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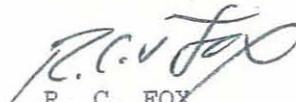
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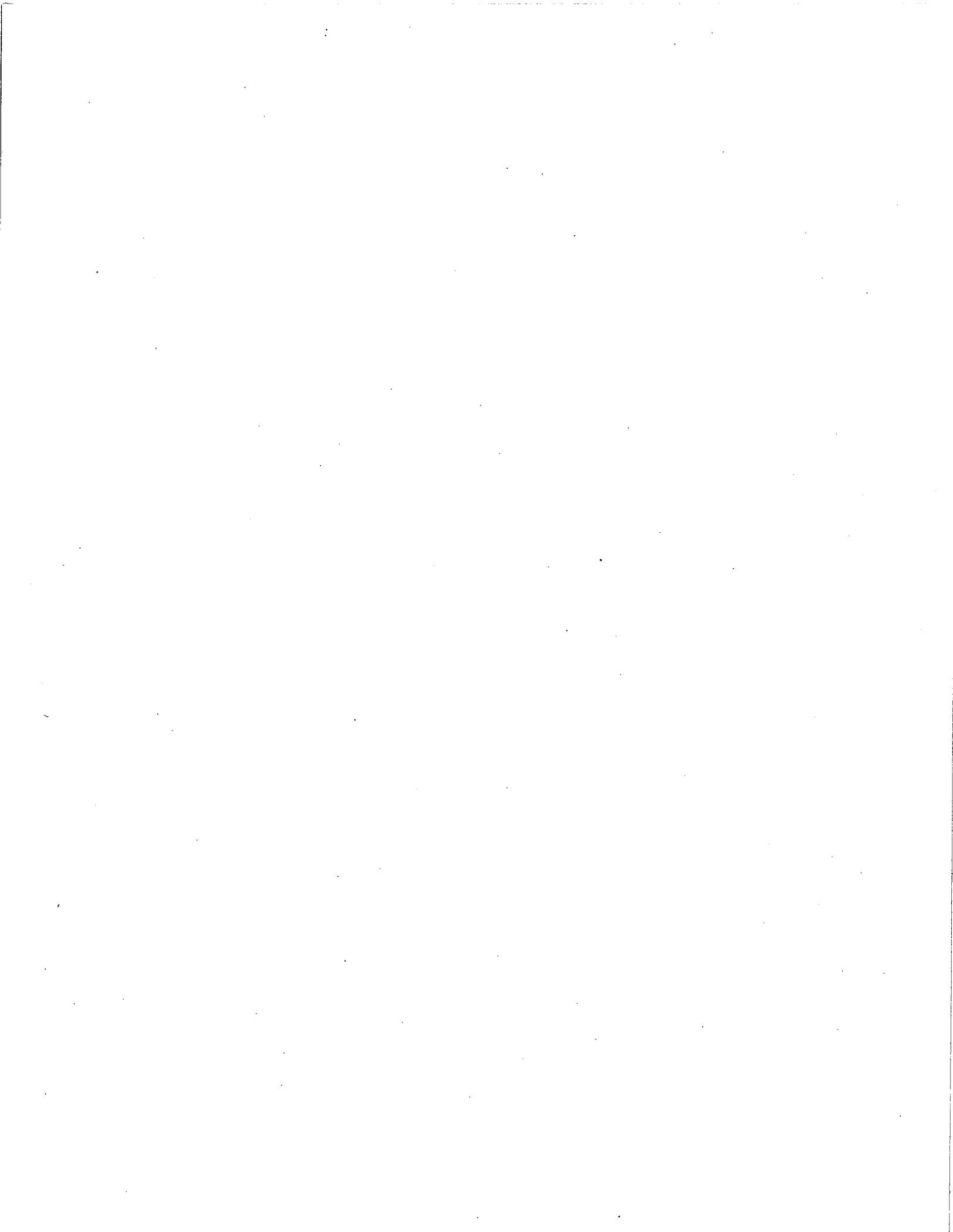
Encl: (1) UC-12B/F T&R Manual

1. Purpose. To revise standards and regulations regarding the training of UC-12B/F aircrew per the reference.
2. Cancellation. NAVMC 3500.30
3. Information. Significant revisions are as follows:
 - a. Establishment of Mission Essential Task List (METL) to facilitate MET-based readiness.
 - b. Incorporation of Marine Corps Task (MCT) list.
 - c. Emphasis on Mission Skills to support MET-based reporting.
 - d. Inclusion of Aviation Career Progression Model (ACPM) training requirements.
 - e. Re-naming and re-numbering of Phases from 3-digit to 4-digit event codes.
4. Recommendations. Recommended changes to this Manual are invited, and may be submitted via the syllabus sponsor and the appropriate chain of command to: Commanding General, Training and Education Command, Aviation Training Division using standard Naval correspondence or the Automated Message Handling System plain language address: CG TECOM ATD.
5. Reserve Applicability. This Manual is applicable to the Marine Corps Total Force.
6. Certification. Reviewed and approved this date.


R. C. FOX
By direction

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CHAPTER 1

UC-12B/F TRAINING AND READINESS UNIT REQUIREMENTS

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CHAPTER 1

UC-12B/F

100. MARINE OPERATIONAL SUPPORT AIRLIFT (OSA) SQUADRONS AND DETACHMENTS (VMR Det. UC-12B/F) UNIT TRAINING AND READINESS REQUIREMENTS. The goal of Marine Aviation is to attain and maintain combat readiness to support Expeditionary Maneuver Warfare while conserving resources. The standards established in this program are validated by subject matter experts to maximize combat capabilities for assigned METs. These standards describe and define unit capabilities and requirements necessary to maintain proficiency in mission skills and combat leadership. Training events are based on specific requirements and performance standards to ensure a common base of training and depth of combat capability.

101. OSA/UC-12B/F MISSION. Provide time-sensitive air transport of high priority passengers and cargo to, within, and between theaters of war.

102. TABLE OF ORGANIZATION (T/O). As of this publication date, UC-12B/F OSA units for the Active Forces are authorized:

Table of Organization Active Forces		
H&HS MCAS Yuma	H&HS MCAS Beaufort	H&HS MCAS New River
T/O # M02212	T/O # M02205	T/O # M02206
2 UC-12B/F	2 UC-12B/F	2 UC-12B/F
Pilots	Pilots	Pilots
14	14	14
Transport Aircrewman	Transport Aircrewman	Transport Aircrewman
5	5	5
Note: A Qualified Observer may fill the T2P requirement on certain missions.		
Table of Organization (Deployed Detachment)		
2 UC-12B/F	1 UC-12B/F	
Pilots	Pilots	
7	5	
Transport Aircrewman	Transport Aircrewman	
3**	2**	
**The Transport Aircrewman is not required on all Mission Flights		

103. CORE SKILLS AND MISSION SKILL ABBREVIATIONS. Shading indicates Core Plus Skills.

CORE SKILLS	
CACT	COMMAND AIRCRAFT CREW TRAINING
FAM	FAMILIARIZATION
NFAM	NIGHT FAMILIARIZATION
INST	INSTRUMENT
CP	CO-PILOT PROCEDURES
MISSION SKILLS	
OSA	OPERATIONAL SUPPORT AIRLIFT
ALS	AIR LOGISTICS SUPPORT
CORE PLUS SKILLS	
INT PROC	INTERNATIONAL PROCEDURES
MISSION PLUS	
AS	ASSAULT SUPPORT
EXP	EXPEDITIONARY SHORE-BASED OPERATIONS

104. CORE METL AND CORE METL OUTPUT STANDARDS

1. Core METL. A list of specified tasks that VMR-1 and VMR Dets are designed to perform.

Core METL

MCT 1.3.4.1.2 Conduct Operational Support Airlift
MCT 4.3.8 Conduct Air Logistics Support

Core Plus

MCT 1.3.4 Conduct Assault Support Operations
MCT 1.3.3.3.2 Conduct Aviation Operations From Expeditionary Shore-Based Sites

2. VMR Det. The required level of performance that a VMR Det must be capable of sustaining to be considered MET-Ready.

VMR Det (UC-12B/F)				
Core METL Output Standards (2/1 A/C)				
MCT	MET	MAXIMUM DAILY SORTIES	MAXIMUM SORTIES PER MET	CMMR
MCT 1.3.4.1.2 OSA	Conduct Operational Support Airlift	5/3	5/3	3/2
MCT 4.3.8 ALS	Conduct Air Logistics Support		5/3	3/2
Core Plus METL Output Standards				
MCT	MET	MAXIMUM DAILY SORTIES	MAXIMUM SORTIES PER MET	CMMR
MCT 1.3.4 AS	Conduct Assault Support Operations	5/3	5/3	3/2
MCT 1.3.3.3.2 EXP	Conduct Aviation Operations From Expeditionary Shore-Based Sites		5/3	3/2

Note: VMR Det (UC-12B/F) (2/1 A/C) is able to execute 5/3 total overall sorties on a daily (24 hour period) basis. Based on historical flight hour data, average sortie duration is 3.0 hours for the UC-12B/F.

3. VMR Deployed Detachment. The required level of performance that VMR-1 or a VMR Det must be capable of sustaining during deployed contingency operations to be considered MET-ready.

VMR Deployed Detachment (UC-12B/F)				
Core METL Output Standards (2/1 A/C Det)				
MCT	MET	MAXIMUM DAILY SORTIES	MAXIMUM SORTIES PER MET	CMMR
MCT 1.3.4.1.2 OSA	Conduct Operational Support Airlift	5/3	5/3	3/2
MCT 4.3.8 ALS	Conduct Air Logistics Support		5/3	3/2
Core Plus METL Output Standards				
MCT	MET	MAXIMUM DAILY SORTIES	MAXIMUM SORTIES PER MET	CMMR
MCT 1.3.4 AS	Conduct Assault Support Operations	5/3	5/3	3/2
MCT 1.3.3.3.2 EXP	Conduct Aviation Operations From Expeditionary Shore-Based Sites		5/3	3/2

Note: A VMR UC-12B/F Deployed Detachment (2/1 A/C) is able to execute 5/3 total overall sorties on a daily (24 hour period) basis during contingency/combat operations. Based on historical flight hour data, average sortie duration is 3.0 hours for the UC-12B/F.

105. CORE MCT TO CORE/MISSION/CORE PLUS SKILL MATRIX. Provides a pictorial view of the relationship between the Core MCT (Marine Corps Task) and each Core/Mission/Core Plus skill required to perform the MCT. Shading indicates a Core Plus.

UC-12B/F							
Mission Essential Task To Core/Mission/Core Plus Skill Matrix							
MISSION ESSENTIAL TASK (MET) // MARINE CORPS TASK (MCT)	CORE SKILLS 2000 PHASE		MISSION SKILLS 3000 PHASE		CORE PLUS 4000 PHASE		
	FAM	INST	OSA	ALS	SKILLS		MISSIONS
					INT	AS	EXP
MCT 1.3.4.1.2 Conduct Operational Support Airlift OSA	X	X	X		X		
MCT 4.3.8 Conduct Air Logistics Support ALS	X	X		X	X		
CORE PLUS							
MCT 1.3.4 Conduct Assault Support Operations AS	X	X			X	X	
MCT 1.3.3.3.2 Conduct Aviation Operations From Expeditionary Shore-Based Sites EXP	X	X					X

106. CMMR CORE/MISSION/CORE PLUS SKILLS CREW DEFINITION AND PROFICIENCY REQUIREMENTS

1. VMR Det. This table delineates crew position and proficiency requirements for each Core/Mission/Core Plus Skill. The numbers associated with each crew position column reflect the number of Core/Mission/Core Plus Skill proficient individuals required.

VMR Det (UC-12B/F)			
CMMR (2/1 A/C)			
CORE SKILLS (2000 Phase)			
CORE SKILL	PILOTS	TRANSPORT AIRCREWMAN	CREWS
FAM	7/5	3/2	3/2
INST	7/5	N/A	3/2
MISSION SKILLS (3000 Phase)			
MISSION SKILL	PILOTS	TRANSPORT AIRCREWMAN	CREWS
OSA	7/5	3/2	3/2
ALS	7/5	3/2	3/2
CORE PLUS (4000 Phase)			
MISSION PLUS	PILOTS	TRANSPORT AIRCREWMAN	CREWS
INT	N/A	N/A	N/A
AS	7/5	3/2	3/2
EXP	7/5	3/2	3/2
*The Transport Aircrewman is not required on all Mission Flights			
Note: A Qualified Observer may fill the duties of an T2P on selected events			

2. VMR Deployed Detachment. This table delineates crew position and proficiency requirements for each Core/Mission/Core Plus Skill. The numbers associated with each crew position column reflect the number of Core/Mission/Core Plus Skill proficient individuals required.

VMR Deployed Detachment(UC-12B/F)			
CMMR (2/1 A/C)			
CORE SKILLS (2000 Phase)			
CORE SKILL	PILOTS	TRANSPORT AIRCREWMAN	CREWS
FAM	7/5	3/2*	3/2
INST	7/5	N/A	3/2
NFAM	7/5	N/A	3/2
CP	7/5	N/A	3/2
FAM REV	7/5	N/A	3/2
MISSION SKILLS (3000 Phase)			
MISSION SKILL	PILOTS	TRANSPORT AIRCREWMAN	CREWS
OSA	7/5	3/2*	3/2
ALS	7/5	3/2*	3/2
CORE PLUS (4000 Phase)			
MISSION PLUS	PILOTS	TRANSPORT AIRCREWMAN	CREWS
AS	7/5	2/2*	2/2
EXP	7/5	2/2*	2/2
*The Transport Aircrewman is not required on all Mission Flights			
Note: A Qualified Observer may fill the duties of an T2P on selected events			

107. INSTRUCTOR REQUIREMENTS

1. VMR Det. A VMR Det should possess the following numbers of personnel with the instructor designations listed in the matrix.

VMR-1 or VMR Det (UC-12B/F) CMMR (2/1 A/C)		
INSTRUCTOR DESIGNATIONS (5000 PHASE)		
DESIGNATIONS	PILOTS	TRANSPORT AIRCREWMAN
ANI (Assistant NATOPS Inst)	3/2	N/A
NI (NATOPS Instructor)	1/1	N/A
Instrument Evaluator	3/2	N/A
Transport Aircrewman Instructor	N/A	3/2

2. VMR Deployed Detachment. A deployed VMR Det should possess the following numbers of personnel with the instructor designations listed in the matrix.

VMR Deployed Det (UC-12B/F) CMMR (2/1 A/C)		
INSTRUCTOR DESIGNATIONS (5000 PHASE)		
DESIGNATIONS	PILOTS	TRANSPORT AIRCREWMAN
ANI (Assistant NATOPS Inst)	2/1	1/1
NI (NATOPS Instructor)	1/1	1/1
Instrument Evaluator	1/1	N/A
Transport Aircrewman Instructor	N/A	1/1

108. CMMR FLIGHT LEADERSHIP REQUIREMENTS

1. VMR Det. A VMR Det to be considered Core Competent, must possess the following numbers of crews with the listed flight leadership designations.

VMR-1 or VMR Det (UC-12B/F) CMMR (2/1 A/C)		
FLIGHT LEADERSHIP (6000 PHASE)		
DESIGNATION	PILOTS	TRANSPORT AIRCREWMAN
T2P*	3/2	N/A
TAC	6/4	N/A
TRANSPORT AIRCREWMAN	N/A	3/2
FCF	3/2	N/A

* A qualified observer may perform the duties of a T2P on selected missions.

2. VMR Deployed Detachment. A deployed VMR Detachment should possess the following numbers of personnel with the flight leadership designations.

VMR Deployed Det (UC-12B/F) CMMR (2/1 A/C)		
FLIGHT LEADERSHIP (6000 PHASE)		
DESIGNATION	PILOTS	TRANSPORT AIRCREWMAN
T2P*	2/1	N/A
TAC	5/4	N/A
TRANSPORT AIRCREWMAN	N/A	2/1
FCF	2/1	N/A

* A qualified observer may perform the duties of a T2P on selected missions.

CHAPTER 2

UC-12B/F PILOT/7555

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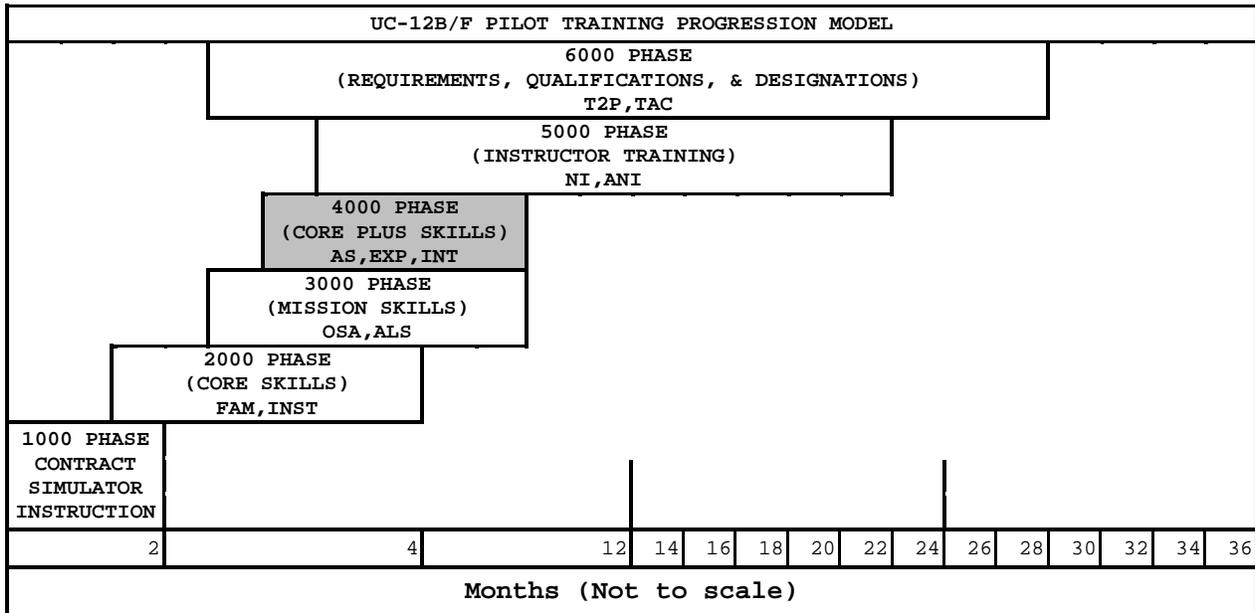
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CHAPTER 2

UC-12B/F PILOT/7555

200. UC-12B/F PILOT/7555 INDIVIDUAL TRAINING AND READINESS REQUIREMENTS. This T&R syllabus is based on specific goals and performance standards designed to ensure individual proficiency in Core, Mission and Core Plus Skills. The goal of this chapter is to develop individual and unit war fighting capabilities.

201. UC-12B/F PILOT TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the average UC-12B/F pilot crewmember. Units should use the model as a guide to generate individual training plans.



202. INDIVIDUAL CORE SKILL PROFICIENCY (CSP) REQUIREMENTS. A CSP crew consists of individuals representing each crew position who have achieved and currently maintain individual CSP. In order to be considered proficient in a Core Skill, an individual must attain and maintain proficiency in Core Skill events as delineated in the below paragraphs.

1. Events Required to Attain Individual CSP. To initially attain CSP in a Core Skill, an individual must simultaneously have a proficient status in all of the Core (2000 Phase) T&R events listed in the table below for that Core Skill.

INDIVIDUAL CORE SKILL PROFICIENCY (CSP) ATTAIN TABLE UC-12B/F Pilot	
T&R events required to Attain CSP (2000 Phase)	
FAM	INST
2110R	2200R
2111R	2201R
2112R	
Gray highlight & an R suffix on the event code = Refresher POI	
An S prefix on the event code = Event conducted in a simulator	

2. Events Required to Maintain Individual CSP. To maintain CSP in a Core Skill, an individual must maintain proficiency in all 2000 phase T&R events listed for that Core Skill:

INDIVIDUAL CORE SKILL PROFICIENCY (CSP) MAINTAIN TABLE UC-12B/F Pilot	
T&R events required to Attain CSP (2000 Phase)	
FAM	INST
2112R	2200R
Gray highlight & an R suffix on the event code = Refresher POI	
An S prefix on the event code = Event conducted in a simulator	

203. INDIVIDUAL MISSION SKILL PROFICIENCY (MSP) REQUIREMENTS. A MSP crew consists of individuals representing each crew position who have achieved and currently maintain Individual MSP. To be considered proficient in a Mission Skill, an individual must attain and maintain proficiency in Mission Skill events as delineated in the below paragraphs.

1. Events Required to Attain Individual MSP. To initially attain MSP in a Mission Skill, an individual must simultaneously have a proficient status in all 3000 phase T&R events listed for that Mission Skill:

INDIVIDUAL MISSION SKILL PROFICIENCY (MSP) ATTAIN TABLE UC-12B/F Pilot	
T&R events required to Attain MSP (3000 Phase)	
OSA	ALS
3100R	3200R
Gray highlight & an R suffix on the event code = Refresher POI	
An S prefix on the event code = Event conducted in a simulator	

2. Events Required to Maintain Individual MSP. To maintain MSP in a Mission Skill, an individual must maintain proficiency in all 3000 phase T&R events listed for that Mission Skill:

INDIVIDUAL MISSION SKILL PROFICIENCY (MSP) MAINTAIN TABLE UC-12B/F Pilot	
T&R events required to Maintain MSP (3000 Phase)	
OSA	ALS
3100R	3200R
Gray highlight & an R suffix on the event code = Refresher POI	
An S prefix on the event code = Event conducted in a simulator	

204. INDIVIDUAL CORE PLUS SKILL/MISSION PLUS SKILL PROFICIENCY REQUIREMENTS

1. Events Required to Attain Individual Proficiency in Core Plus Skills and Mission Plus Skills. Proficiency in Core Plus Skills/Mission Plus Skills is not required to obtain unit CSP. Training to Core Plus Skills/Mission Plus Skills is at the discretion of the unit commanding officer. To initially attain proficiency in a Core Plus Skill/Mission Plus Skill, an individual must simultaneously have a proficient status in all T&R events listed for that Core Plus Skill/Mission Plus Skill.

INDIVIDUAL CORE PLUS PROFICIENCY ATTAIN TABLE UC-12B/F Pilot	
T&R events required to Attain Core Plus Proficiency (4000 Phase)	
AS	EXP
4100R	4200R
4101R	4201R
Gray highlight & an R suffix on the event code = Refresher POI	
An S prefix on the event code = Event conducted in a simulator	

2. Events Required to Maintain Individual Proficiency in Core Plus Skills and Mission Plus Skills. To maintain proficiency in a Core Plus Skill/Mission Plus Skill, an individual must maintain proficiency in all T&R events listed in the table below for that Core Plus Skill Mission Plus Skill:

INDIVIDUAL CORE PLUS PROFICIENCY MAINTAIN TABLE UC-12B/F Pilot	
T&R events required to Maintain Core Plus Proficiency (4000 Phase)	
AS	EXP
4100R	4201R
Gray highlight & an R suffix on the event code = Refresher POI	
An S prefix on the event code = Event conducted in a simulator	

205. CERTIFICATION, QUALIFICATION AND DESIGNATION TABLES. The tables below delineate T&R events required to be completed to attain proficiency, initial qualifications and designations. In addition to event requirements, all required stage lectures, briefs, squadron training, prerequisites, and other criteria shall be completed prior to completing final events. Certification, qualification and designation letters signed by the commanding officer shall be placed in Aircrew Performance Records (APR) and NATOPS. Loss of proficiency in all qualification events causes the associated qualification to be lost. Regaining a qualification requires completing all R-coded syllabus events associated with that qualification.

INDIVIDUAL DESIGNATION REQUIREMENTS UC-12B/F Pilot	
Designation	Initial Event Designation Requirements
ANI	5100,5101,5102,5103
NI	5100,5101,5102,5103
CORE PLUS I	5104
T2P	6200
TAC	6300,6301
FCF	6400,6401,6008

INDIVIDUAL QUALIFICATION REQUIREMENTS UC-12B/F Pilot	
Qualification	Initial Event Qualification Requirements
NATOPS	6000,6001,6002,6100
INSTRUMENT (STANDARD)	6003,6004,6005,6101
INSTRUMENT (SPECIAL)	6003,6004,6005,6102
CRM	6006,6103

206. PROGRAMS OF INSTRUCTION (POI)

1. General. The time required to train a UC-12B/F Pilot to completion of the Core Plus phase will vary. Assignment to a specific POI is determined by previous military fixed-wing experience and is listed in the UC-12B/F NATOPS Manual*. Those aviators with less than 200 military fixed-wing hours should be assigned to the Basic (B) POI. Those aviators with more than 200 military fixed-wing hours should be assigned to the Refresher POI. Those aviators that have been previously designated a UC-12B/F TAC and are returning to a DIFOP status should be assigned to the Refresher(R) POI. Final determination of a training track for a pilot will be at the discretion of the individual command. When a crewmember completes a stage of training, that crewmember need only maintain proficiency in the R coded events for that stage to remain proficient.

*Note - See UC-12B/F NATOPS Manual for current flight hour requirements.

2. Basic (B) POI. Basic Pilots shall fly the entire syllabus.

WEEKS	COURSE	PERFORMING ACTIVITY
1-8	Core Skill Introduction Training	CACT
9-16	Core Skill Training	OSA unit
16-52	Mission Skill Training	OSA unit
16-52	Core Plus Training	OSA unit

3. Refresher (R) POI. Refresher Pilots shall fly those events annotated with an R. Commanding officers/OICs will review the qualifications, previous experience, currency, and demonstrated ability of Refresher Pilots with a view towards combining required flights.

WEEKS	COURSE	PERFORMING ACTIVITY
1-8	Core Skill Introduction Training	CACT
9-12	Core Skill Training	OSA unit
13-26	Mission Skill Training	OSA unit
13-26	Core Plus Training	OSA unit

207. CORE SKILL INTRODUCTION PHASE (1000)

1. General

a. Core Skill Introduction training for the UC-12B/F is conducted by a Command Aircraft Crew Training (CACT) facility. The UC-12B/F Syllabus Sponsor is responsible for contract negotiations and syllabus content/changes. Recommendations for CACT changes shall be submitted to the Syllabus Sponsor.

b. All academic requirements for this phase of training are incorporated into the CACT course.

c. All events in the Core Skill Introduction phase shall be evaluated and documented by a civilian instructor. The Syllabus Sponsor shall ensure standardization of civilian contracted instructors.

d. Event completion is predicated upon demonstrated proficiency. When an individual successfully accomplishes the requirements of an event per the performance standards, the individual should log completion of the event (enter the appropriate T&R code) in M-SHARP. When the event is entered into M-SHARP, the individual's proficiency date for that event is automatically updated to reflect the date the event was completed. When supervising individual events, unit instructors/leaders shall ensure that trainees demonstrate proficiency per T&R standards prior to logging successful event completion. Evaluating individual proficiency in an event normally requires both objective and subjective assessment. If an individual fails to accomplish the requirements of an event per the performance standards, the individual should not log that event and the proficiency status for that event remains unchanged. Times indicated for each event are for planning purposes only.

e. Pilots shall fly events annotated with an N at least 30 minutes after official sunset. Events shall be flown in accordance with environmental conditions listed in the matrix below:

ENVIRONMENTAL CONDITIONS	
Code	Meaning
D	Shall be flown during hours of daylight: (by exception - there is no use of a symbol)
N*	Shall be flown during hours of darkness must be flown unaided
(N*)	May be flown during hours of darkness - If flown during hours of darkness must be flown unaided
Note - If the event is to be flown in the simulator the Simulator Instructor shall set the desired environmental conditions for the event.	

2. Command Aircraft Crew Training (CACT) Ground School

ACAD-1000 40.0 * B CLRM

Goal. CACT ground school

Requirements. Per current contract.

Performance Standard. Per current contract.

ACAD-1020 16.0 365 R CLRM

Goal. CACT Refresher Ground School

Requirements. Per current contract.

Performance Standard. Per current contract.

ACAD-1021 1.0 365 B,R CLRM

Goal. Wind Shear

Requirements. Per current contract.

Performance Standard. Per current contract.

ACAD-1022 8.0 365 R CLRM

Goal. CFIT

Requirements. Per current contract.

Performance Standard. Per current contract.

ACAD-1023 8.0 365 R CLRM

Goal. TCAS

Requirements. Per current contract.

Performance Standard. Per current contract.

3. Civilian Approved Contractor Training (CACT) Simulator Training

SFAM-1101 4.0 * B D S

Goal. Introduce the PUI to crew coordination, checklist procedures, cockpit instrument scan, basic flight maneuvers, and flight characteristics.

Requirements.

BRIEFING: Cockpit Introduction, Crew Coordination, Checklist Utilization, Engine Starting Procedures, Air work and Basic Flight Maneuvers, Approach Plate Review, Two Engine ILS Approach.

SIM: Battery Start, Normal Engine Start (Both Engines), Before Taxi Checklist, Normal Ground Taxi, Review and Perform Engine Run-up Checklist, All NATOPS Checklist Items Complete, ATC Clearance, Weather Briefing, Departure Procedure (If Available), Crew Briefing, Normal Takeoff, Engine and Propeller Limitations, Vectors to an Altitude of At Least 5,000 AGL, Cruise Climb Power Settings and Airspeeds, Climb Checklist, Level off and cruise procedures, Cruise Power Set, Fuel and Oil (Normal Operations), Instrument Scan/Air work, Turns With and Without Flaps, Slow Flight, Approach to Stalls in all Configurations, Stall Warning Device, Steep Turns (45° Bank and 360° Turn), VMC Discussion (Demonstration Optional), Yaw Damper System

Debriefing: Discuss Student's performance and knowledge concerning Checklists, Engine Start, Air work, Simulator Handling

Performance Standard. Demonstrate familiarity with basic flight maneuvers, checklist procedures, crew coordination, and flight characteristics.

Prerequisite. ACAD-1000.

SFAM-1102 4.0 * B D S

Goal. To instruct the PUI on engine starts with associated malfunctions, electric and fuel-related malfunctions, autopilot and flight director operations, air work, holding, approaches, missed approach/go-around procedures, emergency engine shutdown procedures, and engine airstart procedures.

Requirement

BRIEFING: Discussion of Any Questions From the Previous Lesson, Hot Start, Hung Start, and No ITT/TGT Start Procedures, Generator Failure and Isolation/Current Limiter Failures, Autopilot and Flight Director Systems, Air work, Emergency Engine Shutdown/Engine Airstart, Approaches - Precision and Non-Precision, Missed Approach/Go-Around Procedures

SIM: All Checklist Items Completed, Isolation/Current Limiter failure, Fuel Firewall Shutoff Valve Failure, Standby Boost Pump Failure, Fuel Cross feed System Failure, Battery Start: Hot Start, Hung Start, Starter Relay Failed Closed (To be

Discussed During Shutdown), GPU Start, No ITT/TGT Start, Engine Boost Pump Fail, ATC Clearance, Weather Briefing, Departure procedure (If Available), Crew Briefing, Normal Takeoff, Vectors to an Altitude of At Least 5,000 Feet, Auxiliary Transfer Problems, Fuel Boost Pump Problems, Steep Turns, Stalls (As Required), Unusual Attitude Recovery, Autopilot and Flight Director Operations, Coupled Mode Operations, Emergency Engine Shutdown and Single-engine Maneuvering, In-flight Engine Airstart, Electrical Malfunctions,
DEBRIEFING: Discuss student performance and knowledge concerning Electric and Fuel Systems, Single-Engine Procedures, Air work, Autopilot and Flight Director Operations

Performance Standard. Demonstrate proficiency with all normal and abnormal starts and checklist procedures. Demonstrate familiarity with electric and fuel-related malfunctions, holding, instrument approach procedures, and single-engine procedures. Continue to develop effective CRM skills.

Prerequisite. SFAM-1101.

SFAM-1103	4.0	*	B	(N*)	S
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Goal. To instruct the PUI on takeoff abort procedures, propeller malfunctions, pressurization malfunctions, emergency descent procedures, bleed air warning and pneumatic malfunctions, single-engine instrument approach procedures.

Requirement

BRIEFING: Discussion of Any Questions From the Previous Lessons, Abort Procedures and Chart Review, Propeller System and Malfunctions, Pressurization System and Malfunctions, Bleed Air Warning Lights/Pneumatic System Malfunctions, Single-Engine Instrument Approach Procedures

SIM: All Checklist Items Completed (First Pilot), Hot Start, Hung Start, Battery Start, No ITT/TGT Start, Engine Boost Pump Failure (Instructor Discusses Malfunctions), All Checklist Items Complete (First Pilot), Prop Governor Fails in Test, Prop Governor Test is Set Too High, Rudder Boost Crossed, Through-Flight Checklist Items Complete, ATC Clearance (FL210), Weather Briefing, Crew Briefing, Inverter Failure, Flat Tire, Generator Failure, Chip Detector Light, Cabin Door Light, Bleed-Air Warning Failure, Engine Malfunction/Flameout, Normal Takeoff, Squat Switch Failure, Bleed-Air Warning Light (Discuss Various Failures), Cabin Door Warning Light, Bleed-Air Warning Light (Discuss Various Failures), Propeller Malfunctions, Cracked Windshield, Cracked Cabin Window, Cabin Door Light, Smoke and Fumes in the Cabin/Cockpit, PSID Reducing Procedures, Explosive Decompression, Emergency Descent Procedures, Oxygen Procedures Discussion, Single-Engine Approaches, Single-Engine Landing

DEBRIEFING: Discuss Student's Performance and Knowledge Concerning: Abort Procedures, Propeller Malfunctions, Pressurization and Pneumatic Malfunctions, Emergency Descent Procedures, Single-Engine Approach Procedures

Performance Standard. Perform all normal, abnormal, and emergency checklists and procedures, repeating as necessary to achieve 100% completion. In addition, demonstrate effective use of CRM skills.

Prerequisite. SFAM-1102.

SFAM-1104 4.0 * B (N*) S

Goal. Instruct PUI on departure, en route climb, en route high altitude, normal descent, and terminal procedures for a line flight from one airport to another airport. Introduce and discuss the ice and rain protection systems, procedures, and malfunctions. Introduce the TCAS/TCAS II system. Introduce and practice single-engine missed approach procedures. Review previous systems and additional related malfunctions.

Requirement.

BRIEFING: Discussion of any questions from the previous lessons, route of flight for line flight, En route Climb Profile Speeds and Power Settings, En route Power Settings and Chart Reviews, Descent Profile, Terminal Procedures, Ice and Rain Protection Systems and Malfunctions, Single-Engine Missed Approach Procedures

SIM: All Checklist Items Completed with No Malfunctions, GPU Start, Battery Start, ATC Clearance, Crew Briefing, TAKEOFF Maximum Power Prior to Brake Release, Rolling Takeoff, Takeoff Aborts May Be Induced At Instructor's Discretion, Cruise Climb Power Settings and Airspeeds, Climb Checklist, Icing Conditions Encountered During Climb out, Discuss Ice and Rain Systems and Procedures, Discuss Ice and Rain System Malfunctions, Cruise Power Settings and Cruise Charts Review, Discuss TCAS/TCAS II System, Displays, and Warnings, Review Previous Systems and Malfunctions as Required, Descent Checklist, Descent Profile, STAR (If Available), Holding, Various Approaches, Engine Malfunction and Emergency Engine Shutdown, Single-Engine Approach, Single-Engine Missed Approach, Single-Engine Landing,

DEBRIEFING: Discuss the student's performance and knowledge concerning Flight Profiles during line flight, Ice and Rain Systems, TCAS/TCAS II Systems, Single-Engine Approach and Missed Approach Procedures

Performance Standard. The PUI should be able to demonstrate to the instructor normal, abnormal, and selected emergency procedures and checklist usage in a timely and sequentially correct manner.

Prerequisite. SFAM-1103.

SFAM-1105 4.0 * B (N*) S

Goal. To instruct PUI on procedures for engine failures at or after Vr and subsequent single-engine takeoffs. Continue to practice single-engine approaches and missed approaches.

Introduce and practice crosswind takeoffs and landings. Discuss windshear recognition and escape procedures and apply the procedures in various windshear scenarios during takeoff and landing.

Requirement.

BRIEFING: Discussion of any questions from the Previous Lessons, Procedures for Engine Failures at or above Vr, review Single-engine Approach and Missed Approach Procedures, Crosswind Takeoff and Landing Procedures and Techniques, Windshear and Windshear Escape Maneuver

SIM: Through-Flight Checklist Items Completed (No Malfunctions), ATC Clearance, Weather Briefing, Crew Briefing, Aborts May Be Induced At Instructor's Discretion, Engine Failures/Flameouts At or After Vr, Failures Will Occur at Different Altitudes and Airspeeds, Failures Will Occur With 0% Flaps or 40% Flaps, Failures Will Occur With or Without Autofeather, Multiple Engine Failures At or After Vr Will Be Practiced, Single-Engine Climb to a Selected Altitude, Various Single-Engine Approaches, Single-Engine Missed Approaches and Landings, Takeoffs With Crosswind Conditions, Takeoffs With Windshear Conditions, Landings With Crosswind Conditions, Landings With Windshear Conditions

DEBRIEFING: Discuss student's performance and knowledge concerning Engine Failures at or after Vr, Single-Engine Climb out, Approach, Missed Approach, and Landing Procedures, Takeoffs and Landings with Crosswind and/or Windshear Conditions

Performance Standard. Demonstrate correct engine failure procedures during critical flight stages and practice crosswind takeoff and landing technique. Demonstrate proper windshear recognition and escape procedures during takeoff and landing scenarios. Continue to develop standardized checklist procedures and CRM skills.

Prerequisite. SFAM-1104.

SFAM-1106 4.0 * B (N*) S

Goal. To instruct the PUI on high density altitude conditions and the effects on aircraft performance with both engines and with one engine inoperative. Review previously discussed systems and related malfunctions.

Requirement

BRIEFING: Discussion of any questions from the previous lessons, review Performance Charts, Discuss Takeoff Weight Limitations, Discuss Engine Power Available, Discuss Accelerate Stop and Accelerate Go Distances, Discuss Net Gradient of Climb, Discuss Aircraft Configuration

SIM: All Checklist Items Completed, Review Various Malfunctions During the Checklist, Battery Start, Review Various Start Malfunctions, Review Various Malfunctions During the Checklist, Normal Ground Taxi, Review and Perform Engine Run-up Memory Procedures, Review Various Malfunctions During the Checklist, ATC Clearance, Weather Briefing, Radar Vectors

or Departure Procedure (If Available), Crew Briefing, TAKEOFF Maximum Power Before Brake Release, Aborts May Be Induced At Instructor's Discretion, Engine Failures/Flameouts At or After Vr, Failures Will Occur at Different Altitudes and Airspeeds, Failures Will Occur With 0% Flaps or 40% Flaps, Failures Will Occur With or Without Autofeather, Single-Engine or Two Engine Climb to a Selected Altitude, Single-Engine Missed Approaches and Landings

DEBRIEFING: Discuss the student's performance and knowledge concerning High Density Altitude Operations, Aircraft Performance, previous Systems and Related Malfunctions

Performance Standard. PUI should demonstrate ability to conduct normal and emergency procedures at high density altitude field conditions. Perform all normal, abnormal, and emergency checklists and procedures, repeating as necessary to achieve 100% completion. In addition, demonstrate effective use of CRM skills.

Prerequisite. SFAM-1105.

SFAM-1107 4.0 * B (N*) S

Goal. Instruct PUI on landing gear, wheel brake, and wing flap systems and related malfunctions. Discuss dual engine failure/flameout and power off glide procedures. Discuss and perform ditching procedures. Provide a general review of previous systems and malfunctions.

Requirement

BRIEFING: Discussion of any questions from the previous lessons, Landing Gear and Wheel Brake Systems and Malfunctions, Dual Engine Failure/Flameout (Possible Causes), Power-Off Glide Configuration, Dual Engine Failure Landing Pattern, Ditching/Forced Landing Procedures.

SIM: All Checklist Items Completed, Various Malfunctions during the Checklist, GPU Start, Engine Start Malfunctions, Ground Taxi, Engine Run-up Memory Procedures and Engine Run-up Checklist Completed, Systems Malfunctions During the Run-up, Normal Takeoff, Takeoff Aborts May Be Induced At Instructor's Discretion, Engine Failure/Flameout At or Above Vr May Be Induced At Instructor's Discretion, Crosswind and Windshear Conditions May Be Encountered, Climb to Selected Altitude or Enter VFR Traffic Pattern, Landing Gear Malfunctions, Gear Transit Failure, Manual Landing Gear Extension Procedures, Unsafe Gear Up, Unsafe Gear Down, Unsafe Nose Gear, Unsafe Main Gear, All Gear Up, Landings Will Be Done with Various Landing Gear Unsafe Conditions, Dual Engine Failure/Flameout, Power-Off Glide Procedures and Power-Off Landing, Single-Engine Landings May Be Induced At Instructor's Discretion, Two Engine Ditching, Single-Engine Ditching, Power-Off Ditching

DEBRIEFING: Discuss the student's performance and knowledge concerning Landing Gear and Flap Malfunctions, Dual Engine Failure and Power-Off Glide Procedures, Ditching Procedures, Previous Systems and Malfunctions

Performance Standard. PUI should demonstrate ability to recognize and execute emergency procedures related to landing gear, wheel brake, and wing flap systems. Continue to practice standardized checklist and operational procedures and CRM skills.

Prerequisite. SFAM-1106.

SFAM-1108 4.0 * B (N*) S

Goal. PUI will conduct a comprehensive review of previous systems, procedures, and malfunctions in preparation for a NATOPS Evaluation Flight. Cover any specific student requests or problems. Malfunctions and failures will be induced at the instructor's discretion based on the student's level of proficiency.

Requirement

BRIEFING: Discussion of any questions from previous lessons, review of previous systems, review of previous procedures, review of previous malfunctions, address any student questions or problems.

SIM: Review all previous introduced items at the instructor's discretion.

DEBRIEFING: Discuss the student's performance and knowledge, give students the information required for the NATOPS Evaluation Flight

Performance Standard. Progress check for PUI. PUI should demonstrate ability to apply correct NATOPS procedures for instructor selected malfunctions and emergency scenarios. PUI should demonstrate appropriate CRM skills in handling these emergency scenarios.

Prerequisite. SFAM-1107.

SFAM-1109 4.0 365 B,R (N*) S

Goal. Conduct a UC-12 NATOPS Evaluation Flight in accordance with Chapter 30 of the NAVAIR 01-C12AAA-1 NATOPS Flight manual.

Requirement. See Chapter 30 of the NAVAIR 01-C12AAA-1 NATOPS Flight Manual.

Performance Standard. Demonstrate NATOPS standards to operate as PUI in accordance with UC-12 NATOPS Chapter 30.

Prerequisite. SFAM-1108.

SFAM-1120 4.0 * R (N*) S

Goal. Perform normal procedures/checklists, engine starts, engine run-up procedures with associated malfunctions. Review the engine system, propeller system, electrical system, fuel system, and related malfunctions. Practice air work items including takeoffs, climbs, turns, steep turns, stalls, descents, holding, instrument approaches, landings, and single engine procedures. Discuss, observe, and practice Aircrew Coordination skills during simulator training.

Requirement

BRIEFING: PUI questions, overview of Planned Flight Route, Crew Coordination and Responsibilities, Forecast Weather and Aircraft Configuration, Review Possible Start Malfunctions, Stall Checklist and Stall Recovery Procedures, Emergency Engine Shutdown Procedure, In-flight Single Engine, Operations, and In-flight Restarts, Engine, Propeller, Electrical, Fuel Systems Review and Discussion of Related Malfunctions, Expected Instrument Approaches

SIM: All Checklist Items, Fuel Firewall Shutoff Valve Circuit Breaker on the Hot Battery Bus Tripped, Standby Boost Pump Circuit Breaker on the Hot Battery Bus Tripped, Cross feed Valve Fails to Open, Battery Start, Hot Start, Hung Start, No ITT Start, Starter Relay Failed Closed, Engine Driven Boost Pump Failure on Start, Current / Isolation Limiter Failure, Inverter Failure, Avionics Master Switch Failure, Current / Isolation Limiter Failure, Obtain ATIS Information and Clearances From the Appropriate ATC Frequencies, All NATOPS Run up Items Completed, Overspeed Governor Tests Out of Limits, Overspeed Governor Remains in the Test Mode, Rudder Boost Fails to Test, Rudder Boost Crossed, Primary Governor Fails, Autofeather Test Fails, Normal Takeoff, Autofeather Inoperative, Airspeed Failure, Caution or Warning Annunciator Illuminates, Engine Failure, Runaway Torque, Climbs, Turns, Steep Turns, Stalls and Stall Recoveries, Emergency Engine Shutdown and Restart, Generator Failure, Inverter Failure, Battery Charge Light Illuminates, Circuit Breaker or Subpanel Feeder Breaker Trips, Engine Driven Boost Pump Failure, Auxiliary Fuel Transfer Failure, Primary Governor Failure, Instrument holding: Entry Procedures, Speed Restrictions, Fuel Computations, Communications Failure (Discussion Only), Various Approaches, Missed approach or Wave off.

DEBRIEFING: Discuss the PUI's performance and knowledge displayed during the simulator period, review any system or systems malfunctions that caused confusion during the training, point out and discuss strengths and weaknesses in aircrew coordination during the period, ensure all questions are answered

Performance Standard. Demonstrate proper procedures and aircraft handling during all phases of flight.

Prerequisite. ACAD-1020

SFAM-1121 4.0 * R (N*) S

Goal. Perform additional engine starts with associated failures and practice normal and abbreviated ground procedures. Review the charts and practice the procedures applicable to high altitude, high temperature takeoff with an engine failure after Vr, a subsequent single engine approach, and / or single engine missed approach. Review the pressurization system, pneumatic systems, environmental systems, oxygen system, and related

Requirement

BRIEFING: PUI Questions, overview of planned flight profile, Crew Coordination and Responsibilities, Forecast Weather for Departure, En route, and Destination, Anti-Ice/De-ice Systems, Flight Control Systems, Landing Gear System, Wheel Brake System, Pitot-Static System, Avionics And Flight Instrument Systems, Review any Related Malfunctions, Specific PUI Training Requests

SIM: All Checklist Items Completed (abbreviated Checklist Items Completed as appropriate), Possible Failures/Malfunctions continue to Review as necessary from the items listed in Simulator Period #1, Pitot Tube Blocked, Static Port Blocked, Compass System Failure, Altimeter Failure, Radio or Navaid Failure, Landing Gear Relay Circuit Breaker Trip, Landing Gear Indicator Fail, Landing Gear Motor Fails, One Gear Fails to Extend or Indicates Unsafe, Manual Gear Extension Procedure, Runaway Trim, Runaway Flaps, Flap Motor Circuit Breaker Trip, Flap Control Circuit Breaker Trip, Specific PUI training requests or any misc training items that need review.

DEBRIEFING: Discuss PUI's performance and knowledge displayed during the simulator period, review any systems or system malfunctions that caused confusion during the training. Point out and discuss strengths and weaknesses in Aircrew Coordination during the period. Ensure all questions are answered.

Performance Standard. Demonstrate knowledge of systems and competent handling of the aircraft with emphasis on flight skills, situational awareness, and headwork.

Prerequisite. SFAM-1121

208. CORE SKILL (2000 PHASE)

1. Core Skill Academic (ACAD).

- a. Purpose. Introduce the Pilots to the UC-12B/F.
- b. General. The Pilot should be CACT complete prior to beginning this stage.

ACAD-2000	3.0	*	B,R	D	A	1 UC-12B/F (Static)
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Goal. Introduce the UC-12B/F aircraft.

Requirements.

Brief: ADB, MEL/CDL, Chapter 29 Flight Crew Coordination, Pre-flight, Emergency Equipment, Egress Drill, Post Flight, M-Sharp, CP-CALC, Flight-planning, ORM, WX Brief, NOTAMS, Fuel Packet/Multi-use Card, OPARS, Short Field High Obstacle.

Performance Standard. After introduction of above listed items, demonstrate understanding of each subject.

External Syllabus Support. Static aircraft.

Prerequisite. 1000 Phase complete

ACAD-2001 3.0 * B,R A/CLRM 1 UC-12B/F (Static)

Goal. Introduce the UC-12B/F avionics and navigation systems on a powered aircraft.

Requirements. Demonstrate the power up, set up, and various functions of the FMS, radios and avionics.

Performance Standard. Show working knowledge in the use of all navigation equipment and radios.

External Syllabus Support. Ground powered aircraft.

Prerequisite. 2000

ACAD-2002 3.0 * B,R CLRM 1 UC-12B/F (Static)

Goal. FMS Procedures

Requirements. Review ACAD-2001

Performance Standard. Show proficiency in the use of all navigation equipment and radios.

Prerequisite. 2001

2. Familiarization (FAM)

a. Purpose. Develop proficiency as a T2P with the systems management requirements of the UC-12 in all takeoff, landing, and flight modes. At the completion of the core skill basic phase the PUI should be able to meet performance standards for various maneuvers IAW Part 10, Chapter 30 of the UC-12 NATOPS Manual.

b. General

(1) This phase contains basic core skill training essential to operational employment of the UC-12.

(2) At the completion of this phase of training, and the T2P-6200 event, the PUI should be designated a Transport Second Pilot (T2P).

(3) The Core Skill Phase shall be conducted at the VMR DET.

(4) PUI's shall successfully complete approved CACT initial/refresher course prior to starting this phase of training.

(5) Flights in this stage of instruction shall be flown sequentially, single-sortie, with a designated IP, and include a complete brief/debrief for each flight.

c. Crew Requirements. IP and PUI. An NI/ANI shall instruct all initial flights.

FAM-2110 2.0 * B,R D A 1 UC-12B/F

Goal. Introduce the pilot to basic preflight and ground checklist procedures. Demonstrate and introduce normal, abnormal, and emergency procedures.

Requirement. Demonstrate weight and balance, performance data, OPARS, filing requirements, maintenance administration, M-SHARP, aircraft discrepancy book, preflight, checklist utilization, and

pre-event crew coordination. Preflight briefing to include normal/abnormal start procedures, run-up procedures, emergency engine shutdown on deck, aborted takeoff, emergency equipment, emergency egress, engine failure after Vr, ditching procedures (simulated single engine (SSE), dual engine on/off), touch and go procedures, EGPWS operation and alerts, and TCAS operation and alerts. Demonstrate aborted take-off, normal take-off and departure, ditch (2 engine on), engine shutdown procedure (in flight), airstart procedure (starter assist), normal landings, SSE pattern, SSE landing, SSE wave-off, abort, stalls and stall recovery procedures. Introduce turn pattern, slow flight, stalls and stall recovery, normal landing pattern, approach flap landing, full flap landing, no flap landing, wave-off (2 engine), and full stop reverse landing. Practice aircraft inspection, engine starting procedures, engine run-up, taxiing, shut-down, cockpit/crew coordination, operating limits (engine).

Performance Standard. Challenge/Reply method of checklists introduced. First engine start demonstrated by the IP. PUI talked through second engine start. PUI talked through checklists, resulting in long delays. During actual taxi expect the following common errors: power in idle vice beta, difficulty turning (too slow and using too much brake - aircraft stops), riding brakes vice using beta to control speed, inappropriate taxi speed (too fast in the line, too slow on the runway), weaving, failure to maintain centerline, rough brake application, not coming out of beta after stopping, stopping with the nose-wheel canted. During engine run-up PUI will typically be unsure of what steps are, and unable to complete without extensive assistance - may take 10 minutes or more to complete.

Note: IP should demo or talk the PUI through the first takeoff - PUI usually requires extensive coaching and some control inputs by the IP. IP should demo or talk the PUI through an aborted takeoff. PUI should be able to maintain airspeed within 15 knots, and altitude within 200 feet throughout the flight. IP should demo or talk PUI through emergencies/single engine work, then allow PUI to practice them with coaching. IP should demo or talk the PUI through the first landing. The PUI should attempt to land near the centerline, in the first 1/3 of the runway and cross the threshold at Vref. Operate the aircraft according to the NFM, IFM and FARs.

CRM. PUI will be unclear about who does what, when. Will try to do it all, especially if new to multi-pilot aircraft. PUI may require prompting to use the copilot.

Prerequisite. 1000 Phase complete, ACAD-2002

FAM-2111	2.0	*	B,R	(N*)	A	1 UC-12B/F
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Goal. Introduce and practice normal, abnormal, and emergency procedures.

Requirement. Preflight briefing to include GPU start procedures, jammed flight controls, door open light (in flight), oxygen system, smoke and fume elimination, runaway torque on deck, fire detection/extinguisher system, engine fire on deck, loss of and hot brakes, flap system failure, and electrical system

malfunction. Demonstrate/Introduce Safe Single Engine SSE After Takeoff (ATO) (no rudder boost/at altitude), airstart (windmilling), and SSE ditch. Practice aborted take-off, airstart procedures, SSE pattern, SSE landing, SSE wave-off, emergency checklists, engine fire in-flight, electrical fire, and abort. Review preflight inspection, engine start, taxiing, takeoff/departure, stalls/recoveries, landing pattern (normal), approach flap landing, full flap landing, no flap landing wave-off (2 engine), full stop/reverse landing, SSE reverse landing, shut-down, and post-flight.

Performance Standard. PUI should remember to call for checklists, but will not remember all the correct responses. PUI should be able to start engines unassisted - below average otherwise. Common errors on start: not checking all the gauges before advancing the condition lever, trying to start in starter only, forgetting to disengage the starter. During checks PUI should know how and why steps are done; may require a little prompting. PUI should show improvement on taxiing. During engine run-ups PUI may need assistance to recall precise order.

Note: During take-off some coaching may be required. Failure to abort when directed is below average. PUI should be able to maintain airspeed within 10 knots and altitude within 100 feet (with occasional incursions to 200 feet) throughout the flight. PUI should be able to handle emergencies/single engine work with minimal delay and minor coaching. During landing the PUI should be near centerline and flaring in the right fashion, but landings most likely will not be consistent - PUI should understand what they need to correct after each landing.

CRM. PUI should remember to use the copilot some of the time. Will usually forget during emergencies or anything new.

Prerequisite. FAM-2110

FAM-2112	2.0	60	B,R	(N*)	A	1 UC-12B/F
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Goal. Practice emergency procedures application and previous FAM instruction.

Requirement. Preflight briefing to include oil system emergencies, cargo door operations, emergency egress hatch, runaway torque after Vr, electric trim failure, engine failure (2nd engine), in-flight fires, landing gear emergencies, landing gear alternate extensions, propeller failure/overspeed, fuel system emergencies, A/C operating limits (airframe), forced landing (no power), and pressurization failures. Introduce emergency descent, air-start (windmilling), dual engine failure, propeller malfunctions, ditch (2 engine out), SSE ATO (no rudder boost), SSE wave-off (no rudder boost), and engine fire on deck. Practice stall recoveries, landing patterns normal/SSE, and landings normal/SSE. Review previous emergencies and procedures.

Performance Standard. PUI should know when to call for checklists and replies to checklists. Some regression on single engine work is not uncommon. Should be able to complete checklists and taxi without major corrections (may still need technique refinement). PUI should be able to complete engine run-ups unassisted - below average if unable to do any of these things.

Note: Any assistance during takeoff is below average. PUI should be able to maintain airspeed within 5 knots (more than 10 knots is below average) and maintain altitude within 50 feet (with occasional excursions to 100 feet) throughout the flight. PUI should be able to handle emergencies/single engine work without prompting/coaching. Landings should be on centerline, no slip or skid, within the first 1500 feet of the runway, and may be firm, but not hard - should not require coaching. Operate the aircraft according to the NFM, IFM and FARs.

CRM. PUI should remember to use copilot most of the time; calls for assistance with flaps, props and checklists should come nearly all the time. Prompting from IP should be rare.

Prerequisite. FAM-2111

3. Instruments (INST)

a. Purpose. To acquaint the PUI with the flight characteristics, navigation equipment, and flight instruments under simulated or actual instrument flying conditions. PUI should demonstrate keen awareness of flight instrument interpretation and spatial orientation. INST-2201 is utilized for the UC-12B to UC-12F Series Conversion

b. General

- (1) Approaches should terminate in touch-and-go landings if possible.
- (2) One of the instrument flights should be flown at night.

INST-2200 2.0 60 B,R (N*) A 1 UC-12B/F

Goal. Introduce UC-12 instrument procedures and precision/nonprecision capabilities.

Requirement. Preflight briefing to include NATOPS section six precision/nonprecision procedures, VOR procedures, ILS/LOC/BC procedures, GCA/ASR procedures, TACAN procedures, nonprecision SSE procedures, autopilot/Flight Director Indicator (FDI)/Horizontal Situation Indicator (HSI) utilization, enroute/cruise procedures, autopilot coupled approach, autopilot emergency disengage, electric elevator trim failure, autopilot trim failure light, and copilot utilization/duties. Introduce instrument departure, VOR approach, ILS/LOC/BC approach, TACAN approach, ASR/GCA approach, SSE approaches, SSE missed approach, holding, and copilot utilization. Review normal landings, SSE landings, previous emergencies, and procedures.

Performance Standard. In accordance with NATOPS flight manual and OPNAV instrument flight manual.

CRM. Should be like FAM-2110 during instrument procedures; requests for assistance during EPs should be good, but may regress in the new instrument environment.

Prerequisite. FAM-2110

INST-2201 2.0 365 B,R (N*) A 1 UC-12F

Goal. Introduce ProLine 21 UC-12 instrument procedures and precision/non-precision capabilities in the local area. Series conversion UC-12B to UC-12F.

Requirement. Preflight briefing and flight to include NATOPS Part VI precision / non-precision / FMS approaches, limitations and requirements. Flight Level Change, Vs modes (Pitch/Vertical Velocity/Speed), VOR procedures, ILS/LOC/BC procedures, GCA/ASR procedures, RNAV procedures, TACAN procedures, autopilot/Flight Director Indicator (FDI)/Horizontal Situation Indicator (HSI) utilization, airspeed indicator operation and setup, en route/cruise procedures. Introduce non-autopilot instrument departure, VOR approach, ILS/LOC/BC approach, RNAV approaches, TACAN approach, ASR/GCA approach, holding, missed approach procedures and pilot/copilot crew coordination. Review normal landings, SSE landings, previous emergencies, and procedures.

Performance Standard. In accordance with NATOPS flight manual and NATOPS instrument flight manual.

CRM. Should be like FAM-2112 with generally good utilization of copilot.

Prerequisite. INST-2200

INST-2202 2.0 365 B,R (N*) A 1 UC-12B/F

Goal. Introduce PUI to copilot duties and introduce right seat operations.

Requirement. Preflight briefing to include NATOPS section three, copilot duties, arrival transition, anti-ice/de-ice system, severe weather procedures, radar utilization, FMS, HF procedures, and filing in-flight. Introduce copilot responsibilities, right seat approach, right seat landing, FMS, and HF procedures. Practice voice procedures, checklist utilization, secure procedures, and fuel servicing. Review previous stage emergencies and procedures.

Performance Standard. Competently perform all duties of the non-flying pilot while practicing good CRM from the right seat.

Prerequisite. INST-2200

209. MISSION SKILL PHASE (3000)

1. General

a. Aircrew in this stage shall meet the requirements of the NATOPS flight manual and other local directives.

b. Emphasis on this phase is passenger/cargo missions, CRM, and aeronautical competence.

2. Crew Requirements. NI/ANI for initial flights.

3. Operational Support Airlift (OSA)

OSA-3100 3.0 60 B,R (N*) A 1 UC-12B/F

Goal. Introduce to PUI the passenger missions.

Requirement. Discuss left seat/right seat responsibilities. Review the passenger brief, flight/mission planning, and use of the fuel card. Coordinate with scheduling agency (JOSAC, MCB Japan).

Performance Standard. Be able to competently perform pre-flight/in-flight planning (to include a fuel plan), and give a passenger brief, while practicing good CRM.

Prerequisite. 6200

4. Air Logistics Support (ALS)

ALS-3200	3.0	60	B,R	(N*)	A	1 UC-12B/F
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Goal. Introduce to PUI the UC-12 cargo mission.

Requirement. Discuss left seat/right seat responsibilities. Review weight and balance, flight/mission planning, and use of the fuel card.

Performance Standard. Be able to competently compute a weight and balance for the mission, open and close the cargo door, and reconfigure the cabin as needed, while practicing good CRM.

Prerequisite. 6200

210. CORE PLUS PHASE (4000 PHASE)

1. General

- a. The Core Plus Phase consists of academic, skill, and mission training.
- b. Core Plus training is defined as theater specific and/or low likelihood of occurrence training and should not be the focus of unit training.
- c. The Pilot should be Core Skill complete prior to beginning the Core Plus Phase of training.

2. Core Plus Academics (ACAD)

ACAD-4000	2.0	*	B,R	CLRM	Search Patterns
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General. Introduce search and rescue on scene commander procedures.

ACAD-4001	4.0	730	B,R	CLRM	High ALT Ops
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General. Introduce aircraft performance and mission planning in high and/or hot environments.

ACAD-4002	2.0	730	B,R	CLRM	International/ICAO
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General. Introduce navigation and flight planning in the ICAO environment.

3. Assault Support (AS)

AS-4100 3.0 1095 B,R (N*) A 1 UC-12B/F

General. Train the PUI in basic search and rescue and on-scene commander procedures.

Requirement. PUI will demonstrate the ability to act as on-scene commander and to conduct basic a visual search using various search patterns.

Performance Standard. Be able to competently use the FMS SAR search pattern function, and execute the on-scene commander checklist

Note: There is not currently one in the NATOPS. This is a good starting point: <http://www.tpub.com/content/aviation2/P-1286/P-12860050.htm>

Prerequisite. 4000, 3000 Phase complete.

AS-4101 3.0 * B,R (N*) A 1 UC-12B/F

General. Train the PUI in long range/over water procedures.

Requirement. PUI will demonstrate the ability to flight plan and execute a long range/over water flight.

Performance Standard. In accordance with the NATOPS flight manual.

Prerequisite. 4002, 3000 Phase complete.

4. Expeditionary Shore-Based Operations (EXP). Expeditionary operations are defined as operations to certified unimproved runways to include dirt, grass or gravel only.

EXP-4200 2.0 * B,R (N*) A 1 UC-12B/F

Goal. Train the PUI to navigate along a published VR route, no lower than 1000'.

Requirements. PUI will plan and execute VFR flight using appropriate VFR charts and Deduced Reckoning (DR) navigation. Flight should consist of two legs, the first of which, the PUI navigates from the right seat using the VFR charts and DR techniques as the primary means of navigation and instrument NAVAIDS/FMS as secondary. For the second leg PUI will fly from the left seat while IP navigates from the right seat. For planning and execution, visual meteorological conditions shall prevail over the entire navigation route, which meet FAR part 91.155.

Performance Standard. PUI should be +/- one minute and +/- five miles of each checkpoint, for a minimum of five checkpoints. Be able to properly utilize/prepare ONC/TPC charts.

Prerequisite. 6200, 3000 Phase complete.

EXP-4201 2.0 1095 B,R (N*) A 1 UC-12B/F

Goal. Train PUI in short and unimproved airfield operations, and in high, hot, and heavy operations.

Requirements. PUI should demonstrate proficiency in short field and unimproved airfield operations.

Performance Standard. Theatre and unit SOP specific.

Prerequisite. 6200, 4001, 3000 Phase complete

211. INSTRUCTOR TRAINING (5000 PHASE)

1. Purpose. Develop and evaluate skills required to instruct initial and refresher pilots in appropriate phase events.

2. General. The following general requirements shall be adhered to:

a. Standardization Board Recommended and CO/OIC approval.

b. 300 hours of total fixed-wing pilot time.

c. 50 hours as TPC in model.

d. Designated CRM Facilitator. This requirement may be waived for designation purposes but shall be completed as soon as possible based on Crew Resource Management Instructor (CRMI) availability.

e. IUT-5104 is not required to be designated an IP. IUT-5104 is required to instruct in 4000 level events.

f. The IUT shall demonstrate unwavering control over all aspects of aircraft operation.

g. The IP under training in this stage will fly all events from the right seat.

3. Crew Requirement. IP, IUT

4. Ground/Academic Training. Complete local IUT ground school syllabus and CRM facilitator course.

5. Instructor Under Training (IUT)

IUT-5100 2.0 * B,R D E A 1 UC-12B/F

Goal. IUT familiarization introduction.

Requirement. Brief instructional technique, systems knowledge, procedural knowledge, and time management. Flight maneuvers to include start, taxi, run-up, turn pattern, slow flight, stalls, Vmc demo (by instructor), engine failures cruise and after takeoff (at altitude), landing pattern, SSE landing pattern, wave-off, SSE wave-off, landings, abort, EP's, and BAW. Instructional skills to include headwork, cockpit/crew coordination, EP checklists, time management, and critique/ error correction shall be discussed. Postflight to include debrief, critique, and NATOPS grading standards.

Performance Standard. Demonstrate knowledge of instructional techniques.

Prerequisite. 6300

IUT-5101 2.0 * B,R D E A 1 UC-12B/F

Goal. Introduce phase-appropriate instructional techniques during the conduct of an actual instructional sortie.

Requirement. Brief instructional technique, systems knowledge, procedural knowledge, time management. Review start, run-up and shutdown, turn pattern, slow flight, stalls, landing pattern, landings, abort, SSE reversing, SSE after take-off (no rudder boost/with Autofeather), short-field takeoff, dual engine failure (simulated), windmilling airstart, SSE/dual engine out ditch, prop malfunctions, and engine fires (at altitude, in pattern, and on deck). Instructional skills to include headwork, cockpit/crew coordination, EP checklists, time management, and critique/error correction. Postflight to include debrief, critique, and grading.

Performance Standard. Demonstrate knowledge/capability of instructional techniques.

Prerequisite. 5100

IUT-5102 2.0 * B,R D E A 1 UC-12B/F

Goal. IUT instrument/navigation introduction.

Requirement. Brief instructional technique, systems knowledge, procedural knowledge, and time management. Review start, run-up & shutdown, engine failures (at altitude, in pattern, and ATO), slow flight, stalls, ditch, emergency descent, landings in all configurations, SSE landing, abort, and wave-offs (2 engine and SSE). Vmc demo (normal, no inputs, and wrong rudder) microburst escape, basic instruments (BI) (turns, climb, descents), Autopilot/Flight Director (AP/FD) use, and AP/FD on ILS & non-precision approaches. Instructional skills to include headwork, CRM, EP checklists, time management, critique/error correction. Postflight to include debrief, critique, grading.

Performance Standard. Conduct a safe and efficient instructional event.

Prerequisite. 5101

IUT-5103 2.0 * B,R D E A 1 UC-12B/F

Goal. IUT instrument/navigation practice.

Requirement. Brief instructional technique, systems knowledge, procedural knowledge, time management, FLIP publications, and flight plan filing. Flight maneuvers to include VOR approach, NDB approach, circling approach, holding, ILS, PAR, selected approaches to include SSE procedures, en route procedures, jet routes, and airspeed/endurance. Instructional skills to include headwork, cockpit/crew coordination, EP checklists, time management, and critique/error correction. Postflight to include debrief, critique, and grading.

Performance Standard. Conduct a safe and efficient instructional event.

Prerequisite. 5102

IUT-5104 2.0 * B,R D E A 1 UC-12B/F

Goal. Train IUT in Core Plus Skills.

Requirement. IUT demonstrate the ability to train and qualify initial and refresher pilots in on-scene commander and conduct of basic visual search patterns, short field and unimproved airfield operation, DR navigation techniques in VFR environment.

Performance Standard. Conduct a safe and efficient instructional event.

Prerequisite. 5103

IUT-5105 2.0 * B,R D E A 1 UC-12B/F

Goal. IUT Standardization Evaluation.

Requirement. Conduct IUT standardization evaluation.

Performance Standard. Demonstrate knowledge/capability of instructional techniques.

Prerequisite. 5100,5101,5102,5103. IUT-5104 is not a prerequisite for this event.

212. REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS (RQD) (6000 PHASE)

1. General. These events are to be used for the annual training requirements to include NATOPS and Instrument evaluation flights and official qualification and designation check-rides.

2. Purpose. Evaluate and develop skills in accordance with applicable directives.

3. Requirements

a. Purpose. To enable the OSA unit to document completion of required events. The event codes delineate satisfactory completion of all academic, simulator, and flight requirements.

b. Ground/Academic Training. Per the appropriate 1000 and 2000 level syllabus.

c. Flight/Simulator Event Training. Per the appropriate 1000 and 2000 level syllabus.

4. UC-12B/F RQD Academics

ACAD-6000 4.0 365 B,R E NATOPS Open Book

Goal. The open book examination shall consist of, but not be limited to the question bank. The purpose of the open book examination is to evaluate the Pilot's knowledge of the appropriate publications and the aircraft.

Performance Standard. Achieve a minimum score of 3.5 on the open book examination.

ACAD-6001 2.0 365 B,R E NATOPS Closed Book

Goal. The purpose of the closed book examination is to evaluate the Pilot's knowledge of normal/emergency procedures and aircraft limitations.

Performance Standard. Achieve a minimum score of 3.3 on the closed book examination.

Prerequisite. 6000

ACAD-6002 2.0 365 B,R E NATOPS Oral

Goal. The oral examination shall consist of, but not be limited to the question bank. The instructor may draw upon their experience to ask questions of a direct and objective nature to evaluate the Pilot's knowledge of normal/emergency procedures, aircraft limitations, and performance.

Performance Standard. Achieve a minimum grade of qualified on the oral examination.

Prerequisite. 6000, 6001

ACAD-6003 8.0 365 B,R E Instrument Ground School

Goal. The Instrument Ground School shall be an approved Commander Naval Air Forces (CNAF) syllabus. If an approved Instrument Ground School is not available this requirement may be waived.

Performance Standard. Achieve a minimum grade of qualified for Instrument Ground School.

ACAD-6004 2.0 365 B,R E Instrument Exam

Goal. Successful completion of the Instrument Examination.

Performance Standard. Achieve a minimum passing score on the Instrument Examination.

Prerequisite. 6003

ACAD-6005 2.0 365 B,R E Instrument Oral Exam

Goal. The oral NATOPS instrument examination shall consist of, but not be limited to the question bank in addition to any subject listed for coverage in OPNAVINST 3710.7.

Performance Standard. Achieve a minimum grade of qualified on the oral NATOPS instrument examination.

Prerequisite. 6004

ACAD-6006 1.0 365 B,R E CRM BASIC

Goal. Introduce multi-piloted Crew Resource Management.

Requirement. This course of instruction is included in initial and Recurrent CACT.

ACAD-6007 1.0 365 B,R E TPC Responsibilities UC-12B/F

General. Introduce TPC responsibilities.

ACAD-6008 2.0 * B,R E FCP Responsibilities UC-12B/F

Goal. The open book examination shall consist of 20 to 30 questions, including, but not limited to information from Chapter 10 of NATOPS. The purpose of the open book examination is to evaluate the Pilot's knowledge of FCF procedures and the aircraft systems and limitations.

Performance Standard. Achieve a minimum score of 3.5 on the open book examination.

ACAD-6009 1.0 30 B,R E Monthly EP Examination

Goal. Successfully complete the UC-12B/F Monthly Emergency Procedures Examination.

Requirement. Pass the Monthly Emergency Procedures Examination.

Performance Standard. Achieve a passing score on the Monthly Emergency Procedures Examination.

5. NATOPS Evaluation

NATOPS-6100 2.0 365 B,R (N*) E A/S 1 UC-12B/F/SIM

Goal. Complete annual NATOPS flight evaluation. Conduct an objective evaluation of the Pilot's knowledge of mission planning, normal operating procedures (flight and ground), crew resource management, aircraft systems, performance criteria, emergency procedures, and debriefing. The focus is on normal and emergency procedures. Emphasis shall be placed on the aforementioned items with the addition of local course rules, unit SOP, and admin flight procedures. The NATOPS evaluation is intended to evaluate compliance with NATOPS procedures. The NATOPS evaluation is the means to measure the Pilot's efficiency in the execution of normal operating procedures and reaction to emergencies and malfunctions. The NATOPS evaluation process should be as much a learning tool and/or experience as it is an evaluation.

Requirement. Demonstrate comprehensive knowledge and understanding of NATOPS, unit SOP, and local course rules.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7, NATOPS and applicable manuals. Complies with unit SOP and local course rules.

Prerequisite. 2000 Phase complete, ACPM 83XX Phase complete;
6000, 6001, 6002.

NATOPS-6101 2.0 365 B,R (N*) E A/S 1 UC-12B/F/SIM

Goal. Complete standard instrument flight evaluation. Following completion of the ground evaluation events, a standard instrument flight evaluation event shall be flown and completed with a grade of "Qualified." Conduct an objective evaluation of the airman's knowledge of flight planning, filing, briefing, conduct of flight under normal operating conditions, emergency procedures, closing out flight plans, and debriefing.

Requirement. Demonstrate comprehensive knowledge and understanding of instrument flight procedures, NATOPS, unit SOP, and local course rules.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7, NATOPS, NATOPS Instrument Flight Manual, and training rules.

Prerequisite. 6004,6005

NATOPS-6102 2.0 365 B,R (N*) E A/S 1 UC-12B/F/SIM

Goal. Complete special instrument flight evaluation. Following completion of the ground evaluation events, a special instrument flight evaluation event shall be flown and completed with a grade of "Qualified." Conduct an objective evaluation of the airman's knowledge of flight planning, filing, briefing, conduct of flight under normal operating conditions, emergency procedures, closing out flight plans, and debriefing.

Requirement. Demonstrate comprehensive knowledge and understanding of instrument flight procedures, NATOPS, unit SOP, and local course rules.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7, NATOPS, NATOPS Instrument Flight Manual, and training rules.

Prerequisite. Meets OPNAVINST 3710.7 Special Instrument requirements, recommended by Stan Board, 6004, 6005

NTPS-6103 .5 90 B,R (N*) E A/S 1 UC-12B/F/SIM

Goal. Complete CRM evaluation flight.

Requirement. Demonstrate comprehensive knowledge and understanding of CRM skills and guidelines.

Performance Standard. Executes flight and ground operations safely and utilizing good CRM.

Prerequisite. 6006

NTPS-6104 .5 90 B,R (N*) E A 1 UC-12B/F (static)

Goal. Quarterly NATOPS static aircraft emergency procedures review.

Requirement. This review should cover selected aircraft emergencies in a static aircraft. This event can be completed in conjunction with a flight. Demonstrate comprehensive knowledge and understanding of NATOPS emergencies.

Performance Standard. Executes the review in accordance with NATOPS.

6. Transport 2 Pilot (T2P)

T2P-6200

T2P Tracking Code

Goal. T2P Tracking Code

7. Transport Aircraft Commander (TAC)

a. General

(1) Aircrew in this stage shall be recommended by the standardization board and meet the requirements of the NATOPS flight manual and other local directives.

(2) Emphasis on this phase is flight leadership and aeronautical competence. The PUI must be able to manage the cockpit in all phases of flight and use sound judgment with regard to mission decisions. A sound knowledge of all aircraft systems, local SOPs, and USMC OSA procedures is a requirement and shall be thoroughly vetted during the event briefs.

b. Purpose. Develop and evaluate skills required to be a Transport Plane Commander. The following general requirements shall be adhered to:

(1) Standardization Board Recommended and CO/OIC approval.

(2) 100 hours of total fixed-wing pilot time (50 in model).

(3) The TPC should demonstrate unwavering control over all aspects of aircraft operation.

TPC-6300 1.5 * B (N*) E A 1 UC-12B/F

Goal. Prepare PUI for duties as TPC in UC-12.

Requirement. Discuss aircraft commander responsibilities. Review UC-12 normal, abnormal, and emergency procedures. Demonstrate the ability to lead and coordinate crew actions during normal, abnormal, and emergency situations.

Performance Standard. NFM, FAR

Prerequisite. 3000 PHASE COMPLETE

TPC-6301

TPC Tracking Code

Goal. TPC Tracking Code

Prerequisite. 6300

8. Functional Check Pilot (FCP)

a. Purpose. Develop and evaluate skills required to be a Functional Check Pilot.

Avionic/Flight Instrument, Hydraulic System, and Electrical System Checks; Approach and Recovery, and Landing

Performance Standard. Satisfactorily execute procedures per the NFM and IAW OPNAVINST 3710.7

External Syllabus Support. Approved working area or restricted area.

Prerequisite. 6400

FCP-6402

FCP tracking code

Goal. FCP Tracking code.

213. AVIATION CAREER PROGRESSION MODEL (8000 PHASE)

1. Purpose

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

Marine Air Command and Control System (MACCS)

Aviation Ground Support

Joint Air Operations

ACE Battle Staff

MAGTF

Seabased Operations

Combatant Commander Organizations

b. All tactical T/M/S T&R manuals have ACPM training requirements embedded within the progressive training phases, including the flight leadership POI. If not already completed prior to assignment to the OSA unit or a VMR Det (C-12), pilots assigned to an OSA platform shall complete ACPM training requirements as outlined per their original T/M/S MOS T&R manual. Refer to NAVMC 3500.14, Aviation T&R Program Manual, as a primary reference for ACPM training requirements.

2. General

a. The ACPM is intended to be an integrated series of academic events contained within each phase of training. Accordingly, ACPM academic events are like any other academic event in that they serve as pre-requisites to selected flight events or stages. Additionally, several ACPM academic events are integrated as prerequisites for flight leadership syllabi.

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

VMR-1 VMR Det (UC-12B/F)				
ACPM TO UC-12B/F T&R MATRIX				
STAGE	EVENT NUMBER	CLASS	ACPM DESCRIPTION	PREREQUISITE TO (PHASE/STAGE/EVENT)
ACPM	8200	(U)	MACCS AGENCIES, FUNCTIONS AND CONTROL OF AIRCRAFT AND MISSILES	2000 PHASE
ACPM	8201	(U)	MWCS BRIEF	2000 PHASE
ACPM	8202	(U)	ACA AND AIRSPACE	2000 PHASE
ACPM	8210	(U)	AVIATION GROUND SUPPORT	2000 PHASE
ACPM	8230	(U)	ACE BATTLESTAFF	2000 PHASE
ACPM	8231	(U)	BATTLE COMMAND DISPLAY	2000 PHASE
ACPM	8240	(U)	SIX FUNCTIONS OF MARINE AVIATION	2000 PHASE
ACPM	8241	(U)	JTAR/ASR INTRODUCTION AND PRACTICAL APPLICATION CLASS	2000 PHASE
ACPM	8242	(U)	SITE COMMAND PRIMER	2000 PHASE
ACPM	8250	(U)	THEATER AIR GROUND SYSTEM (TAGS)	2000 PHASE
ACPM	8300	(U)	AIR DEFENSE	3000 PHASE
ACPM	8310	(U)	FORWARD ARMING AND REFUELING POINT (FARP) OPERATIONS	3000 PHASE
ACPM	8311	(U)	MARINE CORPS TACTICAL FUEL SYSTEMS	3000 PHASE
ACPM	8320	(U)	JOINT STRUCTURE & JOINT AIR OPERATIONS	3000 PHASE
ACPM	8321	(U)	JOINT AIR TASKING CYCLE PHASE 1: STRATEGY DEVELOPMENT	3000 PHASE
ACPM	8322	(U)	JOINT AIR TASKING CYCLE PHASE 2: TARGET DEVELOPMENT	3000 PHASE
ACPM	8323	(U)	JOINT AIR TASKING CYCLE PHASE 3: WEAPONING AND ALLOCATION	3000 PHASE
ACPM	8324	(U)	JOINT AIR TASKING CYCLE PHASE 4: JOINT ATO PRODUCTION	3000 PHASE
ACPM	8325	(U)	JOINT AIR TASKING CYCLE PHASE 5:	3000 PHASE
ACPM	8326	(U)	JOINT AIR TASKING CYCLE PHASE 6: COMBAT ASSESSMENT	3000 PHASE
ACPM	8340	(U)	INTEGRATING FIRES AND AIRSPACE WITHIN THE MAGTF	3000 PHASE
ACPM	8350	(U)	PHASING CONTROL ASHORE	3000 PHASE
ACPM	8351	(U)	TACRON ORGANIZATIONS AND FUNCTIONS	3000 PHASE
ACPM	8630	(U)	TACTICAL AIR COMMAND CENTER (TACC)	6000 PHASE
ACPM	8660	(U)	JOINT OPS INTRO	6000 PHASE
ACPM	8640	(U)	JOINT DATA NETWORK	6000 PHASE
ACPM	8641	(U)	MAGTF THEATER	6000 PHASE
ACPM	8620	(U)	ESG/CSG INTEGRATION	6000 PHASE

214. UC-12B/F T&R SYLLABUS MATRIX

UC-12B/F PILOT T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)																		
CORE SKILL ACADEMICS																		
ACAD	1000	CACT Ground School	B				*			40.0								XXX
ACAD	1020	CACT Ref Grnd School	R					365		16.0								XXX
ACAD	1021	Wind Shear	B,R					365		1.0								XXX
ACAD	1022	CFIT	B,R					365		1.0								
ACAD	1023	TCAS	B,R					365		2.0								XXX
CORE SKILL ACADEMICS TOTAL									4	60.0	0	0.0	0	0.0				
CORE SKILL INTRODUCTION 1 (CSI 1)																		
SFAM	1101	CACT SIM 1	B		S		D	*				4.0			1000			101
SFAM	1102	CACT SIM 2	B		S		D	*				4.0			1101			102
SFAM	1103	CACT SIM 3	B		S		(N*)	*				4.0			1102			103
SFAM	1104	CACT SIM 4	B		S		(N*)	*				4.0			1103			104
SFAM	1105	CACT SIM 5	B		S		(N*)	*				4.0			1104			105
SFAM	1106	CACT SIM 6	B		S		(N*)	*				4.0			1105			106
SFAM	1107	CACT SIM 7	B		S		(N*)	*				4.0			1106			107
SFAM	1108	CACT SIM 8	B		S		(N*)	*				4.0			1107			108
SFAM	1109	CACT SIM 9	B,R		S		(N*)	365				4.0			1108			109
SFAM	1120	CACT SIM R1	R		S		(N*)	365				4.0			1020	1109		201
SFAM	1121	CACT SIM R2	R		S		(N*)	365				4.0			1120	1121		202
SFAM	1122	CACT SIM R3	R		S		(N*)	365				4.0			1121	1120,1121,1109		203
TOTAL CSI 1 STAGE									0	0.0	12	48.0	0	0.0				
TOTAL CORE SKILL INTRODUCTION (1000 PHASE EVENTS)									4	60.0	12	48.0	0	0.0				
CORE SKILL TRAINING (2000 PHASE EVENTS)																		
CORE SKILL ACADEMICS (ACAD)																		
ACAD	2000	INTRO LOCAL PROC	B,R			1		*		3.0					1000 Phase Complete	Static.		XXX
ACAD	2001	FMS PROCEDURES	B,R			1		*		3.0					1000 Phase Complete	static		XXX
ACAD	2002	FMS PROCEDURES	B,R			1		*		3.0					2001	static		XXX
TOTAL ACAD STAGE									3	9.0	0	0.0	0	0.0				
FAMILIARIZATION (FAM)																		
FAM	2110	INTRO FAM	B,R		A	1	D	*						2.0	1000 Phase Complete,2002			210
FAM	2111	INTRO TO EPs	B,R		A	1	(N*)	*						2.0	2110			210
FAM	2112	FAM REV/STAGE CHECK	B,R		A	1	(N*)	60						2.0	2111			211
TOTAL FAM STAGE									0	0.0	0	0.0	3	6.0				

UC-12B/F PILOT T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
INSTRUMENTS (INST)																		
INST	2200	INTRO INST NAV (UC-12B/F)	B,R		A	1	(N*)	60						2.0	2110 (NIGHT ONE HOP)	UC-2B/F		221
INST	2201	UC-12F INST	B,R		A	1	(N*)	365						2.0	2200			
INST	2202	INTRO CP DUTIES	B,R		A	1	(N*)	365						2.0	2200	UC-2B/F		222
TOTAL INST STAGE									0	0.0	0	0.0	3	4.0				
TOTAL CORE SKILL PHASE (2000 PHASE)									3	9.0	0	0.0	6	10.0				
MISSION SKILL TRAINING (3000 PHASE EVENTS)																		
OPERATIONAL SUPPORT AIRLIFT (OSA)																		
OSA	3100	OSA	B,R		A	1	(N*)	60						3.0	6200	Pax	2112, 2200, 3200	XXX
TOTAL OSA STAGE									0	0.0	0	0.0	1	3.0				
AIR LOGISTICS SUPPORT (ALS)																		
ALS	3200	ALS	B,R		A	1	(N*)	60					1	3.0	6200	Cargo	2112, 2200, 3100	XXX
TOTAL ALS STAGE									0	0.0	0	0.0	1	3.0				
TOTAL MISSION SKILL PHASE (3000 PHASE)									0	0.0	0	0.0	2	6.0				
CORE PLUS TRAINING (4000 PHASE EVENTS)																		
CORE PLUS ACADEMICS (ACAD)																		
ACAD	4000	Search Patterns	B,R					*		2.0								XXX
ACAD	4001	High Alt Ops	B,R					*		2.0								XXX
ACAD	4002	International/ICAO	B,R					*		8.0								XXX
TOTAL ACAD STAGE									3	12.0	0	0.0	0	0.0				
ASSAULT SUPPORT (AS)																		
AS	4100	Search Patterns / OSC	B,R		A	1	(N*)	1095						3.0	4001, 3000 Phase Complete			402
AS	4101	Long Range Nav	B,R		A	1	(N*)	*						3.0	4002, 3000 Phase Complete			XXX
TOTAL AS STAGE									0	0.0	0	0.0	2	6.0				
EXPEDITIONARY FIELD PROCEDURES (EXP)																		
EXP	4200	Visual Pilotage Nav	B,R		A	1	(N*)	*						2.0	6200, 3000 Phase Complete			401
EXP	4201	Exp/High Alt Ops	B,R		A	1	(N*)	1095						2.0	6200, 4002, 3000 Phase Complete			403
TOTAL EXP STAGE									0	0.0	0	0.0	2	4.0				
TOTAL CORE PLUS PHASE (4000 PHASE)									3	12.0	0	0.0	4	10.0				
TOTAL 2000, 3000, & 4000 PHASE									6	21.0	0	0.0	12	28.0				

UC-12B/F PILOT T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
INSTRUCTOR TRAINING (5000 PHASE EVENTS)																		
INSTRUCTOR UNDER TRAINING (IUT)																		
IUT	5100	IUT FAM Intro	B,R	E	A	1	D	*						2.0	6300			XXX
IUT	5101	IUT FAM	B,R	E	A	1	D	*						2.0	5100			XXX
IUT	5102	IUT INST Nav	B,R	E	A	1	D	*						2.0	5100			XXX
IUT	5103	ANI/NI Eval	B,R	E	A	1	D	*						2.0	5100,5101,5102			501
IUT	5104	Core Plus Instructor	B,R	E	A	1	D	*						2.0	5103			XXX
IUT	5105	IUT Stan Eval	B,R	E	A	1	D	*						2.0	5100,5101,5012,5103			
TOTAL IUT STAGE									0	0.0	0	0.0	6	12.0				
INSTRUCTOR TRAINING (5000 PHASE EVENTS) TOTAL									0	0.0	0	0.0	6	12.0				
REQUIREMENT, QUALIFICATIONS, AND DESIGNATIONS (RQD) (6000 PHASE)																		
RQD ACADEMICS (ACAD)																		
ACAD	6000	NATOPS Open Book	B,R	E					365	4.0								XXX
ACAD	6001	NATOPS Closed Book	B,R	E					365	2.0					6000			XXX
ACAD	6002	NATOPS Oral	B,R	E					365	2.0					6000,6001			XXX
ACAD	6003	Inst Ground School	B,R	E					365	8.0								XXX
ACAD	6004	Inst Exam	B,R	E					365	2.0								XXX
ACAD	6005	Inst Oral	B,R	E					365	2.0					6003,6004			XXX
ACAD	6006	CRM Basic	B,R	E					365	1.0								XXX
ACAD	6007	TPC Responsibilities	B,R	E					*	2.0								XXX
ACAD	6008	FCP Responsibilities	B,R	E					*	2.0								XXX
ACAD	6009	Monthly EP Exam	B,R	E					30	2.0								XXX
TOTAL RQD ACAD STAGE									10	27.0	0	0.0	0	0.0				
NATOPS																		
NATOPS	6100	NATOPS Evaluation	B,R	E	A	1	D		365					2.0	6000,6001,6002		5103,5104	XXX
NATOPS	6101	Standard Inst Eval	B,R	E	A	1	(N*)		365					2.0	6004,6005			
NATOPS	6102	Special Inst Eval	B,R	E	A	1	(N*)		365					2.0	6004,6005		6101	
NATOPS	6103	CRM Flight	B,R	E	A	1	(N*)		365					2.0	6006			
NATOPS	6104	Quarterly EP Eval	B,R	E	A	1	D		90					0.0				XXX
NATOPS TOTAL									0	0.0	0	0.0	5	8.0				
TRANSPORT 2 ND PILOT (T2P)																		

UC-12B/F PILOT T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
T2P	6200	T2P Designation Tracking Code	B,R												6100,6101,6103,2000 Phase Complete	Track Code		
TOTAL T2P STAGE									0	0.0	0	0.0	0	0.0				
TRANSPORT PLANE COMMANDER																		
TPC	6300	TPC REVIEW	B,R	E	A	1	D	*						2.0	3000 Phase Complete	100 Hrs, 50 Model	3100,3200	301
TPC	6301	TPC DESIGNATION Tracking Code	B,R												6300	Track Code		630
TOTAL TPC STAGE									0	0.0	0	0.0	1	3.0				
FUNCTIONAL CHECK PILOT (FCP)																		
FCP	6400	FCP Review	B,R	E	A	1	D	*						3.5	6301,6008,5103			
FCP	6401	FCP Eval	B,R	E	A	1	D	*						3.5	6400			
FCP	6402	FCP Flight Tracking Code	B,R												6401	Track Code		
TOTAL FCP STAGE									0	0.0	0	0.0	3	7.0				
AVIATION CAREER PROGRESSION MODEL (ACPM)																		
ACPM	8200	MACCS AGENCIES, FUNCTIONS AND CONTROL OF AIRCRAFT AND MISSILES						*		0.6					2000 PHASE			
ACPM	8201	MWCS BRIEF						*		0.4					2000 PHASE			
ACPM	8202	ACA AND AIRSPACE						*		0.5					2000 PHASE			
ACPM	8210	AVIATION GROUND SUPPORT						*		0.6					2000 PHASE			
ACPM	8230	ACE BATTLESTAFF						*		0.6					2000 PHASE			
ACPM	8231	BATTLE COMMAND DISPLAY						*		0.3					2000 PHASE			
ACPM	8240	SIX FUNCTIONS OF MARINE AVIATION						*		1.3					2000 PHASE			
ACPM	8241	JTAR/ASR INTRODUCTION AND PRACTICAL APPLICATION CLASS						*		0.5					2000 PHASE			
ACPM	8242	SITE COMMAND PRIMER						*		0.7					2000 PHASE			
ACPM	8250	THEATER AIR GROUND SYSTEM (TAGS)						*		0.6					2000 PHASE			
ACPM	8300	AIR DEFENSE						*		0.6					3000 PHASE			

UC-12B/F PILOT T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
ACPM	8310	FORWARD ARMING AND REFUELING POINT (FARP) OPERATIONS						*		0.4					3000 PHASE			
ACPM	8311	MARINE CORPS TACTICAL FUEL SYSTEMS						*		0.2					3000 PHASE			
ACPM	8320	JOINT STRUCTURE & JOINT AIR OPERATIONS						*		1.3					3000 PHASE			
ACPM	8321	JOINT AIR TASKING CYCLE PHASE 1: STRATEGY DEVELOPMENT						*		0.3					3000 PHASE			
ACPM	8322	JOINT AIR TASKING CYCLE PHASE 2: TARGET DEVELOPMENT						*		0.2					3000 PHASE			
ACPM	8323	JOINT AIR TASKING CYCLE PHASE 3: WEAPONING AND ALLOCATION						*		0.2					3000 PHASE			
ACPM	8324	JOINT AIR TASKING CYCLE PHASE 4: JOINT ATO PRODUCTION						*		0.2					3000 PHASE			
ACPM	8325	JOINT AIR TASKING CYCLE PHASE 5:						*		0.2					3000 PHASE			
ACPM	8326	JOINT AIR TASKING CYCLE PHASE 6: COMBAT ASSESSMENT						*		0.2					3000 PHASE			
ACPM	8340	INTEGRATING FIRES AND AIRSPACE WITHIN THE MAGTF						*		0.5					3000 PHASE			
ACPM	8350	PHASING CONTROL ASHORE						*		0.5					3000 PHASE			
ACPM	8351	TACRON ORGANIZATIONS AND FUNCTIONS						*		TBD					3000 PHASE			
ACPM	8630	TACTICAL AIR COMMAND CENTER (TACC)						*		0.7					6000 PHASE			
ACPM	8660	JOINT OPS INTRO						*		0.4					6000 PHASE			

UC-12B/F PILOT T&R MATRIX

STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
ACPM	8640	JOINT DATA NETWORK						*		0.4					6000 PHASE			
ACPM	8641	MAGTF THEATER						*		1.5					6000 PHASE			
ACPM	8620	ESG/CSG INTEGRATION						*		TBD					6000 PHASE			
TOTAL ACPM STAGE									23	13.5	0	0.0	0	0.0				

CHAPTER 3

UC-12B/F TRANSPORT AIRCREWMAN (TA)/6244

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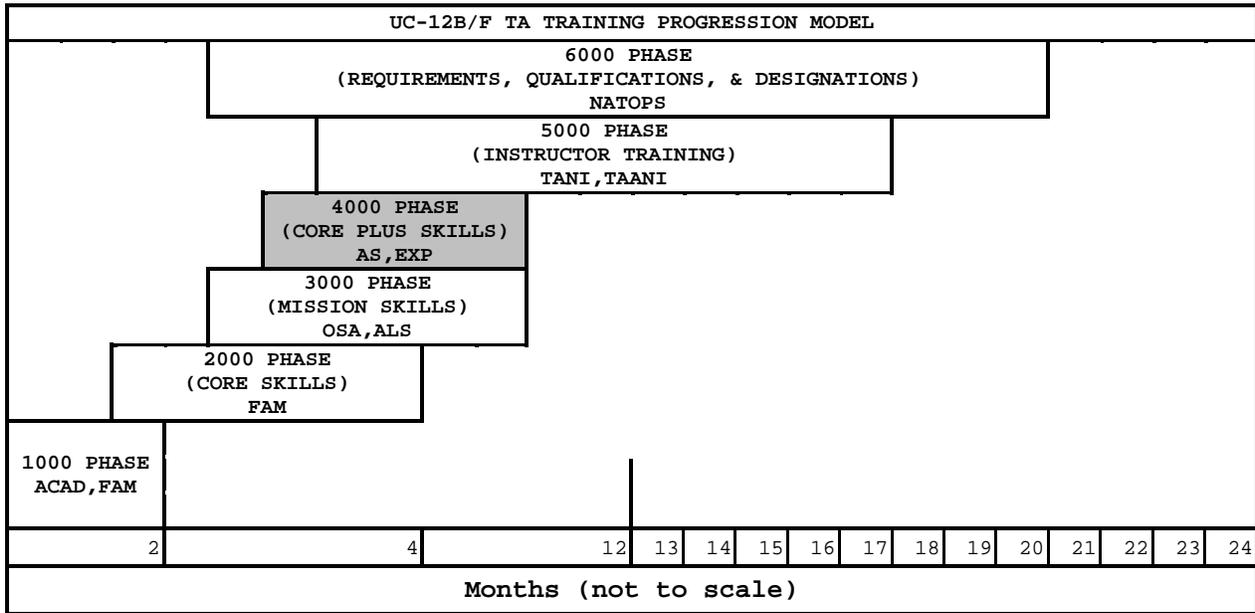
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CHAPTER 3

UC-12B/F TRANSPORT AIRCREWMAN (TA)/6244

300. UC-12B/F TRANSPORT AIRCREWMAN (TA)/6244 INDIVIDUAL TRAINING AND READINESS REQUIREMENTS. This T&R syllabus is based on specific goals and performance standards designed to ensure individual proficiency in Core, Mission and Core Plus Skills. The goal of this chapter is to develop individual and unit war fighting capabilities.

301. UC-12B/F TRANSPORT AIRCREWMAN TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the average UC-12B/F Transport Aircrewman crewmember. Units should use the model as a guide to generate individual training plans.



302. INDIVIDUAL CORE SKILL PROFICIENCY (CSP) REQUIREMENTS. A CSP crew consists of individuals representing each crew position who have achieved and currently maintain individual CSP. In order to be considered proficient in a Core Skill, an individual must attain and maintain proficiency in Core Skill events as delineated in the below paragraphs.

1. Events Required to Attain Individual CSP. To initially attain CSP in a Core Skill, an individual must simultaneously have a proficient status in all the Core (2000 Phase) T&R events listed in the table below for that Core Skill.

INDIVIDUAL CORE SKILL PROFICIENCY (CSP) ATTAIN TABLE
UC-12B/F Transport Aircrewman
FAM
2100R
2101R
Gray highlight & an R suffix on the event code = Refresher POI

2. Events Required to Maintain Individual CSP. To maintain CSP in a Core Skill, an individual must maintain proficiency in all 2000 phase T&R events listed for that Core Skill:

INDIVIDUAL CORE SKILL PROFICIENCY (CSP) MAINTAIN TABLE	
UC-12B/F Transport Aircrewman	
FAM	
2101R	
Gray highlight & an R suffix on the event code = Refresher POI	

303. INDIVIDUAL MISSION SKILL PROFICIENCY (MSP) REQUIREMENTS. A MSP crew consists of individuals representing each crew position who have achieved and currently maintain Individual MSP. To be considered proficient in a Mission Skill, an individual must attain and maintain proficiency in Mission Skill events as delineated in the below paragraphs.

1. Events Required to Attain Individual MSP. To initially attain MSP in a Mission Skill, an individual must simultaneously have a proficient status in all 3000 phase T&R events listed for that Mission Skill:

INDIVIDUAL MISSION SKILL PROFICIENCY (MSP) ATTAIN TABLE	
UC-12B/F Transport Aircrewman	
T&R events required to Attain MSP (3000 Phase)	
OSA	ALS
3100R	3200R
Gray highlight & an R suffix on the event code = Refresher POI	

2. Events Required to Maintain Individual MSP. To maintain MSP in a Mission Skill, an individual must maintain proficiency in all 3000 phase T&R events listed for that Mission Skill:

INDIVIDUAL MISSION SKILL PROFICIENCY (MSP) MAINTAIN TABLE	
UC-12B/F Transport Aircrewman	
T&R events required to Maintain MSP (3000 Phase)	
OSA	ALS
3100R	3200R
Gray highlight & an R suffix on the event code = Refresher POI	

304. INDIVIDUAL CORE PLUS SKILL/MISSION PLUS SKILL PROFICIENCY REQUIREMENTS

1. Events Required to Attain Individual Proficiency in Core Plus Skills and Mission Plus Skills. Proficiency in Core Plus Skills/Mission Plus Skills is not required to obtain unit CSP. Training to Core Plus Skills/Mission Plus Skills is at the discretion of the unit commanding officer. To initially attain proficiency in a Core Plus Skill/Mission Plus Skill, an individual must simultaneously have a proficient status in all T&R events listed for that Core Plus Skill/Mission Plus Skill.

INDIVIDUAL CORE PLUS SKILL PROFICIENCY ATTAIN TABLE	
UC-12B/F Transport Aircrewman	
T&R events required to Attain Core Plus Proficiency (4000 Phase)	
AS	EXP
4100R	4200R
Gray highlight & an R suffix on the event code = Refresher POI	

2. Events Required to Maintain Individual Proficiency in Core Plus Skills and Mission Plus Skills. To maintain proficiency in a Core Plus Skill/Mission Plus Skill, an individual must maintain proficiency in all T&R events listed in the table below for that Core Plus Skill Mission Plus Skill:

INDIVIDUAL CORE PLUS SKILL PROFICIENCY MAINTAIN TABLE UC-12B/F Transport Aircrewman	
T&R events required to Maintain Core Plus Proficiency (4000 Phase)	
AS	EXP
4100R	4200R
Gray highlight & an R suffix on the event code = Refresher POI	

305. CERTIFICATION, QUALIFICATION AND DESIGNATION TABLES. The tables below delineate T&R events required to be completed to attain proficiency, initial qualifications and designations. In addition to event requirements, all required stage lectures, briefs, squadron training, prerequisites, and other criteria shall be completed prior to completing final events. Certification, qualification and designation letters signed by the commanding officer shall be placed in Aircrew Performance Records (APR) and NATOPS. Loss of proficiency in all qualification events causes the associated qualification to be lost. Regaining a qualification requires completing all R-coded syllabus events associated with that qualification.

INDIVIDUAL DESIGNATION REQUIREMENTS UC-12B/F Transport Aircrewman	
Designation	Initial Event Designation Requirements
TA	6100
TANI	5100,5101,5102
TAANI	5100,5101,5102

INDIVIDUAL QUALIFICATION REQUIREMENTS UC-12B/F Transport Aircrewman	
Qualification	Initial Event Qualification Requirements
NATOPS	6000,6001,6002,6100
CRM	6003

306. PROGRAMS OF INSTRUCTION (POI)

1. General

a. The time required to train a UC-12B/F Transport Aircrewman to completion of the Core Plus Phase is based on flight hour requirements that are published in the UC-12B/F NATOPS manual. Assignment to a specific POI is determined by previous Aircrew experience. Transport Aircrewman Under Instruction (TAUI) without prior Naval Aircrew experience shall be assigned to the Basic (B) POI and shall continue to fly 2000 Phase level codes until the minimum flight hour requirement as delineated in NATOPS is met. TANI who were previously designated Naval Aircrew shall be assigned to the Basic (B) POI and may be designated as UC-12B/F TA upon successful completion of the Basic (B) POI. Those Aircrewman who were previously designated UC-12B/F TA's and are returning to a VMR shall be assigned to the Refresher (R) POI. When a crewmember completes a stage of training, that crewmember needs only to maintain proficiency in the (R) coded events for that stage to remain proficient.

b. All 1000 Phase level codes should be instructed by a TANI. If one is not available an ANI or NI may give the instruction. TAUI who are flying

their 2000 Phase level codes to obtain their minimum flight hour requirement may fly with a qualified TA, TANI, or any qualified Pilot. 3000 Phase Level codes may be flown in place of 2000 level codes to obtain minimum flight hour requirements but shall be flown with a TANI.

2. Basic (B) POI. Basic (B) Transport Aircrewman shall fly the entire syllabus.

WEEKS	COURSE	PERFORMING ACTIVITY
1-3	Core Skill Introduction Training	OSA unit
4-8	Core Skill Training	OSA unit
8-12	Mission Skill Training	OSA unit
13-26	Core Plus Training	OSA unit

3. Refresher (R) POI. Refresher Transport Aircrewman shall fly those events annotated with a R. Commanding officers/OICs will review the qualifications, previous experience, currency, and demonstrated ability of Refresher Transport Aircrewman with a view towards combining required flights.

WEEKS	COURSE	PERFORMING ACTIVITY
1-2	Core Skill Introduction Training	OSA unit
3-6	Core Skill Training	OSA unit
7-12	Mission Skill Training	OSA unit
13-26	Core Plus Training	OSA unit

307. CORE SKILL INTRODCUTION (1000 PHASE)

1. General

a. Core Skill Introduction training for the UC-12B/F is conducted at the squadron/unit.

b. The purpose is to introduce Transport Aircrewman Under Instruction (TAUI) to the UC-12B/F. The focus shall be on Aircraft systems, handling, servicing, inspections and logistics

c. All events in the Core Skill Introduction phase shall be evaluated and documented by a TANI. The Syllabus Sponsor shall ensure standardization of all TANIs.

d. Event completion is predicated upon demonstrated proficiency. When an individual successfully accomplishes the requirements of an event per the performance standards, the individual should log completion of the event (enter the appropriate T&R code) in M-SHARP. When the event is entered into M-SHARP, the individual's proficiency date for that event is automatically updated to reflect the date the event was completed. When supervising individual events, unit instructors/leaders shall ensure that trainees demonstrate proficiency per T&R standards prior to logging successful event completion. Evaluating individual proficiency in an event normally requires both objective and subjective assessment. If an individual fails to accomplish the requirements of an event per the performance standards, the individual should not log that event and the proficiency status for that event remains unchanged. Times indicated for each event are for planning purposes only.

e. TAUIs shall fly events annotated with an N at least 30 minutes after official sunset. Events shall be flown in accordance with environmental conditions listed in the matrix below:

ENVIRONMENTAL CONDITIONS	
Code	Meaning
D	Shall be flown during hours of daylight: (by exception - there is no use of a symbol).
N*	Shall be flown during hours of darkness must be flown unaided
(N*)	May be flown during hours of darkness - If flown during hours of darkness must be flown unaided.

2. Academic Ground School (ACAD)(1000 PHASE)

ACAD-1000 3.0 * B CLRM/1 UC-12B/F (Static)

Goal. Introduce ground procedures, and aircraft systems.

Requirements. Discuss aircraft mission, qualification requirements, CRM, aircraft publications, flight publications, flight schedule, flight advisory, NAVFLIR, Logbooks, M-Sharp. Discuss ICS/Radio procedures. Discuss aircraft weight limitations, center of gravity limitations, weight and balance terms and definitions, fuel imbalance limitations and baggage loading.

Performance Standard. After introduction of above listed items, demonstrate understanding of each subject.

External Syllabus Support. Static aircraft with ground power unit.

ACAD-1001 3.0 * B CLRM/1 UC-12B/F (Static)

Goal. Introduce ground procedures, and aircraft systems.

Requirements. Introduce Flight line safety, aircraft danger areas. Introduce aircraft discrepancy book, contract maintenance personnel, general aircraft description, B/F differences, preflight, aircraft security, and aircraft parking. Introduce radio procedures, aircraft fueling, and engine oil servicing procedures. Introduce safety equipment, fire bottle location, survival equipment, primary and emergency exit, O2 masks, egress, lavatory, coffee station, cabin preparation for flight, and seat operation. Review baggage loading.

Performance Standard. After introduction of above listed items, demonstrate understanding of each subject.

External Syllabus Support. Static aircraft with ground power unit.

3. Familiarization (FAM)

a. Purpose. Introduce Transport Aircrewman to UC-12B/F FAM and CRM procedures.

b. Crew Requirements. Shall be instructed/evaluated by a TANI.

FAM-1100 2.0 * B D A 1 UC-12B/F

Goal. Introduce Operation of UC-12B/F aircraft.

2. Familiarization (FAM)

- a. Purpose. Introduce TAUIs to UC-12B/F FAM and CRM procedures.
- b. Crew Requirements. Shall be instructed/evaluated by an NI/ANI.

FAM-2100 2.0 * B,R (N*) A 1 UC-12B/F

Goal. Familiarization with Aircraft systems and radio operation.

Requirements. Familiarize TAUUI in the operation of aircraft systems to include pressurization and communications to include passenger phone system. Practice normal procedures and simulated emergency procedures, to include ditching and egress.

Performance Standard. After introduction of above listed items, demonstrate understanding and operation of each subject.

Prerequisite. 1102

FAM-2101 2.0 365 B,R (N*) A 1 UC-12B/F

Goal. Familiarization with DV passenger procedures.

Requirements. Familiarize TAUUI with DV passenger procedures under simulated conditions. Discuss military appearance, customs and courtesies. DV Passenger comfort, baggage handling, passenger manifest, and passenger safety. Perform passenger brief.

Performance Standard. After introduction of above listed items, demonstrate understanding of each subject.

Prerequisite. 2100

309. MISSION SKILL (3000 PHASE)

1. General

a. Purpose. Familiarize the TAUUI with the Operational Support Aircraft mission. The TAUUI shall continue to fly these codes under actual or simulated conditions until minimum flight hour requirement is met in accordance with NATOPS.

b. Crew Requirements. Shall be instructed/evaluated by a TANI.

2. Operational Support Airlift (OSA)

OSA-3100 2.0 60 B,R (N*) A 1 UC-12B/F

Goal. Conduct an Operational Support Airlift (OSA) Mission.

Requirements. Conduct OSA mission: Crew coordination, fuel requirements, weight and balance, baggage handling, passenger comfort and safety, RON, normal and emergency procedures, passenger brief.

Performance Standard. Conduct flight IAW NATOPS. Assist pilots as required with all normal and emergency procedures.

Prerequisite. 2000 PHASE Complete

3. Air Logistics Support ALS

ALS-3200 2.0 60 B,R (N*) A 1 UC-12B/F

Goal. Conduct an Air Logistics Support (ALS) Mission.

Requirements. Conduct ALS mission: Crew coordination, fuel requirements, weight and balance, cargo certification and handling, special cargo considerations, RON, normal and emergency procedures.

Performance Standard. Conduct flight IAW NATOPS. Assist pilots as required with all normal and emergency procedures.

Prerequisite. 2000 PHASE Complete

310. CORE PLUS (4000 PHASE)

1. General

a. The Core Plus Phase consists of academics, skill, and mission training.

b. Core Plus training is defined as theater specific and/or low likelihood of occurrence training and should not be the focus of unit training.

2. Assault Support (AS)

AS-4100 2.0 730 B,R (N*) A 1 UC-12B/F

General. Long Range/Overwater procedures.

4. Expeditionary Shore-Based Operations (EXP)

EXP-4200 2.0 730 B,R (N*) A 1 UC-12B/F

Goal. Conduct unimproved runway operations.

Requirements. Conduct aviation operations when deployed OCONUS. This event should be logged in conjunction with OAS-3100 or ALS-3200 when performed during contingency operations.

Performance Standard. Conduct flight IAW NATOPS and theatre specific SPINS.

Prerequisite. 3000 Phase complete, 4000

311. INSTRUCTOR TRAINING (5000 PHASE)

1. General. The Instructor Phase consist of three events leading to the Transport Aircrewman NATOPS Instructor and Transport Aircrewman Assistant NATOPS Designations.

2. Instructor Under Training (IUT)

IUT-5100 2.0 * B,R D E A 1 UC-12B/F

Goal. TA NATOPS Instructor Familiarization.

Requirements. Introduce the TANI under instruction (UI) to the skills required to correct common errors and prepare the TANI(UI) to conduct T&R syllabus and NATOPS evaluation flights. Discuss Instructional techniques and conducting a NATOPS Evaluation.

Review passenger procedures, night considerations, icing considerations, weight and balance, aircraft servicing and emergency procedures.

Performance Standard. After introduction of above listed item, demonstrate understanding of each subject.

Prerequisite. TA qualified

IUT-5101 2.0 * B,R (N*) E A 1 UC-12B/F

Goal. TA NATOPS Instructor Review.

Requirements. Review passenger manifest, passenger briefing, passenger procedures, DV procedures, special cargo, aircraft handling, fueling, all weather operations and RON procedures. Discuss environmental system, pressurization system, oxygen system, and aircraft lighting. Practice preflight and postflight, checklists, all normal and emergency procedures, TA duties and responsibilities.

Performance Standard. Demonstrate satisfactory knowledge of passenger handling procedures and passenger brief. Assist pilots as required with all normal and emergency procedures.

Prerequisite. 5100

IUT-5102 2.0 * B,R (N*) E A 1 UC-12B/F

Goal. TANI/ANI designation evaluation flight.

Requirements. TANI(UI) is to brief and conduct a NATOPS evaluation on the TANI. TANI(UI) must show a thorough knowledge of all academic and flight requirements of a Transport Aircrewman and demonstrate the ability to instruct a student on the requirements.

Performance Standard. Demonstrate a thorough knowledge of and be able to effectively instruct all aircraft systems, limitations, normal and emergency procedures, and TA responsibilities.

Prerequisite. 5101

312. REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS (RQD) (6000 PHASE)

1. UC-12B/F RQD Academics (ACAD)

ACAD-6000 4.0 365 B,R E NATOPs Open Book

Goal. The open book examination shall consist of, but not be limited to the question bank found in the 1A-C12WA-NFM-000. The purpose of the open book examination is to evaluate the TA's knowledge of the appropriate publications and the aircraft.

Performance Standard. Achieve a minimum score of 3.5 on the open book examination.

ACAD-6001 2.0 365 B,R E NATOPS Closed Book

Goal. The purpose of the closed book is to evaluate the TA's knowledge of normal and emergency procedures and aircraft limitations.

Performance Standard. Achieve a minimum score of 3.3 on the closed book examination.

ACAD-6002 2.0 365 B,R E NATOPS Oral

Goal. The oral examination shall consist of, but not be limited to the question bank found in the 1A-C12WA-NFM-000. The instructor may draw upon their own experience to ask questions of a direct and objective nature to evaluate the TA's knowledge of normal and emergency procedures and aircraft limitations.

Performance Standard. Achieve a minimum grade of qualified on the oral examination.

Prerequisite. 6000, 6001

ACAD-6003 2.0 365 B,R E CRM BASIC

Goal. Discuss the seven critical CRM skills.

Requirements. Demonstrate knowledge and understanding of the seven critical CRM skills.

ACAD-6004 1.0 365 B,R E CRM UC-12B/F

Goal. Discuss the seven critical CRM skills and how they apply specifically to the UC-12B/F

ACAD-6005 1.0 30 B,R E Monthly EP Exam

Goal. Successfully complete the UC-12B/F Monthly Emergency Procedures Examination.

Requirement. Pass the Monthly Emergency Procedures Examination.

Performance Standard. Achieve a passing score on the Monthly Emergency Procedures Examination.

2. NATOPS Evaluation

NTPS-6100 2.0 365 B,R (N*) E A 1 UC-12B/F

Goal. Complete annual NATOPS flight evaluation. Conduct an evaluation of the TA's knowledge of mission and normal operating procedures (flight and ground), CRM, aircraft systems, emergency procedures.

Requirements. Demonstrate a comprehensive knowledge and understanding of NATOPS, and SOP.

Performance Standard. Achieve a minimum grade of qualified on the evaluation.

Prerequisite. 6000, 6001, 6002, 6003

NTPS-6101 0.0 90 B,R (N*) E A 1 UC-12B/F Static

Goal. Quarterly NATOPS static aircraft emergency procedures review.

Requirement. This review should cover selected aircraft emergencies in a static aircraft. This event can be completed in conjunction with a flight. Demonstrate comprehensive knowledge and understanding of NATOPS emergencies.

Performance Standard. Executes the review in accordance with NATOPS.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7, NATOPS, NATOPS Instrument Flight Manual, and training rules.

Prerequisite. Meets OPNAVINST 3710.7 Special Instrument requirements, recommended by Stan Board, 6003, 6004, 6005

NTPS-6103 .5 90 B,R (N*) E A/S 1 UC-12B/F/SIM

Goal. Complete CRM evaluation flight.

Requirement. Demonstrate comprehensive knowledge and understanding of CRM skills and guidelines.

Performance Standard. Executes flight and ground operations safely and utilizing good CRM.

Prerequisite. 6004

313. UC-12B/F TRANSPORT AIRCREWMAN (TA) T&R SYLLABUS MATRIX

UC-12B/F TA T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)																		
CORE SKILL ACADEMICS																		
ACAD	1000	GROUND PROCEDURES	B					*		3.0								
ACAD	1001	AIRCRAFT SYSTEMS	B					*		3.0								
TOTAL CORE SKILL INTRODUCTION ACADEMICS									2	6.0	0	0.0	0	0.0				
FAMILIARIZATION (FAM)																		
FAM	1100	INTRO UC-12B/F	B		A	1	D	*						2.0	1000,1001			101
FAM	1101	A/C SYSTEMS EPs	B		A	1	D	*						2.0	1100			102
FAM	1102	NIGHT FAM	B		A	1	N*	*						2.0	1101			103
TOTAL FAM STAGE									0	0.0	0	0.0	3	6.0				
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS) TOTAL									2	6.0	0	0.0	3	6.0				
CORE SKILL TRAINING (2000 PHASE EVENTS)																		
FAMILIARIZATION (FAM)																		
FAM	2100	A/C SYSTEMS & RADIOS	B,R		A	1	(N*)	*						2.0	1102			
FAM	2101	INTRO DV PROCEDURES	B,R		A	1	(N*)	365						2.0	2100			202
TOTAL FAM STAGE									0	0.0	0	0.0	2	4.0				
CORE SKILL TRAINING (2000 PHASE EVENTS) TOTAL									0	0.0	0	0.0	2	4.0				
MISSION SKILL TRAINING (3000 PHASE EVENTS)																		
OPERATIONAL SUPPORT AIRLIFT (OSA)																		
OSA	3100	OSA	B,R		A	1	(N*)	60						2.0	2000 Phase Complete	PAX	2101,3200	
TOTAL OSA STAGE									0	0.0	0	0.0	1	2.0				
AIR LOGISTICS SUPPORT (ALS)																		
ALS	3200	ALS	B,R		A	1	(N*)	60						2.0	2000 Phase Complete	CARGO	2101,3100	
TOTAL ALS STAGE									0	0.0	0	0.0	1	2.0				
TOTAL MISSION SKILL TRAINING (3000 PHASE EVENTS)									0	0.0	0	0.0	2	4.0				
CORE PLUS TRAINING (4000 PHASE EVENTS)																		
ASSAULT SUPPORT (AS)																		
AS	4100	AS	B,R		A	1	(N*)	1080						2.0	2100		3100,3200,2101,4200	
TOTAL AS STAGE									0	0.0	0	0.0	1	2.0				
EXPEDITIONARY SHORE-BASED OPERATIONS (EXP)																		
EXP	4200	EXP OPERATIONS	B,R		A	1	(N*)	1080						2.0	3000 Phase complete		3100,3200,2101	
TOTAL EXP STAGE									0	0.0	0	0.0	1	2.0				
CORE PLUS TRAINING (4000 PHASE EVENTS) TOTAL									1	2.0	0	0.0	2	4.0				
2000, 3000, & 4000 PHASE TOTAL									1	2.0	0	0.0	6	12.0				

UC-12B/F TA T&R MATRIX

STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
INSTRUCTOR TRAINING (500 PHASE EVENTS)																		
INSTRUCTOR UNDER TRAINING (IUT)																		
IUT	5100	INTRO FAM	B,R	E	A	1	D	*						2.0				
IUT	5101	INSTRUCTOR FAM	B,R	E	A	1	(N*)	*						2.0	5100			
IUT	5102	EVAL	B,R	E	A	1	(N*)	*						2.0	5101			
TOTAL IUT STAGE									0	0.0	0	0.0	3	6.0				
INSTRUCTOR TRAINING (5000 PHASE EVENTS) TOTAL									0	0.0	0	0.0	3	6.0				
REQUIREMENT, QUALIFICATIONS, AND DESIGNATIONS (RQD) (6000 PHASE)																		
RQD ACADEMICS (ACAD)																		
ACAD	6000	NATOPS Open Book Exam	B,R	E					365	4.0								
ACAD	6001	NATOPS Closed Book	B,R	E					365	2.0					6000			
ACAD	6002	NATOPS Oral Exam	B,R	E					365	2.0					6000,6001			
ACAD	6003	CRM BASIC	B,R	E					365	2.0								
ACAD	6004	CRM T/M/S	B,R	E					365	1.0					6003	ACAD	6003	
ACAD	6005	Monthly EP Exam	B,R	E					30	1.0								
TOTAL ACAD STAGE									5	11.0	0	0.0	0	0.0				
NATOPS																		
NATOPS	6100	NATOPS Evaluation	B,R	E	A	1	(N*)		365					2.0	6000,6001,6002			600
NATOPS	6101	Quarterly EP Eval	B,R	E	A	1	(N*)		90									
NATOPS	6103	CRM Evaluation	B,R	E	A/S	1	(N*)		90					.5	6004			
NATOPS TOTAL									0	0.0	0	0.0	2	2.5				

CHAPTER 4

UC-12B/F QUALIFIED OBSERVER

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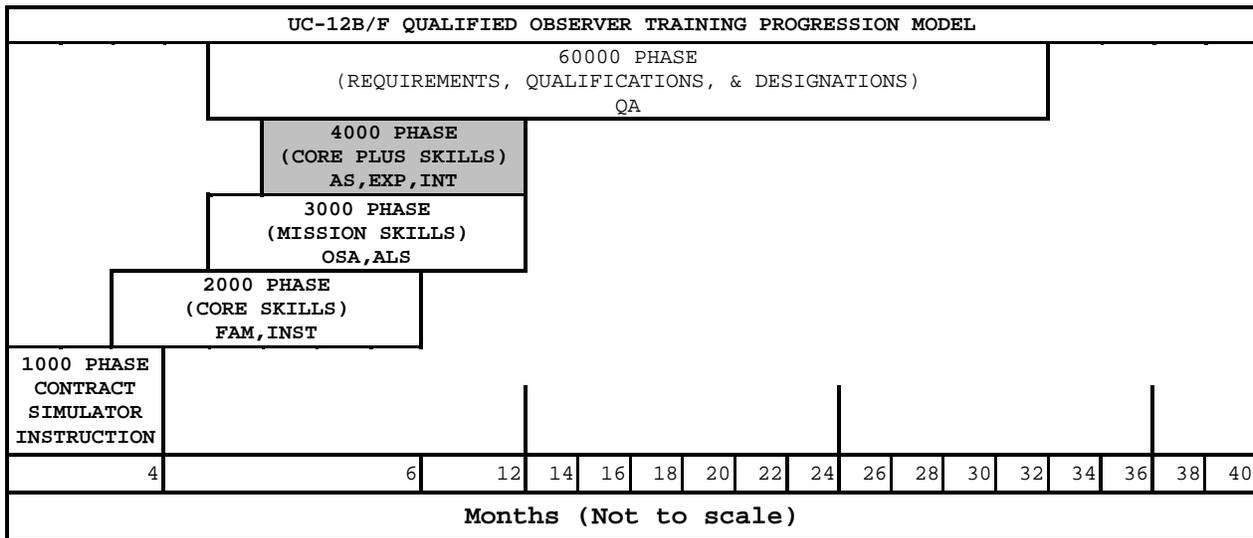
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CHAPTER 4

UC-12B/F QUALIFIED OBSERVER

400. UC-12B/F QUALIFIED OBSERVER INDIVIDUAL TRAINING AND READINESS REQUIREMENTS. This T&R syllabus is based on specific goals and performance standards designed to ensure individual proficiency in Core, Mission and Core Plus Skills. The goal of this chapter is to develop individual and unit war fighting capabilities.

401. UC-12B/F QUALIFIED OBSERVER TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the average UC-12B/F Qualified Observer crewmember. Units should use the model as a guide to generate individual training plans.



402. INDIVIDUAL CORE SKILL PROFICIENCY (CSP) REQUIREMENTS. A CSP crew consists of individuals representing each crew position who have achieved and currently maintain individual CSP. In order to be considered proficient in a Core Skill, an individual must attain and maintain proficiency in Core Skill events as delineated in the below paragraphs.

1. Events Required to Attain Individual CSP. To initially attain CSP in a Core Skill, an individual must simultaneously have a proficient status in all of the Core (2000 Phase) T&R events listed in the table below for that Core Skill.

INDIVIDUAL CORE SKILL PROFICIENCY (CSP) ATTAIN TABLE	
UC-12B/F Qualified Observer	
T&R events required to Attain CSP (2000 Phase)	
FAM	INST
2100	2200R
2101R	2201R
2102R	
Gray highlight & an R suffix on the event code = Refresher POI	
An S prefix on the event code = Event conducted in a simulator	

2. Events Required to Maintain Individual CSP. The QO has no event requirements to maintain in the Core level series.

403. INDIVIDUAL MISSION SKILL PROFICIENCY (MSP) REQUIREMENTS. A MSP crew consists of individuals representing each crew position who have achieved and currently maintain Individual MSP. To be considered proficient in a Mission Skill, an individual must attain and maintain proficiency in Mission Skill events as delineated in the below paragraphs.

1. Events Required to Attain Individual MSP. To initially attain MSP in a Mission Skill, an individual must simultaneously have a proficient status in all 3000 phase T&R events listed for that Mission Skill:

INDIVIDUAL MISSION SKILL PROFICIENCY (MSP) ATTAIN TABLE	
UC-12B/F Qualified Observer	
T&R events required to Attain MSP (3000 Phase)	
OSA	ALS
3100R	3200R
Gray highlight & an R suffix on the event code = Refresher POI	
An S prefix on the event code = Event conducted in a simulator	

2. Events Required to Maintain Individual MSP. To maintain MSP in a Mission Skill, an individual must maintain proficiency in all 3000 phase T&R events listed for that Mission Skill:

INDIVIDUAL MISSION SKILL PROFICIENCY (MSP) MAINTAIN TABLE	
UC-12B/F Qualified Observer	
T&R events required to Maintain MSP (3000 Phase)	
OSA	ALS
3100R	3200R
Gray highlight & an R suffix on the event code = Refresher POI	
An S prefix on the event code = Event conducted in a simulator	

404. INDIVIDUAL CORE PLUS SKILL/MISSION PLUS SKILL PROFICIENCY REQUIREMENTS

1. Events Required to Attain Individual Proficiency in Core Plus Skills and Mission Plus Skills. Proficiency in Core Plus Skills/Mission Plus Skills is not required to obtain unit CSP. Training to Core Plus Skills/Mission Plus Skills is at the discretion of the unit commanding officer. To initially attain proficiency in a Core Plus Skill/Mission Plus Skill, an individual must simultaneously have a proficient status in all T&R events listed for that Core Plus Skill/Mission Plus Skill.

INDIVIDUAL CORE PLUS SKILL PROFICIENCY ATTAIN TABLE		
UC-12B/F Qualified Observer		
T&R events required to Attain Core Plus Proficiency (4000 Phase)		
AS	EXP	INT
4100R	4200R	4300R
		4301R
Gray highlight & an R suffix on the event code = Refresher POI		
An S prefix on the event code = Event conducted in a simulator		

2. Events Required to Maintain Individual Proficiency in Core Plus Skills and Mission Plus Skills. To maintain proficiency in a Core Plus Skill/Mission Plus Skill, an individual must maintain proficiency in all T&R events listed in the table below for that Core Plus Skill Mission Plus Skill:

INDIVIDUAL CORE PLUS SKILL PROFICIENCY MAINTAIN TABLE		
UC-12B/F Qualified Observer		
T&R events required to Maintain Core Plus Proficiency (4000 Phase)		
AS	EXP	INT
4100R	4200R	4300R
		4301R
Gray highlight & an R suffix on the event code = Refresher POI		
An S prefix on the event code = Event conducted in a simulator		

405. CERTIFICATION, QUALIFICATION AND DESIGNATION TABLE. The table below delineates T&R events required to be completed to attain proficiency, initial qualifications and designations. In addition to event requirements, all required stage lectures, briefs, squadron training, prerequisites, and other criteria shall be completed prior to completing final events. Certification, qualification and designation letters signed by the commanding officer shall be placed in Aircrew Performance Records (APR) and NATOPS. Loss of proficiency in all qualification events causes the associated qualification to be lost. Regaining a qualification requires completing all R-coded syllabus events associated with that qualification.

INDIVIDUAL DESIGNATION/QUALIFICATION REQUIREMENTS	
UC-12B/F Qualified Observer	
Designation	Initial Event Designation Requirements
QO	6000,6001,6002,6003,6004,6005,6500
NATOPS	6000,6001,6002,6100
INSTRUMENT	6003,6004,6005
CRM	6006,6007

406. PROGRAMS OF INSTRUCTION (POI)

1. Basic (B) POI. Basic Qualified Observers shall fly the entire syllabus.

WEEKS	COURSE	PERFORMING ACTIVITY
4-6	Core Skill Introduction Training	CACT
2-6	Core Skill Training	OSA unit
2-6	Mission Skill Training	OSA unit

2. Refresher (R) POI. Refresher Qualified Observers shall fly those events annotated with an R. Commanding officers/OICs will review the qualifications, previous experience, currency, and demonstrated ability of Refresher Qualified Observers with a view towards combining required flights.

WEEKS	COURSE	PERFORMING ACTIVITY
4-6	Core Skill Introduction Training	CACT
2-6	Core Skill Training	OSA unit
2-6	Mission Skill Training	OSA unit

407. CORE SKILL INTRODCUTION PHASE (1000)

1. General

a. Core Skill Introduction training for the UC-12B/F is conducted by a Command Aircraft Crew Training (CACT) facility. The UC-12B/F Syllabus Sponsor is responsible for contract negotiations and syllabus content/changes. Recommendations for CACT changes shall be submitted to the Syllabus Sponsor.

b. All academic requirements for this phase of training are incorporated into the CACT course.

c. All events in the Core Skill Introduction phase shall be evaluated and documented by a civilian instructor. The Syllabus Sponsor shall ensure standardization of civilian contracted instructors.

d. Event completion is predicated upon demonstrated proficiency. When an individual successfully accomplishes the requirements of an event per the performance standards, the individual should log completion of the event (enter the appropriate T&R code) in M-SHARP. When the event is entered into M-SHARP, the individual's proficiency date for that event is automatically updated to reflect the date the event was completed. When supervising individual events, unit instructors/leaders shall ensure that trainees demonstrate proficiency per T&R standards prior to logging successful event completion. Evaluating individual proficiency in an event normally requires both objective and subjective assessment. If an individual fails to accomplish the requirements of an event per the performance standards, the individual should not log that event and the proficiency status for that event remains unchanged. Times indicated for each event are for planning purposes only.

e. While attending either the CACT approved QO Initial or QO Recurrent courses, the QOUI will spend 2 hours in the right seat for each sortie.

f. Every attempt should be made to ensure USMC checklists and procedures are studied and adhered to during the CACT training.

g. CACT INT SIM 1101 thru CACT INT SIM 1109 may be accomplished with just the QOUI and contracted instructor. However, every attempt should be made to pair the QOUI up with another USN/USMC PUI in order to facilitate training using established USN/USMC UC-12 procedures.

e. Qualified Observers shall fly events annotated with an N at least 30 minutes after official sunset. Events shall be flown in accordance with environmental conditions listed in the matrix below:

ENVIRONMENTAL CONDITIONS	
Code	Meaning
D	Shall be flown during hours of daylight: (by exception - there is no use of a symbol)
N*	Shall be flown during hours of darkness must be flown unaided
(N*)	May be flown during hours of darkness - If flown during hours of darkness must be flown unaided
Note - If the event is to be flown in the simulator the Simulator Instructor shall set the desired environmental conditions for the event.	

2. Command Aircraft Crew Training (CACT) Ground School

ACAD-1000 40.0 * B CLRМ

Goal. CACT ground school

Requirements. Per current contract.

Performance Standard. Per current contract.

ACAD-1020 16.0 365 R CLRМ

Goal. CACT Refresher Ground School

Requirements. Per current contract.

Performance Standard. Per current contract.

ACAD-1021 1.0 365 B,R CLRM

Goal. Wind Shear

Requirements. Per current contract.

Performance Standard. Per current contract.

ACAD-1022 8.0 365 R CLRM

Goal. CFIT

Requirements. Per current contract.

Performance Standard. Per current contract.

ACAD-1023 8.0 365 R CLRM

Goal. TCAS

Requirements. Per current contract.

Performance Standard. Per current contract.

3. Civilian Approved Contractor Training (CACT) Simulator Training

CACT-1101 2.0 * B (N*) S

Goal. Per current contract.

Requirements. Per current contract.

Performance Standard. Per current contract.

CACT-1102 2.0 * B (N*) S

Goal. Per current contract.

Requirements. Per current contract.

Performance Standard. Per current contract.

CACT-1103 2.0 * B (N*) S

Goal. Per current contract.

Requirements. Per current contract.

Performance Standard. Per current contract.

CACT-1104 2.0 * B (N*) S

Goal. Per current contract.

Requirements. Per current contract.

Performance Standard. Per current contract.

CACT-1105 2.0 365 B (N*) S

Goal. Per current contract.
Requirements. Per current contract.
Performance Standard. Per current contract.

CACT-1106 2.0 365 B (N*) S

Goal. Per current contract.
Requirements. Per current contract.
Performance Standard. Per current contract.

CACT-1107 2.0 365 B,R (N*) S

Goal. Per current contract.
Requirements. Per current contract.
Performance Standard. Per current contract.

CACT-1108 2.0 365 B,R (N*) S

Goal. Per current contract.
Requirements. Per current contract.
Performance Standard. Per current contract.

CACT-1109 2.0 365 B,R E (N*) S

Goal. Per current contract.
Requirements. Per current contract.
Performance Standard. Per current contract.

408. CORE SKILL (2000 PHASE)

1. Core Skill Academic (ACAD)

a. Purpose. Introduce the Qualified Observers to the UC-12B/F.

b. General. The Qualified Observer should be CACT complete prior to beginning this stage.

ACAD-2000 3.0 * B,R D A 1 UC-12B/F

Goal. Introduce the UC-12B/F aircraft.
Requirements.
Brief: ADB, MEL/CDL, Chapter 29 Flight Crew Coordination, Pre-flight, Emergency Equipment, Egress Drill, Post Flight, M-Sharp, CP-CALC, Flight-planning, ORM, WX Brief, NOTAMS, Fuel Packet/Multi-use Card, OPARS, Short Field High Obstacle. Discuss Ditching.
Performance Standard. After introduction of above listed items, demonstrate understanding of each subject.
External Syllabus Support. Static aircraft.
Prerequisite. 1101-1109

ACAD-2001 3.0 * B,R D A 1 UC-12B/F

Goal. Introduce the UC-12B/F avionics and navigation systems on a powered aircraft.

Requirements. Demonstrate the power up, set up, and various functions of the FMS, radios and avionics.

Performance Standard. Show proficiency in the use of all navigation equipment and radios.

External Syllabus Support. Ground powered aircraft.

Prerequisite. 2000

ACAD-2002 3.0 * B,R D A 1 UC-12B/F

Goal. Practice the UC-12B/F avionics and navigation systems on a powered aircraft.

Requirements. Demonstrate the power up, set up, and various functions of the FMS, radios and avionics.

Performance Standard. Show proficiency in the use of all navigation equipment and radios.

External Syllabus Support. Ground powered aircraft.

Prerequisite. 2001

2. Familiarization (FAM)

a. Purpose. Introduce Qualified Observers to UC-12B/F FAM and CRM procedures.

b. General

(1) QOUIs shall successfully complete approved CACT initial course prior to starting this phase of training.

(2) Flights in this phase of instruction shall be flown sequentially, single-sortie, with complete brief/debrief for each flight.

(3) Only aircrew scheduled for CACT recurrent training shall complete the CACT INT SIM 1120 to CACT INT SIM 1122 series codes.

c. Crew Requirements. IP/QOUI.

FAM-2101 2.0 * B D A 1 UC-12B/F

Goal. Introduce the UC-12B/F aircraft.

Requirements. Brief preflight/flight planning, aircrew coordination/voice calls, checklists, normal start procedures, abnormal starts, engine fire on deck, aborted takeoff, runaway torque on deck/in flight, emergency egress, taxiing, run-up (procedure & limits), takeoff, touch-and-go procedures, fuel system & emergencies, landing gear system and emergencies, and critical memory items. Review preflight. Introduce checklists, communication procedures and equipment, demonstrate starting engines, taxi and engine run-up, normal takeoff, aborted takeoff, climb schedule (charts), normal cruise, slow flight, steep turns, approach to stall/full stalls, unusual attitudes, oxygen system, environmental control, and post flight. Observe landings (full

flap, approach flap, no flap and with reverse), engine failure in flight and emergency engine shutdown, starter assisted air start, and wave off. Debrief.

Performance Standard. In accordance with NFM.

Prerequisite. 2001

FAM-2102 2.0 * B,R D A 1 UC-12B/F

Goal. Refine right seat procedures for ground and flight operations in VFR environment.

Requirements. Observe engine starts with associated failures and practice normal and abbreviated ground procedures. Review the charts and practice the procedures applicable to high altitude, high temperature takeoff with an engine failure after Vr, a subsequent single engine approach, and/or single engine missed approach. Review the pressurization system, pneumatic systems, environmental systems, oxygen system, and related malfunctions. Continue to review the engine system, propeller system, electrical system, fuel system, and related malfunctions. Conduct additional instrument procedures, approaches, and missed approaches. Observe crosswind landings, takeoffs, and recovery from low level wind shear. Continue to apply Aircrew Coordination skills.

Performance Standard. In accordance with NFM.

Prerequisite. 2100

3. Instruments (INST)

a. Purpose. To acquaint the QOUI with the flight characteristics, navigation equipment, and flight instruments under simulated or actual instrument flying conditions. QOUI should demonstrate keen awareness of flight instrument interpretation and spatial orientation. After completion of stage, QOUI should be able to operate as a crewmember in the Air Traffic Control environment outside the local area.

b. General. Approaches should terminate in touch-and-go landings, if possible, emphasizing Missed Approach Point/Decision Altitude decision making to either a normal landing or missed approach. Events should be flown with at least 1 approach and landing at an airfield other than the QOUI's home field.

c. Crew Requirements. IP/QOUI.

d. Ground/Academic Training. Complete locally approved Instrument Ground school course.

INST-2200 2.0 * B (N*) A 1 UC-12B/F

Goal. Introduce UC-12 navigation equipment and non-precision/precision approach capabilities.

Requirements. Preflight briefing to include propeller system, bleed air system, explosive decompression, lost communications, fuselage fire, comm/nav radios, AP/FD use SID's & STAR's, en route ATC procedures, instrument approach procedures straight in approaches and circling approaches, weather radar, severe weather

procedures. Discuss EGPWS, CFIT, and CFIT escape maneuver. Review preflight, checklists, engine start hot start and no light-off, (taxi no brakes and hot brakes), abort, climb, cruise, engine shutdown, airstart, postflight, and NALCOMIS. Introduce prop failure/overspeed, fuselage fire, engine chip light, fuel cross-feed after engine failure, manual gear extension, emergency descent, landings (two engine and single engine), instrument approaches straight in and circling, TACAN, VOR, LOC BC, NDB, ASR, ILS and PAR, missed approach (dual engine and single engine), holding. Debrief.

Performance Standard. In accordance with NATOPS Flight Manual, Chapter 7 (Shore-Based Procedures) and Chapter 18 (Instrument Flight Procedures).

Prerequisite. 2101

INST-2201 2.0 * B (N*) A 1 UC-12B/F

Goal. Introduce ProLine 21 instrument procedures and precision/non-precision capabilities.

Requirements. Preflight briefing and flight to include NATOPS Part VI precision/non-precision/FMS approaches, limitations and requirements. Flight Level Change, Vs modes (Pitch/Vertical Velocity/Speed), VOR procedures, ILS/LOC/BC procedures, GCA/ASR procedures, RNAV procedures, TACAN procedures, autopilot/Flight Director Indicator (FDI)/Horizontal Situation Indicator (HSI) utilization, airspeed indicator operation and setup, en route/cruise procedures, and copilot/QO utilization/duties. Introduce non-auto pilot instrument departure, VOR approach, ILS/LOC/BC approach, RNAV approaches, TACAN approach, ASR/GCA approach, holding, missed approach procedures and pilot/copilot crew coordination. Review normal landings, SSE landings, previous emergencies, and procedures.

Performance Standard. In accordance with NATOPS flight manual and NATOPS instrument flight manual.

Prerequisite. 2200

409. MISSION SKILL PHASE (3000)

1. General. All Mission Skill events shall be instructed by an NI or ANI.
2. Operational Support Airlift (OSA)

OSA-3100 2.0 60 B,R (N*) A 1 UC-12B/F

Goal. Conduct an Operational Support Airlift (OSA) mission.

Requirements.

Brief: Mission and crew coordination, flight planning, weather, fuel requirements, weight and balance, aircraft performance factors, RON, passenger requirements, scheduling agency coordination (JOSAC, MCB Japan), and emergency procedures.

Flight: Conduct an OSA mission.

Performance Standard. Demonstrate satisfactory knowledge of aircraft operating procedures and limitations.

Performance Standard. Successful completion of the course of instruction.

3. Assault Support (AS). Operations that take place in a Low Threat (Permissive) environment and include specific procedures to minimize aircraft exposure to the threat. The procedures are designed to remain within the capabilities envelope of the aircraft and to maximize the protection capabilities of the ASE in the take-off and landing environment.

AS-4100 1.5 * B,R (N*) A 1 UC-12B/F

4. Expeditionary Shore-Based Operations (EXP). Expeditionary operations are defined as operations to certified unimproved runways to include dirt, grass or gravel only.

EXP-4200 1.5* B,R (N*) A 1 UC-12B/F

Goal. Conduct operations to certified unimproved runways to include dirt, gravel and grass.

Requirements. Conduct aviation operations to certified unimproved runways in accordance with the limitations and guidelines in the NATOPS manual.

Brief: The brief should include considerations for the specific type of runway to be used, including but not limited to: surface effects on runway length (takeoff, aborted takeoff, landing, etc). The following contingency and emergency operations will also be discussed: engine failure on take-off (before & after V1), single engine landing (specifically use of single engine reverse thrust), and abnormal flap configurations for landing.

Conduct: QOUI to observe landings and takeoffs from certified unimproved runways (dirt, grass or gravel). A minimum of three normal T/O and landings to a full stop (no simulated emergency/abnormal conditions) are required for sortie completion.

Performance Standard. Demonstrate competent knowledge of requirements for landing on unimproved runways.

Prerequisite. 2000 Phase complete, 6100, 6101.

5. International Procedures (INT)

INT-4300 3.0 730 B,R (N*) A 1 UC-12B/F

Goal. Qualified Observer under instruction performs extended range operations.

Requirement. QOUI shall demonstrate the ability to assist the TAC with preflight preparation and managing a crew and aircraft away from home station on an operational mission that should include an RON.

Brief: mission coordination, flight planning, weather, fuel planning, load computations, performance, CRM.

Conduct: QOUI shall demonstrate excellent Crew Resource Management by assisting the TAC during an operational mission that includes a RON. During the trip, the QOUI shall assist in two-engine instrument approach.

Performance Standard. Operate the aircraft according to the NFM IFM, FARs and ICAO procedures.

Prerequisite. 4001

INT-4301 3.0 730 B,R (N*) A 1 UC-12B/F

Goal. QOUI assists the TAC in conducting overwater navigation. Evaluation leg should be conducted with the QOUI demonstrating knowledge of all aspects of overwater flight.

Requirement. QOUI to demonstrate the ability to assist the TAC in managing a crew and aircraft on an extended, overwater flight under ICAO rules.

Brief: Mission coordination, crew briefing, ATFP briefing coordination, flight planning, weather brief, fuel planning, weight and balance, aircraft inspection, cargo inspection (as required), manifest inspection, trip aircraft clearance, foreign clearance guide review, survival gear inspection, fuel computations, performance, customs, and agriculture inspection.

Conduct: QOUI to conduct overwater navigation in accordance with ICAO, FAR and NATOPS convention. The following contingency and emergency operations will also be discussed: engine failure (drift down), loss of pressurization, lost communication, and weather avoidance/contingency operations in an RVSM and or non radar environment.

Performance Standard. Operate the aircraft according to the NFM IFM, FARs and ICAO procedures.

Prerequisite. 4001

411. REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS (RQD) (6000 PHASE)

1. UC-12B/F RQD Academics

ACAD-6000 4.0 365 B,R E NATOPS Open Book

Goal. The open book examination shall consist of, but not be limited to the question bank. The purpose of the open book examination is to evaluate the Qualified Observer's knowledge of the appropriate publications and the aircraft.

Performance Standard. Achieve a minimum score of 3.5 on the open book examination.

ACAD-6001 2.0 365 B,R E NATOPS Closed Book

Goal. The purpose of the closed book examination is to evaluate the Qualified Observer's knowledge of normal/emergency procedures and aircraft limitations.

Performance Standard. Achieve a minimum score of 3.3 on the closed book examination.

Prerequisite. 6000

ACAD-6002 2.0 365 B,R E NATOPS Oral

Goal. The oral examination shall consist of, but not be limited to the question bank. The instructor may draw upon their experience to ask questions of a direct and objective nature to

evaluate the Qualified Observer's knowledge of normal/emergency procedures, aircraft limitations, and performance.

Performance Standard. Achieve a minimum grade of qualified on the oral examination.

Prerequisite. 6000,6001

ACAD-6003 8.0 365 B,R E Instrument Ground School

Goal. The Instrument Ground School shall be an approved Commander Naval Air Forces (CNAF) syllabus. If an approved Instrument Ground School is not available this requirement may be waived.

Performance Standard. Achieve a minimum grade of qualified for Instrument Ground School.

ACAD-6004 2.0 365 B,R E Instrument Exam

Goal. Successful completion of the Instrument Examination.

Performance Standard. Achieve a minimum passing score on the Instrument Examination.

Prerequisite. 6003

ACAD-6005 2.0 365 B,R E Instrument Oral Exam

Goal. The oral NATOPS instrument examination shall consist of, but not be limited to the question bank in addition to any subject listed for coverage in OPNAVINST 3710.7.

Performance Standard. Achieve a minimum grade of qualified on the oral NATOPS instrument examination.

Prerequisite. 6004

ACAD-6006 1.0 365 B,R E CRM BASIC

Goal. Introduce Qualified Observer Crew Resource Management.

Requirement. This course of instruction is included in initial and Recurrent CACT.

ACAD-6007 1.0 365 B,R E CRM UC-12B/F

General. Completed at FSI.

ACAD-6009 1.0 30 B,R E Monthly EP Examination

Goal. Successfully complete the UC-12B/F Monthly Emergency Procedures Examination.

Requirement. Pass the Monthly Emergency Procedures Examination.

Performance Standard. Achieve a passing score on the Monthly Emergency Procedures Examination.

2. NATOPS Evaluation

NTPS-6100 2.0 365 B,R (N*) E A/S 1 UC-12B/F/SIM

Goal. Complete annual NATOPS flight evaluation. Conduct an objective evaluation of the Qualified Observer's knowledge of mission planning, normal operating procedures (flight and ground), crew resource management, aircraft systems, performance criteria, emergency procedures, and debriefing. The focus is on normal and emergency procedures. Emphasis shall be placed on the aforementioned items with the addition of local course rules,

unit SOP, and admin flight procedures. The NATOPS evaluation is intended to evaluate compliance with NATOPS procedures. The NATOPS evaluation is the means to measure the Qualified Observer's efficiency in the execution of normal operating procedures and reaction to emergencies and malfunctions. The NATOPS evaluation process should be as much a learning tool and/or experience as it is an evaluation.

Requirement. Demonstrate comprehensive knowledge and understanding of NATOPS, unit SOP, and local course rules.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7, NATOPS and applicable manuals. Complies with unit SOP and local course rules.

Prerequisite. Core Skill Phase complete, ACPM 83XX Phase complete; 6000, 6001, 6002.

NTPS-6103 .5 90 B,R (N*) E A 1 UC-12B/F (static)

Goal. Quarterly NATOPS static aircraft emergency procedures review.

Requirement. This review should cover selected aircraft emergencies in a static aircraft. This event can be completed in conjunction with a flight. Demonstrate comprehensive knowledge and understanding of NATOPS emergencies.

Performance Standard. Executes the review in accordance with NATOPS.

3. Transport Qualified Observer (QO)

QO-6500 1.5 365 B,R D E A 1 UC-12B/F

Goal. QO evaluation flight.

Requirement. Demonstrate a thorough knowledge of the aircraft systems, the ability to perform the responsibilities of a QO and the ability to assist the TPC in all aircraft configurations under varying emergency and meteorological conditions.

Brief: Flight planning, weight and balance, fuel computations, knowledge and use of the Flight Management System (FMS) and normal and emergency procedures.

Flight: Demonstrate a proficiency in aircraft preflight, the use of all checklists, taxi & run-up procedures, radio and navigational operations, emergency procedures, shutdown checklists, and post flight.

Performance Standard. NFM.

Prerequisite. 2000 PHASE COMPLETE, 6000,6001,6300,6101,6103

412. AVIATION CAREER PROGRESSION MODEL (8000 PHASE)

1. Purpose

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

Marine Air Command and Control System (MACCS)
Aviation Ground Support
Joint Air Operations
ACE Battle Staff
MAGTF
Seabased Operations
Combatant Commander Organizations

b. All tactical T/M/S T&R manuals have ACPM training requirements embedded within the progressive training phases, including the flight leadership POI. If not already completed prior to assignment to the OSA unit(C-12), Qualified Observers assigned to an OSA platform shall complete ACPM training requirements as outlined per their original T/M/S MOS T&R manual. Refer to NAVMC 3500.14, Aviation T&R Program Manual, as a primary reference for ACPM training requirements.

2. General

a. The ACPM is intended to be an integrated series of academic events contained within each phase of training. Accordingly, ACPM academic events are like any other academic event in that they serve as pre-requisites to selected flight events or stages. Additionally, several ACPM academic events are integrated as prerequisites for flight leadership syllabi.

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

ACPM TO UC-12B/F T&R MATRIX				
STAGE	EVENT NUMBER	CLASS	ACPM DESCRIPTION	PREREQUISITE TO (PHASE/STAGE/EVENT)
ACPM	8200	(U)	MACCS AGENCIES, FUNCTIONS AND CONTROL OF AIRCRAFT AND MISSILES	2000 PHASE
ACPM	8201	(U)	MWCS BRIEF	2000 PHASE
ACPM	8202	(U)	ACA AND AIRSPACE	2000 PHASE
ACPM	8210	(U)	AVIATION GROUND SUPPORT	2000 PHASE
ACPM	8230	(U)	ACE BATTLESTAFF	2000 PHASE
ACPM	8231	(U)	BATTLE COMMAND DISPLAY	2000 PHASE
ACPM	8240	(U)	SIX FUNCTIONS OF MARINE AVIATION	2000 PHASE
ACPM	8241	(U)	JTAR/ASR INTRODUCTION AND PRACTICAL APPLICATION CLASS	2000 PHASE
ACPM	8242	(U)	SITE COMMAND PRIMER	2000 PHASE
ACPM	8250	(U)	THEATER AIR GROUND SYSTEM (TAGS)	2000 PHASE
ACPM	8300	(U)	AIR DEFENSE	3000 PHASE
ACPM	8310	(U)	FORWARD ARMING AND REFUELING POINT (FARP) OPERATIONS	3000 PHASE
ACPM	8311	(U)	MARINE CORPS TACTICAL FUEL SYSTEMS	3000 PHASE
ACPM	8320	(U)	JOINT STRUCTURE & JOINT AIR OPERATIONS	3000 PHASE
ACPM	8321	(U)	JOINT AIR TASKING CYCLE PHASE 1: STRATEGY DEVELOPMENT	3000 PHASE
ACPM	8322	(U)	JOINT AIR TASKING CYCLE PHASE 2: TARGET DEVELOPMENT	3000 PHASE
ACPM	8323	(U)	JOINT AIR TASKING CYCLE PHASE 3: WEAPONING AND ALLOCATION	3000 PHASE
ACPM	8324	(U)	JOINT AIR TASKING CYCLE PHASE 4: JOINT ATO PRODUCTION	3000 PHASE
ACPM	8325	(U)	JOINT AIR TASKING CYCLE PHASE 5:	3000 PHASE
ACPM	8326	(U)	JOINT AIR TASKING CYCLE PHASE 6: COMBAT ASSESMENT	3000 PHASE
ACPM	8340	(U)	INTEGRATING FIRES AND AIRSPACE WITHIN THE MAGTF	3000 PHASE
ACPM	8350	(U)	PHASING CONTROL ASHORE	3000 PHASE
ACPM	8351	(U)	TACRON ORGANIZATIONS AND FUNCTIONS	3000 PHASE
ACPM	8630	(U)	TACTICAL AIR COMMAND CENTER (TACC)	6000 PHASE
ACPM	8660	(U)	JOINT OPS INTRO	6000 PHASE
ACPM	8640	(U)	JOINT DATA NETWORK	6000 PHASE
ACPM	8641	(U)	MAGTF THEATER	6000 PHASE
ACPM	8620	(U)	ESG/CSG INTEGRATION	6000 PHASE

413. UC-12B/F T&R SYLLABUS MATRIX

UC-12B/F QUALIFIED OBSERVER T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS)																		
CORE SKILL ACADEMICS																		
ACAD	1000	CACT GROUND SCHOOL	B,R				*			40.0								00
ACAD	1020	CACT REFRESHER GROUND SCH.	B,R				365			16.0								
ACAD	1021	WINDSHEAR	B,R				365			1.0								
ACAD	1022	CFIT	B,R				365			1.0								
ACAD	1023	TCAS	B,R				365			2.0								
ACAD TOTAL									4	60.0	0	0.0	0	0.0				
CACT INTIAL SIMULATOR (CACT SIM)																		
CACT SIM	1101	CACT SIM 1	B		S		(N*)	*				2.0						101
CACT SIM	1102	CACT SIM 2	B		S		(N*)	*				2.0						102
CACT SIM	1103	CACT SIM 3	B		S		(N*)	*				2.0						103
CACT SIM	1104	CACT SIM 4	B		S		(N*)	*				2.0						104
CACT SIM	1105	CACT SIM 5	B		S		(N*)	*				2.0						105
CACT SIM	1106	CACT SIM 6	B		S		(N*)	*				2.0						106
CACT SIM	1107	CACT SIM 7	B,R		S		(N*)	365				2.0						107
CACT SIM	1108	CACT SIM 8	B,R		S		(N*)	365				2.0						108
CACT SIM	1109	CACT SIM 9	B,R		S		(N*)	365				2.0						109
CACT INT SIM TOTAL									0	0.0	7	18.0	0	0.0				
CORE SKILL INTRODUCTION TRAINING (1000 PHASE EVENTS) TOTAL									4	60.0	7	18.0	0	0.0				
CORE SKILL TRAINING (2000 PHASE)																		
CORE SKILL ACADEMICS (ACAD)																		
ACAD	2000	INTRO LOCAL PROC	B,R		A	1	D	*		3.0					1000,1107	STAT		00

UC-12B/F QUALIFIED OBSERVER T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
ACAD	2001	FMS PROCEDURES	B,R		A	1	D	*		3.0					2000	STAT		
ACAD	2002	FMS PROCEDURES	B,R		A	1	D	*		3.0					2001	STAT		
TOTAL ACAD STAGE									2	9.0	0	0.0	0	0.0				
FAMILIARIZATION (FAM)																		
FAM	2100	INTRO UC-12B/F A/C	B		A	1	D	*						2.0	2000,2001			201
FAM	2101	INTRO UC-12	B,R		A	1	D	*						2.0	1000 PHASE COMPLETE			202
FAM	2102	REFINE RS PROCEDURES FOR DAY VFR FLIGHT	B,R		A	1	D	*						2.0	2101			202
TOTAL FAM STAGE									0	0.0	0	0.0	2	6.0				
INSTRUMENTS (INST)																		
INST	2200	INTRO NAV EQUIP	B,R		A	1	(N*)	*						2.0	1000 PHASE COMPLETE			210
INST	2201	INSTURMENT APPORACH PROCEDURES	B,R		A	1	(N*)	*						2.0	2200			211
TOTAL INST STAGE									0	0.0	0	0.0	2	4.0				
MISSION SKILL TRAINING (3000 PHASE)																		
OPERATIONAL SUPPORT AIRLIFT (OSA)																		
OSA	3100	OSA	B,R		A	1	(N*)	60						2.0	2000 PHASE COMPLETE,6100,	PAX	2201,3200,	
TOTAL OSA STAGE									0	0.0	0	0.0	1	2.0				
AIR LOGISTICS SUPPORT (ALS)																		
ALS	3200	ALS	B,R		A	1	(N*)	60						2.0	2000 PHASE COMPLETE,6100	CARGO	2201,3100	
TOTAL ALS STAGE									0	0.0	0	0.0	1	2.0				
TOTAL MISSION SKILL TRAINING (3000 PHASE EVENTS)									0	0.0	0	0.0	2	4.0				
CORE PLUS TRAINING (4000 PHASE)																		
CORE PLUS ACADEMICS																		
ACAD	4000	ASE Academics						*		2.0								
ACAD	4001	CACT International Procedures						730		24.0								
TOTAL ACAD STAGE									2	26.0	0		0					

UC-12B/F QUALIFIED OBSERVER T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
ASSAULT SUPPORT (AS)																		
AS	4100	ASE Procedures	B,R		A	1	(N*)	*						1.5	4000	ASE	3100,3200	
TOTAL AS STAGE									0	0.0	0	0.0	1	1.5				
EXPEDITIONARY SHORE-BASED OPERATIONS (EXP)																		
EXP	4200	Unimproved Runway Operations	B,R		A	1	(N*)	*						1.5	2000 PHASE Complete,6100		3100,3200	
TOTAL EXP STAGE									0	0.0	0	0.0	1	1.5				
INTERNATIONAL PROCEDURES (INT)																		
INT	4300	INTL OSA	B,R		A	1	(N*)	730						3.0	4001		3100,3200,2201,4100	
INT	4301	INTL ALS	B,R		A	2	(N*)	730						3.0	4001		3100,3200,2201,4100	
TOTAL INT STAGE									0	0.0	0	0.0	2	6.0				
CORE PLUS TRAINING (3000 PHASE EVENTS) TOTAL									3	28.0	0	0.0	4	9.0				
1000, 2000, 3000, & 4000 PHASE TOTAL									8	74.0	7	28.0	12	28.5				
REQUIREMENT, QUALIFICATIONS, AND DESIGNATIONS (RQD) (6000 PHASE)																		
RQD ACADEMICS (ACAD)																		
ACAD	6000	NATOPS Open Book Exam		E				365		4.0								
ACAD	6001	NATOPS Closed Book Exam		E				365		2.0					6000			
ACAD	6002	NATOPS Oral Exam		E				365		2.0					6000,6001			
ACAD	6003	Instrument Ground School						365		8.0								
ACAD	6004	Instrument Exam		E				365		2.0								
ACAD	6005	Instrument Oral Exam		E				365		2.0					6004			
ACAD	6006	CRM BASIC		E				365		1.0								
ACAD	6007	CRM T/M/S		E				365		1.0					6006			
ACAD	6009	Monthly EP Exam		E				30		1.0								
TOTAL ACAD STAGE									10	25.0	0	0.0	0	0.0				
NATOPS																		
NATOPS	6100	NATOPS Evaluation	B,R	E	A/S	1	D	365						2.0	6000,6001,6002			
NATOPS	6103	Quarterly EP Eval	B,R	E	A	A	(N*)	90										
NATOPS TOTAL									0	0.0	0	0.0	2	2.0				
TRANSPORT QUALIFIED OBSERVER (QO)																		
QO	6500	QO Designation	B	E	A	1	D	365						1.5				620

UC-12B/F QUALIFIED OBSERVER T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
TOTAL T2P STAGE									0	0.0	0	0.0	1	1.5				
AVIATION CAREER PROGRESSION MODEL (ACPM)																		
ACPM	8200	MACCS AGENCIES, FUNCTIONS AND CONTROL OF AIRCRAFT AND MISSILES						*		0.6					2000 PHASE			
ACPM	8201	MWCS BRIEF						*		0.4					2000 PHASE			
ACPM	8202	ACA AND AIRSPACE						*		0.5					2000 PHASE			
ACPM	8210	AVIATION GROUND SUPPORT						*		0.6					2000 PHASE			
ACPM	8230	ACE BATTLESTAFF						*		0.6					2000 PHASE			
ACPM	8231	BATTLE COMMAND DISPLAY						*		0.3					2000 PHASE			
ACPM	8240	SIX FUNCTIONS OF MARINE AVIATION						*		1.3					2000 PHASE			
ACPM	8241	JTAR/ASR INTRODUCTION AND PRACTICAL APPLICATION CLASS						*		0.5					2000 PHASE			
ACPM	8242	SITE COMMAND PRIMER						*		0.7					2000 PHASE			
ACPM	8250	THEATER AIR GROUND SYSTEM (TAGS)						*		0.6					2000 PHASE			
ACPM	8300	AIR DEFENSE						*		0.6					3000 PHASE			
ACPM	8310	FORWARD ARMING AND REFUELING POINT (FARP) OPERATIONS						*		0.4					3000 PHASE			
ACPM	8311	MARINE CORPS TACTICAL FUEL SYSTEMS						*		0.2					3000 PHASE			
ACPM	8320	JOINT STRUCTURE & JOINT AIR OPERATIONS						*		1.3					3000 PHASE			
ACPM	8321	JOINT AIR TASKING CYCLE PHASE 1: STRATEGY DEVELOPMENT						*		0.3					3000 PHASE			
ACPM	8322	JOINT AIR TASKING CYCLE PHASE 2: TARGET DEVELOPMENT						*		0.2					3000 PHASE			

UC-12B/F QUALIFIED OBSERVER T&R MATRIX																		
STAGE	TRNG CODE	T&R DESCRIPTION	POI	E	DEVICE	# OF A/C	CON	RE FLY	# OF ACAD	ACAD TIME	# OF SIM	SIM TIME	# OF FLTS	FLT TIME	PREREQUISITE	NOTES	CHAINING	EVENT CONV
ACPM	8323	JOINT AIR TASKING CYCLE PHASE 3: WEAPONING AND ALLOCATION						*		0.2					3000 PHASE			
ACPM	8324	JOINT AIR TASKING CYCLE PHASE 4: JOINT ATO PRODUCTION						*		0.2					3000 PHASE			
ACPM	8325	JOINT AIR TASKING CYCLE PHASE 5:						*		0.2					3000 PHASE			
ACPM	8326	JOINT AIR TASKING CYCLE PHASE 6: COMBAT ASSESSMENT						*		0.2					3000 PHASE			
ACPM	8340	INTEGRATING FIRES AND AIRSPACE WITHIN THE MAGTF						*		0.5					3000 PHASE			
ACPM	8350	PHASING CONTROL ASHORE						*		0.5					3000 PHASE			
ACPM	8351	TACRON ORGANIZATIONS AND FUNCTIONS						*		TBD					3000 PHASE			
ACPM	8630	TACTICAL AIR COMMAND CENTER (TACC)						*		0.7					6000 PHASE			
ACPM	8660	JOINT OPS INTRO						*		0.4					6000 PHASE			
ACPM	8640	JOINT DATA NETWORK						*		0.4					6000 PHASE			
ACPM	8641	MAGTF THEATER						*		1.5					6000 PHASE			
ACPM	8620	ESG/CSG INTEGRATION						*		TBD					6000 PHASE			
TOTAL ACPM STAGE									28	13.9	0	0.0	0	0.0				