

CHAPTER 2

ENLISTED AIR TRAFFIC CONTROLLER

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T&R MANUAL, MATC

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CHAPTER 2

ENLISTED AIR TRAFFIC CONTROLLER

200. INTRODUCTION

1. The purpose of the Marine Aviation Training and Readiness (T&R) program is to provide the commander with standardized programs of instruction for all aviation personnel. The goal is to develop unit warfighting capabilities, not to measure the proficiency of individuals. Syllabi are based on specific performance standards designed to ensure proficiency in core competencies. An effective Training and Readiness (T&R) program is the first step in providing the Marine Air Ground Task Force (MAGTF) Commander with an Aviation Combat Element (ACE) capable of accomplishing any and all of its stated missions. The T&R program provides the fundamental tools for commanders to build and maintain unit combat readiness. Using these tools, unit training managers can construct and execute an effective training plan which supports the unit's mission essential tasks.

2. Unit training management is the application of the Marine Corps Training Principles and the Systems Approach to Training to satisfy the training requirements of Commanders at all levels in order to accomplish their wartime mission. Guidance concerning unit training management and the process for establishing effective unit training management programs are contained in MCRP 3-0A, Unit Training Management (UTM) Guide, and formed the basis for the development of this T&R manual. Familiarity with MCRP 3-0A will enhance understanding of the Systems Approach to Training used in T&R development and Marine Corps UTM principles.

3. To maintain congruity in aviation and ground T&R programs, CG TECOM (C4610) is coordinating an update to the aviation unit evaluation mechanism. Efforts are underway to incorporate Collective Training Standards (CTS) into aviation T&R manuals. The goal of this effort is to replace MCCRES Mission Performance Standards (MPS) with T&R CTS and utilize the T&R as the unit evaluation mechanism. Like MPS, CTS are criteria that specify mission and functional area unit proficiency standards for combat, combat support, and combat service support units.

4. The effort to replace MCCRES MPS with T&R manual CTS is in the development phase. The concept is to create separate unit chapters in all aviation T&R manuals which contain unit CTS in the form of unit events. CTS will be derived and implemented into T&R manuals using existing unit MCCRES MPS as a baseline. Unit evaluation will be standardized in T&R manuals, not in a separate document. CG TECOM (C4610) plans to cancel unit MCCRES orders as respective unit CTS chapters are approved. Until unit T&R CTS are formally approved, MCCRES shall be utilized as the aviation unit evaluation standard.

201. CORE COMPETENCIES/SKILLS

1. Core competency serves as the foundation of the T&R program. Core competencies are those core capabilities and skills which support the Mission Essential Task List (METL) derived from MWCP 3-2 and T/O mission statements, which are realistically expected to be assigned in combat. Core competencies for Air Traffic Control (ATC) are listed in paragraph 201.3.

2. Mission. Marine Air Traffic Control (MATC) conducts operations in support of Marine Corps Air Stations (MCAS), Marine Air Ground Task Forces (MAGTF), joint and coalition operations, and integrates into the Marine Air Command and Control System (MACCS) and Integrated Air Defense System (IADS) whenever possible.

3. Mission Essential Tasks

a. Provide tower, radar/non-radar approach, departure, and en-route air traffic control (ATC) services within assigned airspace.

b. Provide precision and non-precision navigational aids (NAVAIDS) and Automatic Carrier Landing System (ACLS) approach services.

c. Integrate, display, and disseminate appropriate information to the designated Joint Forces Air Component Commander (JFACC), Airspace Control Authority (ACA), Area Air Defense Commander (AADC), and adjacent agencies such as the Tactical Air Command Center (TACC), Tactical Air Operation Center (TAOC), Direct Air Support Center (DASC), and Ground Based Air Defense (GBAD) units and coordinate the activation of the Base Defense Zone (BDZ) as part of the IADS.

d. Provide combat and civil airspace management, control, and surveillance.

e. Provide ATC liaison personnel to coordinate ATC related issues between the MACCS and national/international civil ATC systems.

f. Develop, implement, and validate radar and non-radar IFR Terminal Instrument Procedures (TERPs) for use at pre-established and expeditionary airfields and integrate required ATC services into the existing civil/military, national/international ATC architectures.

g. Conduct amphibious/expeditionary operations to include the capability to phase control ashore.

h. Conduct MATC combat operations in a Nuclear, Biological, and Chemical (NBC) environment.

4. Detachment Core Capabilities

a. The core capable Marine Air Traffic Control Detachment (MATCD) establishes continuous all weather ATC services at one expeditionary airfield, with an echelon capability, or provides these services at a pre-established airfield. Additionally, the core capable detachment is able to provide mobile ATC services at two Forward Operating Bases (FOB). The detachment is able to provide ATC personnel to support MCASs in accordance with the Fleet Assistance Program (FAP).

b. Combat Crew

- 1 Watch Commander (WC)
- 1 Radar Watch Supervisor (RWS)
- 1 Radar Approach Controller (APC)
- 1 Arrival/Departure Controller (RATCF)
- 1 Flight Data/Clearance Delivery Controller (RFD)
- 1 Data Link Coordinator (DLC)

- 2 Radar Final Controllers (RFC)
- 1 Tower Watch Supervisor (TWS)
- 1 Local Controller (TLC)
- 1 Ground Controller (TGC)
- 1 Flight Data Controller (TFD)

NOTE: Number of crews required is driven by airfield operational hours and national/international ATC regulations.

c. MATC Mobile Team (MEU SOC)

- 1 ATC Officer
- 3 Controllers
- 1 NAVAID Technician
- 1 Communication Technician

NOTE: Denotes notional MMT. Actual MMT composition will be determined by mission assigned.

202. SUMMARY/INDEX OF LIVE/SIMULATED EVENTS

1. Combat Capable Stage (7251). Completed at AC(A1) formal school.
2. Combat Ready Stage (7257/7253). Table 2-1 contains a listing of the Combat Readiness training events and table 2-2 contains Combat Readiness knowledge based training events.

Table 2-1.--Combat Readiness Training Events.

EVENT	GOAL	PAGE #
FAM-200	Introduce two way communications with MACCS agencies.	2-29
FAM-201	Observe MACCS agencies in an exercise.	2-29
SYS-220	Operate fixed control tower equipment.	2-30
SYS-221	Operate fixed radar equipment.	2-30
SYS-222	Operate the Expeditionary Control Tower (AN/TSQ-120) and associated equipment.	2-31
SYS-223	Operate the Remote Landing Site Tower (AN/TSQ-216) and associated equipment.	2-32
SYS-224	Configure the Control and Communication Subsystem (AN/TSQ-131) and associated equipment for operation.	2-32
SYS-225	Operate communication equipment in secure mode and in frequency agile mode (as applicable).	2-33
SYS-226	Construct a field expedient antenna.	2-33
SIM-230	Control precision/surveillance approaches using the simulation mode of the AN/TSQ-131.	2-34
SIM-231	Encode and decode messages.	2-34
MMT-260	Operate and use MATC Mobile Team (MMT) radios and equipment.	2-34
MMT-261	Perform as an MMT member.	2-35
OPS-270	Perform the duties of a Tower Flight Data Controller.	2-35
OPS-271	Perform the duties of Clearance Delivery Controller.	2-36
OPS-272	Perform the duties of a Tower Ground Controller.	2-36
OPS-273	Perform the duties of a Radar Flight Data Controller.	2-37

EVENT	GOAL	PAGE #
OPS-274	Perform the duties of a Radar Final Controller.	2-37
OPS-275	Conduct launches and recoveries in EMCON conditions.	2-38
CK-280	Qualify as a Tower Flight Data Controller.	2-38
CK-281	Qualify as a Clearance Delivery Controller.	2-39
CK-282	Qualify as a Tower Ground Controller.	2-39
CK-283	Qualify as a Radar Flight Data Controller.	2-39
CK-284	Qualify as a Radar Final Controller.	2-40
QUAL-290	Qualify as an MMT Member.	2-40
QUAL-291	Qualify as a Data Link Coordinator.	2-41

Table 2-2.--Combat Readiness Knowledge Training Events.

EVENT	GOAL	PAGE #
KFAM-200	Memorize the airfield layout.	B-4
KFAM-201	General ATC knowledge.	B-6
KFAM-202	Local area/airfield specific knowledge.	B-7
KFAM-203	Emergency/Safety knowledge.	B-7
KFAM-204	Weather knowledge.	B-7
KFAM-205	Mission, tasks, and organization of the MACS.	B-7
KFAM-206	MATCD systems and support equipment.	B-8
KFAM-207	Tactical Landing Zone (TLZ).	B-8
KFAM-208	Obtain, record, and relay a close air support brief.	B-8
KFAM-209	Knowledge of organic communications equipment.	B-9
KTWR-210	Tower equipment.	B-13
KTWR-211	Strip marking.	B-14
KTWR-212	Airfield lighting.	B-14
KTFD-240	Phraseology/Communications.	B-14
KTFD-241	Clearance/Coordination.	B-15
KTFD-242	LOA's and Facility Directives/Memos/Publications.	B-15
KTGC-243	Phraseology/Communication.	B-15
KTGC-244	Clearance/Coordination.	B-16
KTGC-245	Separation.	B-16
KTGC-246	LOA's and Facility Directives/Memos/Publications.	B-16
KRDR-220	Radar equipment.	B-21
KRDR-221	Radar Strip marking.	B-22
KRFD-250	Phraseology/Communications.	B-24
KRFD-251	Clearance/Coordination.	B-24
KRFD-252	LOA's and Facility Directives/Memos/Publications.	B-25
KRFC-253	Phraseology/Communication.	B-25
KRFC-254	Clearance/Coordination.	B-26
KRFC-255	Separation.	B-26
KRFC-256	LOA's and Facility Directives/Memos/Publications.	B-27
KDLC-263	Data link theory.	B-27
KDLC-264	MATCALC Tactical Digital Information Link (TADIL) B and C.	B-27

3. Combat Qualification Stage (7252/7254). Table 2-3 contains a listing of the Combat Qualification training events and table 2-4 contains Combat Qualification knowledge based training events.

Table 2-3.--Combat Qualification Training Events.

EVENT	GOAL	PAGE #
SIM-330	Conduct ATC operations in an NBC environment.	2-42
SIM-331	Control in an ADC environment using the simulation mode of the AN/TSQ-131.	2-42
SIM-332	Perform non-radar approach control services.	2-42
SIM-333	Plan and develop MATCD communications interface with the MACCS and external agencies.	2-43
OPS-370	Perform the duties of a Tower Local Controller.	2-43
OPS-371	Perform the duties of an Arrival/Departure (RATCF) Controller.	2-44
OPS-372	Perform the duties of an Approach Controller.	2-44
OPS-373	Perform as an MMT Leader.	2-45
OPS-374	Conduct an ATC tactical crew brief.	2-45
OPS-375	Extract pertinent information from the Air Tasking Order (ATO) and Air Control Order (ACO).	2-46
OPS-376	Prepare, request, and supervise an FAA flight inspection/certification.	2-46
OPS-377	Identify and plot air control measures on a map.	2-46
CK-380	Qualify as a Tower Local Controller.	2-47
CK-381	Qualify as an Arrival/Departure (RATCF) Controller.	2-47
CK-382	Qualify as an Approach Controller.	2-48
QUAL-390	Be designated an On The Job Training Instructor (OJTI).	2-49
QUAL-391	Qualify as an MMT Leader in a field exercise.	2-49

Table 2-4.--Combat Qualification Knowledge Training Events.

EVENT	GOAL	PAGE #
KFAM-300	Obtain working knowledge of communication plans and orders.	B-9
KFAM-301	Describe the communication flow within the MACCS.	B-9
KFAM-302	Demonstrate knowledge of Electronic Warfare and its effects on MATCD equipment.	B-9
KFAM-303	Obtain a basic knowledge of the Early Warning and Control (EW/C) site/TAOC.	B-10
KFAM-304	The role of Shore Air Defense (SHORAD) detachment and its integration into the MACCS.	B-10
KFAM-305	Forward Operating Bases (FOB) and how the MATCD supports them.	B-10
KTWR-310	Tower equipment as it relates to tower local control.	B-17
KTWR-311	General ATC knowledge as it applies to tower local control.	B-17
KTWR-312	Local area/airfield specific knowledge as it applies to tower local control.	B-18
KTWR-313	Strip marking as applied to tower local control.	B-18
KTWR-314	Emergency/Safety knowledge as applied to tower local control.	B-18

EVENT	GOAL	PAGE #
KTWR-315	Weather knowledge as applied to tower local control.	B-19
KTWR-316	Airfield lighting knowledge as applied to tower local control.	B-19
KTLC-340	Communications on tower local control.	B-20
KTLC-341	Clearance/Coordination on tower local control.	B-20
KTLC-342	Spacing/Sequencing/Separation on tower local control.	B-20
KTLC-343	LOA's and Facility Directives/Memos/Publications for tower local control.	B-21
KRDR-320	Radar equipment applied on radar approach control.	B-22
KRDR-321	Local area/airfield specific knowledge applied on radar approach control.	B-22
KRDR-322	General ATC knowledge applied on radar approach control.	B-23
KRDR-323	Strip marking applied on radar approach control.	B-23
KRDR-324	Emergency/Safety applied on radar approach control.	B-24
KRDR-325	Weather knowledge applied on radar approach control.	B-24
KAPC-350	Advanced Air Traffic Control applied on radar approach control.	B-28
KAPC-351	Advanced local area/airfield specific knowledge on radar approach control.	B-28
KAPC-352	Non-radar knowledge applied on radar approach control.	B-29
KAPC-353	Coordination as applied on radar approach control.	B-29
KAPC-354	Clearance knowledge as applied on radar approach control.	B-30
KAPC-355	Spacing and sequencing as applied on radar approach control.	B-31
KAPC-356	Phraseology/Communication as applied on radar approach control.	B-32
KAPC-357	Separation knowledge as applied on radar approach control.	B-32
KAPC-358	LOA's and Facility Directives/Memos/Publications.	B-33

4. Full Combat Qualification Stage (7252/7254/7291). Table 2-5 contains a listing of the full-combat qualification training events and table 2-6 contains Full Combat Qualification knowledge based training events.

Table 2-5.--Full Combat Qualification Training Events.

EVENT	GOAL	PAGE #
OPS-470	Develop an embarkation plan for the MATCD.	2-50
OPS-471	Perform as a MATCD Non-Commissioned Officer in Charge (NCOIC).	2-50
OPS-472	Perform as a MACS Operations Chief (Ops Chief).	2-51
DESG-490	Be designated as a Tower Watch Supervisor.	2-51
DESG-491	Be designated as a Control Tower Chief.	2-52
DESG-492	Be designated as a CTO Examiner (CTOE).	2-53
DESG-493	Be designated as a Radar Watch Supervisor.	2-53
DESG-494	Be designated as a Radar Chief.	2-54
DESG-495	Perform as an ATC Specialist Examiner (ATCSE).	2-55
DESG-496	Perform as a Facility Watch Officer (FWO)/MATCD Watch Commander (WC).	2-55

EVENT	GOAL	PAGE #
DESG-497	Perform the duties of a Training and Standardization Supervisor (TSS).	2-56
DESG-498	Be designated as a Terminal Instrument Procedures (TERPS) Specialist.	2-56

Table 2-6.--Full Combat Qualification Knowledge Training Events.

EVENT	GOAL	PAGE #
KFAM-400	Development process of the Air Tasking Order (ATO) and Air Control Order (ACO).	B-11
KFAM-401	Fundamentals of Rear Area Security (RAS).	B-11
KFAM-402	Site selection process for a MATCD.	B-11
KFAM-403	Develop and staff an LOA.	B-12
KFAM-404	Develop and staff an FAA waiver.	B-12
KFAM-405	Terminal Instrument Procedures (TERPS).	B-12
KFAM-406	ATC tactical crew brief.	B-12
KFAM-407	Facility/Personnel/Operations/Training management.	B-13

5. Instructor Under Training (7252/7254/7291). Table 2-7 contains a listing of the instructor under training events.

Table 2-7.--Instructor Under Training (IUT) Training Events.

EVENT	GOAL	PAGE #
QUAL-500	Be designated as an OJTI Course Instructor	2-57
QUAL-501	Be designated as a Marine Enlisted Weapons Tactics Instructor	2-57

6. Operator Core Skills. Core skills are depicted in the following matrix and directly support the METL for each unit. Core skills shall be a determining factor in developing T&R training requirements. Special skills and training requirements must receive appropriate prioritization and emphasis based on training needs and the likelihood of those types of missions being assigned during operations.

Table 2-8.--Core Skills and Special Skills Matrix.

CORE SKILLS								SPECIAL SKILLS		
METL	FAM	SYS	SIM	MMT	OPS	CK	QUAL	OPS	DESG	QUAL
A		220, 221	331, 332		270- 275, 370- 372	280- 284, 380- 382	390	471	490- 497	500
B		221	331		371, 372, 274, 376	284, 381, 382		471	493, 494, 495, 497	
C	200, 201	224, 223, 225	230, 231, 333		374, 375		291	471	493, 496	501
D		224			372	382		471	493, 496	

CORE SKILLS								SPECIAL SKILLS		
METL	FAM	SYS	SIM	MMT	OPS	CK	QUAL	OPS	DESG	QUAL
E					374- 376			471, 472	496	
F								471	498	
G	200, 201	222- 226, 330	231	260, 261	373		290, 291, 391	470, 471	496	501
H		330						471		

203. UNIT TRAINING POLICIES

1. The unit's training program emphasizes qualifications and the overall combat readiness of the unit. Individual training serves as the building block for overall unit readiness. However, unit training will never be compromised for the training of a select, few individuals. Squadron and battalion commanding officers will ensure that this training philosophy is implemented. Unit training must predominate, and squadrons must tailor their training plans to ensure unit combat readiness.

2. The training of Marines to perform as an integral aviation unit in combat lies at the heart of the T&R program. Unit readiness and individual readiness are directly related. Individual training and the mastery of individual core skills serve as the building blocks for unit combat readiness. A Marine's ability to perform those critical skills required in combat is essential.

3. Commanders shall ensure that all tactical training is conducted to a MCCRES standard. The MCCRES, as outlined in MCO P3501.9, is the unit training standard, and all syllabus events shall be tailored to meet MCCRES requirements. Commanders at all levels are responsible for effective aviation training. The conduct of training in a professional manner consistent with Marine Corps standards cannot be over emphasized.

4. Commanders must be cognizant of the numerous factors affecting unit training on a daily basis. Factors which all commanders must address include, but are not limited to:

a. Efficiency. Time and resources expended are measurements of training efficiency. Commanders must ensure that all training increases combat readiness. Unit personnel shall thoroughly plan and effectively execute training to maximize the return on their time and effort.

b. Individual Differences. Commanders must recognize the differences inherent in each individual and should mold flexible training programs to accommodate those differences.

c. Decentralization of Training. The lowest echelon possible shall be responsible for conducting training. Each senior level of command must monitor subordinate commands to ensure safe and efficient training requirements.

5. Commanders shall provide personnel the opportunities to attend formal and operational level courses of instruction as required by this Manual. Attendance at all formal courses must enhance the warfighting capabilities of the unit.

6. Risk Management. Operational Risk Management (ORM) is a process to aid commanders in accomplishing their missions while protecting the force. Commanders, leaders, maintainers, planners and schedulers should integrate risk assessment in the decision making process and implement hazard controls to eliminate risk or reduce it to an acceptable level.

7. MACCS Integrated System Training. All elements of the MACCS shall maintain the capability to effectively function as part of an integrated airspace command and control system. In that large exercises may not always offer sufficient training opportunity for all crew members, and in many cases do not offer sufficient latitude to refine capability upon arrival, the MACCS should conduct MACCS Integrated System Training Exercises (MISTEX) on a regular basis to qualify units and personnel per their respective T&R syllabus. MISTEXs should focus on the establishment of necessary communications and datalinks between MACCS agencies, and incorporate sufficient simulation and Marine Simulation Event List (MSEL) items to exercise and analyze system integration, crew coordination, and critical information flow wherever possible. Tactical Digital Information Link (TADIL) capable agencies should conduct frequent "Link" training exercises to maintain proficiency.

204. MARINE AIR TRAFFIC CONTROLLER TRAINING PROGRESSION PHILOSOPHY

1. Marine Air Traffic Controller training is unique amongst other MACCS MOS training because of the controller's requirement to function in tactical and civilian ATC environments simultaneously, whether assigned to a Marine Air Traffic Control Detachment (MATCD) or a MCAS. The controller provides Marine aviation the requisite interface required to conduct wartime operations or peacetime training exercises, integrating seamlessly into the U.S. National Airspace System (NAS) or a sovereign nation's airspace. The extensive training and qualification requirements which controllers are required to meet, under both Federal Aviation Administration (FAA) and international regulations, ensures the ability of Marine aviation to operate safely and legally anywhere in the world.

2. Marine Air Traffic Controller training utilizes a building block approach. At the entry level school (100-level) the Marine is taught ATC regulations, procedures, and operating techniques. Basic skills required by the controller are taught using state of the art simulation and intensive classroom instruction. Upon completion of the MOS producing school, the controller possesses the same certification obtained by FAA controllers graduating from the National FAA Air Traffic Control School. This training enables the controller to understand and apply ATC rules and regulations, qualify and perform the functions of a Marine Air Traffic Controller in an MATCD or an MCAS.

3. In the 200-level training block, the controller applies the skills and knowledge obtained at the 100-level school by manning crew positions, primarily at an MCAS, under the direct supervision of qualified controllers in an OJT environment. The initial individual core skills are learned and mastered in this level. Basic ATC skills and techniques are learned through

a mix of live and simulated training tasks. Training progresses incrementally and includes introduction to the Marine Air Traffic Control Detachment (MATCD) equipment, the Marine Air Command and Control System (MACCS), the MATC Mobile Team (MMT) and Data Link Coordinator (DLC). This level culminates with the controller achieving Naval Air Training and Operating Procedures Standardization (NATOPS) certifications on junior ATC operating positions as a Tower Flight Data Controller/Tower Ground Controller and/or Radar Flight Data Controller/Radar Final Controller. At this point the controller is combat ready and fully prepared to fill a combat crew member position in a MATCD or a MMT.

4. In the 300-level training block, the controller progresses through the training tasks relating to the remaining core skills required to be qualified to man all combat crew member positions as identified in the MATCD core capabilities. The controller may continue training at a MCAS and achieve NATOPS certifications on senior operating positions, Tower Local Control and/or Radar Approach Control. The controller will begin to integrate acquired ATC skills into the MACCS, Joint Air Command and Control Systems, and international military and civilian command and control to include ATC architectures. During this period, training is focused on the expeditionary capabilities of the MATCD with additional qualification as an MMT Leader. Additional formal training will occur late in the 300-level through completion of the On the Job Trainer Instruction (OJTI), Advanced MATCALS Operators Course, and Advanced Radar Air Traffic Control Course (ARATCC). These courses, in combination with the completion of his core skills training, will prepare the controller to function as a trainer for controllers entering the 200- and 300-levels.

5. In the 400-level, the controller functions solely in managerial leadership positions as Tower or Radar Watch Supervisor, Branch and/or Watch Crew Chief, MATCD NCOIC, and MACS Operations Chief. As such, the controller assists facility officers, detachment commanders and operations officers in the planning and execution of all phases of garrison and expeditionary ATC services and the integration of this ability into the warfighting capability of Marine Corps aviation worldwide. They will require extensive knowledge and experience running the gamut of ATC and air command and control arenas. Formal training at the Joint Air Command and Control Course, the Multi-TADIL Advanced Joint Interoperability Course, Air Traffic Control Managers Course, Military Airspace Management Course, and Terminal Instrument Procedures Course will complete the knowledge base that enables the controller to be fully functional as an assistant planner in joint and combined operations and exercises involving the MACCS. Additionally, the controller will bring a broad base of experience to the Marine Corps ability to integrate seamlessly into the civil and military ATC architecture in the U.S. and internationally.

6. In the 500-level, the controller progresses toward designation as an On The Job Training Instructor (OJTI) Instructor and a Marine Enlisted Weapons and Tactics Instructor (MEWTI). At the completion of this level, the controller is capable of instructing junior controllers in all aspects of ATC, including both the garrison and field environment.

205. TRAINING PROGRESSION MODEL FOR ENLISTED AIR TRAFFIC CONTROLLERS

1. The Training Progression Model for the enlisted ATC is depicted in figure 2-1. This model depicts the **logical progression of qualifications** within a unit. The Combat Capable level is achieved at the completion of initial MOS

entry-level school. After completion of the Combat Capable level, unit personnel move to the Combat Ready level.

Enlisted Progression Model

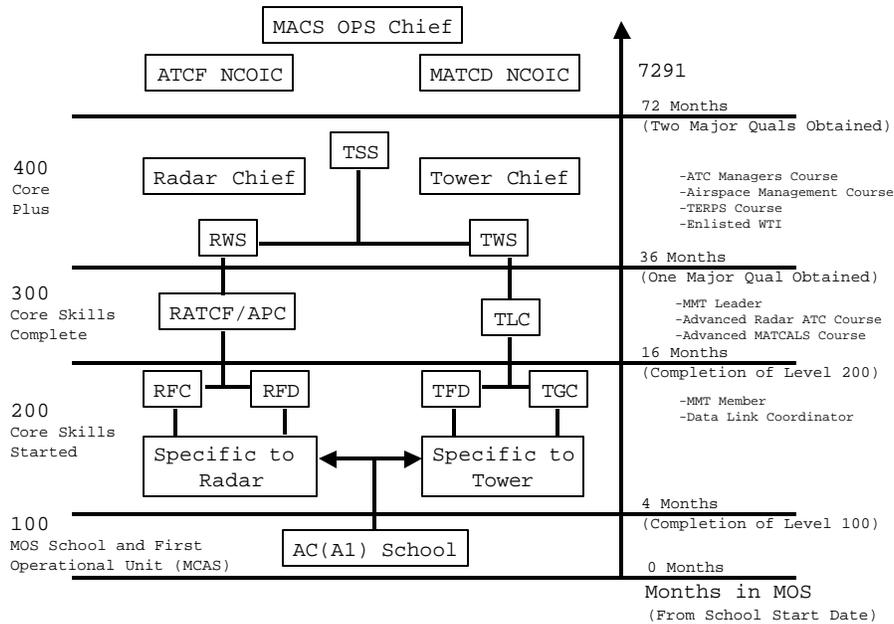


Figure 2-1.--Enlisted Air Traffic Controller Progression Model.

2. The Combat Ready level should take the controller who has completed initial MOS skills training and make them **proficient** in core competencies. With successful completion of the Combat Ready level, unit personnel move to the Combat Qualification level.
3. The Combat Qualification level will be that portion of the model that produces combat leaders and fully qualified crew members. The personnel that are being trained in the Combat Qualification level are those Marines a commanding officer deems capable of directing the actions of subordinates during wartime scenarios.
4. The Full Combat Qualification level will contain special skills and qualifications. These skills or qualifications are not prerequisite to Combat Qualification or the ability to function as combat leaders, but are those for which a certain number of trained individuals or crews must be maintained to accomplish special missions or tasks.
5. The training progression model provides training officers with a valuable tool to develop training plans. With a clear progression of qualifications delineated, and an emphasis on the qualification of Combat Capable and Combat Ready personnel, training officers have the ability to produce viable training plans. Units will use the model as a point of departure to generate weekly, monthly, quarterly and annual training plans.
7. This training progression philosophy applies to the Marine Corps Reserve Air Traffic Controller as well. However, not all training requirements will be achievable by Reserve Marines. Therefore, all applicable training tasks have been annotated with the symbol "Z" in the event header.

206. PROGRAMS OF INSTRUCTION (POI) FOR ENLISTED AIR TRAFFIC CONTROLLERS1. Basic or Transition Air Traffic Controller

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-16	AC(A1) Basic Air Traffic Control School, [Combat Capable]	NATTC

2. Refresher Air Traffic Controller

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
17 - 64	Combat Ready	MACS/MCAS
64 - 152	Combat Qualification	MACS/MCAS
152 - 312	Full Combat Qualification	MACS/MCAS

210. GROUND/ACADEMIC TRAINING

1. Academic training in table 2-9 shall be conducted for each phase/stage of the syllabus. The lectures are strongly encouraged to be incorporated as part of a sound training plan. Where indicated, standardized academic training materials exist and may be obtained from the activity listed as the sponsor.

Table 2-9.--Recommended T&R Lectures.

LECTURE CODE	LECTURE TITLE	SPONSOR
	200-Level: Combat Ready Training	
A-01*	MAGTF Organization	MCCES
A-02*	MACCS Organization	MCCES
A-03*	The Six Functions of Marine Aviation Control of Aircraft & Missiles Offensive Air Support Assault Support Electronic Warfare Aerial Reconnaissance Anti-Air Warfare	MAWTS-1
A-04*		MAWTS-1
A-05*		MAWTS-1
A-06*		MAWTS-1
A-07*		MAWTS-1
A-08*		MAWTS-1
A-09*	Air Tasking Order/Special Instructions	MCCES
A-10*	MACCS Training Management	Local MACG
A-11*	MACCS Reference Material	MCCES
A-12*	Local AOR Contingencies & OP PLANS	Local MACG
A-13*	ROE Overview	Local MACG
A-14*	MACCS Communications	MAWTS-1
A-15*	TBMCS Overview	MAWTS-1
A-16*	Data Link Symbology	USAADASCH, MARCORDET
A-17*	Manual Crosstell Procedures	USAADASCH, MARCORDET
A-18*	Encryption & Authentication Procedures	MCCES
A-19*	COMSEC & Crypto Handling	MCCES
A-20	Communications plans and orders	MAWTS-1 ASP

LECTURE CODE	LECTURE TITLE	SPONSOR
	300-Level: Combat Qualified Training	
B-01*	Missile and UAV Threat to the MAGTF	MAWTS-1
B-02*	Fixed Wing Threat to the MAGTF	MAWTS-1
B-03*	Rotary Wing Threat to the MAGTF	MAWTS-1
B-04*	REC Threat	MAWTS-1
B-05*	Armor Threat to the MAGTF	MAWTS-1
B-06*	AOR Specific Threat & OP PLANS	Local MACG
B-07*	MACCS Agencies	
B-08*	TACC	MAWTS-1
B-09*	TAOC	MAWTS-1
B-10*	DASC	MAWTS-1
B-11*	ATC Detachment	MAWTS-1
B-12*	LAAD Bn	MAWTS-1
B-13*	VMU	MAWTS-1
B-14*	MWCS	MAWTS-1
B-14*	AC2W-ISR	MAWTS-1
B-15*	Multi-TADIL Network	MAWTS-1
B-16*	USMC Aviation Ordnance	MCCES
B-17*	Phasing Control Ashore	MAWTS-1
B-18*	Airspace Planning/Management (Combat Airspace)	Local MACG
B-19*	Tanker Management	MAWTS-1
B-20*	Armed Reconnaissance	MAWTS-1
B-21*	UAV Overview	MAWTS-1
B-22*	Link Architecture & Procedures	Local MACG
B-23*	Introduction to Personnel Recovery	MAWTS-1
B-24*	NEO Execution	MAWTS-1
B-25*	Execution Checklist	MAWTS-1
B-26	Communications lines between ATC and other MACCS agencies	MAWTS-1 WTI *
B-27	Introduction to MMT	MAWTS-1 ASP
B-28	Introduction to TERPS	NATTC
	400-Level: Full Combat Qualified Training	
C-01*	Integrated Combat Airspace Command & Control (ICAC ²)	Local MACG MAWTS-1
C-02*	Joint Air Operations	MAWTS-1
C-03*	TBM and CM Defense	MAWTS-1
C-04*	JTAO Procedures	MCCES
C-05*	Law of War and ROE	MAWTS-1
C-06*	SIS Aircraft	MAWTS-1

(*) The lecture code is standardized throughout all MACCS related syllabi, and are used to link the ATRIMS software to a specific T&R event within this syllabus. Lecture Codes may not be listed sequentially.

2. External academic courses of instruction required to complete the syllabus are listed below:

<u>COURSE</u>	<u>ACTIVITY</u>
Air Traffic Controller Course	NATTC, FL
Marine Air Traffic Control & Landing System Advanced Operator Course	NATTC, FL
Advanced Radar Air Traffic Control Course	NATTC, FL
ATC Managers Course	NATTC, FL
Terminal Instrument Procedures Course	Keesler AFB
Military Airspace Management Course	Keesler AFB
Enlisted Weapons Tactics Instructor Course	MAWTS-1
Joint Aerospace Command and Control Course(JAC2C)	C2WS
Multi-TADIL Advanced Interoperability Course	JMTS

211. TRAINING REFERENCES

1. Tables 2-10 through 2-16 provide training references which shall be utilized to ensure safe and standardized training procedures, performance steps, grading criteria, and equipment operation.

Table 2-10.--FAA Training References.

FAA	
MANUAL/ORDER	TITLE
FAA 7110.65	Air Traffic Control Manual
FAA 7110.10	Flight Services
FAA 7210.3	Facility Operation and Administration
FAA 7400.8	Special Use Airspace
FAA 7220.1	Certification and Rating Procedures
FAA 7340.1	Contractions
FAR 65	Certification of Airmen Other Than Flight Crewmembers
FAR 91	General Operating and Flight Rules
	Aeronautical Information Manual (AIM)
	IFR Supplement
	VFR Supplement
	Low Altitude United States
	High Altitude United States
FAA Handbook OAP 8200.1	U.S. Standard Flight Inspection Manual
	Notices to Airmen (NOTAM)
AP1 A	Area Planning for North and South America
AP1 B	Military Training Routes for North and South America
	Local Sectional
DOC-4444/501	ICAO Rules of the Air and ATC Service
	Airfield Operations Manual (AOM)
	Facility Manual (FACMAN)
	Daily Flight Schedule
	RATCF DAIR Operator's Manual
	Facility Directives
	Letters of Agreement
	Facility Memorandums
	Facility Forms
	Pilot Controller Handbook (PCH)

Table 2-11.--Navy Training References.

NAVY	
MANUAL/ORDER	TITLE
SECNAVINST 5216.5C	Memorandum of Agreement
OPNAVINST 5510.1	Department of the Navy Information and Personnel Security Program Regulation
OPNAVINST 3770.2	Airspace Procedures Manual
OPNAVINST 3722.16	U.S. Standard Flight Inspection Manual
NAVAIR 00-80T-114	ATC Facilities Manual
NAVAIR 00-80T-115	Expeditionary Airfields
NAVAIR 51-50AAA-2	Airfield Markings

Table 2-12.--Marine Corps Training References.

MARINE CORPS	
MANUAL/ORDER	TITLE
MCDP 6	Command and Control
MCWP 3-2	Aviation Operations
MCWP 3-22	Anti-Air Warfare
MCWP 3-22.2	SEAD
MCWP 3-23	OAS
MCWP 3-24	Assault Operations
MCWP 3-25	Control of Aircraft and Missiles
MCWP 3-25A	Multi-service Procedures for JATC
MCWP 3-25B	Multi-Service Brevity Codes
MCWP 3-25C	Introduction to TADIL-J
MCWP 3-25D	Integrated Combat Airspace Command and Control
MCWP 3-25.3	MACCS Handbook
MCWP 3-25.4	TACC Handbook
MCWP 3-25.5	DASC Handbook
MCWP 3-25.7	TAOC Handbook
MCWP 3-25.8	MATCD Handbook
MCWP 3-25.9	MACCS Communications Handbook
MCWP 3-11.2	Marine Rifle Squad
MCWP 3-11.3	Scouting and Patrolling
MCWP 3-11.4	Helicopterborne Operations
MCWP 3-11.4A	Helicopter Insert/Extraction
MCWP 3-17	Engineer Operations
MCWP 3-31.5	Ship to Shore Movement
MCWP 3-33	Military Operations Other Than War (MOOTW)
MCRP 3-33A	Counter-Guerilla Operations
MCWP 3-33.2	Civil Disturbance
MCWP 3-33.6	Humanitarian Assistance Operations
MCWP 3-36	Command and Control Warfare
MCWP 3-36.1	Electronic Warfare
MCWP 3-37	MAGTF NBC Defense Handbook
MCWP 3-37A	NBC Field Handbook
MCWP 3-37.5	NBC Defense of Fixed Sites, Ports, and Airfields
MCWP 6-2	MAGTF C-2
MCWP 6-22	Communications and Information Systems
MCWP 6-22A	Talk II SINCGARS

MARINE CORPS	
MANUAL/ORDER	TITLE
MCRP 6-22D	Field Antenna Handbook
MCRP 3-02E	Individual Guide to Terrorism
MCWP 5-1	Marine Corps Planning Process
MCWP 5-11	MAGTF Aviation Planning
MCWP 5-11.1A	Aviation Planning Documents
MCO 1510.28A	Marine Air Traffic Control (ATC) and ATC Maintenance Personnel Training, Qualification, and Proficiency Records
MCO 3501.9B	Marine Corps Combat Readiness Evaluation System (MCCRES)
MCO 5600.20	Marine Corps War Fighting Publication System
ATO/ACO	Air Tasking Order/Air Control Order
CMS-1	Communications Security Material System Manual
ACP	Aviation Campaign Plan
SPINS	Special Instructions
	Marine Aviation Command and Control and Control System Information Flow Model dtd 30 Sep 1988

Table 2-13.--Maintenance Training References.

MAINTENANCE	
MANUAL/ORDER	TITLE
	MATCALC Controller Handbook
TM 2000 Series	HMMWV and Tactical Quiet Generator
TM 119-MA-OMI-010	Part II Expeditionary Control Tower Equipment Basic Course SA2257TSQ-120
	MATCALC System Operation Manual
	MATCALC Operator's Handbook

Table 2-14.--MAWTS-1 Training References.

MAWTS-1	
MANUAL/ORDER	TITLE
	MAWTS Course Catalog
	MAWTS-1 ASP
	MAWTS-1 SOP
	MAWTS-1 MACCS Reference Guide
	MMT SOP

Table 2-15.--MCI Training References.

MCI COURSES	
MCI	TITLE
25.30	VHF (FM) Field Radio Equipment
25.32	HF/UHF Radio Equipment
04.11	Introduction to Amphibious Embarkation
04.7	Fixed Wing Embarkation

Table 2-16.--Joint Multiservice and Allied Publications Training References.

JOINT MULTISERVICE AND ALLIED PUBS	
MANUAL/ORDER	TITLE
Joint Pub 1	Joint Warfare of the US Armed Forces
Joint Pub 1-02	DOD Dictionary of Military and Associated Terms, March 1994
Joint Pub 0-2	Unified Action Armed Forces
Joint Pub 3-0	Doctrine for Joint Operations
Joint Pub 3-01-2	Joint Doctrine for Theater Counter Air/Air Defense
Joint Pub 3-01-3	Air Defense from Overseas Land Areas
Joint Pub 3-01.5	Doctrine for Joint Theater Missile Defense
Joint Pub 3-52	Doctrine for Joint Airspace Control in a Combat Zone
Joint Pub 3-56.1	Command and Control for Joint Air Operations/Service Operations
Joint Pub 3-56-23	Air Control/Air Defense Procedures
Joint Pub 3-56.24	Tactical Command and Control Planning Guidance and Procedures for Joint Operations
Joint Pub 5-03.1	Joint Operations Planning and Execution System
Module 1	Introduction to the JTAO Interface, JTAO CBT Modules
Module 2	Introduction to TADIL Operations, JTAO CBT Modules
Module 4	Introduction to Naval Warfare, JTAO CBT Modules
Module 5	NTDS and ATDS, JTAO CBT Modules
Module 6	Ground Elements of the Theater Air Control System (TACS), JTAO CBT Modules
Module 7	Airborne Elements of the Air Control System (AEACS), CBT Modules
Module 8	Army Air Defense Command and Control System (AADCCS), CBT Modules
Module 9	Service and Joint Communications Systems in the JTAO Interface, JTAO CBT Modules
ACCI 13-10C	Air Operations Center
ACCR 55-44	Theater Air Control System Modular Control System
AFM 2-1	Tactical Air Operations, Counter Air, Close Air Support and Air Interdiction
FM 44-100	U.S. Army Air Defense Operations
FM 44-100-2	Air Defense Reference Handbook
FM 44-85	Patriot Battalion and Battery Operations
FM 44-63	FAADS/SHORAD Operations, Jane's Land Based Air Defense
FM 100-103	Army Airspace Command and Control in a Combat Zone
	TBMCS Operator/Technician Course Advance Sheets
	ADS Software User's Manual (SUM)
	Operator Familiarization Course Training Materials for the Advanced Planning System (APS)
	Air Operations Center, ACCI 13, 1 Feb 95
	Air Combat Command (ACC) C4I Systems Guide, Vol I, HQ ACC/SC, 24 Dec 1994
	A History of the Contingency Theater Automated Planning System (CTAPS), Part One, Background, HQ TAC, Jan 91
	Software User's Manual (SUM) for the Human-Machine-Interface (HMI) of the Theater Battle Management Core System (TBMCS)

JOINT MULTISERVICE AND ALLIED PUBS	
MANUAL/ORDER	TITLE
	Air Combat Command Computer Systems Squadron, Langley Air Force Base, VA 23665-2091
	ICAC2 Multi-service Procedures for Integrating Airspace Command and Control in the Combat Zone
ATP-40	Doctrine for Airspace Control in Times of Crisis and War

220. LIVE/SIMULATOR EVENT TRAINING1. Combat Capable Training

STAGE	EVENTS	HOURS	PERCENT
ACA1 SCHOOL NATTC PENSACOLA	1	580	60.0%

2. Combat Ready Training

STAGE	EVENTS	HOURS	PERCENT
FAMILIARIZATION	2	6.0	0.6%
SYSTEM	7	22.0	2.8%
SIMULATION	2	4.0	0.8%
MMT	2	14.0	0.9%
OPERATIONS	6	152.0	3.5%
CHECK	5	10.0	5.0%
QUALIFICATIONS	2	14.0	1.4%
COMBAT READY TOTALS:	26	222.0	15.0%

3. Combat Qualification Training

STAGE	EVENTS	HOURS	PERCENT
SIMULATION	4	12.0	2.0%
OPERATIONS	8	456.0	7.5%
CHECK	3	6.0	9.5%
QUALIFICATIONS	2	48.0	1.0%
COMBAT QUALIFICATION TOTALS:	17	522.0	20.0%

4. Full Combat Qualification Training

STAGE	EVENTS	HOURS	PERCENT
OPERATIONS	3	N/A	1.5%
DESIGNATION	9	160.0	3.5%
FULL COMBAT QUALIFICATION TOTALS:	12	160.0	5.0%

5. Instructor Qualification Training

STAGE	EVENTS	HOURS	PERCENT
QUAL	2	264.0	0.0%

230. LIVE/SIMULATOR EVENT PERFORMANCE REQUIREMENTS

1. General. The majority of the Enlisted Air Traffic Controller Syllabus is ground training which requires in-depth integration within the MACCS. Likewise, development of MAGTF training involving extensive integration with applicable elements of the MAGTF is mandatory in the development of a Fully Combat Qualified enlisted air traffic controller. Training not conducted in the live training environment shall be replaced with simulation where applicable as indicated in the condition code.

a. Live Training. Training event condition codes listed as L (live) in this syllabus designate training to be conducted without the aid of simulator devices.

b. Simulator Training. Training event condition codes listed as S (simulator), L/S (live preferred/simulator optional), and S/L (simulator preferred/live optional) in this syllabus designate training to be conducted in the simulator where applicable.

c. Reserve Training. Those portions of the syllabus which are required to be conducted by selected Marine Corps Reserve (SMCR) personnel will be indicated with a Z program of instruction code.

2. Minimum Performance Time for Syllabus "Write-Off"/Designations.

Personnel may receive credit for successful completion of any syllabus requirement (except qualifications) upon either a written, oral, or practical demonstration of proficiency, at the commanding officer's discretion. Completion of 70% of any syllabus requirement (except qualifications) may be "written-off" as complete at the discretion of the designated evaluator. Qualifications require a completed performance evaluation, and the designation signed by the commanding officer.

3. Evaluation of Training. Evaluation of those portions of the syllabus which are academic in nature will be conducted by either written/oral examination or a combination of the two means. Operational and system related subjects will be evaluated by practical application means whenever possible. Performance evaluation to qualify for mission qualifications and designations will be conducted per T&R Manual, Administrative, and the standardized evaluation forms located in the Appendix C.

231. COMBAT CAPABLE TRAINING (7251)

1. Purpose. To develop basic knowledge of ATC rules, procedures and operations. Completion of this formal course of instruction, AC(A1) School at Naval Air Technical Training Center (NATTC) Pensacola, Florida is mandatory to satisfy this requirement. The 100-level (Combat Capable training) does not require refly. Upon completion of this portion of the training syllabus the individual is 60% trained in the MATC operations and is Combat Capable.

a. Prerequisite

- Appropriate Medical certificate. - GT 105.
- 18 years old upon completion of Course. - US Citizenship.

b. Academic Training: Formal school environment.

c. Classroom and Simulator Event Training (27 Events, 580 Hours)

FAM-100 34.0

Goal. Introduce weather as applied to ATC.

Requirement. Describe aviation weather to include:

- (1) Basic weather characteristics.
- (2) Weather hazards.
- (3) Aviation weather observations.
- (4) Aviation weather forecasts.
- (5) Weather advisories.
- (6) Weather observing programs.
- (7) Aviation sequence reports.

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. AC 00-6A, AC 00-45C, and NAVMETOCCOMINST 3141.2.

FAM-101 24.0

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

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65, NAVAIR 00-80V-49, and Airman's Information Manual (AIM).

FAM-102 3.0

Goal. Introduce Special Use Airspace (SUA) used by the military.

Requirement. Describe SUA and controller responsibilities within each.

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65, and AIM.

FAM-103 23.0

Goal. Introduce NAVAIDS.

Requirement. Describe basic radio theory and NAVAIDS.

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65, NAVAIR 00-80T-112, Navy Electricity and Electronics training Series (NEETS), Module 10, and AIM.

FAM-104 24.0

Goal. Introduce charts and publications used in ATC.

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. General Planning (GP) section of the Department of Defense (DOD) FLIP program.

FAM-105 8.0

Goal. Introduce communications as applied in ATC.

Requirement. Describe communication procedures used in ATC.

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65 and AIM.

FAM-106 18.0

Goal. Introduce airport design and ATC equipment.

Requirement. Describe airport design and ATC equipment.

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. Advisory Circular 150/5070-6A, NAVFAC P-80, NAVAIR 51-50AAA-2, NAVAIR 00-80T-114, NAVAIR 00-80R-14, and AIM.

FAM-107 24.0

Goal. Introduce general ATC procedures.

Requirement. Describe general ATC procedures to include:

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65 and FAR Part 91.

FAM-108 32.0

Goal. Introduce ATC terminal procedures.

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65.

FAM-109 10.0

Goal. Introduce emergencies and special handling.

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65.

FAM-110 16.0

Goal. Introduce non-radar procedures.

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65.

FAM-111 16.0

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

Requirement. Conduct a thorough review of all information taught in FAM-100 through FAM-110.

Performance Standards. Pass the AWT with a minimum passing score of 70%.

Reference. FAR Part 65.

FAM-112 18.0

Goal. Control tower indoctrination.

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65, Navy Millington Facility Manual, and NAVAIR 00-80T-114.

FAM-113 10.0

Goal. Introduce basic radar knowledge.

Requirement. Describe the different operating positions in a radar facility, define basic radar theory, and identify associated equipment.

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. NAVAIR 00-80T-114.

FAM-114 26.0

Goal. Introduce basic radar services provided by ATC.

Requirement. Describe basic radar services and procedures used by ATC.

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65.

FAM-115 14.0

Goal. Introduce Airport Surveillance Radar (ASR).

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65 and Navy Millington Facility Manual.

FAM-116 12.0

Goal. Introduce Precision Approach Radar (PAR).

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65 and Navy Millington Facility Manual.

FAM-117 22.0

Goal. Introduce arrival control.

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

Performance Standards. Pass a written test with a minimum passing score of 70%.

Reference. FAA 7110.65 and Navy Millington Facility Manual.

FAM-118

4.0

Goal. Introduce the Marine Air Traffic Control and Landing System (MATCALs).

Requirement. Describe the components and basic operation of the MATCALs, to include:

- (1) AN/TPS-73 Air Traffic Control Subsystem (ATCS).
- (2) AN/TPN-22 Automatic Landing System (ALS).
- (3) AN/TSQ-131 Control and Communication Subsystem (CCS).

Performance Standards. Execute the following functions:

- (1) Load FOC software into MMD via Magnetic Tape Unit (MTU).
- (2) Load FOC software into MMD via Serial Data Bus (SDB).
- (3) Set up an MMD for surveillance usage (ADC).
- (4) Set up an MMD for a Final Controller (FC) Trainee.
- (5) Set up a Final Control (FC) simulation scenario.
- (6) Set up a Arrival Control (ADC) simulation scenario.

Reference. MATCALs Standard Operations Manual.

SYS-120

4.0

Goal. Introduce the CCS equipment.

Requirement. Identify and describe the equipment found in the CCS, to include:

- (1) Processor Display Set (PDS).
- (2) Cartridge Magnetic Tape Unit (CMTU).
- (3) Line Printer.
- (4) Wind indicator.
- (5) TADIL-B modem.
- (6) Digitizer Switching Set (DSS).
- (7) Control and Distribution Set (CDS).
- (8) Radios.
- (9) Intercom.
- (10) Telephones.
- (11) TADIL-C.
- (12) TADIL-B.

Performance Standards. The trainee will identify equipment listed above by visual sight with a minimum 70% accuracy rate.

Prerequisite. FAM-118.

Reference. MATCAL Standard Operations Manual.

SIM-130 32.0

Goal. Introduce basic tower operations.

Requirement. Observe and begin to apply basic tower operations in a Static Lab environment.

Performance Standards. Utilizing proper phraseology and tower procedures, the trainee will demonstrate the proficiency to progress to the Tower Operator Training System (TOTS).

Prerequisite. FAM-112.

SIM-131 76.0

Goal. Perform as a control tower operator.

Requirement. Using the 15G32 Tower Operator Training System (TOTS), perform as the following:

- (1) Flight Data Operator in accordance with FAA 7110.65 and applicable instructions while observing all safety precautions.
- (2) Ground Control Operator in accordance with FAA 7110.65 and applicable instructions while observing all safety precautions.
- (3) Local Control Operator in accordance with FAA 7110.65 and applicable instructions while observing all safety precautions.

Performance Standards. Pass a performance test with a minimum passing score of 70% on each operating position.

Prerequisite. SIM-130.

SIM-132 34.0

Goal. Perform as an ASR Final Controller.

Requirement. Utilizing the 15G31 voice-recognition training device, perform the duties of an ASR Final Controller in accordance with FAA 7110.65 and applicable instructions while observing all safety precautions.

Performance Standards. Pass a performance test with a minimum passing score of 70%.

Prerequisite. FAM-115.

SIM-133 34.0

Goal. Perform as a PAR Final Controller.

Requirement. Utilizing the 15G31 voice-recognition training device, perform the duties of a PAR Final Controller in

accordance with FAA 7110.65 and applicable instructions while observing all safety precautions.

Performance Standards. Pass a performance test with a minimum passing score of 70%.

Prerequisite. FAM-116.

SIM-134 16.0

Goal. Identify and vector an aircraft.

Requirement. Utilizing the 15G31 voice-recognition training device, identify and vector an aircraft through a series of corridors.

Performance Standards. An aircraft shall be vectored from its initial position to the approach gate without touching the sides of the corridors or the airspace boundary.

Prerequisite. FAM-117.

SIM-135 37.0

Goal. Perform as an Arrival Controller.

Requirement. Utilizing the 15G31 voice-recognition training device, perform the duties of an Arrival Controller in accordance with FAA 7110.65 and applicable instructions while observing all safety precautions.

Performance Standards. Pass a performance test with a minimum passing score of 70%.

Prerequisite. FAM-117.

SIM-136 9.0

Goal. Perform as a MATCALs basic equipment operator.

Requirement. Perform the functions of a MATCALs basic equipment operator while operating in all modes of operation, while observing safety precautions to include:

- (1) Arrival departure Control (ADC) Mode.
- (2) Final Control (FC) Mode.
- (3) Training Modes.

Performance Standards. Pass a performance test with a minimum passing score of 70%.

Prerequisite. SYS-120.

232. COMBAT READY TRAINING (7257/7253)

1. Purpose. To develop proficiency in ATC tower and radar operations. Upon completion of this portion of the training syllabus, the controller is 75% trained in MATC operations and is Combat Ready. Syllabus requirements are designated as Familiarization (FAM), System (SYS), Simulation (SIM), MATC Mobile Team (MMT), Operations (OPS), Check (CK), and Qualification (QUAL).

a. Prerequisite. Successfully complete the 100-level.

b. Academic Training. In addition to MAWTS ASP lessons located in Table 2-7, some events require the controller to be familiar with knowledge syllabus references located in Appendix B. All knowledge syllabus events must be covered in an oral or written exam. The minimum passing score is 80%.

c. Live and Simulator Event Training (26 Events, 222 Hours)

2. Familiarization Training (2 Events, 6 Hours)

FAM-200 2.0 Z L/S

Goal. Introduce two-way communications with MACCS agencies.

Requirement. In a classroom setting, field environment, or during a simulated exercise, using appropriate communications equipment: relay aircraft launch and recovery information as necessary, complete a communication transfer/handover of an aircraft to/from TAOC or DASC.

Performance Standards. The controller will establish a communication link with at least one receiving unit utilizing either voice or TADIL and complete the requirement.

Prerequisite. KFAM-205 and KFAM-301.

Reference. MCWP 3-25.3 and MCO 3501.9B.

FAM-201 4.0 Z L

Goal. Observe MACCS agencies in an exercise.

Requirement. In garrison or a field exercise, observe MACCS agencies and become familiar with major operating positions, communication links, and integration requirements.

Performance Standards. Identify the following with a minimum of a 70% accuracy rate.

- (1) Major operating positions of the:
 - (a) TACC.
 - (b) TAOC.
 - (c) DASC.
 - (d) LAAD.
- (2) Identify the types of communication available at the:
 - (a) TACC.
 - (b) TAOC.

- (c) DASC.
- (d) LAAD.

Prerequisite. Lectures A-02, B-07 through B-13, KFAM-205, KFAM-303, and KFAM-304.

Reference. MAWTS-1 ASP and MCO 3501.9B.

External Syllabus Support. MACCS agencies and associated equipment.

3. Systems Training (7 Events, 22 Hours)

SYS-220 2.0 Z L/S

Goal. Operate fixed control tower equipment.

Requirement. Properly utilize all equipment in a tower.

Performance Standards. Operate the following equipment:

- (1) Transmitter/receiver control panel(s).
- (2) Backup/emergency transmitter/receiver location and controls.
- (3) Airfield lighting console/computer.
- (4) Intercom units.
- (5) Telephones.
- (6) Altimeter.
- (7) Aldis lamp.
- (8) Wind instruments.
- (9) Clocks.
- (10) NAVAID monitors.
- (11) Console and cab lighting.
- (12) Cooling and heating controls.
- (13) P. A. system.
- (14) Emergency alert system.
- (15) Fire extinguishers.
- (16) Emergency power cutoff.
- (17) Traffic tabulators.
- (18) FDEP/FDIO.
- (19) BRANDS/BRITE.
- (20) Personal Computer.
- (21) Weather reporting monitor.

Prerequisite. KTWR-210.

Reference. Local publications and MCO 3501.9B.

SYS-221 2.0 Z L/S

Goal. Operate fixed radar equipment.

Requirement. Properly utilize all equipment in a radar facility.

Performance Standards. Operate the following radar equipment:

- (1) Search Radar.

- (2) Precision Radar.
- (3) Transmitter/receiver control panel(s).
- (4) Backup/emergency transmitter/receiver location and controls.
- (5) Intercom units.
- (6) Telephones.
- (7) Altimeter.
- (8) Wind instruments.
- (9) Clocks.
- (10) NAVAID monitors.
- (11) Console lighting.
- (12) Cooling and heating controls.
- (13) Emergency alert system.
- (14) Fire extinguishers.
- (15) Emergency power cutoff.
- (16) FDEP/FDIO.
- (17) Personal Computer.
- (18) Weather reporting monitor.
- (19) VISCOM.
- (20) Simulator.

Prerequisite. KRDR-220.

Reference. Local publications and MCO 3501.9B.

SYS-222

2.0 Z L/S

Goal. Operate the Expeditionary Control Tower (AN/TSQ-120) and associated equipment.

Requirement. Properly utilize all equipment in the AN/TSQ-120.

Performance Standards. Locate and operate the following equipment:

- (1) Power distribution panel.
- (2) Internal and external lights.
- (3) Aldis lamp.
- (4) Overhead speakers and adjustment knobs.
- (5) Flare gun assembly and firing switch.
- (6) Digital clock.
- (7) Thermostat.
- (8) Convert barometric pressure reading to altimeter setting.
- (9) Wind direction and speed indicator operation.
- (10) TELCO (intercom/land line).
- (11) VHF and UHF tunable radios.
- (12) Radio selector buttons.
- (13) Speaker selector switch.
- (14) ATIS.
- (15) Microphone and headset/handset jacks.
- (16) Crash alarm.
- (17) Fire detector.
- (18) Operator Control Unit (OCU).

Prerequisite. KFAM-206.

Reference. Part II Expeditionary Control Tower Equipment Basic Course, Technical Manual EEE 119-MA-OMI-010/SA2257TSQ-120, and MCO 3501.9B.

SYS-223 2.0 Z L/S

Goal. Operate the Remote Landing Site Tower (AN/TSQ-216) and associated equipment.

Requirement. Properly utilize all equipment in the AN/TSQ-216.

Performance Standards. Locate and operate the following equipment:

- (1) Power distribution panel.
- (2) Internal and external lights.
- (3) Aldis lamp (IR and visible light).
- (4) Flare gun.
- (5) Digital clock.
- (6) Thermostat.
- (7) Convert barometric pressure reading to altimeter setting.
- (8) Wind direction and speed indicator operation.
- (9) TELCO (intercom/land line).
- (10) VHF, UHF and HF tunable radios.
- (11) Radio selector buttons.
- (12) Speaker selector switch.
- (13) ATIS.
- (14) Microphone and headset/handset jacks.
- (15) Crash alarm.
- (16) Fire detector.
- (17) Operator's Control Unit (OCU).
- (18) Antenna construction.
- (19) Generator.

Prerequisite. KFAM-206.

Reference. RLST TM.

SYS-224 2.0 Z L/S

Goal. Configure the Control and Communications (AN/TSQ-131) and associated equipment for basic operation.

Requirement. Properly utilize all equipment in the AN/TSQ-131.

Performance Standards. Execute the following functions:

- (1) Operate the Operator Control Unit (OCU).
- (2) Set up communications for a final approach.
- (3) Program Multi-Mode Display (MMD) for elevation/azimuth.
- (4) Load FOC software into MMD via Magnetic Tape Unit (MTU).
- (5) Load FOC software into MMD via Serial Data Bus (SDB).
- (6) Set up an MMD for surveillance usage (ADC).
- (7) Set up an MMD for a Final Controller (FC) Trainee.
- (8) Set up a Final Control (FC) simulation scenario.

- (9) Establish and exit a TADIL-B circuit.
- (10) Emergency circuit exit TADIL-B.
- (11) Use of filters against TADIL-B.
- (12) Build maps.

Prerequisite. KFAM-206, KDLC-263, and KDLC-264.

Reference. MATCALs Controller Handbook and MCO 3501.9B.

SYS-225 6.0 Z L

Goal. Operate communications equipment in secure mode and frequency agile mode (as applicable).

Requirement. In a garrison or field environment, communicate with other agencies using the secure mode of organic radios.

Performance Standards. Demonstrate use of the following:

- (1) AN/GRC-171 (V) (Tower).
- (2) AN/GRC-171 (V) (TADIL-C).
- (3) AN/GRC-211.
- (4) AN/URC-94 (V).
- (5) AN/VRC-82.
- (6) KG-84C.
- (7) KY-58,99.
- (8) KIR-1C.
- (9) KY-75.
- (10) KYK-13.
- (11) KOI-18.
- (12) ARC-210.
- (13) CYZ-10.

Prerequisite. Lecture A-19 and KFAM-209.

Reference. MCI 25.25, MAWTS-1 ASP, and MCO 3501.9B.

SYS-226 6.0 Z L

Goal. Construct a field expedient antenna.

Requirement. Using necessary materials, construct a field expedient antenna for communication.

Performance Standards. Establish two-way communications using organic VHF/HF radios.

Reference. MCI 25.15, MCI 25.20, MCWP 6-22, and MCO 3501.9B.

External Syllabus Support. Field radio(s), antenna construction materials.

4. Simulation Training (2 Events, 4 Hours)

SIM-230 2.0 Z S

Goal. Control precision/surveillance approaches using the simulation mode of the AN/TSQ-131.

Requirement. Utilize the AN/TSQ-131 equipment under the supervision of an OJTI.

Performance Standards. Control 20 simulated approaches using the following RFC modes of the MATCALs:

- (1) Simulated Mode-3 final approach.
- (2) Simulated Mode-2 final approach.
- (3) Simulated Mode-2 final using track update menu.
- (4) Simulated Mode II, ACLS, TADIL-C.
- (5) Simulated emergencies and unusual circumstances incorporated into all of the above simulations.

Prerequisite. SYS-224 and KFAM-206

Reference. MATCALs System Operation Manual, MATCALs Controller Handbook, and MCO 3501.9B.

SIM-231 2.0 Z S

Goal. Encode and decode messages.

Requirement. Given an ACEOI, encode and decode messages and exchange coded alpha or numeric characters, to authenticate radio communications.

Performance Standards. Perform proper authentication of radio communication.

Prerequisite. Lecture A-18 and KFAM-202.

Reference. MAWTS-1 ASP, AKVH 593, and MCO 3501.9B.

5. MATC Mobile Team Training (2 Events, 14 Hours)

MMT-260 6.0 Z L

Goal. Operate and use MMT radios and equipment.

Requirement. Demonstrate the use and operation of radios and equipment in both clear, secure, and frequency agile modes.

Performance Standards. Operate the following equipment:

- (1) AN/PRC-119 FM.
- (2) AN/PRC-104 HF.
- (3) AN/PRC-113 UHF/VHF (AM).
- (4) AN/PRC-117F.
- (5) AN/PRC-138.
- (6) CYZ-10.
- (7) KY-99.
- (8) AN/PVS-5/7 Night Vision Devices.

- (9) VS-17 Marker Panels.
- (10) ACR L-32RCL Field Marker Lights.
- (11) AN/GRA-39.
- (12) AN/TPN-30A Marine Remote Area Approach & Landing System (MRAALS).
- (13) MEP-15 Generator.
- (14) MEP-531.
- (15) AN/PSN-11 Precision Lightweight Global Positioning System Receiver (PLGR).
- (16) AN/PPN-19 Portable Radar Beacon.

Prerequisite. Lectures A-14, A-19, B-27, and KFAM-209.

Reference. MAWTS-1 ASP, MMT SOP, Developmental Bulletin 1-83, RLST TM, and MCO 3501.9B.

MMT-261 8.0 Z L

Goal. Perform as an MMT member.

Requirement. During an operation or training exercise, perform as an MMT member utilizing required equipment, while under the supervision of a qualified MMT Leader.

Performance Standards. Demonstrate the following:

- (1) Equipment readiness.
- (2) MMT and aircrew briefings.
- (3) Site set up and tear down.
- (4) Insertion and extraction.

Prerequisite. MMT-260, and KFAM-207.

Reference. MCI 25.30, MCI 25.32, AMCR 55-60, NWP 55-9 ASH, DB 1-83, and MCO 3501.9B.

External Syllabus Support. TLZ lighting and marking equipment.

6. Operations Training (6 Events, 152 Hours)

OPS-270 30.0 Z L

Goal. Perform the duties of a Tower Flight Data Controller.

Requirement. In a control tower, under direct supervision of an OJTI, perform the duties and responsibilities of a Tower Flight Data Controller.

Performance Standards. Demonstrate the proficiency required to be recommended for qualification as a Tower Flight Data controller.

Prerequisite. SYS-220, KFAM 200 through KFAM-204, KTWR-211, and all KTFD knowledge events.

Reference

NAVAIR 00-80T-114

- Ch 4 Naval Certification Procedures.
- Ch 6 General(Tower Operations).
- Ch 8 Training, Standardization, and Air Traffic Controller Performance Evaluations.
- Appendix G Air Traffic Control Specialist Mishap Statement.
- Appendix I Minimum Altitude Vectoring Chart.
- Appendix J Certification, Rating, and Quality Assurance Program.

Local publications and MCO 3501.9B.

OPS-27130.0 Z LGoal. Perform the duties of a Clearance Delivery Controller.Requirement. While under direct supervision of an OJTI, perform the duties and responsibilities of Clearance Delivery Controller.Performance Standards. Demonstrate the proficiency required to be recommended for qualification as a Clearance Delivery controller.Prerequisite. SYS-220, KTWR-211, and TFD-241.Reference

NAVAIR 00-80T-114

- Ch 4 Naval Certification Procedures.
- Ch 6 General (Tower Operations).
- Ch 8 Training, Standardization, and Air Traffic Controller Performance Evaluations.
- Appendix G ATC Specialist Mishap Statement.
- Appendix I Minimum Altitude Vectoring Chart.
- Appendix J Certification, Rating, and Quality Assurance Program.

Local publications and MCO 3501.9B.

OPS-27230.0 Z LGoal. Perform the duties of a Tower Ground Controller.Requirement. In a control tower, under direct supervision of an OJTI, perform the duties and responsibilities of a Tower Ground Controller.Performance Standards. Demonstrate the proficiency required to be recommended for qualification as a Tower Ground Controller.Prerequisite. SYS-220, KFAM-200 through KFAM-204, and all KTGC knowledge events.Reference

NAVAIR 00-80T-114

- Ch 4 Naval Certification Procedures.

Ch 6 General (Tower Operations).
 Ch 8 Training, Standardization, and Air Traffic
 Controller Performance Evaluations.
 Appendix G ATC Specialist Mishap Statement.
 Appendix I Minimum Altitude Vectoring Chart.
 Appendix J Certification, Rating, and Quality Assurance
 Program.

Local publications and MCO 3501.

OPS-273 30.0 Z L

Goal. Perform the duties of a Radar Flight Data Controller.

Requirement. In a radar environment, under direct supervision of an OJTI, perform the duties and responsibilities of a Radar Flight Data Controller.

Performance Standards. Demonstrate the proficiency required to be recommended for qualification as a Radar Flight Data Controller.

Prerequisite. SYS-221, KFAM-200 through KFAM-204, KRDR-303, and all KRFD knowledge events.

Reference

NAVAIR 00-80T-114

Ch 4 Naval Certification Procedures.
 Ch 7 General (Radar Operations).
 Ch 8 Training, Standardization, and Air Traffic
 Controller Performance Evaluations.
 Appendix G ATC Specialist Mishap Statement.
 Appendix I Minimum Altitude Vectoring Chart.
 Appendix J Certification, Rating, and Quality Assurance
 Program.

Local publications and MCO 3501.9B.

OPS-274 30.0 Z L

Goal. Perform the duties of a Radar Final Controller.

Requirement. In a radar environment, under direct supervision of an OJTI, perform the duties and responsibilities of a Radar Final Controller.

Performance Standards. Demonstrate the proficiency required to be recommended for qualification as a Radar Final Controller.

Prerequisite. SYS-221, KFAM-200 through KFAM-204, and all KRFC knowledge events.

Reference

NAVAIR 00-80T-114

Ch 4 Naval Certification Procedures.
 Ch 7 General (Radar Operations).

Ch 8 Training, Standardization, and Air Traffic Controller Performance Evaluations.
 Appendix G ATC Specialist Mishap Statement.
 Appendix I Minimum Altitude Vectoring Chart.
 Appendix J Certification, Rating, and Quality Assurance Program.

Local publications and MCO 3501.9B.

OPS-275 2.0 Z L/S

Goal. Conduct launches and recoveries in EMCON conditions.

Requirement. In a garrison or field environment, conduct EMCON launches and recoveries.

Performance Standards. Demonstrate usage of the following:

- (1) Prowords and brevity codes.
- (2) Light gun signals.

Prerequisite. KTGC-243.

Reference. Joint Pub 1-02 and MCO 3501.9B.

7. Check Events (CK) (5 Events, 10 Hours)

CK-280 2.0 Z L E

Goal. Qualify as a Tower Flight Data Controller.

Requirement. In a garrison or field environment, under direct supervision and in compliance with established NATOPS evaluation criteria, apply knowledge and conduct ATC procedures in a safe, orderly, and expeditious manner at the Tower Flight Data position.

Performance Standards. Pass an OJT examination demonstrating knowledge and proficiency while performing the following as a Tower Flight Data Controller (as applicable):

- (1) Receive and relay aircraft movement data.
- (2) Operate associated communications equipment.
- (3) Prepare and post flight progress strips.
- (4) Operate ATIS equipment.
- (5) Operate FDEP/FDIO equipment.
- (6) Monitor NAVAID alarm systems.
- (7) Obtain, post, and relay ATC clearances and advisories.
- (8) Other duties as assigned by the Tower Watch Supervisor.
- (9) Other duties as outlined in local Facility Manual.

Prerequisite. OPS-270.

Reference. NAVAIR 00-80T-114, local publications, and MCO 3501.9B.

CK-2812.0 Z L EGoal. Qualify as a Clearance Delivery Controller.Requirement. In a garrison or field environment, under direct supervision and in compliance with established NATOPS evaluation criteria, apply knowledge and conduct ATC procedures in a safe, orderly, and expeditious manner on the Clearance Delivery position.Performance Standards. Pass an OJT examination demonstrating knowledge and proficiency while performing the following as a Clearance Delivery Controller (as applicable):

- (1) Receive and relay aircraft movement data.
- (2) Operate associated communications equipment.
- (3) Prepare and post flight progress strips.
- (4) Operate FDEP/FDIO equipment.
- (5) Obtain, post, and relay ATC clearances and advisories.
- (6) Other duties as assigned by the Tower or Radar Watch Supervisor.
- (7) Other duties as outlined in local Facility Manual.

Prerequisite. OPS-271.Reference. NAVAIR 00-80T-114, Facility Manual, and MCO 3501.9B.CK-2822.0 Z L EGoal. Qualify as a Tower Ground Controller.Requirement. In a garrison or field environment, under direct supervision and in compliance with established NATOPS evaluation criteria, apply knowledge and conduct ATC procedures in a safe, orderly, and expeditious manner at the Tower Ground Control position.Performance Standards. Pass an OJT examination demonstrating knowledge and proficiency while performing the following as a Tower Ground Controller (as applicable):

- (1) Formulate and issue ground movement clearances to aircraft and vehicles operating on the airfield.
- (2) Transmit current weather and field conditions, as required.
- (3) Other duties as assigned by the Tower Watch Supervisor.
- (4) Other duties as outlined in local Facility Manual.

Prerequisite. OPS-272.Reference. NAVAIR 00-80T-114, Facility Manual, and MCO 3501.9B.CK-2832.0 Z L EGoal. Qualify as a Radar Flight Data Controller.

Requirement. In a garrison or field environment, under direct supervision and in compliance with established NATOPS evaluation criteria, apply knowledge and conduct ATC procedures in a safe, orderly, and expeditious manner on the Radar Flight Data position.

Performance Standards. Pass an OJT examination demonstrating knowledge and proficiency while performing the following as a Radar Flight Data Controller (as applicable):

- (1) Operating communications equipment associated with the Radar Flight Data position.
- (2) Receive and relay aircraft movement data.
- (3) Prepare and post flight progress strips.
- (4) Operate ATIS equipment.
- (5) Operate FDEP/FDIO equipment.
- (6) Monitor NAVAID alarm systems.
- (7) Obtain, post, and relay ATC clearances and advisories.
- (8) Other duties as assigned by the Radar Watch Supervisor.
- (9) Other duties as outlined in local Facility Manual.

Prerequisite. OPS-273.

Reference. NAVAIR 00-80T-114, Facility Manual, and MCO 3501.9B.

CK-284

2.0 Z L E

Goal. Qualify as a Radar Final Controller.

Requirement. In a garrison or field environment, under direct supervision and in compliance with established NATOPS evaluation criteria, apply knowledge and conduct ATC procedures in a safe, orderly, and expeditious manner on the Radar Final Controller position.

Performance Standards. Pass an OJT examination demonstrating knowledge and proficiency while performing as a Radar Final Controller (as applicable):

- (1) Provide instructions necessary for an aircraft to conduct an ASR/PAR/PALS approach.
- (2) When required, monitor approaches as specified in FAA 7110.65.
- (3) Other duties as assigned by the Radar Watch Supervisor.
- (4) Other duties as outlined in local Facility Manual.

Prerequisite. OPS-274.

Reference. FAA 7110.65, NAVAIR 00-80T-114, Facility Manual, and MCO 3501.9B.

8. Qualification Training (2 Events, 14 Hours)

QUAL-290

8.0 Z L E

Goal. Qualify as an MMT member.

Requirement. During an operation or a field exercise, demonstrate proficiency as an MMT member.

Performance Standards. Perform the following to include delegated duties in:

- (1) Planning.
- (2) Personnel and equipment readiness.
- (3) MMT and aircrew briefing.
- (4) Site set up and tear down.
- (5) Insertion and extraction.

Prerequisite. MMT-260, MMT-261, CK-280, CK-282 or CK-283, and CK-284.

Reference. AFI 13-217 and MCO 3501.9B.

QUAL-291 6.0 Z L/S E

Goal. Qualify as a Data Link Coordinator in compliance with established evaluation criteria.

Requirement. During an operation or a training exercise, establish, operate, and exit MATCALs TADIL-B and -C links.

Performance Standards

- (1) Track Management.
- (2) Emergency circuit exit TADIL-B.
- (3) Mode II, ACLS, TADIL-C.

Prerequisite. KDLC-263, KDLC-264, and SYS-224.

Reference. JCS PUB 10, IDS AND IDH, JCS PUB 12, VOL IV, PARTS 1-4, OPNAVINST C3510.14, JTAO Procedural Handbook, C3 Information Flow Model Analysis, MCO 3501.9B, TM 2000 Series, and CMS-1.

External Syllabus Support. Operational TACC and/or TAOC equipment (TADIL-B) NAWCAD MTT.

233. COMBAT QUALIFICATION TRAINING (7252/7254)

1. Purpose. To develop advanced proficiency in ATC tower and radar operations. Upon completion of this portion of the training syllabus, the controller is 95% trained in ATC tower and radar operations and is Combat Qualified. Syllabus requirements are designated as Simulation (SIM), Operations (OPS), Check (CK), and Qualification (QUAL).

a. Prerequisite. Complete the 200-level of this syllabus.

b. Academic Training. In addition to MAWTS ASP lessons located in table 2-7, some events require the controller to be familiar with knowledge syllabus references located in Appendix B. All knowledge syllabus events must be covered by an oral or written test. Minimum passing score is 80%.

c. Live and Simulator Event Training (17 Events, 522 Hours)2. Simulation Training (4 Events, 12 Hours)SIM-330 2.0 Z S

Goal. Conduct ATC operations in a Nuclear, Biological, and Chemical (NBC) environment.

Requirement. In a simulated NBC environment utilizing ATC detachment equipment and in MOPP level IV, perform air traffic control functions.

Performance Standards. While in MOPP IV, provide for the safe, orderly, and expeditious movement of air traffic, in either a radar or tower environment.

Reference. MCWP 3-37, MCWP 3-37A, MCWP 3-37.5, MCI 57.6, and MCO 3501.9B.

External Syllabus Support. Voice amplifier.

SIM-331 2.0 Z S

Goal. Control in an Arrival/Departure Control (ADC) environment using the simulation mode of the AN/TSQ-131.

Requirement. Utilizing the AN/TSQ-131 equipment under the supervision of an OJTI perform the functions of an ADC.

Performance Standards. Must successfully conduct a simulated Arrival scenario of five A/C simultaneously, incorporating inter/intra facility handoffs, point-outs, approval requests, and approved strip marking.

Prerequisite. SYS 224.

Reference. MATCALs System Operation Manual, MATCALs Controller Handbook, and MCO 3501.9B.

SIM-332 2.0 S

Goal. Perform non-radar approach control services.

Requirement. In a non-radar environment, under the supervision of an OJTI, perform the duties and responsibilities of a non-radar Approach Controller.

Performance Standards. Must successfully conduct a simulated non-radar scenario of five A/C simultaneously, incorporating inter/intra facility handoffs, point-outs, approval requests, and approved strip marking.

Prerequisite. KAPC-352.

Reference

FAA 7110.65

Ch 6 Non-radar.

NAVAIR 00-80T-114

Ch 4 Naval Certification Procedures.

Ch 6 General (Tower Operations).

Ch 8 Training, Standardization, and ATC Performance Evaluations.

Appendix G ATC Specialist Mishap Statement.

Appendix I Minimum Alt Vectoring Chart.

Appendix J Certification, Rating, and Quality Assurance Program.

Local publications and MCO 3501.9B.

SIM-333 6.0 Z S/LGoal. Plan and develop MATCD communications interface with MACCS and external agencies.Requirement. During simulation or actual operation, plan, develop, and implement the communications architecture for MATCD interface with the MACCS and external agencies by using an ACEOI, and Annex K of an operations order (Op Order).Performance Standards

- (1) Identify and submit communications requirements.
- (2) Provide a communications connectivity chart.

Prerequisite. FAM-200 and Lecture B-26.Reference. MAWTS-1 ASP and MCO 3501.9B.3. Operations Training (8 Events, 456 Hours)OPS-370 160.0 Z LGoal. Perform the duties of a Tower Local Controller.Requirement. In a control tower, under the supervision of an OJTI, perform the duties and responsibilities of a Tower Local Controller.Performance Standards. Demonstrate the proficiency required to be recommended for qualification as a Tower Local Controller.Prerequisite. KTWR-310 through KTWR-316, and all KTLC knowledge events.Reference

NAVAIR 00-80T-114

Ch 4 Naval Certification Procedures.

Ch 6 General (Tower Operations).

Ch 8 Training, Standardization, and Air Traffic Controller Performance Evaluations.

Appendix G ATC Specialist Mishap Statement.
 Appendix I Minimum Altitude Vectoring Chart.
 Appendix J Certification, Rating, and Quality Assurance
 Program.

Local publications and MCO 3501.9B.

OPS-371 120.0 Z L

Goal. Perform the duties of an Arrival/Departure (RATCF) Controller

Requirement. In a radar environment, under direct supervision of an OJTI, perform the duties and responsibilities of an Arrival/Departure Controller.

Performance Standards. Demonstrate the proficiency required to be recommended for qualification as an Arrival/Departure Controller.

Prerequisite. KRDR-320 through KRDR-325, all KAPC knowledge events.

Reference

NAVAIR 00-80T-114

Ch 4 Naval Certification Procedures.
 Ch 7 General (Radar Operations).
 Ch 8 Training, Standardization, and Air Traffic
 Controller Performance Evaluations.
 Appendix G ATC Specialist Mishap Statement.
 Appendix I Minimum Altitude Vectoring Chart.
 Appendix J Certification, Rating, and Quality Assurance
 Program.

Local publications and MCO 3501.9B.

OPS-372 120.0 Z L

Goal. Perform the duties of an Approach Controller.

Requirement. In a radar environment, under direct supervision of a OJTI, perform the duties and responsibilities of a Approach Controller.

Performance Standards. Perform the duties and responsibilities of an Approach Controller under direct supervision.

Prerequisite. KRDR-320 through KRDR-325, and all KAPC knowledge events.

Reference

NAVAIR 00-80T-114

Chapter 4 Naval Certification Procedures.
 Chapter 7 General (Radar Operations).
 Chapter 8 Training, Standardization, and Air Traffic
 Controller Performance Evaluations.
 Appendix G ATC Specialist Mishap Statement.

Appendix I Minimum Altitude Vectoring Chart.

Appendix J Certification, Rating, and Quality Assurance Program

Local publications and MCO 3501.9B.

OPS-373 8.0 Z L

Goal. Perform as an MMT Leader.

Requirement. During an operation or training exercise while utilizing required equipment and under the supervision of a qualified MMT Leader, perform as an MMT Leader.

Performance Standards

- (1) Recommend/assist in TLZ/HLZ site selection and survey.
- (2) Coordinate with civil and military control agencies.
- (3) Prepare personnel and equipment readiness.
- (4) Conduct MMT and aircrew briefings.
- (5) Insertion and extraction methods.
- (6) Mark TLZ/HLZs.

Prerequisite. CK-370, MMT-261, KFAM-208, KFAM-300, KFAM-301, KFAM-400, and KFAM-402.

Reference. MCI 25.30, MCI 25.32, AMCR 55-60, MCO 3501.9B, and MMT SOP.

OPS-374 4.0 Z L/S

Goal. Conduct an ATC tactical crew brief.

Requirement. During an operation, a training exercise or through simulation, properly conduct an ATC tactical crew brief.

Performance Standards. Brief the following areas:

- (1) Enemy and friendly situation.
- (2) Air defense warning condition.
- (3) Air defense alert state.
- (4) Air defense weapons release condition.
- (5) Continuing missions.
- (6) Scheduled events.
- (7) Published air tasking order (ATO).
- (8) Assigned frequencies/call signs.
- (9) Weather.
- (10) Equipment status.
- (11) Crew requirements.
- (12) Emergency procedures.

Prerequisite. KFAM-205, FAM-200, CK-372, CK-373, Lectures A-12, A-13, and B-1 through B-13.

Reference. MCWP 3-25.8, MAWTS-1 Tactical Planning Guide, NAVAIR 00-80T-114, and MCO 3501.9B.

OPS-375 2.0 Z L/S

Goal. Extract pertinent information from the ATO and ACO.

Requirement. During an operation or a training exercise, extract pertinent information and aircraft operating constraints from the ATO/SPINS and ACO.

Performance Standards. Develop a flight schedule utilizing the information found in the ATO/SPINS and ACO.

Prerequisite. Lecture A-09 and KFAM-400.

Reference. MAWTS-1 ASP, Joint Pub 3-56.1, ATO Manual, and MCO 3501.9B.

OPS-376 40.0 Z L

Goal. Prepare, request, and supervise an FAA flight inspection/certification.

Requirement. During an operation, a field exercise, or while in garrison, conduct a tactical or FAA flight inspection.

Performance Standards

- (1) Request tactical or FAA flight inspection from the appropriate agency.
- (2) Prepare for NAVAID/RADAR certification.
- (3) Submit for approval applicable instrument flight procedures for a NAVAID/RADAR.
- (4) Prepare tactical flight check profiles associated with permissive and restrictive environments.

Reference. OPNAVINST 3722.16, NAVAIR 16-1-520, NAVAIR 00-80T-114, NAVAIR 00-80T-115, and FAA OAP 8200.1 U.S.

OPS-377 2.0 Z L/S

Goal. Identify and plot air control measures on a map.

Requirement. During an operation or a training/simulated exercise, identify, describe, and plot the designated air control measures.

Performance Standards. Plot the following items on a map:

- (1) Base Defense Zones (BDZ).
- (2) Minimum Risk Routes (MRR).
- (3) High Density Airspace Control Zone (HIDACZ).
- (4) Standard Use Army Aircraft Flight Routes (SAFFR).
- (5) Low Level Transit Routes (LLTR).
- (6) Amphibious Objective Area (AOA).
- (7) Airspace Coordination Area (ACA).
- (8) Multi-Use Control Points.

Prerequisite. Lecture B-18.

Reference. MAWTS-1 ASP, and MCO 3501.9B.

4. Check Event (CK) (3 Events, 6 Hours)

CK-380 2.0 Z L E

Goal. Qualify as a Tower Local Controller.

Requirement. In a garrison or field environment, under direct supervision of a CTO Examiner and in compliance with established NATOPS evaluation criteria; apply knowledge and conduct ATC procedures in a safe, orderly, and expeditious manner at the Tower Local Control position.

Performance Standards. Pass an OJT examination demonstrating knowledge and proficiency while performing the following as a Tower Local Controller:

- (1) Formulate and issue clearances and control instructions to accomplish separation between aircraft and between aircraft and vehicles operating under the jurisdiction of the tower.
- (2) Effect coordination with appropriate operator positions and other facilities.
- (3) Provide flight assistance service to aircraft.
- (4) Operate airport lighting, lighting systems, and visual landing aids.
- (5) Initial notification and dispatch of emergency personnel and equipment for aircraft emergencies and accidents.
- (6) Other duties as assigned by the Tower Watch Supervisor.
- (7) Other duties as outlined in local Facility Manual.

Prerequisite. OPS-370, and 6 months as a controller at one location (per FAR Part 65.39).

Reference. NAVAIR 00-80T-114, local publications, and MCO 3501.9B.

CK-381 2.0 Z L E

Goal. Qualify as an Arrival/Departure (RATCF) Controller.

Requirement. In a garrison environment, under direct supervision of an ATCSE and in compliance with established NATOPS evaluation criteria; apply knowledge and conduct ATC procedures in a safe, orderly, and expeditious manner at the Arrival/Departure Control position. This qualification is only given at locations without an Approach Control.

Performance Standards. Pass an OJT examination demonstrating knowledge and proficiency while performing the following as an Arrival/Departure Controller:

- (1) Maintain radar surveillance of assigned areas and provide radar services to aircraft as required.

- (2) Issue clearances and control instructions to aircraft operating under arrival control jurisdiction.
- (3) Issue clearances and advisory information to aircraft under departure control jurisdiction.
- (4) Initiate/accept radar hand-offs from adjacent sectors/facilities.
- (5) On arrival, accept radar handoffs from approach control and provide radar services to aircraft as required until the aircraft reaches approach minimums or is handed off to a final controller or adjacent facility.
- (6) Provide assistance and priority of services to aircraft in emergency situations.
- (7) Other duties as assigned by the Radar Watch Supervisor.
- (8) Other duties as outlined in the local Facility Manual.

Prerequisite. OPS-371.

Reference. NAVAIR 00-80T-114, local publications, and MCO 3501.9B.

CK-382

2.0 Z L E

Goal. Qualify as an Approach Controller.

Requirement. In a garrison or field environment, under direct supervision of a ATCS Examiner and in compliance with established NATOPS evaluation criteria; apply knowledge and conduct ATC procedures in a safe, orderly, and expeditious manner at the Approach Control position.

Performance Standards. Pass an OJT examination demonstrating knowledge and proficiency to perform the following as an Approach Controller:

- (1) Issue ATC clearances and advisory information to aircraft under approach control jurisdiction.
- (2) Maintain radar surveillance of assigned areas and provide radar service to aircraft as required.
- (3) Determine the separation and sequence to be used between aircraft.
- (4) Initiate/accept radar hand-offs from adjacent sectors/facilities.
- (5) Provide assistance and priority of services to aircraft in emergency situations.
- (6) Utilize any or all other operating positions as necessary.
- (7) Other duties as assigned by the Radar Watch Supervisor.
- (8) Other duties as outlined in the local Facility Manual.

Prerequisite. OPS-372.

Reference. NAVAIR 00-80T-114, local publications, and MCO 3501.9B.

5. Qualifications Training (QUAL) (2 Events, 48 Hours)

QUAL-390 40.0 Z L E

Goal. Be designated an On The Job Training Instructor (OJTI).

Requirement. In a garrison or field environment, provide OJTI instruction to student controllers.

Performance Standards. Demonstrate proficiency in the following:

- (1) Preferred methods of teaching through a combination of direction, demonstration, and practical application.
- (2) Documentation of training on the Air Traffic Controller Position Evaluation
- (3) Communicating to a trainee an evaluation of their performance to include their overall performance, an identification of strengths and weaknesses, and specific recommendations for improvement.

Prerequisite. Applicable NATOPS CK.

Reference. FAA Facility OJTI Course and local publications.

QUAL-391 8.0 Z L E

Goal. Qualify as an MMT Leader in a field exercise.

Requirement. During an operation or field exercise, with a qualified MMT Leader Instructor, qualify as an MMT Leader.

Performance Standards. Demonstrate proficiency in the following:

- (1) Site selection.
- (2) Personnel and equipment readiness.
- (3) MMT and aircrew briefings.
- (4) Insertion and extraction.
- (5) Mark TLZ/HLZs.

Prerequisite. CK-380, KFAM-208, KFAM-305, and KFAM-406.

Reference. MCI 25.30, MCI 25.32, AFI 13-217, and MCO 3501.9B.

234. FULL COMBAT QUALIFICATION TRAINING (7252/7254/7291)

1. Purpose. To develop advanced proficiency in ATC tower and radar operations. Upon completion of this portion of the training syllabus, the individual is 100% trained in ATC operations and is Full Combat Qualified. Syllabus requirements are designated as Operations (OPS), and Designations (DESG).

a. Prerequisite. Complete the 300-level of this syllabus.

b. Academic Training. In addition to MAWTS ASP lessons located in table 2-9, some events require the controller to be familiar with knowledge syllabus references located in Appendix B. All knowledge syllabus events must be passed with an 80% on a oral or written test.

c. Live and Simulator Event Training (12 Events, 168 Hours)2. Operations Training (3 Events, 8 Hours)OPS-470 8.0 Z L/SGoal. Develop an embarkation plan for the MATCD.Requirement. Given a mission statement, develop a plan for fixed wing air and amphibious embarkation for the ATC Detachment.Performance Standards. Perform embarkation to include:

- (1) Basics of unit movement by military aircraft.
- (2) Plan an air movement.
- (3) Preparation of vehicles and supplies.
- (4) Computation of center of balance for vehicles and cargo.
- (5) Execution of an air movement.
- (6) Embarkation of personnel.
- (7) Embarkation of organizations.
- (8) Preparation of supplies and equipment to include hazardous material, weapons, and ammunition.
- (9) Amphibious ships characteristics and loading methods.
- (10) Embarkation and debarkation procedures.
- (11) Time Phased Force Deployment Data (TPFDD).

Reference. MCI 04.7, MCI 04.11, MATCALs SOM, applicable embarkation directives, and MCO 3501.9B.OPS-471 NA Z LGoal. Perform as a MATCD NCOIC.Requirement

- (1) Assist and make recommendations to the detachment commander concerning all aspects of the detachment.
- (2) Provide input to the detachment commander with regard to the management of personnel.
- (3) Coordinate assignment and supervision of enlisted Marines to include FAP requirements.
- (4) Supervise the professional development of enlisted Marines.
- (5) Coordinate with internal and external agencies as required.
- (6) Coordinate and supervise the administrative functions of the detachment including tracking and reporting the CRP status of unit controllers.
- (7) Assist the detachment commander in preparing the following:
 - (a) Deployment plans and orders.
 - (b) Embarkation planning.
 - (c) TERPS for deployment locations.
 - (d) Recommendations for airspace requirements for deployments.
 - (e) Universal Needs Statement (UNS).

- (f) Submission of Military Training Requirement Review (MTRR).

Performance Standards. Perform at least 80% of the requirements and be permanently assigned as a MATCD NCOIC.

Prerequisite. CK-372, CK-373, KFAM-401 through KFAM-404, and KFAM-500.

OPS-472 NA L

Goal. Perform as a MACS Operations Chief (Ops Chief).

Requirement

- (1) Provide assistance and make recommendations to the operations officer concerning all aspects of the operational employment of the squadron, both in garrison and while deployed to include:
 - (a) TEEP preparation.
 - (b) SORTS review.
 - (c) Intelligence requirements.
- (2) Supervise the administration of the S-3 section.
- (3) Direct the preparation, editing, routing and maintenance of all correspondence and reports required.
- (4) Assist in the preparation of squadron operations plans, orders and training schedules.
- (5) Advise the operations officer on assignment of all enlisted personnel.
- (6) Provide guidance and assist the ATC Chief, Training Chief, Intelligence Chief, ATC NCOIC, and NBC Chief.
- (7) Supervise the professional development of enlisted Marines assigned.
- (8) Coordinate all squadron operational, training, and inspection requirements with higher headquarters.
- (9) Other duties as assigned by the operations officer.

Performance Standards. Perform at least 80% of the requirements and be assigned to a MACS as an Ops Chief.

Prerequisite. CK-372, CK-373, KFAM-302, KFAM-400 through KFAM-404, and KFAM-500.

3. Designation Training (DESG) (9 Events, 160 Hours)

DESG-490 80.0 Z L

Goal. Be designated as a Tower Watch Supervisor.

Requirement. During an operation or a field exercise, under direct supervision of a qualified evaluator, perform the duties and responsibilities of a Tower Watch Supervisor.

Performance Standards

- (1) Coordinate and direct the control of aircraft operating in assigned airspace areas and air and surface vehicular

- traffic operating on runways, taxiways, and other designated areas of the airfield.
- (2) Brief the control tower crew on weather conditions, traffic, equipment status, field conditions, and special evolutions prior to assuming the watch.
 - (3) Assign personnel to operating positions according to individual qualifications and training requirements.
 - (4) Assign trainees to qualified controllers for supervision.
 - (5) Notify cognizant SAR agencies of aircraft in distress.
 - (6) Advise the ATCFOW concerning the maintenance of current facility directives and other pertinent regulations pertaining to the control tower.
 - (7) Maintain tower equipment including the recording of outages and action taken to correct discrepancies.
 - (8) Maintain operational continuity of the watch.
 - (9) Qualify personnel on individual operating positions and recommend certification in conformance with this manual and local requirements.
 - (10) Ensure that controller currency requirements are met.
 - (11) Evaluate the operational readiness of branch equipment.
 - (12) Provide technical assistance to the ATCFOW in the execution of control tower operations procedures to include:
 - (a) Crew management.
 - (b) Control judgment.
 - (c) Traffic management.
 - (d) Operating procedures and methods.
 - (e) Coordination and communication.
 - (f) Equipment operation.
 - (g) Information flow.
 - (h) External agency interface.
 - (i) Logs and records.
 - (j) Phraseology.

Prerequisite. CK-380.

Reference. FAA 7110.65, NAVAIR 00-80T-114, local publications, and MCO 3501.9B.

DESG-491

N/A

L

Goal. Be designated as a Control Tower Chief.

Requirement. In a control tower, perform the duties of a Control Tower Chief.

Performance Standards

- (1) Maintain a current facility directives library and other pertinent regulations pertaining to control tower operations.
- (2) Maintain tower equipment, ensure completion of equipment checklist, and record of outages/returns to service with action taken to correct discrepancies.

- (3) Review the branch log daily and maintain operational continuity between watch teams. Ensure completion of position relief checklists by tower controllers.
- (4) Qualify controllers on operating positions and recommend personnel for supervisory positions in conformance with NAVAIR 00-80T-114 and local requirements.
- (5) Ensure currency of controllers.
- (6) Provide technical assistance to the ATCFO in development of procedures.

Prerequisite. CK-380.

Reference. NAVAIR 00-80T-114 and local publications.

DESG-492

N/A

L

Goal. Be designated as a CTO Examiner (CTOE).

Requirement. Perform the duties of a CTOE when assigned in writing by the appropriate commander and approved by the FAA.

Performance Standards. Execute all CTOE duties as detailed in FAA 7220.1, FAR Part 65, and NAVAIR 00-80T-114, to include:

- (1) Administer all required exams for qualification/certification and issuance of CTO ratings and certificates.
- (2) Grade and document all exam results.
- (3) Ensure appropriate entries are made in the individual MACCS Performance Record/SRB as required.
- (4) Complete all required qualification/certification documentation and submit the appropriate forms to the FAA for issuance of the permanent CTO certificate.
- (5) Prepare and issue qualification certificates as required.
- (6) Maintain written records of all CTO ratings issued while serving in the capacity of a CTOE.
- (7) Suspend CTO ratings as necessary.

Prerequisite. Current or previous completion of all events equating to CTO ratings commensurate with those of the current facility.

Reference. ATC Facility Manual, AOM, FAA 7220.1 & 7110.65, NAVAIR 00-80T-114, and MCO 3501.9B.

DESG-493

80.0

L

Goal. Be designated as a Radar Watch Supervisor.

Requirement. Perform the duties and responsibilities of a Radar Watch Supervisor.

Performance Standards

- (1) Coordinate and direct the control of aircraft within assigned airspace.
- (2) Brief the radar crew on weather conditions, traffic, equipment status, field conditions, and special evolutions prior to assuming the watch.
- (3) Assign personnel to operating positions according to individual qualifications and training requirements.
- (4) Assign trainees to qualified controllers for supervision.
- (5) Ensure the currency of controllers.
- (6) Evaluate the operational readiness of equipment.
- (7) Supervise FAA/military flight checks.
- (8) Maintain a current library of facility directives and other pertinent regulations pertaining to radar operations.
- (9) Maintain radar equipment including the recording of outages and action taken to correct discrepancies.
- (10) Maintain operational continuity of the watch.
- (11) Qualify personnel on individual operating positions and recommend certification in compliance with this manual and local requirements.
- (12) Provide technical assistance to the ATCFWO in the execution of radar control procedures to include:
 - (a) Crew management.
 - (b) Control judgment.
 - (c) Traffic management.
 - (d) Operating procedures and methods.
 - (e) Coordination and communication.
 - (f) Equipment operation.
 - (g) Information flow.
 - (h) External agency interface.
 - (i) Logs and records.
 - (j) Phraseology.

Prerequisite. CK-381 or CK-382.

Reference. FAA 7110.65, NAVAIR 00-80T-114, local publications, and MCO 3501.9B.

DESG-494

N/A

L

Goal. Be designated as a Radar Chief.

Requirement. Perform the duties and responsibilities of a Radar Chief.

Performance Standards

- (1) Maintain a current library of facility directives and other pertinent regulations pertaining to radar operations.
- (2) Maintain radar equipment.
- (3) Ensure completion of equipment checklist and record outages/returns to service with corrective action.

- (4) Review the branch log daily and maintain operational continuity between watch teams.
- (5) Ensure completion of position relief checklists by tower controllers.
- (6) Qualify personnel on individual operating positions and recommend personnel for supervisory positions in conformance with the NAVAIR 00-80T-114 and local requirements.
- (7) Ensure currency of controllers.
- (8) Evaluate and inform the ATCFO about operational readiness of branch equipment.
- (9) Supervise FAA/military flight checks.
- (10) Provide technical assistance to the ATCFO in development of procedures.

Prerequisite. CK-381 or CK-382.

Reference. NAVAIR 00-80T-114.

DESG-495

N/A

L

Goal. Perform as an ATC Specialist Examiner (ATCSE).

Requirement. Perform the duties of an ATCSE when assigned in writing by the appropriate commander.

Performance Standards. Execute all ATCSE duties as detailed in FAA 7220.1, FAR Part 65, and NAVAIR 00-80T-114, to include:

- (1) Administer all required exams for qualification/certification of ATCS ratings.
- (2) Grade and document all exam results.
- (3) Ensure appropriate entries are made in the individual MACCS Performance Record as required.
- (4) Administer operational performance examinations for ATC specialist ratings and recommend issuance of applicable ratings to the ATCFO/MATCD commander.
- (5) Complete all required qualification/certification documentation.
- (6) Prepare and issue qualification certificates as required.
- (7) Maintain written records of all ATC specialist ratings issued while serving in the capacity of an ATCSE.

Prerequisite. Current or previous completion of all events equating to ATCS ratings commensurate with those of the current facility.

Reference. ATC Facility Manual, Airfield Operations Manual, FAA 7220.1 & 7110.65, NAVAIR 00-80T-114, and MCO 3501.9B.

DESG-496

N/A

Z

L

Goal. Perform as a Facility Watch Officer (FWO)/MATCD Watch Commander (WC).

Requirement. During an operation or a field exercise, perform the duties and responsibilities of a FWO/WC.

Performance Standards. Demonstrate proficiency in the following:

- (1) Crew management.
- (2) MACCS information flow if required.
- (3) Interface with external MACCS agencies as required.
- (4) Control judgment.
- (5) Traffic management.
- (6) Operating procedures and method.
- (7) Coordination and communication.
- (8) Phraseology.
- (9) Equipment.

Prerequisite. Qualification as an FWO/MATCD WC is determined by the ATCFWO or MATCD commander.

Reference. FAA 7110.65, FAA 7110.10, NAVAIR 00-80T-114, NAVAIR 00-80T-115, local publications, and MCO 3501.9B.

DESG-497

N/A

L

Goal. Perform the duties of a Training and Standardization Supervisor (TSS).

Requirement. While assigned to an ATC facility, perform TSS duties.

Performance Standards

- (1) Establish and maintain an OJT program for controllers.
- (2) Conduct classroom training on local area ATC equipment and procedure as required.
- (3) Develop local course material, visual aids, and training scenarios to supplement other published material such as FAA refresher series.
- (4) Coordinate with tower and radar chiefs in preparation of monthly training schedule.
- (5) Prepare tests to evaluate results of scheduled training.
- (6) Prepare an indoctrination program for newly assigned controllers.
- (7) Maintain ATC certification/qualification records.
- (8) Ensure effectiveness and currency of facility directives and technical libraries.

Prerequisite. All ATCS ratings at the assigned facility and a minimum of 5 years ATC experience.

Reference. NAVAIR 00-80T-114.

DESG-498

N/A

Z

L

Goal. Be designated Terminal Instrument Procedures (TERPS) Specialist.

Requirement. While at a MCAS or MATCD, manage and upkeep a TERPS Program.

Performance Standards

- (1) Review all current terminal instrument procedures.
- (2) Develop new procedures as required.
- (3) Maintain and file obstacle evaluations.
- (4) Perform and submit required reviews.

Prerequisite. Terminal Instrument Procedures Specialist Course, Biloxi, MS, and Lecture B-28.

Reference. MAWTS-1 ASP, OPNAVINST 3722.16C, DB 1-83 (MRAALS), and MCO 3501.9B.

240. INSTRUCTOR QUALIFICATION TRAINING

1. Purpose. This POI is to be completed prior to designation as an instructor in a particular stage of training; i.e., OJTI(I), MEWTI, etc. Syllabus requirements are designated as Qualification (QUAL).

a. Prerequisite. The controller must be experienced enough to be able to instruct others in the ATC leadership and supervisory functions of this syllabus.

b. Academic Training. None.

c. Live and Simulator Event Training (2 Events, 264 Hours)

2. Instructor Qualification Training

QUAL-500 24.0 L

Goal. Be designated an OJTI Course Instructor.

Requirement. Perform as an OJTI Course Instructor.

Performance Standards. Successfully complete the TyCom OJTI Instructor Course.

Prerequisite. DESG-292.

Reference. FAA/TyCom/Facility OJTI Course.

QUAL-501 240.0 L

Goal. Be designated as a Marine Enlisted Weapons Tactics Instructor (MEWTI).

Requirement. Perform as the MMT/MMT leader instructor for the unit assigned.

Performance Standards. Graduate the MEWTI Course and be certified by MAWTS-1 to be an MMT Leader Instructor.

Prerequisite. CK-380.

Reference. MAWTS Course Catalog.

External Syllabus Support. TEMINS orders to MAWTS-1 as an enlisted WTI student.

260. EXPENDABLE ORDNANCE REQUIREMENTS. None.

270. PROFICIENCY INTERVALS. Tables 2-17, 2-18, and 2-19 contain the proficiency intervals for the Combat Readiness, Combat Qualification, and Full Combat Qualification levels.

Table 2-17.--Enlisted ATC Proficiency Interval for the Combat Readiness Training Level.

STAGE/EVENT	HRS	PROFICIENCY INTERVAL (Months)	CRP	T	C	R	E	Z
FAM-200	2.0	24	0.3	X		X		X
FAM-201	4.0	24	0.3	X		X		X
SYS-220	2.0	12	0.3	X		X		X
SYS-221	2.0	12	0.4	X		X		X
SYS-222	2.0	12	0.4	X		X		X
SYS-223	2.0	12	0.4	X		X		X
SYS-224	2.0	12	0.5	X		X		X
SYS-225	6.0	12	0.5	X		X		X
SYS-226	6.0	24	0.3	X		X		X
SIM-230	2.0	12	0.4	X		X		X
SIM-231	2.0	12	0.4	X		X		X
MMT-260	6.0	12	0.4	X		X		X
MMT-261	8.0	NA	0.5	X		X		X
OPS-270	80.0	NA	0.6	X				X
OPS-271	80.0	NA	0.6	X				X
OPS-272	80.0	NA	0.6	X				X
OPS-273	80.0	NA	0.6	X				X
OPS-274	80.0	NA	0.6	X				X
OPS-275	2.0	NA	0.5	X				X
CK-280	2.0	36	1.0	X			X	X
CK-281	2.0	36	1.0	X			X	X
CK-282	2.0	36	1.0	X			X	X
CK-283	2.0	36	1.0	X			X	X
CK-284	2.0	36	1.0	X			X	X
QUAL-290	8.0	12	0.7	X			X	X
QUAL-291	6.0	12	0.7	X			X	X

Table 2-18.--Enlisted ATC Proficiency Interval for the Combat Qualification Training Level.

STAGE/EVENT	HRS	PROFICIENCY INTERVAL (Months)	CRP	T	C	R	E	Z
SIM-330	2.0	24	0.5	X		X		X
SIM-331	2.0	24	0.5	X		X		X
SIM-332	2.0	12	0.5	X		X		X
SIM-333	6.0	12	0.5	X		X		X
OPS-370	160.0	12	1.0	X				X

STAGE/EVENT	HRS	PROFICIENCY INTERVAL (Months)	CRP	T	C	R	E	Z
OPS-371	120.0	12	1.0	X				X
OPS-372	120.0	12	1.0	X				X
OPS-373	8.0	12	1.0	X				X
OPS-374	4.0	24	1.0	X				X
OPS-375	2.0	12	1.0	X				X
OPS-376	40.0	12	1.0	X				X
OPS-377	40.0	12	0.5	X				X
CK-380	2.0	NA	3.5	X			X	X
CK-381	2.0	NA	2.5	X			X	X
CK-382	2.0	NA	3.5	X			X	X
QUAL-390	40.0	NA	0.5	X			X	X
QUAL-391	8.0	NA	0.5	X			X	X

Table 2-19.--Enlisted ATC Proficiency Interval for the Full Combat Qualification training Level.

STAGE/EVENT	HRS	PROFICIENCY INTERVAL (Months)	CRP	T	C	R	E	Z
OPS-470	8.0	24	0.5	X				X
OPS-471	NA	NA	0.5	X				X
OPS-472	NA	NA	0.5	X				X
DESG-490	80.0	36	0.5	X				X
DESG-491	NA	NA	0.0	X				
DESG-492	NA	NA	0.5	X				
DESG-493	80.0	36	0.5	X				X
DESG-494	NA	NA	0.0	X				
DESG-495	NA	NA	0.5	X				
DESG-496	NA	NA	1.0	X				X
DESG-497	NA	0.0	0.0	X				
DESG-498	NA	NA	0.5	X				

280. ENLISTED AIR TRAFFIC CONTROLLER UPDATE CHAINING. Table 2-20 contains the event update chaining for the enlisted air traffic controller.

Table 2-20.--Enlisted ATC Event Update Chaining.

EVENTS	EVENTS UPDATED
200	
201	
220	
221	
222	
223	
224	
225	200
226	
230	224
231	
260	
261	260
270	220
271	220
272	220
273	221

EVENTS	EVENTS UPDATED
274	221
275	
280	220, 270
281	220, 271
282	220, 272
283	221, 273
284	221, 274
290	260, 261
291	224
330	
331	224
332	
333	200
370	
371	
372	
373	260, 261, 370
374	
375	
376	
377	
380	370
381	371
382	372
390	
391	260, 261, 370, 373, 380
470	
471	
472	
490	380
491	380, 490
492	380, 490, 491
493	371, 372, 381, 382
494	371, 372, 381, 382, 493
495	371, 372, 381, 382, 493, 494
496	
497	
498	