fire Support Coordination Line (FSCL)
 - d. Free Fire Area (FFA)
 - e. Kill Box (KILLBX)
 - f. No Fire Area (NFA)
 - g. Restrictive Fire Line (RFL)
 - h. Restrictive Fire Area (RFA)
3. Air Reference Measures.
 - a. Air Control Point (ACP)
 - b. Bullseye (BULL)
 - c. Contact Point (CP)
 - d. Identification, Friend or Foe Switch Off/On line (IFF OFF/ON)
 - e. Search and Rescue Point (SARDOT)
4. Air Defense Measures.
 - a. Air Defense Area
 - b. Air Defense Identification Zone (ADIZ)
 - c. Base Defense Zone (BDZ)
 - d. Fighter Engagement Zone (FEZ)
 - e. High-Altitude Missile Engagement Zone (HIMEZ)
 - f. Joint Engagement Zone (JEZ)
 - g. Low-Altitude Missile Engagement Zone (LOMEZ)
 - h. Missile Engagement Zone (MEZ)
 - i. Short-Range Air Defense Zone (SHORADEZ)

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. JP 3-52, Joint Airspace Control
2. MCTP 3-20C, Antiair Warfare

ACAD-4102 1.5 * B _____ (N) G

Goal. State the capabilities, limitations and employment considerations for U.S. Air Force aircraft.

Requirement. Given the references, provide the mission, weapons, ID capabilities, and general employment considerations of the following aircraft regarding AAW and tanking: (Classified when filled in)

1. F-15 A-D Eagle.
2. F-15 E Strike Eagle.
3. F-16A-CJ Fighting Falcon.
4. F-22 Raptor.
5. E-3 Sentry.
6. F-35A (Fuel and Weapons Deviations Only)
7. MQ-1 Predator
8. MQ-9 Reaper
9. A-10 Thunderbolt
10. B-1 Lancer
11. B-2
12. B-2 Spirit
13. B-52 Stratofortress
14. JSTARS
15. RC-135

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. AFTTP 3-1, vol. 1, Attachment 3.
2. MAWTS-1 Sharepoint (SIPR), F-35 powerpoint

ACAD-4226 1.0 * B _____ (N) G

Goal. Define the characteristics of Cooperative Engagement Capability (CEC). (Classified)

Requirement. Perform the following:

1. State the purpose of CEC.
2. State the characteristics of the CEC network.
3. Identify the Navy platforms capable of participating in the CEC network.
4. State the Marine Corps equipment required to interface with CEC.
5. Identify and extract key operational information from the OPTASKCEC
6. Discuss basic connectivity considerations for CEC participants.

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

Instructor. BI

Prerequisite. None.

References.

1. NAWDC – CAEWWS Manual - Tactical Networks, Aug 2020. (SIPR)
Web: intelshare.intelink.sgov.gov/sites/NAWDC/weapons-schools/sitepages/CAEWWS/CAEWWS.aspx
2. TACMEMO 3-01.3-12 CEC Tactical Employment Guide, Feb 2012
3. USN Capabilities and Limitations website <http://cnl.phdnswc.navy.smil.mil/>
4. Navy CEC Fact Sheet
5. MIL-STD-6016, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
6. Marine Corps Primer on Expeditionary Integrated Fire Control

2.9.2 AIR INTERCEPT FAMILIARIZATION (AFAM).

Purpose. To familiarize the 7202 in the understanding of air intercept control skills to include communication procedures, friendly tactics and threat capabilities. This stage supports 7202 training towards SADC Ops and/or SADC designation requirements.

General

Admin Notes.

1. A single mission will consist of a brief, execution and debrief.
2. A 7202 will be part of the control team with the 7236 AIC, but will only observe while the 7236 AIC conducts the mission.

Prerequisites. 4026, 4028, 4034, 4038, 4050, 4054, 4056, 4102

Crew Requirements. None.

AFAM-4265 8.0 * B (N) L/S

Goal. Observe and discuss AIC functions for fighter aircraft performing DCA/FI.

Requirement. Given a C2 system or simulation, attend a brief, debrief, and observe the control of fighter aircraft conducting DCA/FI .

Performance Standard. Perform the requirement.

Instructor. AICS.

Prerequisite. None.

References.

1. MCRP 3-20.7, MTTP Fighter Integration (SIPR)
2. MCRP 3-20F.10, MTTP Air Control Communications

2.10 MISSION PLUS TRAINING (4500)

Purpose. Mission Plus Skills are intended to train crews to utilize the tools, systems and/or procedures which have a reduced probability of execution or are theater specific.

General

Admin Notes. Mission Plus skills in this chapter serve as a baseline knowledge for SADC Ops and SADC functions.

Prerequisite. None.

Stages.

PAR NO.	STAGE NAME	PAGE NUMBER
2.10.1	SECTOR AIR DEFENSE COMMANDER OPERATIONS OFFICER (SADCOPS)	2-18
2.10.2	SECTOR AIR DEFENSE COMMANDER (SADC)	2-20

2.10.1 Sector Air Defense Commander (SADC) Operations Officer

Purpose. To develop the AC2O's air and missile defense proficiency, exercise practical application of skill sets and increase the ability of the 7202 to plan / manage air and missile defense operational capabilities. Events listed are required for designation as a Sector Air Defense Commander (SADC) Operations Officer and provide a means for the designated SADC Ops to remain current. SADC Ops should generally be from the 7210 MOS pipeline, as much of the academic and tactical proficiency for AAW operations is developed by the 7210 through the rank of Captain.

General

Administrative Notes.

1. An AC2O will be considered for designation upon completion of all 4000 level academic and 4500 performance events
2. A review of the MPR will be conducted by the squadron's WTI, Operations Officer, and a recommendation will be made to the Commanding Officer.
3. The AC2O shall have a designation letter, with any waivers deferments or endorsements, that will be filed in their MACCS Performance Record.
4. For evaluation purposes, an event will consist of a brief, execution and debrief.

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Refresher Training. Refresher training is required once a designated SADC Operations Officer has been absent from an SADC Operations Officer billet for 24 months or longer. Upon return to an appropriate billet, the AC2O will complete the "R" coded events in the 4500 level syllabus.

Crew Requirements. Core competent TAOC and core plus SADC crew.

SADCOPS-4500 8.0 * B _____ (N) L/S

Goal. Conduct planning as a SADC Operations Officer.

Requirements. Given appropriate operational documentation, demonstrate the following:

Performance Standards. Complete the required items while working with an air defense agency during an exercise or operation.

1. Coordinate with the TAOC for crew brief development IAW information within the Operations Order, Area Air Defense Plan, ACP, ACO, SPINS, and other applicable directives to allow TAOC crews to brief and execute the plan.
2. Develop a task organized SADC crew (SADC Ops Chief, GBAD Rep, FW Rep, and Intel Rep) and delineate personnel coordination responsibilities.
3. Develop the SADF requirements / layout IAW SADC direction. Provide requirements / layout to maintenance personnel to coordinate/ deconflict equipment requirements with co-located air defense agencies (e.g TAOC). This should be completed with the SADC Operations Chief
4. Identify and plan the SADF communications requirements. This should be completed with the SADC Crew Chief
5. Conduct detailed threat analysis and planning for the integration of fighter aircraft and GBAD assets within designated Weapons Engagement Zones.
6. Conduct a detailed time-distance analysis to determine CAP manning/Strip Alert requirements for fighter aircraft allocated within designated Weapons Engagement Zones (e.g. JEZ or FEZ)
7. Conduct detailed tanker planning to correspond with the fighter plan.
8. Conduct coordination with subordinate, adjacent and higher units for digital connectivity / critical information flow requirements, tactical direction, and dissemination of individual unit/agency responsibility.
9. Conduct detailed planning for Joint IFC kill chains.
10. Conduct the detailed planning for the integration of MACCS AMD / C3 Agencies within the TAGS.

Instructor. WTI

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

External Syllabus Support. C3 Agencies / AMD Resources.

References.

1. JP 3-30, Joint Air Operations.
2. JP 3-01, Countering Air and Missile Threats
3. MCTP 3-20C, Antiair Warfare.
4. MCTP 10-10B, MTTP Air and Missile Defense
5. MCTP 3-XXX, SADC Handbook

SADCOPS-4504 16.0 1095 B, R (N) L/S

Goal. Perform as SADC Operations Officer.

Requirement. During an integrated MACCS exercise or joint exercise in a garrison or field environment.

Performance Standard. Demonstrate proficiency in the following areas:

1. Conduct a SADC brief developed IAW the pertinent air operations information received via Operations Orders, Air Defense Plans, ACP's, ACO's and other applicable directives.
2. Conduct interface between the TAOC crew and required external agencies to ensure effective/timely flow of critical air and missile defense / airspace management information.
3. Effectively manage the SADC Crew IAW the SADC's direction.
4. Enable Joint IFC kill chain execution across various classification levels, to include those that may require special access.

Instructor. WTI

Prerequisite. 4000, 4026, 4028, 4030, 4034, 4038, 4050, 4054, 4056, 4068, 4070, 4072, 4102, 4226, 4265, 4500, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

External Syllabus Support. C3 Agencies.

References.

1. JP 3-30, Joint Air Operations.
2. JP 3-01, Countering Air and Missile Threats
3. MCTP 3-20C, Anti-air Warfare.
4. MCTP 10-10B, MTTP Air and Missile Defense
5. MCTP 3-XXX, SADC Handbook

2.10.2 SECTOR AIR DEFENSE COMMANDER (SADC)

Purpose. To develop AC2O skills required for designation as a Sector Air Defense Commander (SADC) and to provide a means for the designated SADC to remain current. The SADC should have a background in AAW, as authorities delegated from the AADC or appropriate commander should be employed considering the threat, ROE, and AMD resources resident within the SADC's area of responsibility. The SADC may be from an MOS other than 7202 (e.g. 75XX).

General

Admin Notes.

1. An AC2O will be considered for designation upon completion of all 4500 mission plus events.
2. A review of the MPR will be conducted by the Squadron WTI, MACG Operations Officer, and a recommendation will be made to the MACG Commanding Officer.
3. The AC2O shall have a designation letter, with any waivers, deferments or endorsements, that will be filed in their MACCS Performance Record.

Prerequisite. None.

Refresher Training. Refresher training is required once a designated SADC has been absent from an SADC billet for 24 months or longer. Upon return to an appropriate billet, the AC2O will complete the "R" coded events in the 4500 level syllabus.

Crew Requirements. Core competent TAOC and SADC crew.

SADC-4501 8.0 * B _____ (N) _____ L/S

Goal. Conduct tactical planning as a SADC.

Requirements. Given appropriate operational documentation, demonstrate the following:

Performance Standards. Complete the required items while working with an air defense agency during an exercise or operation.

1. Provide guidance and direction for sector air defense planning IAW the pertinent air operations information received via Operations Orders, Area Air Defense Plan, ACP's, ACO's, SPINS, and other applicable directives.
2. Provide guidance and approve the SADF requirements / layout as developed by the SADC Operations Officer.
3. Approve SADF communications plan.
4. Provide planning guidance for the integration of fighter aircraft and GBAD assets in designated Weapons Engagement Zones
5. Provide planning guidance for determination of CAP manning/Strip Alert requirements for Fighter aircraft allocated to the Destruction Area.
6. Provide tanker planning guidance.
7. Conduct coordination with subordinate, adjacent and higher units for digital connectivity / critical information flow requirements, tactical direction, and dissemination of individual unit/agency responsibility.
8. Validate integration of AMD assets (Aviation, C3, GBAD, Other) within the TAGS.
9. Conduct final review of applicable ROE, understand delegated authorities, and identify authorities retained by higher air defense commanders. Validate crew understanding of ROE and authorities.

References.

1. JP 3-30, Joint Air Operations.
2. JP 3-01, Countering Air and Missile Threats
3. MCTP 3-20C, Antiair Warfare.
4. MCTP 10-10B, MTTP Air and Missile Defense
5. MCTP 3-XXX, SADC Handbook

Prerequisite. None.

External Syllabus Support. None.

SADC-4505 16.0 1095 B/R _____ (N) _____ L/S

Goal. Perform as SADC.

Requirement. During an integrated MACCS exercise or joint exercise in a garrison or field environment.

Performance Standard. Demonstrate proficiency in the following areas:

1. Provide guidance and direction for sector air defense operations IAW the pertinent air operations information received via Operations Orders, Area Air Defense Plan, ACP's, ACO's, SPINS, and other applicable directives.

2. Interface with the TACC SWO and/or RADC and other external agencies to ensure effective / timely flow of critical AMD / airspace management information.
3. Ensure timely execution of delegated authorities IAW operational documents
4. Provide guidance to SADC Ops IRT crew management expectations.
5. Implement dynamic crew modifications, as required
6. Supervise Joint IFC kill chain execution across various classification levels, to include those that may require special access.

References.

1. JP 3-30, Joint Air Operations.
2. JP 3-01, Countering Air and Missile Threats
3. MCTP 3-20C, Antiair Warfare.
4. MCTP 10-10B, MTTP Air and Missile Defense
5. MCTP 3-XXX, SADC Handbook

Prerequisite. 4501, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

External Syllabus Support. C3 Agencies.

2.11 INSTRUCTOR UNDER TRAINING (IUT) (5000)

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, WTTP Officer, or direct representative as delineated.

General.

PAR NO.	STAGE NAME	PAGE NUMBER
2.11	INSTRUCTOR UNDER TRAINING (IUT)	2-22

Admin Notes.

The MACCS instructor concept is a means to standardize all instructors across the MACCS in regards to concepts of managing a WTTP, properly conducting training, performing evaluations, and recommending training plans.

There are three 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.

- a. Basic Instructor (BI).
- b. Senior Instructor (SI).
- c. Weapons and Tactics Instructor (WTI).

The MAWTS-1 C3 Course catalog contains the training requirements for each of the three instructors. The catalog is located at the MAWTS-1 website, <https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/newc3/default.asp>.

IUT-5010 2.0 B (N) L

Goal. Describe individual T&R requirements.

Requirement. Using the Aviation T&R Program Manual, discuss the purpose of each of the following items with an instructor:

1. Training progression model
2. Programs of Instruction
 - a. Basic
 - b. Refresher
 - c. Conversion
 - d. Series Conversion
 - e. Transition
 - f. Maintain
3. T&R attain and maintain tables
4. Syllabus notes.
5. T&R syllabus structure
 - a. Phase
 - b. Stage
 - c. Event
 - d. Skill
 - e. Syllabus
6. Event format
 - a. Header
 - (1) Event prefix - event code
 - (2) Projected event duration
 - (3) Proficiency period
 - (4) Programs of instruction (POI)
 - (5) Event conditions
 - (6) Device options
 - (7) Device number
 - (8) Device type
 - b. Body
 - (1) Goal
 - (2) Requirement
 - (3) Performance standard
 - (4) Equipment
 - (5) Crew requirement
 - (6) Instructor
 - (7) Prerequisite
 - (8) External resource requirements
 - (9) Reference
- (7) Aviation Career Progression Model (ACPM)
- (8) T&R syllabus matrices
- (9) T&R syllabus evaluation forms

Performance Standard. Without the aid of references and during a discussion session, the BIUT shall describe Individual T&R requirements. During this session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. SI

References.

1. NAVMC 3500.14, Ch. 6
2. NAVMC 1553.1

IUT-5020 12.0 90 B, R, M (N) L

Goal. Conduct T&R instruction.

Requirement. The BIUT, under the supervision of an instructor, will conduct three periods of instruction on three different T&R events selected by the instructor and should include as many different methods of instruction as possible (lecture or academic, demonstration, and practical application). The event must be one the BIUT is current and proficient in. The BIUT will complete the following for each of the three events instructed:

1. Prepare to train the event.
 - a. Review a trainee's performance record to identify required training for the event selected.
 - b. Ensure the student has met prerequisites for the event to be trained.
 - c. Gather the resources necessary to conduct the training (i.e., instructional materials, references, and equipment).
 - d. Conduct task analysis on each event to ensure all intended requirements and prerequisite skills, specified or implied, are trained IAW applicable references.
 - e. Schedule the training event (facilities and students).
 - f. Prepare an evaluation form for each student to be evaluated.
2. Conduct training on the event selected:
 - a. Ensure all training resources are properly staged/equipment if set up properly for training.
 - b. Instruct the student in a thorough manner so as to cover all requirements for the event.
 - c. Ensure continuous, objective assessment of the student's progress during training.
3. Assess student performance:
 - a. Assess the student's performance to the performance standard.
 - b. Correct student deficiencies in a timely manner and provide the student feedback.
 - c. Complete the evaluation form on for each student trained.
 - d. Debrief student on the performance and provide corrective action.
4. Route evaluation form as required.

Performance Standard. Complete the requirement items IAW the reference and ensure training is doctrinally and technically current. Instructor shall use the instructor evaluation form from the SAT user's guide for each class and a mark of satisfactory must be achieved for each of the three classes.

Instructor. SI

Prerequisite. 5000, 5010

References.

1. NAVMC 3500.14, Ch 6
2. NAVMC 1553.1
3. MCO 1553.2B, Appendix O

2.10.2. Senior Instructor (SI)

Purpose. To provide the individual with the skills necessary to understand the Aviation T&R Program structure and content, explain in detail the T&R progression model from event training to qualification and

IUT-5110 4.0 365 B, R, M (N) L

Goal. Conduct instructor evaluations.

Requirement. Using the instructor evaluation checklist from the SAT manual, conduct two evaluations on instructors of equal or lower designation.

1. Provide notification of evaluation to the instructor being evaluated.
2. Do not interfere with or disrupt the instruction while taking place.
3. Thoroughly document observed items on the checklist.
4. Ensure student evaluation form is filled out correctly and the appropriate debrief took place.
5. Debrief the instructor being evaluated on their preparation, instruction, evaluation, and documentation.
6. Have the evaluated instructor complete the instructor improvement plan section and sign.
7. File a copy of the completed evaluation form in both the evaluator's and evaluated instructor's performance record.

Performance Standard. Complete the requirements IAW the reference.

Prerequisite. 5100

Instructor. SI, WTI

References.

1. NAVMC 3500.14
2. Applicable community T&R manual
3. MCO 1553.2B, Appendix O

IUT-5120 2.0 B (N) L

Goal. Perform T&R administration.

Requirement. Document training to include:

1. Performance records.
2. Ensure MSHARP is updated appropriately.
3. Assemble recommendation package for certifications, qualifications, and designations IAW T&R manual.

Performance Standard. Complete the requirement items IAW the references. Instructor will question the trainee to check for understanding of the administration process.

Prerequisite. 5100, 5110

Instructor. SI, WTI

References.

1. NAVMC 3500.14
2. Local WTTP SOP
3. <http://msharpsupport.com>

IUT-5130 2.0 B (N) L

Goal. Develop a training plan.

Requirement. Given a deployment scenario develop a training plan to determine individual, and crew training needed to meet CMMR by completing the following:

1. Review Commander's training guidance.
2. Analyze the CMTR to determine training deficiencies and how to achieve CMMR.
3. Identify and schedule T&R training opportunities IAW the TEEP to achieve requirements.
4. Determine instructors required.
5. Determine equipment required.
6. Determine external support required.
7. Deliver a brief to the instructor that shows:
 - a. Crew manning and training requirements.
 - b. Current training status.
 - c. Identify the training deficiencies and resource shortfalls.
 - d. Explain the training plan to correct the training deficiencies.
 - e. Training plan meets commander's guidance.

Performance Standard. Complete the requirement items IAW the references and commander's training guidance. Training plan will ensure adequate time is allocated to include preparation, instruction, assessment, documentation, and remediation.

Prerequisite. 5100, 5110, 5120

Instructor. SI

References.

1. NAVMC 3500.14
2. Applicable community T&R manual

2.12 CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (6000)

Purpose. This phase provides for community standardization of SADC, SADC Ops, and instructor designations. This syllabus does not include "one time" certification training.

General.

Admin Notes.

1. The squadron WTI shall review the MPR to ensure all required training, documentation and administrative actions have been completed prior to staffing designation recommendations for approval.
2. Only once an individual is designated in writing, the signed letter filed in the Marines MPR, and all administrative actions are completed will the designation be effective.

Prerequisite. None.

Stages. The following stages are included in this Phase of training.

PAR NO.	STAGE NAME	PAGE NUMBER
2.12.1	SCHOOL CODES (SCHL)	2-28
2.12.2	DESIGNATIONS (DESG)	2-36

2.12.1 SCHOOL CODES (SCHL)

Purpose. To provide tracking codes for required schools and training.

General.

Admin Notes. The following table reflects skill enhancement training available to 7202s:

SCHL CODE	NAME OF COURSE	LOCATION	CID
SCHL-6000	Weapons and Tactics Instructor (WTI)	MCAS Yuma, AZ	M149731
SCHL-6001	Senior Watch Officer's Course	MCAS Yuma, AZ	N/A
SCHL-6002	Air Command and Control Officer's Course	MCAS Yuma, AZ	N/A
SCHL-6003	ACE Battlestaff Officer Course (ABOC)	MCAS Yuma, AZ	N/A
SCHL-6006	Air Intercept Controller Instructor Course (AICIC)	MCAS Yuma, AZ	N/A
SCHL-6010	Airspace Course	Hulbert Field, FL	F19KXD2
SCHL-6015	Joint Air Operation Center Command and Control Course (JAOC2C)	Hulbert Field, FL	F19L2W2
SCHL-6016	Joint Air Operations Senior Staff Course	Hulbert Field, FL	N/A
SCHL-6020	Link 16 Basics Course (JT-100)	Joint Knowledge Online (JKO)	N/A
SCHL-6021	Intro to Multi TDL Network (JT-101)	Fort Bragg, NC	N/A
SCHL-6022	Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102)	Fort Bragg, NC	A05L6Z1
SCHL-6023	Link 16 Joint Interoperability Course (US-109)	Joint Knowledge Online (JKO)	N/A
SCHL-6024	Multi TDL Planner Course (JT-201)	Fort Bragg, NC	A05KHY1
SCHL-6025	Link 16 Unit Manager (LUM) Course (JT-220)	Fort Bragg, NC	A05A111
SCHL-6026	Joint Interface Control Officer (JICO) (JT-301)	Fort Bragg, NC	A05FH21
SCHL-6027	Advanced JICC Operators Course (AJOC) (JT-310)	Fort Bragg, NC	A05FH11
SCHL-6067	Military Airspace Management Course	NAS Biloxi, MS	F0273D1
SCHL-6069	USMC AIC TOPGUN Ground School	Naval Strike and Air Warfare Center (NSAWC)	F0273D1
SCHL-6072	Advanced Field Artillery Tactical Data System (AFATDS)	RGtSchls / Ft Sill, OK	N/A
SCHL-6078	TOPGUN AIC Course	Naval Strike and Air Warfare Center (NSAWC)	F0273D1
SCHL-6079	JRE-GW Operators Course	Engility Corporation	N/A
SCHL-6082	Joint Firepower Course	USAF 6 th Combat Training Squadron	N/A
SCHL-6083	IAMD WTI	SMWDC Dahlgren, VA	N/A
SCHL-6084	Weapons Director Ground Based Training	Luke AFB, AZ	N/A
SCHL-6085	CRC IQT – Weapons Director	Luke AFB, AZ	N/A
SCHL-6086	CRC IQT – Air Battle Manager	Luke AFB, AZ	N/A

Prerequisite. The individual school houses will maintain the prerequisites for each course that they offer. Refer to Aviation Skills Enhancement message and the school house for up to date prerequisites.

SCHL-6000 1.0 * B (N) G

Goal. Weapons and Tactics Instructors (WTI) Course.

Requirement. Graduate from WTI Course at MAWTS-1, Yuma, AZ.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. 6320, 6321.

Reference. None.

SCHL-6001 1.0 * B (N) G

Goal. Senior Watch Officer's Course.

Requirement. Graduate from course at MAWTS-1, Yuma, AZ.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6002 1.0 * B (N) G

Goal. Air Command and Control Officer's Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6003 1.0 * B (N) G

Goal. ACE Battlestaff Officer Course (ABOC).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6006 1.0 * B (N) G

Goal. Air Intercept Controller Instructor Course (AICIC).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6010 1.0 * B (N) G

Goal. Airspace Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6015 1.0 * B (N) G

Goal. Joint Air Operation Center Command and Control Course (JAOC2C).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6016 1.0 * B (N) G

Goal. Joint Air Operations Senior Staff Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6020 1.0 * B (N) G

Goal. Link 16 Basics Course (JT-100).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6021 1.0 * B (N) G

Goal. Intro to Multi TDL Network (JT-101).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6022 1.0 * B (N) G

Goal. Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6023 1.0 * B (N) G

Goal. Link 16 Joint Interoperability Course (US-109).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6024 1.0 * B (N) G

Goal. Multi TDL Planner Course (JT-201).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6025 1.0 * B (N) G

Goal. Link 16 Unit Manager (LUM) Course (JT-220).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6026 1.0 * B (N) G

Goal. Joint Interface Control Officer (JICO) (JT-301).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6027 1.0 * B (N) G

Goal. Advanced JICC Operators Course (AJOC) (JT-310).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6067 1.0 * B (N) G

Goal. Military Airspace Management Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6069 1.0 * B (N) G

Goal. USMC AIC TOPGUN Ground School.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6072 1.0 * B (N) G

Goal. Advanced Field Artillery Tactical Data System (AFATDS).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6078 1.0 * B (N) G

Goal. TOPGUN AIC Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6079 1.0 * B (N) G

Goal. JRE-GW Operators Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6082 1.0 * B (N) G

Goal. Joint Firepower Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6083 1.0 * B (N) G

Goal. IAMD WTI.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6084 1.0 * B (N) G

Goal. Weapons Director Ground Based Training.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6085 1.0 * B (N) G

Goal. CRC IQT – Weapons Director.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6086 1.0 * B (N) G

Goal. CRC IQT – Air Battle Manager.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

2.12.2 DESIGNATIONS (DESG).

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

General. Captured in this stage are SADC, SADCOPS, and Instructor Designations (e.g. BI, SI, WTI).

Admin Notes. Complete all designation requirements and be recommended for that designation. However, in the event that a commander deems it necessary to designate someone who has not completed the prerequisite, that person must complete the prerequisite within 6 months from the effective date of designation.

Prerequisite. None.

Crew Requirements. None.

DESG-6290 0.5 * B (N) G

Goal. Sector Air Defense Commander Operations Officer (SADC OPS).

Requirement. Recommended for SADC OPS designation by a WTI and designated in writing by the commanding officer.

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

Instructor. WTI.

Prerequisites. 4000, 4026, 4028, 4030, 4034, 4038, 4050, 4054, 4056, 4068, 4070, 4072, 4102, 4226, 4265, 4500, 4504, 6290, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

Reference. None.

DESG-6292 0.5 * B (N) G

Goal. Marine Sector Air Defense Commander (SADC).

Requirement. Recommended for designation to the MACG CO. During Operations, designated by the appropriate MAGTF or Joint authority (e.g. ACE Commander with MAGTF Commander approval OR Area Air Defense Commander with JFC approval via recommendation from the MAGTF Commander)

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

Instructor. WTI

Prerequisites. 4501, 4505, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

DESG-6294 0.5 * B (N) G

Goal. Air and Missile Defense Officer.

Requirement. Recommended for designation to the Squadron CO to serve as a Combat Leader.

Performance Standard. Be recommended by a Squadron WTI.

Instructor. WTI

Prerequisites. None.

DESG-6320 0.5 * B G

Goal. Basic Instructor (BI).

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

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

Prerequisites. 5000, 5010, 5020.

Reference. MAWTS-1 C3 Course Catalog

DESG-6321 0.5 * B G

Goal. Senior Instructor (SI).

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

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

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

Reference. MAWTS-1 C3 Course Catalog

DESG-6322 0.5 * B _____ G

Goal. Weapons and Tactics Instructor (WTI).

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

Performance Standard. Graduate WTI under the supervision of a MAWTS-1 IP.

Prerequisites. 6000, 6320, 6321.

Reference. MAWTS-1 C3 Course Catalog

2.13 MISSION ESSENTIAL TASK (MET) PHASE (7000).

Purpose. This phase takes CMMR proficient Marines from multiple PMOS, puts them in CMMR representative crews, and trains them as combat effective teams in combined events.

General.

Admin Notes. Prerequisites for this phase of training cannot be waived. Multiple events can be trained at the same time as long as separate evaluations are being conducted.

Prerequisites. Marines must either be CMMR crew position or non-aviation PMOS proficient to train in this phase. For those events requiring combat leaders, only Marines currently designated as such can train in this phase.

Stages. The following stages are included in the Mission Essential Task (MET) Phase of training.

PAR NO.	STAGE NAME	PAGE NUMBER
2.13.1	CONDITION (COND)	2-38

2.13.1 CONDITION (COND).

Purpose. To train unit level teams in executing community specific MET(s) or MET preparatory events.

General.

Admin Notes. All events in this stage will require the following administrative/operational documents to be identified or created:

1. Letter Of Instruction (LOI).
2. Personnel Roster.
3. Bill Of Material (BOM).
4. Equipment Density List (EDL).

Prerequisites. If an event requires prerequisites in addition to those listed for the MET Phase, they will be covered in the individual event.

Crew Requirements. This stage requires that all crew members and combat leaders be qualified/designated and proficient (current) in the position they are assigned for the following events. Crews shall be task organized to meet the mission.

COND-7004 16.0 730 B, R, M E (N) L

Goal. Integrate Operational Air Defense Capabilities.

Requirement. Given organic C2 systems, sensors, and a minimum of two core plus proficient SADC crews, perform the following:

1. Plan for the emplacement, setup, operation, and maintenance of TAOC sensor(s) and C2 equipment within the MAGTF and/or joint assigned airspace.
2. Conduct the emplacement, setup, operation, and maintenance of TAOC sensors(s) and C2 equipment.
3. Extract air and missile defense requirements from MAGTF and joint documents.
4. Create a plan for the TAOC to manage air and missile defense operations within MAGTF and/or joint assigned region/sector.
5. Manage air and missile defense operations within the MAGTF and/or joint assigned region/sector.
6. Extract tactical data link (TDL) architecture information from MAGTF and joint documents.
7. Create a plan for TAOC to assist the TACC Interface Control Officer (ICO) and/or Joint Interface Control Officer (JICO) with the management of TDLs.
8. Manage TDLs for the TAOC in support of MAGTF and joint operations.
9. Demonstrate proficiency during crew changeover.

Performance Standard. Complete the requirements conducting TAOC operations in support of MAGTF AAW and/or joint DCA exercises or operations.

Instructor. WTI.

Prerequisite. None.

External Resource Support. Live execution will require specific T/M/S aviation assets.

Reference. MCO 3501.1_

2.14 AVIATION CAREER PROGRESSION MODEL (8000).

Purpose. To enhance 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 of training in the Aviation Career Progression Model (ACPM) is on academic events in the following areas:

Marine Air Command and Control System (MACCS)

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference.

1. MCRP 3-25 Control of Aircraft and Missiles

ACPM-8002 4.0 * B (N) G

Goal. Demonstrate an understanding of the Tactical Air Command Center (TACC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. State the mission of the TACC.
2. Identify the four organizations of the TACC.
3. List the primary responsibilities of Air Combat Intelligence (ACI).
4. List the primary responsibilities of Future Operations (FOPS).
5. List the primary responsibilities of Future Plans (FPLANS).
6. List the primary responsibilities of Current Operations (COPS).
7. List the major end items used by the TACC.
8. List the system limitations of the TACC.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 TACC Class
2. MCRP 3-25.4 TACC Handbook

ACPM-8003 4.0 * B (N) G

Goal. Demonstrate an understanding of the Direct Air Support Center (DASC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the DASC.
2. List the structure and task organization of the DASC.
3. Identify the major end items and their characteristics used by the DASC.
4. List the capabilities and limitations of the DASC.
5. Identify how the DASC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 DASC Class
2. MCRP 3-25.5 DASC Handbook

ACPM-8004 4.0 * B (N) G

Goal. Demonstrate an understanding of the Tactical Air Operations Center (TAOC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the mission of the TAOC.
2. Identify the Mission Essential Tasks (METs) for the TAOC.
3. Identify the structure and task organization of the TAOC.
4. Identify the major end items and their characteristics used by the TAOC.
5. Identify the capabilities and limitations of the TAOC.
6. Identify how the TAOC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 TAOC Class
2. MCRP 3-25.6 TAOC Handbook

ACPM-8005 4.0 * B (N) G

Goal. Demonstrate an understanding of Marine Air Traffic Control (MATC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of MATC.
2. Identify the Mission Essential Tasks (METs) for MATC.
3. List the structure and task organization of MATC.
4. Identify the major end items and their characteristics used by MATC.
5. Identify the capabilities and limitations of MATC.
6. Identify how MATC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 MATC Class
2. MAWTS-1 MMT Class
3. MCRP 3-25.8 MATC Handbook

ACPM-8006 4.0 * B (N) G

Goal. Demonstrate an understanding of Low Altitude Air Defense (LAAD).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the LAAD battalion.
2. Identify the structure and task organization of the LAAD battalion.
3. Identify the primary vehicle and surface-to-air weapon used by the LAAD Battalion.
4. Define the LAAD employed guidelines.
5. List the LAAD weapon applications.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 LAAD Class
2. MCRP 3-25.10 LAAD BN Handbook

ACPM-8008 4.0 * B (N) G

Goal. Demonstrate an understanding of the Marine Wing Communications Squadron (MWCS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the MWCS.
2. Identify the structure and task organization of the MWCS.
3. Identify the Mission Essential Tasks (METs) for the MWCS.
4. Identify the major end items and their characteristics used by MWCS.
5. Identify the capabilities and limitations of the MWCS.
6. Identify how the MWCS is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MAWTS-1 MWCS Employment Class
2. MCRP 3-30B.2 MAGTF Communications Systems
3. NAVMC 3500.56 Communications Training and Readiness Manual

ACPM-8020 1.0 * B (N) G

Goal. Demonstrate an understanding of the ACE stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Reference. C3 Course Catalog.

ACPM-8021 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC aviation operations doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the six functions of Marine aviation to include all their subsets.
2. Identify the organization and mission of the Marine Aircraft Wing (MAW), to include each type of group and squadron.
3. Define who has operational control of organic MAGTF aviation assets during Joint operations.
4. List the four types of sorties the MAGTF Commander makes available to the Joint Force.
5. Identify the purpose of the Air Tasking Order (ATO).
6. Identify the six phases of the air tasking cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCWP 3-20 Aviation Operations

ACPM-8022 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC doctrine for the control of aircraft and missiles.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify how the control of aircraft and missiles relates to the other five functions of USMC aviation.
2. Identify distinctions between Marine aviation philosophy and that of the other services.
3. Identify the principle objectives of the Marine Air Command and Control System (MACCS).
4. Describe how the COMMARFOR may serve as the Joint Force Air
5. Component Commander (JFACC), Airspace Control Authority (ACA), and Area Air Defense Commander (AADC).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-25 Control of Aircraft and Missiles

ACPM-8023 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC Offensive Air Support (OAS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the purpose of the MAGTF Commanders Single Battle Concept.
2. Define the subcategories of OAS.
3. Define the requirements for effective OAS.
4. Define the three types of Deep Air Support (DAS).
5. Define the capabilities and limitations of the OAS function.
6. Identify the elements of a Joint Tactical Air Strike Request (JTAR).
7. Identify the three types of control of Close Air Support (CAS).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCRP 3-23 Offensive Air Support

ACPM-8024 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the USMC Assault Support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the types of assault support operations.
2. Identify which aircraft conduct each of the types of assault support operations.
3. Identify the elements of an Assault Support Request (ASR).
4. List assault support capabilities and limitations.
5. Define the role of the air mission commander and the assault force commander during air assault operations.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 Assault Support Class
2. MAWTS-1 Direct Air Support Requests Class

ACPM-8025 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the USMC Air Reconnaissance doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the three categories of air reconnaissance.
2. Identify the four principals of air reconnaissance.
3. Identify the five prerequisites for effective air reconnaissance.
4. Identify the current USMC aircraft that have the mission of air reconnaissance.
5. Identify the form used to request air reconnaissance.
6. Identify the five supporting operations for effective air reconnaissance.

Prerequisite. None.

References.

1. MCTP 3-20C, Antiair Warfare

ACPM-8028 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the USMC Ground Support (AGS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the organization responsible for providing AGS to the Marine Aircraft Wing (MAW).
2. Identify the 13 functions of AGS.
3. Identify the five activities that the Marine Wing Support Squadron (MWSS) performs for the ACE when deployed.
4. Identify the four basing concepts for MAGTF Forward Operating Bases (FOBs).
5. List the four classifications of FOBs.
6. Differentiate the distinguishing characteristics of FOBs.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 AGS Class
2. MCTP 3-21.1 Aviation Ground Support

ACPM-8040 1.0 * B _____ (N) G

Goal. Demonstrate an understanding of the Threat stage of the MACCS ACPM

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8041, 8042, 8043, 8044.

Reference. C3 Course Catalog.

ACPM-8041 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the surface-to-antiair threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the system name with the guidance and target aspect for the following Man Portable Air Defense Systems (MANPADS):
 - a. SA-7
 - b. SA-14

- c. SA-16
 - d. SA-18
2. Match the system name with the guidance and associated radars for the following Radio Frequency Surface-to-Air Missile Systems (RF SAMS):
- a. SA-2
 - b. SA-6
 - c. SA-8
 - d. SA-10
 - e. SA-11
 - f. SA-15
 - g. SA-20
 - h. Roland-III
3. Match the system name with the type and associated radar for the following Air Defense Artillery (AAA):
- a. ZPU 1, 2, 4
 - b. ZSU-23-4
 - c. 2S6
 - d. S-60

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8042 4.0 * B (N) G

Goal. Demonstrate an understanding of the fixed wing threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the AN-2 Colt.
2. Identify the role of the MIG-23 Flogger.
3. Identify the role of the MIG-29 Fulcrum.
4. Identify the role of the MIG-31 Foxhound.
5. Identify the role of the Su-24 Fencer.
6. Identify the role of the Su-25 Frogfoot.
7. Identify the role of the Su-27 Flanker.
8. Identify the role of the Su-30 Flanker.
9. Identify the role of the Tu-22M Backfire.
10. Identify the role of the Tu-95 Bear.
11. Identify the role of the Tu-160 Blackjack.
12. Identify the role of the J-7 Fishbed.
13. Identify the role of the JH-7 Flounder.
14. Identify the role of the J-8 Finback.
15. Identify the role of the J-10 Firebird.
16. Identify the role of the H-6 Badger.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8043 4.0 * B (N) G

Goal. Demonstrate an understanding of the rotary wing threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the Mi-24 Hind.
2. Identify the role of the SA 342 Gazelle.
3. Identify the role of the Ka-25 Hormone.
4. Identify the role of the Mi-6 Hook.
5. Identify the role of the Mi-28 Havoc.
6. Identify the role of the Mi-8 Hip.
7. Identify the role of the Ka-50 Kokum.
8. Identify the role of the Ka-29 Helix B.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8044 4.0 * B (N) G

Goal. Demonstrate an understanding of the missile and Unmanned Aircraft System (UAS) threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the system name with the terminal guidance for the following Air-to-Surface Missiles:
 - a. AS-10 Karen
 - b. AS-11 Kilter
 - c. AS-12 Kegler
 - d. AS-14 Kedge
 - e. AS-17 Krypton
2. Match the system name with the warhead and guidance for the following Surface-to-Surface Missiles:
 - a. FROG-7
 - b. SCUD-B
 - c. SCUD-C
 - d. Nodong 1
 - e. C 801
 - f. C 802
3. Identify the mission of the following threat UAS:
 - a. Ababil
 - b. Mohajer
 - c. Harpy
 - d. Heron
 - e. ASN-206
 - f. Pchela-1T

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 Marine Aviation Intelligence Reference
<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/newc3/default.aspx>
2. Marine Corps Intelligence Activity Iran Country Handbook (appendix A)
3. Marine Corps Intelligence Activity North Korea Country Handbook (page 86)
4. Marine Corps Intelligence Activity China Country Handbook (appendix A)
5. <https://www.intelink.gov/mcia/handbook.htm>
6. MCIA UAV Recognition Guide <https://www.intelink.gov/mcia/index.htm>

ACPM-8060 1.0 * B (N) G

Goal. Demonstrate an understanding of the MAGTF stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8061, 8062, 8063, 8064, 8065.

References. C3 Course Catalog.

ACPM-8061 4.0 * B (N) G

Goal. Demonstrate an understanding of the MAGTF ground combat operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify how the Ground Combat Element (GCE) is employed as part of the MAGTF and the capabilities the GCE provides to the MAGTF commander
2. Define the following items related to command and control of ground combat operations:
 - a. Echelons of the GCE headquarters
 - b. Battlespace Organization
 - c. Battlespace Framework
3. Define the five types of amphibious operations.
4. Identify the following items related to offensive operations:
 - a. Types of offensive operations
 - b. Types of attack
 - c. Forms of maneuver
 - d. Distribution of forces
5. Identify the following items related to defensive operations:
 - a. Organization of the defense
 - b. Distribution of forces
 - c. Types of defensive operations
 - d. Defensive methods

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MCDP 1-0 Marine Corps Operations
2. MCWP 3-1 Ground Combat Operations

ACPM-8062 4.0 * B (N) G

Goal. Demonstrate an understanding of fire support coordination in the Ground Combat Element (GCE).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the four fire support tasks.
2. List the functions of the senior fire support coordination center (FSCC) in the GCE.
3. List the four steps of the MAGTF Targeting Process.
4. Define the purpose of essential fire support tasks (EFST).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 MAGTF Targeting and Fire Support Planning Class
2. MCRP 3-16 Fire Support Coordination in the GCE

ACPM-8063 4.0 * B (N) G

Goal. Demonstrate an understanding of MAGTF command and control.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify MAGTF command and support relationships.
2. Identify the purpose and role of the command and control centers in the CE, ACE, GCE, and LCE.
3. Identify the purpose and role of the amphibious command and control facilities.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

Reference. MCWP 3-40.1 MAGTF C2

ACPM-8064 4.0 * B (N) G

Goal. Demonstrate an understanding of MAGTF communications.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

Reference. MCWP 3-40.2 Information Management

ACPM-8067 4.0 * B (N) G

Goal. Demonstrate an understanding of Unmanned Aircraft Systems in support of MAGTF operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the four types of payloads.
2. Identify the three attributes that determine UAS Groups.
3. Identify the five different UAS Group Categories.
4. Identify the two types of VMU operational employment.
5. Identify the three components of the RQ-7B Communications Relay Package.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 UAS In Support of MAGTF Operations
2. MCRP 3-42.1A
3. NTTP 3-22.3-VMU

ACPM-8080 1.0 * B (N) G

Goal. Demonstrate an understanding of the MAGTF stage of the joint air operations stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI.

Prerequisite. 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Reference. C3 Course Catalog.

ACPM-8081 4.0 * B (N) G

Goal. Demonstrate an understanding of command and control of joint air operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the definition of joint air operations.
2. Identify the Joint Force Air Component Commander's responsibilities.
3. Identify the five sections that comprise the Joint Air Operations Center.
4. Identify the six phases of the Joint Air Tasking Cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or

pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. DOCNET Course 3-30 (<http://www.dtic.mil/doctrine/docnet/>)
2. MAWTS-1 Joint Air Operations Class
3. JP 3-30 Joint Air Operations

ACPM-8082 4.0 * B (N) G

Goal. Demonstrate an understanding of the theater air ground system (TAGS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. List the primary characteristics of the Theater Air Ground System (TAGS).
2. Identify the elements within the Air Force's Theater Air Control System (TACS) and their primary responsibilities.
3. Identify the aviation command and control elements with the Army Air and Ground System (AAGS) and their primary responsibilities.
4. Identify the aviation elements within the Navy's Composite Warfare Commander (CWC) architecture.
5. Identify the Amphibious Task Force (ATF) construct and its primary responsibilities.
6. Identify the aviation command and control elements within the Special Operations Air-Ground System.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 TAGS Class
2. MAWTS-1 Joint Air Operations Class
3. ALSA TAGS Pub. (<https://www.mil.alsa.mil/default.aspx>)

ACPM-8083 4.0 * B (N) G

Goal. Demonstrate an understanding of the joint fire support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define joint fires.
2. Define joint fire support.
3. Identify the steps of the joint fire support planning process.
4. List the various elements of the component commander's fires command and control system.
5. Define the various joint control and coordination measures associated with joint fire support.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. DOCNET Course 3-09 (<http://www.dtic.mil/doctrine/docnet/>)
2. JP 3-09 Joint Fire Support

ACPM-8084 4.0 * B (N) G

Goal. Demonstrate an understanding of the close air support (CAS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Explain key roles and responsibilities related to the planning and execution of CAS.
2. Detail key steps in the planning and execution of CAS.
3. Describe various coordination measures used in the planning and conduct of CAS.
4. Describe the manner in which the two types of CAS requests are fulfilled.
5. Identify the goal and purpose of synchronizing CAS with surface fires.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. DOCNET Course 3-09 (<http://www.dtic.mil/doctrine/docnet/>)
2. MAWTS-1 CAS Class
3. JP 3-09.3 Close Air Support

ACPM-8085 4.0 * B (N) G

Goal. Demonstrate an understanding of the joint targeting doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify types of targets.
2. Identify and describe the six phases of the joint targeting cycle.
3. Identify characteristics of a target.
4. Identify and describe steps in dynamic targeting.
5. Describe roles and responsibilities related to the joint targeting process.
6. Describe key products and processes of the joint targeting cycle.
7. Identify key terms related to the joint targeting process.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI.

Prerequisite. None.

References.

1. DOCNET Course 3-09 (<http://www.dtic.mil/doctrine/docnet/>)
2. JP 3-60 Joint Targeting

ACPM-8086 4.0 * B (N) G

2.15 T&R SYLLABUS MATRIX

7202 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	PROFICIENCY PERIOD	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CORE PLUS SKILL TRAINING												
ACADEMIC (ACAD)												
ACAD	4000	Define combat identification capabilities and procedures	B	(N)	G	*	*	2	*	2000		
ACAD	4026	Identify key personnel and responsibilities during air and missile defense operations	B	(N)	G	*	*	0.5	*	2026		
ACAD	4028	State the purpose and intent of Rules of Engagement (ROE)	B	(N)	G	*	*	2	*	2028		
ACAD	4030	Discuss Missile Defense (Classified when filled in)	B	(N)	G	*	*	1	*	2030		
ACAD	4034	Describe aviation operational documents	B	(N)	G	*	*	1	*	2034		
ACAD	4038	Define the characteristics of the Phased Array Tracking Intercept of Target (PATRIOT), AEGIS, and Stinger and how they integrate into an IADS	B	(N)	G	*	*	2	*	2038		
ACAD	4050	State the characteristics and employment considerations of TACAIR Navy and USMC Aircraft	B	(N)	G	*	*	2.5	*	2050		
ACAD	4054	Describe the capabilities of US Air-to-Air Weapons. (classified when filled in)	B	(N)	G	*	*	1.5	*	2054		
ACAD	4056	Describe Air and Missile Defense terminology	B	(N)	G	*	*	2	*	2056		

7202 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	PROFICIENCY PERIOD	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	4068	Define Integrated Fire Control terms and roles	B	(N)	G	*	*	1	*	2068		
ACAD	4070	Describe the technical and tactical considerations involved in tanker management	B	(N)	G	*	*	2	*	2070		
ACAD	4072	Describe Airspace Coordinating Measures, Fire Support Coordination, Air Reference Measures, and Air Defense Measures	B	(N)	G	*	*	2	*	2072		
ACAD	4102	State the capabilities, limitations and employment considerations for U.S. Air Force aircraft	B	(N)	G	*	*	1.5	*	2102		
ACAD	4226	Define the characteristics of Cooperative Engagement Capability (CEC). (Classified)	B	(N)	G	*	*	1	*	2826		
TOTAL HOURS ACAD STAGE			EVENTS		14	HOURS		21.5				
AIR INTERCEPT FAMILIARIZATION (AFAM)												
AFAM	4265	Observe and discuss AIC functions for a division of fighter aircraft performing DCA/FI	B	(N)	L/S	*	*	8	*	2565		
TOTAL HOURS AFAM			EVENTS		1	HOURS		8				
TOTAL HOURS CORE PLUS SKILL								29.5				
MISSION PLUS SKILL TRAINING												
SECTOR AIR DEFENSE COMMANDER OPERATIONS OFFICER (SADCOPS) STAGE												

7202 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	PROFICIENCY PERIOD	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SADCOPS	4500	Conduct planning as a SADC Operations Officer	B	(N)	L/S	*	*	8	*			
SADCOPS	4504	Perform as SADC Operations Officer	B,R	(N)	L/S	1095	*	16	4000, 4026, 4028, 4030, 4034, 4038, 4050, 4054, 4056, 4068, 4070, 4072, 4102, 4226, 4265, 4500, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088			
TOTAL HOURS SADCOPS STAGE			EVENTS		2	HOURS		24				
AIR INTERCEPT FAMILIARIZATION (AFAM)												
SADC	4501	Conduct tactical planning as a SADC	B	(N)	L/S	*	*	8	*			
SADC	4505	Perform as SADC	B,R	(N)	L/S	1095	*	16	4501, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088			
TOTAL HOURS AFAM			EVENTS		1	HOURS		24				
TOTAL HOURS MISSION PLUS SKILL								48				
INSTRUCTOR TRAINING (5000 PHASE EVENTS)												
INSTRUCTOR UNDER TRAINING (IUT) STAGE												

7202 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	PROFICIENCY PERIOD	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
IUT	5000	Introduce principals of instruction.	B	L	(N)	*	*	2	*	5000	*	5000
IUT	5010	Describe individual T&R requirements.	B	L	(N)	*	*	2	*	5010	*	5010
IUT	5020	Conduct T&R instruction.	B,R,M	L	(N)	90	*	12	5000, 5010	5020	*	5020
IUT	5100	Describe the Aviation Training and Readiness (T&R) Program.	B	L	(N)	*	*	2	5000, 5010, 5020	5100	*	5100
IUT	5110	Conduct instructor evaluations.	B,R,M	L	(N)	365	*	4	5100	5110	*	5110
IUT	5120	Perform T&R administration.	B	L	(N)	*	*	2	5100, 5110	5120	*	5120
IUT	5130	Develop a training plan.	B	L	(N)	*	*	2	5100, 5110, 5120	5130	*	5130
TOTAL HOURS (IUT) STAGE			EVENTS		7	HOURS		26				
TOTAL HOURS INSTRUCTOR TRAINING (5000 PHASE)								26				
CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS (QCD)												
SCHOOL CODES (SCHL) STAGE												
SCHL	6000	Weapons and Tactics Instructors (WTI) Course	B	(N)	G	*	*	1	6320, 6321	6000	*	6000
SCHL	6001	Senior Watch Officer's Course	B	(N)	G	*	*	1	*	6001	*	6001
SCHL	6002	Air Command and Control Officer's Course	B	(N)	G	*	*	1	*	6002	*	6002
SCHL	6003	ACE Battlestaff Officer Course (ABOC)	B	(N)	G	*	*	1	*	6003	*	6003
SCHL	6006	Air Intercept Controller Instructor Course (AICIC)	B	(N)	G	*	*	1	*	6006	*	6006
SCHL	6010	Airspace Course	B	(N)	G	*	*	1	*	6010	*	6010
SCHL	6015	Joint Air Operation Center Command and Control Course (JAOC2C)	B	(N)	G	*	*	1	*	6015	*	6015
SCHL	6016	Joint Air Operations Senior Staff Course	B	(N)	G	*	*	1	*	6016	*	6016

7202 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	PROFICIENCY PERIOD	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SCHL	6020	Link 16 Basics Course (JT-100)	B	(N)	G	*	*	1	*	6020	*	6020
SCHL	6021	Intro to Multi TDL Network (JT-101)	B	(N)	G	*	*	1	*	6021	*	6021
SCHL	6022	Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102)	B	(N)	G	*	*	1	*	6022	*	6022
SCHL	6023	Link 16 Joint Interoperability Course (US-109)	B	(N)	G	*	*	1	*	6023	*	6023
SCHL	6024	Multi TDL Planner Course (JT-201)	B	(N)	G	*	*	1	*	6024	*	6024
SCHL	6025	Link 16 Unit Manager (LUM) Course (JT-220)	B	(N)	G	*	*	1	*	6025	*	6025
SCHL	6026	Joint Interface Control Officer (JICO) (JT-301)	B	(N)	G	*	*	1	*	6026	*	6026
SCHL	6027	Advanced JICC Operators Course (AJOC) (JT-310)	B	(N)	G	*	*	1	*	6027	*	6027
SCHL	6067	Military Airspace Management Course	B	(N)	G	*	*	1	*	6067	*	6067
SCHL	6069	USMC AIC TOPGUN Ground School	B	(N)	G	*	*	1	*	6069	*	6069
SCHL	6072	Advanced Field Artillery Tactical Data System (AFATDS)	B	(N)	G	*	*	1	*	6072	*	6072
SCHL	6078	TOPGUN AIC Course	B	(N)	G	*	*	1	*	6078	*	6078
SCHL	6079	JRE-GW Operators Course	B	(N)	G	*	*	1	*	6079	*	6079
SCHL	6082	Joint Firepower Course	B	(N)	G	*	*	1	*	6082	*	6082
SCHL	6083	IAMD WTI	B	(N)	G	*	*	1	*		*	*
SCHL	6084	Weapons Director Ground Based Training	B	(N)	G	*	*	1	*	*	*	*
SCHL	6085	CRC IQT – Weapons Director	B	(N)	G	*	*	1	*	*	*	*
SCHL	6086	CRC IQT – Air Battle Manager	B	(N)	G	*	*	1	*	*	*	*

7202 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	PROFICIENCY PERIOD	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
			EVENTS		26	HOURS		26				
DESIGNATIONS (DESG) STAGE												
DESG	6290	Sector Air Defense Commander Operations Officer (SADC OPS)	B	(N)	G	*	*	0.5	4000, 4026, 4028, 4030, 4034, 4038, 4050, 4054, 4056, 4068, 4070, 4072, 4102, 4226, 4265, 4500, 4504, 6290, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088			
DESG	6292	Marine Sector Air Defense Commander (SADC)	B	(N)	G	*	*	0.5	4501, 4505, 4405, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088			
DESG	6294	Air and Missile Defense Officer	B	(N)	G	*	*	0.5	*			
DESG	6320	Basic Instructor (BI)	B	(N)	G	*	*	0.5	5000, 5010, 5020			6320
DESG	6321	Senior Instructor (SI)	B	(N)	G	*	*	0.5	5000, 5010, 5020, 5100, 5110, 5120, 5130, 6320			6321
DESG	6322	Weapons and Tactics Instructor (WTI)	B	(N)	G	*	*	0.5	6000, 6320, 6321			6322
TOTAL HOURS DESG STAGE			EVENTS		6	HOURS		3				
								TOTAL HOURS QCD		29		

7202 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	PROFICIENCY PERIOD	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
MISSION ESSENTIAL TASK (MET)												
CONDITION STAGE												
COND	7004	Integrate Operational Air Defense Capabilities	B,R,M	(N)	L	730	E	16	*			
				EVENTS				HOURS	16			
TOTAL HOURS MISSION ESSENTIAL TASK (MET)								16				
ACPM MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AVIATION CAREER PROGRESSION MODEL (ACPM)												
AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE												
ACPM	8000	MACCS	B	G	(N)	*	*	1	8001, 8002, 8003, 8004, 8005, 8006, 8008	8000	*	8000
ACPM	8001	Marine Air Command and Control System	B	G	(N)	*	*	4	*	8001	*	8001
ACPM	8002	Tactical Air Command Center (TACC)	B	G	(N)	*	*	4	*	8002	*	8002
ACPM	8003	Direct Air Support Center (DASC)	B	G	(N)	*	*	4	*	8003	*	8003
ACPM	8004	Tactical Air Operations Center (TAOC)	B	G	(N)	*	*	4	*	8004	*	8004
ACPM	8005	Marine Air Traffic Control (MATC)	B	G	(N)	*	*	4	*	8005	*	8005
ACPM	8006	Low Altitude Air Defense (LAAD)	B	G	(N)	*	*	4	*	8006	*	8006
ACPM	8008	Marine Wing Communications Squadron (MWCS)	B	G	(N)	*	*	4	*	8008	*	8008
ACPM	8020	ACE	B	G	(N)	*	*	1	8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	8020	*	8020
ACPM	8021	Aviation Operations	B	G	(N)	*	*	4	*	8021	*	8021
ACPM	8022	Control of Aircraft and Missiles	B	G	(N)	*	*	4	*	8022	*	8022

7202 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	PROFICIENCY PERIOD	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACPM	8023	Offensive Air Support (OAS)	B	G	(N)	*	*	4	*	8023	*	8023
ACPM	8024	Assault Support (AS)	B	G	(N)	*	*	4	*	8024	*	8024
ACPM	8025	Air Reconnaissance	B	G	(N)	*	*	4	*	8025	*	8025
ACPM	8026	Electronic Warfare (EW)	B	G	(N)	*	*	1	*	8026	*	8026
ACPM	8027	Anti-Air Warfare (AAW)	B	G	(N)	*	*	4	*	8027	*	8027
ACPM	8028	Aviation Ground Support	B	G	(N)	*	*	4	*	8028	*	8028
ACPM	8040	Threat	B	G	(N)	*	*	1	8041, 8042, 8043, 8044	8040	*	8040
ACPM	8041	Surface to Air threat to the MAGTF	B	G	(N)	*	*	4	*	8041	*	8041
ACPM	8042	Fixed Wing threat to the MAGTF	B	G	(N)	*	*	4	*	8042	*	8042
ACPM	8043	Rotary Wing threat to the MAGTF	B	G	(N)	*	*	4	*	8043	*	8043
ACPM	8044	Missile and UAS threat to the MAGTF	B	G	(N)	*	*	4	*	8044	*	8044
ACPM	8060	MAGTF	B	G	(N)	*	*	1	8061, 8062, 8063, 8064, 8065, 8066, 8067	8060	*	8060
ACPM	8061	Ground Combat Operations	B	G	(N)	*	*	4	*	8061	*	8061
ACPM	8062	Fire Support Coordination in the GCE	B	G	(N)	*	*	4	*	8062	*	8062
ACPM	8063	MAGTF Command and Control	B	G	(N)	*	*	4	*	8063	*	8063
ACPM	8064	MAGTF Communications	B	G	(N)	*	*	4	*	8064	*	8064
ACPM	8065	Phasing Control Ashore	B	G	(N)	*	*	4	*	8065	*	8065
ACPM	8066	Information Management	B	G	(N)	*	*	4	*	8066	*	8066
ACPM	8067	UAS support of the MAGTF	B	G	(N)	*	*	4	*	8067	*	8067
ACPM	8080	Joint Air Operations	B	G	(N)	*	*	1	8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	8080	*	8080
ACPM	8081	Command and Control of Joint Air Operations	B	G	(N)	*	*	4	*	8081	*	8081

7202 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	PROFICIENCY PERIOD	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACPM	8082	Theater Air Ground System (TAGS)	B	G	(N)	*	*	4	*	8082	*	8082
ACPM	8083	Joint Fire Support	B	G	(N)	*	*	4	*	8083	*	8083
ACPM	8084	Close Air Support (CAS)	B	G	(N)	*	*	4	*	8084	*	8084
ACPM	8085	Joint Targeting	B	G	(N)	*	*	4	*	8085	*	8085
ACPM	8086	North Atlantic Treaty Organization (NATO)	B	G	(N)	*	*	4	*	8086	*	8086
ACPM	8087	Joint Airspace Control	B	G	(N)	*	*	4	*	8087	*	8087
ACPM	8088	Countering Air and Missile Threats	B	G	(N)	*	*	4	*	8088	*	8088
TOTAL HOURS AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE								142				
TOTAL ACPM								142				

2.16 ADDITIONAL MATRIX (ORDNANCE/RANGES). None.

2.17 ADDITIONAL CHAINING FOR 5000 AND 6000 PHASE EVENTS. None.

2.18 TRAINING DEVICE EVENT ESSENTIAL SUBSYSTEMS MATRIX (EESM). None.

2.19 AVIATION TRAINING FORMS (ATF). A syllabus evaluation form is required for any initial or subsequent event training. The MACCS Training Form (MTF) is located in the C3 Course Catalog and available online at the MAWTS-1 C-3 website,

<https://vcepub.tecom.usmc.mil/sites/mc/magtfc/mawts1/departments1/newc3/default.aspx>.

CHAPTER 4

TACTICAL AIR DEFENSE CONTROLLER (MOS 7236)
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

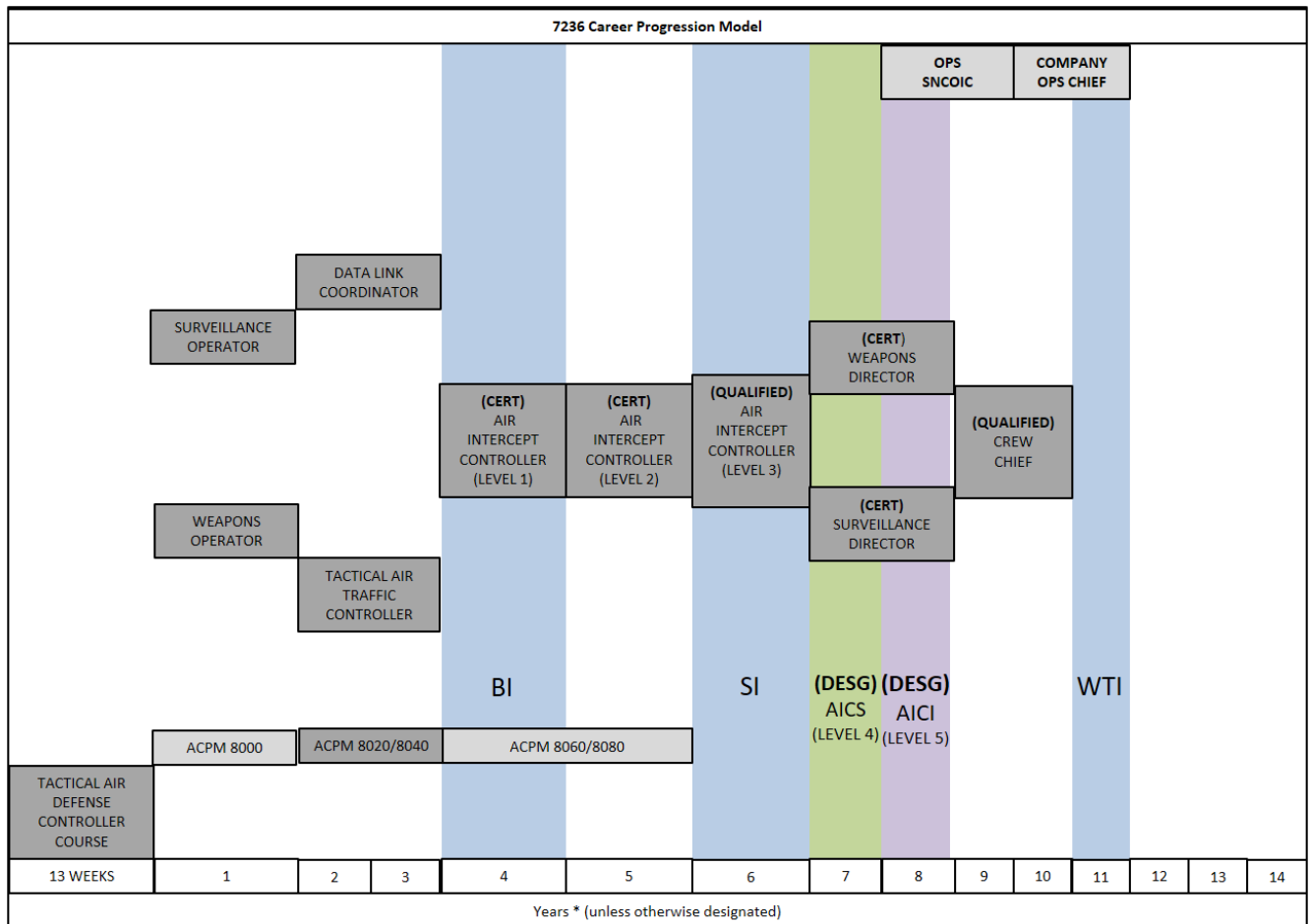
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CHAPTER 4
TACTICAL AIR DEFENSE CONTROLLER (MOS 7236)
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

4.0 TACTICAL AIR DEFENSE CONTROLLER/7236 INDIVIDUAL TRAINING AND READINESS REQUIREMENTS. This T&R Syllabus is based on specific goals and performance standards designed to ensure individual proficiency in Core and Mission Skills. The goal of this chapter is to develop individual and unit warfighting capabilities.

4.1 TRAINING PROGRESSION MODEL. This model represents the recommended average training progression for the Tactical Air Defense Controller crewmember. Units should use the model as a point of departure to generate individual training plans.



0-12	CORE SKILL INTRODUCTION TRAINING	MCCES
13-104	CORE SKILL TRAINING	TACTICAL SQUADRON
VARIES	MISSION SKILL TRAINING	TACTICAL SQUADRON

4.2.2 Refresher POI.

TAOC MOS 7236 REFRESHER POI		
WEEKS	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.

4.3 PROFICIENCY AND CURRENCY. See Chapter 2 of the Aviation Program Manual for amplifying information on POI updating.

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

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

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

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

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

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

4.3.3 Currency. Currency is a control measure used to provide an additional margin of safety based on exposure

frequency to a particular skill and applies to all MOS's that must comply with NATOPS and OPNAV requirements. It is a measure of time since the last event demanding that specific skill. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for aircrew individual type mission profiles can be found in Chapter 3.

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

4.4.1 INSTRUCTOR DESIGNATIONS.

TAOC MOS 7236 INSTRUCTOR DESIGNATIONS (5000 PHASE)	
INSTRUCTOR DESIGNATION	EVENTS
FORMAL LEARNING CENTER (FLC) INSTRUCTOR (DESG-6325)	6325
BASIC INSTRUCTOR (BI) (DESG-6320)	5000, 5010, 5020, 5030, 6320
SENIOR INSTRUCTOR (SI) (DESG-6321)	5100, 5110, 5120, 5130, 5140, 6320, 6321
WEAPONS AND TACTICS INSTRUCTOR (WTI) (DESG-6322)	6000, 6320, 6321, 6322
AIR INTERCEPT CONTROLLER SUPERVISOR (AICS) (DESG-6323)	5500, 5510, 5520, 5530
AIR INTERCEPT CONTROLLER INSTRUCTOR (AICI) (DESG-6324)	5540

4.4.2 CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS.

TAOC MOS 7236	
CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (CQD)	
CQD	EVENTS
CERTIFICATIONS	
SURVEILLANCE DIRECTOR (SD) (CERT-6278)	4200, 4202, 6255
WEAPONS DIRECTOR (WD) (CERT-6279)	3611
AIR INTERCEPT CONTROLLER (AIC) LEVEL 1 (CERT 6276)	2500, 2502, 2504, 2506, 2508, 2510, 2512, 2514, 2516, 2661, 2664, 6250, 6256
AIR INTERCEPT CONTROLLER (AIC) LEVEL 2 (CERT 6277)	2550, 2552, 2554
QUALIFICATIONS	EVENTS
WEAPONS OPERATOR (WO) (QUAL 6250)	3200, 3202, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008
TACTICAL AIR TRAFFIC CONTROLLER (TATC) (QUAL 6251)	3350, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028
AIR INTERCEPT CONTROLLER(AIC) (QUAL 6253)	

	3508, 6250, 6251, 6256, 8040, 8041, 8042, 8043, 8044
DATA LINK COORDINATOR (DLC) (QUAL 6255)	3402, 6250, 6256
SURVEILLANCE OPERATOR (SO) (QUAL 6256)	3302, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008
CREW CHIEF (CC) (QUAL 6257)	3708, 6278, 6279, 8060, 8061, 8062, 8063, 8064, 8065, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8080
MISSILE CONTROLLER (MC) (QUAL 6254)	4100, 4102, 6250, 6256
DEEP AIR CONTROLLER (DAC) (QUAL 6252)	4600, 4602, 6250, 6256

4.5 SYLLABUS NOTES.

4.5.1 Environmental Conditions Matrix.

ENVIRONMENTAL CONDITIONS	
CODE	MEANING
(N)	MAY BE CONDUCTED DAY OR NIGHT-IF AT NIGHT, AIDED OR UNAIDED.
NOTE - IF THE EVENT IS TO BE CONDUCTED IN THE SIMULATOR, THE INSTRUCTOR SHALL ENSURE THE PROPER ENVIRONMENTAL CONDITIONS FOR THE EVENT.	

4.5.2 Device Matrix.

DEVICE	
Symbol	MEANING
L	CONDUCTED USING UNIT T/E EQUIPMENT (SEE NOTE 1)
L/S	LIVE PREFERRED / SIMULATOR ACCEPTABLE
S/L	SIMULATOR PREFERRED/LIVE ACCEPTABLE
G	GROUND/ACADEMIC TRAINING.
GE	GROUND EVENT REQUIRING EVALUATION

Note: Device matrix standardized per NAVMC 3500.14E. Unit personnel can accomplish live events using C2 system with similar capabilities to T/E equipment or available range systems supporting live flight operations.

4.5.3 Program of Instruction Matrix.

PROGRAM OF INSTRUCTION (POI) MATRIX		
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

4.5.4 Event Terms.

EVENT TERMS	
TERM	DESCRIPTION
DISCUSS	An explanation of systems, procedures, or tactics during the brief, exercise, or debrief. The 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 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 a 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.

4.6 CORE INTRODUCTION PHASE (1000).

4.6.1 Purpose. To provide entry-level instruction to develop the basic skills necessary for an enlisted Marine to meet the requirements to be assigned MOS 7236, Tactical Air Defense Controller. This training includes TAOC operations within the Marine Air Command and Control System (MACCS), operation of the Aviation Command and Control System (AC2S), Theater Battle Management Core Systems (TBMCS) with emphasis on duties as a Surveillance Operator (SO), Data Link Coordinator (DLC), Weapons Operator (WO), and Tactical Air Traffic Controller (TATC). Upon graduation from the Tactical Air Defense Controllers Course (TADCC), the Marine is designated MOS 7236.

4.6.2 Admin Notes. Tactical Air Defense Controllers Course (TADCC) (CID M0972P1) is located at Marine Corps Communication-Electronics School (MCCES) in 29 Palms, CA.

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

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

PAR NO.	STAGE NAME	PAGE NUMBER
4.6.3	AIR SCHOOL (AIRS)	4-8

4.6.3 AIR SCHOOL (AIRS)

4.6.3.1 Purpose. To teach the Marine in the required skills to perform as a basic Tactical Air Defense Controller, MOS 7236.

Admin Notes. All exams will be taken without the aid of references and require a minimum score of 80% to pass unless specifically changed in an event.

AIRS-1000 0 * B (N) G

Goal. Explain the fundamentals of Aviation Command and Control (AC2S) employment.

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

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

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

Instructor. FLC Instructor

Prerequisite. None.

References.

1. MCWP 3-25, Control of Aircraft and Missiles
2. MCWP 3-25.3, MACCS Handbook
3. MCWP 3-22, Anti-Air Warfare
4. MCWP 3-23, Offensive Air Support
5. MCWP 3-24, Assault Support
6. MCWP 3-25.4, TACC Handbook
7. MCWP 3-25.5, DASC Handbook
8. MCWP 3-25.7, TAOC Handbook
9. MCWP 3-25.8, MATCD Handbook
10. MCWP 3-25.10, LAAD Handbook
11. MCWP 3-26, Air Reconnaissance
12. MCWP 3-40.5, Electronic Warfare
13. MCWP 3-42.1, Unmanned Aerial Vehicle Operations

AIRS-1200 0 * B (N) G

Goal. Identify characteristics of the Marine Air Command and Control System (MACCS).

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).

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. MCWP 3-2, Aviation Operations

2. MCWP 3-22, Antiair Warfare
3. MCWP 3-25, Control of Aircraft and Missiles
4. MCWP 3-25.10, Low Altitude Air Defense Handbook
5. MCWP 3-25.3, Marine Air Command and Control System Handbook
6. MCWP 3-25.4, Tactical Air Command Center Handbook
7. MCWP 3-25.5, Direct Air Support Center Handbook
8. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
9. MCWP 3-25.8, Marine Air Traffic Control Detachment Handbook

AIRS-1202 0 * B (N) G

Goal. Identify characteristics of the Marine Air Control Squadron (MACS).

Requirement. Identify the following:

1. Identify characteristics of the Marine Air Control Squadron (MACS).
2. Identify characteristics of the MACS Air Defense agencies
3. Identify characteristics of agencies in the Theater Air Ground System (TAGS).
4. Identify characteristics of Integrated Air Defense Systems (IADS).
5. Identify characteristics of U. S. ground-based air defense platforms.
6. Identify characteristics of air and missile threats to the MACS.
7. Identify characteristics of the Aviation T&R program in the TAOC.

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

External Syllabus Support. None.

References.

1. MCRP 3-25D, Multiservice Procedures for Integrated Combat Airspace Command and Control
2. MCRP 3-25E, Multiservice Procedures for Joint Integrated Air Defense System
3. MCWP 3-2, Aviation Operations
4. MCWP 3-22, Antiair Warfare
5. MCWP 3-25, Control of Aircraft and Missiles
6. MCWP 3-25.3, Marine Air Command and Control System Handbook
7. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
8. TM 08565A-CD-1, TAOM System Manual
9. U-TAOC-PCL-03862, TAOC Pocket Checklist

AIRS-1204 0 * B (N) G

Goal. Identify characteristics of U.S. and threat aircraft and missile systems.

Requirement. Identify the following:

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

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

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

AIRS-1206 0 * B (N) G

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. Initialize a workstation.
4. Set TAOC operational parameters from source documents.
5. Enter map/overlay information from source documents.
6. Identify sensor input information.
7. Identify sensor capabilities.
8. Manipulate sensor inputs.

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. FM 21-26, Map Reading and Land Navigation
2. MCRP 5-12A, Operational Terms and Symbols
3. TM 12041A/12050A-OD2, CAC2S User Manual

AIRS-1208 0 * B (N) G

Goal. Operate TAOC voice communications equipment.

Requirement. Given a C2 System and required materials, complete the following:

1. Operate internal communications using source documents.

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. TM 12041A/12050A-OD2, CAC2S User Manual
2. U-TAOC-PCL-03862, TAOC Pocket Checklist
3. MCRP 3-40.3C, Antenna Handbook
4. TM 10576C-OI/1, Communication Interface System CAC2S(V)3
5. TM 10576D-OI, Communication Interface System CAC2S(V)4
6. MCRP 3-40.3B, Radio operator's handbook
7. MCWP 3-40.3, Communications and Information Systems

AIRS-1210 0 * B (N) G

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

Requirement. Given required C4I systems, operate the following:

1. Operate Chat.
2. Operate C4I planning tools.

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. CCS-TRTBM-A017-AATSU, Theater Battle Management Core System, Vol I
2. CCS-TRTBM-A017-COP-1, Theater Battle Management Core System, Vol II

AIRS-1212 0 * B (N) G

Goal. Perform surveillance functions.

Requirement. Given an operational C2 System, complete the following:

1. Identify characteristics of the TAOC surveillance section.
2. Identify TAOC sensor capabilities.
3. Identify characteristics of documents required for Surveillance functions.
4. Identify key elements of the ATO/SPINS for TAOC operations.
5. Identify characteristics of airspace.
6. Identify doctrinal nets used by the Surveillance Section.
7. Set-up user profile for surveillance operations.
8. Classify track data using source documents.
9. Maintain accurate symbology.
10. Perform manual cross-tell.
11. Complete surveillance reports.

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. JP 1-2, DOD Dictionary of Military and Associated Terms
2. JP 3-3, Command and Control of Joint Air Operations
3. JP 3-2, 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 3-25.3, Marine Air Command and Control System Handbook
13. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
14. TM 12041A/12050A-OD2, CAC2S User Manual
15. U-TAOC-PCL-03862, TAOC Pocket Checklist
16. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual

AIRS-1216 0 * B (N) G

Goal. Operate Link 16.

Requirement. Given a C2 System and required materials, complete the following:

1. Extract Link 16 information from the reference documents.
2. Identify characteristics of Link 16.
3. Setup a work station for Link 16 operations.
4. Exchange Link 16 messages.
5. Send/receive text messages.
6. Send/receive digital orders.

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. TM 12041A/12050A-OD2, CAC2S User Manual
3. U-TAOC-PCL-03862, TAOC Pocket Checklist
4. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16

AIRS-1218 0 * B (N) G

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

Requirement. Given a C2 System and required materials, complete the following:

1. Extract JREAP information from the reference documents.
2. Identify characteristics of JREAP.
3. Identify features on ADSI client.
4. Identify characteristics of JREAP-A.
5. Identify characteristics of JREAP-B.
6. Identify characteristics of JREAP-C.

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. TM 12041A/12050A-OD2, CAC2S User Manual
3. U-TAOC-PCL-03862, TAOC Pocket Checklist
4. MIL-STD-3011, JREAP Interface Standard

AIRS-1220 0 * B (N) G

Goal. Establish a workstation for Weapons functions.

Requirement. Given a C2 System and required materials, complete the following:

1. Identify characteristics of the Weapons Section.
2. Setup user profile for Weapons operations.
3. Perform Weapons Section preparation.

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. JP 3-30, Command and Control of Joint Air Operations
2. MCWP 3-2, Aviation Operations
3. MCWP 3-22, Antiair Warfare
4. MCWP 3-25, Control of Aircraft and Missiles
5. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
6. TM 12041A/12050A-OD2, CAC2S User Manual
7. U-TAOC-PCL-03862, TAOC Pocket Checklist
8. JP 3-52, Joint Airspace Control

AIRS-1222 0 * B (N) G

Goal. Perform Airspace Management functions.

Requirement. Given a C2 system and required materials, complete the following:

1. Setup a workstation for weapons operations.
2. Perform TATC procedures.
3. Perform emergency procedures.
3. Perform traffic deconfliction.
4. Communicate required information to aircrews.
5. Control aerial refueling operations.

Performance Standard. Pass an exam.

Instructor. FLC Instructor

Prerequisite. None.

References.

1. JP 3-30, Command and Control of Joint Air Operations
2. MCWP 3-2, Aviation Operations
3. MCWP 3-22, Antiair Warfare
4. MCWP 3-25, Control of Aircraft and Missiles
5. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
6. TM 12041A/12050A-OD2, CAC2S User Manual
7. U-TAOC-PCL-03862, TAOC Pocket Checklist
8. JP 3-52, Joint Airspace Control

AIRS-1224 0 * B (N) G

Goal. Perform Deep Air Operations Management functions.

Requirement. Given a C2 system and required materials, complete the following:

1. Develop DAS aircraft handover procedures.
2. Identify available DAS aircraft assets.
3. Coordinate with Deep Battle Cell for updated targets and Battle Damage Assessment (BDA).

Performance Standard. Pass an exam.

Instructor. FLC instructor

Prerequisite. None.

References.

1. JP 3-30, Command and Control of Joint Air Operations
2. MCWP 3-2, Aviation Operations
3. MCWP 3-22, Antiair Warfare
4. MCWP 3-25, Control of Aircraft and Missiles
5. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
6. TM 12041A/12050A-OD2, CAC2S User Manual
7. U-TAOC-PCL-03862, TAOC Pocket Checklist
8. JP 3-52, Joint Airspace Control
9. ALSA JFIRE date January 2016

AIRS-1226 0 * B (N) G

Goal. Perform air and missile defense functions.

Requirement. Given a C2 system and required materials, complete the following:

1. Identify characteristics of the weapons section.
2. Identify characteristics of AAW missions.
3. Identify characteristics of U.S. ground and surface-based air defense platforms.
4. Perform intercept control with a simulated section of fighter aircraft.
5. Conduct Air and Missile Defense planning and execution.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JP 3-30, Joint Air Operations.
2. MCWP 3-20, Aviation Operations.
3. MCTP 3-20C, Antiair Warfare.
4. MCRP 3-25, Control of Aircraft and Missiles.
5. MCRP 3-25.7, Tactical Air Operations Center (TAOC) Handbook.
6. TM 12041A/12050A-OD2, CAC2S User Manual.
7. JP 3-52, Joint Airspace Control.
8. ALSA JFIRE
9. MCRP 3-25.10, Low Altitude Air Defense Handbook.
10. PATRIOT TOPGUN Manual.
11. MCRP 3-20F.10, MTPP Air Control Communications
12. MCTP 10-10B, MTPP Air and Missile Defense

4.7 CORE SKILL TRAINING (2000)

4.7.1 Purpose. To train the 7236 in basic equipment capabilities and familiarize the 7236 with C2 systems, air surveillance, air control and weapons employment. While assigned to a Marine Air Control Squadron (MACS), under direct supervision, the 7236 moves from an introductory understanding of core skills to core skill proficiency.

4.7.2 General.

Admin Notes.

1. The LFAM stage is required prior to executing any other Core Skill events. It must be conducted every time the 7236 is assigned to new airspace or required to be refreshed per their training record.

2. Based on geographical locations an Air Force Weapons School Air Intercept Control Graduate may be the only option for supervising and instructing AICs working through their syllabus. This allows Air Force Weapons School Air Intercept Control Graduates to instruct and recommend AICs for qualification through the WTI as needed to ensure CMMR is met.

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

PAR NO.	STAGE NAME	PAGE NUMBER
4.7.3	ACADEMICS (ACAD)	4-16
4.7.4	LOCAL FAMILIARIZATION (LFAM)	4-34
4.7.5	EQUIPMENT (EQUIP)	4-34
4.7.6	WEAPONS OPERATOR(WO)	4-36
4.7.7	SURVEILLANCE OPERATOR (SO)	4-38
4.7.8	SURVEILLANCE DIRECTOR (SD)	4-39
4.7.9	TACTICAL AIR TRAFFIC CONTROLLER (TATC)	4-40
4.7.10	AIR INTERCEPT CONTROLLER (AIC1)	4-43
4.7.11	AIR INTERCEPT CONTROLLER (AIC2)	4-49
4.7.12	WEAPONS DIRECTOR (WD)	4-52
4.7.13	WEAPONS (WPNS)	4-54
4.7.14	CREW CHIEF (CC)	4-57

4.7.15	TACTICAL DATA LINKS (TDL)	4-63
4.7.16	COMMAND AND CONTROL SYSTEMS (C2SYS)	4-86

4.7.3 ACADEMICS (ACAD).

4.7.3.1 Purpose. To provide the 7236 standardized academic knowledge to perform assigned duties. Academic events are one-time events unless otherwise stated.

Admin Notes.

1. The academic events in this phase are intended to complement and supplement those in the ACPM. In addition to the events listed in this phase, all trainees will also complete ACPM-8004 (TAOC) and complete a self-paced reading of MCWP 3-25.7, TAOC Handbook.

2. All tests will be taken without the aid of references and require a minimum score of 80% to pass unless specifically changed in an event.

3. Some academics require AICS/I specifically, WTI only does not suffice.

ACAD-2000 2.0 * B (N) G

Goal. Define combat identification capabilities and procedures.

Requirement. Given the references:

1. Define the purpose and criteria for Positive Control.
2. Define the purpose and criteria for an Air Defense Identification Zone (ADIZ).
3. Explain how the following are used to identify aircraft:
 - a. Control points.
 - b. Airspace Control Area.
 - c. Ingress/Egress routes/Minimum Risk Routes.
 - d. Identify Friend or Foe (IFF) (Modes 1-5).
 - e. Air Tasking Order (ATO).
4. Explain the relationship between I.D. Criteria and ROE.
5. Explain the purpose of challenge and reply authentication procedures.
6. Define the 6 standard track identifications, in accordance with the Joint Multi-TDL Operating Procedures (JMTOP).
7. List the five track environment categories, in accordance with the JMTOP.
8. List and describe the electronic identification capabilities of the following platforms. (Classified if filled out)
 - a. E-3 AWACS.
 - b. E- 2/D Hawkeye.
 - c. AEGIS equipped ships.
 - d. E-8 JSTARS.

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MCTP 3-20C Anti-Air Warfare
2. MCRP 3-25, Control of Aircraft and Missiles
3. CJCSM 6120G_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
4. JP 3-52, Joint Airspace Control
5. MCTP 10-10B Multi-Service Tactics, Techniques, and Procedures for Air and Missile Defense
6. TOPGUN C2 Bluebook (SIPR)
7. MCRP 8-10B.10 Radio Operator's Handbook

ACAD-2012 1.0 * B (N) G

Goal. State capabilities and limitations of the threat surface-to-air missile systems.

Requirement. Given the references, for each threat surface-to-air missile systems listed in reference (2), state the following:

1. Capabilities.
2. Limitations.
3. Associated missile and guidance
4. Early warning & target engagement radars.
5. Minimum & maximum recommended intercept ranges.
6. Minimum & maximum recommended intercept altitudes.
7. Countries each system has been proliferated to.

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. AFTTP 3-1., Threat Reference Guide and Countertactics.
2. TOPGUN Manal, Chapter 18, Surface-to-Air threat and Countertactics.
3. MSIC Website (<http://www.msic.dia.smil.mil>).
4. ONI Foreign Naval Capabilities and Systems Handbook (http://seawolf.nmic.navy.smil.mil/PRODUCTS/201108_niddvd/?clid=155).

ACAD-2014 1.0 * B (N) G

Goal. Define the following Air Interdiction terms.

Requirement. Given the references, discuss the advantages and disadvantages of the following mission sets and associated terms:

1. Push Point.
2. Timing Control Point.
3. Decision Point.
4. Initial Point.
5. Egress Control Point.
6. Egress Flow Point.
7. Target Area Commit.
 - a. How Target Area Commit is constructed.

6. MCRP 3-40.3C, Antenna Handbook

ACAD-2022 1.0 * B (N) G

Goal. Identify TAOC voice communication capabilities.

Requirement. Given the reference, identify the following:

1. Define the frequency range of the following:
 - a. High Frequency.
 - b. Very High Frequency.
 - c. Ultra High Frequency.
2. Identify the ground and sky wave range of the following:
 - a. High Frequency.
 - b. Very High Frequency.
 - c. Ultra High Frequency.
3. Define J-Voice capabilities.
4. Define HAVEQUICK

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

Instructor. BI, SI, WTI

References.

1. MCRP 8-10B.10 Radio Operator's Handbook
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. CJCSM 6230.05 HAVEQUICK

ACAD-2024 1.0 * B (N) G

Goal. Define radio terms.

Requirement. Given the reference, define the following:

1. Amplitude modulation (AM).
2. Antenna gain.
3. Bidirectional.
4. Diffraction.
5. Dipole antenna.
6. Directional antenna.
7. Ducting.
8. Frequency hopping.
9. Frequency modulation (FM).
10. Ground wave.
11. Omnidirectional antenna.
12. Polarization.
13. Reflection.
14. Refraction.
15. Sky wave.
16. Take-off angle.

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

Instructor. BI, SI, WTI

Reference.

1. MCRP 8-10B.10 Radio Operator's Handbook

ACAD-2026 0.5 * B (N) G

Goal. Identify key personnel and responsibilities during air and missile defense operations.

Requirement. Given the references, explain the responsibilities of the following:

1. Joint Forces Commander (JFC).
2. Joint Forces Air Component Commander (JFACC).
3. Area Air Defense Commander (AADC).
4. Regional Air Defense Commander (RADC).
5. Sector Air Defense Commander (SADC).
6. Deputy Area Air Defense Commander (DAADC).
7. Joint Force Maritime Component Commander (JFMCC)
8. Composite Warfare Commander
9. Air and Missile Defense Commander "W"

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

Instructor. SI, WTI

References.

1. JP 3-0, Joint Operations
2. JP 3-01, Countering Air and Missile Threats
3. JP 3-30, Joint Air Operations
4. MCTP 3-20C, Antiair Warfare
5. JP 3-32, Joint Maritime Operations
6. MCTP 10-10B, MTTP Air and Missile Defense

ACAD-2028 2.0 * B (N) G

Goal. State 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.
 - d. 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. Without the aid of reference, state (verbally or written) the required items. Minor errors by the trainee are acceptable.

Instructor. SI, WTI

References.

1. CJCSI 3121.01B, Standing ROE for US Forces
2. DOD Directive 2311.01 Law of War Program
3. MCO 3300.4A, Marine Corps Law of War Program
4. Joint Pub 1-02, DOD Dictionary of Military and Associated Terms
5. MCTP 11-10A War Crimes

ACAD-2030 1.0 * B (N) G

Goal. Discuss Missile Defense (Classified when filled in)

Requirement. Given the reference:

1. State the purpose of Missile Defense.
2. State and describe the three mission support areas of Ballistic Missile Defense and what links them together.
3. State the three phases of flight for Ballistic Missiles.
4. Identify major AMD systems in each service and the phase of flight each system will intercept the target.
5. Discuss Cruise Missile Defense (CMD) considerations for the joint force.

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

Instructor. SI, WTI.

Reference.

1. MCTP 10-10B, ALSA MTTP Air and Missile Defense, Classified Appendix

ACAD-2034 1.0 * B (N) G

Goal. Describe aviation operational documents.

Requirement. Given the references:

1. Describe the 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/SPINS.
3. Explain the use of the Airspace Control Order (ACO).
4. State the information found in the OPTASK_LINK.
5. Explain the use of the Area Air Defense Plan (AADP).
6. Explain the use of the Airspace Control Plan (ACP).

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

Instructor. SI, WTI

References.

1. MCWP 3-20, Aviation Operations
2. MCTP 3-20F Control of Aircraft and Missiles
3. CJCSM 6120.01G, Joint Multi TDL Operating Procedures (JMTOP)
4. JP 3-30 Joint Air Operations
5. JP 3-30 Joint Air Operations
6. JP 3-01, Countering Air and Missile Threats

ACAD-2036 1.0 * B (N) G

Goal. Define characteristics of Joint Air-to-Surface Ordnance.

Requirement. Given the references: Describe the following Aircraft-Delivered Weapons

1. Unguided Bombs
 - a. Mk-82.
 - b. Mk-83.
 - c. Mk-84.
2. Guided Bombs
 - a. GBU-31.
 - b. GBU-32.
 - c. GBU-38.
 - d. GBU-39.
3. Paveway II Series
 - a. GBU-10.
 - b. GBU-12.
 - c. GBU-16.
4. Guided Missiles:
 - a. AGM-65 Maverick.
 - b. AGM-88 HARM / AARGM.
 - c. AGM-84 H (Harpoon) / K SLAM-ER.
 - d. AGM 154 JSOW
 - e. AGM 114 Hellfire

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

Instructor. BI, SI, WTI

Reference.

1. Multi-Service Tactics, Techniques, and Procedures for Joint Application of Firepower (JFIRE)

ACAD-2038 2.0 * B (N) G

Goal. Define the characteristics of the Phased Array Tracking Intercept of Target (PATRIOT), AEGIS, THAAD, and Stinger missiles and how they integrate into an IADS. Classified when filled in)

Requirement. Given the references:

1. Outline the structure of a PATRIOT Battalion:
 - a. Number of firing batteries within a battalion.
 - b. Number of launchers within a battery.
 - c. Number and types of missiles per launcher.
2. List the characteristics of the PAC-2, PAC-3, MSE and GEM-T as they relate to the following:
 - a. Maximum effective range.

- b. Max effective altitude for ABT, TBM, and CM.
- c. Target to weapon match for ABT, TBM, and CM.
- d. Missile guidance system.
- e. PATRIOT Operating Area (POA)
3. List the characteristics of the AN/MPQ-65 PATRIOT Radar System :
 - a. Modes of operation.
 - b. Surveillance and targeting Radar ranges.
 - c. Maximum number of simultaneous target tracking.
4. List and define the Detect-to-Engage Kill chain Sequence.
5. Identify Target Centered Deconfliction for PAC 2 and PAC 3
6. Identify the data link capabilities of the ADA Battalion.
7. State the purpose and employment considerations for the PATRIOT ADAFCO as member of the TAOC Crew.
8. List AEGIS employment considerations for Standard Missile (SM) 2, SM-3, and SM-6, SM-6
 - a. Sensor
 - b. Max effective Range
 - c. Missile to threat relationship
 - d. Typical Cruiser, Destroyer Inventory
 - e. Friendly deconfliction considerations
8. Discuss potential Naval kill chains and integration with Alpha Whiskey (AW)
9. Stinger Block II/ LAAD Employment
 - a. Max Range
 - b. Max Altitude
 - c. 360° Coverage
 - d. Weighted Coverage
 - e. Base Defense Zone (BDZ)
10. Discuss Terminal High Altitude Air Defense (THAAD)
 - a. Sensor
 - b. Type of Defense / Threat mitigated

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

Instructor. SI, WTI

References.

1. FM 3-01.13, PATRIOT TOPGUN Manual
2. MCTP 10-10B, ALSA MTTP Air and Missile Defense
3. MCTP 10-10B, ALSA MTTP Air and Missile Defense, (Classified Appendix)
4. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
5. TOPGUN C2 Blue Book (SIPR)
6. NTTP 3-01.11 Maritime Air and Missile Defense Planning
7. NTTP 3-01.12 Maritime Air and Missile Defense Employment (Classified)

ACAD-2050 2.5 * B (N) G

Goal. State the characteristics and employment considerations of TACAIR Navy and USMC Aircraft.

Requirement. Given the references, state the capabilities and limitations and employment considerations of the following aircraft during AAW, OAS, and AAR missions: (Classified when filled in)

1. F/A-18 C-D Hornet.
2. F/A-18E-F Super Hornet.
3. EA-18G Growler.
4. F-35 B/C.

5. AV-8B Harrier.
6. E-2 C/D Hawkeye.
7. KC-130.
8. MQ-9 Reaper

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

Instructor. AICS, AICI, WTI

Reference.

1. MCTP 10-10B, ALSA MTTP Air and Missile Defense
2. Multi-Service Tactics, Techniques, and Procedures for Joint Application of Firepower (JFIRE)
3. TOPGUN Manual, Chapter 42, F/A-18E/F, Air-to-Air Employment, Chapter 43, Strike Fighter Integration, Chapter 45, CAS/AR/SCAR (SIPR)
4. <https://www.nasic.wrightpatterson.af.smil.mil>
5. Air Naval Tactics, Techniques, and Procedures 3-22.1 F/A-18C/D (SIPR)
6. Airborne Electronic Attack Weapons School HAVOC Manual, Chapter 2, EA-18G Air-to-Air, Chapter 25, SEAD Employment (SIPR)
7. Air Naval Tactics, Techniques, and Procedures 3-22.7 AV-8B (SIPR)
8. TOPGUN C2 Blue Book (SIPR)
9. Air Naval Tactics, Techniques, and Procedures 3-22.1 KC-130 (SIPR)

ACAD-2054 1.5 * B (N) G

Goal. Describe the capabilities of US Air-to-Air Weapons.

Requirement. Given the reference describe Capabilities and Limitations for each of the following weapons: (Classified when filled in)

1. AIM-9M Sidewinder.
 - a. Lethal Radius
 - b. Gimbal limits
 - c. Rmax
2. AIM-9X Sidewinder.
 - a. Lethal Radius
 - b. Gimbal Limits
 - c. Max Range Rule of Thumb (ROT)
3. AIM-120 AMRAAM.
 - a. Guidance type
 - b. Data link Antenna Field of View
 1. C7 variant
 2. D variant
 - c. Electromagnetic Attack (EA) considerations

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

Instructor. AICI

Reference.

1. TOPGUN Manual, Chapter 26, AIM-9 Sidewinder (SIPR)
2. TOPGUN Manual, Chapter 28, AIM-120 AMRAMM (SIPR)
3. TOPGUN Manual, Chapter 30, F/A-18 Combat Systems (SIPR)
4. MAWTS-1 SIPR SharePoint, F/A-18 AIM-9X/M
5. MAWTS-1 SIPR SharePoint, F/A-18 Combat Systems

ACAD-2056 2.0 * B (N) G

Goal. Describe Air and Missile Defense terminology.

Requirement. Given the references, define the following:

1. Offensive Counter Air.
2. Defensive Counter Air.
3. Air Superiority.
4. Air Supremacy.
5. Defense in-depth.
6. Vital Area.
7. Identification.
8. Engagement Area.
9. Surveillance Area.
13. Positive Identification.
14. Positive Friendly Identification.
15. Positive Hostile Identification.

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

Instructor. BI, SI, WTI

References.

1. JP 3-0, Joint Operations
2. JP 3-01, Countering Air and Missile Threats
3. JP 3-30 Joint Air Operations
4. MCTP 3-20C, Antiair Warfare

ACAD-2058 4.0 * B (N) G

Goal. Define the following words and concepts.

Requirement. Given the references, define the following terms:

1. Call Signs.
 - a. Informative.
 - b. Directive.
 - c. Interrogative.
2. Anchor Points.
 - a. Bullseye.
 - b. Geographical Reference Point.
 - c. Fighter Nose.
3. Ways to communicate the picture.
 - a. Core information.
 - b. Traditional picture.
 - c. Leading edge picture.
 - d. Leading edge with follow-on picture.
 - e. Packages.
4. AIC Core Information.
 - a. Callsign.
 - b. Number of Groups.
 - c. Anchor Point & Location.

- d. Altitude.
- e. Track Direction.
- f. Declaration.
- g. Fill-ins.
- 5. Phases of an Air-to-Air Intercept.
 - a. Pre Commit
 - (1) Communications Priority.
 - b. Post Commit
 - (1) Communications Priority.
 - c. Merge.
 - (1) Communications Priority.
 - d. Post-Merge.
 - (1) Communications Priority.
- 6. Aspect.
 - a. General.
 - b. Specific.
 - c. Grouping.
- 7. Declaration Modifiers.
 - a. Spades.
 - b. Squawking.
 - c. Paint(s).
 - d. Echo.
 - e. Outlaw.
 - f. Rider.
- 8. Declarations.
 - a. Hostile.
 - b. Bandit.
 - c. Bogey.
 - d. Friendly.

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

Instructor. AICS, AICI

References.

- 1. MTTP ALSA Brevity
- 2. MTTP ALSA Air Control Communication
- 3. MAWTS-1 NIPR SharePoint, C3,
TAOC Classes, <https://mceits.usmc.mil/sites/mawts1/SitePages/TAOC.aspx>
- 4. TOPGUN Manual, Chapter 47, Air Control Communications (SIPR)

ACAD-2060 4.0 * B (N) G

Goal. Identify group labels/names and inner-group formations.

Requirement. Given the references, illustrate the following tactical labels and define the corresponding group names:

- 1. Single Group.
- 2. Azimuth.
- 3. Range.
- 4. Vic.
- 5. Champagne.
- 6. Ladder.

7. Wall.
8. Box.
9. Line Abreast.
10. Lead/Trail.
11. Wedge.
12. Stinger.
13. Container.
14. Swept.

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

Instructor. AICS, AICI

References.

1. MTTP ALSA Air Control Communication
2. MAWTS-1 NIPR SharePoint, C3, TAOC Classes
<https://mceits.usmc.mil/sites/mawts1/SitePages/TAOC.aspx>
3. TOPGUN Manual, Chapter 47, Air Control Communications

ACAD-2062 4.0 * B (N) G

Goal. Identify maneuvers and appropriate fill-ins.

Requirement. Given the references, explain the following terms:

1. Fill-ins:
 - a. Opening.
 - b. Closing.
 - c. Echelon.
 - d. Weighted.
 - e. Stack.
 1. High
 2. Medium
 3. Low
 - f. Heavy.
 - g. High.
 - h. Very Fast.
 - i. Tipper/Electronic ID (EID)
2. Aspects:
 - a. Hot.
 - b. Flank.
 - c. Beam.
 - d. Drag.
 - e. Marshalling
 - f. CAP(ing)
3. Maneuver:
 - a. Maneuver Range.
 - b. Maneuver Azimuth.
 - c. Crossing.
 - d. Passing.
 - e. Maneuver in Altitude.
 - f. Maneuver Range and Azimuth.
 - g. Maneuver Azimuth and Range.
 - h. Joined.

- i. Maneuver Hot
- j. Spread

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

Instructor. AICS, AICI

Reference.

1. MTTP ALSA Air Control Communication
2. TOPGUN Manual, Chapter 47, Air Control Communications
3. MAWTS-1 NIPR SharePoint, C3, TAOC Classes,
<https://mceits.usmc.mil/sites/mawts1/SitePages/TAOC.aspx>

ACAD-2064 2.0 * B (N) G

Goal. Define the following comparative communication terms.

Requirement. Given the references, define and specify the following calls and appropriate response:

1. Threat Call.
2. Nails.
3. Music.
4. Strobe.
5. Clean.
6. Faded.
7. Vanished.
8. Bogey Dope.
9. Declare.
10. Metallica.
11. Separation.
12. Spike
13. Snap Lock

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

Instructor. AICS, AICI

References.

1. MAWTS-1 NIPR SharePoint, C3, TAOC Classes,
<https://mceits.usmc.mil/sites/mawts1/SitePages/TAOC.aspx>
2. MTTP ALSA Air Control Communication
3. MTTP ALSA Brevity
4. TOPGUN Manual, Chapter 47, Air Control Communications (SIPR)

ACAD-2066 2.0 * B (N) G

Goal. Define Air Intercept Control Communication Terms.

Requirement. Given the references define the following terms and their purpose:

1. Abort.
2. Anchored.

3. As fragged.
4. Banzai.
5. Bingo.
6. Bittersweet.
7. Cheap shot.
8. Father.
9. Group.
10. Hits.
11. India.
12. Jackal.
13. Joker.
14. Judy.
15. Kill.
16. Meld.
17. Mickey.
18. Midnight.
19. Naked.
20. Notch(ing).
21. Parrot.
22. Pitbull.
23. Paints.
24. Print.
25. Pump.
26. Pushing.
27. Skate.
28. Short Skate.
29. Snap lock.
30. Spiked.
31. Splash(ed).
32. Standby.
33. Status.
34. Sunrise.
35. Tally.
36. Target.
37. Terminate.
38. Threat.
39. Timber.
40. Trespass.
41. Winchester.
42. Husky.
43. Timeout.
44. Merge.
45. Skosh.
46. Shotgun.
47. Continue.
48. Point (ed) (Classified when filled in).
49. Spider (Classified when filled in)
50. Tesla
51. Stiffarm
52. Monitor
53. Lean(ing)
54. Drop(ing)
55. Blow(ing)
56. Web (Classified when filled in)
57. Holster

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

Instructor. AICS, AICI

References.

1. MTTP ALSA Brevity
2. MTTP ALSA Air Control Communication
3. MTTP ALSA Fighter Integration (SIPR)

ACAD-2068 1.0 * B (N) G

Goal. Define Integrated Fire Control terms and roles.

Requirement. Perform the following (Classified when filled in):

1. Define Integrated Fire Control (IFC).
2. Identify and define the Types of Engagements
3. Define Weapons Quality Track (WQT)
4. Define Fire Control Quality Track (FCQT)
5. Define Cooperative Tracker (CT)
6. Define Cooperative Shooter (CS)
7. Define Weapons Controller (WC)
8. State the track requirements to conduct IFC using AC2S
9. State datalink network requirements to conduct IFC (e.g. Link 16)
10. Identify the types of engagements USMC platforms can currently execute.

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

Instructor. BI, SI, WTI.

References.

1. NAWDC – CAEWWS Manual - Tactical Networks, Aug 2020. (SIPR)
Web: intelshare.intelink.sgov.gov/sites/NAWDC/weapons-schools/sitepages/CAEWWS/CAEWWS.aspx
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. Marine Corps Primer on Expeditionary Integrated Fire Control.
4. MAWTS-1 – C3/Air Defense - IFC Quicklook – Oct 2020 (SIPR)
Web: intelshare.intelink.sgov.gov/sites/mawts1
5. AC2S Help Menu (TDF)

ACAD-2070 2.0 * B (N) G

Goal. Describe the technical and tactical considerations involved in tanker management.

Requirement. Given the reference:

1. Identify the different types of U.S. tanker aircraft and their capabilities
2. Understand the following planning considerations for AAR operations
 - a. Configuration
 - b. Max Offload
 - c. Burn Rate
 - d. Slide/Scram
3. Understand the following terms:
 - a. AAR Control Time (ARCT)

- b. AAR initial Point (ARIP)
- c. AAR Control Point (ARCP)
- d. AAR Entry Point (AREP)
- e. AAR Track
- f. Boom
- g. Boom Drogue Adapter (BDA)
- h. Multi-Point Refueling System (MPRS)
- i. Probe and Drogue

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

Instructor. BI, SI, WTI

References.

- 1. JP 3-17, Air Mobility Operations
- 2. NATO Standard ATP 3.3.4.2 Air-to-Air Refueling ATP-56
- 3. United States ATP 3.3.4.2

ACAD-2072 2.0 * B _____ (N) G

Goal. Describe Airspace Coordinating Measures, Fire Support Coordination, Air Reference Measures, and Air Defense Measures.

Requirement. Given the references: Define the following measures and identify the overlay shape associated with TDF:

- 1. Airspace Coordinating Measures (ACMs).
 - a. Air Corridor (AIRCOR)
 - b. Minimum-Risk Route (MRR)
 - c. Restricted Operations Zone (ROZ)
 - d. Air-to-Air Refueling Area (AAR)
 - e. Close Air Support Area (CAS Stack)
 - f. Combat Air Patrol (CAP)
 - g. Coordinating Altitude (CA)
 - h. Coordination Level (CL)
 - i. High Density Airspace Control Zone (HIDACZ)
 - j. No Fly Area (NOFLY)
 - k. Surface-to-Surface Munitions (SSM)
- 2. Fire Support Coordination Measures (FSCMs).
 - a. Airspace Coordination Area (ACA)
 - b. Coordinated Fire Line (CFL)
 - c. Fire Support Coordination Line (FSCL)
 - d. Free Fire Area (FFA)
 - e. Kill Box (KILLBX)
 - f. No Fire Area (NFA)
 - g. Restrictive Fire Line (RFL)
 - h. Restrictive Fire Area (RFA)
- 3. Air Reference Measures.
 - a. Air Control Point (ACP)
 - b. Bullseye (BULL)
 - c. Contact Point (CP)
 - d. Identification, Friend or Foe Switch Off/On line (IFF OFF/ON)
 - e. Search and Rescue Point (SARDOT)

4. Air Defense Measures (ADM)
 - a. Air Defense Area
 - b. Air Defense Identification Zone (ADIZ)
 - c. Base Defense Zone (BDZ)
 - d. Fighter Engagement Zone (FEZ)
 - e. High-Altitude Missile Engagement Zone (HIMEZ)
 - f. Joint Engagement Zone (JEZ)
 - g. Low-Altitude Missile Engagement Zone (LOMEZ)
 - h. Missile Engagement Zone (MEZ)
 - i. Short-Range Air Defense Zone (SHORADEZ)

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

Instructor. BI, SI, WTI

References.

1. JP 3-52, Joint Airspace Control
2. MCTP 3-20C, Anti-air Warfare

ACAD-2102 1.5 * B (N) G

Goal. State the capabilities, limitations and employment considerations for U.S. Air Force aircraft.

Requirement. Given the references, provide the mission, weapons, ID capabilities, and general employment considerations of the following aircraft regarding AAW and tanking: (Classified When filled in)

1. F-15 C-D Eagle.
2. F-15 E Strike Eagle.
3. F-16A-CJ Fighting Falcon.
4. F-22 Raptor.
5. E-3 Sentry.
6. F-35A (Fuel and weapons Deviations only).
7. MQ-1 Predator
8. MQ-9 Reaper
9. A-10 Thunderbolt
10. B-1 Lancer
11. B-2 Spirit
12. B-52 Stratofortress
13. JSTARS
14. RC-135

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

Instructor. BI, SI, WTI

Reference.

1. AFTTP 3-1, vol. 1, Attachment 3.

ACAD-2104 3.0 * B (N) G

Goal. State the capabilities and limitations of Threat Aircraft.

Requirement. Given the references, provide missions, proliferation (threat nations of interest), weapons, and threat category for aircraft listed in Reference (2). (Classified when filled in):

1. Fighter
2. Bomber
3. Multi-role
4. Special Mission

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

Instructor. SI, WTI

References.

1. AFTTP 3-1.2, Threat Reference guide and Counter tactics
2. TOPGUN Manual, Chapter 14, Threat Aircraft

ACAD-2106 1.0 * B (N) G

Goal. Define Threat Missile Terms.

Requirement. Given the references, define the following terms (Classified when filled in):

1. F-Pole.
2. A-Pole.
3. Stern WEZ.
4. 'nc'.
5. 'tc'.
6. 'mc'.
7. Cold Crank

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

Instructor. AICS, AICI

References.

1. AFTTP 3-1.2, Threat Reference guide and Counter tactics
2. TOPGUN Manual, Chapter 17, Threat Air-to-Air Missiles

ACAD-2108 1.0 * B (N) G

Goal. Define Threat Missile Terms.

Requirement. Given the references and assigned AOR provide threat employment considerations of air-to-air and air-to-ground missiles listed in references (3) to include guidance type, category, proliferation (Nation of Interest), and Rule of Thumb (ROT) missile for each category. (Classified when filled in):

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

Instructor. AICI .

References.

1. AFTTP 3-1.2, Threat Reference guide and Counter tactics

2. TOPGUN Manual, Chapter 14, Threat Aircraft
3. TOPGUN Manual, Chapter 17, Threat Air-to-Air Missiles
4. TOPGUN Manual, Chapter 18, Rules-of-Thumb

ACAD-2116 1.0 * B _____ (N) G

Goal. Describe the F/A-18A-D, F-35B/C and Fighter Integration (FI) Air-to-air Concept of Employment.

Requirement. Given the references, discuss the air-to-air concept of employment for (Classified when filled in):

1. Force Ratio (F/R)
2. Launch and Leave
3. Launch and Decide
4. Banzai
5. Wall
6. Grind
 - a. Fire Control Radar (FCR) requirements
7. Geometry/Spacing/Formation requirements
 - a. F/A-18 C/D
 - b. F-35B/C
 - c. FI
8. Targeting Responsibilities/Priorities
9. Risk to Mission and Risk to Force

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques, and Procedures 3-22.1 F/A18C/D (SIPR)
2. TOPGUN Manuel, Chapter 43, Strike Fighter Integration (SIPR)
3. MTTP ALSA Fighter Integration (SIPR)

ACAD-2118 0.5 * B _____ (N) G

Goal. Explain the following assessment points where fighter leads make tactical decisions and update tactic, flow and targeting for F-35B/C and F/A-18A-D

Requirement. Given the references, explain assessment points and their purpose (Classified when filled in):

1. Initial Picture
2. Passing in Grind Ops
3. Cold Ops
4. Maneuver

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D (SIPR)

2. TOPGUN Manual, Chapter 43, Strike Fighter Integration (SIPR)

ACAD-2120 1.0 * B (N) G

Goal. State the concepts and definitions associated with the following tactics and defensive considerations

Requirement. Given the references, define the following terms and concepts and state how they are constructed (Classified when filled in):

1. Wall.
2. Grind.
3. 4-Ship In.
4. Recommit.
5. Division Delouse.
6. Staggerback.
7. Notchback.
8. Advantageous Element Out. (AEO)
9. Exit attack.
10. Notch attack.
11. Abort.
12. Bullpen Delouse
13. Delay Reform

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D
2. MTTP ALSA Fighter Integration
3. MAWTS-1 SIPR SharePoint Courseware

ACAD-2122 2.0 * B (N) G

Goal. State the timelines and concepts for the FA-18A-D Hornet, F-35B/C and Fighter Integration (FI).

Requirement. Given the references, construct each timeline of the following timelines (Classified when filled in):

1. F/A-18A-D Common Timeline
2. F-35 B/C Timelines
3. FI Timelines

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D
2. MTTP ALSA Fighter Integration
3. MAWTS-1 SIPR SharePoint Courseware

ACAD-2126 1.0 * B (N) G

Goal. Describe the types of targeting used in Anti-Air Warfare.

Requirement. Given the references, discuss the following types of targeting, and give an example of when they are applied:

1. Directive Targeting
2. Area of Responsibility (AOR)
3. Picture Targeting
4. Risk to Mission vs. Risk to Force

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D
2. MTTP ALSA Air Control Communications
3. MTTP ALSA Fighter Integration
4. TOPGUN Manual, Chapter 42, F/A-18 Air-to-Air Employment
5. MAWTS-1 SIPR SharePoint Courseware

ACAD-2128 2.0 * B (N) G

Goal. State standard picture targeting contracts. For F/A-18C/D and F-35B/C

Requirement. Given the reference:

1. State the standard picture targeting against the following presentations:
 - a. Single Group.
 - b. Single Group Stack.
 - d. Range \geq TD.
 - e. Range \leq TD.
 - f. Narrow Azimuth.
 - g. Wide Azimuth.
 - h. Single Group Heavy.
 - i. Wall.
 - j. Champagne.
 - k. Vic.
 - l. Box.
 - m. Ladder.

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D
2. MAWTS-1 SIPR SharePoint Courseware

ACAD-2134 0.5 * B (N) G

Goal. State when the following group names should be applied.

Requirement. Given the reference, provide the following:

1. Range that AIC can use the group name "Threat Group."
2. Range that AIC can use the group name "Additional Group."
3. Range that AIC can use the group name "Pop-Up Group."
4. Explain number naming convention
5. Explain cardinal direction naming amplifiers

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

Instructor. AICI

Reference.

1. MTTP ALSA Air Control Communications

ACAD-2140 1.0 * B (N) G

Goal. Identify Logistical support requirements for TAOC Operations.

Requirement. Given a movement order, Equipment Density List (EDL), and manning document:

1. Examine available personnel, equipment, vehicles, and trailers.
2. Determine priorities for loading and unloading based on position occupation plan.
3. Determine convoy order based on position occupation plan.
4. Graphically display personnel and equipment carried in each vehicle trailer.
5. Ensure classified cargo, sensitive cargo, and hazardous material (HAZMAT) is properly loaded.
6. Establish bump plan for personnel, equipment, and classified material should vehicle/trailer become disabled.

Performance Standard. Conduct all the items in accordance with the references.

Instructor. SI, WTI

Reference.

1. MCRP 4-11.3G, Unit Embarkation Handbook
2. FM 4-01.011, Unit Movement Operations

ACAD-2142 1.0 * B (N) G

Goal. Define the characteristics of Cooperative Engagement Capability (CEC). (Classified)

Requirement. Perform the following:

1. State the purpose of CEC.
2. State the characteristics of the CEC network.
3. Identify the Navy platforms capable of participating in the CEC network.
4. State the Marine Corps equipment required to interface with CEC.
5. Identify and extract key operational information from the OPTASKCEC
6. Discuss basic connectivity considerations for CEC participants.

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

Instructor. BI

Reference.

1. NAWDC – CAEWWS Manual - Tactical Networks, Aug 2020. (SIPR)
Web: intelshare.intelink.sgov.gov/sites/NAWDC/weapons-schools/sitepages/CAEWWS/CAEWWS.aspx
2. TACMEMO 3-01.3-12 CEC Tactical Employment Guide, Feb 2012
3. USN Capabilities and Limitations website <http://cnl.phdnswc.navy.smil.mil/>
4. Navy CEC Fact Sheet
5. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
6. Marine Corps Primer on Expeditionary Integrated Fire Control

4.7.4 LOCAL AREA FAMILIARIZATION (LFAM).

4.7.4.1 Purpose. To familiarize the 7236 with local restricted airspace.

Admin Notes. This stage is required prior to executing any other Core Skill events. It must be conducted every time the 7236 is assigned to new airspace or required to be refreshed per their training record.

LFAM-2150 5.0 1095 B, R, M (N) GE

Goal. Brief local restricted areas.

Requirement. Given source documents and a local map:

1. Identify local restricted areas on a map.
2. Identify characteristics of each local restricted area.
3. Identify agencies responsible for each local restricted area.
4. Identify communication requirements for each local air control agency.

Performance Standard. Brief the instructor on local restricted areas IAW requirements. Minor errors corrected by the trainee are acceptable.

Instructor. AICI, WTI

Prerequisite. 2072

Reference.

1. Unit SOP

4.7.5 EQUIPMENT (EQUIP)

4.7.5.1 Purpose. The purpose of this stage is to train the 7236 on various command and control systems. It will also train the 7236 in setting up and operating the Operations Facility (OPFAC), assist Tactical Data Systems(TDS), communications, and radar personnel.

EQUIP-2160 8.0 * B (N) L

Goal. Emplace and displace the Operations Facility (OPFAC).

5. Notify external agencies and aircraft.

Performance Standard. Completing the requirement items. The instructor may provide minimal guidance.

Instructor. BI, SI, WTI

References.

1. MCO 3400.3_, Nuclear, Biological, and Chemical Defense (NBCD) Training
2. MCO 3501.9B, Marine Corps Combat Readiness Evaluation System

4.7.6 WEAPONS OPERATOR (WO)

4.7.6.1 Purpose. To teach Marines how to assist the weapons sections in the execution of their assigned duties.

Admin Notes. This stage of training may be conducted concurrently with other stages.

WO-2200 1.0 * B (N) L

Goal. Produce a TATC log.

Requirement. Given references and operational documents, conduct the following:

1. List required information to extract from the Air Tasking Order (ATO).
2. Utilizing C2 programs, view, sort, and filter, an ATO.
3. Export into a document format (Excel, Text).

Performance Standard. Present the instructor with an error free TATC log.

Instructor. BI, SI, WTI

Prerequisite. 2034

Reference.

1. TBMCS User's Manual

WO -2202 8.0 * B (N) L/S

Goal. Assist in aircraft handovers.

Requirement. Given a scenario, operational documents, copy of TATC Log, and a C2 System:

1. Monitor aircraft communications.
2. Record mission essential information, to include but not limited to:
 - a. Callsign.
 - b. Number of aircraft.
 - c. Mission.
 - d. Altitude and location.
 - e. Tasking.
3. Provide aircraft mission essential information to internal crew members.
4. Provide aircraft mission essential information to an external controlling agency.

5. Confirm receipt of handover with external controlling agency.
6. Maintain a log

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

Instructor. BI, SI, WTI

Prerequisite. 2072, 2200

Reference.

1. MCWP 3-25.7, TAOC Handbook

WO-2206 4.0 * B (N) L/S

Goal. Maintain track symbology.

Requirement. Given a scenario, a C2 system, and aircraft:

1. Input required information into symbology data display window.
2. Maintain previously established classifications of lost tracks in accordance with ID criteria.
3. Monitor track quality of symbol under agency control.
4. Manually maintain tracks with critical symbology.
5. Delete non-mission critical symbols with poor track quality
6. Digitally control aircraft.

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

Instructor. BI, SI, WTI

Prerequisite. 2000, 2072, 2028, 2060

References.

1. MCWP 3-25.7, TAOC Handbook
2. U-TAOC-PCL-03862, Pocket Checklist

4.7.7 SURVEILLANCE OPERATOR (SO).

4.7.7.1 Purpose. To introduce the 7236 to the techniques required to produce and maintain the accuracy, currency and quality of track data.

SO-2300 1.0 * B (N) G

Goal. Create, identify and classify and update surveillance tracks.

Requirement. Given an operational C2 system, ATO, and an ID Matrix, perform the following:

1. Timely Classification of a sensor track IAW the ID matrix.
2. Create and classify a manual track post obtaining situation awareness of track location.
3. Update track with correct T/M/S, mission, and status.
4. Update track status in ATO management tool

Performance Standard. Update track information to provide situational awareness for crew.

Instructor. BI, SI, WTI

Prerequisite. 2000, 2072, 2028, 2034

Reference.

1. TAOC TACSOP

SO-2302 1.0 * B (N) G

Goal. Identify and classify surveillance tracks in a Tactical Data Link (TDL) environment.

Requirement. Given an operational C2 system with a TDL with an external agency:

1. Manually correlate dual designations.
2. Recognize and report to the SD ID and IFF conflicts.
3. Recognize and report interface anomalies, if applicable.
4. Respond to data link orders as directed by the SD.

Performance Standard. Identify all dual designations and conflicts, and take corrective action without instructor assistance.

Instructor. BI, SI, WTI

Prerequisite. 2000, 2072, 2028, 2034, 2800, 2811, 2812

Reference.

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

SO-2304 1.0 * B (N) G

Goal. Conduct manual cross-tell.

Requirement. Given a scenario, and required documentation and information:

1. Create appropriate overlays used during manual cross-tell.
2. Identify the purpose of manual cross-tell.
3. Identify the nets used for manual cross-tell.
4. Using the relevant OPTASKLINK conduct manual cross-tell.

Performance Standard. Complete requirement items IAW the references.

Instructor. BI

Prerequisite. 2000, 2072, 2022, 2028, 2034, 2800

Reference.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JTMOP) Manual
2. Applicable OPTASKLINK

4.7.8 SURVEILLANCE DIRECTOR (SD).

4.7.8.1 Purpose. To train the 7236 in detailed surveillance planning skills required to manage the surveillance section.

Admin Notes. This stage of training may be conducted concurrently with the WD stage.

Prerequisite. 4200, 4202, 6255

SD-2310 8.0 * B (N) GE

Goal. Develop radar coverage diagram.

Requirement. With the aid of a WD and given a scenario, a map and terrain analysis software:

1. Develop a radar coverage diagram for system radars that identify potential gaps in coverage due to terrain masking and radar horizon limitations.
2. Develop a recommended emplacement plan for MACS organic sensors.

Performance Standard. Provide completed documents and brief the instructor on each requirement.

Instructor. BI, SI, WTI

Prerequisite. 6255

Reference.

1. MCWP 3-25.7, TAOC Handbook

SD-2312 8.0 * B (N) GE

Goal. Conduct EW planning.

Requirement. With the aid of a WD and given a scenario:

1. Identify enemy EW capabilities and effects on unit sensors and communications.
2. Produce an EP plan to counter enemy EW capabilities to include:
 - a. Emissions Control (EMCON) plan.
 - b. Subordinate unit Radiation Control (RADCON) plan.

Performance Standard. Complete the requirement items. Minor errors corrected by the trainee are acceptable. Instructor will discuss each item with the trainee.

Instructor. BI.

Prerequisites. 6255

References.

1. MCRP 3-25.7, TAOC Handbook.
2. TPS-80: TM 12532/13094-13&P/3

4.7.9 TACTICAL AIR TRAFFIC CONTROLLER (TATC).

4.7.9.1 Purpose. To train the TATC to perform airspace control within the TAOC's assigned sector for all missions not controlled by the AIC.

Admin Notes.

1. This stage of training may be conducted concurrently with other stages provided the prerequisites have been met.
2. Based on geographical locations an Air Force Weapons School Air Intercept Control Graduate may be the only option for supervising and instructing controllers working through their syllabus. This allows Air Force Weapons School Air Intercept Control Graduates to instruct and recommend AICs for qualification through the WTI as needed to ensure CMMR is met.

Prerequisites. 2000, 2026, 2028, 2034, 2050, 2056, 2058, 2060, 2066, 2102, 2150, 2160, 2162, 2164, 2200, 2202, 2206, 2910, 2940, 2941, 3200, 3202, 6250, 6275, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008

TATC-2352 8.0 * B _____ (N) GE

Goal. Conduct TATC planning.

Requirement. Given a scenario and operational documents, perform TATC planning for:

1. Local routing procedures for all expected aircraft to include:
 - a. Check in and handover points.
 - b. Handover procedures for internal and external handovers.
 - c. Control points or airspace reference method (e.g. GARS) that will be common between aircrew and controller.
 - d. Routing de-confliction plan.
2. AAR operations to include:
 - a. Track locations.
 - b. Join-ups procedures.
 - c. Scheduled tanking events.
 - d. Prioritization of receivers.
 - e. Routing and handover communications.
3. Known safety or flight hazards to include any applicable restricted areas.
4. Military and nonmilitary airspace considerations:
 - a. De-confliction procedures with civil airways/Federal Aviation Administration (FAA).
 - b. Visual Flight Rules (VFR) / Instrument Flight Rules (IFR) regulations.
5. Emergency procedures IAW SPINS and local area familiarization.
6. Hung ordnance procedures and drop locations.
7. Appropriate data link procedures and planned usage.
8. Slide and retrograde plan as required.
9. RTF/MRR as required.

Performance Standard. Provide a brief to the instructor on the requirements. The Marine should be prepared to answer questions on planning considerations.

Instructor. BI, SI, WTI

Prerequisite. 2020, 2024, 2050, 2070, 2102, 6250, 6256, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008

References.

1. U-TAOC-PCL-03862, TAOC Pocket Checklist
2. MCWP 3-25.7, Tactical Air Operation Center (TAOC) Handbook
3. MCWP 3-22, Anti-Air Warfare
4. MCWP 3-25, Control of Aircraft and Missiles
5. JP 3-52, Joint Airspace Control
6. MCRP 3-25E, Multi-Service Tactics, Techniques, and Procedures for an Integrated Air

Defense Systems (IADS)

TATC-2354 2.0 * B (N) L/S

Goal. Conduct aircrew check-in / handover procedures.

Requirement. Given a scenario, references, C2 system, core skill proficient weapons section, perform the following TATC functions:

1. Load traffic section user profile
2. Verify assigned radio on the UID is programmed to the correct frequency / crypto setting.
3. Receive initial aircrew check-in exemptions and confirm / verify aircraft location
4. Conduct IFF / SIF checks.
5. Perform authentication (if required)
6. Provide aircrew with situational awareness IAW the ACC or local SPINS
7. Provide safe and efficient routing.
8. Receive and disseminate: In-Flight Report
 - a. In-Flight Report (INFLTREP)
 - b. Battle Damage Assessment (BDA)
 - c. Pilot Report (PIREP) (Weather report)
9. Coordinate with receiving controller / controlling agency for follow on routing / stack placement.
10. Conduct external/internal handovers.
11. Update aircraft status in ESTAT and maintain TATC Log.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. BI, SI, WTI

Prerequisite. 2352

References.

1. TAOC TACSOP (Appendix E)
2. MCRP 3-20F.6, Tactical Air Operations Center Handbook
3. TBMCs User Manual (verify which one is current)
4. MCRP 3-25E, Multi-Service Tactics, Techniques, and Procedures for an Integrated Air Defense Systems (IADS)
5. CJCSM 6120.01_, Joint Multi-Tactical Data Link Operating Procedures (JMTOP) Manual
6. MTTP, Air Control Communication

TATC-2356 2.0 * B (N) L/S

Goal. Perform authentication procedures.

Requirement. Given a scenario, references, C2 system, core skill proficient weapons section, perform the following TATC functions:

1. Authenticate calls.
2. Respond to challenges.
3. Encrypt using RAMROD.
4. Decrypt using RAMROD.
5. Describe and/or perform the Gingerbread procedures.
6. Describe and/or perform Beadwindow procedures.
7. Perform chattermark procedures

Performance Standard. Complete the requirement items IAW the references. Minor errors corrected by the trainee are acceptable. The instructor may provide minimal guidance.

Instructor. BI, SI, WTI

Prerequisite. 2352

References.

1. MCRP 8-10B.10, Radio Operator's Handbook
2. MTTP, Air Control Communication
3. Applicable ACEOI
4. TAOC TACSOP

TATC-2358 8.0 * B (N) L/S

Goal. Perform procedural control.

Requirement. Given a scenario, references, C2 system, core skill proficient weapons section, perform the following TATC functions:

1. Verify aircraft location using control or reference points.
2. Provide routing to aircrew IAW ACP / ACO / SPINS
3. Update / change routing as the tactical situation dictates.
4. Inform aircrew of other aircraft on their route that are within 3k ft of their transit altitude.
5. Stack aircraft in a manner that reduces the amount of aircraft altitude changes and radio transmissions.
6. Re-stack aircraft, using control points, to open altitude blocks for additional aircraft.
7. Clear airspace for requested ACM activation.
8. Route aircraft around active ACMs, using control points.

Performance Standard. Complete the requirement items IAW the references. Minor errors corrected by the trainee are acceptable. The instructor may provide minimal guidance.

Instructor. BI

Prerequisite. 2352

References.

1. MTTP, Air Control Communication
2. Applicable ATO / ACP
3. TAOC TACSOP

TATC-2360 8.0 * B (N) L/S

Goal. Perform positive control

Requirement. Given a scenario, references, C2 system, core skill proficient weapons section, perform the following TATC functions:

1. Verify aircraft location using sensors or data link.
2. Provide routing to aircrew IAW ACP / ACO / SPINS.
3. Update / change routing as the tactical situation dictates.
4. Provide traffic calls, in BRAA format, for all aircraft IAW local airspace procedures.
5. Stack aircraft in a manner that reduces the amount of aircraft altitude changes and radio transmissions.

6. Re-stack aircraft, using radar situational awareness, to open altitude blocks for additional aircraft.
7. Clear airspace for requested ACM activation.
8. Route aircraft around active ACMs,

Performance Standard. Complete the requirement items IAW the references. Minor errors corrected by the trainee are acceptable. The instructor may provide minimal guidance.

Instructor. BI, SI, WTI

Prerequisite. 2352

References.

1. MTTP, Air Control Communication
2. Applicable ATO / ACP
3. TAOC TACSOP

4.7.10 AIR INTERCEPT CONTROLLER 1 (AIC1)

4.7.10.1 Purpose. To familiarize the AIC student with the core communications, procedures, and tactics associated with Tactical Intercepts. Upon completion of the (section) AIC1 POI, the student will be assessed by an AICI to become certified as a level 1 AIC. Upon certification the student will be authorized to control up to a section of aircraft unsupervised.

Admin Notes.

1. Missions will be executed per ROE established by published AAW directives, operational planning orders/documents, or individual mission briefs
2. For evaluation purposes, a mission will consist of a fighter mission brief to the AIC, AIC brief to the AICS or AICI, execution of the event, AIC debrief to the AICS or AICI, and fighter mission debrief to the AIC. Weapons Data Links (e.g. Link 16, CEC) will be used to the fullest extent possible.
3. Tactical Combat Training System (TCTS) facilities should be used when available for debriefing.
4. The primary organic C2 system will be used to the fullest extent possible. When necessary, events can be conducted from an instrumented range with equipment hosted at the range or similar C2 system.
5. Live AIC events will be accomplished in conjunction with events from the F/A-18 and F-35 T&R Manuals that require Tactical Intercepts. Weapons and Tactics Training Program (WTTP) Officers should coordinate with fighter squadrons to accomplish these events.
6. When performing as an AIC, the AIC might encounter different tactics depending on the service he/she is supporting. Because of this, the AIC syllabus is built around providing the maximum amount of credit for each AIC event regardless of the service the AIC is supporting.
7. Based on geographical locations an Air Force Weapons School Air Intercept Control Graduate may be the only option for supervising and instructing AICs working through their syllabus. This allows Air Force Weapons School Air Intercept Control Graduates to instruct and recommend AICs for qualification through the WTI as needed to ensure CMMR is met.

Prerequisites. 6250, 6256

AIC1-2500 1.0 * B, R (N) GE

Goal. Conduct a brief for a section DCA/OCA.

Requirement. Given the references and fighter/striker brief, conduct a DCA/OCA brief using proper whiteboard setup, symbology and tactical scenario

Performance Standard. Conduct brief with the AICI or AICS IAW the references and fighter/striker brief.

Instructor. AICS, AICI

Prerequisite. 2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MAWTS-1 NIPR SharePoint AIC Briefing Lab Courseware

AIC1-2502 8.0 * B, R (N) L/S

Goal. Perform AIC functions for a section of fighter aircraft conducting DCA.

Requirement. Given a C2 system or a simulation, control a section of fighter aircraft against an unknown threat providing the following:

1. Accurate initial picture.
2. Recognition of commit/reset criteria.
3. Transition from broadcast control to tactical control with proper labels and names.
4. Accurate and timely TAC Range.
5. Accurate and timely declarations.
6. Accurate and timely recognition and communication of maneuvering targets.
7. Post merge picture.
8. Effective cold ops execution/communication when required.
9. Effective communications brevity IAW reference.

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

Instructor. AICS, AICI

Prerequisite. 2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, , 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2504 8.0 * B, R (N) L/S

Goal. Perform AIC functions for a section of fighter aircraft conducting OCA.

Requirement. Given a C2 system or a simulation, control a section of fighter aircraft against an unknown threat providing the following:

1. Accurate initial picture.
2. Recognition of commit/reset criteria.
3. Transition from broadcast control to tactical control with proper labels and names.
4. Accurate and timely TAC Range.
5. Accurate and timely declarations.
6. Accurate and timely recognition and communication of maneuvering targets.
7. Post merge picture.
8. Effective cold ops execution/communication when required.
9. Effective communications brevity IAW reference.

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

Instructor. AICS, AICI

Prerequisite. 2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040

References.

1. MTTP ALSA Air Control Communication
2. ANTPP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2506 8.0 * B, R (N) L/S

Goal. Maintain timeline awareness

Requirement. Given a C2 system or simulation maintain timeline awareness, control a section of fighter aircraft against unknown threat:

1. Commits/recommends commit of fighters IAW briefed criteria.
2. Transition to tactical control automatically as briefed or IAW reference.
3. Provide TAC Range calls on timeline IAW reference.
4. Use of AIC directive targeting when required IAW reference.
5. Make appropriate threat calls as needed.
6. Use of additional group/pop-up group/pop-up threat group IAW reference.

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

Instructor. AICS, AICI

Prerequisite. 2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040

References.

1. MTTP ALSA Air Control Communication
2. ANTTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2508 8.0 * B, R (N) L/S

Goal. Perform AIC communications.

Requirement. Given a C2 system or simulation and while demonstrating correct communications format, control a section of fighter aircraft against unknown threat and provide the following:

1. Correct callsign usage.
2. When using core information, group are referenced in order of priority as briefed.
3. Labels (range, azimuth, ladder, wall, vic, champagne, etc) are used to accurately describe a picture.
4. Label fill-ins (opening, echelon, stack, weighted are provided when applicable and in the correct order.
5. Group numbering or label with additional group(s) is used when a label does not fit.
6. When using tactical control the group that is anchored is the priority group.
7. Bullseye, GeoRef, and BRAA anchor points are used correctly.
8. Communications format fill-ins are provided in the correct order.
9. Strength (“Heavy”) provided when appropriate.
10. Declarations are provided accurately with appropriate modifiers.
11. Identification of groups is provided accurately.
12. Format TAC Range call is accurate.
13. Format of nails/spike/music/strobe range calls is correct.
14. Bogey Dope.

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

Instructor. AICS, AICI

Prerequisite. 2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040

References.

1. MTTP ALSA Air Control Communication
2. ANTTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2510 8.0 * B, R (N) L/S

Goal. Perform AIC functions.

Requirement. Given a C2 system or simulation and while demonstrating AIC functions, control a

section of fighter aircraft against unknown threat:

1. Makes picture calls pre-commit.
2. Recommends/directs commits or resets as briefed or IAW reference.
3. Makes “new picture” calls as briefed or IAW reference.
4. QA of fighter targeting/monitoring and directivity targets as required.
5. Provides descriptive updates.
6. Provides QA of fighter flow.
7. TAC Range call made when briefed or IAW reference.
8. Corrects name of group called by fighter, if incorrect, in subsequent calls.
9. Uses voice inflection on critical elements of information

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

Instructor. AICS, AICI

Prerequisite. 2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040

References.

1. MTTP ALSA Air Control Communication
2. ANTTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2512 8.0 * B, R (N) L/S

Goal. Respond to fighter requests.

Requirement. Given C2 systems and while demonstrating listening and comprehension skills, control a section of fighter aircraft against unknown threat:

1. Responds to fighter SA request (when appropriate to do so) within two seconds.
2. Responds to SA requests with the correct type of response (picture, anchor point selection, threat, etc) IAW reference.
3. Acknowledges requests for targeting or monitoring.

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

Instructor. AICS, AICI

Prerequisite. 2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040

References.

1. MTTP ALSA Air Control Communication
2. ANTTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2514 8.0 * B, R (N) L/S

Goal. Perform scope mechanics.

Requirement. Given C2 systems, references, scenario, and while demonstrating scope mechanics, interpretation, and utilization, control a section of fighter aircraft against unknown threat:

1. Groups are anchored accurately enough to solve for fighter correlation.
2. Altitude is provided accurately within system tolerances (including stack recognition).
3. Maintains SA to location of fighters and anchors group to the correct fighter element.
4. Recognizes that a group is maneuvering within two radar/IFF updates.
5. Gains SA on groups that are new to a problem within three seconds of the instructor.
6. Correctly identifies group maneuvers (maneuver in range/azimuth/elevation).
7. Correctly identifies aspects of groups.

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

Instructor. AICS, AICI

Prerequisite. 2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040

References.

1. MTTP ALSA Air Control Communication
2. ANTPP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2516 8.0 * B, R (N) L/S

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

Requirement. Given a C2 System with live tactical radar inputs control a section of fighter aircraft against an unknown threat and provide the following:

1. Accurate initial picture.
2. Recognition of commit/reset criteria.
3. Transition from broadcast control to tactical control with proper labels and names.
4. Accurate and timely TAC Range.
5. Accurate and timely declarations.
6. Accurate and timely recognition and communication of maneuvering targets.
7. Post merge picture.
8. Effective cold ops execution/communication when required.
9. Effective communications brevity IAW reference.

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

Instructor. AICS, AICI

Prerequisite. 2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

4.7.11 AIR INTERCEPT CONTROLLER (AIC2)

4.7.11.1 Purpose. To familiarize the AIC student with communications, procedures, and tactics associated with Tactical Intercepts. Upon completion of the (division) AIC2 POI, the student will be assessed by an AICI to become certified as a level 2 AIC. Upon certification the student will be authorized to control up to a division of aircraft unsupervised.

Admin Notes.

1. Missions will be executed per ROE established by published AAW directives, operational planning orders/documents, or individual mission briefs.
2. For evaluation purposes, a mission will consist of a fighter mission brief to the AIC, AIC brief to the AICS or AICI, execution of the event, AIC debrief to the AICS or AICI, and fighter mission debrief to the AIC. Weapons Data Links (e.g. Link 16, CEC) will be used to the fullest extent possible.
3. Tactical Combat Training System (TCTS) facilities should be used when available for debriefing.
4. The primary organic C2 system will be used to the fullest extent possible. When necessary, events can be conducted from an instrumented range with equipment hosted at the range or similar C2 systems.
5. Live AIC events will be accomplished in conjunction with events from the F/A-18 and F-35 T&R Manuals that require Tactical Intercepts. Weapons and Tactics Training Program (WTTP) Officers should coordinate with fighter squadrons to accomplish these events.
6. When performing as an AIC, the AIC might encounter different tactics depending on the service he/she is supporting. Because of this, the AIC syllabus is built around providing the maximum amount of credit for each AIC event regardless of the service the AIC is supporting.
7. Based on geographical locations an Air Force Weapons School Air Intercept Control Graduate may be the only option for supervising and instructing AICs working through their syllabus. This allows Air Force Weapons School Air Intercept Control Graduates to instruct and recommend AICs for qualification through the WTI as needed to ensure CMMR is met.

Prerequisite. 6276

AIC2-2550 1.0 * B, R (N) GE

Goal. Conduct a brief for a division DCA/OCA.

Requirement. Given the references, fighter brief and a tactical scenario, conduct an AIC brief

using proper whiteboard setup, and symbology.

Performance Standard. Conduct brief with the AICI or AICS IAW the references and fighter/striker brief.

Instructor. AICS, AICI

Prerequisite. 2102, 2104, 2120, 2126, 6276, 8020, 8040, 8060, 8080

References.

1. MTTP ALSA Air Control Communication
2. ANTTTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MAWTS-1 NIPR SharePoint AIC Briefing Lab Courseware

AIC2-2552 8.0 * B, R (N) L/S

Goal. Perform AIC functions for a division of fighter aircraft conducting DCA/OCA.

Requirement. Given organic tactical systems, references, scenario, and while demonstrating scope mechanics, interpretation, and utilization, control a division of fighter aircraft against unknown threat:

1. Maintain timeline awareness.
2. Perform AIC communications.
3. Perform proactive involvement.
4. Respond to fighter requests.
5. Perform scope mechanics.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor) IAW the references. Minor errors corrected by the trainee are acceptable.

Instructor. AICS, AICI

Prerequisite. 2102, 2104, 2120, 2126, 6276, 8020, 8040, 8060, 8080

References.

1. MTTP ALSA Air Control Communication
2. ANTTTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC2-2554 8.0 * B, R (N) L/S

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

Requirement. Given organic tactical systems, references, scenario, and while demonstrating scope mechanics, interpretation, and utilization, control a division of fighter aircraft against unknown threat:

1. Maintain timeline awareness.
2. Perform AIC communications.
3. Perform proactive involvement.

4. Respond to fighter requests.
5. Perform scope mechanics.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor) IAW the references. Minor errors corrected by the trainee are acceptable.

Instructor. AICS, AICI

Prerequisite. 2102, 2104, 2120, 2126, 6276 8020, 8040, 8060, 8080

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications

4.7.12 WEAPONS DIRECTOR (WD)

4.7.12.1 Purpose. To train the 7236 in detailed weapons planning skills that includes airspace management; AAW, DAS, and AAR asset management. These skills are required to manage the weapons section.

Prerequisite. 6253, 6255

WD-2608 8.0 * B (N) GE

Goal. Conduct threat analysis.

Requirement. With the aid of references, given a scenario and operational documents, analyze the following:

1. Threat/time distance to Critical Assets List (CAL) / Defended Asset List (DAL).
2. Threat surface-to-air missile systems.
3. Threat air-to-air platforms.
4. Threat air-to-surface delivered weapons.
5. Threat surface-to-surface weapons.

Performance Standard. Complete all requirements and present the information to the instructor. The trainee should be prepared to answer questions from the instructor.

Instructor. BI, SI, WTI

Prerequisite. 6253, 6255

References.

1. MIL-STD 6040, USMTF
2. MCWP 3-22, Anti-Air Warfare
3. MCWP 3-25, Command and Control of Aircraft and Missiles
4. JP 3-01, Countering Air and Missile Threats
5. MCRP 3-25E, Multi-Service Tactics, Techniques, and Procedures for an Integrated Air Defense System (IADS)
6. JP 3-52, Joint Airspace Control

WD-2609 8.0 * B (N) GE

Goal. Conduct air defense planning.

Requirement. Given a scenario and planning documents:

1. Extract Critical Asset List (CAL)/Defended Asset List (DAL) from source documents.
2. Extract IADS information for the AO.
3. Identify air defense asset casualty procedures.
4. Plan required GBAD liaison communications
5. Extract ROE.
6. Identify procedures for weapons assignment based on threat evaluation.
7. Identify AAW external communication requirements.
8. Identify air defense assets available for TAOC control.

Performance Standard. Complete all requirements and present the information to the instructor. The trainee should be prepared to answer questions from the instructor.

Instructor. BI, SI, WTI

Prerequisite. 6253, 6255

References.

1. MIL-STD 6040, USMTF
2. MCWP 3-22, Anti-Air Warfare
3. MCWP 3-25, Command and Control of Aircraft and Missiles
4. JP 3-01, Countering Air and Missile Threats
5. MCRP 3-25E, Multi-Service Tactics, Techniques, and Procedures for an Integrated Air Defense Systems (IADS)
6. JP 3-52, Joint Airspace Control

WD-2610 8.0 * B (N) GE

Goal. Conduct airspace management planning.

Requirement. Given a scenario and operational planning documents:

1. Extract airspace management information from the Airspace Control Plan (ACP), Special Instructions (SPINS), and the Airspace Control Order (ACO).
2. Recommend Airspace Control Measures (ACM) for the TAOC Area of Operations (AO).
3. Develop internal and external aircraft handover procedures.

Performance Standard. Complete all requirements and present the information to the instructor. The trainee should be prepared to answer questions from the instructor.

Instructor. BI, SI, WTI

Prerequisite. 6253, 6255

References.

1. MIL-STD 6040, USMTF
2. MCWP 3-22, Anti-Air Warfare
3. MCWP 3-25, Command and Control of Aircraft and Missiles
4. JP 3-01, Countering Air and Missile Threats

5. MCRP 3-25E, Multi-Service Tactics, Techniques, and Procedures for an Integrated Air Defense System (IADS)
6. JP 3-52, Joint Airspace Control

WD-2611 8.0 * B (N) GE

Goal. Conduct deep air operations planning.

Requirement. Given a scenario and operational planning documents:

1. Process 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. Plan for DAS aircraft handover procedures.
3. Extract applicable database items.
4. Identify available DAS aircraft assets.
5. Identify deep air operations external communication requirements.

Performance Standard. Complete all requirements and present the information to the instructor. The trainee should be prepared to answer questions from the instructor.

Instructor. BI, SI, WTI

Prerequisite. 6253, 6255

References.

1. AFTTP 3-1, General Planning Attachment 1

4.7.13 WEAPONS (WPNS)

4.7.13.1 Purpose. To train the 7236 in emergency procedures when conducting airspace management; AAW, DAS, and AAR asset management.

Admin Notes. This stage of training may be conducted concurrently with any other stage of training.

Crew Requirements. Qualified SAD or WD.

WPNS-2660 1.0 730 B, R, M (N) S/L

Goal. Perform required weapons operator actions for a controlled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. Utilizing the C2 system, highlight the emergency aircraft in order to inform the crew visually.
3. Ensure the C2 system console is recording.
4. Accurately record all information given by the aircrew regarding the nature of the emergency and any requests.

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

Instructor. BI, SI, WTI

Prerequisite. 2202, 2206

Reference.

1. Unit SOP

WPNS-2661 1.0 730 B, R, M (N) S/L

Goal. Perform required aircraft controller actions for a controlled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. Without interrupting aircrew NATOPS procedures, request information regarding the nature of the emergency and any requests the aircrew have to safely recover.
3. Accurately convey all coordinated ATC information back to the aircrew.
4. Monitor and maintain positive contact with emergency aircraft while providing control for remaining non-emergency aircraft.
5. Ensure positive handover with next controlling agency.

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

Instructor. BI, SI, WTI

Prerequisite. 2352

Reference.

1. Unit SOP

WPNS-2662 1.0 730 B, R, M (N) S/L

Goal. Perform required Weapons Director actions for a controlled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. Verbally inform the crew of the aircraft emergency.
3. Ensure the C2 system console is recording.
4. Accurately record all information given by the aircrew regarding the nature of the emergency and any requests.
5. Pass all collected emergency aircraft information to the next controlling agency and appropriate higher agency.
6. Coordinate any aircrew request with appropriate airfield ATC.
7. Ensure positive handover with next controlling agency.

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

Instructor. BI, SI, WTI

Prerequisite. 6253, 6255

Reference.

1. Unit SOP

WPNS-2663 1.0 730 B, R, M (N) S/L

Goal. Perform required Weapons Operator actions for an uncontrolled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. If aircraft is still on the C2 system scope, highlight the emergency aircraft in order to inform the crew visually.
3. If the aircraft is not on the C2 system scope, plot and highlight the last known position of the aircraft in order to inform the crew visually.
4. Ensure the C2 system console is recording.
5. Accurately record all information given by the OSC regarding the emergency.

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

Instructor. BI, SI, WTI

Prerequisite. 2202, 2206

Reference.

1. Unit SOP

WPNS-2664 1.0 730 B, R, M (N) S/L

Goal. Perform required aircraft controller actions for an uncontrolled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. Taking into account a potential threat and on-station time remaining, assign an on-scene commander (OSC) to the last known or closest safe position of the downed aircraft.
3. Utilizing the OSC, request information regarding the potential:
 - a. Contact with the downed aircrew.
 - b. Status of the downed aircrew.
 - c. Exact position of the downed aircraft and/or aircrew (if not the same).
 - d. Cause of the downed aircraft.
 - e. Enemy in the immediate vicinity of the downed aircrew and/or aircraft.
4. Accurately pass all TRAP mission data to OSC.
5. Monitor and maintain positive contact with OSC while providing control for remaining non-emergency aircraft.

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

Instructor. BI, SI, WTI

Prerequisite. 2352

Reference.

1. Unit SOP

WPNS-2665 1.0 730 B, R, M (N) S/L

Goal. Perform required Weapons Director actions for an uncontrolled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. Verbally inform the crew of the aircraft emergency.
3. Ensure the C2 system console is recording.
4. Taking into account a potential threat and on-station time remaining, assign an on-scene commander (OSC) to the last known or closest safe position of the downed aircraft.
5. Pass all collected emergency aircraft information to the appropriate higher agency.
6. Coordinate with the higher agency for OSC relief.
7. Coordinate with the higher agency for tactical recovery of aircraft and personnel (TRAP) mission data.

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

Instructor. BI, SI, WTI

Prerequisite. 6253, 6255

Reference.

1. Unit SOP

4.7.14 CREW CHIEF (CC)

4.7.14.1 Purpose. To develop proficiency in crew and system management involved in TAOC operations.

Admin Notes. The purpose of the Crew Chief position into the crew structure is to provide the SAD with an enlisted advisor to assist with all internal/external planning prior to a mission. Furthermore, the Crew Chief should be and act as the senior enlisted advisor assisting with the internal execution and management of the crew during a mission. The goal of implementing this position is that the Crew Chief has a wealth of knowledge of all the inner workings of the TAOC and has a vast amount of experiences that the SAD and other directors can seek counsel from.

Prerequisite. To begin the crew chief stage of training, a Marine must complete the following prerequisite combinations: 2036, 2140, 6253, 6255, 6278, 6279

CC-2700 1.0 * B (N) L

Goal. Perform TAOC Crew Chief administrative functions.

Requirement. Given the necessary forms or formats and a scenario, identify the necessary information to complete and route the following reports/forms:

1. Equipment Status report.
2. Daily Operational summary (OPSUM).

3. TAOC Crew position evaluations and qualification recommendations.

Performance Standard. Complete each requirement. The instructor may provide minimal guidance.

Instructor. SI, WTI

Prerequisite. 2036, 2140, 6253, 6255, 6278, 6279

References.

1. U-TAOC-PCL-03862, TAOC Pocket Checklist
2. MCWP 3-25.7, TAOC Handbook

CC-2704 2.0 * B (N) L

Goal. Identify/troubleshoot problems and restore TAOC communications.

Requirement. Given an operational C2 system and a scenario with verifiable communications problems:

1. Identify and explain net restoration/maintenance priorities.
2. Determine the communications problems.
3. Determine source of the communication problem.
4. Initiate appropriate action and/or reports to correct the problem.

Performance Standard. Complete requirement items IAW the reference; minor errors corrected by the trainee are acceptable. Instructor may evaluate trainee on naturally occurring communication problems without a scenario should they occur.

Instructor. SI, WTI

Prerequisite. 2036, 2140, 6253, 6255, 6278, 6279

References.

1. MCRP 3-40.3B, Radio operator's handbook
2. MCRP 3-40.3C, Antenna Handbook
3. MCWP 3-40.3, Communications and Information Systems
4. U-TAOC-PCL-03862, TAOC Pocket Checklist
5. MCWP 3-25.7, TAOC Handbook
6. TM 10566C-OI/1, Communication Interface System CAC2S(V)3
7. TM 10566D-OI, Communication Interface System CAC2S(V)4

CC-2706 4.0 * B (N) L/S

Goal. Conduct a crew changeover.

Requirement. Given a scenario, supporting documentation, an operational TAOC with a passage of control checklist, demonstrate the ability to effectively conduct the following tasks while managing a TAOC crew:

1. Conduct pre watch brief, crew change brief and debrief.
2. Maintain a log and relay significant events.
3. Review forms for completeness and accuracy.
4. Ensure information processed by the TAOC is complete and accurate and routed to the appropriate agency.

5. Ensure all warfighter consoles are operational.
6. Conduct a passage of control as necessary.

Performance Standard. Conduct internal crew changeover.

Instructor. SI, WTI

Prerequisite. 2036, 2140, 6253, 6255, 6278, 6279

References.

1. U-TAOC-PCL-03862, TAOC Pocket Checklist
2. MCWP 3-25.7, TAOC Handbook

CC-2708 1.5 * B (N) GE

Goal. Plan for a TAOC site selection/map survey.

Requirement. Given the references, a Table of Equipment (T/E) and/or Equipment Density List (EDL), Commander's guidance, and a general location, select a site that will support TAOC operations and draw a site diagram accounting for the following considerations:

1. Identify environmental concerns that may affect TAOC communication.
2. Site security.
3. Camouflage and dispersion.
4. Trafficability.
5. Location of communications and support equipment.
6. Priority for equipment emplacement.
7. Echelon considerations.
8. Identify composition of the Pre-deployment site survey team.
9. Identify alternate sites.

Performance Standard. Brief the instructor and answer questions on the site selected.

Instructor. SI, WTI

Prerequisite. 2036, 2140, 6253, 6255, 6278, 6279

References.

1. U-TAOC-PCL-03862, TAOC Pocket Checklist
2. MCWP 3-25.7, TAOC Handbook
3. TM 10576C-OI/1, Communication Interface System CAC2S(V)3
4. TM 10576D-OI, Communication Interface System CAC2S(V)4

CC-2710 1.5 * B (N) GE

Goal. Prepare a plan for TAOC displacement operations.

Requirement. Given a scenario-based Tactical Decision Game (TDG) while working with an SAD:

1. Define TAOC displacement operations.
2. Explain the steps of TAOC displacement operations IAW the references.
3. Write a plan for the TAOC to displace, annotate identified issues of concern.

Performance Standard. Complete all the requirement items IAW the references while working with an SAD. Instructor will discuss each item with the trainee. The written plan must support the scenario.

Instructor. SI, WTI

Prerequisite. 2036, 2140, 6253, 6255, 6278, 6279

References.

1. U-TAOC-PCL-03862, TAOC Pocket Checklist
2. MCWP 3-25.7, TAOC Handbook
3. MCWP 5-1, Marine Corps Planning Process (MCPPE)
4. MCO 3501.9B, Marine Corps Combat Readiness Evaluation System
5. MAGTF Operations Ashore

CC-2718 16.0 * B (N) GE

Goal. Plan for the employment of the TAOC.

Requirement. Given a scenario, Commander's guidance, mission, required source documentation and support sections (TDS, RADAR, S-1, S-2, S-4, S-6), conduct an Operational Planning Team and plan TAOC specific requirements, to include:

1. Personnel.
2. Equipment.
3. Equipment Density List (EDL).
4. Bill of Materials (BOM).
5. C2 System emplacement.
6. Sensor emplacement.
7. Internal and external communications.
8. Logistics.
9. Casualty/degradation plan and detailed restoration priorities.

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

Instructor. WTI

Prerequisite. 2036, 2140, 6253, 6255, 6278, 6279

Reference.

1. MCWP 3-25.7, TAOC Handbook

4.7.15 TACTICAL DATA LINK (TDL)

4.7.15.1 Purpose. To provide the 7236 standardized academic/practical application Tactical Data Link knowledge to perform assigned duties. TDL events are one-time events unless otherwise stated.

Admin Notes. All tests will be taken without the aid of references and require a minimum score of 80% to pass unless specifically changed in an event.

TDL-2800 1.0 * B (N) G

Goal. Identify the purpose of documents that enable tactical datalinks (TDL) operations.

Requirement. Given the documents below, identify their purpose:

1. Guard chart.
2. Communication Electronic Operating Instruction (CEOI).
3. Operations Order (OPORDER) Annex K.
4. OPORDER Annex U.
5. Link 16 Network Description Document.
6. Communications security (COMSEC) callout.
7. Operational Tasking Datalink (OPTASKLINK).
8. Satellite Access Authorization (SAA).
9. Joint Multi-TDL Operating Procedures (JMTOP).

Performance Standard. With the aid of reference, state (verbally or written) the required items. Minor errors by the trainee are acceptable.

Instructor. BI, SI, WTI

References.

1. MCWP 5-1, Marine Corps Planning Process
2. MCWP 3-40.3, MAGTF Communications Systems
3. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)

TDL-2802 1.0 * B (N) G

Goal. Identify TAOC and EW/C voice and data communications equipment.

Requirement. Given the reference, identify the following:

1. Radio systems.
2. Data link systems.
3. C2 systems.

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

Instructor. BI, SI, WTI

References.

1. MCRP 5-12D, Organization of Marine Corps forces
2. MCWP 3-25.7, TAOC Handbook
3. Approved Core METL applicable to the unit
4. MCBUL 3000, Marine Corps Readiness reportable ground equipment

TDL-2807 2.0 * B (N) G

Goal. Identify missions and TDL capabilities of Joint Tactical Data Systems (TDS).

Requirement. Given the references, identify the missions and TDL capabilities of the following:

1. US Army:
 - a. Air and Missile Defense Battalion (AMD BN) Composite.
 - b. Air and Missile Defense Theater High Altitude Air Defense Battery (AMD THAAD).
 - c. Air Defense Airspace Management (ADAM) Cell.
 - d. Joint Tactical Ground Station (JTAGS).
2. US Navy:
 - a. E-2C Group II.
 - b. F/A-18E/F (MIDS).
 - c. EA-18G (MIDS).
 - d. Model 5 (CV, LHD, CG, DDG).
 - e. Model 4 (CG, FFG, LCC).
3. US Air Force:
 - a. CRC/MCE.
 - b. Air Support Operations Center (ASOC).
 - c. E-3.
 - d. F-15 A through E.
 - e. E-8C JSTARS.
 - f. RC-135 RIVET JOINT and COBRA BALL.
4. U.S. Marine Corps:
 - a. F/A-18 A++, C/D.
 - b. EA-6B ICAP III.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. [https://cnl.NAVSEA Tactical Data Systems Capabilities and Limitations website \(SIPR\)](https://cnl.NAVSEA Tactical Data Systems Capabilities and Limitations website (SIPR))

TDL-2808 1.0 * B _____ (N) G

Goal. Describe the Joint Data Network (JDN).

Requirement. Perform the following:

1. Define the Joint Data Network (JDN).
2. State the responsibilities of the JDN operations officer.
3. State the purpose of the global command and control system (GCCS) family of systems.
4. Define Common Operation Picture (COP).
5. Define Common Tactical Picture (CTP).
6. Define Tactical Picture.
7. State the components of the CTP.
8. Describe track management.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 3115.01: Volume 1, Joint Data Network Operations
2. CJCSM 3115.02: Volume 2, Common Tactical Picture Data Management
3. CJCSI 3115.01, CTP Reporting Requirements

4. CJCSI 3151.01B, GCCS COP Reporting Requirements

TDL-2809 2.0 * B (N) G

Goal. Describe the Multi-Tactical Data Link (TDL) interface.

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

1. State the concept and information exchange of the multi-TDL interface.
2. State the technical functions of the multi-TDL Interface.
3. List the three elements of the Multi-TDL Interface.
4. Define the basic interface and list its three data links.
5. Identify the characteristics of Link 11.
6. Identify the characteristics of Link 11B.
7. Identify the characteristics of Link 16.
8. Define the extended interface.
9. Identify the purpose of the Joint Range Extension Application Protocol (JREAP).
10. Define the following interface voice coordination nets:
 - a. Air Defense Command and Control Net (ADCCN).
 - b. Engagement Control Net (ECN).
 - c. Data link Coordination Net (DCN).
 - d. Track Supervision Net (TSN).
 - e. Voice Production Net (VPN).
11. Describe the delegation of responsibilities for the conduct of the Multi-TDL operations at the Joint Task Force (JTF) level and below.
12. State the two Interface Control Officer (ICO) execution functions.
13. State the responsibilities of the Link 16 manager.
14. State the responsibilities of the Link 11/11B manager.
15. State the responsibilities of the Track Data Coordinator (TDC).
16. List the minimum requirements for Services that operate the Multi-Link Interface.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOPI) Manual
2. MIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
4. MIL-STD-3011, JREAP Interface Standard

TDL-2810 2.0 * B (N) G

Goal. Identify interface unit (IU), categories, and addressing requirements.

Requirement. Perform the following:

1. Identify how IU's are categorized.
2. Define concurrent operations.
3. Define data looping.
4. Define the following IU communication functions:
 - a. Interface Unit (IU).
 - b. JITDS / MIDS Unit (JU).

- c. Command and Control JTIDS / MIDS Unit (C2JU).
 - d. Non-Command and Control JTIDS / MIDS Unit (NonC2JU).
 - e. Participating Unit (PU).
 - f. Reporting Unit (RU).
 - g. Supporting Unit (SU).
 - h. Forwarding JTIDS / MIDS Unit A (FJUA).
 - i. Forwarding JTIDS / MIDS Unit B (FJUB).
 - j. Forwarding JTIDS / MIDS Unit AB (FJUAB).
 - k. Forwarding Participating Unit (FPU).
 - l. Forwarding Reporting Unit (FRU).
 - m. Concurrent Interface Unit (CIU).
5. Define IU address.
 6. Identify legal and preferred IU address ranges for:
 - a. PU/FPU.
 - b. RU/FRU.
 - c. C2JU.
 - d. NonC2JU.
 - e. FJUA/FJUAB.
 - f. FJUB.
 7. Explain the purpose of the pseudo source address.
 8. Explain the purpose of the collective address.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. MIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16

TDL-2811 2.0 * B (N) G

Goal. Identify basic track data.

Requirement. Perform the following

1. Define track number.
2. Identify the value and purpose of the following
 - a. Low track numbers.
 - b. High track numbers.
 - c. Data forwarding track numbers.
4. Identify five track numbers.
5. Identify the six standard track identifications
6. Define track quality.
7. Define real-time track reports.
8. Identify how non real-time tracks are distinguished from real-time tracks.
9. Identify when non-real time tracks are used.
10. Define Reporting Responsibility (R2).
11. Define a common track.
12. Define correlation.
13. Define automatic correlation.
14. Describe track number negotiations during correlation.
15. Define manual correlation.
16. Explain de-correlation.

17. Define dual designation.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP)
2. MIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B
3. MIL-STD_6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16

TDL-2812 2.0 * B (N) G

Goal. Identify information contained within J-Series Messages that may be displayed to the operator.

Requirement. Define the following:

1. Identify the six Precise Participant Location and Identification (PPLI) message types.
2. Identify the information conveyed within J2.X PPLI messages.
3. Identify the main difference between a J2.0 Indirect PPLI message and the other J2.X PPLI messages
4. Identify the five Platform Status and System Status message types.
5. Identify the information conveyed within J3.X Surveillance messages.
6. Identify the eight Surveillance message types.
7. Identify information conveyed within J3.X Surveillance messages.
8. Identify the characteristics of each IFF/SIF Code.
9. Identify the differences between a sensor measured altitude, Mode IIIC altitude, and PPLI altitude.

Performance Standard. Without the aid of reference, state (verbally or written) the required items.

Minor errors by the trainee are acceptable.

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16

TDL-2813 1.0 * B (N) G

Goal. Identify tactical data link orders associated with Network Participating Group (NPG) 8 and 9.

Requirement. With the aid of reference, perform the following

1. State the purpose of the J9.0 message.
2. State the purpose of the J12.0 message.
3. State the purpose of the J10.3 message.
4. State the purpose of the J10.2 message.
5. State the purpose of the J12.6 message.
6. State the relationship between the J9.0 and the J12.0.
7. State the OPTASK LINK requirements for using NPG-9.
8. Describe the handshake process and corresponding J series messages that are used while conducting Control (NPG-9).

Performance Standard. Without the aid of reference, state (verbally or written) the required items.

Requirement. Given references, define:

1. Active Synchronization.
2. Backlink.
3. Command and Control JTIDS/MIDS Unit (C2 JU).
4. Conditional Radio Silence Mode.
5. Contention Access Mode.
6. Continuation Word.
7. Dedicated Access Mode.
8. Donor.
9. Dynamic Network Management.
10. Extension Word.
11. Geodetic Position Quality.
12. Header Message.
13. Host System.
14. Initial Entry.
15. Initial Entry JTIDS/MIDS Unit (IEJU).
16. Initial Word.
17. Machine Receipt.
18. Multifunctional Information Distribution System (MIDS).
19. Minimum Implementation.
20. Mode 1, 2, and 4 Communications.
21. Net Number.
22. Network Participation Group.
23. Network Time Reference.
24. Non-Command and Control JTIDS/MIDS Unit (NonC2 JU).
25. Pool.
26. Passive Synchronization.
27. Recurrence Rate.
28. Reed-Solomon Code.
29. Relative Position Quality.
30. Relay Block.
31. Round-Trip Timing (RTT).
32. Stacked Net.
33. Synchronization.
34. Time (System & Terminal).
35. Time Quality (QT).
36. Time slot.
37. Time Slot Reallocation Access Mode.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16

TDL-2818 3.0 * B (N) G

Goal. State the characteristics of Link 16.

Requirement. Perform the Following:

1. Identify terminal capacity of Link 16 terminal.
2. Identify spectral capacity of a Link 16 network.
3. Identify spectral capacity of a Link 16 network.
4. Identify the two types of security used by Link 16.
5. Identify the organization of a Secure Data unit (SDU).
6. Identify the purpose of the JANUS Table.
7. Identify the two range modes associated with Link 16.
8. Define direct connectivity.
9. Define relayed connectivity.
10. Identify the purpose of an Initialization Data Load (IDL).
11. Locate the website and phone number of the USMC Network Design Facility (NDF).
12. Define time division multiple access.
13. Identify the acceptable time error when initializing a Link 16 terminal.
14. Explain the synchronization process and the importance of each message in the synchronization process.
15. Precise Participate Location and Identification (PPLI).
 - a. Initial Entry Message (IEM).
 - b. Round Trip Timing (RTT) Message.
16. Identify the two Link 16 duties that transmit the IEM.
17. Identify the frequency range used by Link 16.
18. State the purpose of pulse de-confliction.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTO)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. CJCSI 6232.01_, Link 16 Spectrum De-confliction

TDL-2819 2.0 * B _____ (N) G

Goal. State the characteristics of the Joint Range Extension Application Protocol (JREAP).

Requirement. Perform the following:

1. Describe JREAP A.
2. Select the data rates of JREAP A.
3. Select the JREAP A roles.
4. Describe the JREAP A Transmission Sequence List (TSL).
5. Explain the difference between JREAP A and satellite J.
6. Describe JREAP B.
7. Describe JREAP B modes of operation.
8. Select JREAP B data rates.
9. Describe JREAP C.
10. Describe JREAP C modes of operation.
11. Define the following terms associated with JREAP:
 - a. Common Time Reference.
 - b. Demand Assigned Multiple Access (DAMA).
 - c. Joint Range Extension (JRE).
 - d. JRE Network Controller.
 - e. JRE source track number.
 - f. Link 16 zone.

- g. Multicast.
- h. Packet.
- i. Port.
- j. Secondary track number.
- k. Token passing.
- l. Unicast.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. MIL-STD-3011_, Department of Defense Interface Standard for the Joint Range Extension Application Protocol

TDL-2820 2.0 * B (N) G

Goal. Identify mission essential segments, sets, and fields within the OPTASK LINK message.

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

1. Identify the purpose of the OPTASK LINK.
2. Identify who is responsible for creating and disseminating the OPTASK LINK.
3. State the purpose of the Common Message Processor (CMP) and discuss its relationship to the OPTASK LINK.
4. Define Segment.
5. Define Set.
6. Define Field.
7. Identify the information contained in the header of the OPTASK LINK to include the following sets include the following sets.
 - a. GENTEXT/CONDUCTOF TDL OPERATIONS.
 - b. POCLINK.
 - c. DLRPGRID.
8. Identify the information contained in the IVCCN Segment.
9. Identify the information contained in the CORRDEC set.
10. Identify the information contained in THE HEADING /ULTILINK INTERFACE COORDINATION
11. REQUIREMENTS set to include the following GENTEXT sets.
 - a. FORCE INTERFACE INFORMATION.
 - b. REGIONAL INTERFACE INFORMATION.
 - c. SECTOR INTERFACE INFORMATION.
 - d. CHANGE DATA ORDER AUTHORITIES.
 - e. CONTINGENCY PROCEDURES.
 - f. TRACK PRODUCTION AREA GUIDANCE.
12. Identify the information contained in the MULCDUTY set.
13. Identify the information contained in the Link 11 Segment to include the following sets:
 - a. POLLSEQ.
 - b. LSYSDATA.
 - c. CRYPTDATA.
 - d. DALKFREQ.
 - e. FORCFLTR.
 - f. LPUDATA.
 - g. UNITFLTR.

14. Identify the information contained in the Link 16 Segment to include the following sets:
 - a. JNETWORK.
 - b. CPD.
 - c. JCRYPTDAT.
 - d. JTRNMODE.
 - e. JSTNETS.
 - f. JUDATA.
 - g. SQDDATA.
15. Identify the information contained in the Joint Range Extension (JRE) Data Segment to include the following sets.
 - a. UNITINFO.
 - b. LNKPROT.
 - c. SECTEL.
 - d. SECINTER.
 - e. SATCONN.
 - f. CONMATRX.
16. Identify the information contained in the 1MANCODE set.

Performance Standard. With the aid of reference, state (verbally or written) the required items. Minor errors by the trainee are acceptable.

Instructor. BI, SI, WTI

References.

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

TDL-2821 1.0 * B (N) G

Goal. State the purpose of Interface Coordination procedures.

Requirement. Perform the following:

1. Identify the purpose of data link entry / exit procedures.
2. Define data registration.
3. State the purpose of the following data registration:
 - a. Geodetic registration.
 - b. Sensor registration.
 - c. Remote interface unit registration.
4. List the steps of the data registration test.
5. State which unit will normally be assigned as the data registration reference unit in a Multi-TDL environment.
6. List the five correlation restrictions for reported tracks.
7. List the eight operational contingency constraints (OCCs) for a track.
8. List the six steps for voice resolution of a dual designation.
9. IAW the JMTOP, what is the single most important element of information of the TDL interface.
10. Define an Identification (ID) conflict.
11. Define an environmental conflict.
12. Outline the ID difference resolution procedures.
13. Define a Change Data Order (CDO)
14. State who on the interface may originate a CDO.
15. Identify the three detection and tracking reporting techniques.

Performance Standard. Without the aid of reference, state (verbally or written) the required items.

Minor errors by the trainee are acceptable.

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. BMIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
4. MCRP 3-25E, MTPP for an Integrated Air Defense System

TDL-2822 1.0 * B _____ (N) G

Goal. State the Interface Control Officer responsibilities.

Requirement. Perform the following:

1. List the eight Interface Control Officer (ICO) planning functions.
2. List the two ICO execution functions.
3. List the typical planning input requirements for the following areas:
 - a. Operational environment.
 - b. Interface Participants.
 - c. Capabilities and limitations of supporting tactical data links.
4. List the doctrinal responsibilities of the Tactical Air Command Center ICO.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. MCWP 3-25.4, Marine TACC Handbook

TDL-2823 1.0 * B _____ (N) G

Goal. State the characteristics of the Variable Message Format (VMF).

Requirement. Given the reference, explain:

1. The purpose of Variable Message Format (VMF) messages.
2. The characteristics of VMF messages.
3. VMF messages functional areas.
4. Transmission medium options used to exchange VMF messages.
5. Unit reference numbers.
6. How URNs are assigned.
7. The purpose of the K01.2 unit reference query/response message.
8. Position reporting requirements of VMF units.
9. The purpose of a K05.1 position report.
10. The purpose of a K04.1 observation report.
11. VMF multi-cast groups.
12. K series and J series data forwarding.

Performance Standard. With the aid of reference, state (verbally or written) the required items.

Instructor. BI, SI, WTI

References.

1. CJCSM 3115.01: Volume 1, Joint Data Network Operations
2. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
3. MIL-STD-188-220, Digital Message Transfer Device Subsystems
4. MIL-STD-2045-47001, Connectionless Data Transfer Application Layer Interface Standard
5. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
6. MIL-STD-6017, VMF Interface Standard
7. MIL-STD-6020, Data Forwarding Between TDLs

TDL-2830 2.0 * B _____ (N) L

Goal. Operate an Air Defense Systems Integrator (ADSI).

Requirement. Given an OPTASK LINK and operational ADSI using TSD:

1. Inspect/Configure own unit configuration to include:
 - a. JU address.
 - b. PPLI Message Format.
 - c. Unit Position Source.
 - d. Unit Position Location.
 - e. Elevation.
 - f. J13.5 System Status.
2. Configure DERG for monitoring and recording.
3. Configure the ADSI for the following data links:
 - a. Link 11.
 - b. Link 11B.
 - c. Link 16.
 - d. JREAP A.
 - e. JREAP B.
 - f. JREAP C (TCP/IP and UDP/IP).
4. Configure filters IAW the OPTASK LINK.
5. Inspect link configurations.
6. Utilize the forwarding matrix to transmit data over the appropriate link IAW the forwarding plan.
7. Utilize the forwarding matrix to receive data over the appropriate link.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. ADSI Version 14.1.1, Software Users Guide
3. ADSI Version 14.1.1, Installation and Configuration Guide

TDL-2836 8.0 * B _____ (N) L

Goal. Operate Link 16.

Requirement. Given an OPTASK LINK, Network Description Document (NDD), and a C2 system:

1. Extract required information from the OPTASK LINK.
2. Enter required database entries per the OPTASK LINK.
3. Enter and activate filters per the OPTASK LINK.
4. Identify Stacked Net assignments for voice and air control.
5. Enter and validate stacked net assignments in the database.
6. Obtain the Link 16 initialization data load (IDL) form USMC Network Design Facility.
7. Perform Link 16 pulse de-confliction.
8. Verify equipment is configured correctly.
9. Verify the cryptographic equipment is keyed.
10. Load appropriate time.
11. Load IDL.
12. Enter / Exit link IAW published procedures.
13. Achieve fine synchronization with other interface unit.
14. 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; minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

External Resource Support. Link 16 capable platform(s), TDS.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. C2 System Technical Manual
4. USMC NDF Website

TDL-2838 8.0 * B (N) L

Goal. Operate JREAP A.

Requirement. Given a MIL-STD-3011 compliant system, SATCOM radio assets, Satellite Access Authorization (SAA), OPTASK LINK, and assistance from maintenance and communications sections:

1. Extract satellite communications information from the SAA.
2. Verify proper radio configuration for JREAP A operations.
3. Verify cryptographic equipment is keyed.
4. Verify JREAP A equipment is connected.
5. Verify the SATCOM antenna has the correct elevation and azimuth.
6. Build the JREAP A link in the MIL-STD-3011 compliant system.
7. Enter and activate filter in the MIL-STD-3011 compliant system.
8. Enable and disable the correct link connections.
9. Enter/Exit link IAW published procedures.
10. Demonstrate the ability to operate in the following modes:
 - a. Network Participant.
 - b. Network Controller.
 - c. Network Listener.

Performance Standard. Successfully exchange information/data.

Instructor. SI, WTI

External Resource Support. AVRAD, TDS, External JREAP capable system, DAMA Satellite Access, Live/Virtual/Constructive Forwarding JTIDS/MIDS Unit Generic Network Controller.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOPI)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. C2 System Technical Manual
4. MIL-STD-3011, JREAP Interface Standard

TDL-2840 8.0 * B (N) L

Goal. Operate JREAP B.

Requirement. Given a MIL-STD 3011 compliant system, a serial line encryption device, and assistance from maintenance and communications sections:

1. Verify the serial line encryption device is configured for JREAP B operations.
2. Verify the serial line encryption device is connected to the MIL-STD 3011 compliant system and telephone line.
3. Build the JREAP B link in the MIL-STD 3011 compliant system.
4. Enter and activate filters in the MIL-STD 3011 compliant system per the OPTASK LINK.
5. Enable and disable the link connections.
6. Enter and exit link IAW published procedures.

Performance Standard. Successfully exchange information/data.

Instructor. SI, WTI

External Resource Support. TDS, External JREAP capable system, switching network, Live/Virtual/Constructive JRE Unit.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOPI)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. C2 System Technical Manual
4. MIL-STD-3011, JREAP Interface Standard

TDL-2842 8.0 * B (N) L

Goal. Operate JREAP C.

Requirement. Given a MIL-STD 3011 compliant system, SIPRNET access, and assistance from the maintenance and communications sections:

1. Verify the MIL-STD 3011 compliant system is configured with the correct IP address.
2. Verify the MIL-STD 3011 compliant system is connected to the network.
3. Build JREAP C IP link in the MIL-STD 3011 compliant system.
 - a. TCP.
 - b. UDP unicast.
 - c. UDP multicast.
4. Enter and activate filters in the MIL-STD 3011 compliant system per the OPTASK LINK.
5. Enable and disable the correct link connections.

6. Activate and exchange information with JREAP-C (either TCP or UDP).

Performance Standard. Successfully exchange information/data.

Instructor. SI, WTI

External Resource Support. TDS, External JREAP capable system, Live/Virtual/Constructive JRE Unit.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. C2 System technical manual
4. MIL-STD-3011, JREAP Interface Standard

TDL-2845 3.0 * B (N) L

Goal. Troubleshoot Link 16.

Requirement. Given a C2 System with a malfunctioning Link 16:

1. Verify the internal data path being used for Link 16 is functional.
2. Verify direct connectivity exists with a network time reference or initial Entry JTIDS units.
3. Recognize and take appropriate action for incorrect time.
4. Recognize and take appropriate action for incorrect crypto.
5. Recognize and take appropriate action for incorrect IDL.
6. Select and monitor Link 16 messages.
7. Elevate unresolvable issues to the crew chief.

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

Instructor. SI, WTI

References.

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

TDL-2846 3.0 * B (N) L

Goal. Troubleshoot JREAP A.

Requirement. Given a C2 system with a malfunctioning JREAP A:

1. Use the SATCOM radio's receive signal strength orderwire (RSSOW) to troubleshoot antenna elevation and azimuth.
2. Troubleshoot the SATCOM radio's satellite connection status.
3. Determine if the units Interface Unit Address is in the network controllers subscriber list.
4. Elevate unresolvable issues to the crew chief.

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

Instructor. SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. C2 System Technical Manual
4. SATCOM Radio Technical Manual
5. MIL-STD-3011, JREAP Interface Standard

TDL-2847 3.0 * B (N) L

Goal. Troubleshoot JREAP B.

Requirement. Given a C2 system with malfunctioning JREAP B:

1. Verify distant end and local settings on the STEs.
2. Verify KSV-21 has the appropriate crypto key.
3. Identify low quality phone lines to the crew chief.
4. Elevate unresolvable issues to the crew chief.

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

Instructor. SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. C2 System Technical Manual
4. MIL-STD-3011, JREAP Interface Standard

TDL-2848 3.0 * B (N) L

Goal. Troubleshoot JREAP C.

Requirement. Given a C2 system with a malfunctioning JREAP C:

1. Use the ping and trace route functions to determine if a network connection exists between two computers.
2. Identify firewall exemptions to the communication's section to open blocked ports.
3. Elevate unresolvable issues to the crew chief.

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

Instructor. SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
3. C2 System Technical Manual
4. MIL-STD-3011, JREAP Interface Standard

TDL-2849 3.0 * B (N) L

Goal. Conduct tactical data link planning for an agency.

Requirement. Given an exercise or operational scenario:

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

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

Instructor. SI, WTI

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP)
2. C3 Agency SOP

TDL-2851 3.0 * B (N) L

Goal. Perform track data coordination for track producing agency.

Requirement. Given the reference and an operational C2 System: changes. Coordinate the changes in the agency's track production responsibilities as the tactical situation

1. Coordinate the agency's usage of data filters.
2. Coordinate the agency's usage of special points, lines, and areas on the Multi-Link Interface.
3. Perform the resolution of the following interface anomalies affecting the local agency:
 - a. Dual designations.
 - b. Duplicate tracks.
 - c. Identification conflicts.
 - d. Category and environment conflicts.

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

Instructor. BI, SI, WTI

References.

1. CJCSM 6120.01, Joint Multi TDL Operating Procedures (JMTOP)
2. C3 Agency SOPs

4.7.16 COMMAND AND CONTROL SYSTEMS (C2SYS)

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

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 personnel, position dependent:

C2SYS-2910 2.0 B, R (N) G

Goal. Demonstrate proficiency with the TBMCS Execution Status and Monitoring (ESTAT) tool.

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

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

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

Instructor. BI

External Syllabus Support.

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

Reference.

1. TBMCS User's Manual

C2SYS-2940 1.0 B, R (N) G

Goal. Demonstrate proficiency utilizing tactical chat. (Note: no two tactical chat programs are the same, thus this event is dependent upon the designated instructor to implement this event in accordance with MEF/MAW or AOR standards).

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

1. Initiate the tactical chat application
2. Connect to a chat server

3. Set up user preference
4. Access channels on the tactical chat server
5. Know and understand the standard tactical chat terminology and abbreviations
6. Know and understand proper acknowledgement procedures of tactical chat communications
7. Know and understand the basic troubleshooting steps of tactical chat

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

Instructor. BI

References.

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

4.8 MISSION SKILL TRAINING (3000)

4.8.1 Purpose. Mission Skill training consists of advanced events that provide training on processes within the TAOC and develop the ability of the 7236 to perform their duties as a member of a TAOC crew while conducting TAOC operations.

4.8.1.1 Prerequisite.

1. The EQUIP stage must be completed prior to conducting mission skills training.
2. Completion of all Core Skill events required for the respective crew position._

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

PAR NO.	STAGE NAME	PAGE NUMBER
4.8.3	WEAPONS OPERATOR (WO)	4-88
4.8.4	SURVEILLANCE OPERATOR (SO)	4-89
4.8.5	TACTICAL AIR TRAFFIC CONTROLLER (TATC)	4-92
4.8.6	DATA LINK COORDINATOR (DLC)	4-93
4.8.7	AIR INTERCEPT CONTROLLER (AIC3)	4-95
4.8.8	WEAPONS DIRECTOR (WD)	4-97
4.8.9	SURVEILLANCE DIRECTOR (SD)	
4.8.10	CREW CHIEF (CC)	4-98

4.8.3 WEAPONS OPERATOR (WO)

4.8.3.1 Purpose. To teach Marines how to assist the weapons sections in the execution of their assigned duties.

Admin Notes. This stage of training may be conducted concurrently with other stages.

Prerequisite. 2016, 2066, 2160, 2162, 2164, 2660, 2663

WO-3200 8.0 * B (N) S/L

Goal. Perform weapons operator functions for the weapons section.

Requirement. Given a C2 system and operational documents, perform weapons operator functions for the weapons section in:

1. Enter all database items required.
2. Manage symbols.
3. Conduct digitally aided control.
4. Identify threat information to include:
5. Identify safety of flight information.
6. Compile and forward applicable engagement reports.
7. Notify the AIC when new additional, pop-up, and threat groups are identified.
8. Update and manage all weapon system inputs.
9. Conduct IFF/SIF checks.
10. Observe fighter brief/debrief.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. BI, SI WTI

Prerequisite. 2016, 2066, 2160, 2162, 2164, 2660, 2663

References.

1. TOPGUN Manual, Air Control Communications, Chapter 47
2. MCWP 3-25.7, TAOC Handbook

WO-3202 16.0 1095 B, R, M (N) L/S

Goal. Perform as the weapons operator.

Requirement. Given a C2 system and operations documents, assist in the following:

1. Production of a TATC log.
2. Manage the TATC log by tracking all aircraft under the control of your section.
3. Assist in the conduct of external/internal handovers.
4. Maintain proper symbol management of aircraft under the control of your section.
5. Enter all database items required for the mission.
6. Provide threat information.
7. Update external agencies on mission status via IRC or other C2 systems.
8. Receive and forward Battle Damage Assessment (BDA).

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. BI, SI, WTI

Prerequisite. 2016, 2066, 2160, 2162, 2164, 2660, 2663

Reference.

1. MCWP 3-25.7, TAOC Handbook

4.8.4 SURVEILLANCE OPERATOR (SO)

4.8.4.1 Purpose. To train the 7236 on the techniques required to produce and maintain the accuracy, currency and quality of track data that is received and transmitted by the Tactical Air Operations Center (TAOC). The SO will coordinate with perform duties including, but not limited to assisting the Surveillance Director with radar optimization, conducting data registration, interface anomaly resolution, combat identification, and electronic protection feature operations.

Prerequisite. 2016, 2160, 2162, 2164, 2300, 2302, 2304, 2910, 2940, 2941

Crew Requirement. A core skill proficient surveillance section.

SO-3300 1.0 * B (N) L/S

Goal. Perform display management.

Requirement. Given a C2 system, operator console, and display software, conduct the following:

1. Load Surveillance Profile.
2. Select user role.
3. Import ATO and ACO.
4. Edit ATO and ACO.
5. Update real-time track information:
 - a. Declaration
 - b. Type / model / series
 - c. Mission
 - d. Call sign
 - e. Comments
6. Plot non-real time air tracks with the following track information:
 - a. Declaration
 - b. Type / model / series
 - c. Mission
 - d. Call sign
 - e. Comments
8. Build / activate / deactivate / delete ACMs, FSCMs, and Air Reference Measures.
9. Use Spotlight Function to highlight tracks that meet designated parameters.

Performance Standard. Complete the requirement items IAW the references. Minor errors corrected by the trainee are acceptable. The instructor may provide minimal guidance.

Instructor. BI, SI, WTI

Prerequisite. 2016, 2160, 2162, 2164, 2300, 2302, 2304, 2910, 2940, 2941

References.

1. MCRP 8-10B.10, Radio Operator's Handbook
2. MTTP, Air Control Communication
3. Applicable ACEOI
4. TAOC TACSOP

SO-3302 8.0 1095 B, R (N) L/S

Goal. Perform Surveillance Operator functions.

Requirement. Given the reference and an operational C2 system:

1. Conduct briefed identification and classification procedures.
2. Adhere to published identification criteria and Rules of Engagement when evaluating unknown contacts.
3. Conduct symbol management with a focus on data entry and amplifying track identification.
4. Coordinate with external electronic identification platforms to obtain track identification information.
5. Configure the Warfighter console global alert and track/contact/IFF Doctrine functions to supplement combat identification functions.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. 2016, 2160, 2162, 2164, 2300, 2302, 2304, 2910, 2940, 2941

External Resource Support. TDL capable agencies with the ability to output sensor data. Agencies must have at least one operational Link 11, Link 11B, Link 16, or JREAP. Extended interface links are not applicable.

Reference.

1. CJCSM 6120.01_, Joint Multi-Tactical Data Link Operating Procedures (JMTOP) Manual

4.8.5 TACTICAL AIR TRAFFIC CONTROLLER (TATC)

4.8.5.1 Purpose. To train the TATC to perform airspace control within the TAOC's assigned sector.

Prerequisite. 2354, 2356, 2358, 2360, 2361, 2364

Crew Requirement. A core skill proficient weapons section.

TATC-3350 16.0 1095 B, R, M (N) L/S

Goal. Perform as TATC.

Requirement. Given a C2 system and while performing as a TATC during a training evolution:

1. Enter and maintain the traffic database per WD direction.
2. RIO aircraft,
3. Conduct external/internal handovers of aircraft as required.
4. Conduct Aerial Refueling (AR) operations:
5. Deconflict assigned airspace
6. Maintain proper symbol management.
7. Maintain appropriate TATC logs.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. 2354, 2356, 2358, 2360, 2361, 2364

References.

1. TAOC TACSOP
2. MCTP 3-25.7, Tactical Air Operation Center (TAOC) Handbook
3. MTPP ALSA Air Control Communication

4.8.6 DATA LINK COORDINATOR (DLC)

4.8.6.1 Purpose. To train the 7236 as a DLC in the TAOC.

Prerequisite. 2020, 2024,2142, 2802, 2807, 2808, 2809, 2810, 2813, 2814, 2818, 2819, 2820, 2821, 2822, 2823, 2830, 2836, 2838, 2840, 2842, 2845, 2846, 2847, 2848, 2849, 2851

DLC-3400 8.0 * B (N) L/S

Goal. Conduct tactical data link coordination.

Requirement. Given a C2 system in a multi-TDL environment:

1. Ensure data link database entries are entered and correct.
2. Ensure TAOC data link equipment is configured.
3. Ensure TAOC cryptographic equipment is keyed.
4. Enter and activate filters in accordance with the OPTASK LINK.
5. Activate TDLs as directed by SD.
6. Evaluate TDL performance and recommend needed changes to SD.
7. Maintain a visual depiction of the TAOC's TDL architecture.
8. Coordinate with external agencies in the conduct of multi-TDL operations.
9. Ensure proper configuration of tactical data link forwarding matrix.

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

Instructor. SI, WTI

Prerequisite. 2020, 2024,2142, 2802, 2807, 2808, 2809, 2810, 2813, 2814, 2818, 2819, 2820, 2821, 2822, 2823, 2830, 2836, 2838, 2840, 2842, 2845, 2846, 2847, 2848, 2849, 2851

External Resource Support. TDL capable agencies/platform.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. MIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B.
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
4. Guide to the USMTF User Formats- OPERATIONAL TASKING DATA LINKS
5. JRE Version 5.3.X, Software User Guide
6. ASDI Version 14.1.1, Software Users Guide

DLC-3402 8.0 1095 B, R, M (N) L/S

Goal. Perform as a DLC.

Requirement. Given a multi-TDL environment, and operational documents:

1. Operate and troubleshoot Link 16 to include JREAPs.
2. Conduct all required logbook entries.

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

Instructor. SI, WTI

Prerequisite. 3400

External Resource Support. TDL capable agencies/platform.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
2. MIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B.
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
4. Guide to the USMTF User Formats- OPERATIONAL TASKING DATA LINKS
5. JRE Version 5.3.X, Software User Guide
6. ASDI Version 14.1.1, Software Users Guide

4.8.7 AIR INTERCEPT CONTROLLER (AIC3)

4.8.7.1 Purpose. To familiarize the AIC student with communications, procedures, and tactics associated with Tactical Intercepts. Upon completion of the AIC3 POI, the student will be assessed by an AICI to become fully qualified AIC. Upon qualification the AIC will become reportable on the CMMR.

Admin Notes.

1. Missions will be executed per ROE established by published AAW directives, operational planning orders/documents, or individual mission briefs.
2. For evaluation purposes, a mission will consist of a fighter mission brief to the AIC, AIC brief to the AICS or AICI, execution of the event, AIC debrief to the AICS or AICI, and fighter mission debrief to the AIC. Weapons Data Links (e.g. Link 16, CEC) will be used to the fullest extent possible.
3. Tactical Combat Training System (TCTS) facilities should be used when available for debriefing.
4. The primary organic C2 system will be used to the fullest extent possible. When necessary, events can be conducted from an instrumented range with equipment hosted at the range or similar C2 systems.
5. Live AIC events will be accomplished in conjunction with events from the F/A-18 and F-35 T&R Manuals that require Tactical Intercepts. Weapons and Tactics Training Program (WTTP) Officers should coordinate with fighter squadrons to accomplish these events.
6. When performing as an AIC, the AIC might encounter different tactics depending on the service he/she is supporting. Because of this, the AIC syllabus is built around providing the maximum amount of credit for each AIC event regardless of the service the AIC is supporting.
7. Based on geographical locations an Air Force Weapons School Air Intercept Control Graduate may be the only option for supervising and instructing AICs working through their syllabus. This allows Air Force Weapons School Air Intercept Control Graduates to instruct and recommend AICs for qualification through the WTI as needed to ensure CMMR is met.

8. Navy Air Intercept Controllers with either AIC level 4 or 5 qualifications are considered equivalent to Marine Corps AIC 4/5. They are authorized to instruct AIC events.

Prerequisite. 2026, 2030, 2038, 2108, 2116, 2118, 2128, 2136, 2138, 2817, 6251, 6277

AIC3-3500 1.0 * B, R (N) GE

Goal. Conduct DCA FI brief.

Requirement. Given the references and fighter brief, conduct DCA FI AIC briefing lab using proper whiteboard setup, symbology and tactical scenario for a division of fighters, conducting DCA FI.

Performance Standard. Conduct brief with the AICS IAW the references.

Instructor. AICS, AICI

Prerequisite. 2026, 2030, 2038, 2068, 2108, 2116, 2118, 2128, 2136, 2138, 2817, 6251, 6277

References.

1. MTTP ALSA Air Control Communication
2. ANTPP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MAWTS-1 NIPR SharePoint AIC Briefing Lab Courseware
7. MTTP ALSA Fighter Integration

AIC3-3502 1.0 * B, R (N) GE

Goal. Conduct OCA FI brief.

Requirement. Given the references and striker brief, conduct OCA FI AIC briefing lab using proper whiteboard setup, symbology and tactical scenario for a division of fighters, conducting OCA FI.

Performance Standard. Conduct brief with the AICS IAW the references.

Instructor. AICS, AICI

Prerequisite. 2026, 2030, 2038, 2068, 2108, 2116, 2118, 2128, 2136, 2138, 2817, 6251, 6277

References.

1. MTTP ALSA Air Control Communication
2. ANTPP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MAWTS-1 NIPR SharePoint AIC Briefing Lab Courseware
7. MTTP ALSA Fighter Integration

AIC3-3504 5.0 * B, R, M (N) L/S

Goal. Perform AIC functions with fighter aircraft conducting DCA FI.

Requirement. Given C2 systems control fighter aircraft against unknown threat provide the following:

1. Use of correct communications format.
2. Maintain timeline awareness.
3. Demonstrate proactive involvement.
4. Demonstrate listening and comprehension skills.
5. Proper use of scope mechanics, interpretation and utilization (from system utilized).

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. AICI

Prerequisite. 3500, 3502

Range. Airspace capable of conducting air-to-air engagements.

External Resource Support. Fighter aircraft

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MTTP ALSA Fighter Integration

AIC3-3506 5.0 * B, R, M (N) L/S

Goal. Perform AIC functions with fighter aircraft conducting OCA FI.

Requirement. Given C2 systems control fighter aircraft against unknown threat provide the following:

1. Use of correct communications format.
2. Maintain timeline awareness.
3. Demonstrate proactive involvement.
4. Demonstrate listening and comprehension skills.
5. Proper use of scope mechanics, interpretation and utilization (from system utilized).

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. AICI

Prerequisite. 3500, 3502

Range. Airspace capable of conducting air-to-air engagements.

External Resource Support. Fighter aircraft

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MTTP ALSA Fighter Integration

AIC3-3508 5.0 1095 B, R, M (N) L

Goal. Perform AIC functions with fighter aircraft.

Requirement. Given C2 systems control fighter aircraft against unknown threat provide the following:

1. Use of correct communications format.
2. Maintain timeline awareness.
3. Demonstrate proactive involvement.
4. Demonstrate listening and comprehension skills.
5. Proper use of scope mechanics, interpretation and utilization (from system utilized).

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. AICI

Prerequisite. 3506, 3504

Range. Airspace capable of conducting air-to-air engagements.

External Resource Support. Fighter aircraft

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MTTP ALSA Fighter Integration

4.8.8 WEAPONS DIRECTOR (WD)

4.8.8.1 Purpose. To train the 7236 in detailed weapons skills.

Admin Notes. This stage of training may be conducted concurrently with the SD stage of training.

Prerequisite. 2608, 2609, 2610, 2611, 2662, 2665

Crew Requirements. SAD and Weapons Section.

WD-3611 8.0 1095 B, R, M (N) L/S

Goal. Perform as WD.

Requirement. Given a C2 system and operational documents:

1. Conduct a weapons section crew brief.
2. Manage Air and Missile Defense assets.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. 2608, 2609, 2610, 2611, 2662, 2665

Reference.

1. AFTTP 3-1, General Planning Attachment 1

4.8.9 SURVEILLANCE DIRECTOR (WD)

4.8.9.1 Purpose. To train the 7236 in detailed surveillance skills.

Admin Notes. This stage of training may be conducted concurrently with the WD stage of training.

Prerequisite. 2608, 2609, 2610, 2611, 2662, 2665

Crew Requirements. Surveillance section.

SD-3612 8.0 1095 B (N) L/S

Goal. Perform as SD.

Requirement. Given a C2 system and operational documents:

1. Conduct a surveillance section crew brief.
2. Manage the surveillance section.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. 2310, 2312

Reference.

1. AFTTP 3-1, General Planning Attachment 1

4.8.10 CREW CHIEF (CC)

4.8.10.1 Purpose. To develop proficiency in crew and system management involved in TAOC operations.

Admin Notes. The purpose of the Crew Chief position into the crew structure is to provide the SAD with an enlisted advisor to assist with all internal/external planning prior to a mission. Furthermore, the Crew

Chief should be and act as the senior enlisted advisor assisting with the internal execution and management of the crew during a mission. The goal of implementing this position is that the Crew Chief has a wealth of knowledge of all the inner workings of the TAOC and has a vast amount of experiences that the SAD and other directors can seek counsel from.

Prerequisite. 2700, 2704, 2706, 2708, 2710, 2718

CC-3702 10.0 * B (N) L

Goal. Perform system troubleshooting.

Requirement. Given a C2 system and a scenario with verifiable faults:

1. Serve as a liaison to ensure continuity of effort in facilitating the crew with functional equipment:
2. Liaison with maintenance for the status of OPFAC and OPFAC support equipment.
3. Liaison with communications to ensure modifications or corrections to external communications assets are properly implemented.
4. Liaison with utilities personnel to coordinate mobile electric power (MEP) fuel status, refuel times and maintenance intervals with operation vulnerability periods.
 - a. Identify the communications nets for recording and assist in the operation of the Digital Voice Recorder (DVR), to include:
 5. Voice recording.
 6. Recording playback.
 7. Recording extraction to media.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. 2700, 2704, 2706, 2708, 2710, 2718

External Syllabus Support. TDS, RADAR, MT/UT.

References.

1. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
2. TM 12041A/12050A-OD2, CAC2S User Manual

CC-3704 8.0 * B (N) GE

Goal. Conduct mission planning.

Requirement. Given mission tasking, Commander's guidance, and assistance of a SAD, SD, and WD, determine requirements to support the TAOC mission taking into account the following:

1. Operational hours and duration of operation/exercise.
2. Communication requirements.
3. Digital backbone.
4. Echelon requirements.
5. Information exchange requirements.
6. 24 hour crew structure with changeover procedures.
7. Compound security.

8. C2 System internal configuration.
9. Sensor emplacement.
10. Establish timelines for internal unit planning

Performance Standard. Complete all requirements and present the information to the instructor. The trainee should be prepared to answer questions from the instructor.

Instructor. SI, WTI

Prerequisite. 2700, 2704, 2706, 2708, 2710, 2718

Reference.

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

CC-3708 10.0 1095 B, R, M (N) L

Goal. Perform Crew Chief functions.

Requirement. Given a scenario, supporting documentation, an operational organic C2 system, and manage a crew and associated systems to include the following at a minimum:

1. Conduct crew brief.
2. Identify system failures/degradations:
 - a. Troubleshoot and perform fault isolation.
 - b. Utilize corrective action.
 - c. Coordinate with maintenance to resolve system issues.
3. Implement casualty procedures/restoration plan as the situation dictates.
4. Implement system configuration plan.
5. Record events during crew watch in appropriate reports and logbooks.
6. Record voice and data.
7. Assist in the internal management of the crew.
8. Assist in coordinating with aircraft and external C2 agencies as appropriate.
9. Conduct crew changeover.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. WTI

Prerequisite. 3702, 3704

Reference.

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

4.9 CORE PLUS TRAINING (4000)

4.9.1 Purpose. Core Plus Skills are intended to train the individual to utilize the tools, systems and/or procedures which have a low probability of execution or are theater specific.

4.9.2 Stages

PAR NO.	STAGE NAME	PAGE NUMBER
4.9.3	MISSILE CONTROLLER (MC)	4-105
4.9.4	DEEP AIR CONTROLLER (DAC)	4-112

4.9.3 MISSILE CONTROLLER (MC).

4.9.3.1 Purpose. To familiarize the 7236 with the core communications, procedures, and tactics associated with controlling Ground Based Air Defense (GBAD) assets. .

MC-4100 4.0 * B (N) S/L

Goal. Perform MC functions without tactical data links.

Requirement. Given a C2 System, and without a data link, coordinate missile control with GBAD units.

1. Conduct manual assignments against air threats.
2. Disseminate appropriate Weapons Control Status (WCS), Air Defense Warning Condition (ADWC), States of Alert (SOA).
3. Monitor and post Firing Unit (FU) status.
4. Interface with GBAD units.
5. Maintain information flow to the GBAD units.
6. Conduct cross boundary coordination.
7. Compile and forward all engagement reports.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. 6250, 6256

External Resource Support. GBAD Unit.

References.

1. MCWP 3-22, Antiair Warfare
2. MCWP 3-25, Control of Aircraft and Missiles
3. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
4. MCWP 3-25.10, Low Altitude Air Defense (LAAD) Gunner's Handbook

MC-4102 4.0 1095 B (N) L/S

Goal. Perform MC functions with tactical data links.

Requirement. Given a C2 System and with a data link, coordinate missile control with multiple GBAD units.

1. Use data link orders to conduct assignments against multiple air threats.
2. Conduct manual assignments against air threats.
3. Disseminate appropriate Weapons Control Status (WCS), Air Defense Warning Condition (ADWC), and States of Alert (SOA).
4. Monitor and post FU status.

5. Interface with GBAD units.
6. Maintain information flow to the GBAD units.
7. Ensure cross boundary coordination.
8. Compile and forward all engagement reports.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite 4100, 6250, 6256

External Resource Support. GBAD unit, Link capable platform(s), TDS, AvRad.

References.

1. MCWP 3-22, Anti-air Warfare
2. MCWP 3-25, Control of Aircraft and Missiles
3. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
4. MCWP 3-25.10, Low Altitude Air Defense (LAAD) Gunner's Handbook

4.9.4 DEEP AIR CONTROLLER (DAC)

4.9.4.1 Purpose. To familiarize the trainee with control procedures utilized in Offensive Air Support operations.

Admin Notes. This stage of training may be conducted concurrently with other stages provided the prerequisite have been met.

DAC-4600 6.0 * B (N) L/S

Goal. Receive and process deep air operations information.

Requirement. Given a C2 system, references, and weapons section:

1. Receive and pass tasking.
2. Receive and forward Inflight/Pilot Reports (IFREP/PIREP) information to the WD.
3. Maintain a log.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. 6250, 6256

External Resource Support. Aircraft performing DAS.

References.

1. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
2. MCWP 3-25.5, Direct Air Support Center (DASC) Handbook

DAC-4602 6.0 1095 B, M (N) L/S

Goal. Control aircraft in deep air operations.

Requirement. Given requisite communications equipment and a scenario involving aircraft in deep air operations:

1. Control DAS aircraft.
2. Coordinate aerial refueling operations.
3. Conduct handovers with adjacent and external agencies.
4. Integrate long-range surface fires with MAGTF and Joint aviation assets.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. 4600, 4602, 6250, 6256

Range. Ground and air spaces capable of conducting deep air support missions.

External Resource Support. Aircraft performing a DAS mission.

References.

1. MCWP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
2. MCWP 3-25.5, Direct Air Support Center (DASC) Handbook

4.10 INSTRUCTOR UNDER TRAINING (IUT) (5000)

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

4.10.2 General.

Admin Notes.

1. The MACCS instructor concept is a means to standardize all instructors across the MACCS in regards to concepts of managing a WTTP, properly conducting training, performing evaluations, and recommending training plans.
2. There are six instructor designations in this syllabus. 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.
 - a. Basic Instructor (BI)
 - b. Senior Instructor (SI)
 - c. Weapons and Tactics Instructor (WTI)
 - d. Air Intercept Controller Instructor (AICI)

- e. Air Intercept Controller Supervisor (AICS)
- f. Formal Learning Center (FLC) Instructor

3. The MAWTS-1 C3 Course catalog contains the basic training requirements for (BI, SI, and WTI) instructors. The catalog is located on the MAWTS-1 website:
<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/WTI/default.aspx>

4. The TAOC has added events to increase simulation training. The events will be prerequisites for TAOC Marines the additional events are only located in the TAOC T&R.

5. 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 current and proficient.
SI	Core Skill and Mission Skill events in which current and proficient.
WTI	Mission Skill and Qualification events. - Evaluate and recommend for qualification - Endorse recommendations for position designations
AICS	Core Skill and Mission Skill AIC events in which current and proficient.
AICI	Core Skill and Mission Skill AIC events in which current and proficient and is the only instructor that can recommend student AIC's for qualifications.
FLC	Core Skill Introduction Phase. Entry level school instructors.
Notes	The Commanding Officer is the approving authority for qualifications and designations..

4.10.2.1. Stages. The following stages are included in the Instructor Under Training Phase.

PAR NO.	STAGE NAME	PAGE NUMBER
4.10.3	INSTRUCTOR UNDER TRAINING (IUT)	4-122

4.10.3 INSTRUCTOR UNDER TRAINING (IUT)

Purpose. To train the individual Marine in the skills required to lead a period of instruction.

IUT-5000 2.0 * B (N) L

Goal. Introduce principles of instruction.

Requirement. Given the reference, the BIUT will demonstrate the following with the assistance of a unit instructor:

1. Adult learning principles
 - a. Pedagogy to andragogy
 - b. Characteristics of the adult learner
 - c. Learning styles
 - d. How adults learn

- e. Domains of learning
- f. Group dynamics
- g. Motivation
- h. Constructivist learning environments
2. Introduce, discuss, and demonstrate instruction techniques.
3. Introduce, discuss, and demonstrate class management techniques.
 - a. How to select teaching resources to accommodate student learning styles.
 - b. How to properly organize the instructional environment for effective learning.

Performance Standard. With the aid of references, the BIUT shall demonstrate principles of instruction. During this session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. SI

References.

1. Adult Learning section, Systems Approach to Training Manual (2004)
2. NAVMC 3500.14
3. NAVMC 1553.1

IUT-5010 2.0 * B (N) L

Goal. Describe individual T&R requirements.

Requirement. Using the Aviation T&R Program Manual, discuss the purpose of each of the following items with an instructor:

1. Training progression model
2. Programs of Instruction
 - a. Basic
 - b. Refresher
 - c. Conversion
 - d. Series Conversion
 - e. Transition
 - f. Maintain
3. T&R attain and maintain tables
4. Syllabus notes.
5. T&R syllabus structure
 - a. Phase
 - b. Stage
 - c. Event
 - d. Skill
 - e. Syllabus
6. Event format
 - a. Header
 - (1) Event prefix - event code
 - (2) Projected event duration
 - (3) Proficiency period
 - (4) Programs of instruction (POI)
 - (5) Event conditions

- (6) Device options
- (7) Device number
- (8) Device type
- b. Body
 - (1) Goal
 - (2) Requirement
 - (3) Performance standard
 - (4) Equipment
 - (5) Crew requirement
 - (6) Instructor
 - (7) Prerequisite
 - (8) External resource requirements
 - (9) Reference
- 7. Aviation Career Progression Model (ACPM)
- 8. T&R syllabus matrices
- 9. T&R syllabus evaluation forms

Performance Standard. Without the aid of references and during a discussion session, the BIUT shall describe Individual T&R requirements. During this session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. SI

References.

1. NAVMC 3500.14, Ch. 6
2. NAVMC 1553.1

IUT-5020 12.0 90 B, R, M (N) L

Goal. Conduct T&R instruction.

Requirement. The BIUT, under the supervision of an instructor, will conduct three periods of instruction on three different T&R events selected by the instructor and should include as many different methods of instruction as possible (lecture or academic, demonstration, and practical application). The event must be one the BIUT is current and proficient in. The BIUT will complete the following for each of the three events instructed:

1. Prepare to train the event.
 - a. Review a trainee's performance record to identify required training for the event selected.
 - b. Ensure the student has met prerequisites for the event to be trained.
 - c. Gather the resources necessary to conduct the training (i.e., instructional materials, references, and equipment).
 - d. Conduct task analysis on each event to ensure all intended requirements and prerequisite skills, specified or implied, are trained IAW applicable references.
 - e. Schedule the training event (facilities and students).
 - f. Prepare an evaluation form for each student to be evaluated.
2. Conduct training on the event selected:
 - a. Ensure all training resources are properly staged/equipment if set up properly for training.
 - b. Instruct the student in a thorough manner so as to cover all requirements for the event.
 - c. Ensure continuous, objective assessment of the student's progress during training.
3. Assess student performance:
 - a. Assess the student's performance to the performance standard.

- b. Correct student deficiencies in a timely manner and provide the student feedback.
 - c. Complete the evaluation form on for each student trained.
 - d. Debrief student on the performance and provide corrective action.
4. Route evaluation form as required.

Performance Standard. Complete the requirement items IAW the reference and ensure training is doctrinally and technically current. Instructor shall use the instructor evaluation form from the SAT user's guide for each class and a mark of satisfactory must be achieved for each of the three classes.

Instructor. SI

Prerequisite. 5000, 5010

References.

1. NAVMC 3500.14, Ch 6
2. NAVMC 1553.1
3. MCO 1553.2B, Appendix O

IUT-5030 5.0 * B (N) GE

Goal. Conduct a simulation.

Requirement.

1. Provide desired training objective inputs to Senior Instructors for simulation scenario and events development.
2. Configure simulation equipment for use as a response cell pilot.
3. Demonstrate proficiency in operating simulation software as a remote pilot.
4. Dynamically control entities within the simulation software.
5. Generate new entities within the simulation software.

Instructor. SI, WTI

Prerequisite. 5000, 5010, 5020

IUT-5100 2.0 B (N) L

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

Requirement. Using the community T&R manual discuss the following with an instructor:

1. Describe the Weapons and Tactics Training Program (WTTP).
2. Define each element of the Core Model:
 - a. Mission statements
 - b. Core Mission Essential Task List (METL)
 - c. Output standards
 - d. Core Skills (How to attain and maintain)
 - e. Mission Skills (How to attain and maintain)
 - f. Combat Leadership
3. Define each of the following elements of unit training:
 - a. Training Exercise Employment Plan (TEEP)
 - b. Core Model Minimum Requirements (CMMR)
 - c. Instructors
 - d. Core Model Training Report (CMTR)

- e. T&R manual connection to readiness reporting
- 4. Define each of the following elements of training:
 - a. Certification
 - b. Qualification
 - c. Designation
- 5. PERFORMANCE RECORD Explain how changes are made to the Program manual:
 - a. Explain T&R conference procedures.
 - b. Explain correspondence change procedures.

Performance Standard. Complete the requirements IAW the reference. Instructor will question the SIUT to check for thorough understanding of the Aviation T&R Program.

Prerequisite. None.

Instructor. SI, WTI

References.

1. NAVMC 3500.14
2. MCO 3500.109

IUT-5110 4.0 365 B, R, M (N) L

Goal. Conduct instructor evaluations.

Requirement. Using the instructor evaluation checklist from the SAT manual, conduct two evaluations on instructors of equal or lower designation.

1. Provide notification of evaluation to the instructor being evaluated.
2. Do not interfere with or disrupt the instruction while taking place.
3. Thoroughly document observed items on the checklist.
4. Ensure student evaluation form is filled out correctly and the appropriate debrief took place.
5. Debrief the instructor being evaluated on their preparation, instruction, evaluation, and documentation.
6. Have the evaluated instructor complete the instructor improvement plan section and sign.
7. File a copy of the completed evaluation form in both the evaluator's and evaluated instructor's performance record.

Performance Standard. Complete the requirements IAW the reference.

Prerequisite. 5100

Instructor. SI, WTI

References.

1. NAVMC 3500.14
2. Applicable community T&R manual
3. MCO 1553.2B, Appendix O

IUT-5120 2.0 B (N) L

Goal. Perform T&R administration.

Requirement. Document training to include:

1. Performance records.

2. Ensure MSHARP is updated appropriately.
3. Assemble recommendation package for certifications, qualifications, and designations IAW T&R manual.

Performance Standard. Complete the requirement items IAW the references. Instructor will question the trainee to check for understanding of the administration process.

Prerequisite. 5100, 5110

Instructor. SI, WTI

References.

1. NAVMC 3500.14
2. Local WTTP SOP
3. <http://msharpsupport.com>

IUT-5130 2.0 B (N) L

Goal. Develop a training plan.

Requirement. Given a deployment scenario develop a training plan to determine individual, and crew training needed to meet CMMR by completing the following:

1. Review Commander's training guidance.
2. Analyze the CMTR to determine training deficiencies and how to achieve CMMR.
3. Identify and schedule T&R training opportunities IAW the TEEP to achieve requirements.
4. Determine instructors required.
5. Determine equipment required.
6. Determine external support required.
7. Deliver a brief to the instructor that shows:
 - a. Crew manning and training requirements.
 - b. Current training status.
 - c. Identify the training deficiencies and resource shortfalls.
 - d. Explain the training plan to correct the training deficiencies.
 - e. Training plan meets commander's guidance.

Performance Standard. Complete the requirement items IAW the references and commander's training guidance. Training plan will ensure adequate time is allocated to include preparation, instruction, assessment, documentation, and remediation.

Prerequisite. 5100, 5110, 5120

Instructor. SI

References.

1. NAVMC 3500.14
2. Applicable community T&R manual

IUT-5140 5.0 * B (N) GE

Goal. Develop and conduct a TAOC simulation.

Requirement.

1. Develop desired training objectives for the simulation.
2. Develop scenario and scenario products to facilitate crew preparation for simulation execution.
Road-to-War
 - a. AADP
 - b. ACP
 - c. ACO
 - d. ATO
 - e. SPINs
 - f. Mission CDR / Transition Brief
3. Develop scenario events and Master Scenario Events List (MSEL) for simulation.
4. Develop simulation scenario in AC2S simulation software that is consistent with scenario and event injects.
5. Develop response cell positions and responsibilities.
6. Supervise setup and configuration of agency and response cell equipment for the conduct of the simulation.
 - a. MSCT script edits
 - b. MRQ-13 Single Channel Radio nets and frequency requests
 - c. Tactical Data Links
 - d. Tactical Chat
7. Supervise execution of the scenario and scenario injects.
8. Compile learning points and debrief focus points from scenario execution.
9. Compile after action items for improving future simulations.

Instructor. WTI

Prerequisite. 5100, 5110, 5120, 5130, 6320

IUT-5500 0.5 * B (N) GE

Goal. Discuss local area course rules.

Requirement. Provide a brief on local area course rules.

Performance Standard. N/A.

Instructor. AICI

Prerequisite. 6253, 6321

Reference. Local area SPINs.

IUT-5510 5 * B (N) GE

Goal. Develop an AIC training plan.

Requirement. Review Squadron pre-AIC records.

1. Analyze the records to determine training deficiencies.
2. Identify and schedule AIC training opportunities IAW the TEEP / local flight schedule to achieve requirements.
3. Deliver a brief to the instructor that shows:

- a. AIC training requirements.
- b. Current training status.
- c. Identify the training deficiencies and shortfalls.
- d. Explain the training plan to correct the training

Instructor. AICI

Prerequisite. 5500

Reference.

1. NAVMC 1553.1

IUT-5520 5 * B (N) GE

Goal. Conduct a period of instruction on an AIC academic event.

Requirement.

1. Prepare to train the event.
 - a. Gather the resources necessary to conduct the training.
 - b. Schedule the training event (facilities and students).
 - c. Prepare an evaluation form for each student to be evaluated.
2. Conduct training on the event selected:
 - a. Ensure all training resources are properly staged/equipment if set up properly for training.
 - b. Instruct the student in a thorough manner so as to cover all requirements for the event.
 - c. Ensure continuous, objective assessment of the student's progress during training.
3. Assess student performance:
 - a. Assess the student's performance to the performance standard.
 - b. Complete the evaluation form.
 - c. Debrief student on the performance and provide corrective action.
4. Route evaluation form as required.

Performance Standard. Complete the requirement items IAW the reference and ensure training is doctrinally and technically current.

Instructor. AICI

Prerequisite. 5510

Reference.

1. NAVMC 1553.1

IUT-5530 5 * B (N) GE

Goal. Evaluate an AIC during execution.

Requirement.

1. Evaluate the AIC student's conduct during the fighter brief to the AIC.
2. Evaluate the AIC student's controller brief.
3. Evaluate the AIC student's execution of the event.
4. Evaluate the AIC student's performance of the debrief (BATTSEA).

- a. Brief
 - b. Administration
 - c. Tactical administration
 - d. Training rule violations
 - e. Safety of flight
 - f. Environmental
 - g. Alibis
5. Assess student performance:
- a. Assess the AIC student's performance to the performance standard.
 - b. Complete the evaluation form.
 - c. Debrief AIC student on the performance and provide corrective action.
6. Route evaluation form as required.

Performance Standard. Conduct all stages of evaluation for any AIC level.

Instructor. AICI

Prerequisite. 5520

Reference.

1. NAVMC 1553.1

IUT-5540 0.5 * B (N) GE

Goal. Graduate an AIC 5 producing course.

Requirement. Graduate Air Intercept Controller Instructor Course (SCHL-6006) or TOPGUN Air Intercept Controller Course (SCHL-6069)

Performance Standard. Complete program of instruction.

Instructor. AICI

Prerequisite. 6323

4.11 CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (6000)

4.11.1 Purpose. This phase provides for community standardization of TAOC 7236 position qualifications, combat leadership and instructor designations.

Admin Notes.

1. The WTTP shall review the MPR to ensure all required training, documentation and administrative actions have been completed prior to staffing qualifications or designation recommendations for approval.

2. Only once an individual is qualified, designated or certified in writing, the signed letter filed in the MPR, and all administrative actions are completed will the qualification, designation or certification to be effective.

4.11.2 Stages. The following stages are included in this Phase of training.

PAR NO.	STAGE NAME	PAGE NUMBER
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4.11.3	QUALIFICATIONS (QUAL)	4-123
4.11.4	CERTIFICATIONS (CERT)	4-126
4.11.5	DESIGNATIONS (DESG)	4-129
4.11.6	SCHOOL CODES (SCHL)	4-131

4.11.3 QUALIFICATIONS (QUAL)

4.11.3.1 Purpose. To qualify Marines on their ability to perform as crewmembers through evaluation. There is no limit on the amount of system time required before performing a qualification event. Once all prerequisites for a qualification have been completed, the trainee is eligible to proceed to the applicable qualifying event.

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

Prerequisite. Complete all prerequisites for qualification and be recommended by the appropriate instructor.

QUAL-6250 0.5 * B (N) G

Goal. Qualify as a Weapons Operator (WO).

Requirement. Complete the required training in the AC POI. Be recommended by a WTI to the commanding officer who will approve the qualification in writing.

Performance Standard. N/A.

Instructor. WTI

Prerequisite. 3200, 3202, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008

Reference. None.

QUAL-6251 0.5 * B (N) G

Goal. Qualify as a Tactical Air Traffic Controller (TATC).

Requirement. Complete the required training in the TATC POI. Be recommended by a WTI to the commanding officer who will approve the qualification in writing.

Performance Standard. N/A.

Instructor. WTI

Prerequisite. 3350, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028

Reference. None.

QUAL-6252 0.5 * B (N) G

Goal. Qualify as a Deep Air Controller (DAC).

Requirement. Complete the required training in the DAC POI. Be recommended by a WTI to the commanding officer who will approve the qualification in writing.

Performance Standard. N/A.

Instructor. WTI

Prerequisite. 4600, 4602, 6250, 6256

QUAL-6253 0.5 * B _____ (N) G

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

Requirement. Complete the required training in the AIC POI. Be recommended by an AICI (through the WTI) to the commanding officer who will approve the qualification in writing.

Performance Standard. N/A.

Instructor. AICI

Prerequisite. 3508, 6250, 6251, 6256, 8040, 8041, 8042, 8043, 8044

Reference. None.

QUAL-6254 0.5 * B _____ (N) G

Goal. Qualify as a Missile Controller (MC).

Requirement. Complete the required training in the MC POI. Be recommended by a WTI to the commanding officer who will approve the qualification in writing.

Performance Standard. N/A.

Instructor. WTI

Prerequisite. 4100, 4102, 6250, 6256

Reference. None.

QUAL-6255 0.5 * B _____ (N) G

Goal. Qualify as Data Link Coordinator (DLC).

Requirement. Complete the required training in the DLC POI. Be recommended by a WTI to the commanding officer who will approve the qualification in writing.

Performance Standard. N/A.

Instructor. WTI

Prerequisite. 3402, 6250, 6256

Reference. None.

QUAL-6256 0.5 * B _____ (N) G

Goal. Qualify as a Surveillance Operator (SO).

Requirement. Complete the required training in the SO POI. Be recommended by a WTI to the commanding officer who will approve the qualification in writing.

Performance Standard. N/A.

Instructor. WTI

Prerequisite. 3302, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008

Reference. None.

QUAL-6257 0.5 * B _____ (N) G

Goal. Qualify as a Crew Chief (CC).

Requirement. Complete the required training in the CC POI. Be recommended by a WTI to the commanding officer who will approve the qualification in writing.

Performance Standard. N/A.

Instructor. WTI

Prerequisite. 3708, 6278, 6279, 8060, 8061, 8062, 8063, 8064, 8065, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8080

Reference. None.

4.11.4 CERTIFICATIONS (CERT)

4.11.4.1 Purpose. To provide certifications used within the training of individuals in safety of flight.

Admin Notes. This is annual training that must be completed by all personnel prior to beginning any live training. This is completed annually or upon transfer to a new unit.

CERT-6276 0.5 * B _____ (N) G

Goal. Certify as Air Intercept Controller Level 1.

Requirement. Complete the training prescribed in AIC1 POI. Be recommended by an AICI (through the WTI) to the commanding officer who will approve the certification in writing.

Performance Standard. N/A.

Prerequisite. Complete all designation requirements and be recommended for that designation. However, in the event that a commander deems it necessary to designate someone who has not completed the prerequisite, that person must complete the prerequisite within 6 months from the effective date of designation.

DESG-6320 0.5 * B _____ (N) G

Goal. Designation as Basic Instructor (BI).

Requirement. Be recommended for BI designation by a SI or WTI, and designated in writing by the commanding officer.

Performance Standard. N/A.

Prerequisite. 5000, 5010, 5020, 5030

Reference. None.

DESG-6321 0.5 * B _____ (N) G

Goal. Designation as Senior Instructor (SI).

Requirement. Be recommended for designation by a SI or WTI, and designated in writing by the commanding officer.

Performance Standard. N/A.

Prerequisite. 5100, 5110, 5120, 5130, 5140

Reference. None.

DESG-6322 0.5 * B _____ (N) G

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

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

Performance Standard. N/A.

Prerequisite. 6000

Reference. None.

DESG-6323 0.5 * B _____ (N) G

Goal. Designation as an Air Intercept Controller Supervisor (AICS).

Requirement. Be recommended for designation by an AICI. The Commanding Officer will designate the AICS in writing.

Performance Standard. N/A.

Instructor. AICI

Prerequisite. 5500, 5510, 5520, 5530

Reference. None.

DESG-6324 0.5 * B _____ (N) G

Goal. Designation as an Air Intercept Controller Instructor (AICI).

Requirement. Be recommended for AICI designation by the resident formal school (TOPGUN or MDTC) and designated in writing by the Commanding Officer.

Performance Standard. N/A.

Instructor. AICI

Prerequisite. 5540

DESG-6325 0.5 * B _____ (N) G

Goal. Designation as Formal Learning Center (FLC) Instructor.

Requirement. Complete the respective instructor course.

Performance Standard. N/A.

Instructor. N/A

Prerequisite. None.

DESG-6326 0.5 * B _____ (N) G

Goal. Designation as a SADC Operations Chief.

Requirement. Be designated by the Commanding Officer.

Performance Standard. N/A.

Instructor. N/A

Prerequisite. None.

4.11.6 SCHOOL CODES (SCHL)

4.11.6.1 Purpose. To provide tracking codes for required schools and training.

Admin Notes. The following table reflects skill enhancement training available to TAOC Marines:

SCHL CODE	NAME OF COURSE	LOCATION	CID
SCHL-6000	Weapons and Tactics Instructor (WTI)	MCAS Yuma, AZ	M14P2A1
SCHL-6001	Senior Watch Officer's Course	MCAS Yuma, AZ	N/A
SCHL-6002	Air Command and Control Officer's Course	MCAS Yuma, AZ	M1467Q1
SCHL-6003	ACE Battlestaff Officer Course (ABOC)	MCAS Yuma, AZ	N/A
SCHL-6006	Marine Division Tactics Course (MDTC)	MCAS Yuma, AZ	N/A
SCHL-6010	Airspace Course	Hulbert Field, FL	F19KXD2
SCHL-6015	Joint Air Operation Center Command and Control Course (JAOC2C) Airspace Course	Hulbert Field, FL	F19L2W2
SCHL-6016	Joint Air Operations Senior Staff Course	Hulbert Field, FL	N/A
SCHL-6020	Link 16 Basics Course (JT-100)	Joint Knowledge Online (JKO)	N/A
SCHL-6021	Intro to Multi TDL Network (JT-101)	Fort Bragg, NC	N/A
SCHL-6022	Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102)	Fort Bragg, NC	A05L6Z1
SCHL-6023	Link 16 Joint Interoperability Course (US-109)	Joint Knowledge Online (JKO)	N/A
SCHL-6024	Multi TDL Planner Course (JT-201)	Fort Bragg, NC	A05KHY1
SCHL-6025	Link 16 Unit Manager (LUM) Course (JT-220)	Fort Bragg, NC	N/A
SCHL-6026	Joint Interface Control Officer (JICO) (JT-301)	Fort Bragg, NC	N/A
SCHL-6027	Advanced JICC Operator Course (JT-310)	Fort Bragg, NC	N/A
SCHL-6067	Military Airspace Management Course	NAS Biloxi, MS	F0273D1
SCHL-6069	USMC AIC TOPGUN Ground School	Naval Strike and Air Warfare Center (NSAWC)	N39KYA1
SCHL-6072	Advanced Field Artillery Tactical Data System (AFATDS)	RGtSchls / Ft Sill, OK	N/A
SCHL-6078	TOPGUN AIC Course	Naval Air Warfare Development Center (NAWDC)	N39KYA1
SCHL-6079	JRE-GW Operators Course	Engility Corporation	N/A
SCHL-6082	Joint Firepower Course	USAF 6 th Combat Training Squadron	N/A

Prerequisite. The individual school houses will maintain the prerequisites for each course that they offer. Refer to Skills Enhancement message and the school house for up to date prerequisites.

SCHL-6000 1.0 * B (N) G

Goal. Weapons and Tactics Instructors (WTI) Course.

Requirement. Graduate from WTI Course at MAWTS-1, Yuma, AZ.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. 6320, 6321.

Reference. None.

SCHL-6001 1.0 * B (N) G

Goal. Senior Watch Officer's Course.

Requirement. Graduate from course at MAWTS-1, Yuma, AZ.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6002 1.0 * B (N) G

Goal. Air Command and Control Officer's Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6003 1.0 * B (N) G

Goal. ACE Battlestaff Officer Course (ABOC).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6006 1.0 * B (N) G

Goal. Marine Division Tactics Course (MDTC).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6010 1.0 * B (N) G

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6072 1.0 * B (N) G

Goal. Advanced Field Artillery Tactical Data System (AFATDS).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6078 1.0 * B (N) G

Goal. TOPGUN AIC Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6079 1.0 * B (N) G

Goal. JRE-GW Operators Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6082 1.0 * B (N) G

Goal. Joint Firepower Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6096 1.0 * B (N) G

Goal. Attend respective instructor development course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

4.12 MISSION ESSENTIAL TASK (MET) PHASE (7000)

4.12.1 Purpose. This phase takes CMMR proficient Marines from multiple PMOS, puts them in CMMR representative crews, and trains them as combat effective teams in combined events.

4.12.1.1 Admin Notes. Prerequisites for this phase of training cannot be waived. Multiple events can be trained at the same time as long as separate evaluations are being conducted.

4.12.1.2 Prerequisite. Marines must either be CMMR crew position or non-aviation PMOS proficient to train in this phase. For those events requiring combat leaders, only Marines currently designated as such can train in this phase.

4.12.2 Stages. The following stages are included in the Mission Essential Task (MET) Phase of training.

PAR NO.	STAGE NAME	PAGE NUMBER
4.12.3	CONDITION (COND)	4-132

4.12.3 CONDITION (COND)

4.12.3.1 Purpose. To train unit level teams in executing community specific MET(s) or MET preparatory events.

4.12.3.2 General.

Admin Notes. All events in this stage will require the following administrative/operational documents to be identified or created:

1. Letter Of Instruction (LOI)
2. Personnel Roster

3. Bill Of Material (BOM)
4. Equipment Density List (EDL)

Prerequisite. If an event requires prerequisites in addition to those listed for the MET Phase, they will be covered in the individual event.

Crew Requirements. This stage requires that all crew members and combat leaders be qualified/designated and proficient (current) in the position they are assigned for the following events. Crews shall be task organized to meet the mission.

COND-7000 16.0 730 B, R, M (N) L

Goal. Conduct Airspace Surveillance.

Requirement. Given organic C2 systems, radars, and a minimum of two CMMR surveillance crews, perform the following:

1. Plan for the emplacement, setup, operation, and maintenance of TAOC radar(s) and C2 equipment within the MAGTF and/or joint assigned airspace.
2. Extract tactical data link (TDL) architecture information from MAGTF and joint documents.
3. Extract required surveillance operations information exchange requirements from source MAGTF and/or joint documents.
4. Plan for TAOC airspace surveillance operations.
5. Conduct the emplacement, setup, operation, and maintenance of TAOC radar(s) and C2 equipment
6. Detect and track aircraft and missiles within MAGTF and/or joint assigned airspace using organic TAOC radar(s).
7. Conduct combat identification on objects detected and tracked using information extracted from surveillance operations source documents.
8. Disseminate air/ground surveillance information to adjacent, higher, and subordinate agencies and aircraft identified in surveillance operations source documents.
9. Demonstrate proficiency during crew changeover.

Performance Standard. Complete the requirements conducting TAOC operations in support of MAGTF and/or joint exercises or operations.

Instructor. WTI

Prerequisite. None.

External Syllabus Support. TDSM, RDR, AVRAD, UT. Live execution will require specific T/M/S aviation assets.

Reference. None.

COND-7001 16.0 730 B, R, M (N) L/S

Goal. Conduct Positive Control.

Requirement. Given organic C2 systems, radars, and a minimum of two CMMR weapons crews, perform the following:

1. Plan for the emplacement, setup, operation, and maintenance of TAOC radar(s) and C2 equipment within the MAGTF and/or joint assigned airspace.
2. Conduct the emplacement, setup, operation, and maintenance of TAOC radar(s) and C2 equipment

Goal. Conduct Dual Site Air Defense Operations.

Requirement. Given organic C2 systems, radars, and a minimum of four CMMR air defense crews, perform the following at two geographically disparate sites:

1. Plan for the emplacement, setup, operation, and maintenance of TAOC radar(s) and C2 equipment within the MAGTF and/or joint assigned airspace.
2. Conduct the emplacement, setup, operation, and maintenance of TAOC radar(s) and C2 equipment
3. Conduct airspace surveillance.
4. Conduct positive control.
5. Coordinate air defense actions.
6. Demonstrate proficiency during crew changeover.

Performance Standard. Complete the requirements conducting TAOC operations in support of MAGTF and/or joint exercises or operations.

Instructor. WTI

Prerequisite. None.

External Syllabus Support. TDSM, RDR, AVRAD, UT. Live execution will require specific T/M/S aviation assets.

Reference. None.

COND-7004 16.0 730 B, R, M (N) L/S

Goal. Integrate Operational Air Defense Capabilities.

Requirement. Given organic C2 systems, radars, and a minimum of two core plus proficient SADC crews, perform the following:

1. Plan for the emplacement, setup, operation, and maintenance of TAOC radar(s) and C2 equipment within the MAGTF and/or joint assigned airspace.
2. Conduct the emplacement, setup, operation, and maintenance of TAOC radar(s) and C2 equipment
3. Extract air defense requirements from MAGTF and joint air defense documents.
4. Create a plan for the TAOC to manage air defense operations within MAGTF and/or joint assigned region/sector.
5. Manage air defense operations within the MAGTF and/or joint assigned region/sector.
6. Extract tactical data link (TDL) architecture information from MAGTF and joint documents.
7. Create a plan for TAOC to assist the (Joint) Interface Control Officer J/ICO with the management of TDLs.
8. Manage TDLs for the TAOC in support of MAGTF and joint operations.
9. Demonstrate proficiency during crew changeover.

Performance Standard. Complete the requirements conducting TAOC operations in support of MAGTF AAW and/or joint DCA exercises or operations.

Instructor. WTI

Prerequisite. None.

External Syllabus Support. TDSM, RDR, AVRAD, UT. Live execution will require specific T/M/S aviation assets.

Reference. None.

4.13 AVIATION CAREER PROGRESSION MODEL (8000)

4.13.1 Purpose. To enhance 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 of training in the Aviation Career Progression Model (ACPM) is on academic events in the following areas:

Marine Air Command and Control System
(MACCS) Aviation Ground Support
Joint Air
Operations
ACE Battle
Staff MAGTF
Seabased Operations
Combatant Commander Organizations

General.

1. 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 pre-requisites to selected flight events or stages. Additionally, several ACPM academic events are integrated as prerequisites for flight leadership syllabi.
2. 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.
3. 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://vcepub.tecom.usmc.mil/sites/msc/magftc/mawts1/departments1/newc3/default.aspx>
4. Completed events shall be manually logged and tracked in M-SHARP.
5. ACPM academic events, along with their identifying prerequisite association with other training phases/stages/events, are listed below.

ACPM-8000 1.0 * B (N) G

Goal. Demonstrate an understanding of the MACCS stage.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI, WTI

Prerequisite. 8001, 8002, 8003, 8004, 8005, 8006, 8008.

Reference. C3 Course Catalog.

ACPM-8001 4.0 * B (N) G

Goal. Demonstrate an understanding of the Marine Air Command and Control System (MACCS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Describe how the control of aircraft and missiles relates to the other five functions of USMC aviation.
2. Define the control of aircraft and missiles and each of its subcomponents.
3. Define the Marine aviation's philosophy of centralized command and decentralized control.
4. Differentiate between Marine aviation philosophy and Joint aviation philosophy.
5. Identify the principle objectives of the MACCS.
6. Recall the primary role of each agency of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MAWTS-1 MACCS Agencies, Functions and the Control of Aircraft and Missiles Class
2. MCTP 3-20F Control of Aircraft and Missiles

ACPM-8002 4.0 * B (N) G

Goal. Demonstrate an understanding of the Tactical Air Command Center (TACC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. State the mission of the TACC.
2. Identify the four organizations of the TACC.
3. List the primary responsibilities of Air Combat Intelligence (ACI).
4. List the primary responsibilities of Future Operations (FOPS).
5. List the primary responsibilities of Future Plans (FPLANS).
6. List the primary responsibilities of Current Operations (COPS).
7. List the major end items used by the TACC.
8. List the system limitations of the TACC.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MAWTS-1 TACC Class
2. MCRP 3-20F.4 Marine TACC Handbook

ACPM-8003 4.0 * B (N) G

Goal. Demonstrate an understanding of the Direct Air Support Center (DASC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the DASC.
2. List the structure and task organization of the DASC.
3. Identify the major end items and their characteristics used by the DASC.
4. List the capabilities and limitations of the DASC.
5. Identify how the DASC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MAWTS-1 DASC Class
2. MCRP 3-20F.5 DASC Handbook

ACPM-8004 4.0 * B (N) G

Goal. Demonstrate an understanding of the Tactical Air Operations Center (TAOC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the mission of the TAOC.
2. Identify the Mission Essential Tasks (METs) for the TAOC.
3. Identify the structure and task organization of the TAOC.
4. Identify the major end items and their characteristics used by the TAOC.
5. Identify the capabilities and limitations of the TAOC.
6. Identify how the TAOC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI .

Prerequisite. None.

References.

1. MAWTS-1 TAOC Class
2. MCRP 3-20F.6 TAOC Handbook

ACPM-8005 4.0 * B (N) G

Goal. Demonstrate an understanding of Marine Air Traffic Control (MATC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of MATC.
2. Identify the Mission Essential Tasks (METs) for MATC.
3. List the structure and task organization of MATC.
4. Identify the major end items and their characteristics used by MATC.
5. Identify the capabilities and limitations of MATC.
6. Identify how MATC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI .

References.

1. MAWTS-1 MATC Employment Class
2. MCTP 3-20F
3. MCRP 3-20F.7 Marine Air Traffic Control Detachment Handbook

ACPM-8006 4.0 * B (N) G

Goal. Demonstrate an understanding of Low Altitude Air Defense (LAAD).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the LAAD battalion.
2. Identify the structure and task organization of the LAAD battalion.
3. Identify the primary vehicle and surface-to-air weapon used by the LAAD Battalion.
4. Define the LAAD employed guidelines.
5. List the LAAD weapon applications.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI .

Prerequisite. None.

References.

1. MAWTS-1 LAAD Employment Class
2. MCRP 3-20F.8 LAAD Battalion Handbook
3. MCRP 3-20F.9 LAAD Gunner's Handbook

ACPM-8008 4.0 * B (N) G

Goal. Demonstrate an understanding of the Marine Wing Communications Squadron (MWCS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the MWCS.
2. Identify the structure and task organization of the MWCS.
3. Identify the Mission Essential Tasks (METs) for the MWCS.
4. Identify the major end items and their characteristics used by MWCS.
5. Identify the capabilities and limitations of the MWCS.
6. Identify how the MWCS is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MAWTS-1 MWCS Employment Class

2. MCRP 3-30B.2 MAGTF Communications Systems
3. NAVMC 3500.56 Communications Training and Readiness Manual

ACPM-8020 1.0 * B (N) G

Goal. Demonstrate an understanding of the ACE stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Reference. C3 Course Catalog.

ACPM-8021 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC aviation operations doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the six functions of Marine aviation to include all their subsets.
2. Identify the organization and mission of the Marine Aircraft Wing (MAW), to include each type of group and squadron.
3. Define who has operational control of organic MAGTF aviation assets during Joint operations.
4. List the four types of sorties the MAGTF Commander makes available to the Joint Force.
5. Identify the purpose of the Air Tasking Order (ATO).
6. Identify the six phases of the air tasking cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MCWP 3-2 Aviation Operations

ACPM-8022 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC doctrine for the control of aircraft and missiles.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify how the control of aircraft and missiles relates to the other five functions of USMC aviation.
2. Identify distinctions between Marine aviation philosophy and that of the other services.
3. Identify the principle objectives of the Marine Air Command and Control System (MACCS).
4. Describe how the COMMARFOR may serve as the Joint Force Air
5. Component Commander (JFACC), Airspace Control Authority (ACA), and Area Air Defense Commander (AADC).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

1. MAWTS-1 Control of Aircraft and Missiles Class
2. MCTP 3-20F Control of Aircraft and Missiles

ACPM-8023 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC Offensive Air Support (OAS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the purpose of the MAGTF Commanders Single Battle Concept.
2. Define the subcategories of OAS.
3. Define the requirements for effective OAS.
4. Define the three types of Deep Air Support (DAS).
5. Define the capabilities and limitations of the OAS function.
6. Identify the elements of a Joint Tactical Air Strike Request (JTAR).
7. Identify the three types of control of Close Air Support (CAS).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 OAS Class
2. MCTP 3-20D Offensive Air Support

ACPM-8024 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC Assault Support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the types of assault support operations.
2. Identify which aircraft conduct each of the types of assault support operations.
3. Identify the elements of an Assault Support Request (ASR).
4. List assault support capabilities and limitations.
5. Define the role of the air mission commander and the assault force commander during air assault operations.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 Assault Support Class
2. MCTP 3-20E Assault Support

ACPM-8025 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC Air Reconnaissance doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the three categories of air reconnaissance.
2. Identify the four principals of air reconnaissance.
3. Identify the five prerequisites for effective air reconnaissance.
4. Identify the current USMC aircraft that have the mission of air reconnaissance.
5. Identify the form used to request air reconnaissance.
6. Identify the five supporting operations for effective air reconnaissance.
7. Identify the capabilities and limitations of air reconnaissance.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MCTP 3-20G Air Reconnaissance

ACPM-8026 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC Electronic Warfare (EW) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define radar.
2. List the three basic radar types.
3. Identify the limitations and characteristics of radar systems.
4. Identify the six guidance systems and how they work.
5. List the three subdivisions of Electronic Warfare (EW).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MCRP 3-32D.1 Electronic Warfare

ACPM-8027 4.0 * B (N) G

Goal. Demonstrate an understanding of the USMC Anti-air Warfare (AAW) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define AAW.

2. Define the two subsets of AAW.
3. Identify the principles of AAW.
4. Identify the types of Offensive Anti-air Warfare (OAAW).
5. Identify the active air defense functions.
6. List three examples of passive air defense measures.
7. Define a Joint Engagement Zone (JEZ), Fighter Engagement Zone (FEZ), Missile Engagement Zone (MEZ), and Base Defense Zone (BDZ).
8. Define the air defense warning conditions.
9. Define the weapons control statuses.
10. Identify the responsibilities of the Regional Air Defense Commander (RADC) and the Sector Air Defense Commander (SADC).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MCTP 3-20C Anti-air Warfare

ACPM-8028 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the USMC Ground Support (AGS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the organization responsible for providing AGS to the Marine Aircraft Wing (MAW).
2. Identify the 13 functions of AGS.
3. Identify the five activities that the Marine Wing Support Squadron (MWSS) performs for the ACE when deployed.
4. Identify the four basing concepts for MAGTF Forward Operating Bases (FOBs).
5. List the four classifications of FOBs.
6. Differentiate the distinguishing characteristics of FOBs.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 AGS Class
2. MCTP 3-20B Aviation Ground Support

ACPM-8040 1.0 * B _____ (N) G

Goal. Demonstrate an understanding of the Threat stage of the MACCS ACPM

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI, WTI.

Prerequisite. 8041, 8042, 8043, 8044.

Reference. C3 Course Catalog.

ACPM-8041 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the surface-to-anti-air threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the system name with the guidance and target aspect for the following Man Portable Air Defense Systems (MANPADS):
 - a. SA-7
 - b. SA-14
 - c. SA-16
 - d. SA-18
2. Match the system name with the guidance and associated radars for the following Radio Frequency Surface-to-Air Missile Systems (RF SAMS):
 - a. SA-2
 - b. SA-6
 - c. SA-8
 - d. SA-10
 - e. SA-11
 - f. SA-15
 - g. SA-20
 - h. Roland-III
3. Match the system name with the type and associated radar for the following Air Defense Artillery (AAA):
 - a. ZPU 1, 2, 4
 - b. ZSU-23-4
 - c. 2S6
 - d. S-60

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8042 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the fixed wing threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the AN-2 Colt.
2. Identify the role of the MIG-23 Flogger.
3. Identify the role of the MIG-29 Fulcrum.
4. Identify the role of the MIG-31 Foxhound.

1. Match the system name with the terminal guidance for the following Air-to-Surface Missiles:
 - a. AS-10 Karen
 - b. AS-11 Kilter
 - c. AS-12 Kegler
 - d. AS-14 Kedge
 - e. AS-17 Krypton
2. Match the system name with the warhead and guidance for the following Surface-to-Surface Missiles:
 - a. FROG-7
 - b. SCUD-B
 - c. SCUD-C
 - d. Nodong 1
 - e. C 801
 - f. C 802
3. Identify the mission of the following threat UAS:
 - a. Ababil
 - b. Mohajer
 - c. Harpy
 - d. Heron
 - e. ASN-206
 - f. Pchela-1T

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 Marine Aviation Intelligence Reference
https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/ne_wc3/default.aspx
2. Marine Corps Intelligence Activity Iran Country Handbook (appendix A)
3. Marine Corps Intelligence Activity North Korea Country Handbook (page 86)
4. Marine Corps Intelligence Activity China Country Handbook (appendix A)
<https://www.intelink.gov/mcia/handbook.htm>
5. MCIA UAV Recognition Guide <https://www.intelink.gov/mcia/index.htm>

ACPM-8060 1.0 * B _____ (N) G

Goal. Demonstrate an understanding of the MAGTF stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI, WTI.

Prerequisite. 8061, 8062, 8063, 8064, 8065.

References. C3 Course Catalog.

ACPM-8061 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the MAGTF ground combat operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify how the Ground Combat Element (GCE) is employed as part of the MAGTF and the capabilities the GCE provides to the MAGTF commander
2. Define the following items related to command and control of ground combat operations:
 - a. Echelons of the GCE headquarters
 - b. Battlespace Organization
 - c. Battlespace Framework
3. Define the five types of amphibious operations.
4. Identify the following items related to offensive operations:
 - a. Types of offensive operations
 - b. Types of attack
 - c. Forms of maneuver
 - d. Distribution of forces
4. Identify the following items related to defensive operations:
 - a. Organization of the defense
 - b. Distribution of forces
 - c. Types of defensive operations
 - d. Defensive methods

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference.

1. MCDP 1-0 Marine Corps Operations

ACPM-8062 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of fire support coordination in the Ground Combat Element (GCE).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the four fire support tasks.
2. List the functions of the senior fire support coordination center (FSCC) in the GCE.
3. List the four steps of the MAGTF Targeting Process.
4. Define the purpose of essential fire support tasks (EFST).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 MAGTF Targeting and Fire Support Planning Class
2. MCTP 3-10F Fire Support Coordination in the GCE

ACPM-8063 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the MAGTF command and control.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify MAGTF command and support relationships.
2. Identify the purpose and role of the command and control centers in the CE, ACE, GCE, and LCE.
3. Identify the purpose and role of the amphibious command and control facilities.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference.

1. MCWP 3-30 MAGTF Command and Control

ACPM-8064 4.0 * B (N) G

Goal. Demonstrate an understanding of MAGTF communications.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the six characteristics of communications and information systems.
2. Identify the mission and organizational structure of the Communications Battalion.
3. Identify the purpose of the Communications-Electronics Operating Instructions (CEOI) and what information is usually included in it.
4. Identify what information can be found in Annex K of an operations order.
5. Identify the purpose of select fires, support, and ACE specific radio nets.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MCRP 3-30B.2 MAGTF Communications System

ACPM-8065 4.0 * B (N) G

Goal. Demonstrate an understanding of phasing control ashore.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify types of amphibious operations and how command relationships may change during the conduct of each.
2. Identify how disputes among commanders during amphibious operations are resolved.
3. Identify the key commanders and command relationships.
4. Identify the key characteristics of each phase in phasing the MACCS ashore.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. JP 3-02 Amphibious Operations
2. MCTP 3-20F Control of Aircraft and Missiles (Appendix C)

ACPM-8066 4.0 * B (N) G

Goal. Demonstrate an understanding of information management.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the principles of information management with their descriptions.
2. Define each of the classes of information within an information hierarchy.
3. List the characteristics of quality information.
4. Identify the role and responsibilities of an Information Management Officer (IMO).
5. Define C2 support structure and the three steps followed to develop one.
6. Identify the purpose of an information management matrix and the information management plan.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MCTP 3-30B Information Management

ACPM-8067 4.0 * B (N) G

Goal. Demonstrate an understanding of Unmanned Aircraft Systems in support of MAGTF operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the four types of payloads.
2. Identify the three attributes that determine UAS Groups.
3. Identify the five different UAS Group Categories.
4. Identify the two types of VMU operational employment.
5. Identify the three components of the RQ-7B Communications Relay Package.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MCRP 3-42.1A
2. NTTP 3-22.3-VMU

ACPM-8080 1.0 * B (N) G

Goal. Demonstrate an understanding of the MAGTF stage of the joint air operations stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI, WTI.

Prerequisite. 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Reference. C3 Course Catalog.

ACPM-8081 4.0 * B (N) G

Goal. Demonstrate an understanding of the command and control of joint air operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the definition of joint air operations.
2. Identify the Joint Force Air Component Commander's responsibilities.
3. Identify the five sections that comprise the Joint Air Operations Center.
4. Identify the six phases of the Joint Air Tasking Cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. DOCNET Course 3-30 (<http://www.dtic.mil/doctrine/docnet/>)
2. MAWTS-1 Joint Air Operations Class
3. JP 3-30 C2 of Joint Air Operations

ACPM-8082 4.0 * B (N) G

Goal. Demonstrate an understanding of the theater air ground system (TAGS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. List the primary characteristics of the Theater Air Ground System (TAGS).
2. Identify the elements within the Air Force's Theater Air Control System (TACS) and their primary responsibilities.
3. Identify the aviation command and control elements with the Army Air and Ground System (AAGS) and their primary responsibilities.

4. Identify the aviation elements within the Navy's Composite Warfare Commander (CWC) architecture.
5. Identify the Amphibious Task Force (ATF) construct and its primary responsibilities.
6. Identify the aviation command and control elements within the Special Operations Air-Ground System.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference.

MCRP 3-20.1 Multi-Service Tactics, Techniques, and Procedures for the Theater Air-Ground System_

ACPM-8083 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the joint fire support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define joint fires.
2. Define joint fire support.
3. Identify the steps of the joint fire support planning process.
4. List the various elements of the component commander's fires command and control system.
5. Define the various joint control and coordination measures associated with joint fire support.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. JP 3-09 Joint Fire Support

ACPM-8084 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the close air support (CAS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Explain key roles and responsibilities related to the planning and execution of CAS.
2. Detail key steps in the planning and execution of CAS.
3. Describe various coordination measures used in the planning and conduct of CAS.
4. Describe the manner in which the two types of CAS requests are fulfilled.
5. Identify the goal and purpose of synchronizing CAS with surface fires.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. JP 3-09.3 Close Air Support

ACPM-8085 4.0 * B (N) G

Goal. Demonstrate an understanding of the joint targeting doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify types of targets.
2. Identify and describe the six phases of the joint targeting cycle.
3. Identify characteristics of a target.
4. Identify and describe steps in dynamic targeting.
5. Describe roles and responsibilities related to the joint targeting process.
6. Describe key products and processes of the joint targeting cycle.
7. Identify key terms related to the joint targeting process.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. JP 3-60 Joint Targeting

ACPM-8086 4.0 * B (N) G

Goal. Demonstrate an understanding of the North Atlantic Treaty Organization (NATO).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the composition of the NATO alliance.
2. Identify the three key articles of the NATO alliance.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MAWTS-1 NATO Class
2. North Atlantic Treaty Organization Handbook
3. "What is NATO" Brief(http://www.nato.int/welcome/intro_to_NATO_en.ppt)
4. AJP-01(D)

ACPM-8087 4.0 * B (N) G

Goal. Demonstrate an understanding of the joint airspace control doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the

following learning objectives:

1. Identify the responsibilities of the airspace control authority (ACA).
2. Identify the basic principles for airspace control.
3. Identify the purpose of the airspace control plan (ACP).
4. Identify the purpose of the airspace control order (ACO).
5. Identify the methods of airspace control.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. JP 3-30 C2 of Joint Air Operations
2. JP 3-52 Joint Airspace Control

ACPM-8088 4.0 * B (N) G

Goal. Demonstrate an understanding of the joint doctrine for countering air and missile threats.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the purposes of counter air missions (offensive and defensive).
2. Identify roles and responsibilities related to counter air missions.
3. Identify key considerations for the planning of offensive counter air operations.
4. Identify key considerations for the planning of defensive counter air operations.
5. Identify key principles and consideration related to the command and control of counter air operations.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference.

1. JP 3-01 Countering Air and Missile Threats

4.14 T&R SYLLABUS MATRIX

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)												
AIR SCHOOL (AIRS) STAGE												
AIRS	1000	Explain the fundamentals of Aviation Command and Control (AC2S) employment	B	G	(N)	*	*	0	*	*	*	
AIRS	1200	Identify the components of Marine Air Command and Control System (MACCS)	B	G	(N)	*	*	0	*	*	*	
AIRS	1202	. Identify characteristics of the Marine Air Control Squadron (MACS)	B	G	(N)	*	*	0	*	*	*	
AIRS	1204	Identify characteristics of U.S. and threat aircraft and missile systems	B	G	(N)	*	*	0	*	*	*	
AIRS	1206	Configure Tactical Air Operations Center (TAOC) platforms for operations	B	G	(N)	*	*	0	*	*	*	
AIRS	1208	Operate TAOC voice communications equipment	B	G	(N)	*	*	0	*	*	*	
AIRS	1210	Operate Command, Control, Communications, Computer and Intelligence (C4I) systems	B	G	(N)	*	*	0	*	*	*	
AIRS	1212	Perform surveillance functions	B	G	(N)	*	*	0	*	*	*	
AIRS	1216	Operate Link 16	B	G	(N)	*	*	0	*	*	*	
AIRS	1218	Operate a Beyond Line of Site (BLOS) gateway	B	G	(N)	*	*	0	*	*	*	
AIRS	1220	Establish a workstation for Weapons functions	B	G	(N)	*	*	0	*	*	*	
AIRS	1222	Perform Airspace Management functions	B	G	(N)	*	*	0	*	*	*	
AIRS	1224	Perform Deep Air Operations Management functions	B	G	(N)	*	*	0	*	*	*	

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIRS	1226	Perform air and missile defense functions	B	G	(N)	*	*	0	*	*	*	
TOTAL HOURS AIR SCHOOL (AIRS) STAGE				EVENTS		20	HOURS	0				
TOTAL HOURS CORE SKILL INTRODUCTION TRAINING (1000 PHASE)								0				
CORE SKILL TRAINING (2000 PHASE EVENTS)												
ACADEMICS (ACAD) STAGE												
ACAD	2000	Define combat identification capabilities and procedures	B	G	(N)	*	*	2	*	*	*	2000
ACAD	2012	Caps and Lims of Threat SAMs	B	G	(N)	*	*	1	*	*	*	*
ACAD	2014	Define Air Interdiction terms.	B	G	(N)	*	*	1	*	*	*	*
ACAD	2016	Explain the troubleshooting theory	B	G	(N)	*	*	1	*	*	*	2016
ACAD	2020	Identify the characteristics, capabilities and limitations of the Communications Subsystem (CS)	B	G	(N)	*	*	1.5	*	*	*	2020
ACAD	2022	Identify TAOC voice communication capabilities	B	G	(N)	*	*	1	*	*	*	2022
ACAD	2024	Define TAOC radio terms	B	G	(N)	*	*	1	*	*	*	2024
ACAD	2026	Identify the purpose of the positions that make up the Air Defense Command Structure	B	G	(N)	*	*	0.5	*	*	*	2026
ACAD	2028	State the purpose and intent of Rules of Engagement (ROE)	B	G	(N)	*	*	2	*	*	*	2028
ACAD	2030	Define Joint Theater Missile Defense	B	G	(N)	*	*	1	*	*	*	2030
ACAD	2034	Describe aviation operational documents	B	G	(N)	*	*	1	*	*	*	2034
ACAD	2036	Define characteristics of Aviation Air-to-Surface Ordnance	B	G	(N)	*	*	1	*	*	*	2036
ACAD	2038	Define the characteristics of friendly GBAD and SAM systems	B	G	(N)	*	*	2	*	*	*	2038

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	2050	State the characteristics and employment considerations of TACAIR Navy and USMC Aircraft	B	G	(N)	*	*	2.5	*	*	*	2050
ACAD	2054	Describe the capabilities of US Air-to-Air Weapons	B	G	(N)	*	*	1.5	*	*	*	2054
ACAD	2056	Describe Air Defense terminology	B	G	(N)	*	*	2	*	*	*	2056
ACAD	2058	Define the following words and concepts	B	G	(N)	*	*	4	*	*	*	2058
ACAD	2060	Identify group labels/names and inner-group formations	B	G	(N)	*	*	4	*	*	*	2060
ACAD	2062	Identify maneuvers and appropriate fill-ins	B	G	(N)	*	*	4	*	*	*	2062
ACAD	2064	Define the following comparative communication terms	B	G	(N)	*	*	2	*	*	*	2064
ACAD	2066	Define Air Intercept Control Communication Terms	B	G	(N)	*	*	2	*	*	*	2066
ACAD	2068	Integrated Fire Control	B	G	(N)	*	*	1	*	*	*	2826
ACAD	2070	Aerial Refueling	B	G	(N)	*	*	2	*	*	*	*
ACAD	2072	Airspace Measures	B	G	(N)	*	*	2	*	*	*	*
ACAD	2102	State the capabilities, limitations and employment considerations for U.S. Air Force Aircraft	B	G	(N)	*	*	1.5	*	*	*	2102
ACAD	2104	State the capabilities and limitations of Threat Aircraft	B	G	(N)	*	*	3	*	*	*	2104
ACAD	2106	Define Threat Missile Terms	B	G	(N)	*	*	1	*	*	*	2106
ACAD	2108	State the capabilities and limitations of threat missiles	B	G	(N)	*	*	1	*	*	*	2108
ACAD	2116	Fighter Integration COE	B	G	(N)	*	*	1	*	*	*	2116
ACAD	2118	Describe the three assessment points where flight leads make tactical decisions and update tactic, flow and targeting	B	G	(N)	*	*	0.5	*	*	*	2118

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	2120	State the concepts and definitions associated with the following tactics and defensive considerations	B	G	(N)	*	*	1	*	*	*	2120
ACAD	2122	Fighter Timelines	B	G	(N)	*	*	2	*	*	*	2122
ACAD	2126	Describe the types of targeting	B	G	(N)	*	*	1	*	*	*	2126
ACAD	2128	State standard picture targeting	B	G	(N)	*	*	2	*	*	*	2128
ACAD	2134	State when the following group names should be applied	B	G	(N)	*	*	2	*	*	*	2134
ACAD	2140	Identify Logistic Support (LOGSUP)	B	G	(N)	*	*	1	*	*	*	2716
ACAD	2142	Cooperative Engagement Capability	B	G	(N)	*	*	1	*	*	*	2826
TOTAL HOURS ACADEMICS (ACAD) STAGE				EVENTS		28	HOURS	59				
LOCAL FAMILIARIZATION (LFAM) STAGE												
LFAM	2150	Brief local restricted areas	B,R,M	GE	(N)	1095	*	5	*	*	*	2150
TOTAL HOURS LOCAL FAM (LFAM) STAGE				EVENTS		1	HOURS	5				
) STAGE												
EQUIP	2160	Emplace and displace the Operations Facility (OPFAC).	B	L	(N)	*	*	8	*	*	*	2160
EQUIP	2162	Setup organic communications equipment.	B,R	L	(N)	*	*	4	*	*	*	2162
EQUIP	2164	Conduct TAOC duties in a Chemical Biological Radiological Nuclear (CBRN) environment.	B	L	(N)	*	*	4	*	*	*	2164
TOTAL) STAGE				EVENTS		3	HOURS	16				
WEAPONS OPERATOR (WO) STAGE												
WO	2200	Produce a TATC log.	B	L	(N)	*	*	1	2034	*	*	2200
WO	2202	Record aircraft handovers.	B	L/S	(N)	*	*	8	2072, 2200	*	*	2202
WO	2206	Maintain system symbology.	B	L/S	(N)	*	*	4	2000, 2028, 2060,2072	*	*	2206

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TOTAL WEAPONS OPERATOR (WO) STAGE				EVENTS		3	HOURS	13				
SURVEILLANCE OPERATOR (SO) STAGE												
SO	2300	Conduct track management	B	L	(N)	*	*	1	2000, 2072, 2028, 2034	*	*	2300
SO	2302	Conduct track management in TDL environment	B	L	(N)	*	*	1	2000, 2072, 2028, 2034, 2800, 2811, 2812	*	*	2302
SO	2304	Conduct manual crosstell	B	L	(N)	*	*	1	2000, 2072, 2022, 2028, 2034, 2800	*	*	*
TOTAL SURVEILLANCE OPERATOR (SO) STAGE				EVENTS		3	HOURS	3				
SURVEILLANCE DIRECTOR (SD) STAGE												
SD	2310	Develop radar coverage diagram	B	GE	(N)	*	*	8	6255	*	*	2310
SD	2312	Conduct EW planning	B	GE	(N)	*	*	8	6255	*	*	2312
TOTAL SURVEILLANCE DIRECTOR (SD) STAGE				EVENTS		2	HOURS	16				
TACTICAL AIR TRAFFIC CONTROLLER (TATC) STAGE												
TATC	2352	Conduct TATC planning	B	GE	(N)	*	*	8	2020, 2024, 2050, 2070, 2102, 6250, 6256, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008	*	*	2352
TATC	2354	Conduct Check in procedures	B	L/S	(N)	*	*	2	2352	*	*	
TATC	2356	Perform Authentication	B	L/S	(N)	*	*	2	2352	*	*	
TATC	2358	Perform Procedural Control	B	L/S	(N)	*	*	8	2352	*	*	
TATC	2360	Perform Positive Control	B	L/S	(N)	*	*	8	2352	*	*	
TOTAL (TATC) STAGE				EVENTS		5	HOURS	28				
AIR INTERCEPT CONTROLLER (AIC1) STAGE												

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIC1	2500	Conduct a brief for a section AI/DCA/OCA.	B,R	GE	(N)	*	*	1	2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040	*	*	2500
AIC1	2502	Perform AIC functions for a section of fighter aircraft conducting DCA	B,R	L/S	(N)	*	*	8	2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, , 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040	*	*	2502
AIC1	2504	Perform AIC functions for a section of fighter aircraft conducting OCA	B,R	L/S	(N)	*	*	8	2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040	*	*	2504
AIC1	2506	Maintain timeline awareness	B,R	L/S	(N)	*	*	8	2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040	*	*	2506
AIC1	2508	Perform AIC communications	B,R	L/S	(N)	*	*	8	2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040	*	*	2508

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIC1	2510	Perform AIC functions	B,R	L/S	(N)	*	*	8	2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040	*	*	2510
AIC1	2512	Respond to fighter requests	B,R	L/S	(N)	*	*	8	2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040	*	*	2512
AIC1	2514	Perform scope mechanics	B,R	L/S	(N)	*	*	8	2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040	*	*	2514
AIC1	2516	Perform AIC functions for a section of fighter aircraft against unknown threat	B,R	L/S	(N)	*	*	8	2050, 2054, 2058, 2062, 2064, 2106, 2122, 2134, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8040	*	*	2516
TOTAL AIC1 STAGE				EVENTS		9	HOURS	73				
AIR INTERCEPT CONTROLLER 2 (AIC2) STAGE												
AIC2	2550	Conduct a brief for a division AI/DCA/OCA	B,R	GE	(N)	*	*	1	2102, 2104, 2120, 2126, 6276, 8020, 8040, 8060, 8080	*	*	2550
AIC2	2552	Perform AIC functions for a division of fighter aircraft conducting DCA/OCA	B,R	L/S	(N)	*	*	8	2102, 2104, 2120, 2126, 6276, 8020, 8040, 8060, 8080	*	*	2552

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIC2	2554	Perform AIC functions for a division of fighter aircraft	B,R	L/S	(N)	*	*	8	2102, 2104, 2120, 2126, 6276 8020, 8040, 8060, 8080	*	*	2554
TOTAL AIC2 STAGE				EVENTS		3	HOURS	17				
WEAPONS DIRECTOR (WD) STAGE												
WD	2608	Conduct threat analysis	B	GE	(N)	*	*	8	6253, 6255	*	*	2608
WD	2609	Conduct air defense planning	B	GE	(N)	*	*	8	6253, 6255	*	*	2609
WD	2610	Conduct airspace management planning	B	GE	(N)	*	*	8	6253, 6255	*	*	2610
WD	2611	Conduct deep air operations planning	B	GE	(N)	*	*	8	6253, 6255	*	*	2611
TOTAL WEAPONS DIRECTOR (WD) STAGE				EVENTS		4	HOURS	32				
WEAPONS (WPNS) STAGE												
WPNS	2660	Perform required WEAPONS OPERATOR actions for a controlled aircraft emergency	B,R,M	S/L	(N)	760	*	1	2202, 2206	*	*	2660
WPNS	2661	Perform required aircraft controller actions for a controlled aircraft emergency	B,R,M	S/L	(N)	760	*	1	2352	*	*	2661
WPNS	2662	Perform required Weapons Director actions for a controlled aircraft emergency	B,R,M	S/L	(N)	760	*	1	6253, 6255	*	*	2662
WPNS	2663	Perform required WEAPONS OPERATOR actions for an uncontrolled aircraft emergency	B,R,M	S/L	(N)	730	*	1	2202, 2206	*	*	2663
WPNS	2664	Perform required aircraft controller actions for an uncontrolled aircraft emergency	B,R,M	S/L	(N)	730	*	1	2352	*	*	2664
WPNS	2665	Perform required Weapons Director actions for an uncontrolled aircraft emergency	B,R,M	S/L	(N)	730	*	1	6253, 6255	*	*	2665
TOTAL WEAPONS (WPNS) STAGE				EVENTS		6	HOURS	6				

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CREW CHIEF (CC) STAGE												
CC	2700	Perform TAOC Crew Chief administrative functions	B	L	(N)	*	*	1	2036, 2140, 6253, 6255, 6278, 6279	*	*	2700
CC	2704	Identify/troubleshoot problems and restore TAOC communications	B	L	(N)	*	*	2	2036, 2140, 6253, 6255, 6278, 6279	*	*	2704
CC	2706	Conduct a crew changeover	B	L/S	(N)	*	*	4	2036, 2140, 6253, 6255, 6278, 6279	*	*	2706
CC	2708	Plan for a TAOC site selection/map survey	B	GE	(N)	*	*	1.5	2036, 2140, 6253, 6255, 6278, 6279	*	*	2708
CC	2710	Prepare a plan for TAOC displacement operations	B	GE	(N)	*	*	1.5	2036, 2140, 6253, 6255, 6278, 6279	*	*	2710
CC	2718	Develop a plan for the employment of the TAOC	B	GE	(N)	*	*	16	2036, 2140, 6253, 6255, 6278, 6279	*	*	2718
TOTAL CREW CHIEF (CC) STAGE				EVENTS		6	HOURS		26			
TACTICAL DATA LINKS (TDL) STAGE												
TDL	2800	Identify the purpose of documents that enable tactical datalinks (TDL) operations	B	G	(N)	*	*	1	*	*	*	2800
TDL	2802	Identify TAOC and EW/C voice and data communications equipment	B	G	(N)	*	*	1	*	*	*	2802
TDL	2807	Identify missions and TDL capabilities of Joint Tactical Data Systems (TDS)	B	G	(N)	*	*	2	*	*	*	2807
TDL	2808	Describe the Joint Data Network (JDN)	B	G	(N)	*	*	1	*	*	*	2808
TDL	2809	Describe the Multi-Tactical Data Link (TDL) interface	B	G	(N)	*	*	2	*	*	*	2809
TDL	2810	Identify interface unit (IU), categories, and addressing requirements	B	G	(N)	*	*	2	*	*	*	2810
TDL	2811	Identify basic track data	B	G	(N)	*	*	2	*	*	*	2811
TDL	2812	Identify information contained within J-Series Messages that may be displayed to the operator	B	G	(N)	*	*	2	*	*	*	2812

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TDL	2813	Identify tactical data link orders associated with Network Participating Group (NPG) 8 and 9	B	G	(N)	*	*	1	*	*	*	2813
TDL	2814	Describe Data Filters	B	G	(N)	*	*	2	*	*	*	2814
TDL	2817	Define terms associated with Link 16	B	G	(N)	*	*	3	*	*	*	2817
TDL	2818	State the characteristics of Link 16	B	G	(N)	*	*	3	*	*	*	2818
TDL	2819	State the characteristics of the Joint Range Extension Application Protocol (JREAP)	B	G	(N)	*	*	2	*	*	*	2819
TDL	2820	Identify mission essential segments, sets, and fields within the OPTASK LINK message	B	G	(N)	*	*	2	*	*	*	2820
TDL	2821	State the purpose of Interface Coordination procedures	B	G	(N)	*	*	1	*	*	*	2821
TDL	2822	State the Interface Control Officer responsibilities	B	G	(N)	*	*	1	*	*	*	2822
TDL	2823	State the characteristics of the Variable Message Format (VMF)	B	G	(N)	*	*	1	*	*	*	2823
TDL	2830	Operate an Air Defense Systems Integrator (ADSI)	B	G	(N)	*	*	2	*	*	*	2830
TDL	2836	Operate Link 16	B	G	(N)	*	*	8	*	*	*	2836
TDL	2838	Operate JREAP A	B	G	(N)	*	*	8	*	*	*	2838
TDL	2840	Operate JREAP B	B	G	(N)	*	*	8	*	*	*	2840
TDL	2842	Operate JREAP C	B	G	(N)	*	*	8	*	*	*	2842
TDL	2845	Troubleshoot Link 16	B	G	(N)	*	*	3	*	*	*	2845
TDL	2846	Troubleshoot JREAP A	B	G	(N)	*	*	3	*	*	*	2846
TDL	2847	Troubleshoot JREAP B	B	G	(N)	*	*	3	*	*	*	2847
TDL	2848	Troubleshoot JREAP C	B	G	(N)	*	*	3	*	*	*	2848
TDL	2849	Conduct tactical data link planning for an agency	B	G	(N)	*	*	3	*	*	*	2849
TDL	2851	Perform track data coordination for track producing agency	B	G	(N)	*	*	3	*	*	*	2851

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TOTAL TACTICAL DATA LINKS (TDL) STAGE				EVENTS		35	HOURS	81				
COMMAND AND CONTROL SYSTEMS (C2SYS) STAGE												
C2SYS	2910	Use the Execution Status and Monitoring (ESTAT) tool	B	L	(N)	*	*	1	*	*	*	2910
C2SYS	2940	Set up and establish communications utilizing tactical chat	B	L	(N)	*	*	1	*	*	*	2940
TOTAL COMMAND AND CONTROL SYSTEMS STAGE				EVENTS		2	HOURS	2				
TOTAL HOURS CORE SKILL TRAINING (2000 PHASE)								377				
MISSION SKILL TRAINING (3000 PHASE EVENTS)												
WEAPONS OPERATOR (WO) STAGE												
WO	3200	Perform Weapons Operator functions	B	S/L	(N)	*	*	8	2016, 2066, 2160, 2162, 2164, 2660, 2663	*	*	3200
WO	3202	Perform as the Weapons Operator	B,R,M	L/S	(N)	1095	*	16	2016, 2066, 2160, 2162, 2164, 2660, 2663	*	*	3202
TOTAL HOURS WEAPONS OPERATOR (WO) STAGE				EVENTS		2	HOURS	24				
SURVEILLANCE OPERATOR (SO) STAGE												
SO	3300	Perform display management	B	L/S	(N)	*	*	1	2016, 2160, 2162, 2164, 2300, 2302, 2304, 2910, 2940, 2941	*	*	3300
SO	3302	Perform combat identification functions	B,R	L	(N)	*	*	8	2016, 2160, 2162, 2164, 2300, 2302, 2304, 2910, 2940, 2941	*	*	3302
TOTAL SURVEILLANCE OPERATOR (SO) STAGE				EVENTS		2	HOURS	9				
TACTICAL AIR TRAFFIC CONTROLLER (TATC) STAGE												

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TATC	3350	Perform as TATC	B,R,M	L/S	(N)	1095	*	16	2020, 2024, 2142, 2802, 2807, 2808, 2809, 2810, 2813, 2814, 2818, 2819, 2820, 2821, 2822, 2823, 2830, 2836, 2838, 2840, 2842, 2845, 2846, 2847, 2848, 2849, 2851	*	*	3350
TOTAL (TATC) STAGE				EVENTS		1	HOURS	16				
DATA LINK COORDINATOR (DLC) STAGE												
DLC	3400	Conduct tactical data link coordination	B	L/S	(N)	*	*	8	2020, 2024, 2142, 2802, 2807, 2808, 2809, 2810, 2813, 2814, 2818, 2819, 2820, 2821, 2822, 2823, 2830, 2836, 2838, 2840, 2842, 2845, 2846, 2847, 2848, 2849, 2851	*	*	3400
DLC	3402	Perform as a DLC	B,R,M	L/S	(N)	1095	*	8	3400	*	3302	3402
TOTAL DATA LINK COORDINATOR (DLC) STAGE				EVENTS		2	HOURS	16				
DATA LINK COORDINATOR (DLC) STAGE												
DLC	3400	Conduct tactical data link coordination	B	L/S	(N)	*	*	8	2020, 2024, 2142, 2802, 2807, 2808, 2809, 2810, 2813, 2814, 2818, 2819, 2820, 2821, 2822, 2823, 2830, 2836, 2838, 2840, 2842, 2845, 2846, 2847, 2848, 2849, 2851	*	*	3400
DLC	3402	Perform as a DLC	B,R,M	L/S	(N)	1095	*	8	3400	*	3302	3402
TOTAL DATA LINK COORDINATOR (DLC) STAGE				EVENTS		2	HOURS	16				

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIR INTERCEPT CONTROLLER 3 (AIC3) STAGE												
AIC3	3500	Conduct DCA/FI brief for a division	B,R	GE	(N)	*	*	1	2026, 2030, 2038, 2068, 2108, 2116, 2118, 2128, 2136, 2138, 2817, 6251, 6277	*	*	3500
AIC3	3502	Conduct OCA FI brief	B,R	GE	(N)	*	*	1	2026, 2030, 2038, 2068, 2108, 2116, 2118, 2128, 2136, 2138, 2817, 6251, 6277	*	*	3502
AIC3	3504	Perform AIC functions with fighter aircraft conducting DCA FI	B,R,M	L	(N)	*	*	5	3500, 3502	*	*	3504
AIC3	3506	Perform AIC functions with fighter aircraft conducting OCA FI	B,R,M	L	(N)	*	*	5	3500, 3502	*	*	3504
AIC3	3508	Perform AIC functions	B,R,M	L	(N)	1095	*	5	3504, 3506	*	3202, 3302, 3350	3504
TOTAL AIR INTERCEPT CONTROLLER (AIC3) STAGE				EVENTS		5	HOURS	17				
DATA LINK COORDINATOR (DLC) STAGE												
WD	3611	Perform as WD	B,R,M	L	(N)	1095	*	8	2608, 2609, 2610, 2611, 2662, 2665	*	*	6279
TOTAL DATA LINK COORDINATOR (DLC) STAGE				EVENTS		1	HOURS	8				
DATA LINK COORDINATOR (DLC) STAGE												
SD	3612	Perform as SD	B,R,M	L	(N)	1095	*	8	2310, 2312	*	*	6278
TOTAL DATA LINK COORDINATOR (DLC) STAGE				EVENTS		1	HOURS	8				
CREW CHIEF (CC) STAGE												
CC	3702	Perform system troubleshooting	B	L	(N)	*	*	10	2700, 2704, 2706, 2708, 2710, 2718	*	*	3702

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CC	3704	Conduct mission planning	B	GE	(N)	*	*	8	2700, 2704, 2706, 2708, 2710, 2718	*	*	3704
CC	3708	Conduct Crew Chief functions	B,R,M	L	(N)	1095	*	10	3702, 3704	*	3202, 3302, 3402, 3350, 3508	3708
TOTAL CREW CHIEF (CC) STAGE				EVENTS		3	HOURS	28				
TOTAL HOURS MISSION SKILL TRAINING (3000 PHASE)								126				
CORE PLUS SKILL TRAINING (4000 PHASE EVENTS)												
MISSILE CONTROLLER (MC) STAGE												
MC	4100	Perform manual MC functions	B	S/L	(N)	*	*	4	6250, 6256	*	*	4100
MC	4102	Perform MC functions	B,R,M	L/S	(N)	1095	*	4	4100, 6250, 6256	*	*	4102
TOTAL HOURS MISSILE CONTROLLER (MC) STAGE				EVENTS		2	HOURS	8				
DEEP AIR CONTROLLER (DAC) STAGE												
DAC	4600	Receive and process deep air operations information	B	L/S	(N)	*	*	6	6250, 6256	*	*	4600
DAC	4602	Control aircraft in deep air operations	B,R,M	L/S	(N)	1095	*	6	4600, 4602, 6250, 6256	*	*	4602
TOTAL HOURS DEEP AIR CONTROLLER (DAC) STAGE				EVENTS		2	HOURS	12				
TOTAL HOURS CORE PLUS TRAINING (4000 PHASE)								20				
INSTRUCTOR TRAINING (5000 PHASE EVENTS)												
INSTRUCTOR UNDER TRAINING (IUT) STAGE												
IUT	5000	Introduce principals of instruction	B	L	(N)	*	*	2	*	*	*	*
IUT	5010	Describe individual T&R requirements	B	L	(N)	*	*	2	*	*	*	*
IUT	5020	Conduct T&R instruction	B,R,M	L	(N)	90	*	12	5000, 5010	*	*	*
IUT	5030	Conduct a simulation	B	GE	(N)	*	*	5	5000, 5010, 5020	*	*	*

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
IUT	5100	Describe the Aviation Training and Readiness (T&R) Program	B	L	(N)	*	*	2	*	*	*	*
IUT	5110	Conduct instructor evaluations	B,R,M	L	(N)	365	*	4	5100	*	*	*
IUT	5120	Perform T&R administration	B	L	(N)	*	*	2	5100, 5110	*	*	*
IUT	5130	Develop a training plan	B	L	(N)	*	*	2	5100, 5110, 5120	*	*	*
IUT	5140	Develop and conduct a TAOC simulation	B	GE	(N)	*	*	5	5100, 5110, 5120, 5130, 6320	*	*	*
IUT	5500	Discuss local area course rules	B	GE	(N)	*	*	0.5	6253, 6321	*	*	*
IUT	5510	Develop an AIC training plan	B	GE	(N)	*	*	5	5500	*	*	*
IUT	5520	Conduct a period of instruction on an AIC academic event	B	GE	(N)	*	*	5	5510	*	*	*
IUT	5530	Evaluate an AIC during execution	B	GE	(N)	*	*	5	5520	*	*	*
IUT	5540	CHECK			(N)							
TOTAL HOURS INSTRUCTOR UNDER TRAINING (IUT) STAGE								24				
TOTAL HOURS INSTRUCTOR TRAINING (5000 PHASE)								24				
CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (QCD) (6000 PHASE EVENTS)												
SCHOOL CODES												
SCHL	6000	Weapons and Tactics Instructor Course	B	G	(N)	*	*	0.5	6320, 6321, 8000, 8020, 8040, 8060, 8080	*	*	*
SCHL	6001	Senior Watch Officer's Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6002	Air Command and Control Officer's Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6003	ACE Battlestaff Officer Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6006	Marine Division Tactics Course (MDTC)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6010	AOCIQT (Airspace) Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6015	Joint Air and Space Operations Center Command and Control Course (JAOC2C)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6016	Joint Air Operations Senior Staff Course	B	G	(N)	*	*	0.5	*	*	*	*

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SCHL	6020	Link 16 Basics Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6021	Introduction to Multi-TDL Network Operations (JT-101)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6022	Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6023	Link 16 Joint Interoperability Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6024	Multi TDL Planner Course (JT-201)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6025	Link 16 Link Unit Manager Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6026	Joint Interface Control Officer (JICO) (JT-301)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6027	Joint Interface Control Center (JICC) (JT-310)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6067	Military Airspace Management Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6069	USMC AIC TOPGUN Ground School	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6072	Advanced Field Artillery Tactical Data System (AFATDS)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6078	TOPGUN AIC Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6079	JRE-GW Operators Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6082	Joint Firepower Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6096	Attend Respective Instructor Development Course	B	G	(N)	*	*	0.5	*	*	*	*
TOTAL HOURS SCHOOL CODES (SCHL) STAGE				EVENTS		23	HOURS	11.5				
CERTIFICATION (CERT) STAGE												
CERT	6276	Air Intercept Controller Level 1	B	G	(N)	*	*	0.5	2500, 2502, 2504, 2506, 2508, 2510, 2512, 2514, 2516, 2661, 2664, 6250, 6256	*	*	6276
CERT	6277	Air Intercept Controller Level 2	B	G	(N)	*	*	0.5	2550, 2552, 2554	*	*	6277

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CERT	6278	Surveillance Director (SD)	B	G	(N)	*	*	0.5	4200, 4202, 6255	*	*	6278
CERT	6279	Weapons Director (WD)	B	G	(N)	*	*	0.5	3611	*	*	6279
TOTAL HOURS CERTIFICATION (CERT) STAGE				EVENTS		4	HOURS	2				
QUALIFICATION (QUAL) STAGE												
QUAL	6250	Weapons Operator (WO)	B	G	(N)	*	*	0.5	3200, 3202, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008	*	*	6250
QUAL	6251	Tactical Air Traffic Controller (TATC)	B	G	(N)	*	*	0.5	3350, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	6251
QUAL	6252	Deep Air Controller (DAC)	B	G	(N)	*	*	0.5	4600, 4602, 6250, 6256	*	*	6252
QUAL	6253	Air Intercept Controller (AIC)	B	G	(N)	*	*	0.5	3508, 6250, 6251, 6256, 8040, 8041, 8042, 8043, 8044	*	*	6253
QUAL	6254	Missile Controller (MC)	B	G	(N)	*	*	0.5	4100, 4102, 6250, 6256	*	*	6254
QUAL	6255	Data Link Coordinator (DLC)	B	G	(N)	*	*	0.5	3402, 6250, 6256	*	*	6255
QUAL	6256	Surveillance Operator (SO)	B	G	(N)	*	*	0.5	3302, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008	*	*	6256
QUAL	6257	Crew Chief (CC)	B	G	(N)	*	*	0.5	3708, 6278, 6279, 8060, 8061, 8062, 8063, 8064, 8065, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8080	*	*	6257
TOTAL HOURS QUALIFICATION (QUAL) STAGE				EVENTS		8	HOURS	4				
DESIGNATION (DESG) STAGE												
DESG	6320	Basic Instructor (BI)	B	G	(N)	*	*	0.5	5000, 5010, 5020, 5030	*	*	6320

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6321	Senior Instructor (SI)	B	G	(N)	*	*	0.5	5100, 5110, 5120, 5130, 5140	*	*	6321
DESG	6322	Weapons and Tactics Instructor (WTI)	B	G	(N)	*	*	0.5	6000	*	*	6322
DESG	6323	Air Intercept Controller Supervisor (AICS)	B	G	(N)	*	*	0.5	5500, 5510, 5520, 5530	*	*	6323
DESG	6324	Air Intercept Controller Instructor (AICI)	B	G	(N)	*	*	0.5	5540	*	*	6324
DESG	6325	Formal Learning Center Instructor	B	G	(N)	*	*	0.5	6096	*	*	*
DESG	6326	SADC Operations Chief	B	G	(N)	*	*	0.5	*	*	*	*
TOTAL HOURS DESIGNATION (DESG) STAGE				EVENTS		7	HOURS	3.5				
TOTAL HOURS CQD (6000 PHASE)								27.5				
MISSION ESSENTIAL TASK (MET) (7000 PHASE EVENTS)												
CONDITION (COND) STAGE												
COND	7000	Conduct Airspace Surveillance	B,R,M	L	(N)	730	*	16	*	*	*	*
COND	7001	Conduct Positive Control	B,R,M	L/S	(N)	730	*	16	*	*	*	*
COND	7002	Coordinate Air Defense Actions	B,R,M	L/S	(N)	730	*	16	*	*	*	*
COND	7003	Conduct Dual Site Air Defense Operations	B,R,M	L/S	(N)	730	*	16	*	*	*	*
COND	7004	Integrate Operational Air Defense Capabilities	B,R,M	L/S	(N)	730	*	16	*	*	*	*
TOTAL HOURS CONDITION (COND) STAGE				EVENTS		5	HOURS	80				
TOTAL HOURS MISSION ESSENTIAL TASK (7000 PHASE)								80				
ACPM MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AVIATION CAREER PROGRESSION MODEL (ACPM)												
AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE												

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACPM	8000	MACCS	B	G	(N)	*	*	1	8001, 8002, 8003, 8004, 8005, 8006, 8008	*	*	8000
ACPM	8001	Marine Air Command and Control System	B	G	(N)	*	*	4	*	*	*	8001
ACPM	8002	Tactical Air Command Center (TACC)	B	G	(N)	*	*	4	*	*	*	8002
ACPM	8003	Direct Air Support Center (DASC)	B	G	(N)	*	*	4	*	*	*	8003
ACPM	8004	Tactical Air Operations Center (TAOC)	B	G	(N)	*	*	4	*	*	*	8004
ACPM	8005	Marine Air Traffic Control (MATC)	B	G	(N)	*	*	4	*	*	*	8005
ACPM	8006	Low Altitude Air Defense (LAAD)	B	G	(N)	*	*	4	*	*	*	8006
ACPM	8008	Marine Wing Communications Squadron (MWCS)	B	G	(N)	*	*	4	*	*	*	8008
ACPM	8020	ACE	B	G	(N)	*	*	1	8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	*	8020
ACPM	8021	Aviation Operations	B	G	(N)	*	*	4	*	*	*	8021
ACPM	8022	Control of Aircraft and Missiles	B	G	(N)	*	*	4	*	*	*	8022
ACPM	8023	Offensive Air Support (OAS)	B	G	(N)	*	*	4	*	*	*	8023
ACPM	8024	Assault Support (AS)	B	G	(N)	*	*	4	*	*	*	8024
ACPM	8025	Air Reconnaissance	B	G	(N)	*	*	4	*	*	*	8025
ACPM	8026	Electronic Warfare (EW)	B	G	(N)	*	*	1	*	*	*	8026
ACPM	8027	Anti-Air Warfare (AAW)	B	G	(N)	*	*	4	*	*	*	8027
ACPM	8028	Aviation Ground Support	B	G	(N)	*	*	4	*	*	*	8028
ACPM	8040	Threat	B	G	(N)	*	*	1	8041, 8042, 8043, 8044	*	*	8040
ACPM	8041	Surface to Air threat to the MAGTF	B	G	(N)	*	*	4	*	*	*	8041
ACPM	8042	Fixed Wing threat to the MAGTF	B	G	(N)	*	*	4	*	*	*	8042
ACPM	8043	Rotary Wing threat to the MAGTF	B	G	(N)	*	*	4	*	*	*	8043

TAOC 7236 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACPM	8044	Missile and UAS threat to the MAGTF	B	G	(N)	*	*	4	*	*	*	8044
ACPM	8060	MAGTF	B	G	(N)	*	*	1	8061, 8062, 8063, 8064, 8065, 8066, 8067	*	*	8060
ACPM	8061	Ground Combat Operations	B	G	(N)	*	*	4	*	*	*	8061
ACPM	8062	Fire Support Coordination in the GCE	B	G	(N)	*	*	4	*	*	*	8062
ACPM	8063	MAGTF Command and Control	B	G	(N)	*	*	4	*	*	*	8063
ACPM	8064	MAGTF Communications	B	G	(N)	*	*	4	*	*	*	8064
ACPM	8065	Phasing Control Ashore	B	G	(N)	*	*	4	*	*	*	8065
ACPM	8066	Information Management	B	G	(N)	*	*	4	*	*	*	8066
ACPM	8067	UAS support of the MAGTF	B	G	(N)	*	*	4	*	*	*	8067
ACPM	8080	Joint Air Operations	B	G	(N)	*	*	1	8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	8080
ACPM	8081	Command and Control of Joint Air Operations	B	G	(N)	*	*	4	*	*	*	8081
ACPM	8082	Theater Air Ground System (TAGS)	B	G	(N)	*	*	4	*	*	*	8082
ACPM	8083	Joint Fire Support	B	G	(N)	*	*	4	*	*	*	8083
ACPM	8084	Close Air Support (CAS)	B	G	(N)	*	*	4	*	*	*	8084
ACPM	8085	Joint Targeting	B	G	(N)	*	*	4	*	*	*	8085
ACPM	8086	North Atlantic Treaty Organization (NATO)	B	G	(N)	*	*	4	*	*	*	8086
ACPM	8087	Joint Airspace Control	B	G	(N)	*	*	4	*	*	*	8087
ACPM	8088	Countering Air and Missile Threats	B	G	(N)	*	*	4	*	*	*	8088
TOTAL HOURS AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE								142				
TOTAL ACPM								142				

4.15 AVIATION TRAINING FORMS (ATF). A syllabus evaluation form is required for any initial or subsequent event training. The MACCS Training Form (MTF) is located in the C3 Course Catalog and available online at the MAWTS-1 C-3 website:

<https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/newc3/default.aspx>

CHAPTER 3
AIR DEFENSE CONTROL OFFICER (MOS 7210)
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

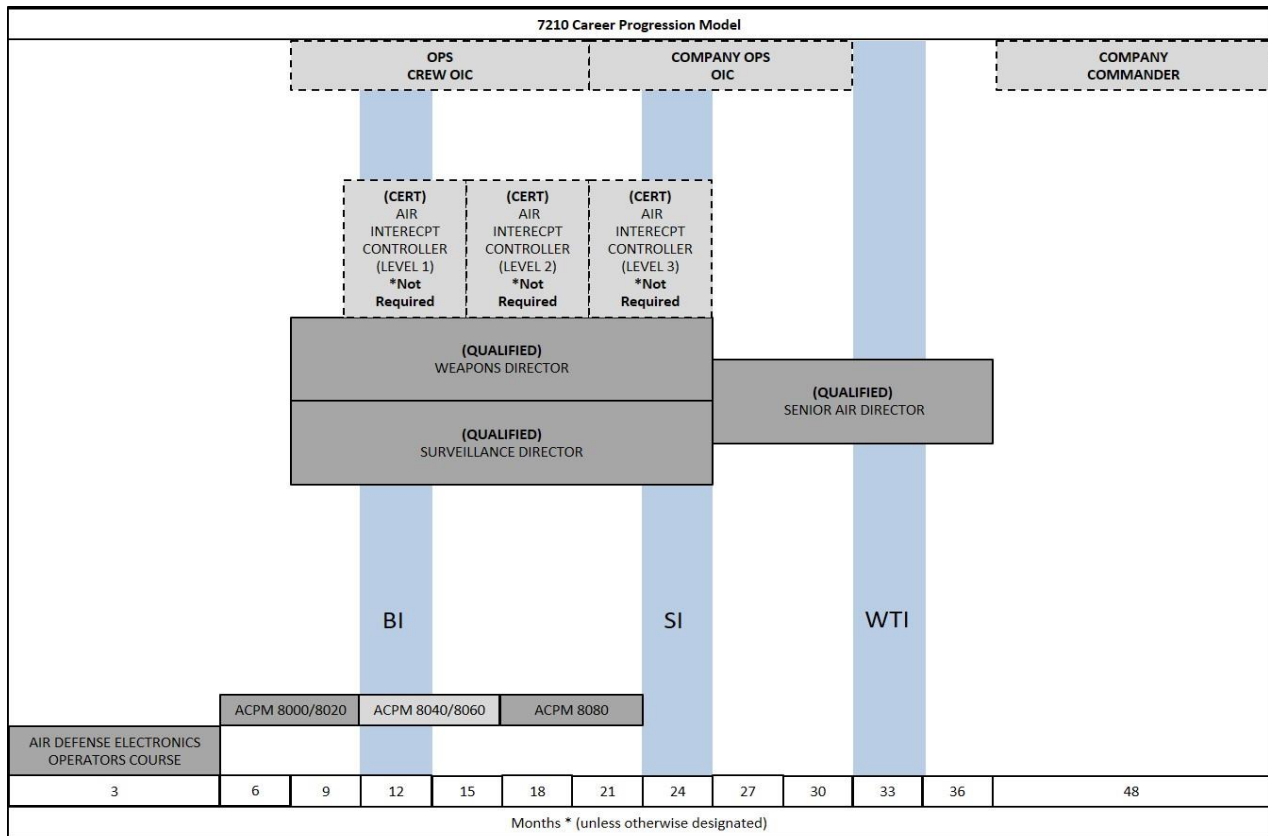
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CHAPTER 3
AIR DEFENSE CONTROL OFFICER (MOS 7210)
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS

3.0 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 and Mission Skills. The goal of this chapter is to develop individual and unit warfighting capabilities.

3.1 7210 TRAINING PROGRESSION MODEL. This model represents the recommended average training progression for the Air Defense Control Officer. Units should use the model as a point of departure to generate individual training plans.



3.2 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.

3.2.1 Basic POI.

TAOC MOS 7210 BASIC POI		
WEEKS	PHASE OF INSTRUCTION	UNIT RESPONSIBLE
0-12	CORE SKILL INTRODUCTION TRAINING	MCCES
13-104	CORE SKILL TRAINING	TACTICAL SQUADRON
VARIABLES	MISSION SKILL TRAINING	TACTICAL SQUADRON

VARIES	CORE & MISSION PLUS	TACTICAL SQUADRON
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3.2.2 Refresher POI.

TAOC MOS 7210 REFRESHER POI		
WEEKS	PHASE OF INSTRUCTION	UNIT RESPONSIBLE
VARIES	CORE SKILL TRAINING	TACTICAL SQUADRON
VARIES	MISSION SKILL TRAINING	TACTICAL SQUADRON
VARIES	CORE PLUS AND MISSION PLUS	TACTICAL SQUADRON

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

3.3 PROFICIENCY AND CURRENCY.

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

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

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

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

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

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

3.3.3 Currency. Currency is a control measure used to provide an additional margin of safety based on exposure frequency to a particular skill and applies to all MOS’s that must comply with NATOPS and OPNAV requirements. It is a measure of time since the last event demanding that specific skill. For example, currency

determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for aircrew individual type mission profiles can be found in Chapter 3 Aviation T&R Program Manual.

3.4 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.

3.4.1 INSTRUCTOR DESIGNATIONS.

TAOC MOS 7210 INSTRUCTOR DESIGNATIONS (5000 Phase)	
INSTRUCTOR DESIGNATION	EVENTS
FORMAL LEARNING CENTER INSTRUCTOR (FLC)	6325
BASIC INSTRUCTOR (BI)	5000, 5010, 5020, 5030, 6320
SENIOR INSTRUCTOR (SI)	5000, 5010, 5020, 5100, 5110, 5120, 5130, 5140, 6321
WEAPONS AND TACTICS INSTRUCTOR (WTI)	6000, 6321, 6322
AIR INTERCEPT CONTROLLER INSTRUCTOR SUPERVISOR (AICS)	5510, 5520, 5530, 6272, 6273, 6274, 6323 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088
AIR INTERCEPT CONTROLLER INSTRUCTOR (AICI)	5540, 6272, 6273, 6274, 6323, 6324, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

3.4.2 CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS.

TAOC MOS 7210 CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (CQD) (6000 Phase)	
CERTIFICATIONS	EVENTS
Certify as Air Intercept Controller Level 1 (AIC1)	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044
Certify as Air Intercept Controller Level 2 (AIC2)	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044

Certify as Air Intercept Controller Level 3 (AIC3)	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 4608, 4609, 4610, 4611, 4612, 6272, 6273, 6274, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044
QUALIFICATIONS	EVENTS
Qualify as Surveillance Director (SD)	2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2068, 2072, 2150, 2226, 2311, 2312, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 6280, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088
Qualify as Weapons Director (WD)	2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2226, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 3602, 3604, 3606, 3610, 6281, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088
Qualify as Senior Air Director (SAD)	2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 3707, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6282, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088
DESIGNATIONS	EVENTS
Formal Learning Center Instructor (FLC)	6325
Designation as Basic Instructor (BI)	5000, 5010, 5020, 5030, 6320
Designation as Senior Instructor (SI)	5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6321
Designation as Weapons and Tactics Instructor (WTI)	6000, 6320, 6321, 6322
Air Intercept Controller Supervisor (AICS)	5510, 5520, 5530, 6272, 6273, 6274, 6323, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088
Air Intercept Controller Instructor (AICI)	5540, 6272, 6273, 6274, 6323, 6324, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

Air and Missile Defense Officer	6294
Sector Air Defense Commander Operations Officer (SADCOPS)	2000, 2026, 2028, 2030, 2034, 2038, 2050, 2054, 2056, 2068, 2070, 2072, 2102, 2826, 2565, 4500, 4504, 6290, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

3.5 SYLLABUS NOTES.

3.5.1 All events, to include simulations, shall begin with a comprehensive brief with emphasis on administrative procedures, ORM, mission performance standards and crew expectations.

3.5.2 All events terminate with a comprehensive debrief with emphasis on crew performance utilizing all evaluation techniques available.

3.5.3 A MACCS Training Form (MTF) is required for any performance event completed within the basic or refresher POI, or as recommended by squadron WTTP. If the CO has waived/deferred a syllabus event, the squadron WTTP officer shall place a waiver/deferral letter inside the Marine's MACCS Performance Record.

3.5.4 Environmental Conditions Matrix.

Code	Environmental Conditions
(N)	May be conducted day or night. – If at night, may be aided or unaided.

3.5.5 Device Matrix.

DEVICE	
Symbol	Meaning
L	Conducted using unit T/E Equipment (See Note 1)
L/S	Live preferred / simulator acceptable
S/L	Simulator preferred/live acceptable
G	Ground/academic training.
GE	Ground event requiring evaluation

Note: Device matrix standardized per NAVMC 3500.14E. Unit personnel can accomplish live events using C2 system with similar capabilities to T/E equipment or available range systems supporting live flight operations.

3.5.6 Program of Instruction Matrix.

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

3.5.7 Event Terms.

EVENT TERMS	
TERM	DESCRIPTION
Discuss	An explanation of systems, procedures, or tactics during the brief, exercise, or debrief. Student is responsible for knowledge of procedures.
Demonstrate	The description and performance of a particular event by the instructor, observed by the student. The student is responsible for knowledge of the procedures prior to the demonstration of a required event.
Introduce	The instructor may demonstrate a procedure or event to a student, or may coach the student through the maneuver without demonstration. The student performs the procedures or maneuver with coaching as necessary. The student is responsible for knowledge of the procedures.
Practice	The performance of a maneuver or procedure by the student that may have been previously introduced in order to attain a specified level of performance.
Review	Demonstrated proficiency of an event by the student.
Evaluate	Any event designed to evaluate team/crew standardization that does not fit another category.

3.6 CORE SKILL INTRODUCTION PHASE (1000).

3.6.1 Purpose. To provide entry-level instruction to develop the basic skills necessary for an officer to work within an air and missile defense agency. This training includes operations within the Marine Air Command and Control System (MACCS) and employment of Command and Control (C2) systems. Emphasis is placed on learning basic functions as a Surveillance Director (SD) and Weapons Director (WD). Upon graduation from the Air Defense Control Officer Course (ADCOC), the Marine is designated MOS 7210.

General.

Admin Notes. All exams will be taken without the aid of references and require a minimum score of 80% to pass unless specifically changed in an event. Aviation Command and Control Commons Course (CID M09C2A1) located at Marine Corps Communication-Electronics School (MCCES) in 29 Palms, CA. Air Defense Control Officer's Course (ADCOC - CID M0972M1) located at Marine Corps Communication-Electronics School (MCCES) in 29 Palms, CA.

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

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

PAR NO.	STAGE NAME	PAGE NUMBER
3.6.1	COMMON AIR SCHOOL (CAIRS)	3-8
3.6.2	AIR SCHOOL (AIRS)	3-20

3.6.1 AVIATION COMMAND AND CONTROL COMMON (CAIRS) STAGE.

Purpose. To provide entry-level classroom instruction on Aviation Command and Control (AC2) concepts, regulations, procedures, and operating techniques as well as Marine Aviation Command and Control Systems (MACCS) doctrine and capabilities. This stage is designed as a foundation for all AC2 officers prior to commencing their terminal course of instruction. The instruction ensures understanding and application of AC2 rules and regulations required for an AC2 officer to qualify and perform MACCS functions in a Tactical Air Operations Center, Direct Air Support Center, Low Altitude Air Defense section, Air Traffic Control facility, or Tactical Air Command Center.

General.

Prerequisite. None.

Administrative Notes. None.

Crew Requirements. None.

CAIRS-1000 * B (N) G

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

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

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

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

Instructor. FLC Instructor.

Prerequisite. None.

References.

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

CAIRS-1002 * B (N) G

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

Requirement. Identify the following:

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

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

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

CAIRS-1004 * B (N) G

Goal. Identify characteristics of Aviation Command and Control.

Requirement. Identify the following:

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

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

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

CAIRS-1006 * B (N) G

Goal. State the proper procedures for handling and storage of classified materials.

Requirement. Without the aid of reference, perform the following:

1. State the different levels of classification.
2. State the marking requirements for each level of classification.
3. State the two-person integrity (TPI) rule.
4. State storage procedures for each level of classification.

5. 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. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. SECNAVINST 5510, Physical Security.
2. MCO P5510.1A, Physical Security.
3. CMS 1_, Policy and Procedures.

CAIRS-1008 * B (N) G

Goal. Identify Aviation Ground Support (AGS).

Requirement. Given the references the student will demonstrate an understanding of AGS, including:

1. Define AGS.
2. The fourteen AGS functions.
3. The unit within the MAW that performs AGS.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. MCTP 3-20.B, Aviation Ground Support.

CAIRS-1010 * B (N) G

Goal. Introduce Marine Air Command and Control System (MACCS) equipment.

Requirement. Identify the role, mission, equipment, and organization of the MACCS, to include the following agencies:

1. Tactical Air Command Center (TACC).
2. Tactical Air Operations Center (TAOC).
3. Direct Air Support Center (DASC).
4. Marine Air Traffic Control Detachment (MATCD).
5. Marine Air Traffic Control Mobile Team (MMT).
6. Low Altitude Air Defense (LAAD) Battalion Extensions of the MACCS.
7. Marine Wing Communications Squadron (MWCS).

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCRP 3-20F.2, Marine Tactical Air Command Center Handbook.
2. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
3. MCRP 3-20F.5, Direct Air Support Center Handbook.
4. MCRP 3-20F.7, Marine Air Traffic Control Detachment Handbook.
5. MCRP 3-20F.8, Low Altitude Air Defense (LAAD) Battalion Handbook.
6. MCRP 3-30B.2, MAGTF Communications Systems.
7. MCRP 3-20.5, Unmanned Aircraft Systems Operations.

CAIRS-1012 * B (N) G

Goal. Identify characteristics of Aircraft.

Requirement. Identify the following:

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

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

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

CAIRS-1014 * B (N) G

Goal. Identify the components of the air picture.

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

1. Define a track.
2. Identify the purpose of a track number.
3. Identify the definition of the Common Tactical Picture.
4. Describe the purpose of the Multi-TDL Network.
5. Describe the characteristics of Link 11.
6. Describe the characteristics of Link 11B.
7. Describe the characteristics of Link 16.
8. Describe the Joint Range Extension Application Protocols (JREAP).
9. Identify the TDL capabilities of the agencies provided by MACG units.
10. Identify TDL capabilities of USMC air platforms.

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

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. CJCSM 3115.01, Joint Data Network Operations.
2. CJCSM 6120.01, Joint Multi-TDL Operating Procedures.
3. MCTP 3-20C, Anti-Air Warfare.
4. MCTP 3-20D, Offensive Air Warfare.
5. MIL-STD-6016, TDL 16 Interface Standard.
6. MIL-STD-6017, VMF Interface Standard.
7. MIL-STD-3011, JREAP Interface Standard.
8. MIL-STD-6020, Data Forwarding between TDLs.

CAIRS-1016 * B (N) G

Goal. Identify operational graphics.

Requirement. The student will identify operational terms, unit symbols, and graphic control measures with the aid of a locally produced scenario, 1:50,000 map, 1:250,000 map, overlays, and map pens. The following information will be included:

1. MACCS unit symbols.
2. Symbols for adjacent and supporting/supported units locations.
3. Maneuver and Command and Control.
4. Fire Support Coordination Measures.
5. Airspace Coordination Measures.
6. Air Defense Control Measures.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MIL-STD-2525, Common Warfighting Symbolology
2. MC Supplement to DOD dictionary of military and associated terms.

CAIRS-1018 * B (N) G

Goal. Identify the elements of an Integrated Air Defense System (IADS).

Requirement. The student will understand the construct of an IADS, including:

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

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JP 3-01, Countering Aircraft and Missiles.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 10-10B, MTTP Air and Missile Defense

CAIRS-1020 * B (N) G

Goal. Extract critical information from operations documents.

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

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

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

Instructor. FLC Instructor

Prerequisite. None.

References.

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

CAIRS-1022 * B (N) G

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

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

1. Identify the four classes of information.
2. Identify the characteristics of quality information.
3. Define situational awareness.
4. Define a commander's critical information requirement.
5. Define a priority intelligence requirement.
6. Define a friendly force information requirement.
7. Define an essential element of friendly information.
8. Identify the purpose of information flow.

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

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. MCTP 3-30B, Information Management.
2. MCRP 3-30B.2, MAGTF Communication Systems.

CAIRS-1024 * B (N) G

Goal. Introduce the six functions of Marine Aviation.

Requirement. Describe the six functions of Marine aviation to include:

1. Offensive Air Support (OAS).
 - a. Purpose of OAS.
 - b. Requirements for Deep Air Support (DAS).
 - c. Requirements for Close Air Support (CAS).
 - d. Differences between immediate and pre-planned OAS.
 - e. Marine Corps airframes that have the primary mission of OAS.
 - f. The unit(s)/agency(ies) within the MACG/MACCS that coordinate(s) OAS.
2. Assault Support.
 - a. Purpose of Assault Support.
 - b. Sub-categories of Assault Support.
 - c. Differences between immediate and pre-planned Assault Support.
 - d. Marine Corps airframes that have the primary mission of Assault Support.
 - e. The unit(s)/agency(ies) within the MACG/MACCS that coordinate(s) Assault Support
3. Aerial Reconnaissance.
 - a. Purpose of aerial reconnaissance.
 - b. Two types of aerial reconnaissance.
 - c. Which aviation platforms can conduct aerial reconnaissance.
 - d. The unit and system within the MACG that has the primary mission of aerial reconnaissance.
4. Anti-Air Warfare (AAW).
 - a. The definition of AAW.
 - b. The two types of AAW.
 - c. Which units within the MACG have the primary mission of AAW.
 - d. The Marine Corps' air defense systems responsible for conducting AAW operations.
 - e. The basic construct of an Integrated Air Defense System (IADS).
 - f. Air Defense Warning Conditions.
 - g. Weapons Control Statuses
 - h. The purpose of a Bulls Eye.
 - i. Air Defense Communication/data link methods.
5. Electronic Warfare (EW).
 - a. Identify the definition and purpose for EW.
 - b. Identify the sub-sets of EW.
 - c. Identify which units within the Marine Corps conduct EW.
 - d. Identify the procedures used within the DASC to report enemy Electronic Attack operations.
6. Control of Aircraft and Missiles.
 - a. Marine Corps' philosophy for Command and Control.
 - b. Purpose for Control of Aircraft and Missiles.
 - c. Structure of the MACCS and each agency's purpose.
 - d. Which agencies of the MACCS utilize positive control.

- e. Which agencies of the MACCS utilize procedural control.
- f. Agencies responsible for command and control of expeditionary operations.
- g. Definitions of Air Direction and Air Control.
- h. Become familiar with the Theater Air-Ground System (TAGS).
- i. Become familiar with the doctrine for command and control of expeditionary operations.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

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

CAIRS-1026 * B (N) G

Goal. Introduce airspace, navigation, and time.

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

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

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

CAIRS-1028 * B (N) G

Goal. Introduce weather as applied to MACCS.

Requirement. Describe aviation weather to include:

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

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

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

CAIRS-1030 * B (N) G

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

Requirement. Describe the T&R Program.

Performance Standard. Pass a practical exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

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

CAIRS-1032 * B (N) G

Goal. Conduct Information Security.

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

1. Define information security.
2. Identify the components of information security.

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

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

Instructor. FLC Instructor.

Prerequisite. None.

References.

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

CAIRS-1034 * B (N) G

Goal. Introduce basic radar services provided by the MACCS.

Requirement. Describe basic radar services and procedures.

Performance Standard. Pass a written exam.

Instructor. FLC Instructor.

Prerequisite. None.

Reference.

1. JO 7110.65, Air Traffic Control.

CAIRS-1036 * B (N) G

Goal. Identify the air command and control structure within the Joint Force.

Requirement. In an academic setting, the student will understand joint Air Command and Control structure and responsibilities.

1. Become familiar with the Theater Air-Ground System (TAGS).
2. Become familiar with the doctrine for command and control of expeditionary operations.
3. The responsibilities of the JFACC.
4. The responsibilities of the ACA.
5. The primary responsibility of the AADC.
6. The subordinate commanders the AADC may designate in order to maximize responsiveness to the threat.
7. The responsibilities of the RADC.
8. The agency within the MACCS that will most likely be assigned the role of SADC._

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JP 1, Doctrine for the Armed Forces of the United States.
2. JP 3-0, Joint Operations.
3. JP 3-30, Joint Air Operations.
4. JP 3-52, Joint Airspace Control.
5. JP 3-01, Countering Aircraft and Missiles.
6. MCTP 3-20F, Control of Aircraft and Missiles.

CAIRS-1038 * B (N) G

Goal. Identify threats to the MAGTF.

Requirement. Without the aid of reference, identify the following:

1. Surface-to-air threats.
 - a. Categories of AAA.
 - b. Categories of SAMs (MANPADS, Optical and RF Guided).
2. Air-to-ground threats.
 - a. F/W.
 - b. R/W.
3. Surface-to-surface threats.
 - a. Armor.
 - b. APC.
 - c. Artillery.

Performance Standard. Pass an exam.

Prerequisite. None.

Reference.

1. AFTTP 3-1, Threat Guide.

3.6.2 AIR SCHOOL (AIRS).

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

General.

Admin Notes. All tests will be taken without the aid of references and require a minimum score of 80% to pass unless specifically changed for an event.

Prerequisites. None.

AIRS-1206 * B (N) G

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. Initialize a workstation.
4. Set TAOC operational parameters from source documents.
5. Enter map/overlay information from source documents.
6. Identify sensor input information.
7. Enter radar sensor areas.
8. Manipulate sensor inputs.
9. Conduct planning for TAOC employment.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. FM3-25.26, Map Reading and Land Navigation.
2. MIL-STD-2525, Common Warfighting Symbology
3. TM 12041A/12050A-OD2, CAC2S User Manual.

AIRS-1208 * B (N) G

Goal. Operate TAOC voice communications equipment.

Requirement. Given a C2 System and required materials, complete the following:

1. Operate communications equipment using source documents.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. TM 12041A/12050A-OD2, CAC2S User Manual.
2. TM 10576C-OI/1, Communication Interface System CAC2S(V)3.
3. TM 10576D-OI, Communication Interface System CAC2S(V)4.
4. MCRP 3-30B.2, MAGTF Communications Systems.

AIRS-1210 * B (N) G

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

Requirement. Given required C4I systems, operate:

1. C4I planning and execution tools.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. CCS-TRTBM-A017-AATSU, Theater Battle Management Core System, Vol I.
2. CCS-TRTBM-A017-COP-1, Theater Battle Management Core System, Vol II.
3. ALSA T-Chat

AIRS-1212 * B (N) G

Goal. Perform surveillance functions.

Requirement. Given an operational C2 System, complete the following:

1. Identify characteristics of the TAOC surveillance section.
2. Identify TAOC radar capabilities.
3. Identify characteristics of documents required for Surveillance functions.
4. Identify key elements of the ATO/SPINS for TAOC operations.
5. Identify characteristics of airspace.
6. Identify doctrinal nets used by the Surveillance Section.
7. Set-up user profile for surveillance operations.
8. Perform combat identification using source documents.
9. Maintain accurate symbology.
10. Perform manual cross-tell.
11. Complete surveillance reports.
12. Identify characteristics of sensor and data registration.
13. Plan a multi-TDL architecture.
14. Conduct mission planning for surveillance operations.
15. Conduct a surveillance brief.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JP 1-2, DOD Dictionary of Military and Associated Terms.
2. JP 3-52, Airspace Control
3. JP 3-30, Joint Air Operations.
4. MCM 3-1, Threat Reference Guide and Countertactics (U), VOL II.
5. MCTP 10-10B, MTTP Air and Missile Defense
6. MCWP 3-20, Aviation Operations.
7. MCTP 3-20C, Antiair Warfare.
8. MCTP 3-20F, Control of Aircraft and Missiles.
9. MCTP 3-20F.6, Tactical Air Operations Center (TAOC) Handbook.
10. TM 12041A/12050A-OD2, CAC2S User Manual.
11. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual.

AIRS-1216 * B (N) G

Goal. Operate Link 16.

Requirement. Given a C2 System and required materials, complete the following:

1. Extract Link 16 information from the reference documents.
2. Identify characteristics of Link 16.
3. Setup a work station for Link 16 operations.
4. Exchange Link 16 messages.
5. Send/receive text messages.
6. Send/receive digital orders.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual.
2. TM 12041A/12050A-OD2, CAC2S User Manual.
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
4. MIL-STD-6040, USMTF

AIRS-1218 * B (N) G

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

Requirement. Given a C2 System and required materials, complete the following:

1. Extract JREAP information from the reference documents.
2. Identify characteristics of JREAP.
3. Identify features on ADSI client.
4. Identify characteristics of JREAP-A.
5. Identify characteristics of JREAP-B.
6. Identify characteristics of JREAP-C.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual.
2. TM 12041A/12050A-OD2, CAC2S User Manual.
3. MIL-STD-3011, JREAP Interface Standard.
4. MIL-STD-6040, USMTF

AIRS-1220 * B (N) G

Goal. Establish a workstation for Weapons functions.

Requirement. Given a C2 System and required materials, complete the following:

1. Identify characteristics of the Weapons Section.
2. Setup user profile for Weapons operations.
3. Perform Weapons section preparation.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None

References.

1. JP 3-30, Joint Air Operations.
2. MCWP 3-20, Aviation Operations.
3. MCTP 3-20C, Antiair Warfare.
4. MCTP 3-20F, Control of Aircraft and Missiles.
5. MCRP 3-20F.6, Tactical Air Operations Center (TAOC) Handbook.
6. TM 12041A/12050A-OD2, CAC2S User Manual.
7. JP 3-52, Joint Airspace Control.

AIRS-1222 * B (N) G

Goal. Perform Air Control and Airspace Management functions.

Requirement. Given a C2 system and required materials, complete the following:

1. Setup a workstation for weapons section operations.
2. Perform TATC procedures.
3. Perform emergency procedures.
4. Perform traffic deconfliction.
5. Communicate required information to aircrews.
6. Communicate required information to higher/adjacent agencies.
7. Control aerial refueling operations.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JP 3-30, Joint Air Operations.

2. MCWP 3-20, Aviation Operations.
3. MCTP 3-20C, Antiair Warfare.
4. MCTP 3-20F, Control of Aircraft and Missiles.
5. MCRP 3-20F.6, Tactical Air Operations Center (TAOC) Handbook.
6. TM 12041A/12050A-OD2, CAC2S User Manual.
7. JP 3-52, Joint Airspace Control.

AIRS-1224 * B (N) G

Goal. Perform Deep Air Support functions.

Requirement. Given a C2 system and required materials, complete the following:

1. Develop DAS aircraft handover procedures.
2. Identify and coordinate with DAS aircraft.
3. Coordinate with Deep Battle Cell for updated targets and Battle Damage Assessment (BDA).

Performance Standard. Pass an exam.

Instructor. FLC instructor.

Prerequisite. None.

References.

1. JP 3-30, Joint Air Operations.
2. MCWP 3-20, Aviation Operations.
3. MCTP 3-20C, Antiair Warfare.
4. MCTP 3-20D, Offensive Air Support
5. MCTP 3-20F, Control of Aircraft and Missiles.
6. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
7. TM 12041A/12050A-OD2, CAC2S User Manual.
8. JP 3-52, Joint Airspace Control.
9. ALSA JFIRE

AIRS-1226 * B (N) G

Goal. Perform air and missile defense functions.

Requirement. Given a C2 system and required materials, complete the following:

1. Identify characteristics of the weapons section.
2. Identify characteristics of AAW missions.
3. Identify characteristics of U.S. ground and surface-based air defense platforms.
4. Perform intercept control with a simulated section of fighter aircraft.
5. Conduct Air and Missile Defense planning and execution.

Performance Standard. Pass an exam.

Instructor. FLC Instructor.

Prerequisite. None.

References.

1. JP 3-30, Joint Air Operations.

2. MCWP 3-20, Aviation Operations.
3. MCTP 3-20C, Anti-air Warfare.
4. MCTP 3-20F, Control of Aircraft and Missiles.
5. MCRP 3-25.6, Tactical Air Operations Center (TAOC) Handbook.
6. TM 12041A/12050A-OD2, CAC2S User Manual.
7. JP 3-52, Joint Airspace Control.
8. ALSA JFIRE
9. MCRP 3-25.10, Low Altitude Air Defense Handbook.
10. PATRIOT TOPGUN Manual.
11. MCRP 3-20F.8, Low Altitude Air Defense Battalion Handbook.
12. MCTP 10-10B, MTTP Air and Missile Defense

3.7 CORE SKILL TRAINING (2000)

Purpose. To train the 7210 in basic equipment capabilities and familiarize the 7210 with surveillance, weapons, and command section employment as prerequisite training for SD, WD and SAD qualifications. Focus of this phase is to train the 7210 to execute methods, exercise practical application of skill sets, plan, and manage MACS operational capabilities. While assigned to a Marine Air Control Squadron (MACS), under the direct supervision of a designated instructor, the 7210 moves from an introductory understanding of core skills to core skill proficiency.

General.

Admin Notes. All tests will require a minimum score of 80% to pass unless specifically changed for an event.

Prerequisite. Complete Core Skill Introduction phase of training.

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

PAR NO.	STAGE NAME	PAGE NUMBER
3.7.1	ACADEMIC (ACAD)	3-25
3.7.2	LOCAL AREA FAMILIARIZATION (LFAM)	3-48
3.7.3	EQUIPMENT (EQUIP)	3-49
3.7.4	SURVEILLANCE DIRECTOR (SD)	3-49
3.7.5	AIR INTERCEPT CONTROLLER 1 (AIC1)	3-51
3.7.6	AIR INTERCEPT FAMILIARIZATION (AFAM)	3-57
3.7.7	WEAPONS DIRECTOR (WD)	3-59
3.7.8	WEAPONS (WPNS)	3-61
3.7.9	SENIOR AIR DIRECTOR (SAD)	3-64
3.7.10	TACTICAL DATA LINK (TDL)	3-67
3.7.11	COMMAND AND CONTROL SYSTEMS (C2SYS)	3-83

3.7.1 ACADEMIC (ACAD)

Purpose. To provide the 7210 standardized academic knowledge to perform assigned duties. Academic events are one-time events unless otherwise stated.

General.

Admin Notes. The academic events in this phase are intended to complement ACPMs. In addition to the events listed in this phase, all trainees will complete ACPM-8000, 8020, 8040, 8060, 8080 and complete a self-paced reading of MCRP 3-20F.6, Tactical Air Operations Center Handbook.

Prerequisites. None.

Crew Requirements. None.

ACAD-2000 2.0 * B (N) G

Goal. Define combat identification capabilities and procedures.

Requirement. Given the references:

1. Define the purpose and criteria for Positive Control.
2. Define the purpose and criteria for an Air Defense Identification Zone (ADIZ).
3. Explain how the following are used to identify aircraft:
 - a. Control points.
 - b. Airspace Control Area.
 - c. Ingress/Egress routes/Minimum Risk Routes.
 - d. Identify Friend or Foe (IFF) (Modes 1-5).
 - e. Air Tasking Order (ATO).
4. Explain the relationship between I.D. Criteria and ROE.
5. Explain the purpose of challenge and reply authentication procedures.
6. Define the 6 standard track identifications, in accordance with the Joint Multi-TDL Operating Procedures (JMTOP).
7. List the five track environment categories, in accordance with the JMTOP.
8. List and describe the electronic identification capabilities of the following platforms.
 - a. E-3 AWACS.
 - b. E-2/D Hawkeye.
 - c. AEGIS equipped ships.
 - d. E-8 JSTARS.

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MCTP 3-20C, Antiair Warfare.
2. MCTP 3-20F, Control of Aircraft and Missiles.
3. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual.
4. JP 3-52, Joint Airspace Control.
5. MCTP 10-10B, MTTP Air and Missile Defense
6. TOPGUN C2 Bluebook (SIPR)

ACAD-2012 1.0 * B (N) G

Goal. State capabilities and limitations of the threat surface-to-air missile systems.

Requirement. Given the references, for each threat surface-to-air missile systems listed in reference (2), state the following:

1. Capabilities.
2. Limitations.
3. Associated missile and guidance
4. Early warning & target engagement sensors.
5. Minimum & maximum recommended intercept ranges.
6. Minimum & maximum recommended intercept altitudes.
7. Countries each system has been proliferated to.

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. AFTTP 3-1., Threat Reference Guide and Countertactics.
2. TOPGUN Manual, Chapter 18, Surface-to-Air threat and Countertactics.
3. MSIC Website (<http://www.msic.dia.smil.mil>).
4. ONI Foreign Naval Capabilities and Systems Handbook (http://seawolf.nmic.navy.smil.mil/PRODUCTS/201108_niddvd/?clid=155).

ACAD-2014 1.0 * B _____ (N) G

Goal. Define the following Air Interdiction Terms

Requirement. Given the references, discuss the advantages and disadvantages of the following mission sets and associated terms:

1. Push Point
2. Timing Control Point
3. Decision Point
4. Initial Point
5. Egress Control Point
6. Egress Flow Point
7. Target Area Commit
 - a. How Target Area Commit is Constructed

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

Instructor. AICS, AICI

Prerequisite. None.

References.

1. TOPGUN Manual Chapter 44, F/A-18 Air to Surface Fundamentals
2. ANTTP 3-22.1 F/A-18C/D

ACAD-2016 1.0 * B _____ (N) G

Goal. Explain the troubleshooting theory.

Requirement. Without the aid of references:

1. Identify the problem.
2. Establish a theory of probable cause (question the obvious).
3. Test the theory to determine cause.
4. Establish a plan of action to resolve the problem and implement the solution.
5. Verify full system functionality and if applicable implement preventive measures.
6. Document findings, actions and outcomes.

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. TM 12041A/12050A-OD2, CAC2S User Manual.
2. TM 10566D-OI, Communication Interface System CAC2S(V)4.

ACAD-2020 1.5 * B (N) G

Goal. Identify the characteristics, capabilities and limitations of the Communications System (CS).

Requirement. Identify or explain the following:

1. Identify the nomenclature and number of radios.
2. Identify the number of radio nets and frequency spectrum breakdown.
3. Identify antennas.
4. Explain the power requirements.
5. Explain the remote capability.

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. TM 10566C-OI/1, Communication Interface System CAC2S(V)3.
2. TM 10566D-OI, Communication Interface System CAC2S(V)4.
3. Harris Quick Reference Pocket Guide for the AN/PRC-117.
4. Harris Quick Reference Pocket Guide for the AN/PRC-150.
5. MCTSSA's Marine Corps Tactical Data Systems Reference Guide.

ACAD-2022 1.0 * B (N) G

Goal. Identify TAOC voice communication capabilities.

Requirement. Given the reference, identify the following:

1. Define the frequency range of the following:
 - a. High Frequency.

- b. Very High Frequency.
- c. Ultra High Frequency.
2. Identify the ground and sky wave range of the following:
 - a. High Frequency.
 - b. Very High Frequency.
 - c. Ultra High Frequency.
3. Define J-Voice capabilities.
4. Define HAVEQUICK

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MCRP 8-10B.10 Radio Operator's Handbook
2. MIL-STD-6016, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. CJCSM 6230.05 HAVEQUICK
4. MCRP 3-30B.2, MAGTF Communications Systems.

ACAD-2024 1.0 * B _____ (N) G

Goal. Define radio terms.

Requirement. Given the reference, define the following:

1. Amplitude modulation (AM).
2. Antenna gain.
3. Bidirectional.
4. Diffraction.
5. Dipole antenna.
6. Directional antenna.
7. Ducting.
8. Frequency hopping.
9. Frequency modulation (FM).
10. Ground wave.
11. Omnidirectional antenna.
12. Polarization.
13. Reflection.
14. Refraction.
15. Sky wave.
16. Take-off angle.

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

Instructor. BI, SI, WTI

Prerequisite. None.

Reference.

1. MCRP 8-10B.10 Radio Operator's Handbook

ACAD-2026 0.5 * B (N) G

Goal. Identify key personnel and responsibilities during air and missile defense operations.

Requirement. Given the references, explain the responsibilities of the following:

1. Joint Forces Commander (JFC).
2. Joint Forces Air Component Commander (JFACC).
3. Area Air Defense Commander (AADC).
4. Regional Air Defense Commander (RADC).
5. Sector Air Defense Commander (SADC).
6. Deputy Area Air Defense Commander (DAADC).
7. Joint Force Maritime Component Commander (JFMCC)
8. Composite Warfare Commander
9. Air and Missile Defense Commander “W”

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

Instructor. SI, WTI

Prerequisite. None.

References.

1. JP 3-0, Joint Operations
2. JP 3-01, Countering Air and Missile Threats
3. JP 3-30, Joint Air Operations
4. MCTP 3-20C, Anti-air Warfare
5. JP 3-32, Joint Maritime Operations
6. MCTP 10-10B, MTTP Air and Missile Defense

ACAD-2028 2.0 * B (N) G

Goal. State 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.
 - d. 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. Without the aid of reference, state (verbally or written) the required items. Minor errors by the trainee are acceptable.

Instructor. SI, WTI

Prerequisite. None.

References.

1. CJCSI 3121.01B, Standing ROE for US Forces

2. DOD Directive 2311.01 Law of War Program
3. MCO 3300.4A, Marine Corps Law of War Program
4. Joint Pub 1-02, DOD Dictionary of Military and Associated Terms
5. MCTP 11-10A War Crimes

ACAD-2030 1.0 * B _____ (N) G

Goal. Discuss Missile Defense (Classified when filled in).

Requirement. Given the reference:

1. State the purpose of Missile Defense.
2. State and describe the three mission support areas of Ballistic Missile Defense and what links them together.
3. State the three phases of flight for Ballistic Missiles.
4. Identify major AMD systems in each service and the phase of flight each system will intercept the target.
5. Discuss Cruise Missile Defense (CMD) considerations for the joint force.

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

Instructor. SI, WTI.

Prerequisite. None.

Reference.

1. MCTP 10-10B, ALSA MTPP Air and Missile Defense, Classified Appendix

ACAD-2034 1.0 * B _____ (N) G

Goal. Describe aviation operational documents.

Requirement. Given the references:

1. Describe the 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/SPINS.
3. Explain the use of the Airspace Control Order (ACO).
4. State the information found in the OPTASK LINK.
5. Explain the use of the Area Air Defense Plan (AADP).
6. Explain the use of the Airspace Control Plan (ACP).

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

Instructor. SI, WTI.

Prerequisite. None.

2. List the characteristics of the PAC-2, PAC-3, MSE and GEM-T as they relate to the following (SECRET when filled in):
 - a. Maximum effective range.
 - b. Max effective altitude for ABT, TBM, and CM.
 - c. Target to weapon match for ABT, TBM, and CM.
 - d. Missile guidance system.
 - e. PATRIOT Operating Area (POA)
3. List the characteristics of the AN/MPQ-65 PATRIOT Radar System (SECRET when filled in):
 - a. Modes of operation.
 - b. Surveillance and targeting Radar ranges.
 - c. Maximum number of simultaneous target tracking.
4. List and define the Detect-to-Engage Kill chain Sequence.
5. Identify Target Centered Deconfliction for PAC 2 and PAC 3
6. Identify the data link capabilities of the ADA Battalion.
7. State the purpose and employment considerations for the PATRIOT ADAFCO as member of the TAOC Crew.
8. List AEGIS employment considerations for Standard Missile (SM) 2, SM-3, and SM-6
 - a. Sensor
 - b. Max effective Range
 - c. Missile to threat relationship
 - d. Typical Cruiser, Destroyer Inventory
 - e. Friendly deconfliction considerations
8. Discuss potential naval kill chains and integration with Whiskey (W)
9. Stinger Block II/ LAAD Employment
 - a. Max Range
 - b. Max Altitude
 - c. 360° Coverage
 - d. Weighted Coverage
 - e. Base Defense Zone (BDZ)
10. Discuss Terminal High Altitude Air Defense (THAAD)
 - a. Sensor
 - b. Type of Defense / Threat mitigated

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

Instructor. SI, WTI

Prerequisite. None.

References.

1. FM 3-01.13, PATRIOT TOPGUN Manual
2. MCTP 10-10B, ALSA MTTP Air and Missile Defense
3. MCTP 10-10B, ALSA MTTP Air and Missile Defense, (Classified Appendix)
4. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual
5. TOPGUN C2 Blue Book (SIPR)
6. NTTP 3-01.11 Maritime Air and Missile Defense Planning
7. NTTP 3-01.12 Maritime Air and Missile Defense Employment (Classified)

ACAD-2050 2.5 * B (N) G

Goal. State the characteristics and employment considerations of TACAIR Navy and USMC Aircraft.

Requirement. Given the references, state the capabilities and limitations and employment considerations of the following aircraft during AAW, OAS, and AAR missions: (Classified when filled in)

1. F/A-18 C-D Hornet.
2. F/A-18E-F Super Hornet.
3. EA-18G Growler.
4. F-35 B/C.
5. AV-8B Harrier.
6. E-2 C/D Hawkeye.
7. KC-130.
8. MQ-9 Reaper

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

Instructor. AICS, AICI

Prerequisite. None.

References.

1. MCTP 10-10B, ALSA MTTP Air and Missile Defense
2. Multi-Service Tactics, Techniques, and Procedures for Joint Application of Firepower (JFIRE)
3. TOPGUN Manual, Chapter 42, F/A-18E/F, Air-to-Air Employment, Chapter 43, Strike Fighter Integration, Chapter 45, CAS/AR/SCAR (SIPR)
4. <https://www.nasic.wrightpatterson.af.smil.mil>
5. Air Naval Tactics, Techniques, and Procedures 3-22.1 F/A-18C/D (SIPR)
6. Airborne Electronic Attack Weapons School HAVOC Manual, Chapter 2, EA-18G Air-to-Air, Chapter 25, SEAD Employment (SIPR)
7. Air Naval Tactics, Techniques, and Procedures 3-22.7 AV-8B (SIPR)
8. TOPGUN C2 Blue Book (SIPR)
9. Air Naval Tactics, Techniques, and Procedures 3-22.1 KC-130 (SIPR)

ACAD-2054 1.5 * B _____ (N) G

Goal. Describe the capabilities of US Air-to-Air Weapons. (classified when filled in)

Requirement. Given the reference describe Capabilities and Limitations for each of the following weapons: (Classified when filled in)

1. AIM-9M Sidewinder.
 - a. Lethal Radius
 - b. Gimbal limits
 - c. Rmax
2. AIM-9X Sidewinder.
 - a. Lethal Radius
 - b. Gimbal Limits
 - c. Max Range Rule of Thumb (ROT)
3. AIM-120 AMRAAM.
 - a. Guidance type
 - b. Data link Antenna Field of View
 1. C7 variant
 2. D variant
 - c. Electromagnetic Attack (EA) considerations

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

Instructor. AICI

Prerequisite. None.

References.

1. TOPGUN Manual, Chapter 26, AIM-9 Sidewinder (SIPR)
2. TOPGUN Manual, Chapter 28, AIM-120 AMRAMM (SIPR)
3. TOPGUN Manual, Chapter 30, F/A-18 Combat Systems (SIPR)
4. MAWTS-1 SIPR SharePoint, F/A-18 AIM-9X/M
5. MAWTS-1 SIPR SharePoint, F/A-18 Combat Systems

ACAD-2056 2.0 * B (N) G

Goal. Describe Air and Missile Defense terminology.

Requirement. Given the references, define the following:

1. Offensive Counter Air.
2. Defensive Counter Air.
3. Air Superiority.
4. Air Supremacy.
5. Defense in-depth.
6. Vital Area.
7. Identification.
8. Engagement Area.
9. Surveillance Area.
10. Positive Identification.
11. Positive Friendly Identification.
12. Positive Hostile Identification.

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. JP 3-0, Joint Operations
2. JP 3-01, Countering Air and Missile Threats
3. JP 3-30, Joint Air Operations
4. MCTP 3-20C, Antiair Warfare

ACAD-2058 4.0 * B (N) G

Goal. Define the following words and concepts.

Requirement. Given the references, define the following terms:

1. Call Signs.
 - a. Informative.
 - b. Directive.
 - c. Interrogative.

2. Anchor Points.
 - a. Bullseye.
 - b. Geographical Reference Point.
 - c. Fighter Nose.
3. Ways to communicate the picture.
 - a. Core information.
 - b. Traditional picture.
 - c. Leading edge picture.
 - d. Leading edge with follow-on picture.
 - e. Packages.
4. AIC Core Information.
 - a. Callsign.
 - b. Number of Groups.
 - c. Anchor Point & Location.
 - d. Altitude.
 - e. Track Direction.
 - f. Declaration.
 - g. Fill-ins.
5. Phases of an Air-to-Air Intercept.
 - a. Pre Commit
 - (1) Communications Priority.
 - b. Post Commit
 - (1) Communications Priority.
 - c. Merge.
 - (1) Communications Priority.
 - e. Post-Merge.
 - (1) Communications Priority.
6. Aspect.
 - a. General.
 - b. Specific.
 - c. Grouping.
7. Declaration Modifiers.
 - a. Spades.
 - b. Squawking.
 - c. Paint(s).
 - d. Echo.
 - e. Outlaw.
 - f. Rider.
8. Declarations.
 - a. Hostile.
 - b. Bandit.
 - c. Bogey.
 - d. Friendly.

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

Instructor. AICS, AICI

References.

1. MTTP ALSA Brevity
2. MTTP ALSA Air Control Communication
3. MAWTS-1 NIPR SharePoint, C3, TAOC Classes,
<https://mceits.usmc.mil/sites/mawts1/SitePages/TAOC.aspx>
4. TOPGUN Manual, Chapter 47, Air Control Communications (SIPR)

ACAD-2060 4.0 * B (N) G

Goal. Identify group labels/names and inner-group formations.

Requirement. Given the references, illustrate the following tactical labels and define the corresponding group names:

1. Single Group.
2. Azimuth.
3. Range.
4. Vic.
5. Champagne.
6. Ladder.
7. Wall.
8. Box.
9. Line Abreast.
10. Lead/Trail.
11. Wedge.
12. Stinger.
13. Container.
14. Swept.

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

Instructor. AICS, AICI.

Prerequisite. None.

References.

1. MTTP ALSA Air Control Communication
2. MAWTS-1 NIPR SharePoint, C3, TAOC Classes
<https://mceits.usmc.mil/sites/mawts1/SitePages/TAOC.aspx>
3. TOPGUN Manual, Chapter 47, Air Control Communications

ACAD-2062 4.0 * B (N) G

Goal. Identify maneuvers and appropriate fill-ins.

Requirement. Given the references, explain the following terms:

1. Fill-ins:
 - a. Opening.
 - b. Closing.
 - c. Echelon.
 - d. Weighted.
 - e. Stack.
 - (1) High
 - (2) Medium
 - (3) Low
 - f. Heavy.
 - g. High.
 - h. Very Fast.
 - i. Tipper/Electronic ID (EID)

2. Aspects:
 - a. Hot.
 - b. Flank.
 - c. Beam.
 - d. Drag.
 - e. Marshalling
 - f. CAP(ing)
3. Maneuver:
 - a. Maneuver Range.
 - b. Maneuver Azimuth.
 - c. Crossing.
 - d. Passing.
 - e. Maneuver in Altitude.
 - f. Maneuver Range and Azimuth.
 - g. Maneuver Azimuth and Range.
 - h. Joined.
 - i. Maneuver Hot
 - j. Spread

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

Instructor. AICS, AICI.

Prerequisite. None.

References.

1. MTTP ALSA Air Control Communication
2. TOPGUN Manual, Chapter 47, Air Control Communications
3. MAWTS-1 NIPR SharePoint, C3, TAOC Classes,
<https://mceits.usmc.mil/sites/mawts1/SitePages/TAOC.aspx>

ACAD-2064 2.0 * B (N) G

Goal. Define the following comparative communication terms.

Requirement. Given the references, define and specify when to use the following:

1. Threat Call.
2. Nails.
3. Music.
4. Strobe.
5. Clean.
6. Faded.
7. Vanished.
8. Bogey Dope.
9. Declare.
10. Metallica.
11. Separation.
12. Spike
13. Snap Lock

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

Instructor. AICS, AICI.

Prerequisite. None.

References.

1. MAWTS-1 NIPR SharePoint, C3, TAOC Classes
<https://mceits.usmc.mil/sites/mawts1/SitePages/TAOC.aspx>
2. MTTP ALSA Air Control Communication
3. MTTP ALSA Brevity
4. TOPGUN Manual, Chapter 47, Air Control Communications (SIPR)

ACAD-2066 2.0 * B (N) G

Goal. Define Air Intercept Control Communication Terms.

Requirement. Given the references define the following terms and their purpose:

1. Abort.
2. Anchored.
3. As fragged.
4. Banzai.
5. Bingo.
6. Bittersweet.
7. Cheap shot.
8. Father.
9. Group.
10. Hits.
11. India.
12. Jackal.
13. Joker.
14. Judy.
15. Kill.
16. Meld.
17. Mickey.
18. Midnight.
19. Naked.
20. Notch(ing).
21. Parrot.
22. Pitbull.
23. Paints.
24. Print.
25. Pump.
26. Pushing.
27. Skate.
28. Short Skate.
29. Snap lock.
30. Spiked.
31. Splash(ed).
32. Standby.
33. Status.
34. Sunrise.
35. Tally.
36. Target.
37. Terminate.

38. Threat.
39. Timber.
40. Trespass.
41. Winchester.
42. Husky.
43. Timeout.
44. Merge.
45. Skosh.
46. Shotgun.
47. Continue.
48. Point (ed) (Classified when filled in).
49. Spider (Classified when filled in)
50. Tesla
51. Stiffarm
52. Monitor
53. Lean(ing)
54. Drop(ing)
55. Blow(ing)
56. Web (Classified when filled in)
57. Holster

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

Instructor. AICS, AICI.

Prerequisite. None.

References.

1. MTTP ALSA Brevity
2. MTTP ALSA Air Control Communication
3. MTTP ALSA Fighter Integration (SIPR)

ACAD-2068 1.0 * B _____ (N) G

Goal. Define Integrated Fire Control terms and roles

Requirement. Perform the following (SECRET when filled in):

1. Define Integrated Fire Control (IFC).
2. Identify and define the Types of Engagements
3. Define Weapons Quality Track (WQT)
4. Define Fire Control Quality Track (FCQT)
5. Define Cooperative Tracker (CT)
6. Define Cooperative Shooter (CS)
7. Define Weapons Controller (WC)
8. State the track requirements to conduct IFC using AC2S
9. State Link 16 network requirements to conduct IFC
10. Identify the types of engagements USMC platforms can currently execute.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. NAWDC – CAEWWS Manual - Tactical Networks, Aug 2020. (SECRET)
Web: intelshare.intelink.sgov.gov/sites/NAWDC/weapons-schools/sitepages/CAEWWS/CAEWWS.aspx
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. Marine Corps Primer on Expeditionary Integrated Fire Control.
4. MAWTS-1 – C3/TAOC- IFC Quicklook – Oct 2020 (SECRET)
Web: intelshare.intelink.sgov.gov/sites/mawts1
5. AC2S Help Menu (TDF)

ACAD-2070 2.0 * B _____ (N) G

Goal. Describe the technical and tactical considerations involved in tanker management.

Requirement. Given the reference:

1. Identify the different types of U.S. tanker aircraft and their capabilities
2. Understand the following planning considerations for AAR operations
 - a. Configuration
 - b. Max Offload
 - c. Burn Rate
 - d. Slide/Scram
3. Understand the following terms:
 - a. AAR Control Time (ARCT)
 - b. AAR initial Point (ARIP)
 - c. AAR Control Point (ARCP)
 - d. AAR Entry Point (AREP)
 - e. AAR Track
 - f. Boom
 - g. Boom Drogue Adapter (BDA)
 - h. Multi-Point Refueling System (MPRS)
 - i. Probe and Drogue

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. JP 3-17, Air Mobility Operations
2. NATO Standard ATP 3.3.4.2 Air-to-Air Refueling ATP-56
3. United States ATP 3.3.4.2

ACAD-2072 2.0 * B _____ (N) G

Goal. Describe Airspace Coordinating Measures, Fire Support Coordination, Air Reference Measures, and Air Defense Measures

Requirement. Given the references: Define the following measures and identify the overlay shape associated with TDF:

1. Airspace Coordinating Measures (ACMs).
 - a. Air Corridor (AIRCOR)
 - b. Minimum-Risk Route (MRR)
 - c. Restricted Operations Zone (ROZ)
 - d. Air-to-Air Refueling Area (AAR)
 - e. Close Air Support Area (CAS Stack)
 - f. Combat Air Patrol (CAP)
 - g. Coordinating Altitude (CA)
 - h. Coordination Level (CL)
 - i. High Density Airspace Control Zone (HIDACZ)
 - j. No Fly Area (NOFLY)
 - k. Surface-to-Surface Munitions (SSM)
2. Fire Support Coordination Measures (FSCMs).
 - a. Airspace Coordination Area (ACA)
 - b. Coordinated Fire Line (CFL)
 - c. Fire Support Coordination Line (FSCL)
 - d. Free Fire Area (FFA)
 - e. Kill Box (KILLBX)
 - f. No Fire Area (NFA)
 - g. Restrictive Fire Line (RFL)
 - h. Restrictive Fire Area (RFA)
3. Air Reference Measures.
 - a. Air Control Point (ACP)
 - b. Bullseye (BULL)
 - c. Contact Point (CP)
 - d. Identification, Friend or Foe Switch Off/On line (IFF OFF/ON)
 - e. Search and Rescue Point (SARDOT)
4. Air Defense Measures.
 - a. Air Defense Area
 - b. Air Defense Identification Zone (ADIZ)
 - c. Base Defense Zone (BDZ)
 - d. Fighter Engagement Zone (FEZ)
 - e. High-Altitude Missile Engagement Zone (HIMEZ)
 - f. Joint Engagement Zone (JEZ)
 - g. Low-Altitude Missile Engagement Zone (LOMEZ)
 - h. Missile Engagement Zone (MEZ)
 - i. Short-Range Air Defense Zone (SHORADEZ)

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. JP 3-52, Joint Airspace Control
2. MCTP 3-20C, Anti-air Warfare

ACAD-2102 1.5 * B (N) G

Goal. State the capabilities, limitations and employment considerations for U.S. Air Force Aircraft.

Requirement. Given the references, provide the mission, weapons, ID capabilities, and general

employment considerations of the following aircraft with regard to AAW, OAS and tanking:

1. F-15 C-D Eagle.
2. F-15 E Strike Eagle.
3. F-16A-CJ Fighting Falcon.
4. F-22 Raptor.
5. E-3 Sentry.
6. F-35A (Fuel and weapons Deviations only).
7. MQ-1 Predator
8. MQ-9 Reaper
9. A-10 Thunderbolt
10. B-1 Lancer
11. B-2 Spirit
12. B-52 Stratofortress
13. JSTARS
14. RC-135

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

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference.

1. AFTTP 3-1, vol. 1, Attachment 3.

ACAD-2104 3.0 * B (N) G

Goal. State the capabilities and limitations of Threat Aircraft.

Requirement. Given the references, provide missions, proliferation (threat nations of interest), weapons, and threat category for aircraft listed in Reference (2). (Classified when filled in):

1. Fighter
2. Bomber
3. Multi-role
4. Special Mission

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

Instructor. SI, WTI

Prerequisite. None.

References.

1. AFTTP 3-1.2, Threat Reference guide and Counter tactics
2. TOPGUN Manual, Chapter 14, Threat Aircraft

ACAD-2106 1.0 * B (N) G

Goal. Define Threat Missile Terms.

Requirement. Given the references, define the following terms (Classified when filled in):

1. F-Pole.
2. A-Pole.
3. Stern WEZ.
4. 'nc'.
5. 'tc'.
6. 'mc'.
7. Cold Crank

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

Instructor. AICS, AICI

References.

1. AFTTP 3-1.2, Threat Reference guide and Counter tactics
2. TOPGUN Manual, Chapter 17, Threat Air-to-Air Missiles

ACAD-2108 1.0 * B (N) G

Goal. State the capabilities and limitations of threat missiles

Requirement. Given the references and assigned AOR provide threat employment considerations of air-to-air and air-to-ground missiles listed in references (3) to include guidance type, category, proliferation (Nation of Interest), and Rule of Thumb (ROT) missile for each category. (Classified when filled in):

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

Instructor. AICI .

References.

1. AFTTP 3-1.2, Threat Reference guide and Counter tactics
2. TOPGUN Manual, Chapter 14, Threat Aircraft
3. TOPGUN Manual, Chapter 17, Threat Air-to-Air Missiles
4. TOPGUN Manual, Chapter 18, Rules-of-Thumb

ACAD-2116 1.0 * B (N) G

Goal. Describe the F/A-18A-D, F-35B/C and Fighter Integration (FI) Air-to-air Concept of Employment.

Requirement. Given the references, discuss the air-to-air concept of employment for (Classified when filled in):

1. Force Ratio (F/R)
2. Launch and Leave
3. Launch and Decide
4. Banzai
5. Wall
6. Grind
 - a. Fire Control Radar (FCR) requirements
7. Geometry/Spacing/Formation requirements
 - a. F/A-18 C/D
 - b. F-35B/C
 - c. FI

8. Targeting Responsibilities/Priorities
9. Risk to Mission and Risk to Force

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques, and Procedures 3-22.1 F/A18C/D (SIPR)
2. TOPGUN Manuel, Chapter 43, Strike Fighter Integration (SIPR)
3. MTTP ALSA Fighter Integration (SIPR)

ACAD-2118 0.5 * B (N) G

Goal. Explain the following assessment points where fighter leads make tactical decisions and update tactic, flow and targeting for F-35B/C and F/A-18A-D

Requirement. Given the references, explain assessment points and their purpose (Classified when filled in):

1. Initial Picture
2. Passing in Grind Ops
3. Cold Ops
4. Maneuver

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

Instructor. AICI.

Prerequisite. None.

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D (SIPR)
2. TOPGUN Manual, Chapter 43, Strike Fighter Integration (SIPR)

ACAD-2120 1.0 * B (N) G

Goal. State the concepts and definitions associated with the following tactics and defensive considerations.

Requirement. Given the references, define the following terms and concepts and state how they are constructed (SECRET when filled in):

1. Wall.
2. Grind.
3. 4-Ship In.
4. Recommit.
5. Division Delouse.
6. Staggerback.
7. Notchback.
8. Advantageous Element Out. (AEO)
9. Exit attack.
10. Notch attack.

11. Abort.
12. Bullpen Delouse
13. Delay Reform

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

Instructor. AICI.

Prerequisite. None.

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D
2. MTTP ALSA Fighter Integration
3. MAWTS-1 SIPR SharePoint Courseware

ACAD-2122 2.0 * B (N) G

Goal. State the timelines and concepts for the FA-18A-D Hornet, F-35B/C and Fighter Integration (FI).

Requirement. Given the references, construct each timeline of the following timelines (Classified when filled in):

1. F/A-18A-D Common Timeline
2. F-35 B/C Timelines
3. FI Timelines

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D
2. MTTP ALSA Fighter Integration
3. MAWTS-1 SIPR SharePoint Courseware

ACAD-2126 1.0 * B (N) G

Goal. Describe the types of targeting used in Anti-Air Warfare.

Requirement. Given the references, discuss the following types of targeting, and give an example of when they are applied:

1. Directive Targeting
2. Area of Responsibility (AOR)
3. Picture Targeting
4. Risk to Mission vs. Risk to Force

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D
2. MTTT ALSA Air Control Communications
3. MTTT ALSA Fighter Integration
4. TOPGUN Manual, Chapter 42, F/A-18 Air-to-Air Employment
5. MAWTS-1 SIPR SharePoint Courseware

ACAD-2128 2.0 * B _____ (N) G

Goal. State standard picture targeting contracts. For F/A-18C/D and F-35B/C

Requirement. Given the reference:

1. State the standard picture targeting against the following presentations:
 - a. Single Group.
 - b. Single Group Stack.
 - d. Range \geq TD.
 - e. Range \leq TD.
 - f. Narrow Azimuth.
 - g. Wide Azimuth.
 - h. Single Group Heavy.
 - i. Wall.
 - j. Champagne.
 - k. Vic.
 - l. Box.
 - m. Ladder.

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

Instructor. AICI

References.

1. Air Naval Tactics, Techniques and Procedures, 3-22.1 F/A-18C/D
2. MAWTS-1 SIPR SharePoint Courseware

ACAD-2134 2.0 * B _____ (N) G

Goal. State when the following group names should be applied.

Requirement. Given the reference, provide the following:

1. Range that AIC can use the group name "Threat Group."
2. Range that AIC can use the group name "Additional Group."
3. Range that AIC can use the group name "Pop-Up Group."
4. Explain number naming convention
5. Explain cardinal direction naming amplifiers

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

Instructor. AICI

Reference.

1. MTTT ALSA Air Control Communications

ACAD-2226 1.0 * B (N) G

Goal. Define the characteristics of Cooperative Engagement Capability (CEC). (Classified)

Requirement. Perform the following:

1. State the purpose of CEC.
2. State the characteristics of the CEC network.
3. Identify the Navy platforms capable of participating in the CEC network.
4. State the Marine Corps equipment required to interface with CEC.
5. Identify and extract key operational information from the OPTASKCEC
6. Discuss basic connectivity considerations for CEC participants.

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

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. NAWDC – CAEWWS Manual - Tactical Networks, Aug 2020. (SIPR)
Web: intelshare.intelink.sgov.gov/sites/NAWDC/weapons-schools/sitepages/CAEWWS/CAEWWS.aspx
2. TACMEMO 3-01.3-12 CEC Tactical Employment Guide, Feb 2012
3. USN Capabilities and Limitations website <http://cnl.phdnswc.navy.smil.mil/>
4. Navy CEC Fact Sheet
5. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16
6. Marine Corps Primer on Expeditionary Integrated Fire Control

3.7.2 LOCAL AREA FAMILIARIZATION (LFAM).

Purpose. To familiarize the 7210 with local restricted airspace.

General.

Admin Notes. The LFAM stage is required prior to executing any other Core Skill events. It must be conducted every time the 7210 is assigned to new airspace or required to be refreshed per their training record.

Prerequisites. None.

Crew Requirements. None.

LFAM-2150 5.0 1095 B, R, M (N) G/E

Goal. Brief local restricted areas.

Requirement. Given source documents and a local map:

1. Identify local restricted areas on a map.
2. Identify characteristics of each local restricted area.
3. Identify agencies responsible for each local restricted area.
4. Identify communication requirements for each local air control agency.

Performance Standard. Brief the instructor on local restricted areas IAW requirements. Minor errors corrected by the trainee are acceptable.

Instructor. BI, SI, WTI

Prerequisite. None.

Reference.

1. Unit SOP.

3.7.3 EQUIPMENT (EQUIP)

Purpose. The purpose of this stage is to train the 7210 on various command and control systems and/or train the 7210 to operate in hazardous environments.

General.

Admin Notes. None.

Prerequisite. None.

Crew Requirement. None.

EQUIP-2164 4.0 * B (N) L/S

Goal. Conduct TAOC duties in a Chemical Biological Radiological Nuclear (CBRN) environment.

Requirement. Given a scenario, supporting documentation, an operational TAOC, conduct assigned TAOC duties in a simulated CBRN environment. Begin in MOPP-0 and graduate to MOPP-IV over a four hour period. While increasing MOPP levels:

1. Identify alternate C2 communications procedures.
2. Plan personnel rotations while in MOPP gear.
3. Utilize CBRN defense equipment as required.
4. Alert subordinate displaced elements.
5. Notify external agencies and aircraft.

Performance Standard. Completing the requirement items. The instructor may provide minimal guidance.

Instructor. BI, SI, WTI.

Prerequisite. None.

External Resource Support. CRBNE NCO 5711.

References.

1. MCO 3400.3_, Nuclear, Biological, and Chemical Defense (NBCD) Training.
2. MCO 3501.9B, Marine Corps Combat Readiness Evaluation System.

3.7.4 SURVEILLANCE DIRECTOR (SD).

Purpose. To train the 7210 in detailed surveillance planning skills required to manage the surveillance

section.

General.

Admin Notes. This stage of training may be conducted concurrently with the WD stage.

Prerequisites. None.

Crew Requirement. None.

SD-2311 8.0 * B (N) G

Goal. Identify radar characteristics and develop a radar employment plan

Requirement. Given the references, scenario, a map and terrain analysis software:

1. Develop a radar coverage diagram that identifies potential gaps in coverage due to terrain masking and radar horizon limitations.
2. State the primary limiting factor of the TAOC's radars.
3. Explain basic performance characteristics of the TAOC's radars.
4. Describe measures that can be taken to minimize terrain masking on the TAOC's radars.
5. State the environmental considerations when employing a radar system to include:
 - a. Terrain
 - b. Soil composition
 - c. Ducting
6. State the nine considerations for selecting a radar site.
7. State how the following affect radar employment.
 - a. Mission
 - b. Threat axis
 - c. Threat analysis
 - d. Adjacent agencies
 - e. Adjacent sensors
 - f. Data link architecture
8. State the specific planning considerations for the emplacement of the AN/TPS-80
9. State the following specifications for the AN/TPS-80:
 - a. Power requirements
 - b. Antenna height
 - c. Required surface area for site
 - d. Frequency spectrum and associated bands
 - e. Transportability
 - f. Estimated set up time
 - g. Crew size for 24-hour operations
 - h. Mission capabilities
10. State the inherent modes available within the AN/TPS-80 enhance performance of the system

Performance Standard. Provide completed documents and brief the instructor on each requirement.

Instructor. BI, SI, WTI

Prerequisite. 2000, 2020, 2024, 2026, 2150, 2226.

References.

1. MCRP 3-25.7, Tactical Air Operations Center (TAOC) Handbook
2. AN/TPS-80 G/ATOR TM 12532/13094-13&P/3
3. MAWTS-1 Basic Radar Principles Courseware

SD-2312 8.0 * B (N) G

Goal. Conduct EW planning.

Requirement. With the aid of a WD and given a scenario:

1. Identify enemy EW capabilities and effects on unit sensors and communications.
2. Produce an EP plan to counter enemy EW capabilities to include:
 - a. Emissions Control (EMCON) plan.
 - b. Subordinate unit Radiation Control (RADCON) plan.

Performance Standard. Complete the requirement items. Minor errors corrected by the trainee are acceptable. Instructor will discuss each item with the trainee.

Instructor. BI, SI, WTI.

Prerequisites. 2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2038, 2150, 2802, 2811, 2226.

References.

1. MCRP 3-25.7, TAOC Handbook.
2. TPS-80: TM 12532/13094-13&P/3

3.7.5 AIR INTERCEPT CONTROLLER 1 (AIC1).

Purpose. To familiarize the AIC student with the core communications, procedures, and tactics associated with Tactical Intercepts. Upon completion of the AIC1 POI at the 2000 and 4000 level, 7210 AIC students will be assessed by an AICI to become certified as a level 1 AIC. Upon certification the student will be authorized to control up to a section of aircraft unsupervised.

General.

Admin Notes.

1. Missions will be executed per ROE established by published AAW directives, operational planning orders/documents, or individual mission briefs.
2. For evaluation purposes, a mission will consist of a fighter mission brief to the AIC, AIC brief to the AICS or AICI, execution of the event, AIC debrief to the AICS or AICI, and fighter mission debrief to the AIC.
3. Data Links and/or real time exchange mediums (e.g. Link 16, CEC) will be used to the fullest extent possible.
4. Tactical Combat Training System (TCTS) facilities should be used when available for debriefing.
5. The primary organic C2 system will be used to the fullest extent possible. When necessary, events can be conducted from an instrumented range with equipment hosted at the range or similar C2 systems.
6. Live AIC events will be accomplished in conjunction with events from the F/A-18 and F-35 T&R Manuals that require Tactical Intercepts. Weapons and Tactics Training Program (WTTP) Officers should coordinate with fighter squadrons to accomplish these events.

7. When performing as an AIC, the AIC might encounter different tactics depending on the service he/she is supporting. Because of this, the AIC syllabus is built around providing the maximum amount of credit for each AIC event regardless of the service the AIC is supporting.

8. Based on geographical locations an Air Force Weapons School Air Intercept Control Graduate may be the only option for supervising and instructing AICs working through their syllabus. This allows Air Force Weapons School Air Intercept Control Graduates to instruct and recommend AICs for qualification through the WTI as needed to ensure CMMR is met.

Prerequisites. None.

Crew Requirements. None.

AIC1-2517 1.0 * B (N) G/E

Goal. Conduct a brief for a section DCA/OCA.

Requirement. Given the references and fighter/striker brief, conduct a DCA/OCA brief using proper whiteboard setup, symbology and tactical scenario

Performance Standard. Conduct brief with the AICI or AICS IAW the references and fighter/striker brief.

Instructor. AICS, AICI

Prerequisites. 2014, 2028, 2034, 2050, 2054,2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

References.

1. MTTP ALSA Air Control Communication
2. ANTTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MAWTS-1 NIPR SharePoint AIC Briefing Lab Courseware

AIC1-2518 8.0 * B (N) L/S

Goal. Perform AIC functions for a section of fighter aircraft conducting DCA.

Requirement. Given a C2 system or a simulation, control a section of fighter aircraft against an unknown threat providing the following:

1. Accurate initial picture.
2. Recognition of commit/reset criteria.
3. Transition from broadcast control to tactical control with proper labels and names.
4. Accurate and timely TAC range.
5. Accurate and timely declarations.
6. Accurate and timely recognition and communication of maneuvering targets.
7. Post merge picture.
8. Effective cold ops execution/communication when required.
9. Effective communications brevity IAW reference.

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

Instructor. AICS, AICI.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

External Syllabus Support. Fighter Aircraft (if Live).

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2519 8.0 * B (N) L/S

Goal. Perform AIC functions for a section of fighter aircraft conducting OCA.

Requirement. Given a C2 system or a simulation, control a section of fighter aircraft against an unknown threat providing the following:

1. Accurate initial picture.
2. Recognition of commit/reset criteria.
3. Transition from broadcast control to tactical control with proper labels and names.
4. Accurate and timely TAC range.
5. Accurate and timely declarations.
6. Accurate and timely recognition and communication of maneuvering targets.
7. Post merge picture.
8. Effective cold ops execution/communication when required.
9. Effective communications brevity IAW reference.

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

Instructor. AICS, AICI.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

External Syllabus Support. Fighter Aircraft (if Live).

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2520 8.0 * B (N) L/S

Goal. Maintain timeline awareness.

Requirement. Given a C2 system or simulation maintain timeline awareness, control a section of fighter aircraft against unknown threat:

1. Commits/recommends commit of fighters IAW briefed criteria.
2. Transition to tactical control automatically as briefed or IAW reference.
3. Provide TAC range calls on timeline IAW reference.
4. Use of AIC directive targeting when required IAW reference.
5. Make appropriate threat calls as needed.
6. Use of additional group/pop-up group/ pop-up threat group IAW reference.

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

Instructor. AICS, AICI.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

External Syllabus Support. Fighter Aircraft (Live)

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2521 8.0 * B (N) L/S

Goal. Perform AIC communications.

Requirement. Given a C2 system simulation and while demonstrating correct communications format, control a section of fighter aircraft against unknown threat and provide the following:

1. Correct callsign usage.
2. When using core information, group are referenced in order of priority as briefed.
3. Labels (range, azimuth, ladder, wall, vic, champagne, etc) are used to accurately describe a picture.
4. Label fill-ins (opening, echelon, stack, weighted are provided when applicable and in the correct order.
5. Group numbering or label with additional group(s) is used when a label does not fit.
6. When using tactical control the group that is anchored is the priority group.
7. Bullseye, GeoRef, and BRAA anchor points are used correctly.
8. Communications format fill-ins are provided in the correct order.
9. Strength (“Heavy”) provided when appropriate.
10. Declarations are provided accurately with appropriate modifiers.
11. Identification of groups is provided accurately.
12. Format TAC Range call is accurate.
13. Format of nails/spike/music/strobe range calls is correct.

14. Bogey Dope.

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

Instructor. AICS, AICI.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

External Syllabus Support. Fighter Aircraft (if Live)

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2522 8.0 * B _____ (N) L/S

Goal. Perform AIC functions.

Requirement. Given C2 systems and while demonstrating AIC functions, control a section of fighter aircraft against unknown threat:

1. Makes picture calls pre-commit.
2. Recommends/directs commits or resets as briefed or IAW reference.
3. Makes “new picture” calls as briefed or IAW reference.
4. QA of fighter targeting/monitoring and directivity targets as required.
5. Provides descriptive updates.
6. Provides QA of fighter flow.
7. TAC Range call made when briefed or IAW reference.
8. Corrects name of group called by fighter, if incorrect, in subsequent calls.
9. Uses voice inflection on critical elements of information

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

Instructor. AICS, AICI.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

External Syllabus Support. Fighter Aircraft (if Live).

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment

6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2523 8.0 * B (N) L/S

Goal. Respond to fighter requests.

Requirement. Given C2 systems and while demonstrating listening and comprehension skills, control a section of fighter aircraft against unknown threat:

1. Responds to fighter SA request (when appropriate to do so) within two seconds.
2. Responds to SA requests with the correct type of response (picture, anchor point selection, threat, etc) IAW reference.
3. Acknowledges requests for targeting or monitoring.

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

Instructor. AICS, AICI.

External Syllabus Support. Fighter Aircraft (if Live).

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

References.

1. MTTP ALSA Air Control Communication
2. ANTTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2524 8.0 * B (N) L/S

Goal. Perform scope mechanics.

Requirement. Given a C2 system, references, scenario, and while demonstrating scope mechanics, interpretation, and utilization, control a section of fighter aircraft against an unknown threat:

1. Groups are anchored accurately enough to solve for fighter correlation.
2. Altitude is provided accurately within system tolerances (including stack recognition).
3. Maintains SA to location of fighters and anchors group to the correct fighter element.
4. Recognizes that a group is maneuvering within two radar/IFF updates.
5. Gains SA on groups that are new to a problem within three seconds of the instructor.
6. Correctly identifies group maneuvers (maneuver in range/azimuth/elevation).
7. Correctly identifies aspects of groups.

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

Instructor. AICS, AICI.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

External Syllabus Support. Fighter Aircraft (if Live).

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC1-2525 8.0 * B (N) L/S

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

Requirement. Given a C2 System with live tactical radar inputs control a section of fighter aircraft against an unknown threat and provide the following:

1. Accurate initial picture.
2. Recognition of commit/reset criteria.
3. Transition from broadcast control to tactical control with proper labels and names.
4. Accurate and timely TAC Range.
5. Accurate and timely declarations.
6. Accurate and timely recognition and communication of maneuvering targets.
7. Post merge picture.
8. Effective cold ops execution/communication when required.
9. Effective communications brevity IAW reference.

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

Instructor. AICS, AICI.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

External Syllabus Support. Fighter Aircraft (if Live).

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

3.7.6 AIR INTERCEPT FAMILIARIZATION (AFAM).

Purpose. To familiarize the 7210 in the understanding of air intercept control skills and deep air operations to

include communication procedures, friendly tactics and threat capabilities. This stage supports 7210 training towards WD qualification requirements.

General.

Admin Notes.

1. A single mission will consist of a brief, execution and debrief.
2. A 7210 will be part of the control team with the 7236 AIC2-5, but will only observe while the 7236 AIC2-5 conducts the mission.

Prerequisites. None

Crew Requirements. None.

AFAM-2565 8.0 * B (N) L/S

Goal. Observe and discuss AIC functions for fighter aircraft performing DCA/Fl.

Requirement. Given a C2 system or simulation, attend a brief, debrief, and observe the control of fighter aircraft conducting DCA/Fl.

Performance Standard. Perform the requirement.

Instructor. AICS, AICI.

Prerequisite. None.

External Syllabus Support. Fighter Aircraft (if live).

References.

1. MCRP 3-20.7, MTTP Fighter Integration (SIPR)
2. MCRP 3-20F.10, MTTP Air Control Communications

AFAM-2567 8.0 * B (N) L/S

Goal. Observe and discuss AIC functions for a fighter aircraft performing OCA/Fl.

Requirement. Given a C2 system or simulation, attend a brief/debrief and observe the control of fighter aircraft conducting OCA/Fl.

Performance Standard. Perform the requirement.

Instructor. AICS, AICI.

Prerequisite. None

External Syllabus Support. Fighter Aircraft (if live).

References.

1. MCRP 3-20.7, MTTP Fighter Integration (SIPR)

2. MCRP 3-20F.10, MTTP Air Control Communications

3.7.7 WEAPONS DIRECTOR (WD).

Purpose. To train the 7210 in detailed weapons planning skills that includes air control and airspace management; These skills are required to manage the weapons section.

General.

Admin Notes. This stage of training may be conducted concurrently with the SD stage of training.

Prerequisite. None.

Crew Requirements. None.

WD-2600 8.0 * B (N) G/E

Goal. Conduct threat analysis.

Requirement. With the aid of references, given a scenario and operational documents, analyze the following with an SD:

1. Threat/time distance to Critical Assets List (CAL) / Defended Asset List (DAL) or MAGTF Air Defense Priority.
2. Threat surface-to-air missile systems.
3. Threat air-to-air platforms.
4. Threat air-to-surface delivered weapons.
5. Threat surface-to-surface weapons.

Performance Standard. Complete the requirement items with the aid of an SD. Minor errors corrected by the trainee are acceptable. Instructor will discuss each item with the trainee.

Instructor. BI, SI, WTI

Prerequisites. 2000, 2026, 2028, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2150, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

References.

1. MCTP 3-20C, Anti-Air Warfare.
2. MCTP 3-20F, Control of Aircraft and Missiles.
3. JP 3-52, Joint Airspace Control.
4. MCTP 10-10B, MTTP Air and Missile Defense
5. AFTTP 3-1.2, Threat Reference guide and Counter tactics.
6. TOPGUN Manual, Chapter 14, Threat Aircraft.
7. TOPGUN Manual, Chapter 17, Threat Air-to-Air Missiles.
8. TOPGUN Manual, Chapter 18, Rules-of-Thumb.
9. ONI, Worldwide: Foreign Naval Surface-to-Surface Missile Systems Handbook.

WD-2602 8.0 * B (N) G/E

Goal. Conduct air and missile defense planning.

Requirement. Given a scenario and planning documents:

1. Extract Critical Asset List (CAL)/Defended Asset List (DAL) and/or MAGTF Air Defense Priorities from source documents.
2. Extract IADS information for the AOR.
3. Develop air and missile defense asset casualty procedures.
4. Plan required GBAD liaison communications.
5. Extract ROE.
6. Establish procedures for weapons assignment based on threat evaluation.
7. Identify AAW external communication requirements.
8. Identify air and missile defense assets available for TAOC control.

Performance Standard. Complete all requirements and provide the information to the instructor.

Instructor. BI, SI, WTI.

Prerequisites. 2000, 2012, 2014, 2016, 2020, 2022, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2226, 2150, 2600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

References.

1. MIL-STD 6040, USMTF.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.
4. JP 3-01, Countering Air and Missile Threats.
5. MCTP 10-10B, MTTP Air and Missile Defense
6. JP 3-52, Joint Airspace Control.

WD-2604 8.0 * B (N) G/E

Goal. Conduct airspace management planning.

Requirement. Given a scenario and operational planning documents:

1. Extract airspace management information from the Airspace Control Plan (ACP), Special Instructions (SPINS), and the Airspace Control Order (ACO).
2. Recommend Airspace Control Measures (ACM) for the TAOC Area of Operations (AO).
3. Develop internal and external aircraft handover procedures.

Performance Standard. Complete all requirements and present the information to the instructor. The trainee should be prepared to answer questions from the instructor.

Instructor. BI, SI, WTI.

Prerequisites. 2000, 2012, 2014, 2016, 2020, 2022, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2226, 2150, 2600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023,

8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

References.

1. MIL-STD 6040, USMTF.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.
4. JP 3-01, Countering Air and Missile Threats.
5. MCTP 10-10B, MTTP Air and Missile Defense
6. JP 3-52, Joint Airspace Control.
7. MCRP 3-20F.10, MTTP Air Control Communications

WD-2606 8.0 * B (N) L/S

Goal. Facilitate deep air operations.

Requirement. Given a scenario and operational planning documents:

1. Process and disseminate 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. Plan for DAS aircraft handover procedures.
3. Extract applicable database items.
4. Identify available DAS aircraft assets.
5. Support battle tracking with SCAR / DAS aircraft

Performance Standard. Complete all requirements and present the information to the instructor. The trainee should be prepared to answer questions from the instructor.

Instructor. BI, SI, WTI

Prerequisites. 2000, 2012, 2014, 2016, 2020, 2022, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2226, 2150, 2600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

References.

1. MIL-STD 6040, USMTF.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.
4. JP 3-01, Countering Air and Missile Threats.
5. MCTP 10-10B, MTTP Air and Missile Defense.
6. JP 3-52, Joint Airspace Control.
7. MCRP 3-20F.10, MTTP Air Control Communications

3.7.8 WEAPONS (WPNS).

Purpose. To train the 7210 in emergency procedures when conducting airspace management during AAW, OAS, and AAR operations.

General.

Admin Notes. This stage of training may be conducted concurrently with any other stage of training.

Prerequisite. None.

Crew Requirements. None.

WPNS-2661 1.0 365 B, R, M (N) S/L

Goal. Perform required controller actions for a controlled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. Without interrupting aircrew NATOPS procedures, request information regarding the nature of the emergency and any requests the aircrew have to safely recover.
3. Accurately convey all coordinated ATC information back to the aircrew.
4. Monitor and maintain positive contact with emergency aircraft while providing control for remaining non-emergency aircraft.
5. Ensure positive handover with next controlling agency.

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

Instructor. BI, SI, WTI.

Prerequisites. 2000, 2022, 2026, 2034, 2050, 2056, 2066, 2070, 2072, 2102, 2150, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Reference.

1. Unit SOP.

WPNS-2662 1.0 365 B, R, M (N) S/L

Goal. Perform required Weapons Director actions for a controlled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. Verbally inform the crew of the aircraft emergency.
3. Ensure the C2 system console is recording.
4. Accurately record all information given by the aircrew regarding the nature of the emergency and any requests.
5. Pass all collected emergency aircraft information to the next controlling agency and appropriate higher agency.
6. Coordinate any aircrew request with appropriate airfield ATC.
7. Ensure positive handover with next controlling agency.

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

Instructor. BI, SI, WTI.

Prerequisites. 2000, 2022, 2026, 2034, 2050, 2056, 2066, 2070, 2072, 2102, 2150, 2910, 2940, 8000, 8001,

8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Reference.

1. Unit SOP.

WPNS-2664 1.0 365 B, R, M (N) S/L

Goal. Perform required controller actions for an uncontrolled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. Taking into account a potential threat and on-station time remaining, assign an on-scene commander (OSC) to the last known or closest safe position of the downed aircraft.
3. Utilizing the OSC, request information regarding the potential:
 - a. Contact with the downed aircrew.
 - b. Status of the downed aircrew.
 - c. Exact position of the downed aircraft and/or aircrew (if not the same).
 - d. Cause of the downed aircraft.
 - e. Enemy in the immediate vicinity of the downed aircrew and/or aircraft.
4. Accurately pass all TRAP mission data to OSC.
5. Monitor and maintain positive contact with OSC while providing control for remaining non-emergency aircraft.

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

Instructor. BI, SI, WTI.

Prerequisites. 2000, 2022, 2026, 2034, 2050, 2056, 2066, 2070, 2072, 2102, 2150, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Reference.

1. Unit SOP.

WPNS-2665 1.0 365 B, R, M (N) S/L

Goal. Perform required Weapons Director actions for an uncontrolled aircraft emergency.

Requirement. Given a mission capable C2 system, communication equipment, and a minimum control of four simulated aircraft, perform the following:

1. Identify the aircraft with an emergency.
2. Verbally inform the crew of the aircraft emergency.
3. Ensure the C2 system console is recording.
4. Taking into account a potential threat and on-station time remaining, assign an on-scene commander (OSC) to the last known or closest safe position of the downed aircraft.
5. Pass all collected emergency aircraft information to the appropriate higher agency.
6. Coordinate with the higher agency for OSC relief.
7. Coordinate with the higher agency for tactical recovery of aircraft and personnel (TRAP) mission data.

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

Instructor. BI, SI, WTI.

Prerequisites. 2000, 2022, 2026, 2034, 2050, 2056, 2066, 2070, 2072, 2102, 2150, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Reference.

1. Unit SOP.

3.7.9 SENIOR AIR DIRECTOR (SAD)

Purpose. To train the 7210 in TAOC operations and tactical planning.

General.

Admin Notes. This stage of training may not be conducted until the SD and WD qualifications are attained.

Prerequisites. None.

Crew Requirements. None.

SAD-2701 8.0 * B (N) G/E

Goal. Conduct mission planning.

Requirement. Given mission tasking, Commander's guidance, and assistance of a Crew Chief, SD, and WD, determine the following requirements to support the TAOC operations:

1. Operational hours and duration of operation/exercise.
2. Communication requirements.
3. Digital backbone.
4. Echelon requirements.
5. Information exchange requirements.
6. 24 hour crew structure with changeover procedures.
7. Compound security.
8. C2 System internal configuration.
9. Radar emplacement.
10. Establish timelines for internal unit planning
11. Passive air and missile defense measures

Performance Standard. Complete all requirements and present the information to the instructor. The trainee should be prepared to answer questions from the instructor.

Instructor. SI, WTI.

Prerequisites. 2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2800, 2802, 2807, 2808, 2809, 2810, 2811,

2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300,3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020,5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

Reference.

1. MCTP 3-20C, Antiair Warfare.
2. TAOC TACSOP
3. MCTP 10-10B, MTTP Air and Missile Defense

SAD-2703 2.0 * B (N) G/E

Goal. Conduct a site survey.

Requirement. Given a scenario, applicable references, an Equipment Density List (EDL) and mission statement, determine a site for system emplacement:

1. Utilize planning tools 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 Ordnance (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. Determine protection from the elements.
6. Determine operational footprint.
7. Design a site layout.
8. Determine support requirements (e.g. MWCS, MWSS, MACS HQ, Other)

Performance Standard. Complete a site survey and brief the instructor. The trainee should be prepared to answer questions from the instructor.

Instructor. SI, WTI.

Prerequisites. 2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

External Resource Support. None

References.

1. MCDP 6, Command and Control.
2. MCRP 3-20F.2, Marine Tactical Air Coordination Center Handbook.
3. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
4. Marine Corps Planning Process (MCPD).
5. Meshnet Ethernet Unit (MEU 1-2) TECH MANUAL 762326, Equipment Description.

6. Network Access Unit (NAU 5-1) TECH MANUAL 762324, Equipment Description.
7. User Control Device (UCD 1-4) TECH MANUAL 762325, Equipment Description.
8. System Description and Overview Communications Distribution System TECH MANUAL 762323.
9. IEEE C95.1-1991, Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
10. NAVSHIPS 0967-317-7010, Radio Frequency Burn Hazards Reduction.
11. TM 9406-15, Grounding Procedures for Electromagnetic Interface Control.
12. DODINST 6055.11, Protecting Personnel from Electromagnetic Fields.
13. BUMED 6470.23, Medical management of Non-Ionizing Radiation Casualties.
14. OPNAVINST 5100.23 Series, Navy Safety and Occupational Health Program.
15. NAVSEA OP 3565/NAVAIR 16-1-529/NAVELEX 0967-LP-624-6010/Volume II, Electromagnetic Radiation Hazards.
16. Navy Safety Center.
17. MCO 5100.29X, Marine Corps Safety Program.
18. MCO 5104.2, Marine Corps Radiofrequency Electromagnetic Field Personnel Protection Program.
19. MCO 5104.3X, Marine Corps Radiation Safety Program.
20. TAOC TACSOP

SAD-2705 1.5 * B (N) G/E

Goal. Prepare a plan for TAOC displacement operations.

Requirement. Given a scenario-based Tactical Decision Game (TDG):

1. Define TAOC displacement operations.
2. Explain the steps of TAOC displacement operations IAW the references.
3. Write a plan for the TAOC to displace, annotate identified issues of concern.

Performance Standard. Complete all the requirement items IAW the references while working with TAOC Crew. Instructor will discuss each item with the trainee. The written plan must support the scenario.

Instructor. SI, WTI.

Prerequisites. 2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665. 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

References.

1. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
2. Marine Corps Planning Process (MCPD).
3. MCO 3501.9B, Marine Corps Combat Readiness Evaluation System.
4. MAGTF Operations Ashore.
5. TAOC TACSOP

SAD-2711 16.0 * B (N) G/E

Goal. Develop a plan for the employment of the TAOC.

Requirement. Given a scenario, Commander's guidance, mission, required source documentation and support sections (TDS, RADAR, HQ), conduct an Operational Planning Team and develop TAOC specific requirements, to include:

1. Personnel.
2. Equipment.
3. Equipment Density List (EDL).
4. Bill of Materials (BOM).
5. C2 System emplacement plan.
6. RADAR emplacement plan.
7. Internal and external communications.
8. Logistics.
9. Casualty/degradation plan and detailed restoration priorities plan.

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

Instructor. SI, WTI

Prerequisite. 2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

External Resource Support. None.

References.

1. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
2. TAOC TACSOP

3.7.10 TACTICAL DATA LINK (TDL)

Purpose. To provide the 7210 standardized academic/practical application Tactical Data Link knowledge to perform assigned duties. TDL events are one-time events unless otherwise stated.

General.

Admin Notes. All tests will be taken without the aid of references and require a minimum score of 80% to pass unless specifically changed in an event.

Prerequisite. None.

Crew Requirements. None.

TDL-2800 1.0 * B (N) G

Goal. Identify the purpose of documents that enable tactical datalinks (TDL) operations.

Requirement. Given the documents below, identify their purpose:

1. Guard chart
2. Communication Electronic Operating Instruction (CEOI)
3. Operations Order (OPORDER) Annex K
4. OPORDER Annex U
5. Link 16 Network Description Document
6. Communications security (COMSEC) callout
7. Operational Tasking Datalink (OPTASKLINK)
8. Satellite Access Authorization (SAA)
9. Joint Multi-TDL Operating Procedures (JMTOP)

Performance Standard. With the aid of reference, state (verbally or written) the required items. Minor errors by the trainee are acceptable.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MCWP 5-1, Marine Corps Planning Process (MCP).)
2. MCWP 3-40.3, MAGTF Communications Systems.
3. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).

TDL-2802 1.0 * B (N) G

Goal. Identify TAOC and EW/C voice and data communications equipment.

Requirement. Given the reference, identify the following:

1. Radio systems.
2. Data link systems.
3. C2 systems.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MCRP 5-12D, Organization of Marine Corps forces.
2. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
3. Approved Core METL applicable to the unit.
4. MCBUL 3000, Marine Corps Readiness reportable ground equipment.

TDL-2807 2.0 * B (N) G

Goal. Identify missions and TDL capabilities of Joint Tactical Data Systems (TDS).

Requirement. Given the references, identify the missions and TDL capabilities of the following:

1. US Army:
 - a. Air and Missile Defense Battalion (AMD BN) Composite.
 - b. Air and Missile Defense Theater High Altitude Air Defense Battery (AMD THAAD).
 - c. Air Defense Airspace Management (ADAM) Cell.
 - d. Joint Tactical Ground Station (JTAGS).
2. US Navy:
 - a. E-2C Group II.
 - b. F/A-18E/F (MIDS).
 - c. EA-18G (MIDS).
 - d. Model 5 (CV, LHD, CG, DDG).
 - e. Model 4 (CG, FFG, LCC).
2. US Air Force:
 - a. CRC/MCE.
 - b. Air Support Operations Center (ASOC).
 - c. E-3.
 - d. F-15 A through E.
 - e. E-8C JSTARS.
 - f. RC-135 RIVET JOINT and COBRA BALL.
3. U.S. Marine Corps:
 - a. F/A-18 A++, C/D.
 - b. EA-6B ICAP III.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual.
2. <https://cnl.>, NAVSEA Tactical Data Systems Capabilities and Limitations website (SIPR).

TDL-2808 1.0 * B (N) G

Goal. Describe the Joint Data Network (JDN).

Requirement.

1. Define the Joint Data Network (JDN).
2. State the responsibilities of the JDN operations officer.
3. State the purpose of the global command and control system (GCCS) family of systems.
4. Define Common Operation Picture (COP).
5. Define Common Tactical Picture (CTP).
6. Define Tactical Picture.
7. State the components of the CTP.
8. Describe track management.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 3115.01, Volume 1, Joint Data Network Operations.
2. CJCSM 3115.02, Volume 2, Common Tactical Picture Data Management.
3. CJCSI 3115.01, CTP Reporting Requirements.
4. CJCSI 3151.01B, GCCS COP Reporting Requirements.

TDL-2809 2.0 * B _____ (N) G

Goal. Describe the Multi-Tactical Data Link (TDL) interface.

Requirement.

1. State the concept and information exchange of the multi-TDL interface.
2. State the technical functions of the multi-TDL Interface.
3. List the three elements of the Multi-TDL Interface.
4. Define the basic interface and list its three data links.
5. Identify the characteristics of Link 11.
6. Identify the characteristics of Link 11B.
7. Identify the characteristics of Link 16.
8. Define the extended interface.
9. Identify the purpose of the Joint Range Extension Application Protocol (JREAP).
10. Define the following interface voice coordination nets:
 - a. Air Defense Command and Control Net (ADCCN).
 - b. Engagement Control Net (ECN).
 - c. Data link Coordination Net (DCN).
 - d. Track Supervision Net (TSN).
 - e. Voice Production Net (VPN).
11. Describe the delegation of responsibilities for the conduct of the Multi-TDL operations at the Joint Task Force (JTF) level and below.
12. State the two Interface Control Officer (ICO) execution functions.
13. State the responsibilities of the Link 16 manager.
14. State the responsibilities of the Link 11/11B manager.
15. State the responsibilities of the Track Data Coordinator (TDC).
16. List the minimum requirements for Services that operate the Multi-Link Interface.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

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

2. MIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B.
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
4. MIL-STD-3011, JREAP Interface Standard.

TDL-2810 2.0 * B (N) G

Goal. Identify interface unit (IU), categories, and addressing requirements.

Requirement. Perform the following:

1. Identify how IU's are categorized.
2. Define concurrent operations.
3. Define data looping.
4. Define the following IU communication functions:
 - a. Interface Unit (IU).
 - b. JTIDS / MIDS Unit (JU).
 - c. Command and Control JTIDS / MIDS Unit (C2JU).
 - d. Non-Command and Control JTIDS / MIDS Unit (NonC2JU).
 - e. Participating Unit (PU).
 - f. Reporting Unit (RU).
 - g. Supporting Unit (SU).
 - h. Forwarding JTIDS / MIDS Unit A (FJUA).
 - i. Forwarding JTIDS / MIDS Unit B (FJUB).
 - j. Forwarding JTIDS / MIDS Unit AB (FJUAB).
 - k. Forwarding Participating Unit (FPU).
 - l. Forwarding Reporting Unit (FRU).
 - m. Concurrent Interface Unit (CIU).
5. Define IU address.
6. Identify legal and preferred IU address ranges for:
 - a. PU/FPU.
 - b. RU/FRU.
 - c. C2JU.
 - d. Non C2JU.
 - e. FJUA/FJUAB.
 - f. FJUB.
7. Explain the purpose of the pseudo source address.
8. Explain the purpose of the collective address.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
2. MIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B.
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.

TDL-2811 2.0 * B (N) G

Goal. Identify basic track data.

Requirement. Perform the following:

1. Define track number.
2. Identify the value and purpose of the following:
 - a. Low track numbers.
 - b. High track numbers.
 - c. Data forwarding track numbers.
3. Identify five track numbers.
4. Identify the six standard track identifications.
5. Define track quality.
6. Define real-time track reports.
7. Identify how non real-time tracks are distinguished from real-time tracks.
8. Identify when non-real time tracks are used.
9. Define Reporting Responsibility (R2).
10. Define a common track.
11. Define correlation.
12. Define automatic correlation.
13. Describe track number negotiations during correlation.
14. Define manual correlation.
15. Explain de-correlation.
16. Define dual designation.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP).
2. MIL- STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B.
3. MIL-STD_ 6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.

TDL-2812 2.0 * B (N) G

Goal. Identify information contained within J-Series Messages that may be displayed to the operator.

Requirement. Define the following:

1. Identify the six Precise Participant Location and Identification (PPLI) message types.
2. Identify the information conveyed within J2.X PPLI messages.
3. Identify the main difference between a J2.0 Indirect PPLI message and the other J2.X PPLI messages.
4. Identify the five Platform Status and System Status message types.
5. Identify the information conveyed within J3.X Surveillance messages.
6. Identify the eight Surveillance message types.
7. Identify information conveyed within J3.X Surveillance messages.
8. Identify the characteristics of each IFF/SIF Code.
9. Identify the differences between a sensor measured altitude, Mode IIIC altitude, and PPLI altitude.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.

TDL-2813 1.0 * B (N) G

Goal. Identify tactical data link orders associated with Network Participating Group (NPG) 8 and 9.

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

1. State the purpose of the J9.0 message.
2. State the purpose of the J12.0 message.
3. State the purpose of the J10.3 message.
4. State the purpose of the J10.2 message.
5. State the purpose of the J12.6 message.
6. State the relationship between the J9.0 and the J12.0.
7. State the OPTASK LINK requirements for using NPG-9.
8. Describe the handshake process and corresponding J series messages that are used while conducting Air Control (NPG-9).

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

Instructor. BI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.

TDL-2814 2.0 * B (N) G

Goal. Describe Data Filters.

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

1. Identify the purpose of the data filters.
2. State operational factors that may dictate the use of data filters.
3. Describe transmit filters.
4. Describe forwarding filters.
5. Describe receive filters.
6. Explain why receive filters require an equally restrictive transmit filter.

7. Describe display filters.
8. State the difference between a force filter and unit filter.
9. State the purpose of the following data filter types:
 - a. Geographic (Geo) 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.
10. Describe how Force Tell and Emergency Data interact with data filters.
11. State the personnel responsible for data filters and their associated duties.
12. Describe the characteristics of prearranged and non-prearranged data filters.
13. State the function of filter numbers and identify codes associated with the ten filter unit types.
14. List essential information that should be included when establishing a data filter.
15. State the doctrinal restrictions of the establishment of data filters.
16. State the difference between a data filter and a link connection.
17. Identify the unique filtering capabilities of different gateways IAW the references.

Performance Standard. With the aid of reference, state (verbally or written) the required items. Minor errors by the trainee are acceptable.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual.
2. MIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B.
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
4. Guide to the USMTF User Formats- OPERATIONAL TASKING DATA LINKS.
5. JRE Version 5.3.X Software User Guide.
6. ASDI Version 14.1.1 Software Users Guide.

TDL-2817 3.0 * B (N) G

Goal. Define terms associated with Link 16.

Requirement. Given references, define:

1. Active Synchronization.
2. Backlink.
3. Command and Control JTIDS/MIDS Unit (C2 JU).
4. Conditional Radio Silence Mode.
5. Contention Access Mode.
6. Continuation Word.
7. Dedicated Access Mode.
8. Donor.
9. Dynamic Network Management.
10. Extension Word.
11. Geodetic Position Quality.
12. Header Message.
13. Host System.

14. Initial Entry.
15. Initial Entry JTIDS/MIDS Unit (IEJU).
16. Initial Word.
17. Machine Receipt.
18. Multifunctional Information Distribution System (MIDS).
19. Minimum Implementation.
20. Mode 1, 2, and 4 Communications.
21. Net Number.
22. Network Participation Group.
23. Network Time Reference.
24. Non-Command and Control JTIDS/MIDS Unit (NonC2 JU).
25. Pool.
26. Passive Synchronization.
27. Recurrence Rate.
28. Reed-Solomon Code.
29. Relative Position Quality.
30. Relay Block.
31. Round-Trip Timing (RTT).
32. Stacked Net.
33. Synchronization.
34. Time (System & Terminal).
35. Time Quality (QT).
36. Time slot.
37. Time Slot Reallocation Access Mode.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOF).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.

TDL-2818 3.0 * B _____ (N) G

Goal. State the characteristics of Link 16.

Requirement. Perform the Following:

1. Identify terminal capacity of Link 16 terminal.
2. Identify spectral capacity of a Link 16 network.
3. Identify spectral capacity of a Link 16 network.
4. Identify the two types of security used by Link 16.
5. Identify the organization of a Secure Data unit (SDU).
6. Identify the purpose of the JANUS Table.
7. Identify the two range modes associated with Link 16.
8. Define direct connectivity.
9. Define relayed connectivity.
10. Identify the purpose of an Initialization Data Load (IDL).
11. Locate the website and phone number of the USMC Network Design Facility (NDF).

12. Define time division multiple access.
13. Identify the acceptable time error when initializing a Link 16 terminal.
14. Explain the synchronization process and the importance of each message in the synchronization process.
 - a. Precise Participate Location and Identification (PPLI).
 - b. Initial Entry Message (IEM).
 - c. Round Trip Timing (RTT) Message.
15. Identify the two Link 16 duties that transmit the IEM.
16. Identify the frequency range used by Link 16.
17. State the purpose of pulse de-confliction.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. CJCSI 6232.01_, Link 16 Spectrum De-confliction.

TDL-2819 2.0 * B (N) G

Goal. State the characteristics of the Joint Range Extension Application Protocol (JREAP).

Requirement. Perform the following:

1. Describe JREAP A.
2. Select the data rates of JREAP A.
3. Select the JREAP A roles.
4. Describe the JREAP A Transmission Sequence List (TSL).
5. Explain the difference between JREAP A and satellite J.
6. Describe JREAP B.
7. Describe JREAP B modes of operation.
8. Select JREAP B data rates.
9. Describe JREAP C.
10. Describe JREAP C modes of operation.
11. Define the following terms associated with JREAP:
 - a. Common Time Reference.
 - b. Demand Assigned Multiple Access (DAMA).
 - c. Joint Range Extension (JRE).
 - d. JRE Network Controller.
 - e. JRE source track number.
 - f. Link 16 zone.
 - g. Multicast.
 - h. Packet.
 - i. Port.
 - j. Secondary track number.
 - k. Token passing.
 - l. Unicast.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual.
2. MIL-STD-3011_, Department of Defense Interface Standard for the Joint Range Extension Application Protocol.

TDL-2820 2.0 * B (N) G

Goal. Identify mission essential segments, sets, and fields within the OPTASK LINK message.

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

1. Identify the purpose of the OPTASK LINK.
2. Identify who is responsible for creating and disseminating the OPTASK LINK.
3. State the purpose of the Common Message Processor (CMP) and discuss its relationship to the OPTASK LINK.
4. Define Segment.
5. Define Set.
6. Define Field.
7. Identify the information contained in the header of the OPTASK LINK to include the following sets:
 - a. GENTEXT/CONDUCTOF TDL OPERATIONS.
 - b. POCLINK.
 - c. DLRPGRID.
8. Identify the information contained in the IVCCN Segment.
9. Identify the information contained in the CORRDEC set.
10. Identify the information contained in THE HEADING /UTILINK INTERFACE COORDINATION REQUIREMENTS set to include the following GENTEXT sets.
 - a. FORCE INTERFACE INFORMATION.
 - b. REGIONALINTERFACE INFORMATION.
 - c. SECTOR INTERFACE INFORMATION.
 - d. CHANGE DATA ORDER AUTHORITIES.
 - e. CONTINGENCY PROCEDURES.
 - f. TRACK PRODUCITON AREA GUIDANCE.
11. Identify the information contained in the MULCDUTY set.
12. Identify the information contained in the Link 11 Segment to include the following sets:
13. POLLSEQ.
14. LSYSDATA.
15. CRYPTDATA.
16. DALKFREQ.
17. FORCFLTR.
18. LPUDATA.
19. UNITFLTR.
20. Identify the information contained in the Link 16 Segment to include the following sets:
 - a. JNETWORK.
 - b. CPD.
 - c. JCRYPTDAT.
 - d. JTRNMODE.

- e. JSTNETS.
 - f. JUDATA.
 - g. SQDDATA.
21. Identify the information contained in the Joint Range Extension (JRE) Data Segment to include the following sets.
- a. UNITINFO.
 - b. LNKPROT.
 - c. SECTEL.
 - d. SECINTER.
 - e. SATCONN.
 - f. CONMATRX.
22. Identify the information contained in the 1MANCODE set.

Performance Standard. With the aid of reference, state (verbally or written) the required items. Minor errors by the trainee are acceptable.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

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

TDL-2821 1.0 * B _____ (N) G

Goal. State the purpose of Interface Coordination procedures.

Requirement. Perform the following:

1. Identify the purpose of data link entry / exit procedures.
2. Define data registration.
3. State the purpose of the following data registration:
 - a. Geodetic registration.
 - b. Sensor registration.
 - c. Remote interface unit registration.
4. List the steps of the data registration test.
5. State which unit will normally be assigned as the data registration reference unit in a Multi-TDL environment.
6. List the five correlation restrictions for reported tracks.
7. List the eight operational contingency constraints (OCCs) for a track.
8. List the six steps for voice resolution of a dual designation.
9. IAW the JMTOP, what is the single most important element of information of the TDL interface.
10. Define an Identification (ID) conflict.
11. Define an environmental conflict.
12. Outline the ID difference resolution procedures.
13. Define a Change Data Order (CDO).
14. State who on the interface may originate a CDO.
15. Identify the three detection and tracking reporting techniques.

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

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
2. BMIL-STD-6011_, Department of Defense Interface Standard, Tactical Data Link (TDL) 11/11B.
3. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
4. MCTP 10-10B, MTTP Air and Missile Defense

TDL-2823 1.0 * B (N) G

Goal. State the characteristics of the Variable Message Format (VMF).

Requirement. Given the reference, explain:

1. The purpose of Variable Message Format (VMF) messages.
2. The characteristics of VMF messages.
3. VMF messages functional areas.
4. Transmission medium options used to exchange VMF messages.
5. Unit reference numbers.
6. How URNs are assigned.
7. The purpose of the K01.2 unit reference query/response message.
8. Position reporting requirements of VMF units.
9. The purpose of a K05.1 position report.
10. The purpose of a K04.1 observation report.
11. VMF multi-cast groups.
12. K series and J series data forwarding.

Performance Standard. With the aid of reference, state (verbally or written) the required items.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. CJCSM 3115.01, Volume 1, Joint Data Network Operations.
2. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
3. MIL-STD-188-220, Digital Message Transfer Device Subsystems.
4. MIL-STD-2045-47001, Connectionless Data Transfer Application Layer Interface Standard.
5. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
6. MIL-STD-6017, VMF Interface Standard.
7. MIL-STD-6020, Data Forwarding Between TDLs.

TDL-2830 2.0 * B (N) L

Goal. Operate an Air Defense Systems Integrator (ADSI).

Requirement. Given an OPTASK LINK and operational ADSI using TSD:

- b. Network Time Reference (NTR).
- c. Initial Entry JTIDS Unit (IEJU).

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

Instructor. SI, WTI.

Prerequisite. None.

External Resource Support. Link 16 capable platform(s), TDS.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. USMC NDF Website.

TDL-2838 8.0 * B (N) L

Goal. Operate JREAP A.

Requirement. Given a MIL-STD-3011 compliant system, SATCOM radio assets, Satellite Access Authorization (SAA), OPTASK LINK, and assistance from maintenance and communications sections:

1. Extract satellite communications information from the SAA.
2. Verify proper radio configuration for JREAP A operations.
3. Verify cryptographic equipment is keyed
4. Verify JREAP A equipment is connected.
5. Verify the SATCOM antenna has the correct elevation and azimuth.
6. Build the JREAP A link in the MIL-STD-3011 compliant system.
7. Enter and activate filter in the MIL-STD-3011 compliant system.
8. Enable and disable the correct link connections.
9. Enter/Exit link IAW published procedures.
10. Demonstrate the ability to operate in the following modes:
 - a. Network Participant.
 - b. Network Controller.
 - c. Network Listener.

Performance Standard. Successfully exchange information/data.

Instructor. SI, WTI.

Prerequisite. None.

External Resource Support. AVRAD, TDS, External JREAP capable system, DAMA Satellite Access, Live/Virtual/Constructive Forwarding JTIDS/MIDS Unit Generic Network Controller.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.

3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standards

TDL-2840 8.0 * B (N) L

Goal. Operate JREAP B.

Requirement. Given a MIL-STD 3011 compliant system, a serial line encryption device, and assistance from maintenance and communications sections:

1. Verify the serial line encryption device is configured for JREAP B operations.
2. Verify the serial line encryption device is connected to the MIL-STD 3011 compliant system and telephone line.
3. Build the JREAP B link in the MIL-STD 3011 compliant system.
4. Enter and activate filters in the MIL-STD 3011 compliant system per the OPTASK LINK.
5. Enable and disable the link connections.
6. Enter and exit link IAW published procedures.

Performance Standard. Successfully exchange information/data.

Instructor. SI, WTI.

Prerequisite. None.

External Resource Support. TDS, External JREAP capable system, switching network, Live/Virtual/Constructive JRE Unit.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOPI).
2. MIL-STD-6016_, Department of Defense Interface Standard, Tactical Data Link (TDL) 16.
3. C2 System Technical Manual.
4. MIL-STD-3011, JREAP Interface Standard.

TDL-2849 3.0 * B (N) L

Goal. Conduct tactical data link planning for an agency.

Requirement. Given an exercise or operational scenario:

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

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

Instructor. SI, WTI.

Prerequisite. None.

References.

1. CJCSM 6120.01_, Joint Multi_TDL Operating Procedures (JMTOP).
2. C3 Agency SOP.

3.7.11 COMMAND AND CONTROL SYSTEMS (C2SYS).

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

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.

Prerequisite. None.

Crew Requirement. None.

The table below lists all C2SYS events that are to be completed by personnel position dependent:

EVENT CODE	EVENT NAME	POSITION	PRE-REQS
C2SYS-2910	Use the Execution Status and Monitoring (ESTAT) tool	WD, SAD	NONE
C2SYS-2940	Set up and establish communications utilizing tactical chat	WD, SD	NONE

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

Goal. Demonstrate proficiency with the TBMCS Execution Status and Monitoring (ESTAT) tool.

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

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

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

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

Instructor. BI

External Syllabus Support.

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

Reference.

- 1. TBMCS User's Manual

C2SYS-2940 1.0 * B, R (N) G

Goal. Demonstrate proficiency utilizing tactical chat.

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

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

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

Instructor. BI

References.

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

3.8 MISSION SKILL TRAINING (3000)

Purpose. To train the 7210 in surveillance and weapons section employment and management. After completing SD and WD qualifications, the 7210 will train in crew management and TAOC employment as a SAD. Focus of this phase is to train the 7210 to execute methods, exercise practical application of skill sets, and plan/manage TAOC operational capabilities.

General.

Admin Notes.

1. The SD and WD training can be conducted concurrently.
2. The 7210 should complete the SD and WD qualifications prior to progressing to the SAD skill set.
3. Core skill C2SYS events must be completed.
4. For the culminating mission skill event (evaluation of knowledge, skills, and attitudes prior to recommendation for qualification), only C2 systems found on the MACS Table of Equipment will be used.
5. All tests will require a minimum score of 80% to pass unless specifically changed for an event.

Prerequisite. None.

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

PAR NO.	STAGE NAME	PAGE NUMBER
3.8.1	SURVEILLANCE DIRECTOR (SD)	3-85
3.8.2	WEAPONS DIRECTOR (WD)	3-86
3.8.3	SENIOR AIR DIRECTOR (SAD)	3-90

3.8.1 SURVEILLANCE DIRECTOR (SD)

Purpose. To train the 7210 in detailed surveillance planning skills required to manage the surveillance section.

General.

Admin Notes. This stage of training may be conducted concurrently with the WD stage of training.

Prerequisites. None.

Crew Requirements. None.

SD-3300 8.0 * B (N) G/E

Goal. Brief the Surveillance section.

Requirement. Given operational documents, develop a SD brief and brief the crew.

Performance Standard. Provide a Surveillance Section brief IAW the reference.

Instructor. SI, WTI.

Prerequisite. 2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034,2068, 2072 2150, 2226, 2311, 2312, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

References.

1. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
2. TAOC TACSOP.

SD-3302 12.0 1095 B, R, M (N) L

Goal. Perform as a SD.

Requirement. Given an operational C2 system, organic radar, a core capable surveillance crew, and operational documents:

1. Conduct a crew brief.
2. Ensure organic radar performance is maximized.
3. Validate surveillance database entries including EMCON, data links, radar parameters, and ACM's.
4. Ensure aircraft are identified and classified.
5. Ensure data links are initialized.
6. Coordinate entry into CEC architecture.
7. Activate EP/EMCON plan.
8. Implement RADCON plan.
9. Coordinate with radar section to identify any jamming sources.
10. Fix location of threat jammers with proper symbology.
11. Ensure manual crosstell procedures are followed.
12. Compile and forward Joint Spectrum Interference Resolution (JSIR) report.
13. Maintain logbook.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI.

Prerequisite. 2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2068, 2072 2150, 2226, 2311, 2312, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

External Resource Support. External agency with TDL capability.

References.

1. CJCSM 6120.01_, Joint Multi-TDL Operating Procedures (JMTOP) Manual.
2. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
3. MCTP 10-10B, MTTP Air and Missile Defense
4. TAOC TACSOP
5. MIL-STD 6040, USMTF Baseline.
6. OPTASKCEC or Cut Sheet
7. OPTASKLINK

3.8.2 WEAPONS DIRECTOR (WD)

Purpose. To train the 7210 in detailed air control and airspace management duties. These skills are required to manage the weapons section.

General.

Admin Notes. This stage of training may be conducted concurrently with the SD stage of training.

Prerequisites. 2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

Crew Requirements. None.

WD-3600 8.0 * B (N) G/E

Goal. Brief the weapons section.

Requirement. Given operational documents, produce a WD brief and brief crew.

Performance Standard. Provide a Weapons Section Brief IAW the reference.

Instructor. SI, WTI.

Prerequisite. 2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

References.

1. TAOC TACSOP
2. MIL-STD 6040, USMTF.
3. MCTP 3-20C, Anti-Air Warfare.
4. MCTP 3-20F, Control of Aircraft and Missiles.
5. JP 3-01, Countering Air and Missile Threats.
6. MCTP 10-10B, MTTP Air and Missile Defense
7. JP 3-52, Joint Airspace Control.

WD-3602 8.0 * B (N) L/S

Goal. Perform airspace management.

Requirement. Given a C2 system and operational documents:

1. Ensure all ACMs identified in planning are put into and available on the tactical display.
2. Supervise controllers.
3. Update aircraft mission status.
4. Integrate long-range artillery, Naval Surface Fires Support and/or MAGTF/ Naval / Joint aviation fires

affecting TAOC airspace.

- a. Sanitize airspace.
 - b. Coordinate with higher/adjacent on status of airspace for fires.
5. Execute slide and scram of HVAA.
 6. Assist in coordinating SAR/TRAP missions.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI.

Prerequisites. 2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

References.

1. MIL-STD 6040, USMTF.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.
4. JP 3-01, Countering Air and Missile Threats.
5. MCTP 10-10B, MTTP Air and Missile Defense
6. JP 3-52, Joint Airspace Control.

WD-3604 8.0 * B (N) L/S

Goal. Manage aerial refueling.

Requirement.

1. Maintain updated flow of available assets.
2. Maintain updated list of aircraft scheduled to AAR that includes associated time of refuel and amount of fuel to receive.
3. Coordinate with higher/adjacent/subordinate agencies availability of on-station fuel.
4. Manage Aerial Refueling (AR) operations to include:
 - a. Tanker on the appropriate track at the appropriate altitude block.
 - b. Manage the Slide/Retrograde plan as briefed.
 - c. Monitor, record, and report tanker fuel status.
5. Coordinate and make recommendations for dynamic tanker operations.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI.

Prerequisites. 2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024,

8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

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

References.

1. MIL-STD 6040, USMTF.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.
4. JP 3-01, Countering Air and Missile Threats.
5. MCTP 10-10B, MTTP Air and Missile Defense
6. JP 3-52, Joint Airspace Control.
7. JP 3-17 Air Mobility Operations
8. NATO Standard ATP 3.3.4.2 Air to Air Refueling ATP-56
9. United States ATP 3.3.4.2

WD-3606 8.0 * B (N) L/S

Goal. Supervise the management of combat air patrol(s).

Requirement. Given a C2 system, crew, and operational documents:

1. Maintain updated flow of available AAW aviation assets.
2. Conduct CAP management.
 - a. Manning and relief plan
3. Maintain Strip Launch Alert (SLA) status awareness.
4. Receive and disseminate aircraft status updates to include:
 - a. Current weapons loadout.
 - b. Current fuel status.
 - c. Time on station.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI.

Prerequisites. 2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

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

References.

1. MIL-STD 6040, USMTF.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.
4. JP 3-01, Countering Air and Missile Threats.

5. MCTP 10-10B, MTTP Air and Missile Defense
6. JP 3-52, Joint Airspace Control.

WD-3610 8.0 1095 B, R, M (N) L/S

Goal. Perform as WD.

Requirement. Given a C2 system, crew and operational documents:

1. Conduct a weapons section crew brief.
2. Manage air and missile defense assets
3. Manage HVAA assets.
4. Manage itinerant aircraft traffic.
5. Pass/Generate words / PUC (e.g. ADWC/WCS/SOA and ROE changes)
6. Ensure emergency procedures are adhered to.
7. Compile and forward all applicable reports.
8. Maintain a log.
9. Integrate fires and airspace, as required
10. Conduct internal and external coordination IAW information exchange requirements

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI.

Prerequisites. 2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 3602, 3604, 3606, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

External Resource Support. External C3 agencies

References.

1. TAOC TACSOP
2. MIL-STD 6040, USMTF.
3. MCTP 3-20C, Anti-Air Warfare.
4. MCTP 3-20F, Control of Aircraft and Missiles.
5. JP 3-01, Countering Air and Missile Threats.
6. MCTP 10-10B, MTTP Air and Missile Defense
7. JP 3-52, Joint Airspace Control.
8. MCRP 3-20F.10, MTTP Air Control Communications

3.8.3 SENIOR AIR DIRECTOR (SAD)

Purpose. To train the 7210 in TAOC management responsibilities, planning, and employment. 7210s will conduct planning and coordination with within the Air Defense Company, MACS, and MACCS.

General.

Instructor. SI, WTI.

Prerequisites. 2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2150, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2709, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2826, 2830, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6280, 6281, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

References.

1. TAOC TACSOP
2. MCRP 3-20F.6, Tactical Air Operations Center Handbook.

SAD-3705 16.0 * B (N) G/E

Goal. Provide a confirmation brief.

Requirement. Given a scenario, Commander's guidance, mission, required source documentation and support sections complete the following:

1. Conduct operational planning.
2. Develop TAOC specific requirements that include:
 - a. Personnel requirements.
 - b. Equipment requirements.
 - c. Equipment density list.
 - d. C2 system emplacement plan.
 - e. Sensor emplacement plan.
 - f. Identify communication requirements.
 - g. Identify utilities requirements.
 - h. Identify logistical requirements.
 - i. Casualty/degradation plan and detailed restoration priorities plan.
3. Develop a plan to move, setup, sustain and safely retrograde TAOC personnel and equipment.
4. Using a CO-approved confirmation brief shell, produce a confirmation brief.

Performance Standard. Brief the instructor. 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. WTI.

Prerequisites. 2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2150, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2709, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2826, 2830, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6280, 6281, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

External Resource Support. None.

General.

Admin Notes. None.

Prerequisite. None.

Stages.

PAR NO.	STAGE NAME	PAGE NUMBER
3.9.1	AIR INTERCEPT CONTROLLER 1 (AIC1)	3-94
3.9.2	AIR INTERCEPT CONTROLLER 2 (AIC2)	3-95
3.9.3	AIR INTERCEPT CONTROLLER 3 (AIC3)	3-98
3.9.4	WEAPONS DIRECTOR (WD)	3-101
3.9.5	SENIOR AIR DIRECTOR (SAD)	3-102
3.9.6	SECTOR AIR DEFENSE COMMANDER OPERATIONS OFFICER (SADC OPS)	3-103

3.9.1 AIR INTERCEPT CONTROLLER 1 (AIC1).

Purpose. To familiarize the AIC student with the core communications, procedures, and tactics associated with GroundControl Intercepts (GCI). Upon completion of the (section) AIC1 POI, the student will be assessed by an AICI to become certified as a level 1 AIC. Upon certification the student will be authorized to control up to a section of aircraft unsupervised.

General.

Admin Notes.

1. Missions will be executed per ROE established by published AAW directives, operational planning orders/documents, or individual mission briefs.
2. For evaluation purposes, a mission will consist of a fighter mission brief to the AIC, AIC brief to the AICI, execution of the event, AIC debrief to the AICI, and fighter mission debrief to the AIC.
3. Data Links and/or real time exchange mediums (e.g. Link 16, CEC) will be used to the fullest extent possible.
4. Tactical Combat Training System (TCTS) facilities should be used, when available, for debriefing.
5. The primary organic C2 system will be used to the fullest extent possible. When necessary, events can be conducted from an instrumented range with equipment hosted at the range.
6. Live AIC events will be accomplished in conjunction with events from the F/A-18 T&R Manual (NAVMC 3500.50_) that require ground-controlled intercepts (GCI). Weapons and Tactics Training Program (WTTP) Officers should coordinate with fighter squadrons to accomplish these events.
7. 7210's are not required to become certified as an AIC1, however will have to complete all requisite events in the AIC1 2000 level POI prior to earning a WD qualification under the instruction of the appropriate supervisor or instructor.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108,

2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044,

Crew Requirements. None

AIC1-4600 8.0 1095 B, R, M (N) L

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

Requirement. Given a C2 System with live tactical radar inputs control a section of fighter aircraft against an unknown threat and provide the following:

1. Accurate initial picture.
2. Recognition of commit/reset criteria.
3. Transition from broadcast control to tactical control with proper labels and names.
4. Accurate and timely TAC Range.
5. Accurate and timely declarations.
6. Accurate and timely recognition and communication of maneuvering targets.
7. Post merge picture.
8. Effective cold ops execution/communication when required.
9. Effective communications brevity IAW reference.

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

Instructor. AICS, AICI

Prerequisite. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. MAWTS-1 NIPR/SIPR SharePoint AIC Courseware
4. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
5. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
6. TOPGUN MANUAL, Chapter 47, Air Control Communications

3.9.2 AIR INTERCEPT CONTROLLER (AIC2)

Purpose. To familiarize the AIC student with communications, procedures, and tactics associated with Ground Control Intercepts (GCI). Upon completion of the (division) AIC2 POI, the student officer will be assessed by an AICI to become certified as a level 2 AIC. Upon certification the student officer will be authorized to control up to a division of aircraft unsupervised.

General.

Admin Notes.

1. Missions will be executed per ROE established by published AAW directives, operational planning

orders/documents, or individual mission briefs.

2. For evaluation purposes, a mission will consist of a fighter mission brief to the AIC, AIC brief to the AICI, execution of the event, AIC debrief to the AICI, and fighter mission debrief to the AIC.
3. Data Links and/or real time exchange mediums (e.g. Link 16, CEC) will be used to the fullest extent possible.
4. Tactical Combat Training System (TCTS) facilities should be used when available for debriefing.
5. The primary organic C2 system will be used to the fullest extent possible. When necessary, events can be conducted from an instrumented range with equipment hosted at the range.
6. Live AIC events will be accomplished in conjunction with events from the F/A-18 T&R Manual (NAVMC 3500.50_) that require ground-controlled intercepts (GCI). Weapons and Tactics Training Program (WTTP) Officers should coordinate with fighter squadrons to accomplish these events.
7. 7210's are not required to become certified as an AIC2, however may complete all events in the POI if training opportunities are made available. Every effort should be made to ensure that 7210's prioritize 7236's AIC2 training over their own, as AIC2 training is not required for a 7210.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

Crew Requirements. None

AIC2-4602 1.0 * B (N) G/E

Goal. Conduct a brief for a division DCA/OCA.

Requirement. Given the references, fighter brief and a tactical scenario, conduct an AIC brief using proper whiteboard setup, and symbology.

Performance Standard. Conduct brief with the AICI or AICS IAW the references and fighter/striker brief.

Instructor. AICS, AICI

Prerequisite. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MAWTS-1 NIPR SharePoint AIC Briefing Lab Courseware

AIC2-4604 8.0 * B (N) L

Goal. Perform AIC functions for a division of fighter aircraft conducting DCA/OCA.

Requirement. Given organic tactical systems, references, scenario, and while demonstrating scope mechanics, interpretation, and utilization, control a division of fighter aircraft against unknown threat:

1. Maintain timeline awareness.
2. Perform AIC communications.
3. Perform proactive involvement.
4. Respond to fighter requests.
5. Perform scope mechanics.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor) IAW the references. Minor errors corrected by the trainee are acceptable.

Instructor. AICS, AICI

Prerequisite. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications

AIC2-4606 8.0 1095 B, R, M (N) L

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

Requirement. Given organic tactical systems, references, scenario, and while demonstrating scope mechanics, interpretation, and utilization, control a division of fighter aircraft against unknown threat:

1. Maintain timeline awareness.
2. Perform AIC communications.
3. Perform proactive involvement.
4. Respond to fighter requests.
5. Perform scope mechanics.

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor) IAW the references. Minor errors corrected by the trainee are acceptable.

Instructor. AICS, AICI

Prerequisite. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications

3.9.3 AIR INTERCEPT CONTROLLER (AIC3)

Purpose. To familiarize the AIC student with communications, procedures, and tactics associated with Ground Control Intercepts (GCI). Upon completion of the AIC3 POI, the student officer will be assessed by an AICI to become certified as an AIC3.

General.

Admin Notes.

1. Missions will be executed per ROE established by published AAW directives, operational planning orders/documents, or individual mission briefs.
2. For evaluation purposes, a mission will consist of a fighter mission brief to the AIC, AIC brief to the AICS or AICI, execution of the event, AIC debrief to the AICS or AICI, and fighter mission debrief to the AIC.
3. Data Links and/or real time exchange mediums (e.g. Link 16, CEC) will be used to the fullest extent possible.
4. Tactical Combat Training System (TCTS) facilities should be used when available for debriefing.
5. The primary organic C2 system will be used to the fullest extent possible. When necessary, events can be conducted from an instrumented range with equipment hosted at the range.
6. Live AIC events will be accomplished in conjunction with events from the F/A-18 T&R Manual (NAVMC 3500.50_) that require ground-controlled intercepts (GCI). Weapons and Tactics Training Program (WTTP) Officers should coordinate with fighter squadrons to accomplish these events.
7. 7210's are not required to become certified as an AIC3, however may complete all events in the POI if training opportunities are made available. Every effort should be made to ensure that 7210's prioritize 7236's AIC3 training over their own, as AIC3 training is not required for a 7210.
8. When performing as an AIC, the AIC might encounter different tactics depending on the service he/she is supporting. Because of this, the AIC syllabus is built around providing the maximum amount of credit for each AIC event regardless of the service the AIC is supporting.
9. Based on geographical locations an Air Force Weapons School Air Intercept Control Graduate may be the only option for supervising and instructing AICs working through their syllabus. This allows Air Force Weapons School Air Intercept Control Graduates to instruct and recommend AICs for certification through the WTI.

Prerequisite. None.

Crew Requirements. None

AIC3-4608 1.0 * B (N) G/E

Goal. Conduct DCA FI brief.

Requirement. Given the references and fighter brief, conduct DCA FI AIC briefing lab using proper whiteboard setup, symbology and tactical scenario for a division of fighters, conducting DCA FI.

Performance Standard. Conduct brief with the AICS or AICI IAW the references.

Instructor. AICS, AICI

Prerequisite. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066,2068, 2102,2104, 2106,2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MAWTS-1 NIPR SharePoint AIC Briefing Lab Courseware
7. MTTP ALSA Fighter Integration

AIC3-4609 5.0 * B (N) L/S

Goal. Perform AIC functions with fighter aircraft conducting DCA FI.

Requirement. Given C2 systems control fighter aircraft against unknown threat provide the following:

1. Use of correct communications format.
2. Maintain timeline awareness.
3. Demonstrate proactive involvement.
4. Demonstrate listening and comprehension skills.
5. Proper use of scope mechanics, interpretation and utilization (from system utilized).

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. AICI

Prerequisite. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102,2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 4608, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

Range. Airspace capable of conducting air-to-air engagements.

External Resource Support. Fighter aircraft (if live)

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MTTP ALSA Fighter Integration

AIC3-4610 1.0 * B (N) G/E

Goal. Conduct OCA FI brief.

Requirement. Given the references and striker brief, conduct OCA FI AIC briefing lab using proper whiteboard setup, symbology and tactical scenario for a division of fighters, conducting OCA FI.

Performance Standard. Conduct brief with the AICS IAW the references.

Instructor. AICS, AICI

Prerequisite. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

References.

1. MTTP ALSA Air Control Communication
2. ANTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MAWTS-1 NIPR SharePoint AIC Briefing Lab Courseware
7. MTTP ALSA Fighter Integration

AIC3-4611 5.0 * B, M (N) L/S

Goal. Perform AIC functions with fighter aircraft conducting OCA FI.

Requirement. Given C2 systems control fighter aircraft against unknown threat provide the following:

1. Use of correct communications format.
2. Maintain timeline awareness.
3. Demonstrate proactive involvement.
4. Demonstrate listening and comprehension skills.
5. Proper use of scope mechanics, interpretation and utilization (from system utilized).

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. AICI

Prerequisite. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525,

4600, 4602, 4604, 4606, 4610, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

Range. Airspace capable of conducting air-to-air engagements.

External Resource Support. Fighter aircraft (if live).

References.

1. MTTP ALSA Air Control Communication
2. ANTTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MTTP ALSA Fighter Integration

AIC3-4612 8.0 1095 B, R, M (N) L

Goal. Perform AIC functions with fighter aircraft.

Requirement. Given C2 systems control fighter aircraft against unknown threat provide the following:

1. Use of correct communications format.
2. Maintain timeline awareness.
3. Demonstrate proactive involvement.
4. Demonstrate listening and comprehension skills.
5. Proper use of scope mechanics, interpretation and utilization (from system utilized).

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. AICI

Prerequisite. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 4608, 4609, 4610, 4611, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044

Range. Airspace capable of conducting air-to-air engagements.

External Resource Support. Fighter aircraft.

References.

1. MTTP ALSA Air Control Communication
2. ANTTP 3-22.1 F/A-18C/D
3. TOPGUN MANUAL, Chapter 8, FA-18 Air-to-Air Mission Planning
4. TOPGUN MANUAL, Chapter 42, FA-18 Air-to-Air Employment
5. TOPGUN MANUAL, Chapter 47, Air Control Communications
6. MTTP ALSA Fighter Integration

3.9.4 WEAPONS DIRECTOR (WD)

Purpose. To train the 7210 in TAOC mission and tactical planning.

General.

Admin Notes.

Prerequisites. 2000, 2020, 2022, 2024, 2026, 2028, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2130, 2134, 2136, 2150, 2600, 2602, 2604, 2606, 2940, 3610, 6275, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067

WD-4708 8.0 * B (N) L/S

Goal. Coordinate deep air operations.

Requirement. Given a C2 system and operational documents:

1. Coordinate with external C2 agencies for current JIPTL, HVT, HPT and RAGM .
2. Coordinate with external C2 agencies to match available aviation assets with requests.
3. Report Battle Damage Assessment (BDA).

Performance Standard. Perform the requirement to a proficient level (correct, efficient and skillful execution of tasks without hesitation requiring minimal input from the instructor). Minor errors corrected by the trainee are acceptable.

Instructor. SI, WTI.

Prerequisites. 2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 3602, 3604, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

References.

1. MIL-STD 6040, USMTF.
2. MCTP 3-20C, Anti-Air Warfare.
3. MCTP 3-20F, Control of Aircraft and Missiles.
4. JP 3-01, Countering Air and Missile Threats.
5. MCTP 10-10B, MTTP Air and Missile Defense
6. JP 3-52, Joint Airspace Control.

3.9.5 SENIOR AIR DIRECTOR (SAD)

Purpose. To train the 7210 in TAOC mission and tactical planning.

General.

Admin Notes. This stage of training may not be conducted until the SD and WD qualifications are attained.

Prerequisites. 2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050,

2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

Crew Requirements. None.

SAD-4702 1.0 * B (N) G/E

Goal. Prepare a plan for Phasing Control Ashore.

Requirement. Given a scenario-based TDG, demonstrate the following:

1. Define phasing control ashore.
2. Explain each step of phasing control ashore.
3. Determine common issues of concern.
4. Write a plan to phase control ashore, annotate identified issues of concern.

Performance Standard. Complete all the requirement .

Instructor. SI, WTI.

Prerequisites. 2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

References.

1. MCRP 3-20F.6, Tactical Air Operations Center Handbook.
2. MCWP 5-1, Marine Corps Planning Process (MCPPE).
3. MCTP 3-20C, Anti-Air Warfare.
4. MAGTF Operations Ashore.
5. JP 3-02, Joint Doctrine for Amphibious Operations.

3.9.6 SECTOR AIR DEFENSE COMMANDER (SADC) OPERATIONS OFFICER

Purpose. To develop the 7210s air and missile defense proficiency, exercise practical application of skill sets and increase the ability of the 7210 to plan / manage air and missile defense operational capabilities. Events listed are required for designation as a Sector Air Defense Commander (SADC) Operations Officer and provide a means for the designated SADC Ops to remain current.

General

Administrative Notes.

1. A 7210 will be considered for designation upon completion of all core level academics and 4500 performance events. Academic events in this chapter correlate with core plus academic events within the 7202 Chapter.
2. A review of the MPR will be conducted by the squadron's WTI, Operations Officer, and a recommendation will be made to the Commanding Officer.
3. The 7210 shall have a designation letter, with any waivers, deferments or endorsements filed in their MACCS Performance Record.
4. For evaluation purposes, an event will consist of a brief, execution and debrief.

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Refresher Training. Refresher training is required once a designated SADC Operations Officer has been absent from an SADC Operations Officer billet for 24 months or longer. Upon return to an appropriate billet, the officer will complete the "R" coded events in the 4500 level syllabus.

Crew Requirements. Core competent TAOC and core plus SADC crew.

SADCOPS-4500 8.0 * B (N) L/S

Goal. Conduct planning as a SADC Operations Officer

Requirements. Given appropriate operational documentation, demonstrate the following:

Performance Standards. Complete the required items while working with an air defense agency during an exercise or operation.

1. Coordinate with the TAOC for crew brief development IAW information within the Operations Order, Area Air Defense Plan, ACP, ACO, SPINS, and other applicable directives to allow TAOC crews to brief and execute the plan.
2. Develop a task organized SADC crew (SADC Ops Chief, GBAD Rep, FW Rep, and Intel Rep) and delineate personnel coordination responsibilities.
3. Develop the SADF requirements / layout IAW SADC direction. Provide requirements / layout to maintenance personnel to coordinate/ deconflict equipment requirements with co-located air defense agencies (e.g TAOC). This should be completed with the SADC Operations Chief
4. Identify and plan the SADF communications requirements. This should be completed with the SADC Crew Chief
5. Conduct detailed threat analysis and planning for the integration of fighter aircraft and GBAD assets within designated Weapons Engagement Zones.
6. Conduct a detailed time-distance analysis to determine CAP manning/Strip Alert requirements for fighter aircraft allocated within designated Weapons Engagement Zones (e.g. JEZ or FEZ)
7. Conduct detailed tanker planning to correspond with the fighter plan.
8. Conduct coordination with subordinate, adjacent and higher units for digital connectivity / critical information flow requirements, tactical direction, and dissemination of individual unit/agency responsibility.
9. Conduct detailed planning for Joint IFC kill chains.
10. Conduct the detailed planning for the integration of MACCS AMD / C3 Agencies within the TAGS.

Instructor. WTI

Prerequisite. 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

External Syllabus Support. C3 Agencies / AMD Resources.

References.

1. JP 3-30, Joint Air Operations.
2. JP 3-01, Countering Air and Missile Threats
3. MCTP 3-20C, Antiair Warfare.
4. MCTP 10-10B, MTTP Air and Missile Defense
5. MCTP 3-XXX, SADC Handbook

SADCOPS-4504 16.0 1095 B, R (N) L/S

Goal. Perform as SADC Operations Officer.

Requirement. During an integrated MACCS exercise or joint exercise in a garrison or field environment.

Performance Standard. Demonstrate proficiency in the following areas:

1. Conduct a SADC brief developed IAW the pertinent air operations information received via Operations Orders, Air Defense Plans, ACP's, ACO's and other applicable directives.
2. Conduct interface between the TAOC crew and required external agencies to ensure effective/timely flow of critical air and missile defense / airspace management information.
3. Effectively manage the SADC Crew IAW the SADC's direction.
4. Enable Joint IFC kill chain execution across various classification levels, to include those that may require special access.

Instructor. WTI

Prerequisite. 2000, 2026, 2028, 2030, 2034, 2038, 2050, 2054, 2056, 2068, 2070, 2072, 2102, 2226, 2565, 4500, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

External Syllabus Support. C3 Agencies.

References.

1. JP 3-30, Joint Air Operations.
2. JP 3-01, Countering Air and Missile Threats
3. MCTP 3-20C, Antiair Warfare.
4. MCTP 10-10B, MTTP Air and Missile Defense
5. MCTP 3-XXX, SADC Handbook

3.10 INSTRUCTOR UNDER TRAINING (IUT)(5000)

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, WTTP Officer, or direct representative as delineated.

General.

Admin Notes.

1. The MACCS instructor concept is a means to standardize all instructors across the MACCS in regards to concepts of managing a WTTP, properly conducting training, performing evaluations, and recommending training plans.
2. There are three MACCS 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. Other supervisor and instructor designations (e.g AICS, AICI) have training events delineated within this chapter.
 - a. Basic Instructor (BI).
 - b. Senior Instructor (SI).
 - c. Weapons and Tactics Instructor (WTI).
3. The MAWTS-1 C3 Course catalog contains the training requirements for each of the three instructors. The catalog is located at the MAWTS-1 website, <https://vcepub.tecom.usmc.mil/sites/msc/magftfc/mawts1/departments1/newc3/default.asp>.
4. 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 current and proficient
SI	Core Skill and Mission Skill events in which current and proficient.
WTI	Mission Skill and Qualification events in which current and proficient. - Evaluate and recommend for qualification - Endorse recommendations for position designations
Notes	The Commanding Officer is the approving authority for qualifications and designations

Prerequisite. None.

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

PAR NO.	STAGE NAME	PAGE NUMBER
3.10.1	INSTRUCTOR UNDER TRAINING (IUT)	3-106

3.10.1 INSTRUCTOR UNDER TRAINING (IUT)

Purpose. To train the individual Marine in the skills required to lead a period of instruction.

General.

Admin Notes. None.

Prerequisite. None.

Crew Requirement. None.

IUT-5000 2.0 * B (N) L

Goal. Introduce principles of instruction.

Requirement. Given the reference, the BIUT will demonstrate the following with the assistance of a unit instructor:

1. Adult learning principles
 - a. Pedagogy to andragogy
 - b. Characteristics of the adult learner
 - c. Learning styles
 - d. How adults learn
 - e. Domains of learning
 - f. Group dynamics
 - g. Motivation
 - h. Constructivist learning environments
2. Introduce, discuss, and demonstrate instruction techniques.
3. Introduce, discuss, and demonstrate class management techniques.
 - a. How to select teaching resources to accommodate student learning styles.
 - b. How to properly organize the instructional environment for effective learning.

Performance Standard. With the aid of references, the BIUT shall demonstrate principles of instruction. During this session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. SI

Prerequisite. None.

References.

1. Adult Learning section, Systems Approach to Training Manual (2004)
2. NAVMC 3500.14
3. NAVMC 1553.1

IUT-5010 2.0 * B (N) L

Goal. Describe individual T&R requirements.

Requirement. Using the Aviation T&R Program Manual, discuss the purpose of each of the following items with an instructor:

1. Training progression model
2. Programs of Instruction
 - a. Basic
 - b. Refresher
 - c. Conversion
 - d. Series Conversion
 - e. Transition
 - f. Maintain
3. T&R attain and maintain tables

4. Syllabus notes.
5. T&R syllabus structure
 - a. Phase
 - b. Stage
 - c. Event
 - d. Skill
 - e. Syllabus
6. Event format
 - a. Header
 - (1) Event prefix - event code
 - (2) Projected event duration
 - (3) Proficiency period
 - (4) Programs of instruction (POI)
 - (5) Event conditions
 - (6) Device options
 - (7) Device number
 - (8) Device type
 - b. Body
 - (1) Goal
 - (2) Requirement
 - (3) Performance standard
 - (4) Equipment
 - (5) Crew requirement
 - (6) Instructor
 - (7) Prerequisite
 - (8) External resource requirements
 - (9) Reference
7. Aviation Career Progression Model (ACPM)
8. T&R syllabus matrices
9. T&R syllabus evaluation forms

Performance Standard. Without the aid of references and during a discussion session, the BIUT shall describe Individual T&R requirements. During this session, the instructor shall discuss the event content and question the student throughout the training session to ensure understanding.

Instructor. SI

Prerequisite. None.

References.

1. NAVMC 3500.14, Ch. 6
2. NAVMC 1553.1

IUT-5020 12.0 90 B, R, M (N) L

Goal. Conduct T&R instruction.

Requirement. The BIUT, under the supervision of an instructor, will conduct three periods of instruction on three different T&R events selected by the instructor and should include as many different methods of instruction as possible (lecture or academic, demonstration, and practical application). The event must be one the BIUT is current and proficient in. The BIUT will complete the following for each of the three

events instructed:

1. Prepare to train the event.
 - a. Review a trainee's performance record to identify required training for the event selected.
 - b. Ensure the student has met prerequisites for the event to be trained.
 - c. Gather the resources necessary to conduct the training (i.e., instructional materials, references, and equipment).
 - d. Conduct task analysis on each event to ensure all intended requirements and prerequisite skills, specified or implied, are trained IAW applicable references.
 - e. Schedule the training event (facilities and students).
 - f. Prepare an evaluation form for each student to be evaluated.
2. Conduct training on the event selected:
 - a. Ensure all training resources are properly staged/equipment if set up properly for training.
 - b. Instruct the student in a thorough manner so as to cover all requirements for the event.
 - c. Ensure continuous, objective assessment of the student's progress during training.
3. Assess student performance:
 - a. Assess the student's performance to the performance standard.
 - b. Correct student deficiencies in a timely manner and provide the student feedback.
 - c. Complete the evaluation form on for each student trained.
 - d. Debrief student on the performance and provide corrective action.
4. Route evaluation form as required.

Performance Standard. Complete the requirement items IAW the reference and ensure training is doctrinally and technically current. Instructor shall use the instructor evaluation form from the SAT user's guide for each class and a mark of satisfactory must be achieved for each of the three classes.

Instructor. SI

Prerequisite. 5000, 5010

References.

1. NAVMC 3500.14, Ch 6
2. NAVMC 1553.1
3. MCO 1553.2B, Appendix O

IUT-5030 5.0 * B (N) GE

Goal. Conduct a simulation.

Requirement.

1. Provide desired training objective inputs to Senior Instructors for simulation scenario and events development.
2. Configure simulation equipment for use as a response cell pilot.
3. Demonstrate proficiency in operating simulation software as a remote pilot.
4. Dynamically control entities within the simulation software.
5. Generate new entities within the simulation software.

Instructor. SI, WTI

Prerequisite. 5000, 5010, 5020

IUT-5100 2.0 B (N) L

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

Requirement. Using the community T&R manual discuss the following with an instructor:

1. Describe the Weapons and Tactics Training Program (WTTP).
2. Define each element of the Core Model:
 - a. Mission statements
 - b. Core Mission Essential Task List (METL)
 - c. Output standards
 - d. Core Skills (How to attain and maintain)
 - e. Mission Skills (How to attain and maintain)
 - f. Combat Leadership
3. Define each of the following elements of unit training:
 - a. Training Exercise Employment Plan (TEEP)
 - b. Core Model Minimum Requirements (CMMR)
 - c. Instructors
 - d. Core Model Training Report (CMTR)
 - e. T&R manual connection to readiness reporting
4. Define each of the following elements of training:
 - a. Certification
 - b. Qualification
 - c. Designation
5. PERFORMANCE RECORD Explain how changes are made to the Program manual:
 - a. Explain T&R conference procedures.
 - b. Explain correspondence change procedures.

Performance Standard. Complete the requirements IAW the reference. Instructor will question the SIUT to check for thorough understanding of the Aviation T&R Program.

Prerequisite. None.

Instructor. SI, WTI

References.

1. NAVMC 3500.14
2. MCO 3500.109

IUT-5110 4.0 365 B, R, M (N) L

Goal. Conduct instructor evaluations.

Requirement. Using the instructor evaluation checklist from the SAT manual, conduct two evaluations on instructors of equal or lower designation.

1. Provide notification of evaluation to the instructor being evaluated.
2. Do not interfere with or disrupt the instruction while taking place.
3. Thoroughly document observed items on the checklist.
4. Ensure student evaluation form is filled out correctly and the appropriate debrief took place.
5. Debrief the instructor being evaluated on their preparation, instruction, evaluation, and documentation.
6. Have the evaluated instructor complete the instructor improvement plan section and sign.
7. File a copy of the completed evaluation form in both the evaluator's and evaluated instructor's performance record.

Performance Standard. Complete the requirement items IAW the references and commander's training guidance. Training plan will ensure adequate time is allocated to include preparation, instruction, assessment, documentation, and remediation.

Prerequisite. 5100, 5110, 5120

Instructor. SI

References.

1. NAVMC 3500.14
2. Applicable community T&R manual

IUT-5140 5.0 * B (N) GE

Goal. Develop and conduct a TAOC simulation.

Requirement.

1. Develop desired training objectives for the simulation.
2. Develop scenario and scenario products to facilitate crew preparation for simulation execution.
Road-to-War
 - a. AADP
 - b. ACP
 - c. ACO
 - d. ATO
 - e. SPINs
 - f. Mission CDR / Transition Brief
3. Develop scenario events and Master Scenario Events List (MSEL) for simulation.
4. Develop simulation scenario in AC2S simulation software that is consistent with scenario and event injects.
5. Develop response cell positions and responsibilities.
6. Supervise setup and configuration of agency and response cell equipment for the conduct of the simulation.
 - a. MSCT script edits
 - b. MRQ-13 Single Channel Radio nets and frequency requests
 - c. Tactical Data Links
 - d. Tactical Chat
7. Supervise execution of the scenario and scenario injects.
8. Compile learning points and debrief focus points from scenario execution.
9. Compile after action items for improving future simulations.

Instructor. WTI

Prerequisite. 5100, 5110, 5120, 5130, 6320

Reference.

1. NAVMC 1553.1A

IUT-5500 0.5 * B (N) GE

Goal. Discuss local area course rules.

Requirement. Provide a brief on local area course rules.

Performance Standard. N/A.

Instructor. AICI

Prerequisite. 6253, 6321

Reference. Local area SPINS.

IUT-5510 5 * B (N) GE

Goal. Develop an AIC training plan.

Requirement. Review Squadron pre-AIC records.

1. Analyze the records to determine training deficiencies.
2. Identify and schedule AIC training opportunities IAW the TEEP / local flight schedule to achieve requirements.
3. Deliver a brief to the instructor that shows:
 - a. AIC training requirements.
 - b. Current training status.
 - c. Identify the training deficiencies and shortfalls.
 - d. Explain the training plan to correct the training

Instructor. AICI

Prerequisite. 5500

Reference.

1. NAVMC 1553.1

IUT-5520 5 * B (N) GE

Goal. Conduct a period of instruction on an AIC academic event.

Requirement.

1. Prepare to train the event.
 - a. Gather the resources necessary to conduct the training.
 - b. Schedule the training event (facilities and students).
 - c. Prepare an evaluation form for each student to be evaluated.
2. Conduct training on the event selected:
 - a. Ensure all training resources are properly staged/equipment if set up properly for training.
 - b. Instruct the student in a thorough manner so as to cover all requirements for the event.
 - c. Ensure continuous, objective assessment of the student's progress during training.
3. Assess student performance:
 - a. Assess the student's performance to the performance standard.
 - b. Complete the evaluation form.
 - c. Debrief student on the performance and provide corrective action.
4. Route evaluation form as required.

Performance Standard. Complete the requirement items IAW the reference and ensure training is doctrinally and technically current.

Instructor. AICI

Prerequisite. 5510

Reference.

1. NAVMC 1553.1

IUT-5530 5 * B (N) GE

Goal. Evaluate an AIC during execution.

Requirement.

1. Evaluate the AIC student's conduct during the fighter brief to the AIC.
2. Evaluate the AIC student's controller brief.
3. Evaluate the AIC student's execution of the event.
4. Evaluate the AIC student's performance of the debrief (BATTSEA).
 - a. Brief
 - b. Administration
 - c. Tactical administration
 - d. Training rule violations
 - e. Safety of flight
 - f. Environmental
 - g. Alibis
5. Assess student performance:
 - a. Assess the AIC student's performance to the performance standard.
 - b. Complete the evaluation form.
 - c. Debrief AIC student on the performance and provide corrective action.
6. Route evaluation form as required.

Performance Standard. Conduct all stages of evaluation for any AIC level.

Instructor. AICI

Prerequisite. 5520

Reference.

1. NAVMC 1553.1

IUT-5540 0.5 * B (N) GE

Goal. Graduate an AIC 5 producing course.

Requirement. Graduate Air Intercept Controller Instructor Course (SCHL-6006) or TOPGUN Air Intercept Controller Course (SCHL-6069)

Performance Standard. Complete program of instruction.

Instructor. AICI

Prerequisite. 6323

Reference.

1. NAVMC 1553.1A

3.11 CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (6000)

Purpose. This phase provides for community standardization of TAOC position qualifications, certifications, combat leadership and instructor designations.

General.

Admin Notes.

1. The squadron WTI shall review the MACCS Performance Record and MSHARP to ensure all required training, documentation and administrative actions have been completed prior to forwarding qualification, certification, or designation recommendations to the Commanding Officer for approval.
2. Only once an individual is qualified, certified, or designated in writing, the signed letter is filed in the MACCS Performance Record, and all administrative actions are completed will the qualification, certification, or designation be effective.

Prerequisite. None.

Stages. The following stages are included in this phase of training.

PAR NO.	STAGE NAME	PAGE NUMBER
3.11.1	SCHOOL CODES (SCHL)	3-115
3.11.2	CERTIFICATIONS (CERT)	3-123
3.11.3	QUALIFICATIONS (QUAL)	3-124
3.11.4	DESIGNATIONS (DESG)	3-126

3.11.1 SCHOOL CODES (SCHL)

Purpose. To provide tracking codes for required schools and training.

General.

Admin Notes. The following table reflects skill enhancement training available to TAOC Marines:

SCHL CODE	NAME OF COURSE	LOCATION	CID
SCHL-6000	Weapons and Tactics Instructor (WTI)	MCAS Yuma, AZ	M149731
SCHL-6001	Senior Watch Officer's Course	MCAS Yuma, AZ	N/A
SCHL-6002	Air Command and Control Officer's Course	MCAS Yuma, AZ	N/A
SCHL-6003	ACE Battlestaff Officer Course (ABOC)	MCAS Yuma, AZ	N/A
SCHL-6006	Air Intercept Controller Instructor Course (AICIC)	MCAS Yuma, AZ	N/A
SCHL-6010	AOCIQT (Airspace) Course	Hulbert Field, FL	F19KXD2
SCHL-6015	Joint Air Operation Center Command and Control Course (JAOC2C) Airspace Course	Hulbert Field, FL	F19L2W2
SCHL-6016	Joint Air Operations Senior Staff Course	Hulbert Field, FL	N/A

SCHL-6020	Link 16 Basics Course (JT-100)	Joint Knowledge Online (JKO)	N/A
SCHL-6021	Intro to Multi TDL Network (JT-101)	Fort Bragg, NC	N/A
SCHL-6022	Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102)	Fort Bragg, NC	A05L6Z1
SCHL-6023	Link 16 Joint Interoperability Course (US-109)	Joint Knowledge Online (JKO)	N/A
SCHL-6024	Multi TDL Planner Course (JT-201)	Fort Bragg, NC	A05KHY1
SCHL-6025	Link 16 Unit Manager (LUM) Course (JT-220)	Fort Bragg, NC	A05A111
SCHL-6026	Joint Interface Control Officer (JICO) (JT-301)	Fort Bragg, NC	A05FH21
SCHL-6027	Advanced JICC Operators Course (AJOC) (JT-310)	Fort Bragg, NC	A05FH11
SCHL-6067	Military Airspace Management Course	NAS Biloxi, MS	F0273D1
SCHL-6069	USMC AIC TOPGUN Ground School	Naval Strike and Air Warfare Center (NSAWC)	F0273D1
SCHL-6072	Advanced Field Artillery Tactical Data System (AFATDS)	RGtSchls / Ft Sill, OK	N/A
SCHL-6078	TOPGUN AIC Course	Naval Strike and Air Warfare Center (NSAWC)	F0273D1
SCHL-6079	JRE-GW Operators Course	Engility Corporation	N/A
SCHL-6082	Joint Firepower Course	USAF 6 th Combat Training Squadron	N/A
SCHL-6083	IAMD WTI	SMWDC Dahlgren, VA	N/A
SCHL-6084	Weapons Director Ground Based Training	Luke AFB, AZ	N/A
SCHL-6085	CRC IQT – Weapons Director	Luke AFB, AZ	N/A
SCHL-6086	CRC IQT – Air Battle Manager	Luke AFB, AZ	N/A
SCHL-6096	Formal Learning Center Instructor Course	N/A	N/A

Prerequisite. The individual school houses will maintain the prerequisites for each course that they offer. Refer to Skills Enhancement message and the school house for up to date prerequisites.

Crew Requirements. None.

SCHL-6000 .5 * B (N) G

Goal. Weapons and Tactics Instructors (WTI) Course.

Requirement. Graduate from WTI Course at MAWTS-1, Yuma, AZ.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. 6320, 6321.

Reference. None.

SCHL-6001 .5 * B (N) G

Goal. Senior Watch Officer's Course.

Requirement. Graduate from course at MAWTS-1, Yuma, AZ.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6002 .5 * B (N) G

Goal. Air Command and Control Officer's Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6003 .5 * B (N) G

Goal. ACE Battlestaff Officer Course (ABOC).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6006 .5 * B (N) G

Goal. Marine Division Tactics Course (MDTC).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6010 .5 * B (N) G

Goal. AOCIQT Airspace Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6015 .5 * B (N) G

Goal. Joint Air Operations Center Command and Control Course (JAOC2C).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6016 .5 * B (N) G

Goal. Joint Air Operations Senior Staff Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6020 .5 * B (N) G

Goal. Link 16 Basics Course (JT-100).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6021 .5 * B (N) G

Goal. Intro to Multi TDL Network (JT-101).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6022 .5 * B (N) G

Goal. Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6023 .5 * B (N) G

Goal. Link 16 Joint Interoperability Course (US-109).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6024 .5 * B (N) G

Goal. Multi TDL Planner Course (JT-201).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6025 .5 * B (N) G

Goal. Link 16 Unit Manager (LUM) Course (JT-220).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6026 .5 * B (N) G

Goal. Joint Interface Control Officer (JICO) (JT-301).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6027 .5 * B (N) G

Goal. Advanced JICC Operators Course (AJOC) (JT-310).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6067 .5 * B (N) G

Goal. Military Airspace Management Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6069 .5 * B (N) G

Goal. USMC AIC TOPGUN Ground School.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6072 .5 * B (N) G

Goal. Advanced Field Artillery Tactical Data System (AFATDS).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6078 .5 * B (N) G

Goal. TOPGUN AIC Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6079 .5 * B (N) G

Goal. JRE-GW Operators Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6082 .5 * B (N) G

Goal. Joint Firepower Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6083 .5 * B (N) G

Goal. Advanced Field Artillery Tactical Data System (AFATDS).

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6084 .5 * B (N) G

Goal. TOPGUN AIC Course.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6085 .5 * B (N) G

Goal. CRC IQT – Weapons Director.

Requirement. Complete course requirements.

Performance Standard. N/A

Instructor. FLC Instructor

Prerequisite. None.

Reference. None.

SCHL-6086 .5 * B (N) G

Goal. CRC IQT – Air Battle Manager.

Requirement. Complete course requirements.

Reference. None.

CERT-6273 0.5 * B (N) G

Goal. Air Intercept Controller Level 2.

Requirement. Complete the training prescribed in AIC2 POI. Attain AICI recommendation, forwarded through the WTI to the commanding officer who will approve the certification in writing.

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

Instructor. AICI.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

Reference. None.

CERT-6274 0.5 * B (N) G

Goal. Air Intercept Controller Level 3.

Requirement. Complete the training prescribed in AIC3 POI. Attain AICI recommendation, forwarded through the WTI to the commanding officer who will approve the certification in writing.

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

Instructor. AICI.

Prerequisites. 2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 4608, 4609, 4610, 4611, 4612, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044.

Reference. None.

3.11.3. QUALIFICATIONS (QUAL).

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

General.

Admin Notes. None

Prerequisites. Complete all prerequisites for qualification and be recommended by a WTI.

Crew Requirement. None

QUAL-6280 0.5 * B (N) G

5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

Reference. None.

3.11.4 DESIGNATIONS (DESG).

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

General.

Admin Notes. Complete all designation requirements and be recommended for that designation. However, in the event that a commander deems it necessary to designate someone who has not completed the prerequisite, that person must complete the prerequisite within 6 months from the effective date of designation.

Prerequisite. None.

Crew Requirements. None.

DESG-6290 0.5 * B (N) G

Goal. Sector Air Defense Commander Operations Officer (SADC OPS).

Requirement. Recommended for SADC OPS designation by a WTI and designated in writing by the commanding officer.

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

Instructor. WTI.

Prerequisites. 2000, 2026, 2028, 2030, 2034, 2038, 2050, 2054, 2056, 2068, 2070, 2072, 2102, 2826, 2565, 4500, 4504, 6290, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

Reference. None.

DESG-6294 0.5 * B (N) G

Goal. Air and Missile Defense Officer.

Requirement. Recommended for designation by the Squadron CO to serve as a Combat Leader.

Performance Standard. Be recommended by a Squadron WTI.

Instructor. WTI

Prerequisites. N/A

DESG-6320 0.5 * B (N) G

Goal. Basic Instructor (BI).

Requirement. Be recommended for designation by a SI or WTI, and designated in writing by the commanding officer.

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

Prerequisites. 5000, 5010, 5020, 5030.

Reference. MAWTS-1 C3 Course Catalog.

DESG-6321 0.5 * B (N) G

Goal. Senior Instructor (SI).

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

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

Prerequisites. 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140.

Reference. MAWTS-1 C3 Course Catalog.

DESG-6322 0.5 * B (N) G

Goal. Weapons and Tactics Instructor (WTI).

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

Performance Standard. Graduate WTI under the supervision of a MAWTS-1 IP.

Prerequisites. 6000, 6320, 6321

Reference. MAWTS-1 C3 Course Catalog.

DESG-6323 0.5 * B (N) G

Goal. Air Intercept Controller Supervisor (AICS).

Requirement. Recommended for designation by an AICI and routed through the squadron WTI to the commanding officer. The commanding officer will designate the AICS in writing.

Performance Standard. Complete the prerequisites under the supervision of a unit instructor.

Instructor. AICI

Prerequisites. 5510, 5520, 5530, 6272, 6273, 6274, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

Reference. None

DESG-6324 0.5 * B (N) G

Goal. Air Intercept Controller Instructor (AICI).

Requirement. Receive recommendation for AICI designation by the resident formal school (NAWDC or MAWTS-1) and designated in writing by the Commanding Officer.

Performance Standard. Complete program of instruction IAW IUT 5540.

Prerequisites. 5540, 6272, 6273, 6274, 6323, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088

Reference. MAWTS-1 C3 Course Catalog.

DESG-6325 0.5 * B (N) G

Goal. Formal Learning Center (FLC) Instructor

Requirement. Complete the required course at the Formal Learning Center.

Performance Standard. Complete FLC Instructor prerequisites

Prerequisites. Unit SOP

Reference. NAVMC 3500.14_, Aviation Training and Readiness Program Manual.

3.12 MISSION ESSENTIAL TASK (MET) PHASE (7000).

Purpose. This phase takes CMMR proficient Marines from multiple PMOS, puts them in CMMR representative crews, and trains them as combat effective teams in combined events.

General.

Admin Notes. Prerequisites for this phase of training cannot be waived. Multiple events can be trained to at the same time as long as separate evaluations are being conducted.

Prerequisites. Marines must either be CMMR crew position or non-aviation PMOS proficient to train in this phase. For events requiring combat leaders, only Marines currently designated as such can train in this phase.

Stages. The following stages are included in the Mission Essential Task (MET) Phase of training.

PAR NO.	STAGE NAME	PAGE NUMBER
3.12.1	CONDITION (COND)	3-128

3.12.1 CONDITION (COND).

Purpose. To train unit level teams in executing community specific MET(s) or MET preparatory events.

General.

Admin Notes. All events in this stage will require the following administrative/operational documents to be identified or created:

1. Letter Of Instruction (LOI).
2. Personnel Roster.
3. Bill Of Material (BOM).
4. Equipment Density List (EDL).

Prerequisites. If an event requires prerequisites in addition to those listed for the MET Phase, they will be covered in the individual event.

Crew Requirements. This stage requires that all crew members and combat leaders be qualified/designated and proficient (current) in the position they are assigned for the following events. Crews shall be task organized to meet the mission.

COND-7000 16.0 730 B, R, M (N) L

Goal. Conduct Airspace Surveillance.

Requirement. Given organic C2 systems, sensors, and a minimum of two CMMR surveillance crews, perform the following:

1. Plan for the emplacement, setup, operation, and maintenance of TAOC sensor(s) and C2 equipment within MAGTF and/or joint assigned airspace.
2. Extract tactical data link (TDL) architecture information from MAGTF and joint documents.
3. Extract required surveillance operations information exchange requirements from source MAGTF and/or joint documents.
4. Plan for TAOC airspace surveillance operations.
5. Conduct the emplacement, setup, operation, and maintenance of TAOC sensor(s) and C2 equipment
6. Detect and track aircraft and missiles within MAGTF and/or joint assigned airspace using organic TAOC sensor(s).
7. Conduct combat identification on objects detected and tracked using information extracted from surveillance operations source documents.
8. Disseminate surveillance information to adjacent, higher, and subordinate agencies and aircraft identified in surveillance operations source documents.
9. Demonstrate proficiency during crew changeover.

Performance Standard. Complete the requirements conducting TAOC operations in support of MAGTF and/or joint exercises or operations.

Instructor. WTI

Prerequisite. None.

External Syllabus Support. Live execution will require specific T/M/S aviation assets.

Reference. MCO 3501.1_

Instructor. WTI.

Prerequisite. None.

External Resource Support. Live execution will require specific T/M/S aviation assets.

Reference. MCO 3501.1_

3.13 AVIATION CAREER PROGRESSION MODEL (ACPM) (8000).

Purpose. To enhance professional understanding of Marine Aviation and the MAGTF and to provide MACG Marines with a knowledge of the doctrine and tactics techniques and procedures (TTPs) of aviation command and control. Additionally, the ACPM series ensures that individuals possess the requisite skills to fill battle command and battle staff positions in support of the ACE and the MAGTF in a joint environment. The focus in the Aviation Career Progression Model (ACPM) is on academics in the following areas:

Marine Air Command and Control System
(MACCS) Aviation Combat Element (ACE)
Threat to the MAGTF
MAGTF Joint Air
Operations

General. The ACPM is intended to be an integrated series of academic events contained within each phase of training. Accordingly, ACPM academic events are like any other academic event in that they serve as prerequisites to selected training events or stages. Additionally, several ACPM academic events are integrated as prerequisite for certain combat leadership syllabi. ACPM events may be conducted in group session with an instructor conducting the period of instruction or they may be accomplished by self-paced instruction.

MAWTS-1 is responsible to update and validate the ACPM periods of instruction. In the future, courses may be consolidated or revised to meet changing requirements. Refer to the MAWTS-1 link for the current ACPM program of instruction: <https://mceits.usmc.mil/sites/mawts1/default.aspx>.

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

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

ACPM-8000 1.0 * B (N) G

Goal. Demonstrate an understanding of the MACCS stage.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI, WTI.

Prerequisite. 8001, 8002, 8003, 8004, 8005, 8006, 8008.

Reference. C3 Course Catalog.

ACPM-8001 4.0 * B (N) G

Goal. Demonstrate an understanding of the Marine Air Command and Control System (MACCS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Describe how the control of aircraft and missiles relates to the other five functions of USMC aviation.
2. Define the control of aircraft and missiles and each of its subcomponents.
3. Define the Marine aviation's philosophy of centralized command and decentralized control.
4. Differentiate between Marine aviation philosophy and Joint aviation philosophy.
5. Identify the principle objectives of the MACCS.
6. Recall the primary role of each agency of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

1. MCRP 3-25 Control of Aircraft and Missiles

ACPM-8002 4.0 * B (N) G

Goal. Demonstrate an understanding of the Tactical Air Command Center (TACC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. State the mission of the TACC.
2. Identify the four organizations of the TACC.
3. List the primary responsibilities of Air Combat Intelligence (ACI).
4. List the primary responsibilities of Future Operations (FOPS).
5. List the primary responsibilities of Future Plans (FPLANS).
6. List the primary responsibilities of Current Operations (COPS).
7. List the major end items used by the TACC.
8. List the system limitations of the TACC.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 TACC Class
2. MCRP 3-25.4 TACC Handbook

ACPM-8003 4.0 * B (N) G

Goal. Demonstrate an understanding of the Direct Air Support Center (DASC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the DASC.

2. List the structure and task organization of the DASC.
3. Identify the major end items and their characteristics used by the DASC.
4. List the capabilities and limitations of the DASC.
5. Identify how the DASC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 DASC Class
2. MCRP 3-25.5 DASC Handbook

ACPM-8004 4.0 * B (N) G

Goal. Describe the Tactical Air Operations Center (TAOC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the mission of the TAOC.
2. Identify the Mission Essential Tasks (METs) for the TAOC.
3. Identify the structure and task organization of the TAOC.
4. Identify the major end items and their characteristics used by the TAOC.
5. Identify the capabilities and limitations of the TAOC.
6. Identify how the TAOC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 TAOC Class
2. MCRP 3-25.6 TAOC Handbook

ACPM-8005 4.0 * B (N) G

Goal. Demonstrate an understanding of Marine Air Traffic Control (MATC).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of MATC.
2. Identify the Mission Essential Tasks (METs) for MATC.
3. List the structure and task organization of MATC.
4. Identify the major end items and their characteristics used by MATC.
5. Identify the capabilities and limitations of MATC.
6. Identify how MATC is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 MATC Class
2. MAWTS-1 MMT Class
3. MCRP 3-25.8 MATC Handbook

ACPM-8006 4.0 * B (N) G

Goal. Demonstrate an understanding of Low Altitude Air Defense (LAAD).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the LAAD battalion.
2. Identify the structure and task organization of the LAAD battalion.
3. Identify the primary vehicle and surface-to-air weapon used by the LAAD Battalion.
4. Define the LAAD employed guidelines.
5. List the LAAD weapon applications.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 LAAD Class
2. MCRP 3-25.10 LAAD BN Handbook

ACPM-8008 4.0 * B (N) G

Goal. Demonstrate an understanding of the Marine Wing Communications Squadron (MWCS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the mission of the MWCS.
2. Identify the structure and task organization of the MWCS.
3. Identify the Mission Essential Tasks (METs) for the MWCS.
4. Identify the major end items and their characteristics used by MWCS.
5. Identify the capabilities and limitations of the MWCS.
6. Identify how the MWCS is doctrinally employed as part of the MACCS.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI

Prerequisite. None.

References.

1. MAWTS-1 MWCS Employment Class
2. MCRP 3-30B.2 MAGTF Communications Systems
3. NAVMC 3500.56 Communications Training and Readiness Manual

ACPM-8020 1.0 * B (N) G

Goal. Demonstrate an understanding of the ACE stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028.

Reference. C3 Course Catalog.

ACPM-8021 4.0 * B (N) G

Goal. Demonstrate an understanding of USMC aviation operations doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the six functions of Marine aviation to include all their subsets.
2. Identify the organization and mission of the Marine Aircraft Wing (MAW), to include each type of group and squadron.
3. Define who has operational control of organic MAGTF aviation assets during Joint operations.
4. List the four types of sorties the MAGTF Commander makes available to the Joint Force.
5. Identify the purpose of the Air Tasking Order (ATO).
6. Identify the six phases of the air tasking cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MCWP 3-20 Aviation Operations

ACPM-8022 4.0 * B (N) G

Goal. Demonstrate an understanding of USMC doctrine for the control of aircraft and missiles.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify how the control of aircraft and missiles relates to the other five functions of USMC aviation.
2. Identify distinctions between Marine aviation philosophy and that of the other services.
3. Identify the principle objectives of the Marine Air Command and Control System (MACCS).
4. Describe how the COMMARFOR may serve as the Joint Force Air
5. Component Commander (JFACC), Airspace Control Authority (ACA), and Area Air Defense Commander (AADC).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MCRP 3-25 Control of Aircraft and Missiles

ACPM-8023 4.0 * B (N) G

Goal. Demonstrate an understanding of USMC Offensive Air Support (OAS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the purpose of the MAGTF Commanders Single Battle Concept.
2. Define the subcategories of OAS.
3. Define the requirements for effective OAS.
4. Define the three types of Deep Air Support (DAS).
5. Define the capabilities and limitations of the OAS function.
6. Identify the elements of a Joint Tactical Air Strike Request (JTAR).
7. Identify the three types of control of Close Air Support (CAS).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MCRP 3-23 Offensive Air Support

ACPM-8024 4.0 * B (N) G

Goal. Demonstrate an understanding of USMC Assault Support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define the types of assault support operations.
2. Identify which aircraft conduct each of the types of assault support operations.
3. Identify the elements of an Assault Support Request (ASR).
4. List assault support capabilities and limitations.
5. Define the role of the air mission commander and the assault force commander during air assault operations.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 Assault Support Class
2. MAWTS-1 Direct Air Support Requests Class

ACPM-8025 4.0 * B (N) G

Goal. Demonstrate an understanding of USMC Air Reconnaissance doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the three categories of air reconnaissance.
2. Identify the four principals of air reconnaissance.
3. Identify the five prerequisites for effective air reconnaissance.
4. Identify the current USMC aircraft that have the mission of air reconnaissance.
5. Identify the form used to request air reconnaissance.
6. Identify the five supporting operations for effective air reconnaissance.
7. Identify the capabilities and limitations of air reconnaissance.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MCRP 3-26 Air Reconnaissance

ACPM-8026 4.0 * B (N) G

Goal. Demonstrate an understanding of USMC Electronic Warfare (EW) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define radar.
2. List the three basic radar types.
3. Identify the limitations and characteristics of radar systems.
4. Identify the six guidance systems and how they work.
5. List the three subdivisions of Electronic Warfare (EW).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 (S) Electronic Warfare Class—for additional training only, secret courseware should not to be used for testing purposesMAWTS-1 Direct Air Support Requests Class
2. MCRP 3-40.5 Electronic Warfare

ACPM-8027 4.0 * B (N) G

Goal. Demonstrate an understanding of USMC Antiair Warfare (AAW) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define AAW.
2. Define the two subsets of AAW.
3. Identify the principles of AAW.
4. Identify the types of Offensive Antiair Warfare (OAAW).
5. Identify the active air defense functions.
6. List three examples of passive air defense measures.
7. Define a Joint Engagement Zone (JEZ), Fighter Engagement Zone (FEZ), Missile Engagement Zone

(MEZ), and Base Defense Zone (BDZ).

8. Define the air defense warning conditions.

9. Define the weapons control statuses.

10. Identify the responsibilities of the Regional Air Defense Commander (RADC) and the Sector Air Defense Commander (SADC).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MCTP 3-20C, Anti-air Warfare

ACPM-8028 4.0 * B (N) G

Goal. Demonstrate an understanding of USMC Ground Support (AGS) doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the organization responsible for providing AGS to the Marine Aircraft Wing (MAW).
2. Identify the 13 functions of AGS.
3. Identify the five activities that the Marine Wing Support Squadron (MWSS) performs for the ACE when deployed.
4. Identify the four basing concepts for MAGTF Forward Operating Bases (FOBs).
5. List the four classifications of FOBs.
6. Differentiate the distinguishing characteristics of FOBs.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 AGS Class
2. MCTP 3-21.1 Aviation Ground Support

ACPM-8040 1.0 * B (N) G

Goal. Demonstrate an understanding of the Threat stage of the MACCS ACPM

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI, WTI.

Prerequisite. 8041, 8042, 8043, 8044.

Reference. C3 Course Catalog.

ACPM-8041 4.0 * B (N) G

Goal. Demonstrate an understanding of the surface-to-air threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the system name with the guidance and target aspect for the following Man Portable Air Defense Systems (MANPADS):
 - a. SA-7
 - b. SA-14
 - c. SA-16
 - d. SA-18
2. Match the system name with the guidance and associated radars for the following Radio Frequency Surface-to-Air Missile Systems (RF SAMS):
 - a. SA-2
 - b. SA-6
 - c. SA-8
 - d. SA-10
 - e. SA-11
 - f. SA-15
 - g. SA-20
 - h. Roland-III
3. Match the system name with the type and associated radar for the following Air Defense Artillery (AAA):
 - a. ZPU 1, 2, 4
 - b. ZSU-23-4
 - c. 2S6
 - d. S-60

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8042 4.0 * B (N) G

Goal. Demonstrate an understanding of the fixed wing threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the AN-2 Colt.
2. Identify the role of the MIG-23 Flogger.
3. Identify the role of the MIG-29 Fulcrum.
4. Identify the role of the MIG-31 Foxhound.
5. Identify the role of the Su-24 Fencer.
6. Identify the role of the Su-25 Frogfoot.
7. Identify the role of the Su-27 Flanker.
8. Identify the role of the Su-30 Flanker.
9. Identify the role of the Tu-22M Backfire.
10. Identify the role of the Tu-95 Bear.
11. Identify the role of the Tu-160 Blackjack.
12. Identify the role of the J-7 Fishbed.
13. Identify the role of the JH-7 Flounder.
14. Identify the role of the J-8 Finback.

15. Identify the role of the J-10 Firebird.
16. Identify the role of the H-6 Badger.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8043 4.0 * B (N) G

Goal. Demonstrate an understanding of the rotary wing threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the role of the Mi-24 Hind.
2. Identify the role of the SA 342 Gazelle.
3. Identify the role of the Ka-25 Hormone.
4. Identify the role of the Mi-6 Hook.
5. Identify the role of the Mi-28 Havoc.
6. Identify the role of the Mi-8 Hip.
7. Identify the role of the Ka-50 Kokum.
8. Identify the role of the Ka-29 Helix B.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MAWTS-1 Marine Aviation Intelligence Reference
(<https://vcepub.tecom.usmc.mil/sites/msc/magftc/mawts1/departments1/newc3/default.aspx>)

ACPM-8044 4.0 * B (N) G

Goal. Demonstrate an understanding of the missile and Unmanned Aircraft System (UAS) threat to the MAGTF.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the system name with the terminal guidance for the following Air-to-Surface Missiles:
 - a. AS-10 Karen
 - b. AS-11 Kilter
 - c. AS-12 Kegler
 - d. AS-14 Kedge
 - e. AS-17 Krypton
2. Match the system name with the warhead and guidance for the following Surface-to-Surface Missiles:
 - a. FROG-7
 - b. SCUD-B
 - c. SCUD-C
 - d. Nodong 1
 - e. C 801
 - f. C 802

3. Identify the mission of the following threat UAS:
 - a. Ababil
 - b. Mohajer
 - c. Harpy
 - d. Heron
 - e. ASN-206
 - f. Pchela-1T

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI.

Prerequisite. None.

References.

1. MAWTS-1 Marine Aviation Intelligence Reference
2. <https://vcepub.tecom.usmc.mil/sites/msc/magftc/mawts1/departments1/newc3/default.aspx>
3. Marine Corps Intelligence Activity Iran Country Handbook (appendix A)
4. Marine Corps Intelligence Activity North Korea Country Handbook (page 86)
5. Marine Corps Intelligence Activity China Country Handbook (appendix A)
<https://www.intelink.gov/mcia/handbook.htm>
6. MCIA UAV Recognition Guide <https://www.intelink.gov/mcia/index.htm>

ACPM-8060 1.0 * B (N) G

Goal. Demonstrate an understanding of the MAGTF stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. SI, WTI.

Prerequisite. 8061, 8062, 8063, 8064, 8065.

References. C3 Course Catalog.

ACPM-8061 4.0 * B (N) G

Goal. Demonstrate an understanding of the MAGTF ground combat operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify how the Ground Combat Element (GCE) is employed as part of the MAGTF and the capabilities the GCE provides to the MAGTF commander
2. Define the following items related to command and control of ground combat operations:
 - a. Echelons of the GCE headquarters
 - b. Battlespace Organization
 - c. Battlespace Framework
3. Define the five types of amphibious operations.
4. Identify the following items related to offensive operations:
 - a. Types of offensive operations
 - b. Types of attack

- c. Forms of maneuver
 - d. Distribution of forces
5. Identify the following items related to defensive operations:
- a. Organization of the defense
 - b. Distribution of forces
 - c. Types of defensive operations
 - d. Defensive methods

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

- 1. MCDP 1-0 Marine Corps Operations
- 2. MCWP 3-1 Ground Combat Operations

ACPM-8062 4.0 * B (N) G

Goal. Demonstrate an understanding of fire support coordination in the Ground Combat Element (GCE).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

- 1. Identify the four fire support tasks.
- 2. List the functions of the senior fire support coordination center (FSCC) in the GCE.
- 3. List the four steps of the MAGTF Targeting Process.
- 4. Define the purpose of essential fire support tasks (EFST).

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

- 1. MAWTS-1 MAGTF Targeting and Fire Support Planning Class
- 2. MCRP 3-16 Fire Support Coordination in the GCE

ACPM-8063 4.0 * B (N) G

Goal. Demonstrate an understanding of MAGTF command and control.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

- 1. Identify MAGTF command and support relationships.
- 2. Identify the purpose and role of the command and control centers in the CE, ACE, GCE, and LCE.
- 3. Identify the purpose and role of the amphibious command and control facilities.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MCWP 3-40.1 MAGTF C2

ACPM-8064 4.0 * B (N) G

Goal. Demonstrate an understanding of MAGTF communications.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the six characteristics of communications and information systems.
2. Identify the mission and organizational structure of the Communications Battalion.
3. Identify the purpose of the Communications-Electronics Operating Instructions (CEOI) and what information is usually included in it.
4. Identify what information can be found in Annex K of an operations order.
5. Identify the purpose of select fires, support, and ACE specific radio nets.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MCWP 3-40.3 MAGTF Communications System

ACPM-8065 4.0 * B (N) G

Goal. Demonstrate an understanding of phasing control ashore.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify types of amphibious operations and how command relationships may change during the conduct of each.
2. Identify how disputes among commanders during amphibious operations are resolved.
3. Identify the key commanders and command relationships.
4. Identify the key characteristics of each phase in phasing the MACCS ashore.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 Phasing Control Ashore Class
2. JP 3-02 Amphibious Operations
3. MCRP 3-25 Control of Aircraft and Missiles (Appendix C)

ACPM-8066 4.0 * B (N) G

Goal. Demonstrate an understanding of information management.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Match the principles of information management with their descriptions.
2. Define each of the classes of information within an information hierarchy.
3. List the characteristics of quality information.
4. Identify the role and responsibilities of an Information Management Officer (IMO).

5. Define C2 support structure and the three steps followed to develop one.
6. Identify the purpose of an information management matrix and the information management plan.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

Reference. MCWP 3-40.2 Information Management

ACPM-8067 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of Unmanned Aircraft Systems in support of MAGTF operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the four types of payloads.
2. Identify the three attributes that determine UAS Groups.
3. Identify the five different UAS Group Categories.
4. Identify the two types of VMU operational employment.
5. Identify the three components of the RQ-7B Communications Relay Package.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 UAS In Support of MAGTF Operations
2. MCRP 3-42.1A
3. NTTP 3-22.3-VMU

ACPM-8080 1.0 * B _____ (N) G

Goal. Demonstrate an understanding of the MAGTF stage of the joint air operations stage of the MACCS ACPM.

Requirement. Pass a closed book examination that encompasses all learning objectives contained in the prerequisites.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088.

Reference. C3 Course Catalog.

ACPM-8081 4.0 * B _____ (N) G

Goal. Demonstrate an understanding of the command and control of joint air operations.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the

following learning objectives:

1. Identify the definition of joint air operations.
2. Identify the Joint Force Air Component Commander's responsibilities.
3. Identify the five sections that comprise the Joint Air Operations Center.
4. Identify the six phases of the Joint Air Tasking Cycle.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives or pass the DOCNET course listed below with a score of 80% or higher.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. DOCNET Course 3-30 (<http://www.dtic.mil/doctrine/docnet/>)
2. MAWTS-1 Joint Air Operations Class
3. JP 3-30 Joint Air Operations

ACPM-8082 4.0 * B (N) G

Goal. Demonstrate an understanding of the theater air ground system (TAGS).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. List the primary characteristics of the Theater Air Ground System (TAGS).
2. Identify the elements within the Air Force's Theater Air Control System (TACS) and their primary responsibilities.
3. Identify the aviation command and control elements with the Army Air and Ground System (AAGS) and their primary responsibilities.
4. Identify the aviation elements within the Navy's Composite Warfare Commander (CWC) architecture.
5. Identify the Amphibious Task Force (ATF) construct and its primary responsibilities.
6. Identify the aviation command and control elements within the Special Operations Air-Ground System.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 TAGS Class
2. MAWTS-1 Joint Air Operations Class
3. ALSA TAGS Pub. (<https://wwwmil.alsa.mil/default.aspx>)

ACPM-8083 4.0 * B (N) G

Goal. Demonstrate an understanding of joint fire support doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Define joint fires.
2. Define joint fire support.
3. Identify the steps of the joint fire support planning process.
4. List the various elements of the component commander's fires command and control system.
5. Define the various joint control and coordination measures associated with joint fire support.

References.

1. DOCNET Course 3-09 (<http://www.dtic.mil/doctrine/docnet/>)
2. JP 3-60 Joint Targeting

ACPM-8086 4.0 * B (N) G

Goal. Demonstrate an understanding of the North Atlantic Treaty Organization (NATO).

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the composition of the NATO alliance.
2. Identify the three key articles of the NATO alliance.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 NATO Class
2. "What is NATO" Brief (http://www.nato.int/welcome/intro_to_NATO_en.ppt)
3. AJP-01(D)

ACPM-8087 4.0 * B (N) G

Goal. Demonstrate an understanding of joint airspace control doctrine.

Requirement. Conduct a self-paced reading of the reference and pass a closed book examination on the following learning objectives:

1. Identify the responsibilities of the airspace control authority (ACA).
2. Identify the basic principles for airspace control.
3. Identify the purpose of the airspace control plan (ACP).
4. Identify the purpose of the airspace control order (ACO).
5. Identify the methods of airspace control.

Performance Standard. Pass an exam with a score of 80% or higher on the stated learning objectives.

Instructor. BI, SI, WTI.

Prerequisite. None.

References.

1. MAWTS-1 Airspace Control Authority and Airspace Class
2. JP 3-52 Joint Airspace Control

3.14 T&R SYLLABUS MATRIX

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)												
COMMON AIR SCHOOL (CAIRS) STAGE												
CAIRS	1000	Explain the fundamentals of Aviation Command and Control (Air C2) employment	B	G	(N)	*	*	0	*	*	*	1000
CAIRS	1002	Identify the components of Marine Air Ground Task Force (MAGTF) Operations	B	G	(N)	*	*	0	*	*	*	1002
CAIRS	1004	Identify characteristics of Aviation Command and Control	B	G	(N)	*	*	0	*	*	*	1004
CAIRS	1006	State the proper procedures for handling and storage of classified materials	B	G	(N)	*	*	0	*	*	*	1006
CAIRS	1008	Identify Aviation Ground Support (AGS)	B	G	(N)	*	*	0	*	*	*	1008
CAIRS	1010	Introduce Marine Air Command and Control System (MACCS) equipment	B	G	(N)	*	*	0	*	*	*	1010
CAIRS	1012	Identify characteristics of Aircraft	B	G	(N)	*	*	0	*	*	*	1012
CAIRS	1014	Identify the components of the air picture	B	G	(N)	*	*	0	*	*	*	1014
CAIRS	1016	Identify operational graphics	B	G	(N)	*	*	0	*	*	*	1016
CAIRS	1018	Identify the elements of an Integrated Air Defense System (IADS)	B	G	(N)	*	*	0	*	*	*	1018
CAIRS	1020	Extract critical information from operations documents	B	G	(N)	*	*	0	*	*	*	1020
CAIRS	1022	Define elements of information exchange within the MAGTF Communications System	B	G	(N)	*	*	0	*	*	*	1022
CAIRS	1024	Introduce the six functions of Marine Aviation	B	G	(N)	*	*	0	*	*	*	1024
CAIRS	1026	Introduce airspace, navigation, and time	B	G	(N)	*	*	0	*	*	*	1026

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CAIRS	1028	Introduce weather as applied to MACCS	B	G	(N)	*	*	0	*	*	*	1028
CAIRS	1030	Introduce the Training and Readiness (T&R) Manual	B	G	(N)	*	*	0	*	*	*	1030
CAIRS	1032	Conduct Information Security	B	G	(N)	*	*	0	*	*	*	1032
CAIRS	1034	Introduce basic radar services provided by the MACCS	B	G	(N)	*	*	0	*	*	*	1034
CAIRS	1036	Identify the air command and control structure within the Joint Force	B	G	(N)	*	*	0	*	*	*	1036
CAIRS	1038	Identify threats to the MAGTF	B	G	(N)	*	*	0	*	*	*	1038
TOTAL ACADEMIC (ACAD) STAGE				EVENTS		20	HOURS	0				
AIR SCHOOL (AIRS) STAGE												
AIRS	1206	Configure Tactical Air Operations Center (TAOC) platforms for operations	B	G	(N)	*	*	0	*	*	*	1206
AIRS	1208	Operate TAOC voice communications equipment	B	G	(N)	*	*	0	*	*	*	1208
AIRS	1210	Operate Command, Control, Communications, Computer and Intelligence (C4I) systems	B	G	(N)	*	*	0	*	*	*	1210
AIRS	1212	Perform surveillance functions	B	G	(N)	*	*	0	*	*	*	1212
AIRS	1216	Operate Link 16	B	G	(N)	*	*	0	*	*	*	1216
AIRS	1218	Operate a Beyond Line of Site (BLOS) gateway	B	G	(N)	*	*	0	*	*	*	1218
AIRS	1220	Establish a workstation for Weapons functions	B	G	(N)	*	*	0	*	*	*	1220
AIRS	1222	Perform Airspace Management functions	B	G	(N)	*	*	0	*	*	*	*
AIRS	1224	Perform Deep Air Support functions	B	G	(N)	*	*	0	*	*	*	*
AIRS	1226	Perform air and missile defense functions	B	G	(N)	*	*	0	*	*	*	*
TOTAL HOURS AIR SCHOOL (AIRS) STAGE				EVENTS		10	HOURS	0				
TOTAL HOURS CORE SKILL INTRODUCTION TRAINING (1000 PHASE)								0				

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CORE SKILL TRAINING (2000 PHASE EVENTS)												
ACADEMICS (ACAD) STAGE												
ACAD	2000	Define combat identification capabilities and procedures	B	G	(N)	*	*	2	*	4000 (7202)		2000
ACAD	2012	State the Capabilities and Limitations of Threat SAMS	B	G	(N)	*	*	1	*			3012
ACAD	2014	Define the following Air Interdiction terms	B	G	(N)	*	*	1	*			*
ACAD	2016	Explain the troubleshooting theory	B	G	(N)	*	*	1	*			2016
ACAD	2020	Identify the characteristics, capabilities and limitations of the Communications System (CS)	B	G	(N)	*	*	1.5	*			2020
ACAD	2022	Identify TAOC voice communication capabilities	B	G	(N)	*	*	1	*			2022
ACAD	2024	Define radio terms	B	G	(N)	*	*	1	*			2024
ACAD	2026	Identify key personnel and responsibilities during air and missile defense operations.	B	G	(N)	*	*	0.5	*	4026 (7202)		2026
ACAD	2028	State the purpose and intent of Rules of Engagement (ROE)	B	G	(N)	*	*	2	*	4028 (7202)		2028
ACAD	2030	Discuss Missile Defense	B	G	(N)	*	*	1	*	4030 (7202)		2034
ACAD	2034	Describe aviation operational documents	B	G	(N)	*	*	1	*	4034 (7202)		2034
ACAD	2036	Define characteristics of Aviation Air-to-Surface Ordnance	B	G	(N)	*	*	1	*			2036
ACAD	2038	Define the characteristics of AMD Capabilities	B	G	(N)	*	*	2	*	4038 (7202)		2038
ACAD	2050	State the characteristics and employment considerations of TACAIR Navy and USMC Aircraft	B	G	(N)	*	*	2.5	*	4050 (7202)		2050
ACAD	2054	Describe the capabilities of US Air-to-Air Weapons	B	G	(N)	*	*	1.5	*	4054 (7202)		2054
ACAD	2056	Describe Air and Missile Defense terminology	B	G	(N)	*	*	2	*	4056 (7202)		2056

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	2058	Define the following words and concepts	B	G	(N)	*	*	4	*			2058
ACAD	2060	Identify group labels/names and inner-group formations	B	G	(N)	*	*	4	*			2060
ACAD	2062	Identify maneuvers and appropriate fill-ins	B	G	(N)	*	*	4	*			2062
ACAD	2064	Define the following comparative communication terms	B	G	(N)	*	*	2	*			2064
ACAD	2066	Define Air Intercept Control Communication Terms	B	G	(N)	*	*	2	*			2066
ACAD	2068	Define Integrated Fire Control terms and Roles	B	G	(N)	*	*	1	*	4068 (7202)		*
ACAD	2070	Describe the technical and tactical considerations for Tanker Management	B	G	(N)	*	*	2	*	4070 (7202)		*
ACAD	2072	Define Airspace Measures	B	G	(N)	*	*	2	*	4072 (7202)		*
ACAD	2102	State the capabilities, limitations and employment considerations for U.S. Air Force Aircraft	B	G	(N)	*	*	1.5	*	4102 (7202)		2102
ACAD	2104	State the capabilities and limitations of Threat Aircraft	B	G	(N)	*	*	3	*			2104
ACAD	2106	Define Threat Missile Terms	B	G	(N)	*	*	1	*			2106
ACAD	2108	State the capabilities and limitations of threat missiles	B	G	(N)	*	*	1	*			2108
ACAD	2116	Describe the USMC F/A-18, F-35, and FI Air to Air Concept of Employment	B	G	(N)	*	*	1	*			2116
ACAD	2118	Explain the following assessment points where fighter leads make tactical decisions and update tactic, flow and targeting for F-35B/C and F/A-18A-D	B	G	(N)	*	*	0.5	*			2118
ACAD	2120	State the concepts and definitions associated with the following tactics and defensive considerations	B	G	(N)	*	*	1	*			2120

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
ACAD	2122	State the timelines and concepts for the FA-18A-D Hornet, F-35B/C and Fighter Integration (FI)	B	G	(N)	*	*	2	*			2122
ACAD	2126	Describe the types of targeting used in Anti-Air Warfare	B	G	(N)	*	*	1	*			2126
ACAD	2128	State standard picture targeting contracts. For F/A-18C/D and F-35B/C	B	G	(N)	*	*	2	*			2128
ACAD	2134	State when the following group names should be applied	B	G	(N)	*	*	2	*			2134
ACAD	2226	Define the characteristics of Cooperative Engagement Capability (CEC)	B	G	(N)	*	*	1	*	4226 (7202)		TDL 2826
TOTAL HOURS ORIENTATION (ORNT) STAGE				EVENTS		36	HOURS	58				
LOCAL FAMILIARIZATION (LFAM) STAGE												
LFAM	2150	Brief local restricted areas	B,R,M	G/E	(N)	1095	*	5	*	*	*	2150
TOTAL HOURS LOCAL FAMILIARIZATION (LFAM) STAGE				EVENTS		1	HOURS	5				
LOCAL FAMILIARIZATION (LFAM) STAGE												
EQPT	2164	Conduct TAOC duties in a Chemical Biological Radiological Nuclear (CBRN) environment	B	L/S	(N)	*	*	4	*	*	*	2164
TOTAL HOURS LOCAL FAMILIARIZATION (LFAM) STAGE				EVENTS		1	HOURS	4				
LOCAL FAMILIARIZATION (LFAM) STAGE												
SD	2311	Identify radar characteristics and develop a radar employment plan	B	G/E	(N)	*	*	8	2000, 2020, 2024, 2026, 2150, 2226	*	*	2311
SD	2312	Conduct EW planning	B	G/E	(N)	*	*	8	2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2038, 2150, 2802, 2811, 2226	*	*	2312
TOTAL HOURS LOCAL FAMILIARIZATION (LFAM) STAGE				EVENTS		2	HOURS	16				
EXPEDITIONARY (EXPD) STAGE												

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIC1	2517	Conduct a brief for a section DCA/OCA	B	L/S	(N)	*	*	1	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	2517
AIC1	2518	Perform AIC functions for a section of fighter aircraft conducting DCA	B	L/S	(N)	*	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	2518
AIC1	2519	Perform AIC functions for a section of fighter aircraft conducting OCA	B	L/S	(N)	*	*	8	2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	2519
AIC1	2520	Maintain timeline awareness	B	L/S	(N)	*	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	2520
AIC1	2521	Perform AIC communications	B	L/S	(N)	*	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	2521

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIC1	2522	Perform AIC functions	B	L/S	(N)	*	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	2522
AIC1	2523	Respond to fighter requests	B	L/S	(N)	*	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	2523
AIC1	2524	Perform scope mechanics	B	L/S	(N)	*	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	2524
AIC1	2525	Perform AIC functions for a section of fighter aircraft against unknown threat	B	L/S	(N)	*	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	2525
TOTAL EXPEDITIONARY (EXPD) STAGE				EVENTS		9	HOURS	65				
AIR INTERCEPT FAMILIARIZATION (AFAM) STAGE												
AFAM	2565	Observe AIC functions for a division of fighter aircraft performing DCA/FI	B	L/S	(N)	*	*	8		*	*	2565

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AFAM	2567	Observe AIC functions for a division of fighter aircraft performing OCA	B	L/S	(N)	*	*	8		*	*	2567
TOTAL AIR INTERCEPT FAMILIARIZATION (AFAM) STAGE				EVENTS		2	HOURS	16				
WEAPONS DIRECTOR (WD) STAGE												
WD	2600	Conduct threat analysis	B	G/E	(N)	*	*	8	2000, 2026, 2028, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2150, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2600
WD	2602	Conduct air and missile defense planning	B	L	(N)	*	*	8	2000, 2012, 2014, 2016, 2020, 2022, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2226, 2150, 2600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2602

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
WD	2604	Conduct airspace management planning	B	L	(N)	*	*	8	2000, 2012, 2014, 2016, 2020, 2022, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2226, 2150, 2600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2604
WD	2606	Facilitate deep air support operations	B	L	(N)	*	*	8	2000, 2012, 2014, 2016, 2020, 2022, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2226, 2150, 2600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2606
TOTAL WEAPONS DIRECTOR (WD) STAGE				EVENTS		4	HOURS	32				
WEAPONS (WPNS) STAGE												
WPNS	2661	Perform required controller actions for a controlled aircraft	B,R,M	S/L	(N)	365	*	1	2000, 2022, 2026, 2034, 2050, 2056, 2066, 2070, 2072, 2102, 2150, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2661

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
WPNS	2662	Perform required Weapons Director actions for a controlled aircraft emergency	B,R,M	S/L	(N)	365	*	1	2000, 2022, 2026, 2034, 2050, 2056, 2066, 2070, 2072, 2102, 2150, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2662
WPNS	2664	Perform required controller actions for an uncontrolled aircraft emergency	B,R,M	S/L	(N)	365	*	1	2000, 2022, 2026, 2034, 2050, 2056, 2066, 2070, 2072, 2102, 2150, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2664
WPNS	2665	Perform required Weapons Director actions for an uncontrolled aircraft emergency	B	L	(N)	*	*	1	2000, 2022, 2026, 2034, 2050, 2056, 2066, 2070, 2072, 2102, 2150, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2665
TOTAL WEAPONS (WPNS) STAGE				EVENTS		4	HOURS	4				
SENIOR AIR DIRECTOR (SAD) STAGE												

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SAD	2701	Conduct mission planning	B	G	(N)	*	*	8	2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2701

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SAD	2703	Conduct a site survey	B	G/E	(N)	*	*	2	2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2703

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SAD	2705	Prepare a plan for TAOC displacement operations	B	G	(N)	*	*		2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	

TAOC 7210 T&R SYLLABUS MATRIX													
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV	
SAD	2711	Develop a plan for the employment of the TAOC	B	G	(N)	*	*	16	2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	2711	
TOTAL SENIOR AIR DIRECTOR (SAD) STAGE				EVENTS		4	HOURS						
TACTICAL DATA LINK (TDL) STAGE													
TDL	2800	Identify the purpose of documents that enable tactical datalinks (TDL) operations	B	G	(N)	*	*	1	*	*	*	2800	
TDL	2802	Identify TAOC and EW/C voice and data communications equipment	B	G	(N)	*	*	1	*	*	*	2802	
TDL	2807	Identify missions and TDL capabilities of Joint Tactical Data Systems (TDS)	B	G	(N)	*	*	2	*	*	*	2807	

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TDL	2808	Describe the Joint Data Network (JDN)	B	G	(N)	*	*	1	*	*	*	2808
TDL	2809	Describe the Multi-Tactical Data Link (TDL) interface	B	G	(N)	*	*	2	*	*	*	2809
TDL	2810	Identify interface unit (IU), categories, and addressing requirements	B	G	(N)	*	*	2	*	*	*	2810
TDL	2811	Identify basic track data	B	G	(N)	*	*	2	*	*	*	2811
TDL	2812	Identify information contained within J-Series Messages that may be displayed to the operator	B	G	(N)	*	*	2	*	*	*	2812
TDL	2813	Identify tactical data link orders associated with Network Participating Group (NPG) 8 and 9	B	G	(N)	*	*	1	*	*	*	2813
TDL	2814	Describe Data Filters	B	G	(N)	*	*	2	*	*	*	2814
TDL	2817	Define terms associated with Link 16	B	G	(N)	*	*	3	*	*	*	2817
TDL	2818	State the characteristics of Link 16	B	G	(N)	*	*	3	*	*	*	2818
TDL	2819	State the characteristics of the Joint Range Extension Application Protocol (JREAP)	B	G	(N)	*	*	2	*	*	*	2819
TDL	2820	Identify mission essential segments, sets, and fields within the OPTASK LINK message	B	G	(N)	*	*	2	*	*	*	2820
TDL	2821	State the purpose of Interface Coordination procedures	B	G	(N)	*	*	1	*	*	*	2821
TDL	2823	State the characteristics of the Variable Message Format (VMF)	B	G	(N)	*	*	1	*	*	*	2823
TDL	2830	Operate an Air Defense Systems Integrator (ADSI)	B	L	(N)	*	*	2	*	*	*	2830
TDL	2836	Operate Link 16	B	L	(N)	*	*	8	*	*	*	2836
TDL	2838	Operate JREAP A	B	L	(N)	*	*	8	*	*	*	2838
TDL	2840	Operate JREAP B	B	L	(N)	*	*	8	*	*	*	2840
TDL	2849	Conduct tactical data link planning for an agency	B	L	(N)	*	*	3	*	*	*	2849
TOTAL TACTICAL DATA LINK (TDL) STAGE				EVENTS		19	HOURS	57				

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
COMMAND AND CONTROL SYSTEM (C2SYS) STAGE												
C2SYS	2910	Demonstrate proficiency with the TBMCS Execution Status and Monitoring	B, R	G	(N)	*	*	2	*	*	*	2910
C2SYS	2940	Demonstrate proficiency utilizing tactical chat	B,R	G	(N)	*	*	1	*	*	*	2940
TOTAL C2SYS STAGE				EVENTS		2	HOURS		3			
TOTAL HOURS CORE SKILL TRAINING (2000 PHASE)								176.5				
MISSION SKILL TRAINING (3000 PHASE EVENTS)												
SURVEILLANCE DIRECTOR (SD) STAGE												
SD	3300	Brief the Surveillance section	B	G/E	(N)	*	*	8	2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034,2068, 2072 2150, 2226, 2311, 2312, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3300

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SD	3302	Perform as a SD	B,R,M	L	(N)	1095	*	12	2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2068, 2072, 2150, 2226, 2311, 2312, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3302
TOTAL HOURS SURVEILLANCE DIRECTOR (SD) STAGE				EVENTS		2	HOURS	20				
WEAPONS DIRECTOR (WD) STAGE												
WD	3600	Brief the weapons section	B	G/E	(N)	*	*	8	2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3600

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
WD	3602	Perform airspace management	B	L/S	(N)	*	*	8	2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3602
WD	3604	Manage aerial refueling	B	L/S	(N)	*	*	8	2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3604

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
WD	3606	Supervise the management of combat air patrol(s)	B	L/S	(N)	*	*	8	2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3606
WD	3610	Perform as WD	B,R,M	L/S	(N)	1095	*	8	2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 3602, 3604, 3606, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3610
TOTAL WEAPONS DIRECTOR (WD) STAGE				EVENTS		7	HOURS	44				
SENIOR AIR DIRECTOR (SAD) STAGE												

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SAD	3701	Emplacement of the TAOC	B	L	(N)	*	*	8	2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2150, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2709, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2826, 2830, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6280, 6281, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3701

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SAD	3701	Emplacement of the TAOC	B	L	(N)	*	*	8	2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2150, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2709, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2826, 2830, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6280, 6281, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3701

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SAD	3703	Brief the TAOC crew	B	L/S	(N)	*	*	8	2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2150, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2709, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2826, 2830, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6280, 6281, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3703

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SAD	3705	Provide a confirmation brief	B	G/E	(N)	*	*	16	2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2150, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2709, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2826, 2830, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 5000, 5010, 5020, 5100, 5110, 5120, 5130, 6280, 6281, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3705

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SAD	3707	Perform the duties of a SAD	B,R,M	L	(N)	1095	*	24	2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2711, 2800, 2802, 2807, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	3707
TOTAL SENIOR AIR DIRECTOR (SAD) STAGE				EVENTS		4	HOURS	56				
								TOTAL HOURS MISSION SKILL TRAINING (3000 PHASE)		120		
CORE PLUS SKILL TRAINING (4000 PHASE EVENTS)												
AIR INTERCEPT CONTROLLER 1 (AIC1) STAGE												

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIC1	4600	Perform AIC functions for a section of fighter aircraft against unknown threat	B,R,M	L	(N)	1095	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	4500
TOTAL HOURS AIR INTERCEPT CONTROLLER (AIC1) STAGE				EVENTS		1	HOURS	8				
AIR INTERCEPT CONTROLLER 2 (AIC2) STAGE												
AIC2	4602	Conduct a brief for a division DCA/OCA	B	G/E	(N)	*	*	1	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	4502
AIC2	4604	Perform AIC functions for a division of fighter aircraft conducting DCA/OCA	B	L	(N)	*	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	4504

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIC2	4606	Perform AIC functions for a division of fighter aircraft	B,R,M	L	(N)	1095	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	4600	4506
TOTAL HOURS AIR INTERCEPT CONTROLLER 2 (AIC2) STAGE				EVENTS		3	HOURS	17				
AIR INTERCEPT CONTROLLER 3 (AIC3) STAGE												
AIC3	4608	Conduct DCA FI brief	B	G/E	(N)	*	*	1	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	4508
AIC3	4609	Perform AIC functions with fighter aircraft conducting DCA FI	B	L/S	(N)	*	*	5	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 4608, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	4512

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
AIC3	4610	Conduct OCA FI brief	B	G/E	(N)	*	*	1	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	4510
AIC3	4611	Perform AIC functions with fighter aircraft conducting OCA FI	B,M	L/S	(N)	*	*	5	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 4610, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	4512
AIC3	4612	Perform AIC functions with fighter aircraft	B,R,M	L/S	(N)	1095	*	8	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 4608, 4609, 4610, 4611, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	4600 4606	4512
TOTAL HOURS AIR INTERCEPT CONTROLLER 3 (AIC3) STAGE				EVENTS		5	HOURS	20				
WEAPONS DIRECTOR (WD) STAGE												

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
WD	4708	Coordinate deep air operations	B	L/S	(N)	*	*	8	2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 3602, 3604, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	4608
TOTAL WEAPONS DIRECTOR (WD) STAGE				EVENTS	1	HOURS	8					
SENIOR AIR DIRECTOR (SAD) STAGE												

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SAD	4702	Prepare a plan for Phasing Control Ashore	B	G/E	(N)	*	*	1	2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	4702
TOTAL SENIOR AIR DIRECTOR (SAD) STAGE				EVENTS		1	HOURS	1				
SECTOR AIR DEFENSE COMMANDER (SADC) OPERATIONS OFFICER STAGE												
SADCOPS	4500	Conduct planning as a SADC Operations Officer	B	L/S	(N)	*	*	8	8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	4500 (7202)	*	*

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SADCOPS	4504	Perform as SADC Operations Officer	B,R	L/S	(N)	1095	*	16	2000, 2026, 2028, 2030, 2034, 2038, 2050, 2054, 2056, 2068, 2070, 2072, 2102, 2226, 2565, 4500, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	4504 (7202)	*	*
TOTAL HOURS SADC OPERATIONS OFFICER STAGE				EVENTS		2	HOURS	24				
								TOTAL HOURS CORE PLUS TRAINING (4000 PHASE)		78		
INSTRUCTOR TRAINING (5000 PHASE EVENTS)												
INSTRUCTOR UNDER TRAINING (IUT) STAGE												
IUT	5000	Introduce principals of instruction	B	L	(N)	*	*	2	*	*	*	5000
IUT	5010	Describe individual T&R requirements	B	L	(N)	*	*	2	*	*	*	5010
IUT	5020	Conduct T&R instruction	B,R,M	L	(N)	90	*	12	5000, 5010	*	*	5020
IUT	5030	Conduct a simulation	B	GE	(N)	*	*	5	5000, 5010, 5020	*	*	SAD 2709
IUT	5100	Describe the Aviation Training and Readiness (T&R) Program	B	L	(N)	*	*	2	5000, 5010, 5020, 6320	*	*	5100
IUT	5110	Conduct instructor evaluations	B,R,M	L	(N)	365	*	4	5000, 5010, 5020, 6320	*	*	5110
IUT	5120	Perform T&R administration	B	L	(N)	*	*	2	5000, 5010, 5020, 6320	*	*	5120
IUT	5130	Develop a training plan	B	L	(N)	*	*	2	5100, 5110, 5120	*	*	5130
IUT	5140	Develop and conduct a TAOC simulation	B	GE	(N)	*	*	5	5100, 5110, 5120, 5130, 6320	*	*	SAD 2709
IUT	5500	Discuss local area course rules	B	GE	(N)	*	*	0.5	6253, 6321	*	*	5500
IUT	5510	Develop an AIC training plan	B	GE	(N)	*	*	5	5500	*	*	*
IUT	5520	Conduct a period of instruction on an AIC academic event	B	GE	(N)	*	*	5	5510	*	*	*
IUT	5530	Evaluate an AIC during execution	B	GE	(N)	*	*	5	5520	*	*	*
IUT	5540	Graduate an AIC 5 producing course	B	GE	(N)	*	*	0.5	6323	*	*	6006
TOTAL HOURS INSTRUCTOR UNDER TRAINING (IUT) STAGE								52				

TAOC 7210 T&R SYLLABUS MATRIX													
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV	
TOTAL HOURS INSTRUCTOR TRAINING (5000 PHASE)								52					
CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (CQD) (6000 PHASE EVENTS)													
SCHOOL CODES													
SCHL	6000	Weapons and Tactics Instructor Course	B	G	(N)	*	*	0.5	6320, 6321	*	*	*	
SCHL	6001	Senior Watch Officer's Course	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6002	Air Command and Control Officer's Course	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6003	ACE Battlestaff Officer Course	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6006	Marine Division Tactics Course (MDTC)	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6010	AOCIQT (Airspace) Course	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6015	Joint Air and Space Operations Center Command and Control Course (JAOC2C)	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6016	Joint Air Operations Senior Staff Course	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6020	Link 16 Basics Course (JT-100)	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6021	Introduction to Multi-TDL Network Operations (JT-101)	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6022	Multi-TDL Advanced Joint Interoperability Course (MAJIC) (JT-102)	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6023	Link 16 Joint Interoperability Course (US-109)	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6024	Multi TDL Planner Course (JT-201)	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6025	Link 16 Link Unit Manager Course	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6026	Joint Interface Control Officer (JICO) (JT-301)	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6027	Joint Interface Control Center (JICC) (JT-310)	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6067	Military Airspace Management Course	B	G	(N)	*	*	0.5	*	*	*	*	
SCHL	6069	USMC AIC TOPGUN Ground School	B	G	(N)	*	*	0.5	*	*	*	*	

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
SCHL	6072	Advanced Field Artillery Tactical Data System (AFATDS)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6078	TOPGUN AIC Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6079	JRE-GW Operators Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6082	Joint Firepower Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6083	Advanced Field Artillery Tactical Data System (AFATDS)	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6084	TOPGUN AIC Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6085	JRE-GW Operators Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6086	Joint Firepower Course	B	G	(N)	*	*	0.5	*	*	*	*
SCHL	6096	Formal Learning Center (FLC) Instructor	B	G	(N)	*	*	0.5	*	*	*	*
TOTAL HOURS SCHOOL CODES (SCHL) STAGE				EVENTS		27	HOURS	13.5				
CERTIFICATION (CERT) STAGE												
CERT	6272	Air Intercept Controller Level 1	B	G	(N)	*	*	0.5	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	*
CERT	6273	Air Intercept Controller Level 2	B	G	(N)	*	*	0.5	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 6272, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	*

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
CERT	6274	Air Intercept Controller Level 3	B	G	(N)	*	*	0.5	2014, 2028, 2034, 2050, 2054, 2058, 2060, 2062, 2064, 2066, 2068, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 4600, 4602, 4604, 4606, 4608, 4609, 4610, 4611, 4612, 6272, 6273, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044	*	*	*
TOTAL HOURS CERTIFICATION (CERT) STAGE				EVENTS		3	HOURS	1.5				
QUALIFICATION (QUAL) STAGE												
QUAL	6280	Surveillance Director (SD)	B	G	(N)	*	*	0.5	2000, 2016, 2020, 2022, 2024, 2026, 2028, 2034, 2068, 2072, 2150, 2226, 2311, 2312, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	*

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
QUAL	6281	Weapons Director (WD)	B	G	(N)	*	*	0.5	2000, 2012, 2014, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2662, 2665, 2910, 2940, 3600, 3602, 3604, 3606, 3610, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	*

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
QUAL	6282	Senior Air Director (SAD)	B	G	(N)	*	*	0.5	2000, 2012, 2014, 2016, 2020, 2022, 2024, 2026, 2028, 2030, 2034, 2036, 2038, 2050, 2054, 2056, 2058, 2060, 2062, 2064, 2066, 2068, 2070, 2072, 2102, 2104, 2106, 2108, 2116, 2118, 2120, 2122, 2126, 2128, 2134, 2150, 2226, 2311, 2312, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2565, 2567, 2600, 2602, 2604, 2606, 2661, 2662, 2664, 2665, 2701, 2703, 2705, 2711, 2800, 2802, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2817, 2818, 2819, 2820, 2821, 2823, 2830, 2836, 2837, 2838, 2840, 2849, 2910, 2940, 3300, 3302, 3600, 3602, 3604, 3606, 3610, 3701, 3703, 3705, 3707, 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140, 6280, 6281, 6320, 6321, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	*
TOTAL HOURS QUALIFICATION (QUAL) STAGE				EVENTS		3	HOURS	1.5				
DESIGNATION (DESG) STAGE												
DESG	6290	Sector Air Defense Commander Operations Officer (SADC OPS)	B	G	(N)	*	*	0.5	2000, 2026, 2028, 2030, 2034, 2038, 2050, 2054, 2056, 2068, 2070, 2072, 2102, 2826, 2565, 4500, 4504, 6290, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	*

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
DESG	6294	Air and Missile Defense Officer	B	G	(N)	*	*	0.5	*	*	*	*
DESG	6320	Basic Instructor (BI)	B	G	(N)	*	*	0.5	5000, 5010, 5020, 5030	*	*	*
DESG	6321	Senior Instructor (SI)	B	G	(N)	*	*	0.5	5000, 5010, 5020, 5030, 5100, 5110, 5120, 5130, 5140	*	*	*
DESG	6322	Weapons and Tactics Instructor (WTI)	B	G	(N)	*	*	0.5	6000, 6320, 6321	*	*	*
DESG	6323	Air Intercept Controller Supervisor (AICS)	B	G	(N)	*	*	0.5	5510, 5520, 5530, 6272, 6273, 6274, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	*
DESG	6324	Air Intercept Controller Instructor (AICI)	B	G	(N)	*	*	0.5	5540, 6272, 6273, 6274, 6323, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8008, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8040, 8041, 8042, 8043, 8044, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	*	*
DESG	6325	Formal Learning Center Instructor	B	G	(N)	*	*	0.5	*	*	*	*
TOTAL HOURS DESIGNATION (DESG) STAGE				EVENTS		8	HOURS	4				
TOTAL HOURS RQCD (6000 PHASE)												
MISSION ESSENTIAL TASK (MET) (7000 PHASE EVENTS)												
CONDITION (COND) STAGE												
COND	7000	Conduct Airspace Surveillance	B,R,M	L	(N)	730	*	16	*	*	*	*
COND	7001	Conduct Positive Control	B,R,M	L	(N)	730	*	16	*	*	*	*
COND	7002	Coordinate Air and Missile Defense Actions	B,R,M	L	(N)	730	*	16	*	*	*	*
COND	7003	Conduct Dual Site Air and Missile Defense Operations	B,R,M	L	(N)	730	*	16	*	*	*	*
COND	7004	Integrate Operational Air Defense Capabilities	B,R,M	L	(N)	730	*	16	*	*	*	*
TOTAL HOURS CONDITION (COND) STAGE				EVENTS		5	HOURS	80				

TAOC 7210 T&R SYLLABUS MATRIX												
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	MIRROR	CHAIN	EVENT CONV
TOTAL HOURS MISSION ESSENTIAL TASK (7000 PHASE)								80				

AVIATION CAREER PROGRESSION MODEL (ACPM) (8000 PHASE)											
ACPM MATRIX											
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	CHAIN	EVENT CONV
AVIATION CAREER PROGRESSION MODEL (ACPM) (8000 PHASE EVENTS)											
AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE											
ACPM	8000	MACCS stage	B	G	(N)	*	*	1	8001, 8002, 8003, 8004, 8005, 8006, 8008	*	8000
ACPM	8001	Marine Air Command and Control System	B	G	(N)	*	*	4	*	*	8001
ACPM	8002	Tactical Air Command Center (TACC)	B	G	(N)	*	*	4	*	*	8002
ACPM	8003	Direct Air Support Center (DASC)	B	G	(N)	*	*	4	*	*	8003
ACPM	8004	Tactical Air Operations Center (TAOC)	B	G	(N)	*	*	4	*	*	8004
ACPM	8005	Marine Air Traffic Control (MATC)	B	G	(N)	*	*	4	*	*	8005
ACPM	8006	Low Altitude Air Defense (LAAD)	B	G	(N)	*	*	4	*	*	8006
ACPM	8008	Marine Wing Communications Squadron (MWCS)	B	G	(N)	*	*	4	*	*	8008
ACPM	8020	ACE	B	G	(N)	*	*	1	8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028	*	8020
ACPM	8021	Aviation Operations	B	G	(N)	*	*	4	*	*	8021
ACPM	8022	Control of Aircraft and Missiles	B	G	(N)	*	*	4	*	*	8022
ACPM	8023	Offensive Air Support (OAS)	B	G	(N)	*	*	4	*	*	8023
ACPM	8024	Assault Support (AS)	B	G	(N)	*	*	4	*	*	8024
ACPM	8025	Air Reconnaissance	B	G	(N)	*	*	4	*	*	8025
ACPM	8026	Electronic Warfare (EW)	B	G	(N)	*	*	1	*	*	8026
ACPM	8027	Anti-Air Warfare (AAW)	B	G	(N)	*	*	4	*	*	8027
ACPM	8028	Aviation Ground Support	B	G	(N)	*	*	4	*	*	8028
ACPM	8040	Threat	B	G	(N)	*	*	1	8041, 8042, 8043, 8044	*	8040
ACPM	8041	Surface to Air threat to the MAGTF	B	G	(N)	*	*	4	*	*	8041
ACPM	8042	Fixed Wing threat to the MAGTF	B	G	(N)	*	*	4	*	*	8042
ACPM	8043	Rotary Wing threat to the MAGTF	B	G	(N)	*	*	4	*	*	8043

AVIATION CAREER PROGRESSION MODEL (ACPM) (8000 PHASE)											
ACPM MATRIX											
STAGE	CODE	TITLE	POI	DEVICE	COND	REFLY	E-CODED	TIME	PREREQ	CHAIN	EVENT CONV
ACPM	8044	Missile and UAS threat to the MAGTF	B	G	(N)	*	*	4	*	*	8044
ACPM	8060	MAGTF	B	G	(N)	*	*	1	8061, 8062, 8063, 8064, 8065, 8066, 8067	*	8060
ACPM	8061	Ground Combat Operations	B	G	(N)	*	*	4	*	*	8061
ACPM	8062	Fire Support Coordination in the GCE	B	G	(N)	*	*	4	*	*	8062
ACPM	8063	MAGTF Command and Control	B	G	(N)	*	*	4	*	*	8063
ACPM	8064	MAGTF Communications	B	G	(N)	*	*	4	*	*	8064
ACPM	8065	Phasing Control Ashore	B	G	(N)	*	*	4	*	*	8065
ACPM	8066	Information Management	B	G	(N)	*	*	4	*	*	8066
ACPM	8067	UAS support of the MAGTF	B	G	(N)	*	*	4	*	*	8067
ACPM	8080	Joint Air Operations	B	G	(N)	*	*	1	8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088	*	8080
ACPM	8081	Command and Control of Joint Air Operations	B	G	(N)	*	*	4	*	*	8081
ACPM	8082	Theater Air Ground System (TAGS)	B	G	(N)	*	*	4	*	*	8082
ACPM	8083	Joint Fire Support	B	G	(N)	*	*	4	*	*	8083
ACPM	8084	Close Air Support (CAS)	B	G	(N)	*	*	4	*	*	8084
ACPM	8085	Joint Targeting	B	G	(N)	*	*	4	*	*	8085
ACPM	8086	North Atlantic Treaty Organization (NATO)	B	G	(N)	*	*	4	*	*	8086
ACPM	8087	Joint Airspace Control	B	G	(N)	*	*	4	*	*	8087
TOTAL HOURS AVIATION CAREER PROGRESSION MODEL (ACPM) STAGE								142			
TOTAL ACPM (8000 PHASE)								142			

- 3.15 ADDITIONAL MATRIX (ORDNANCE/RANGES). None.
- 3.16 ADDITIONAL CHAINING FOR 5000 AND 6000 PHASE EVENTS. See matrix above.
- 3.17 TRAINING DEVICE EVENT ESSENTIAL SUBSYSTEMS MATRIX (EESM). None.
- 3.18 AVIATION TRAINING FORMS (ATF). A syllabus evaluation form is required for any initial or subsequent event training. The MACCS Training Form (MTF) is located in the C3 Course Catalog and available online at the MAWTS-1 C-3 website,
<https://vcepub.tecom.usmc.mil/sites/msc/magftc/mawts1/departments1/newc3/default.aspx>.