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Subj: UC-12 TRAINING AND READINESS MANUAL

Ref: (a) NAVMC 3500.14D

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

1. <u>Purpose</u>. Per the reference, this Training and Readiness (T&R) Manual, contained in enclosure (1), revises training standards, regulations, and policies regarding the training of UC-12 aircrew.

2. Cancellation. NAVMC 3500.102B, NAVMC 3500.30A.

3. <u>Scope</u>. Highlights of major changes included in this Manual are:

a. Chapter 1 revisions include the following:

(1) Consolidates the UC-12W and UC-12F/M series T&R manuals into one manual (a global change reflected in all chapters).

(2) The table of organization has been revised to reflect additions of UC-12W aircraft and corresponding reductions of UC-12F/M aircraft.

b. Chapter 2 revisions include the following:

(1) Incorporated the series conversion program of instruction.

(2) The use of simulators and network simulators are leveraged and directed where practical.

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c. Chapter 3 revisions include the following:

(1) Events may be instructed by a naval air training and operations procedures standardization pilot instructor or assistant instructor.

(2) Deleted the night systems qualification.

4. <u>Information</u>. Commanding General (CG), Training and Education Command (TECOM) will update this T&R Manual as necessary to provide current and relevant training standards to commanders. All questions pertaining to the Marine Corps Aviation T&R Program and Unit Training Management should be directed to: CG, TECOM, Marine Air-Ground Task Force Training and Education Standards Division (C 466), 1019 Elliot Road, Quantico, Virginia 22134.

5. <u>Command</u>. This Manual is applicable to the Marine Corps Total Force.

6. Certification. Reviewed and approved this date.

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W. F. MULLEN III By direction

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RECORD OF ADMINISTRATIVE CHANGES

Log completed change action as indicated.

Admin Change Number	Description	Chapter	Message Date-Time- Group
1	 -For Event NTPS-6103; changed device condition from "A" to "A/S" -Changed Requirement field to: "This review covers instructor selected aircraft emergencies. Demonstrate comprehensive knowledge and understanding of aircraft emergencies. This event can be completed in conjunction with a flight or in a static aircraft. Furthermore, abnormal and emergency procedure training conducted in simulators by civilian instructors during CACT Initial Training or CACT Recurrent Training satisfies the requirement." 	2	DoN Tracker 2021- TECOM_PSD _ASB-151 of 9 Sep 21

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CHAPTER 1

UC-12F/M/W/W+ TRAINING AND READINESS UNIT REQUIREMENTS

PARAGRAPH PAGE

TRAINING AND READINESS UNIT REQUIREMENTS1.0	1-3
MISSION1.1	1-3
TABLE OF ORGANIZATION (T/O) 1.2	1-3
MISSION ESSENTIAL TASK LIST (METL)	1-3
MISSION ESSENTIAL TASK (MET) TO SIX FUNCTIONS OF MARINE AVIATION1.4	1-4
MET TO CORE/MISSION/CORE PLUS SKILL MATRIX	1-4
MISSION ESSENTIAL TASKS (MET) OUTPUT STANDARDS1.6	1-4
CORE MODEL MINIMUM REQUIREMENTS (CMMR) TRAINING STANDARDS FOR READINESS REPORTING1.7	1-5
CORE MODEL TRAINING STANDARD (CMTS)	1-6
INSTRUCTOR DESIGNATIONS	1-6
REQUIREMENTS, CERTIFICATIONS, DESIGNATIONS, QUALIFICATIONS (RCQD)1.10	1-7
APPENDIX A MET WORKSHEETS	A-1
APPENDIX B REFERENCE SOURCES	B-1

NAVMC 3500.102C 26 Jun 19

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CHAPTER 1

UC-12F/M/W/W+

1.0 <u>MARINE OPERATIONAL SUPPORT AIRCRAFT (OSA) SQUADRONS AND DETACHMENTS</u> (VMR Det./H&HS UC-12F/M/W/+) 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.

1.1 <u>OSA/UC-12F/M/W/W+ MISSION</u>. Provide time-sensitive air transport of high priority passengers and cargo to, within, and between theaters of war.

1.2 <u>TABLE OF ORGANIZATION (T/O)</u>. As of this publication date, UC-12F/M/W/W+ VMR Dets for both the Active and Reserve Forces are authorized:

H&HS/VMR Det UC-12F/M/W/W+					
Table of Organization - Active Forces					
H&HS MCAS Futenma	H&HS MCAS Miramar	H&HS MCAS Iwakuni			
T/O # M02204	T/O # M02209	T/O # M02204			
1 UC-12W+	2 UC-12W	2 UC-12W			
Pilots*	Pilots*	Pilots*			
10	12	10			
Transport Aircrewman	Transport Aircrewman	Transport Aircrewman			
3	3	3			
H&HS MCAS Yuma	H&HS MCAS Beaufort	H&HS MCAS New River			
T/O # M02212	T/O # M02205	T/O # M02206			
2 UC-12F	2 UC-12M	2 UC-12F // 1 UC-12W			
Pilots	Pilots	Pilots			
14	14	14			
Transport Aircrewman	Transport Aircrewman	Transport Aircrewman			
5	5	5			
1	able of Organization - Reserve Force	es			
	VMR Det				
	JRB Belle Chasse				
	T/O M03017				
	2 UC-12W				
	Pilots*				
	21				
	Transport Aircrewman				
	3				
Table	e of Organization - (Deployed Detach	ment)			
2 UC-12W/W+		1 UC-12W/W+			
Pilots* Pilots*					
7		5			
Transport Aircrewman Transport Aircrewman					
3**		2**			
*A Qualified Observer may be counted	l as a T2P on certain events.				
**The Transport Aircrewman is not re	quired on all Mission Flights				

1.3 <u>MISSION ESSENTIAL TASK LIST (METL)</u>. The METL is comprised of specified capabilitiesbased Mission Essential Tasks (METs) which a unit is designed to execute. METs are drawn from the Marine Corps Task List (MCTL), are standardized by type unit, and defined as Core or Core Plus METs. Core METs are those tasks that a unit is expected to execute at all times, and are the only METs used in reporting the Training Level (T-Level) for the Core Mission (C-Level) in the Defense Readiness Reporting System – Marine Corps (DRRS-MC). Core Plus METs identify additional capabilities to support missions or plans which are limited in scope, theater specific, or have a lower probability of execution. Core Plus METs may be included in readiness reporting when contained within an Assigned Mission METL. An Assigned Mission METL consists of only selected METs (drawn from Core and Core Plus METs) necessary to conduct the assigned mission. MCO 3000.13_ provides additional information on readiness reporting.

H&HS/VMR Det UC-12F/M/W/W+						
	MISSION ESSENTIAL TASK LIST (METL)					
CORE						
MET SKILL ABBREVIATION		DESCRIPTION				
MCT 1.3.4.1.2	OSA	Conduct Operational Support Airlift				
MCT 4.3.8	ALS	Conduct Air Logistics Support				
CORE PLUS						
MCT 1.3.4	AS	Conduct Assault Support Operations				
MCT 1.3.3.3.2 EXP Conduct Aviation Operations From Expeditionary Shore-Based Sites						

1.4 <u>MISSION ESSENTIAL TASK (MET) TO SIX FUNCTIONS OF MARINE AVIATION.</u> As Aviation Ground units provide universal impact across all six functions of Marine Aviation, this table is optional for the Aviation Ground community.

H&HS/VMR Det UC-12F/M/W/W+							
MISSION	MISSION ESSENTIAL TASK (MET) TO SIX FUNCTIONS OF MARINE AVIATION						
MET	SKILL	S	SIX FUNC	FIONS OF	MARINE	AVIATION	N
	ABBREVIATION	OAS	ASPT	AAW	EW	CoA&M	AerRec
MCT 1.3.4.1.2	OSA		Х				
MCT 4.3.8	ALS		Х				
CORE PLUS							
MCT 1.3.4	AS		X				
MCT 1.3.3.3.2	EXP		Х				

1.5 <u>MET TO CORE/MISSION/CORE PLUS SKILL MATRIX</u>. Depicts the relationship between a MET and each Core/Mission/Core Plus/Mission Plus skill associated with the MET for readiness reporting and resource allocation purposes.

	H&HS/VMR Det UC-12F/M/W/W+												
	I	Mission	Essential	l Task To	o Core/N	/lission/C	Core Plus	Skill Ma	atrix				
MISSION			CORE SKILLS			MISS SKI	MISSION SKILLS		CORE PLUS 4000 PHASE				
ESSENTIAL ABBREVIATION		2000 PHASE			3000 PHASE		SKILL		MISSION				
TASK (MET)		FAM	INST	NFAM	CP	REV	OSA	ALS	ACAD	INT	NS	AS	EXP
MCT 1.3.4.1.2	OSA	Х	Х	Х	Х	Х	Х				X		
MCT 4.3.8	ALS	Х	Х	Х	Х	Х		X			X		
CORE PLUS													
MCT 1.3.4	AS	Х	Х	Х	Х	Х			Х	Х	Х	Х	
MCT 1.3.3.3.2	EXP	Х	Х	Х					Х		Х		X

1.6 <u>MISSION ESSENTIAL TASK (MET) OUTPUT STANDARDS</u>. The following MET output standard is the required level of performance for VMR (UC-12W/W+) and must be capable of sustaining during contingency operations by MET to be considered MET-ready.

1.6.1 Output standards will be demonstrated through the incorporation of unit training Events.

1.6.2 A core capable VMR Det. (UC-12W/W+) squadron is able to sustain the number of sorties listed below on a daily basis during contingency/combat operations. The sortie rates are based on 3.0 hour average sortie duration. It assumes >70% MC aircraft and >90% T/O aircrew on hand. If unit MC aircraft is <70% or T/O aircrew <90%, core capability will be degraded by a like percentage."

VMR Det UC-12W/W+									
	MET OUTPUT STANDARDS								
	CORE								
MET AF	SKILL	T&D DESCRITION	MAXIMUM SO ME	DRTIES PER Г	MAXIMU SOR	M DAILY TIES			
	ABBREVIATON	Tak Descrition	2 Aircraft	1 Aircraft	2 Aircraft	1 Aircraft			
MCT 1.3.4.1.2	OSA	Conduct Operational Support Airlift	5	3					
MCT 4.3.8	ALS	Conduct Air Logistics Support	5	3					
		CORE PLUS			5	2			
MCT 1.3.4	AS	Conduct Assault Support Operations	5	3	5	5			
MCT 1.3.3.3.2 EXP		Conduct Aviation Operations From Expeditionary Shore-Based Sites	5	3					

1.7 <u>CMMR CORE/MISSION/CORE PLUS SKILLS CREW DEFINITION AND PROFICIENCY</u> <u>REQUIREMENTS</u>

		VMR Det U	U C-12W/W +				
	CORE MO	DEL MINIMUM	I REQUIREMENT	C (CMMR)			
		MISSION ((3000 Phase)				
MISSION SVILLS		2Aircraft			1 Aircraft		
MISSION SKILLS	PILOTS	TA*	CREWS	PILOTS	TA*	CREWS	
OSA	7	3***	3	5	2***	2	
ALS	7	3***	3	5	2***	2	
		MISSION PLU	US (4000 Phase)				
MICCION DI LIC CVII I C	2 Aircraft			1 Aircraft			
MISSION PLUS SKILLS	PILOTS	TA*	CREWS	PILOTS	TA*	CREWS	
AS	7**	3***	3	5**	2***	2	
EXP	7**	3***	3	5**	2***	2	
*TA – TRANSPORT AIRCREWM	IAN						
**Note: A Qualified Observer ma	y fill duties of T2P	on selected flights	6				
***The Transport Aircrewman is no	ot required on all M	ission Flights					
		COMBAT L	EADERSHIP				
DESIGNATION			2 Aircraft		1 Aircraft		
T2P	2				1		
TAC	TAC				4		
TRANSPORT AIRCREWN	IAN		2		1		

1.8 <u>CORE MODEL TRAINING STANDARD (CMTS)</u>. The CMTS is the optimum training standard reflecting the number of pilots trained to CSP/MSP, per crew position to execute each Stage of flight as detailed below. The CMTS Matrix depicts the training goal and optimum depth of training desired for each squadron as they develop their squadron training plan. It is not utilized for readiness reporting (DRRS-MC) purposes. At a minimum, the CMTS shall enable a squadron to form Core Model Minimum Requirement (CMMR) crews for Mission Skills (and Mission Plus Skills when required).

		VMR Det	./H&HS U	UC-12F/M	[/W/W+					
		CORE MODEL	ΓRAININ	G STANI	DARD (CN	ATS)				
		С	ORE (200	00 Phase)						
COPE SKILL		2 Aircraft					1 Aiı	craft		
COKE SKILL	PILOTS	TA*	CR	EWS	PIL	OTS	T	A *	CR	EWS
FAM	7	3		3		5		2		2
INST	7	N/A		3		5	N	/A		2
NFAM	7	N/A		3		5	N	/A		2
CP	7	N/A		3		5	N	/A		2
REV	7	N/A		3		5	N	/A		2
		MI	SSION (3	000 Phase)					
	2 Aircraft 1 Aircraft									
MISSION SKILLS	PILOTS	TA*	CR	EWS	WS PILOTS		TA*		CREWS	
OSA	7	3		3		5	2		2	
ALS	7	3		3	5		2		2	
		COR	E PLUS ((4000 Phas	se)					
CORE PLUS		2 Aircraft					1 Air	craft		
SKILLS	PILOTS	TA*	CR	EWS	PILOTS TA*			4*	CREWS	
ACAD	0 5	0 0	0	2	0	5	0	0	0	2
INT	0 5	0 0	0	2	0	5	0	0	0	2
NS	0 5	0 0	0	2	0	5	0	0	0	2
		MISSI	ON PLUS	5 (4000 Ph	ase)					
MISSION PLUS		2 Aircraft					1 Air	craft		
SKILLS	PILOTS	TA* CREWS			PILOTS		TA*		CR	EWS
AS	0 5	0 2	0	2	0	5	0	2	0	2
EXP	0 5	0 2	0	2	0	5	0	2	0	2
*TA – TRANSPORT A	IRCREWMAN									

Note¹: For Core Plus Mission and Skills, the first number (in blue font and highlighted in gray) represents the number of individuals the squadron is expected to train at all times in order to retain a cadre of capability within the squadron. The second number represents the number of MET capable individuals the squadron should train if that MET becomes an Assigned/Directed Mission Set. For Core Plus Skills the commanding officer determines the number of aircrew to train. The CMTS is based upon the community's collective recommendation.

1.9 <u>INSTRUCTOR REQUIREMENTS</u>. A VMR Det./H&HS should possess the following numbers of personnel with the instructor designations listed in the matrix.

VMR Det./H&HS UC-12F/M/W/W+							
INSTRUCTOR DESIGNATIONS (5000 PHASE)							
Designation	F	rilot	Transport A	ircrewman			
Designation	2 Aircraft	1 Aircraft	2 Aircraft	1 Aircraft			
NATOPS Instructor (NI)	1	1	1	1			
Assistant NATOPS Instructor (ANI)	3	2	1	0			
Night Systems Instructor (NSI)	1	1	N/A	N/A			
Instrument Evaluator	3	2	N/A	N/A			
Transport Aircrewman NATOPS Instructor (TANI)	N/A	N/A	1	1			
Transport Aircrewman Assistant NATOPS Instructor (TAANI)	N/A	N/A	1	0			

1.10 REQUIREMENTS, CERTIFICATIONS, DESIGNATIONS, AND QUALIFICATIONS (RCQD)

VMR Det./H&HS UC-12F/M/W/W+					
RCQD (6000 PHASE)					
DESIGNATION	2 Aircraft	1 Aircraft			
FCF (Pilots)	3	2			

NAVMC 3500.102C 26 Jun 19

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APPENDIX A

UC-12W/W+ MET WORKSHEETS

CORE

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

- MCT 1.3.4
- Conduct Air Logistics Support <u>CORE PLUS</u> Conduct Assault Support Operations Conduct Aviation Operations From Expeditionary Shore-Based Sites MCT 1.3.3.3.2

<u>CORE</u>

MCT 1.3.4.1.2 Conduct Operational Support Airlift (OSA)

Conditions:

C 1.3.2.1 Light

Light available to illuminate objects from natural or manmade sources.

Descriptors: Bright (sunny day); Day (overcast day); low (dusk, dawn, moonlit, streetlight lit); Negligible (overcast night)

Standards: (2/1 Aircraft)

Personnel

- 5/3 aircrews formed
- 90% of squadron T/O personnel MOS qualified and deployable .
- 100% critical MOS fill

<u>Equipment</u>

- 70% Mission Capable (MC) aircraft of PAA (2/1/1 aircraft)
- Operational support equipment fully supports MCT

Training

• 3/2 Crews EXP Mission Skill Proficient IAW T&R requirements

Output Standards

• 5/3 sorties daily sustained during contingency/combat operations

MCT 4.3.8Conduct Air logistics Support (ALS)Conditions:

C 1.3.2.1 Light

Light available to illuminate objects from natural or manmade sources.

Descriptors: Bright (sunny day); Day (overcast day); low (dusk, dawn, moonlit, streetlight lit); Negligible (overcast night)

Standards: (2/1 Aircraft)

Personnel

- 5/3 aircrews formed
- 90% of squadron T/O personnel MOS qualified and deployable
- 100% critical MOS fill

<u>Equipment</u>

- 70% Mission Capable (MC) aircraft of PAA (2/1/1 aircraft)
- Operational support equipment fully supports MCT

Training

• 3/2 Crews EXP Mission Skill Proficient IAW T&R requirements

Output Standards

• 5/3 sorties daily sustained during contingency/combat operations

CORE PLUS

MCT 1.3.4 Conduct Assault Support Operations (CAT)

Conditions:

C 1.3.2.1 Light

Light available to illuminate objects from natural or manmade sources.

Descriptors: Bright (sunny day); Day (overcast day); low (dusk, dawn, moonlit, streetlight lit); Negligible (overcast night)

Standards: (2/1 Aircraft)

Personnel

- 5/3 aircrews formed
- 90% of squadron T/O personnel MOS qualified and deployable
- 100% critical MOS fill

<u>Equipment</u>

- 70% Mission Capable (MC) aircraft of PAA (2/1/1 aircraft)
- Operational support equipment fully supports MCT

Training

• 3/2 Crews EXP Mission Skill Proficient IAW T&R requirements

Output Standards

• 5/3 sorties daily sustained during contingency/combat operations

MCT 1.3.3.3.2 Conduct Aviation Operations From Expeditionary Shore-Based Sites (EXP)

Conditions:

C 1.3.2.1 Light

Light available to illuminate objects from natural or manmade sources.

Descriptors: Bright (sunny day); Day (overcast day); low (dusk, dawn, moonlit, streetlight lit); Negligible (overcast night)

Standards: (2/1 Aircraft)

Personnel

- 5/3 aircrews formed
- 90% of squadron T/O personnel MOS qualified and deployable
- 100% critical MOS fill

Equipment

- 70% Mission Capable (MC) aircraft of PAA (2/1/1 aircraft)
- Operational support equipment fully supports MCT

Training

• 3/2 Crews EXP Mission Skill Proficient IAW T&R requirements

Output Standards

• 5/3 sorties daily sustained during contingency/combat operations

APPENDIX B

REFERENCE SOURCES

VMR UC-12F/M/W/W+/W+			
ABBREVIATIONS			
	CORE		
CACT	COMMAND AIRCRAFT CREWTRAINING		
FAM	FAMILIARIZATION		
NFAM	NIGHT FAMILIARIZATION		
INST	INSTRUMENT		
СР	CO-PILOT PROCEDURES		
	MISSION		
OSA	OPERATIONAL SUPPORT AIRLIFT		
ALS	AIR LOGISTICS SUPPORT		
CORE PLUS			
NS	NIGHT SYSTEMS		
INT PROC INTERNATIONAL PROCEDURES			
MISSION PLUS			
AS	ASSAULT SUPPORT		
EXP	EXPEDITIONARY SHORE-BASED OPERATIONS		

CHAPTER 2

UC-12F/M/W/W+ PILOT/7555

<u>PARAGRAPH</u> <u>PAGE</u>

INDIVIDUAL TRAINING AND READINESS REQUIREMENTS.	2.0	2-3
TRAINING PROGRESSION MODEL	2.1	2-3
PROGRAMS OF INSTRUCTION (POI)	2.2	2-3
PROFICIENCY AND CURRENCY	2.3	2-4
QUALIFICATIONS AND DESIGNATIONS TABLES	2.4	2-4
SYLLABUS NOTES	2.5	2-5
CORE INTRODUCTION PHASE	2.6	2-6
CORE INTRODUCTION STAGES	2.7	2-6
CORE PHASE	2.8	2-6
CORE STAGE	2.9	2-7
MISSION PHASE	2.10	2-12
MISSION STAGE	2.11	2-12
CORE PLUS PHASE	2.12	2-13
CORE PLUS STAGES	2.13	2-14
INSTRUCTOR TRAINING PHASE	2.14	2-18
INSTRUCTOR TRAINING STAGES	2.15	2-18
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, DESIGNATIONS (RCQD)	2.16	2-20
RCQD STAGES	2.17	2-20
AVIATION CAREER PROGRESSION MODEL (8000 PHASE)	2.18	2-24
T&R SYLLABUS MATRIX	2.19	2-26

NAVMC 3500.102C 26 Jun 19

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CHAPTER 2

UC-12F/M/W/W+ PILOT/7555

2.0 <u>UC-12F/M/W/W+ PILOT/7555 INDIVIDUAL TRAINING AND READINESS REQUIREMENTS</u>. 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.

2.1 <u>UC-12F/M/W/W+ PILOT TRAINING PROGRESSION MODEL</u>. This model represents the recommended training progression for the average UC-12F/M/W/W+ pilot crewmember. Units should use the model as a guide to generate individual training plans.



2.2 PROGRAMS OF INSTRUCTION (POI)

<u>General</u>. Those aviators with less than 200 military fixed-wing hours shall be assigned to the Basic (B) POI. Those aviators with more than 200 military fixed-wing hours may be assigned to the Refresher (R) POI. Those aviators that have been previously designated a UC-12F/M/W/W+ TAC and are returning to a DIFOP status should be assigned to the Refresher(R) POI. Those aviators conducting a Series Conversion (UC-12F/M to UC-12W) shall conduct the Series Conversion (S) 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.

2.2.1	Basic (B) POI.	Basic Pilots shall	fly the entire	syllabus.	(Average time to train)
			~	~	

BASIC POI (B)				
WEEKS	COURSE	PERFORMING ACTIVITY		
8	Core Introduction Training	CACT		
7	Core Training	VMR Det./H&HS		
4	Mission Training	VMR Det./H&HS		

2.2.2 <u>Refresher (R) POI</u>. 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. (Average time to train)

REFRESHER POI (R)				
WEEKS	COURSE	PERFORMING ACTIVITY		
8	Core Introduction Training	CACT		
3	Core Training	VMR Det./H&HS		
4	Mission Training	VMR Det./H&HS		

2.2.3 <u>Series Conversion (S) POI</u>. Series Conversion Pilots shall fly those events annotated with an S. Commanding officers/OICs will review the qualifications, previous experience, currency, and demonstrated ability of Series Conversion Pilots with a view towards combining required flights. (Average time to train)

	SERIES CONVERSION (S) POI					
WEEKS	COURSE	PERFORMING ACTIVITY				
8	Core Introduction Training	CACT				
3	Core Training	VMR Det./H&HS				
4	Mission Training	VMR Det./H&HS				

2.3 PROFICIENCY AND CURRENCY

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

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

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

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

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

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

2.3.3 <u>Skill Currency</u>. Currency is a control measure used to provide an additional margin of safety based on exposure frequency to a particular skill and applies to all MOS's that must comply with NATOPS and CNAFINST M3710.7 requirements. It is a measure of time since the last event demanding that specific skill. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for aircrew individual type mission profiles can be found in Chapter 3.

2.4 <u>QUALIFICATIONS AND DESIGNATIONS TABLES</u>. 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.

VMR Det./H&HS UC-12F/M/W/W+					
	DESIGNATIONS				
Designation	Initial Event Designation Requirements				
ANI	5100,5101,5102,5103				
NI	5100,5101,5102,5103				
Instrument Evaluator	6101				
NSI (UC-12W/W+ Only)	5150,5151				
T2P	6300				
TAC	6400,6401,6402				
FCF	6500,6501,6008				
VMR Det./H&HS UC-12F/M/W/W+					
QUALIFICATIONS					
Qualification Initial Event Qualification Requirements					
NSQ (UC-12W/W+ Only)	4400,4401				
NATOPS	6000,6001,6002,6100				
STANDARD INSTRUMENT	6003,6004,6005,6101				
SPECIAL INSTRUMENT	6003,6004,6005,6102				
CRM	6006,6007				

2.5 <u>SYLLABUS NOTES</u>

2.5.1 All Events, to include simulators, shall begin with a comprehensive brief with emphasis on administrative procedures, CRM, mission performance standards and aircrew expectations.

2.5.2 All flights shall terminate with a comprehensive debrief with emphasis on aircrew performance utilizing all evaluation techniques available.

2.5.3 An ATF is required for any initial event completed by a Basic or Refresher pilot, or as recommended by the squadron Standardization Board. If the commanding officer has waived/deferred a syllabus sortie, the squadron training officer shall place a waiver/deferral letter in section 3 of the APR.

	2.5.4	Event Conditions.	Refer to the fe	ollowing table	for required	event conditions.
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Code	DESCRIPTION (ENVIRONMENTAL CONDITION)
D	Shall be conducted during day
N	Shall be conducted at night, aided or unaided, at least 30 minutes after official sunset.
(N)	May be conducted day or night. If at night, aided or unaided.
NS	Shall be conducted at night aided under High Light Level or Low Light Level at least 30 minutes after official sunset.
(NS)	May be conducted day or night. If at night, shall be aided under High Light Level or Low Light Level at least 30 minutes after official sunset.
N*	Shall be conducted at night unaided, at least 30 minutes after official sunset
(N*)	May be conducted day or night. If at night, shall be unaided.
D/NS	Shall be conducted in the simulator during day and night aided.

2.5.5 <u>Device matrix</u>. Only include applicable rows.

	DEVICE				
Symbol	Meaning				
А	Conducted in Aircraft				
A/S	Aircraft Preferred/Simulator Optional				
S	Conducted in Simulator				
S/A	Simulator Preferred/Aircraft Optional				

2.6 CORE INTRODUCTION PHASE

General

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

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

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

Undergoing an additional CACT Course For Series Conversion (S) POI Pilots is not required.

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.

2.7 <u>CORE INTRODUCTION STAGES</u>

	UC-12F/M/W/W+ PILOT							
	CORE SKILL INTRODUCTION PHASE							
			COMMAND AIRCRAFT	CREW 1	RAINING (C	CACT)		
			INITIAL '	TRAINI	NG			
SKILL	PREFIX	TRNG CODE	T&R DESCRIPTION	POI	PROF INTERVAL	ACAD HOURS	SIM HOURS	NOTES
			INITIAL ACADEM	ICS (INI	TIAL ACAD)	-		
	ACAD	1000	CACT GND SCHL INITIAL	В	*	48.0		
INITIAL	ACAD	1002	RVSM	В	*	3.0		
ACAD	ACAD	1003	WEATHER RADAR	B,R	*	2.0		
	ACAD	1004	CACT INTERNATIONAL INITIAL	B,R	*	21.0		
	INITIAL SIMULATOR (INITIAL SIM)							
	SIM	1101	CACT SIM 1	В	*		4.0	
INITIAL	SIM	1102	CACT SIM 2	В	*		4.0	
SIM	SIM	1103	CACT SIM 3	В	*		4.0	
	SIM	1104	CACT SIM 4	В	*		4.0	
	RECURRENT TRAINING							
SKILL	PREFIX	TRNG CODE	T&R DESCRIPTION	POI	PROF INTERVAL	ACAD HOURS	SIM HOURS	NOTES
RECURRENT ACADEMICS (REC ACAD)								
DEC	ACAD	1001	CACT GND SCHL REFRESH	B,R,M	365	8.0		
ACAD	ACAD	1006	WEATHER RADAR	B,R,M	365	2.0		
ACAD	ACAD	1005	CACT INTERNATIONAL RECURRENT	B,R,M	730	8.0		
		-	RECURRENT SIM	ULATO	R (REC SIM)	_		
DEC	SIM	1105	CACT SIM 5	B,R,M	365		4.0	
SIM	SIM	1106	CACT SIM 6	B,R,M	365		4.0	
51101	SIM	1107	CACT SIM 7	B,R,M	365		4.0	

2.8 <u>CORE PHASE (2000)</u>

2.8.1 At the completion of the Core Phase of training and T2P-6300 the PUI shall be designated a Transport Second Pilot (T2P).

2.8.2 All Core Phase events shall be instructed by an ANI/NI.

2.9 <u>CORE STAGES</u>

2.9.1 Core Skill Academic (ACAD)

<u>Purpose</u>. Introduce the Pilots to the UC-12F/M/W/W+.

General. The Pilot should be CACT complete prior to beginning this stage.

ACAD-2000 0.0 * B,S D G 1 UC-12F/M/W/W+ (Static)

Goal. Introduce the UC-12F/M/W/W+ aircraft.

Requirements

Brief: ADB, MEL/CDL, Chapter 29 Flight Crew Coordination, Pre-flight, Emergency Equipment, Egress Drill, Post Flight, M-Sharp, Flight-planning, ORM, WX Brief, NOTAMS, Fuel Packet/Multi-use Card, OPARS. Discuss engine failure during critical phases of flight. Discuss Rapid depressurization and Time of Useful Consciousness. Discuss dual engine failure. Discuss Ditching with two engines, single engine, and power off.

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

External Syllabus Support. Static aircraft.

Prerequisite. CACT Complete

<u>ACAD-2001</u> 0.0 * B,S D G 1 UC-12F/M/W/W+ (Static)

Goal. Introduce the UC-12F/M/W/W+ 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

2.9.2 <u>Familiarization (FAM)</u>

<u>Purpose</u>. Introduce Pilots to UC-12F/M/W/W+ FAM and CRM procedures. Develop proficiency as a T2P with the aircraft in all takeoff, landing, and flight modes. At the completion of the core phase the PUI should be able to meet performance standards for various maneuvers IAW the UC-12F/M/W/W+ NATOPS manual.

General

This phase contains basic core skill training essential to operational employment of the UC-12F/M/W/W+. Basic, Refresher, and Series Conversion Pilots shall be trained and evaluated in the appropriate seat.

Basic and Refresher Pilots shall complete the CACT prior to commencing flight training.

The Core Skill Phase shall be conducted at the OSA unit/VMR Det./ H&HS.

Flights in this stage of flight shall be flown with a designated IP, and include a complete brief/debrief for each flight.

Crew Requirements. NI/ANI shall instruct the PUI for all initial flights.

FAM-2100 2.0 * B D A 1 UC-12F/M/W/W+

Goal. Introduce the pilot to preflight and ground checklist procedures for UC-12F/M/W/W+ aircraft.

Requirements

Brief:

Stall warning Aircraft handling Take-off abort Landing profile/landing techniques Engine limitations Electrical limitations Airframe limitations.

Practice:

Start Taxi Take off Climbs/descents Steep turns Slow flight Stabilized approach Landing Crew Resource Management.

Performance Standard:

Demonstrate safe and proficient air work and show the ability to recognize deviation from Airline Transport Pilot (ATP) Practical Test Standards (PTS) standards and work towards correction. Operate the aircraft according to the NFM, IFM, and FARs.

Prerequisite. 2000,2001

FAM-2101 2.0 365 B,R,S,M D A	1 UC-12F/M/W/W+
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Goal. Review FAM maneuvers.

Requirements

Brief:

Aborted takeoffs
Go-around crew coordination
Powerplant malfunctions prior to/at V1
Engine failures during critical phases of flight
Crosswind landing techniques
Aerodynamic/fuel/autopilot limitations.

Discuss:

Emergency evacuation of passengers and crew Review emergency evacuation procedures.

Practice:

Simulated Single-Engine Failure (NATOPS) Approach to Stall, Emergency Descent Approach and Landing Two-Engine Go-Around Single-engine Go-Around Reduced Flap Landings

Performance Standard

Demonstrate safe and proficient air work. Demonstrate the ability to recognize deviation from Airline Transport Pilot (ATP) and/or Airmen Certification Standards (ACS) and work towards correction. Operate the aircraft according to the NFM, IFM and FARs.

External Syllabus Support. Approved working area or restricted area.

Prerequisite. 2100

2.9.3 Instruments (INST)

<u>Purpose</u>. Introduce Pilots to UC-12F/M/W/W+ Instrument procedures under actual or simulated instrument flying conditions. PUI should demonstrate keen awareness of flight instrument interpretation and spatial orientation.

<u>General</u>. Basic and Refresher Pilots shall be trained and evaluated in the left seat. One of the instrument flights should be flown at night.

Crew Requirements. PUI shall be instructed/evaluated by an NI/ANI.

<u>INST-2200</u> 2.0 * B (N*) A 1 UC-12F/M/W/W+

Goal. Introduce instrument flying in the UC-12F/M/W/W+.

Requirements

<u>Brief</u>: Set-up of FMS,MFD,PFD <u>Discuss</u>: Jeppeson approach plates TCASII warnings & conflict resolution maneuvers IFR minimums.

Flight:

ILS (coupled/non-coupled) PAR Standby Gyro approach Go-around VOR holding FMS holding.

Performance Standard:

Demonstrate safe and proficient air work

Show the ability to recognize deviation from Airline Transport Pilot (ATP) and/or Airmen Certification Standards (ACS) standards and work towards correction. Operate the aircraft according to the NFM, IFM and FARs

Demonstrate sound Crew Resource Management (CRM).

Prerequisite. 2100

INST-2201	2.0	365	B,R,S,M	(N*)	А	1 UC-1212F/M/W/W+

Goal. Practice instrument flying in the UC-12F/M/W/W+.

Requirements

Brief:

RNAV/GPS LNAV/MDA LNAV/VNAV VOR/TAC ASR B/C GPS HOLDING Instrument missed approach procedures Standby Gyro Approach

Discuss:

Volcanic ash hazards recognition/avoidance Review pressurization system Rapid decompression Door open warning annunciation procedures in flight Emergency descent procedures.

Flight:

RNAV/GPS LNAV/MDA LNAV/VNAV VOR/TAC ASR GPS holding Instrument missed approach procedures Standby Gyro Approach

Performance Standard:

Demonstrate safe and proficient air work Show the ability to recognize deviation from Airline Transport Pilot (ATP) and/or Airmen Certification Standards (ACS) standards and work towards correction. Operate the aircraft according to the NFM, IFM and FARs Demonstrate sound Crew Resource Management (CRM).

Prerequisite. 2200

2.9.4 <u>Night Familiarization (NFAM)</u>

Purpose. Introduce Pilots to UC-12F/M/W/W+ Night Familiarization procedures.

General. Basic, Series Conversion, and Refresher Pilots shall be trained and evaluated in the left seat.

Crew Requirements. Shall be instructed/evaluated by an NI/ANI.

NFAM-2300	15	180	BRSM	N*	А	1 UC-12 F/M/W/W+
INI ANI-2300	1.5	100	D,R,D,M	11	Π	$1 00^{-1}21/101/00/001$

Goal. Introduce night flying in the UC-12F/M/W/W+.

Requirements

Brief:

Cockpit management and lighting Night emergency procedures to include; Electrical fire and electrical failure Emergency lighting pack Visual illusions

Discuss:

Terrain Awareness Warning System (TAWS) Controlled Flight into Terrain (CFIT) hazards and recognition CFIT escape maneuver.

Flight:

Landing pattern Instrument approaches Simulated single engine failures Go-around (one and two engines)

Performance Standard:

Show the ability to recognize deviation from Airline Transport Pilot (ATP) and/or Airmen Certification Standards (ACS) and work towards correction

Operate the aircraft according to the NFM, IFM and FARs Demonstrate sound Crew Resource Management (CRM

Prerequisite. 2100

2.9.5 <u>Co-Pilot Responsibility (CP)</u>

Purpose. Introduce UC-12F/M/W/W+ Co-Pilot responsibilities.

General. Basic and Refresher Pilots shall be trained and evaluated in the right seat.

Crew Requirements. PUI shall be instructed/evaluated by an NI/ANI.

<u>CP-2400</u> 2.0 * B (N*) A 1 UC-12F/M/W/W+

Goal:

Introduce right seat (pilot not flying) navigation, communication, and cockpit management duties Introduce right seat approaches and landings.

Requirements

Brief:

Aircraft servicing NATOPS - Chapter 29 Flight Crew Coordination Weather radar Satellite phone Cabin ICS and audio capabilities Passenger/environmental comfort Passenger briefing/procedures Fuel planning (normal, long-range, over water)

Discuss:

Anti-icing system Airframe icing hazards.

Flight:

Pilot not flying duties: Normal procedures Normal checklists Simulated emergency procedures Abnormal checklists) Pilot Flying: (approaches and landings).

Performance Standard:

Demonstrate safe and proficient air work and effective cockpit management Operate the aircraft according to the NFM, IFM and FARs Demonstrate sound Crew Resource Management (CRM)

Prerequisite. 2100

CP-2401	2.0	365	BRSM	(N*)	А	1 UC-12F/M/W/W+
CI 2701	2.0	505	D,IX,D.IVI		11	100121/101/00/001

Goal. Review right seat (pilot not flying) navigation, communication, and cockpit management duties. Review right seat approaches and landings.

Requirements

Brief:

Drier:	
	Aircraft servicing
	NATOPS - Chapter 29 Flight Crew Coordination
	Weather radar
	Satellite phone
	Cabin ICS and audio capabilities
	Passenger/environmental comfort
	Passenger briefing/procedures
	Fuel planning (normal, long-range, over water)
Discuss	
	TAWS system
	Windshear hazards
	Windshear recognition
	Windshear avoidance/escape maneuvers.
Flight:	-
	Review pilot not flying duties:

Normal procedures Normal checklists Simulated emergency procedures Abnormal checklists

Pilot Flying (approaches and landings).

Performance Standard:

Demonstrate safe and proficient air work and effective cockpit management Operate the aircraft according to the NFM, IFM and FARs Demonstrate sound Crew Resource Management (CRM).

Prerequisite. 2100, 2400

2.9.6 <u>Familiarization Review (FAM REV)</u>

Purpose. Review UC-12F/M/W/W+ FAM procedures.

General. Basic Pilots shall be trained and evaluated in the left seat.

Crew Requirements. PUI shall be instructed/evaluated by an NI/ANI.

	FAM REV-2500	2.0	365	B,R,S,M	D	А	1 UC-12F/M/W/W+
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Goal. Complete FAM Review. The focus is on normal and emergency procedures.

Requirement:

Conduct an objective review of the Pilot's knowledge of: Mission planning Normal operating procedures (flight and ground) Crew Resource Management Aircraft systems Performance criteria Emergency procedures Debriefing Emphasis shall be placed on the aforementioned items with the addition of: Local course rules Unit SOP Admin flight procedures This review is the means to measure the Pilot's efficiency in the execution of: Normal operating procedures Reaction to emergencies and malfunctions. Review: All previous requirements in preparation for upgrade/designation.

Performance Standard

Demonstrate satisfactory knowledge of aircraft operating procedures and limitations

Demonstrate safe and proficient air work and show the ability to recognize deviation from Airline

Transport Pilot (ATP) and/or Airmen Certification Standards (ACS) and work towards correction

Operate the aircraft according to the NFM, IFM and FARs.

Prerequisite. 2101

2.10 MISSION PHASE

General. All Mission Skill events shall be instructed by an NI or ANI.

2.11 MISSION STAGES

2.11.1 Operational Support Airlift (OSA)

OSA-3100	2.0	365	B,R,M	(N)	А	1 UC-12F/M/W/W+

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 (JOSAC) coordination
Emergency procedures:
Demonstrate use of cargo door
Discuss rapid decompression
Door open annunciation emergency procedures in flight

Flight: Conduct an OSA mission

Performance Standard

Demonstrate satisfactory knowledge of aircraft systems Operating procedures and limitations Demonstrate safe and proficient air work Show the ability to recognize deviation from Airline Transport Pilot (ATP) and/or Airmen Certification Standards (ACS) and work towards correction. Operate the aircraft according to the NFM, IFM and FARs.

Prerequisite. 2000 Phase complete, 6100, 6101.

2.11.2 Air Logistics Support (ALS)

ALS-3200	2.0	365	B,R,M	(N)	А	1 UC-12F/M/W/W+

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

<u>Requirements</u>

Brief:

Mission and crew coordination Flight planning Weather Fuel requirements Weight and balance Aircraft performance factors RON Scheduling agency (JOSAC) coordination Cargo certification and handling Special cargo considerations Emergency procedures

Flight: Conduct an ALS mission.

Performance Standard.

Demonstrate satisfactory knowledge of aircraft operating procedures and limitations Demonstrate safe and proficient air work and show the ability to recognize deviation from Airline

Transport Pilot (ATP) and/or Airmen Certification Standards (ACS) and work towards correction Operate the aircraft according to the NFM, IFM and FARs.

Prerequisite. 2000 Phase Complete, 6100, 6101

2.12 CORE PLUS PHASE

General

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

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

The Pilot should be Core Skill Proficient prior to beginning the Core Plus Phase of training.

Shall be instructed/evaluated by an NI/ANI/NSI.

2.13 CORE PLUS STAGES

2.13.1 Core Plus Academics (ACAD)

ACAD-4000 2.0 * B,S G ASE Academics

<u>General</u>. At the publishing date of this manual, the ASE academic period of instruction is under development by the Syllabus Sponsor (VMR Det Belle Chasse) and it will be distributed to the UC-12W community once completed. (UC-12W Only)

ACAD-4001 4.0 1095 B,R,S,M G International

<u>Goal</u>. Pilot under instruction is introduced to mission planning for extended over water and overseas operations.

Requirements. The PUI will be introduced to mission planning for a multiday, long range flight that should include the crossing of international airspace. The following tools commonly used for mission planning in the international environment should be introduced: Optimum Path Aircraft Routing System (OPARS), Aircraft/Personnel Automated Clearance System (APACS), Foreign Clearance Guide, Area Planning/General Planning (AP/GP), Giant Report/Global Decision Support System 2 (GDSS2) account, Naval Flight Information Group (NavFIG), Jeppesen View and the validation and use of Jeppesen terminal approach procedures, North Atlantic/Pacific Tracks message, North Atlantic/Pacific Track Oceanic procedures (FIH), North Atlantic/Pacific Minimum Navigation Performance Specification Airspace Operations Manual, Equal Time Point (ETP)/Point of No Return (PNR), and Aircraft Flight Manual (AFM) Supplement 63. The following contingency and emergency operations will also be discussed: engine failure (single engine service ceiling), loss of pressurization, lost communication, and weather avoidance/contingency operations in an RVSM and/or non radar environment. Discuss ditching, post ditching aircraft evacuation procedures.

Performance Standard. Successful completion of the course of instruction.

<u>General</u>. Introduce search and rescue on scene commander procedures in accordance with the Assault Support Tactical SOP.

2.13.2 Assault Support (AS)

General

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.

Note: Detailed procedures for this event are being developed by the syllabus sponsor (VMR JRB Belle Chasse, LA). Once the maneuvers have been approved they will be released to the units.

Purpose

Develop skills for operations that take place in a Low Threat (Permissive) environment and will include specific procedures to minimize aircraft exposure to a threat.

Upon completion of this stage, the pilot will be capable of flying in a ground threat environment during day or night.

Develop proficiency in the use of Electronic Warfare Principles, Aircraft Survivability Equipment (ASE), and threat reactions versus enemy surface-to-air threats.

<u>General</u>. At the publishing date of this manual, the Assault Support/ASE flight is under development by the Syllabus Sponsor (VMR Det Belle Chasse) and it will be distributed to the UC-12W community once completed.

Prerequisite. 4000

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

EXP-4200 2.0 730 B,R,S,M (N) A 1 UC-12F/M/W/W+

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

<u>Requirements</u>. 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)

Abnormal flap configurations for landing

Conduct:

PUI to conduct landings and takeoffs from certified unimproved runways (dirt or grass)

PUI shall conduct all take-offs and landings from the left seat

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 safe landing and takeoff procedures from one of the two categories of certified unimproved runway surfaces

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

Instructor Requirements: ANI/NI/NSI

Prerequisite. 2000 Phase complete, 6100, 6101

EXP-4201	2.0	1095	B,R,S,M	(N*)	А	1 UC-12F/M/W/W+

<u>General</u>. Train the PUI in high, hot, and/or heavy Operations.

<u>Requirement</u>. PUI will demonstrate the ability to operate the aircraft in high, hot, and/or heavy operations.

<u>Performance Standard</u>. Be able to operate the aircraft safely in high, hot, and/or heavy operations in accordance with NATOPS.

Prerequisite. 2000 Phase complete, 6100, 6101

EXP-4202	2.0	1095	B,R,S,M	(N*)	А	1 UC-12F/M/W/W+

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

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

<u>Performance Standard</u>. Be able to competently use the FMS SAR search pattern function, and execute the on-scene commander checklist in accordance with the Assault Support Tactical SOP.

Prerequisite. 200 Phase complete, 4002, 6100, 6101

2.13.4 International Procedures (INT)

<u>INT-4300 3.0 * B (N) A 1 UC-12F/M/W/W+</u>

<u>Goal</u>. Pilot under instruction performs extended range operations and alternates between left and right seats throughout the mission in order to demonstrate flight leadership from either seat.

<u>Requirement</u>. PUI shall demonstrate the ability to supervise preflight preparation and manage a crew and aircraft away from home station on an operational mission that should include a RON.

Brief:

Mission coordination Flight planning Weather Fuel planning Load computations Performance CRM.

Conduct:

Demonstrate flight leadership Crew Resource Management during an operational mission.

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

Prerequisite. 4001,6100, 6101

INT-4301 3.0 1095 B,R,M (N) A 1 UC-12F/M/W/W+

<u>Goal.</u> Pilot Under Instruction conducts overwater navigation. Evaluation leg should be conducted with the PUI in the left or right seat.

<u>Requirement</u>. PUI to demonstrate the ability to manage 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 Agriculture inspection

<u>Conduct</u>: PUI to conduct overwater navigation in accordance with ICAO, FAR and NATOPS convention. <u>Discuss</u>:

Engine failure (single engine service ceiling) Loss of pressurization Lost communication 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. 4001,6100, 6101

2.13.5 Night Systems (NS) UC-12W/W+ Only

<u>Purpose</u>. To qualify and maintain proficiency utilizing night vision devices (NVDs). Upon completion of this phase, the pilot will be capable of operations using NVDs in the NS non-LAT environment.

<u>General</u>. The NS qualification (NSQ) syllabus consists of NSQ-4400 and NSQ-4401. NSQ sorties shall be flown in the aircraft. Pilots successfully completing these requirements shall be issued a NSQ qualification letter by the squadron commanding officer.

Crew Requirements. PUI shall be instructed/evaluated by a NSI.

<u>Academic/Ground Training</u>. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, and the MAWTS-1 TACAIR NVD Manual.

NS-4400	2.0	180	B,R,M	NS	А	1 UC-12W/W+	
Goal. Introduc	e NS ope	erations.					
Requirement:							
Prefli	ght shall i	include:					
	Flight	station					
	Cargo	comparti	nent				
	Exteri	or lightin	g				
Demo	onstration	with NV	Ds:				
	Emph	asize the	interaction be	tween aircraf	t lightin	g with normal and covert modes	
	Donni	ing NVDs	, and the use	of oxygen ma	ISK WITH	helmets/NVDs shall be practiced to proficiency	
Eliabe	Groun	a operati	ons shall incl	ude NVD taxi	proced	ures	
Takeoff							
	Cockpit orientation at altitude						
	Landings						
	Aircra	ft operati	ons				
	NVD	aircrew c	oordination				
Cond	uct:						
	Minin	num of 4	touch-and-go	landings			
	1 full	stop landi	ng on a hard	surface runwa	iy as the	e pilot not flying (PNF)	
	Event	shall be f	lown from th	e right seat			
Performance S	tandards						
Demonstrate a basic level of familiarity with NVD operations							
Demo	onstrate co	ompetenc	y as the PNF	while wearing	g NVDs		
Prerequisite. N	ITE Lab	and MAV	VTS-1 NVD	ASPs. 2000 p	hase con	mplete, 6100, 6101	
Range Require	ment. Ai	irfield cap	able of varied	d airfield light	ing con	figurations.	
	• •	-			-		
<u>NS-4401</u>	2.0	180	B,R,M	NS	Α	1 UC-12W/W+	
Goal. To qual	ify or mai	intain pro	ficiency in N	S operations.			
Requirement.							
Cond	uct night	familiariz	ation/instrum	ent procedure	s on N	VDs.	
Ground operations shall include NVD taxi procedures.							
Flight procedures shall include:							
	Takeo	off					
	Cockr	oit orienta	tion at altitud	e			

Landings

Aircraft operations

NVD aircrew coordination.

Conduct:

4 touch-and-go landings minimum

1 full stop landing on a hard surface runway as the pilot flying (PF) Event shall be conducted from the left seat

Performance Standards

Demonstrate competence IAW the NFM with NVDs donned as the PF:

Takeoff Climbout Visual approach Full stop landing Touch and go procedures Basic air work standards include +/- 5 KIAS and 100 ft of assigned altitude Align aircraft with runway, maintain aircraft in trim and touchdown within the first 1000' of the runway Maintain directional control throughout the flare, touchdown, and rollout. Demonstrate an understanding of the Aviation T&R Program Manual and OPNAV 3710.7 as they pertain to NVD operations

Prerequisite. 3300

Range Requirement. Airfield capable of varied airfield lighting configurations.

2.14 INSTRUCTOR TRAINING PHASE

<u>General</u>. The Instructor Phase consists of four events leading to NATOPS Instructor and Assistant NATOPS Designations.

2.15 INSTRUCTOR TRAINING STAGE

<u>General</u>. The NATOPS Evaluator (NE) shall instruct IUT events for the NATOPS Instructor (NI). A NATOPS Instructor or Evaluator may instruct IUT events for the Assistant NATOPS Instructor (ANI).

2.15.1 Instructor Under Training (IUT)

<u>IUT-5100 2.0 * B,R,S D A 1 UC-12F/M/W/W+</u>

Goal. NI/ANI Training

Requirements

Introduce the IUT to the skills required to correct common student errors and prepare the IUT to conduct T&R syllabus and NATOPS/Instrument evaluation flights IAW Chap. 30 of the NATOPS Manual and CNAF INST M3710.7.

Brief: Training Areas, Maneuver Descriptions, Operating Limitations, EP/Abnormals, Aeromedical Factors, Aerodynamics

Flight: Flight Planning, Weight & Balance, Performance Planning, Flight/Mission Briefing, Preflight/Postflight, Start, Taxi & Takeoff, Steep Turns, Slow Flight, Stalls, Fuel Management, Emergency Descent, Holding, Precision Approach, Wave Off(s), Non-Precision Approaches, Single Engine Work, Reduced Flap Landings.

<u>Performance Standard</u>. The IUT shall be evaluated on the ability to correctly brief the flight, demonstrate and introduce maneuvers in accordance with applicable directives, correct student deficiencies, conduct proper debrief and display appropriate subject matter expertise.

External Syllabus Support. Approved working area or restricted area.

Prerequisite. 6402, Standardization Board recommendation

<u>IUT-5101</u> 2.0 * B,R,S D A 1 UC-12F/M/W/W+

Goal. NI/ANI Training

Requirements

Introduce the IUT to the skills required to correct common student errors and prepare the IUT to conduct T&R syllabus and NATOPS/Instrument evaluation flights from the right seat IAW Chap. 30 of the NATOPS Manual and CNAF INST M3710.7.

Brief: Operating Limitations, EP/Abnormals, Aeromedical Factors, Aerodynamics

Flight: Flight Planning, Weight & Balance, Performance Planning, Flight/Mission Briefing, Preflight/Postflight, Start, Taxi & Takeoff, Steep Turns, Slow Flight, Stalls, Fuel Management, Emergency Descent, Holding, Precision Approach, Wave Off(s), Non-Precision Approaches, Single Engine Work, Reduced Flap Landings.

<u>Performance Standard</u>. The IUT shall be evaluated on the ability to correctly brief the flight, demonstrate and introduce maneuvers in accordance with applicable directives, correct student deficiencies, conduct proper debrief and display appropriate subject matter expertise.

External Syllabus Support. Approved working area or restricted area.

Prerequisite. 5100

<u>IUT-5102</u> 2.0 * B,R,S N* A 1 UC-12F/M/W/W+

Goal. Night Instructional Techniques

Requirements

IUT shall refine the skills required to correct common student errors and prepare to conduct T&R syllabus and NATOPS/Instrument evaluation flights IAW Chap. 30 of the NATOPS Manual and CNAF INST M3710.7.

Brief: Operating Limitations, EP/Abnormals, Aeromedical Factors, Aerodynamics

Flight: Flight Planning, Weight & Balance, Performance Planning, Flight/Mission Briefing, Preflight/Postflight, Start, Taxi & Takeoff, Steep Turns, Slow Flight, Fuel Management, Emergency Descent, Holding, Precision Approach, Wave Off(s), Non-Precision Approaches, Reduced Flap Landings.

<u>Performance Standard</u>. The IUT shall be evaluated on the ability to correctly brief the flight, demonstrate and introduce maneuvers in accordance with applicable directives, correct student deficiencies, conduct proper debrief and display appropriate subject matter expertise.

External Syllabus Support. Approved working area or restricted area.

Prerequisite. 5101

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

Goal. NI/ANI Check

Requirements

IUT shall be evaluated on the skills required to correct common student errors and conduct T&R syllabus and NATOPS/Instrument evaluation flights from the right seat IAW Chap. 30 of the NATOPS Manual and CNAF INST M3710.7. Flight should be completed in conjunction with a NATOPS/Instrument evaluation.

Brief: Operating Limitations, EP/Abnormals, Aeromedical Factors, Aerodynamics

Flight: Flight Planning, Weight & Balance, Performance Planning, Flight/Mission Briefing, Preflight/Postflight, Start, Taxi & Takeoff, Steep Turns, Slow Flight, Stalls, Fuel Management, Emergency Descent, Holding, Precision Approach, Wave Off(s), Non-Precision Approaches, Single Engine Work, Reduced Flap Landings.

<u>Performance Standard</u>. The IUT shall be evaluated on the ability to correctly brief the flight, demonstrate and introduce maneuvers in accordance with applicable directives, correct student deficiencies, conduct proper debrief and display appropriate subject matter expertise.

External Syllabus Support. Approved working area or restricted area.

Prerequisite. 5102

2.15.2 Night Systems Instructor (NSI) (NS (H) 5150 through 5151) UC-12W Only

NAVMC 3500.102C 26 Jun 19

<u>Purpose</u>. To qualify and designate the pilot as an NSI.

<u>General</u>. Refer to NAVMC 3500.14, MCO 3500.109, and the MAWTS-1 UC-12W Course Catalog. The build-up phase may be supervised by a squadron NSI. Upon certification by MAWTS-1, the NSI shall be designated by the squadron commanding officer.

Crew Requirements. Refer to the MAWTS-1 UC-12W Course Catalog.

Academic/Ground Training. Refer to the MAWTS-1 UC-12W Course Catalog.

2.16 <u>REQUIREMENTS, CERTIFICATIONS, DESIGNATIONS, AND QUALIFICATIONS, (RCQD)</u>

- 2.17 <u>RCQD STAGES</u>
- 2.17.1 <u>RCQD Academics</u>

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

<u>Goal</u>. 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,S,M E NATOPS Closed Book

<u>Goal</u>. 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,S,M E NATOPS Oral

<u>Goal</u>. 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,M E Instrument Ground School

<u>Goal</u>. 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,M E Instrument Exam

<u>Goal</u>. 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,M E Instrument Oral Exam

<u>Goal</u>. 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 CNAF INST M3710.7.

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

Prerequisite. 6004
ACAD-6006 1.0 365 B,R,M 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,S,M E CRM UC-12F/M/W/W+

<u>Goal</u>. This course of instruction is under development by VMR Det Belle Chasse, LA and will be distributed to the UC-12W community once completed.

ACAD-6008 2.0 365 B,R,S,M E FCP Open Book Examination

<u>Goal</u>. 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.

Goal. Successfully complete the UC-12F/M/W/W+ Monthly Emergency Procedures Examination.

Requirement. Pass the Monthly Emergency Procedures Examination.

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

2.17.2 NATOPS Evaluation

NTPS-6100 2.0 365 B,R,S,M (N*) I A/S 1 UC-12F/M/W/W+/S	PS-6100	2.0 365	B,R,S,M	(N*) I	A/S	1 UC-12F/M/W/W+/SIN
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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.

<u>Requirement</u>. Demonstrate comprehensive knowledge and understanding of NATOPS, unit SOP, and local course rules.

<u>Performance Standard</u>. Executes flight and ground operations safely IAW CNAF INST M3710.7, NATOPS and applicable manuals. Complies with unit SOP and local course rules.

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

<u>NTPS-6103</u> 0.0 90 B,R,S,M (N*) A/S 1 UC-12F/M/W/W+

Goal. Quarterly NATOPS static aircraft emergency procedures review.

<u>Requirement</u>. This review covers instructor selected aircraft emergencies. Demonstrate comprehensive knowledge and understanding of aircraft emergencies. This event can be completed in conjunction with a flight or in a static aircraft. Furthermore, abnormal and emergency procedure training conducted in simulators by civilian instructors during CACT Initial Training or CACT Recurrent Training satisfies the requirement.

Performance Standard. Executes the review in accordance with NATOPS.

2.17.3 Instrument Evaluations

INST-6101	2.0	365	B.R.M	(N*)) I	A/S	1 UC-12F/M/W/W+/SIM
11010101		000		1 - 1	-	1 1 10	

<u>Goal</u>. 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.

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

<u>Performance Standard</u>. Executes flight and ground operations safely IAW CNAF INST M3710.7, NATOPS, NATOPS Instrument Flight Manual, and training rules.

Prerequisite. 2500,6004,6005

INST-6102 2.0 365 B,R (N*) I A/S 1 UC-12F/M/W/W+/SIM

<u>Goal</u>. 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.

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

<u>Performance Standard</u>. Executes flight and ground operations safely IAW CNAF INST M3710.7, NATOPS, NATOPS Instrument Flight Manual, and training rules.

<u>Prerequisite</u>. Meets CNAF INST M3710.7 Special Instrument requirements, recommended by Stan Board 2500,6004,6005

2.17.4 Transport 2 Pilot (T2P)

T2P-6300	1.5	*	B,R,S	D	E	А	1 UC-12F/M/W/W+

Goal. T2P evaluation flight.

<u>Requirement</u>. Demonstrate a thorough knowledge of the aircraft systems, the ability to perform the responsibilities of a Second-in-Command (SIC)/copilot, and the ability to assist the TAC 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 the use of all checklists, taxi & run-up procedures, normal/crosswind Take-offs and landings, aircraft handling (high work), use of the FMS in enroute & terminal operations, airstarts, emergency descent, instrument approach procedures, circle to land, missed approach procedures, single engine operations and after landing and post flight procedures.

Performance Standard. NFM.

Prerequisite. 2000 PHASE COMPLETE, 6000, 6001, 6003, 6103

2.17.5 Transport Aircraft Commander (TAC)

TAC-6400	1.5	*	B,S	(N*)	E	А	1 UC-12F/M/W/W+

Goal. TAC Mission Procedures Review.

<u>Requirements</u>. Conduct a simulated airlift mission to demonstrate a thorough knowledge of NATOPS, scheduling agency (JOSAC) Unit procedures and FAR's in a real world environment. Demonstrate a thorough knowledge of Crew Resource Management (CRM) and Operational Risk Management (ORM). Demonstrate the ability to perform the responsibilities of a Pilot-in-Command during normal operations in high volume/density airspace.

Brief: Flight planning, weight and balance, fuel computations and management, knowledge and use of the Flight Management System (FMS) and scheduling agency (JOSAC) procedures and requirements.

Flight: Demonstrate a proficiency in the use of all checklists, normal procedures, use of the FMS in enroute & terminal operations to include RNAV SIDS & STARS, instrument approach procedures and post flight procedures.

Performance Standard. NFM, FAR

Prerequisite.	. 6300,3000) PHAS	E COMPLETE				
TAC-6401	1.5	*	B,S	D	Е	А	1 UC-12F/M/W/W+

Goal. TAC Pre-Check flight.

Requirement. Demonstrate a thorough knowledge of the aircraft systems, normal and emergency procedures, FAR's and JOSAC procedures. Demonstrate a thorough knowledge of Crew Resource Management (CRM) and Operational Risk Management (ORM). Demonstrate the ability to perform the responsibilities of a Pilot-in-Command in all aircraft configurations and 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 the use of all checklists, taxi & run-up procedures, normal/crosswind Take-offs and landings, aircraft handling (high work), use of the FMS in en route & terminal operations, air starts, emergency descent, instrument approach procedures, circle to land, missed approach procedures, single engine operations and after landing and post flight procedures.

Performance Standard. NFM

Prerequisite. 6400

TAC-6402 2.0 * B,R,S D E A 1 UC-12F/M/W/W+

Goal. TAC Check flight.

<u>Requirement</u>. Demonstrate a thorough knowledge of the aircraft systems, normal and emergency procedures, FAR's and scheduling agency (JOSAC) procedures. Demonstrate a thorough knowledge of Crew Resource Management (CRM) and Operational Risk Management (ORM). Demonstrate the ability to perform the responsibilities of a Pilot-in-Command in all aircraft configurations and 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 the use of all checklists, taxi & run-up procedures, normal/crosswind Take-offs and landings, aircraft handling (high work), use of the FMS in enroute & terminal operations, airstarts, emergency descent, instrument approach procedures, circle to land, missed approach procedures, single engine operations and after landing and post flight procedures.

Performance Standard. NFM

Prerequisite. 6000,6001,6002,6401,3000 PHASE COMPLETE

2.17.6 Functional Check Pilot (FCP)

FCP-6500 3.5 * B D A 1 UC-12F/

<u>Goal</u>. Instruct a TAC (Transport Aircraft Commander) on the safe and proper conduct of an FCF. This does not necessarily entail conducting an entire "A" profile in flight.

<u>Requirements</u>. The flight shall consist of execution and/or discussion of all "A" profile functional check flight procedures from the left seat and be instructed by a qualified FCP Pilot.

Brief: FCP Responsibilities, Briefing, Check Fight Profiles, Crew Coordination, Aircraft Limitations, Preflight, Start Procedures, Checklists, Stall/Spin Recovery, Airstart Procedures, Operating Limitations; Engine Performance, Pressurization, Bleed Air System, Aerodynamic, Avionic/Flight Instrument, Hydraulic System, and Electrical System Checks; Approach and Recovery, and Landing

Flight: Preflight, Start Procedures, Checklists, Approach to Stalls, Airstart Procedures, Operating Limitations; Engine Performance, Pressurization, Bleed Air System, Aerodynamic, Avionic/Flight Instrument, Hydraulic System, and Electrical System Checks; Approach and Recovery, and Landing

Performance Standard. Satisfactorily execute procedures per the NFM and IAW CNAF INST M3710.7_.

External Syllabus Support. Approved working area or restricted area.

Prerequisite. 6008, 6402, Standardization Board recommendation

FCP-6501	3.5	*	B,R,S	D	А	1 UC-12W
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Goal. FCP Evaluation/Designation

<u>Requirements</u>. The flight shall consist of execution and/or discussion of all "A" profile functional check flight procedures from the right seat and be evaluated by a qualified FCP Pilot.

Brief: FCP Responsibilities, Briefing, Check Fight Profiles, Crew Coordination, Aircraft Limitations, Preflight, Start Procedures, Checklists, Stall/Spin Recovery, Airstart Procedures, Operating Limitations; Engine Performance, Pressurization, Bleed Air System, Aerodynamic, Avionic/Flight Instrument, Hydraulic System, and Electrical System Checks; Approach and Recovery, and Landing

Flight: Preflight, Start Procedures, Checklists, Approach to Stalls, Airstart Procedures, Operating Limitations; Engine Performance, Pressurization, Bleed Air System, Aerodynamic, Avionic/Flight Instrument, Hydraulic System, and Electrical System Checks; Approach and Recovery, and Landing

Performance Standard. Satisfactorily execute procedures per the NFM and IAW CNAF INST M3710.7_.

External Syllabus Support. Approved working area or restricted area.

Prerequisite. 6500

2.18 AVIATION CAREER PROGRESSION MODEL (8000 PHASE)

Purpose

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

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 VMR-1 or a VMR det (UC-35, C-12, or C-20), 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.

General

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

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

	VMR Det (UC-12F/M/W/W+) ACPM TO UC-12F/M/W/W+ T&R MATRIX													
			ACPM TO UC-12F/M/W/W+ 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										

2.19 UC-12F/M/W/W+ PILOT T&R SYLLABUS MATRIX

					UC	C-12I	F/M/V	W/W	/+ PIL	.OT	T&R	MA	TRIX								
SKILL	PREFIX	TRAINING CODE	T&R DESCRIPTION	РОІ	DEVICE	NUMBER	CONDITION	EVALUATION	PROFICIENCY INTERVAL	# ACA	ACADEMIC TIME	# SIM	SIMULATOR	# FLIGHT	FLIGHT TIME	PREREQUISITES	CHAINING	MIRROR UC-12F/M to UC-12W	MIRROR UC-12W to UC-12F/M	UC- 12F/M CONV	UC- 12W CONV
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			-	CA	CT I	INIT	IAL	AC	ADEN	ЛС	S (IN	ITIA	AL A(CAD)			ī	1	T	
	ACAD	1000	CACT GND SCHL INITIAL	В	G				*		48.0									1000	1000
INITIAI	ACAD	1002	RVSM	В	G				*		3.0										1002
ACAD	ACAD	1003	WEATHER RADAR	B,R	G				*		2.0										1003
	ACAD	1004	CACT INT INITIAL	B,R	G				*		21.0										1004
		INITIAL ACAI	D TOTAL							4	74.0	0	0.0	0	0.0						
	- I			CA	ACT	INI	TIAI	L SI	MUL	ATC)R (II	ITI	IAL S	IM)		1			.	1	
	SIM	1101	CACT SIM 1	В	S	1	(N*)		*			_	4.0		_					1101	1101
INITIAL	SIM	1102	CACT SIM 2	В	S	1	(N*)		*				4.0							1102	1102
SIM	SIM	1103	CACT SIM 3	В	S	1	(N*)		*				4.0	_						1103	1103
	SIM	1104	CACT SIM 4	В	S	1	(N*)		*				4.0						<u> </u>	1104	1104
		INITIAL SIM	TOTAL	~	~	-			~ .	0	0.0	4	16.0	0	0.0						
	1 1		CACT OND SOUL	CAG	CT R	ECU	URR	ENI	I' ACA	ADE	MICS	6 (RI	EC A	CAD)		1	<u> </u>	1		T
DEC	ACAD	1001	REFRESH	B,R,M	G				365		8.0					1000				1020	1001
ACAD	ACAD	1006	WEATHER RADAR	B,R,M	G				365		2.0										
i iei ib	ACAD	1005	CACT INT RECURRENT	B,R,M	G				730		8.0					1004					1005
	<u> </u>	REC ACAD	FOTAL	1	•	•			4	3	18.0	0	0.0	0	0.0		<u>.</u>	•	1	4	-
				CA	CT	REC	CURI	REN	T SIN	AUI	ATO	R (F	REC S	SIM)		•					
DEC	SIM	1105	CACT SIM 5	B,R,M	S	1	(N*)		365				4.0							1120	1105
SIM	SIM	1106	CACT SIM 6	B,R,M	S	1	(N*)		365				4.0							1121	1106
3111	SIM	1107	CACT SIM 7	B,R,M	S	1	(N*)		365				4.0							1122	1107
		REC SIM T	OTAL							0	0.0	3	12.0	0	0.0						
						COI	RE T	RAI	ININ(G (20	<mark>)00 P</mark> I	HAS	E)								
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	ACAD	2000	INTRO LOCAL PROC	B,S	G		D		*		3.0	_	_		_	CACT COMP		2000	2000	2000	2000
FAM	ACAD	2001	FMS PROCEDURES	B,S	G	1	D		*		3.0		-	_	2.0	2000				2110	2001
1 7 1111	FAM	2100	INTRO UC-12 A/C PRACTICE FAM	В	Α	I	D		*			_	-		2.0	2000,2001				2110	2100
	FAM	2101	MANEUVERS	B,R,S,M	A	1	D		365						2.0	2100				2111	2101
		TOTAL FAM	STAGE							2	6.0	0	0.0	2	4.0						
				-	_		INS	TRU	JMEN	ITS	(INS'	Γ)									
INST	INST	2200	INTRO INST/NAV	В	Α	1	(N*)	<u> </u>	*				_		2.0	2100			ļ	2200	2200
	INST	2201	PRACTICE INST/NAV	B,R,S,M	A	1	(N*)		365						2.0	2200				2201	2201
		TOTAL INST	STAGE							0	0.0	0	0.0	2	4.0						

					UC	C-12F	F/M/V	V/W+ F	PILO	DT T	F&R I	MA	TRIX								
SKILI	PREFIX	TRAINING CODE	T&R DESCRIPTION	ΡΟΙ	DEVICE	NUMBER	CONDITION	EVALUATION PROFICIENCY	INTERVAL	# ACA	ACADEMIC TIME	# SIM	SIMULATOR	# FLIGHT	FLIGHT TIME	PREREQUISITES	CHAINING	MIRROR UC-12F/M to UC-12W	MIRROR UC-12W to UC-12F/M	UC- 12F/M CONV	UC- I 12W 7 CONV
NEAM	NEAM	2200	INTRO NICUT ODS	DDCM	NI		FAP			LAT	10N	(NF	(AM)		1.5	2100		1	1	1	2200
INFAM	INFAM	Z300	INTRO NIGHT OFS	D,K,S,M	A	1	IN*	10	50	0	0.0	0	0.0	1	1.5	2100					2300
	CO-PILOT RESPON													1	1.5						
	CP	2400	INTRO CP RESP	В		1	(N*)			SIDI					2.0	2100			1	2202	2400
CP	CP	2400	PRACTICE CP RESP	BRSM	Δ	1	(N*)	36	55						2.0	2100 2400				2202	2400
	CI	TOTAL CP S	TAGE	D,R,0,101		1	(11)	50	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	0.0	0	0.0	2	4.0	2100,2400	<u>.</u>	-	-	<u> </u>	2401
		Tomber 5		F	'AM	ILIA	RIZ	ATION	IR	EVI	EW (FAI	M RE	V)							
REV	REV	2500	REVIEW FAM	BRSM	Δ	1	D	36	55		(T			2.0	2101	2101 2401		1	2112	2500
KL V	KL V	2500	MANEUVERS	D,R,5,W	А	1	D	50	,5	0	0.0	0	0.0	1	2.0	2101	2101,2401			2112	2500
			SIAGE						_	0	0.0	0	0.0	0	2.0						
		CORE TRAINING (2000 PHA	ASE EVENIS) IUI	IAL	2	MICC	ION.			$\frac{4}{C}$	0.0			0	15.5						
				0	DFE			I SUE					<u>ЗЕ)</u> Т (ОS	(A)							
054	054	2100	054	DDM							AIN			(A)	20	2000 PHASE	2201 2401 2200 2200 N 2101	2100	2100	2100	2100
OSA	USA	3100	OSA	B,K,M	А	1	(IN)	30	55						2.0	COMPLETE,6100,6101	2201,2401,3200,2300~N,2101	3100	5100	3100	5100
		TOTAL OSA	STAGE							0	0.0	0	0.0	1	2.0						
				1	A	AIR	LOG	ISTIC	S SI	UPP	ORT	' (Al	LS)	_		2000 DUA CE			1	1	
ALS	ALS	3200	ALS	B,R,M	Α	1	(N)	36	55						2.0	2000 PHASE COMPLETE,6100,6101	2201,2401,3100,2300~N,2101	3200	3200	3200	3200
		TOTAL ALS :	STAGE							0	0.0	0	0.0	1	2.0						
		TOTAL MISSION TRAINING	(3000 PHASE EVE	NTS)						0	0.0	0	0.0	2	4.0						
					CC	ORE	PLUS	<mark>S TRAI</mark>	NIN	NG (4	<u>4000</u>	PH	ASE)								
					C	CORI	E PLI	US AC.	AD	EMI	ICS (AC	AD)								
	ACAD	4000	ASE Academics	B,S				:	*		2.0										4000
ACAD	ACAD	4001	Extended over water and overseas operations	B,R,S,M				10	95		4.0										4001
	ACAD	4002	Search Patterns	В				*	k		2.0									4000	,
		TOTAL ACAD	STAGE	-	-					3	8.0	0		0					-	-	
						A	ASSA	ULT S	UP	POF	RT (A	S)									
AS	AS	4100	ASE Procedures	B,R,S,M	Α	1	D	10	95						2.0	4000					4100
		TOTAL AS S	TAGE							0	0.0	0	0.0	1	2.0						
	- 1			EXPED	DITIC	DNA	RY S	HORE-	BA	SED	O OPI	ERA	TION	S (E	XP)	-		-	-	7	
	EXP	4200	Unimproved Runway Operations	B,R,S,M	Α	1	(N)	73	30						2.0	2000 PHASE Complete,6100,6101	3100,3200	4200	4200	4201	4200
EXP	EXP	4201	HIGH, HOT, OR HEAVY OPS	B,R,S,M	Α	1	(N)	10	95						2.0	2000 PHASE Complete,6100,6101					
	EXP	4202	SEARCH [PATTERNS / OSC	B,R,S,M	Α	1	(N)	10	95						2.0	2000 PHASE Complete,4002,6100,6101		4202	4202	4100)
		TOTAL EXP	STAGE								0.0	0	0.0	2	4.0						

					UC	-12F	F/M/V	V/W	+ PIL	.OT	T&R	MA	TRIX								
SKILL	PREFIX	TRAINING CODE	T&R DESCRIPTION	POI	DEVICE	NUMBER	CONDITION	EVALUATION	PROFICIENCY INTERVAL	# ACA	ACADEMIC TIME	# SIM	SIMULATOR	# FLIGHT	FLIGHT TIME	PREREQUISITES	CHAINING	MIRROR UC-12F/M to UC-12W	MIRROR UC-12W to UC-12F/M	UC- 12F/M CONV	UC- 12W CONV
					INT	ERN	JATI	ON	AL PR	200	EDUF	RES	(INT)								
	INT	4300	INTL OSA	В	A	1	(N)		*						3.0	4001,6100,6101	2101,3100,3200,2201,2300~N,4301,4100)			4300
INT	INT	4301	LONG	B,R,M	А	1	(N)		1095						3.0	4001,6100,6101	2101,3100,3200,2201,2300~N,4100				4301
		TOTAL INT :	STAGE	· · · ·			· ,			0	0.0	0	0.0	2	6.0					1	ļ
				N	IGH	T SY	YSTE	EMS	(NS)	{U	C-12V	N/W	/+ On	ly}		<u>.</u>					
NS	NS	4400	Intro NS Procedures	B,R,M	А	1	NS		180						2.0	2000 PHASE COMP.6100.6101					4400
115	NS	4401	Review NS Procedures	B,R,M	А	1	NS		180						2.0	4400					4401
	-	TOTAL INT	STAGE	-	-			-		0	0.0	0	0.0	2	4.0		-	-		-	
					INS	TRU	JCTO	R T	RAIN	INC	<mark>3 (500</mark>	0 PH	<mark>IASE</mark>)								
		1	INTRO EAM/INST	1	INST	rru	сто	RU	INDE	R T.	RAIN	INC	G (IUI	')	1	1	1	1		1	
	IUT	5100	MAN	B,R,S	Α	1	D		*						2.0	6402	2101,2201,2401			5100	5100
W IT	IUT	5101	PRAC FAM/INST MAN	B,R,S	А	1	D		*						2.0	5100	2101,2201,2401			5101	5101
101	IUT	5102	NIGHT INSTRUCTIONAL TECHNIQUES	B,R,S	А	1	N*		*						2.0	5101	2101,2201,2401,2300				
	IUT	5103	IUT EVAL	B,R,S	А	1	D	Е	*						2.0	5102	2101,2201,2401			5105	5103
		TOTAL IUT	STAGE		-			_	_					4	8.0			-		-	
	1		NICHTENE	1	NIG	HT	SYS	TEN	AS IN	ISTI	RUCT	'OR	(NSI))	. <u> </u>	1	1	1		1	
NSI	NS	5150	INST	B,R,S	Α	1	NS		*						2.0	4400, 4401	4400,4401				5150
1151	NS	5151	NIGHT SYSTEMS INST	B,R,S	А	1	NS		*						2.0	4400, 4401	4400,4401				5151
		TOTAL NSI:	STAGE							0	0.0	0	0.0	2	4.0						
			REQUIREM	<mark>IENT, QU</mark>	JALI	FIC	ATI(ONS	, ANI	D DI	ESIGI	NAT	TIONS	6 (R(<mark>) (6</mark>	000 PHASE)					
	1	1	NATOPS Open Book	1	1	R	QD A	ACA	DEM		G (ACA	AD) T	-		1			1		1	
	ACAD	6000	Exam	B,R,S,M	G			Е	365		4.0						6009			6000	6000
	ACAD	6001	NATOPS Closed Book Exam	B,R,S,M	G			Е	365		2.0					6000	6009			6001	6001
	ACAD	6002	NATOPS Oral Exam	B,R,S,M	G			Е	365		2.0		L			6000,6001				6002	6002
	ACAD	6003	Instrument Ground School	B,R,M	G			Е	365		8.0							6003	6003	6003	6003
ACAD	ACAD	6004	Instrument Exam	B,R,M	G			Е	365		2.0					6003		6004	6004	6004	6004
	ACAD	6005	Instrument Oral Exam	B,R,M	G			Е	365		2.0					6004		6005	6005	6005	6005
	ACAD	6006	CRM BASIC	B,R,M	G	┝╴╽		E	365	-	1.0							6006	6006	6006	6006
	ACAD	6007	CRM T/M/S ECP	B,R,S,M	G	┝┤		Е	365		1.0		<u> </u>					+			6007
	ACAD	6008	RESPONSIBILITIES	B,R,S,M	G			Е	365		2.0									6008	6008
	ACAD	6009	Monthly EP Exam	B,R,S,M	G				30		1.0	_	0.0		0.0					6009	6009
		TOTAL ACAL	STAGE							2	5.0	0	0.0	0	0.0						

					UC	-12F	/M/W	/W+PIL	OT T&I	R MAT	TRIX						
SKILL	PREFIX	TRAINING CODE	T&R DESCRIPTION	POI	DEVICE	NUMBER	CONDITION	EVALUATION PROFICIENCY INTERVAL	# ACA ACADEMIC	# SIM	SIMULATOR TIME # FLIGHT FLIGHT TIME	PREREQUISITES	CHAINING	MIRROR UC-12F/M to UC-12W MIPPOP TC-12W	MILKINK UC-12W to UC-12F/M Q TI	UC- 2F/M ONV	UC- 12W CONV

								NAT	ΓOPS	(NI	(PS)											
NTPS	NTPS	6100	NATOPS Evaluation	B,R,S,M	A/S	1	(N*)	X	365							2.0	6000,6001,6002,2000 Phase Complete,8200- 8250	2101,2201,2401,6103			6100	6100
	NTPS	6103	Quarterly EP Eval	B,R,S,M	A/S	1	(N*)) I	90							0.0				6103	6104	6103
	NATOPS TOTAL									0	0.0) (0	0.0	2	2.0						
							INS	STR	UME	NT	(INS	<u>T)</u>										
INST	INST	6101	Standard Instrument Eval	B,R,M	A/S	1	(N*)) I	365							2.0	2500,6004,6005	6103	6101	6101	6101	6101
1,91	INST	6102	Special Instrument Eval	B,R,M	A/S	1	(N*)) I	365							2.0	2500,6004,6005	6101, 6103	6102	6102	6102	6102
	TOTAL INST STAGE						-	0	0.0) (0	0.0	2	4.0		-						

						T	RAN	SPO	ORT 2	PII	LOT ([2P])								
T2P	T2P	6300	T2P UPGRADE	B,R,S	Α	1	D	Е	*						1.5	2000 Phase complete,6000,6001,6003,6103	6103			1	6300
		TOTAL T2P ST	TAGE							0	0.0	0	0.0	1	1.5						
				TRA	NSI	POR	RT A	IRC	CRAF	Г СO	OMM/	ND	DER (1	FAC)						
	TAC	6400	Mission Proc Rev	B,S	А	1	(N*)) E	*						1.5	6300, 3000 Phase complete					6400
TAC	TAC	6401	TAC REV	B,S	Α	1	D	Е	*						1.5	6400					6401
	TAC	6402	TAC EVAL	B,R,S	Α	1	D	E	*						2.0	6000,6001,6002,6401, 3000 Phase complete	6103			6300	6402
		TOTAL TAC ST	ГAGE							0	0.0	0	0.0	3	5.0						
					FU	JNC	TIO	NAI	L CHI	ECK	PILO) T	FCP)		-						
FCP	FCP	6500	FCP REVIEW	В	Α	1	D		*						3.5	6402,6008	6103			6400	6500
I CI	FCP	6501	FCP EVAL	B,R,S	Α	1	D		*						3.5	6500	6103			6401	6501
		TOTAL FAC ST	ΓAGE							0	0.0	0	0.0	2	7.0						
			AVIA	FION CA	REI	ER I	PRO	GR	ESSIC	N N	MODE	L (A	ACPM) (80	<mark>)00 PH</mark>	(ASE)					
	ACPM	1 8200	MACCS AGENCIES,						*		0.6					2000 PHASE		8200	8200	8200	8200
	ACPM	1 8201	MWCS BRIEF						*		0.4		_			2000 PHASE		8201	8201	8201	8201
	ACPM	1 8202	ACA AND AIRSPACE						*		0.5					2000 PHASE		8202	8202	8202	8202
	ACPM	1 8210	AVIATION GROUND SUPPORT						*		0.6					2000 PHASE		8210	8210	8210	8210
	ACPM	1 8230	ACE BATTLESTAFF						*		0.6					2000 PHASE		8230	8230	8230	8230
	ACPM	1 8231	BATTLE COMMAND DISPLAY						*		0.3					2000 PHASE		8231	8231	8231	8231
ACPM	ACPM	1 8240	SIX FUNCTIONS						*		1.3					2000 PHASE		8240	8240	8240	8240
	ACPM	1 8241	JTAR/ASR INTRODUCTION						*		0.5					2000 PHASE		8241	8241	8241	8241
	ACPM	1 8242	SITE COMMAND PRIMER						*		0.7					2000 PHASE		8242	8242	8242	8242
	ACPM	1 8250	(TAGS)						*		0.6					2000 PHASE		8250	8250	8250	8250
	ACPM	1 8300	AIR DEFENSE						*		0.6					3000 PHASE		8300	8300	8300	8300
	ACPM	1 8310	(FARP) OPERATIONS						*		0.4					3000 PHASE		8310	8310	8310	8310
	ACPM	1 8311	TACTICAL FUEL SYSTEMS						*		0.2					3000 PHASE		8311	8311	8311	8311

					UC	-12F	F/M/\	W/W	+ PIL	LOT	T&R	MA	TRE	X								
SKILL	PREFIX	TRAINING CODE	T&R DESCRIPTION	POI	DEVICE	NUMBER	CONDITION	EVALUATION	PROFICIENCY INTERVAL	# ACA	ACADEMIC	# SIM	SIMULATOR	TIME	# FLIGHT FUTCHT	FLIGHT	PREREQUISITES	CHAINING	MIRROR UC-12F/M to UC-12W	MIRROR UC-12W to UC-12F/M	UC- 12F/M CONV	UC- 12W CONV
	ACPM	8320	JOINT STRUCTURE						*		1.3						3000 PHASE		8320	8320	8320	8320
	ACPM	8321	JOINT AIR TASKING						*		0.3						3000 PHASE		8321	8321	8321	8321
	ACPM	8322	JOINT AIR TASKING CYCLE PHASE 2:						*		0.2						3000 PHASE		8322	8322	8322	8322
	ACPM	8323	JOINT AIR TASKING CYCLE PHASE 3:						*		0.2						3000 PHASE		8323	8323	8323	8323
	ACPM	8324	JOINT AIR TASKING CYCLE PHASE 4:						*		0.2						3000 PHASE		8324	8324	8324	8324
	ACPM	8325	JOINT AIR TASKING CYCLE PHASE 5:						*		0.2						3000 PHASE		8325	8325	8325	8325
	ACPM	8326	JOINT AIR TASKING CYCLE PHASE 6:						*		0.2						3000 PHASE		8326	8326	8326	8326
	ACPM	8340	INTEGRATING FIRES						*		0.5						3000 PHASE		8340	8340	8340	8340
	ACPM	8350	PHASING CONTROL ASHORE						*		0.5						3000 PHASE		8350	8350	8350	8350
	ACPM	8351	TACRON ORGANIZATIONS						*		TB)					3000 PHASE		8351	8351	8351	8351
	ACPM	8630	(TACC)						*		0.7						6000 PHASE		8630	8630	8630	8630
	ACPM	8660	JOINT OPS INTRO						*		0.4						6000 PHASE		8660	8660	8660	8660
	ACPM	8640	JOINT DATA NETWORK						*		0.4						6000 PHASE		8640	8640	8640	8640
	ACPM	8641	MAGTF THEATER						*		1.5						6000 PHASE		8641	8641	8641	8641
	ACPM	8620	ESG/CSG INTEGRATION						*		TB						6000 PHASE		8620	8620	8620	8620
		TOTAL ACPM	STAGE							28	13.	0	0.	.0	0	0.0			•			

CHAPTER 3

UC-12F/M/W/W+ TRANSPORT AIRCREWMAN (TA)/6244

	PARAGRAPH	PAGE
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS.	3.0	3-3
TRAINING PROGRESSION MODEL		3-3
PROGRAMS OF INSTRUCTION (POI)		3-3
PROFICIENCY AND CURRENCY		3-4
QUALIFICATIONS AND DESIGNATIONS TABLES		3-5
SYLLABUS NOTES	3.5	3-5
CORE INTRODUCTION PHASE		3-5
CORE INTRODUCTION STAGES		3-6
CORE PHASE		3-7
CORE STAGES		3-7
MISSION PHASE	3.10	3-8
MISSION STAGES	3.11	3-8
CORE PLUS PHASE		3-8
CORE PLUS STAGES	3.13	3-8
INSTRUCTOR TRAINING PHASE		3-9
INSTRUCTOR TRAINING STAGE	3.15	3-9
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, DESIGNATIONS (RCC	QD) 3.16	3-9
RCQD STAGES	3.17	3-9
T&R SYLLABUS MATRIX		3-11

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CHAPTER 3

UC-12F/M/W/W+ TRANSPORT AIRCREWMAN (TA)/6244

3.0 UC-12F/M/W/W+ TRANSPORT AIRCREWMAN (TA)/6244 INDIVIDUAL TRAINING AND

<u>READINESS REQUIREMENTS</u>. 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.

3.1 <u>UC-12F/M/W/W+ TRANSPORT AIRCREWMAN TRAINING PROGRESSION MODEL</u>. This model represents the recommended training progression for the average UC-12F/M/W/W+ Transport Aircrewman crewmember. Units should use the model as a guide to generate individual training plans.



3.2 PROGRAMS OF INSTRUCTION (POI)

General

The time required to train a UC-12F/M/W/W+ Transport Aircrewman to completion of the Core Plus Phase is based off of flight hour requirements that are published in the UC-12F/M/W/W+ 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-12F/M/W/W+ TA upon successful completion of the Basic (B) POI. Those Aircrewman who were previously designated a UC-12F/M/W/W+ TA and are returning to a H&HS/VMR Det 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. Those Aircrewman who are executing a Series Conversion from one series to another shall execute the (S) Series Conversion POI.

All 1000 Phase level codes shall be instructed by a TANI. 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.

3.2.1 Basic (B) POI. Basic (B) Transport Aircrewman shall fly the entire syllabus (Average Time to Train).

WEEKS	COURSE	PERFORMING ACTIVITY
3	Core Introduction Training	H&HS/VMR Det
4	Core Training	H&HS/VMR Det
5	Mission Training	H&HS/VMR Det

3.2.2 <u>Refresher (R) POI</u>. 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 Average Time to Train).

WEEKS	COURSE	PERFORMING ACTIVITY
2	Core Introduction Training	H&HS/VMR Det
3	Core Training	H&HS/VMR Det
5	Mission Training	H&HS/VMR Det

3.2.3 <u>Series Conversion (S) POI</u>. Series Conversion Transport Aircrewman shall fly those events annotated with a S. Commanding officers/OICs will review the qualifications, previous experience, currency, and demonstrated ability of Series Conversion Transport Aircrewman with a view towards combining required flights Average Time to Train).

WEEKS	COURSE	PERFORMING ACTIVITY
2	Core Introduction Training	H&HS/VMR Det
3	Core Training	H&HS/VMR Det

3.3 PROFICIENCY AND CURRENCY

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

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

<u>Maintaining Skill Proficiency</u>. Once attained, skill proficiency is maintained by executing those events which have a Proficiency Period (Maintain events). Proficiency Periods establish the maximum time between Event demonstration. Should proficiency be lost in any maintain event, for a specific skill, that skill proficiency is temporarily lost. Skill proficiency can be re-attained by again demonstrating proficiency in the Event(s) that are not proficient.

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

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

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

3.3.3 <u>Skill Currency</u>. Currency is a control measure used to provide an additional margin of safety based on exposure frequency to a particular skill and applies to all MOS's that must comply with NATOPS and CNAFINST M3710.7 requirements. It is a measure of time since the last event demanding that specific skill. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for aircrew individual type mission profiles can be found in Chapter 3.

3.4 <u>QUALIFICATION AND DESIGNATION TABLES</u>. 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.

	H&HS/VMR Det UC-12F/M/W/W+						
Transport Aircrewman							
Designation Initial Event Designation Requirements							
ТА	6100						
TANI	5100,5101,5102						
TAANI	5100,5101,5102						

	H&HS/VMR Det UC-12F/M/W/W+							
	Transport Aircrewman							
Qualification	Initial Event Qualification Requirements							
NATOPS	6000,6001,6002,6100							
CRM	6003							

3.5 <u>SYLLABUS NOTES</u>

3.5.1 All Events, to include simulators, shall begin with a comprehensive brief with emphasis on administrative procedures, CRM, mission performance standards and aircrew expectations.

3.5.2 All flights shall terminate with a comprehensive debrief with emphasis on aircrew performance utilizing all evaluation techniques available.

3.5.3 An ATF is required for any initial event completed by a Basic, Series Conversion, or Refresher Aircrewman, or as recommended by the squadron Standardization Board. If the commanding officer has waived/deferred a syllabus sortie, the squadron training officer shall place a waiver/deferral letter in section 3 of the APR.

3.5.4 While it is desired to have TANI or TAANI instruct events a Pilot NI/ANI may instruct any Transport Aircrewman event.

3.5.4 <u>Event Conditions</u>. Refer to the following table for required event conditions.

Code	DESCRIPTION (ENVIRONMENTAL CONDITION)
D	Shall be conducted during day
Ν	Shall be conducted at night, aided or unaided, at least 30 minutes after official sunset.
(N)	May be conducted day or night. If at night, aided or unaided.
NS	Shall be conducted at night aided under High Light Level or Low Light Level at least 30 minutes after official sunset.
(NS)	May be conducted day or night. If at night, shall be aided under High Light Level or Low Light Level at least 30 minutes after official sunset.
N*	Shall be conducted at night unaided, at least 30 minutes after official sunset
(N*)	May be conducted day or night. If at night, shall be unaided.
D/NS	Shall be conducted in the simulator during day and night aided.

3.5.5 <u>Device matrix</u>. Only include applicable rows.

	DEVICE									
Symbol	Meaning									
Α	Conducted in Aircraft									

3.6 CORE INTRODUCTION PHASE

General

Core Skill Introduction training for the UC-12F/M/W/W+ is conducted at the squadron/unit.

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

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.

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.

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:

3.7 CORE INTRODUCTION STAGES

3.7.1 Academic Ground School (ACAD)(1000 PHASE)

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

Goal. Introduce ground procedures, and aircraft systems.

<u>Requirements</u>. 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,S CLRM/1 UC-12F/M/W/W+ (Static)

Goal. Introduce ground procedures, and aircraft systems.

<u>Requirements</u>. Introduce Flight line safety, aircraft danger areas. Introduce aircraft discrepancy book, contract maintenance personnel, general aircraft description, UC-12F/M/W/W+ aircraft differences, preflight, aircraft security, and aircraft parking. Introduce radio procedures, aircraft fueling, engine oil servicing procedures. Introduce safety equipment, fire bottle location, survival equipment, ASE equipment and use, 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.

3.7.2 <u>Familiarization (FAM)</u>

Purpose. Introduce Transport Aircrewman to UC-12F/M/W/W+ FAM and CRM procedures.

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

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

<u>Goal</u>. Introduce Operation of UC-12F/M/W/W+ aircraft.

<u>Requirements</u>. Introduce aircrew coordination/situational awareness. Perform Weight and Balance; and aircrew brief. Introduce normal and emergency checklist, flight packet, communication during critical phases of flight, lookout doctrine crew coordination, icing considerations, aircraft lighting, basic cockpit familiarization, and duties during an emergency. Introduce over the wing refueling procedures. Introduce preflight and post-flight inspections.

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

Prerequisite. 1000, 1001

FAM-1101	2.0	*	B,S	D	А	1 UC-12F/M/W/W+
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Goal. Familiarization with aircraft systems and emergency procedures.

<u>Requirements</u>. Familiarize TAUI with aircrew coordination and situational awareness. Perform Weight and Balance and aircrew brief. Familiarize normal and emergency checklist, flight packet, communication during critical phases of flight, lookout doctrine crew coordination, icing considerations, aircraft lighting, basic cabin operations, and duties during an emergency. Familiarize over the wing refueling procedures at civil airfields, and familiarize preflight and post-flight inspections.

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

Prerequisite. 1100

FAM-1102 2.0 * B,S N* A 1 UC-12F/M/W/W+

Goal. Familiarization with aircraft systems and emergency procedures during night operations.

<u>Requirements</u>. Familiarize TAUI with nighttime aircrew coordination/situational awareness. Perform Weight and Balance and aircrew brief. Familiarize TAUI with normal and emergency checklist, flight packet, communication during critical phases of flight, lookout doctrine crew coordination. Discuss night time considerations, icing considerations, aircraft lighting, basic cockpit orientation, and duties during an emergency. Familiarize TAUI with over the wing refueling procedures at civil airfields at night, familiarize preflight and post-flight inspections.

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

Prerequisite. 1101

3.8 CORE PHASE

General

<u>Purpose</u>. Familiarize the TAUI with the Operational Support Aircraft mission. The TAUI shall continue to fly these codes under actual or simulated conditions until minimum flight hour requirement is met IAW NATOPS.

3.9 <u>CORE STAGES</u>

3.9.1 <u>Familiarization (FAM)</u>

Purpose. Introduce TAUIs to UC-12F/M/W/W+ FAM and CRM procedures.

<u>Crew Requirements</u>. Shall be instructed/evaluated by an NI/ANI.

FAM-2100	2.0	*	В	(N*)	А	1 UC-12F/M/W/W+

Goal. Familiarization with Aircraft systems and radio operation.

<u>Requirements</u>. Familiarize TAUI in the operation of aircraft systems to include pressurization and communications to include passenger phone system. Practice normal procedures and simulated emergency procedures.

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

Prerequisite. 1102

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

Goal. Familiarization with DV passenger procedures.

<u>Requirements</u>. Familiarize TAUI 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

3.10 MISSION PHASE

General

<u>Purpose</u>. Familiarize the TAUI with the Operational Support Aircraft mission. The TAUI shall continue to fly these codes under actual or simulated conditions until minimum flight hour requirement is met in accordance with NAVAIR 1A-C12WA-NFM-000

<u>Crew Requirements</u>. Shall be instructed/evaluated by a TANI. A Pilot ANI/NI may instruct any Mission Skill event.

3.11 MISSION STAGES

3.11.1 Operational Support Airlift (OSA)

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

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

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

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

Prerequisite. 2000 PHASE Complete

3.11.2 Air Logistics Support ALS

ALS-3200	2.0	60	B,R,M	(N*)	А	1 UC-12F/M/W/W+
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Goal. Conduct an Air Logistics Support (ALS) Mission.

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

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

Prerequisite. 2000 PHASE Complete

3.12 CORE PLUS (4000 PHASE)

General

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

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

3.13 CORE PLUS STAGES

- 3.13.1 Core Plus Academics (ACAD)
- 3.13.2 Expeditionary Shore-Based Operations (EXP)

EAP-4200 2.0 / 30 B,K,M (N*) A 1 UC-12F/M/W/W	EXP-4200	2.0	730	B,R,M	(N*)	А	1 UC-12F/M/W/W-
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Goal. Conduct unimproved runway operations.

<u>Requirements</u>. 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.

3.14 INSTRUCTOR TRAINING PHASE

<u>General</u>. The Instructor Phase consists of three events leading to the Transport Aircrewman NATOPS Instructor and Transport Aircrewman Assistant NATOPS Designations.

3.15 INSTRUCTOR TRAINING STAGE

3.15.1 Instructor Under Training (IUT)

<u>IUT-5100 2.0 * B,R D A 1 UC-12F/M/W/W+</u>

Goal. TA NATOPS Instructor Familiarization.

<u>Requirements</u>. 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. Designated TA

<u>IUT-5101</u> 2.0 * B,R,S (N*) E A 1 UC-12F/M/W/W+

Goal. TA NATOPS Instructor Review.

<u>Requirements</u>. 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.

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

Prerequisite. 5100

<u>IUT-5102</u> 2.0 * B,R,S (N*) E A 1 UC-12F/M/W/W+

Goal. TANI/ANI designation evaluation flight.

<u>Requirements</u>. 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.

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

Prerequisite. 5101

3.16 **REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD)**

- 3.17 RCQD STAGES
- 3.17.1 UC-12W RQD Academics (ACAD)

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

<u>Goal</u>. The open book examination shall consist of, but not be limited to the question bank found in the NATOPS 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,S,M E NATOPS Closed Book

<u>Goal</u>. 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,S,M E NATOPS Oral

<u>Goal</u>. 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,S,M E CRM BASIC

<u>Goal</u>. This course of instruction is under development by VMR Det Belle Chase and will be distributed to the UC-12 community once completed.

Requirements.

ACAD-6004 1.0 365 B,R,S,M E CRM UC-12F/M/W/W+

<u>Goal</u>. This course of instruction is under development by VMR Det Belle Chase, LA and will be distributed to the UC-12 community once completed.

ACAD-6005 1.0 30 B,R,S,M Monthly EP Exam

Goal. Successfully complete the UC-12F/M/W/W+ Monthly Emergency Procedures Examination.

Requirement. Pass the Monthly Emergency Procedures Examination.

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

3.17.2 NATOPS Evaluation

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<u>NTPS-6100</u> 2.0 365 B,R,S,M (N*) E A 1 UC-12F/M/W/W+
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<u>Goal</u>. 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

<u>NTPS-6101</u> 0.0 90 B,R,S,M (N*) A 1 UC-12F/M/W/W+ Static

Goal. Quarterly NATOPS static aircraft emergency procedures review.

<u>Requirement</u>. 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 CNAFINST M3710.7 and NATOPS.

3.18 UC-12F/M/W/W+/W+ TRANSPORT AIRCREWMAN (TA) T&R SYLLABUS MATRIX

				τ	U C-1 2	2F/M/	W/W	/+/W+ T	RANSP	ORT	AIRCRE	EWM	AN (TA)) T& I	R SYLLA	ABUS MATRIX					
SKILL	PREFIX	EVENT NUMBER	T&R DESCRIPTION	BASIC	EVALUATION	DEVICE	NUMBER	CONDITION	PROFICIENCY INTERVAL	# ACADEMIC	ACADEMIC HOURS	# SIMULATOR	SIMULATOR HOURS	# FLIGHT	FLIGHT HOURS	PREREQUISITE	CHAINING	MIRROR UC- 12F/M to UC-12W	MIRROR UC- 12W to UC- 12F/M	UC-12F/M CONV	UC-12W CONV
	CORE INTRODUCTION TRAINING (1000 PHASE)																				
									CORE I	NTR	ODUCTI	ION A	ACADEN	AICS	5						
ACAD	ACAD	1000	GROUND PROCEDURES	В		G			*		3.0									1000	1000
ACAD	ACAD	1001	AIRCRAFT SYSTEMS	B,S		G			*		3.0									1001	1001
	TOTAL CORE INTRODUCTION ACADEMICS26.000.000.0																				
				•	-				FA	MII	JARIZA	TION	I (FAM)	_					•	•	
	FAM	1100	INTRO UC-12W	В		Α	1	D	*						2.0	1000,1001				1100	1100
FAM	FAM	1101	A/C SYSTEMS EPs	B,S		Α	1	D	*						2.0	1100				1101	1101
	FAM	1102	NIGHT FAM	B,S		Α	1	N*	*						2.0	1101				1102	1102
			TOTAL FAM	STAGE						0	0.0	0	0.0	3	6.0						
	CORE	INTRO	DUCTION TRAINING	(1000 PHAS	SE EV	VENT	S) T(DTAL		2	6.0	0	0.0	3	6.0						
	CORE TRAINING (2000 PHASE)																				
		1	Î.	1		1		1	FA	MII	LIARIZA'	TION	I (FAM)		1	1	1	-	1	1	1
FAM	FAM	2100	A/C SYSTEMS & RADIOS	В		Α	1	(N*)	*						2.0	1102				2100	2100
	FAM	2101	INTRO DV PROCEDURES	B,R,S,M		Α	1	(N*)	365						2.0	2100				2101	2101
			TOTAL FAM	STAGE						0	0.0	0	0.0	2	4.0						
									MISSI	ON '	FRAININ	<mark>G (3</mark>	000 PHA	SE)							
	1	1		1	-	1 .		OI	PERATI	ONA	L SUPPO	DRT 4	AIRLIF	<u>Г (OS</u>	SA)	In the second	T	1	1		
OSA	OSA	3100	OSA	B,R,M		Α	1	(N*)	60						2.0	2101	2101,3200	3100	3100	3100	3100
			TOTAL OSA	STAGE						0	0.0	0	0.0	1	2.0						
					1	1.	1.		AIR	LOG	ISTICS S	UPPO	ORT (AI	LS)	• •	Terror					
ALS	ALS	3200	ALS	B,R,M		A	1	(N*)	60						2.0	2101	2101,3100	3200	3200	3200	3200
			TOTAL ALS	STAGE					~~~~	0	0.0	0	0.0	1	2.0						
									CORE I		TRAINI	NG (4000 PH	ASE)		•					
EVD	EVD	1200	END ODED ATIONS	D D M	1	1	E	XPEDI		ty SI	HORE-BA	ASED	O OPERA		NS (EXF	')	2100 2200 2101	1	1	1200	1200
EXP	EXP	4200	EXP OPERATIONS	B,R,M		Α	1	(N*)	730			•			2.0	4000,3200,3100	3100,3200,2101			4200	4200
			TOTAL EXP	STAGE		_	_	-			0.0		0.0		2.0						
									INSTRU	CIC	OR TRAIN	NING	(500 PH	IASE)						
	ILIT	5100		DD			1		NSTRU		K UNDEI	RTR	AINING	(101)		1	1	1	5100	5100
II IT		5100		B,K		A	1	D (N th)	* *						2.0	Designation TA		1		5100	5100
101		5101	INSTRUCTOR FAM	B,R,S		A	1	(N*)	*	-					2.0	5100		+		5101	5101
	101	5102	EVAL	B,R,S		A	1	(N*)	*	0	0.0		0.0		2.0	5101				5102	5102
			TOTAL IUT	STAGE	DEC	NUDT								<u>5</u>							
					RE(UIRI	LIVIEI	\mathbf{NI}, \mathbf{QU}	ALIFIC	A 1 1(JNS, ANI	DE	SIGNAT	ION	S (KQD)	(0000 PHASE)					

	UC-12F/M/W/W+/W+ TRANSPORT AIRCREWMAN (TA) T&R SYLLABUS MATRIX																				
SKILL	PREFIX	EVENT NUMBER	T&R DESCRIPTION	BASIC	EVALUATION	DEVICE	NUMBER	CONDITION	PROFICIENCY INTERVAL	# ACADEMIC	ACADEMIC HOURS	# SIMULATOR	SIMULATOR HOURS	# FLIGHT	FLIGHT HOURS	PREREQUISITE	CHAINING	MIRROR UC- 12F/M to UC-12W	MIRROR UC- 12W to UC- 12F/M	UC-12F/M CONV	UC-12W CONV
R									QD A	CADEM	ICS	(ACAD)									
	ACAD	6000	NATOPS Open Book Exam	B,R,S,M	Х	G			365		4.0									6000	6000
	ACAD	6001	NATOPS Closed Book	B,R,S,M	Х	G			365		2.0					6000				6001	6001
	ACAD	6002	NATOPS Oral Exam	B,R,S,M	Х	G			365		2.0					6000,6001				6002	6002
ACAD	ACAD	6003	CRM BASIC	B,R,S,M	X	G			365		2.0									6003	6003
	ACAD	6004	CRM T/M/S	B,R,S,M	X	G			365		1.0					6003	6003			6004	6004
	ACAD	6005	Monthly EP Exam	B,R,S,M		G			30		1.0									6005	6005
			TOTAL ACAI) STAGE						5	11.0	0	0.0	0	0.0						
										N	ATOPS	(NTP	'S)								
NTDC	NTPS	6100	NATOPS Evaluation	B,R,S,M	Х	Α	1	(N*)	365						2.0	6000,6001,6002				6100	6100
NIPS	NTPS	6101	Quarterly EP Eval	B,R,S,M		Α	1	(N*)	90						0.0					6101	6101
	-		NATOPS T	OTAL		-			-	0	0.0	0	0.0	2	2.0			-			

CHAPTER 4

UC-12F/M/W/W+ QUALIFIED OBSERVER

<u>PARAGRAPH</u> <u>PAGE</u>

INDIVIDUAL TRAINING AND READINESS REQUIREMENTS.	4.0	4-3
TRAINING PROGRESSION MODEL	4.1	4-3
PROGRAMS OF INSTRUCTION (POI)	4.2	4-3
PROFICIENCY AND CURRENCY	4.3	4-3
CERTIFICATIONS, DESIGNATIONS, QUALIFICATIONS (CQD)	4.4	4-4
SYLLABUS NOTES	4.5	4-4
CORE INTRODUCTION PHASE	4.6	4-5
CORE INTRODUCTION STAGES	4.7	4-6
CORE PHASE	4.8	4-6
CORE STAGE	4.9	4-6
MISSION PHASE	4.10	4-10
MISSION STAGE	4.11	4-10
CORE PLUS PHASE	4.12	4-11
CORE PLUS STAGES	4.13	4-11
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, DESIGNATIONS (RCQD)	4.14	4-13
RCQD STAGES	4.15	4-13
AVIATION CAREER PROGRESSION MODEL (8000 PHASE)	4.16	4-15
T&R SYLLABUS MATRIX	4.17	4-17
DC/A LETTER 17 MAY 2010; REMOVAL OF NFO WAIVER OPTION	4-18	4-20
DC/A MSG 101812Z JUN 10 USMC UC-12BFW NFO-QO WAIVER	4-19	4-21

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CHAPTER 4

UC-12F/M/W/W+ QUALIFIED OBSERVER

4.0 UC-12F/M/W/W+ QUALIFIED OBSERVER INDIVIDUAL TRAINING AND READINESS

<u>REQUIREMENTS</u>. 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.

4.1 <u>UC-12F/M/W/W+ QUALIFIED OBSERVER TRAINING PROGRESSION MODEL</u>. This model represents the recommended training progression for the average UC-12F/M/W/W+ Qualified Observer

crewmember. Units should use the model as a guide to generate individual training plans.



4.2 PROGRAMS OF INSTRUCTION (POI)

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

WEEKS	COURSE	PERFORMING ACTIVITY
5	Core Introduction Training	CACT
5	Core Training	H&HS/VMR Det
5	Mission Training	H&HS/VMR Det

<u>Refresher (R) POI</u>. 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					
5	Core Introduction Training	CACT					
4	Core Training	H&HS/VMR Det					
3	Mission Training	H&HS/VMR Det					

4.3 PROFICIENCY AND CURRENCY

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

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

<u>Maintaining Skill Proficiency</u>. Once attained, skill proficiency is maintained by executing those events which have a Proficiency Period (Maintain events). Proficiency Periods establish the maximum time between Event demonstration. Should proficiency be lost in any maintain event, for a specific skill, that skill proficiency is temporarily lost. Skill proficiency can be re-attained by again demonstrating proficiency in the Event(s) that are not proficient

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

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

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

4.3.3 <u>Skill Currency</u>. Currency is a control measure used to provide an additional margin of safety based on exposure frequency to a particular skill and applies to all MOS's that must comply with NATOPS and OPNAV requirements. It is a measure of time since the last event demanding that specific skill. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for aircrew individual type mission profiles can be found in Chapter 3.

4.4 <u>CERTIFICATION, QUALIFICATION AND DESIGNATION TABLE</u>. The table 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/QUALIFICATION REQUIREMENTS UC-12F/M/W/W+ Qualified Observer							
Qualification	Event Qualification Requirements						
NSQ	4400 (UC-12W/W+ Only)						
NATOPS	6000,6001,6002,6100						
INSTRUMENT	6003,6004,6005						
CRM	6006,6007						
Designation	Event Designation Requirements						
QO	6000,6001,6002,6003,6004,6005,6500						

4.5 <u>SYLLABUS NOTES</u>

4.5.1 All Events, to include simulators, shall begin with a comprehensive brief with emphasis on administrative procedures, CRM, mission performance standards and aircrew expectations.

4.5.2 All flights shall terminate with a comprehensive debrief with emphasis on aircrew performance utilizing all evaluation techniques available.

4.5.3 An ATF is required for any initial event completed by a Basic or Refresher pilot, or as recommended by the squadron Standardization Board. If the commanding officer has waived/deferred a syllabus sortie, the squadron training officer shall place a waiver/deferral letter in section 3 of the APR.

4.5.4	Event Conditions.	Refer to the follo	wing table for rec	uired event conditions.
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Code	DESCRIPTION (ENVIRONMENTAL CONDITION)
D	Shall be conducted during day
Ν	Shall be conducted at night, aided or unaided, at least 30 minutes after official sunset.
(N)	May be conducted day or night. If at night, aided or unaided.
NS	Shall be conducted at night aided under High Light Level or Low Light Level at least 30 minutes after official sunset.
(NS)	May be conducted day or night. If at night, shall be aided under High Light Level or Low Light Level at least 30 minutes after official sunset.
N*	Shall be conducted at night unaided, at least 30 minutes after official sunset
(N*)	May be conducted day or night. If at night, shall be unaided.
D/NS	Shall be conducted in the simulator during day and night aided.

4.5.5 <u>Device matrix</u>. Only include applicable rows.

	DEVICE
Symbol	Meaning
Α	Conducted in Aircraft
A/S	Aircraft Preferred/Simulator Optional
S	Conducted in Simulator
S/A	Simulator Preferred/Aircraft Optional

4.6 CORE INTRODUCTION PHASE

General

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

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

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.

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.

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.

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

CACT INT SIM 1101 thru CACT INT SIM 1107 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.

4.7 CORE INTRODUCTION STAGES

			UC-12F/M/W/W+ QU	JALIFIE	D OBSERVE	R					
			CORE SKILL INTE	RODUCT	'ION PHASE						
			COMMAND AIRCRAFT	CREW 1	RAINING (C	CACT)					
INITIAL TRAINING											
SKILL	PREFIX	TRNG CODE	T&R DESCRIPTION	POI	PROF INTERVAL	ACAD HOURS	SIM HOURS	NOTES			
	INITIAL ACADEMICS (INITIAL ACAD)										
	ACAD	1000	CACT GND SCHL INITIAL	В	*	48.0					
INITIAL	ACAD	1002	RVSM	В	*	3.0					
ACAD	ACAD	1003	WEATHER RADAR	B,R	*	2.0					
	ACAD	1004	CACT INTERNATIONAL INITIAL	B,R	*	21.0					
			INITIAL SIMULA	TOR (IN	ITIAL SIM)						
	SIM	1101	CACT SIM 1	В	*		4.0				
INITIAL	SIM	1102	CACT SIM 2	В	*		4.0				
SIM	SIM	1103	CACT SIM 3	В	*		4.0				
	SIM	1104	CACT SIM 4	В	*		4.0				
			RECURREN	T TRAI	NING						
SKILL	PREFIX	TRNG CODE	T&R DESCRIPTION	POI	PROF INTERVAL	ACAD HOURS	SIM HOURS	NOTES			
			RECURRENT ACAI	DEMICS	(REC ACAD))					
DEC	ACAD	1001	CACT GND SCHL REFRESH	B,R,M	365	8.0					
	ACAD	1006	WEATHER RADAR	B,R,M	365	2.0					
ACAD	ACAD	1005	CACT INTERNATIONAL RECURRENT	B,R,M	730	8.0					
			RECURRENT SIM	ULATOI	R (REC SIM)		-				
DEC	SIM	1105	CACT SIM 5	B,R,M	365		4.0				
SIM	SIM	1106	CACT SIM 6	B,R,M	365		4.0				
51101	SIM	1107	CACT SIM 7	B,R,M	365		4.0				

4.8 <u>CORE PHASE (2000)</u>. All Core Phase events shall be instructed by an NI or ANI.

4.9 <u>CORE STAGES</u>

4.9.1 Core Skill Academic (ACAD)

Purpose. Introduce the Qualified Observers to the UC-12F/M/W/W+.

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

ACAD-2000 3.0 * B D G 1 UC-12F/M/W/W+

<u>Goal</u>. Introduce the UC-12F/M/W/W+ 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. 1104

ACAD-2001 3.0 * B D A 1 UC-12F/M/W/W+

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

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

<u>Performance Standard</u>. Show proficiency in the use of all navigation equipment and radios.

External Syllabus Support. Ground powered aircraft.

Prerequisite. 2000

4.9.2 Familiarization (FAM)

Purpose. Introduce Qualified Observers to UC-12F/M/W/W+ FAM and CRM procedures.

General

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

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

Crew	Requirements	IP/OOUI	
	Requirements.	$\mathbf{n} / 0 0 0 1$	

FAM-2101	2.0	*	В	D	А	1 UC-12F/M/W/W+

Goal. Introduce the UC-12F/M/W/W+ aircraft.

Requirements

Brief: Preflight/flight planning Aircrew coordination/voice calls Checklist 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 Critical memory items Discuss: Windshear as a hazard to flight Windshear recognition, avoidance, and escape maneuver 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 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.

Review preflight

Performance Standard. In accordance with NFM.

Prerequisite. 2000,2001

D 1 UC-12F/M/W/W+ FAM-2102 2.0 365 B.R.S.M А

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

Requirements

Observe: Engine starts with associated failures Crosswind landings Crosswind takeoffs Recovery from low level wind shear. Practice: Normal ground procedures Abbreviated ground procedures Review: Pressurization system Pneumatic systems Environmental systems Oxygen system Related malfunctions Engine system Propeller system Electrical system Fuel system Aircrew Coordination skills Conduct: Additional instrument procedures

Approaches

Missed approaches

Discuss/Review:

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 charts).

Performance Standard. In accordance with NFM.

Prerequisite. 2101

Instruments (INST) 4.9.3

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.

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 OOUI's home field.

Crew Requirements. IP/QOUI.

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

* 1 UC-12F/M/W/W+ INST-2200 2.0 В (N*) А

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

Requirements

Preflight briefing: 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
	Circling approaches
	Weather radar
	Severe weather procedures
Discuss [.]	Severe weather procedures
21000.000.	TCAS II system
	Warnings and conflict resolution
Review:	6
	Preflight, checklists
	Engine start hot start and no light-off
	Taxi no brakes and hot brakes
	Abort
	Climb
	Cruise
	Engine shutdown/Airstart
	Post flight
	M-SHARP
Introduc	2.
	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
	ASR
	ILS
	PAR
	Missed approach (dual engine and single engine)
	Holding
	Debrief

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

Prerequisite.	2001					
INST-2201	2.0	365	B,R,S,M	(N*)	А	1 UC-12F/M/W/W+

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

Requirements.

Brief/Review: 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

		TACA	N proced	ures			. 1.6			×
		Autopi	lot/Flight ed indicat	Director Ind	licator (and set	FDI)/Horiz up	zontal S	Situatio	n Indicator (HSI) utilization
		En rou	te/cruise j	procedures	und set	чp				
_		Copilo	t/QO utili	zation/duties	5					
	Introduc	e: Non ai	to pilot i	nstrumant da	nortura					
		VOR a	no phót i pproach	listrument de	parture					
		ILS/LC	DC/BC ap	proach						
		RNAV	approach	nes						
		TACA	N approa	ch Dach						
		Holdin	g	Jacii						
		Missed	approacl	n procedures						
1	Diamaa	Pilot/co	opilot cre	w coordination	on	mition and	avaida	n 0.0)		
I I	Review:	voica	me asn na	izard to mgn	it (recog	intion and	avoiua	nce)		
		Norma	l landings	5						
		SSE la	ndings							
		Previoi Norma	is emerge	encies						
Dorforma	nga Stan	dord I	n accorde	nco with NA	TODS	flight mon	ual and	ΝΑΤΟ	DS instrumont fl	ight manual
		<u>uaru</u> . 1			1015	ingin main	uai allu	NAIO	or 5 mstrument n	iigiit manuai.
Prerequis	<u>ite</u> . 220	0								
4.10 <u>1</u>	MISSIO	N PHA	<u>SE</u>							
General.	All Mis	sion Ph	ase event	s shall be ins	tructed	by an NI o	or ANI.			
4.11 <u>I</u>	MISSIO	N STA	<u>GES</u>							
4.11.1 <u>(</u>	Operatio	nal Sup	port Airl	ift (OSA)						
05 4 210	0	2.0	265	DDM		(N I*)		•	1 UC 12EMA	XI/XXI
<u>05A-310</u>	0	2.0	303	B,K,M	((IN*)		A	1 UC-12F/M/	<u>w/w+</u>
<u>Goal</u> . Cor	nduct an	Operat	ional Sup	port Airlift (OSA) n	nission.				
Requirem	ents									
1	Brief:	. <i>.</i> .		1. <i>.</i> .						
		Flight 1	n and cre	w coordinatio	on					
		Weathe	er							
		Fuel re	quiremen	ts						
		Weight	t and bala	nce						
		RON	t perform	lance factors						
		Passen	ger requi	rements						
		Schedu	ling ager	cy (JOSAC/	MCB Ja	apan) coore	dinatio	n		

Emergency procedures.

Flight: Conduct an OSA mission.

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

Prerequisite. 2000 Phase complete, 6100.

4.11.2 <u>Air Logistics Support</u>

ALS-3200	2.0	365	B,R,M	(N*)	А	1 UC-12F/M/W/W+
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Goal. Conduct an Air Logistics Support (ALS) mission.

Requirements Brief:

Mission and crew coordination Flight planning Weather Fuel requirements Weight and balance Aircraft performance factors RON Scheduling agency (JOSAC, MCB JAPAN) coordination Cargo certification and handling Special cargo considerations Emergency procedures.

Flight: Conduct an ALS mission.

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

Prerequisite. 2000 Phase complete, 6100

4.12 <u>CORE PLUS PHASE</u>

General

All Core Plus Phase events shall be instructed by an NI or ANI (NSI for NS event).

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

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

The Qualified Observer should be Core Skill complete prior to beginning the Core Plus Phase of training.

4.13 CORE PLUS STAGES

4.13.1 Core Plus Academics (ACAD)

ACAD-4001 4.0 730 B,R,M CLRM International

<u>Goal.</u> Qualified Observer under instruction is introduced to mission planning for extended over water and overseas operations.

<u>Requirements.</u> The QOUI will be introduced to mission planning for a multiday, long range flight that should include the crossing of international airspace. The following tools commonly used for mission planning in the international environment should be introduced: Optimum Path Aircraft Routing System (OPARS), Aircraft/Personnel Automated Clearance System (APACS), Foreign Clearance Guide, Area Planning/General Planning (AP/GP), Giant Report/Global Decision Support System 2 (GDSS2) account, Naval Flight Information Group (NavFIG), Jeppesen View and the validation and use of Jeppesen terminal approach procedures, Universal Flight Planning software for oceanic remote operations, North Atlantic/Pacific Tracks message, North Atlantic/Pacific Track Oceanic Checklist, North Atlantic/Pacific Minimum Navigation Performance Specification Airspace Operations Manual, Equal Time Point (ETP)/Point of No Return (PNR), and Aircraft Flight Manual (AFM) Supplement 63. 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. Successful completion of the course of instruction.

4.13.2 <u>Assault Support (AS)</u>. 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.

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

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

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

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

Brief: 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).

Discuss:

Engine failure on take-off (before & after V1) Single engine landing (specifically use of single engine reverse thrust) 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.

4.13.4 International Procedures (INT)

INT-4300 3.0 * B (N*) A 1 UC-12F/M/V

Goal. Qualified Observer under instruction performs extended range operations.

<u>Requirement</u>. 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 1095 B,R,S,M (N*) A 1 UC-12F/M/W/W+

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

<u>Requirement</u>. 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.

<u>Performance Standard</u>. Operate the aircraft according to the NFM IFM, FARs and ICAO procedures.

Prerequisite. 4001

4.13.5 Night Systems (NS) {UC-12W Only}

<u>Purpose</u>. To qualify and maintain proficiency utilizing night vision devices (NVDs). Upon completion of this phase, the QO will be capable of operations using NVDs in the NS non-LAT environment.

<u>General</u>. QOs successfully completing these requirements shall be issued a NSQ qualification letter by the squadron commanding officer.

Crew Requirements. QOUI shall be instructed/evaluated by a NSI.

<u>Academic/Ground Training</u>. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, and the MAWTS-1 TACAIR NVD Manual.

<u>NS-4400 2.0 180 B,R,M NS A 1 UC-12W</u>

Goal. To qualify or maintain proficiency in NS operations.

<u>Requirement</u>. Preflight shall include a flight station, cargo compartment and exterior lighting demonstration with NVDs. Emphasize the interaction between aircraft lighting with normal and covert modes. Donning NVDs, and the use of oxygen mask with helmets/NVDs shall be practiced to proficiency. Ground operations shall include NVD taxi procedures. Flight procedures shall include takeoff, cockpit orientation at altitude, landings, aircraft operations, and NVD aircrew coordination. Conduct a minimum of 4 touch-and-go landings and 1 full stop landing on a hard surface runway as a copilot/QO. Event shall be flown from the right seat.

Performance Standards

Demonstrate a basic level of familiarity with NVD operations. Demonstrate competency as a copilot/QO while wearing NVDs.

Prerequisite. NITE Lab and MAWTS-1 NVD ASPs. 2000 Phase complete, 6100

Range Requirement. Airfield capable of varied airfield lighting configurations.

4.14 REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS (RQD) (6000 PHASE)

4.15 <u>RCQD STAGES</u>

4.15.1 UC-12F/M/W/W+ RQD Academics

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

<u>Goal</u>. 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,S,M G E NATOPS Closed Book

<u>Goal</u>. 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,S,M G E NATOPS Oral

<u>Goal</u>. 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,M G E Instrument Ground School

<u>Goal</u>. 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,M G 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,M G E Instrument Oral Exam

<u>Goal</u>. 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 CNAFINST M3710.7.

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

Prerequisite. 6004

ACAD-6006 1.0 365 B,R,M G 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,M G E CRM UC-12F/M/W/W+

<u>Goal</u>. This course of instruction is under development by VMR Det Belle Chasse, LA and will be distributed to the UC-12F/M/W/W+ community once completed.

ACAD-6009 1.0 30 B,R,S,M Monthly EP Examination

Goal. Successfully complete the UC-12F/M/W/W+ Monthly Emergency Procedures Examination.

Requirement. Pass the Monthly Emergency Procedures Examination.

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

4.15.2 NATOPS Evaluation

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

<u>Goal</u>. 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.

<u>Requirement</u>. Demonstrate comprehensive knowledge and understanding of NATOPS, unit SOP, and local course rules.

<u>Performance Standard</u>. Executes flight and ground operations safely IAW CNAFINST M3710.7, NATOPS and applicable manuals. Complies with unit SOP and local course rules.

Prerequisite. 6000, 6001, 6002.

NTPS-6103	.5	90	B,R,S,M	(N*)	А	1 UC-12F/M/W/W+ (s	tatic)
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Goal. Quarterly NATOPS static aircraft emergency procedures review.

<u>Requirement</u>. 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.

4.15.3 Transport Qualified Observer (QO)

QO-6500	1.5	365	B,R,M	D	А	1 UC-12F/M/W/W+
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Goal. QO evaluation flight.

<u>Requirement</u>. 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

4.16 AVIATION CAREER PROGRESSION MODEL (8000 PHASE)

Purpose

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

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 VMR-1 or a VMR det (C-9, UC-35, C-12, or C-20), 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.

General

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

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

VMR-1 VMR Det (UC-12F/M/W/W+)													
			ACPM TO UC-12F/M/W/W+ 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									

4.17 QUALIFIED OBSERVER (QO) T&R SYLLABUS MATRIX

									UC-1	2F/N	1/W/W-	+ QU	JALIFI	ED (DBSERVE	R T&R MATRIX					
SKILL	PREFIX	TRNG CODE	T&R DESCRIPTION	РОІ	DEVICE	NUMBER	CONDITION	EVALUATION	PROFICIENCY INTERVAL	# ACAD	ACAD TIME	WIS #	SIM TIMI	# FLIGHT	FLIGHT TIME	PREREQUISITES	CHAINING	MIRROR UC-12F/M to UC-12W	MIRROR UC-12W to UC-12F/M	UC-12F/M CONV	UC-12W CONV
									CC	RE	INTRO	DU	CTIO	N TR	AINING	(1000 PHASE)					
	-		1			-	1		(CAC	T INIT	IAL	ACAI)EM	ICS (INIT	TIAL ACAD)	T	<u>г</u>	I		
	ACAD	1000	CACT GND SCHL INITIAL	В	G				*		48.0									1000	1000
INITIAL	ACAD	1002	RVSM	В	G				*		3.0										1002
ACAD	ACAD	1003	WEATHER RADAR	B,R	G				*		2.0										1003
	ACAD	1004	CACT INT INITIAL	B,R	G				*		21.0										1004
INITIAL ACAD TOTAL 4 74.0 0 0.0 0 0.0																					
	0.00			1 -		1.		<u> </u>	<u>.</u>	CA(CT INI	ΓΙΑΙ	L SIM	ULA	TOR (INI	TIAL SIM)		1	T		
	SIM	1101	CACT SIM 1	B	S	1	(N*)		*				4.0							1101	1101
INITIAL	SIM	1102	CACT SIM 2	B	S	1	(N*)		*				4.0							1102	1102
SIM	SIM	1103	CACT SIM 3	В	S	1	(N*)		*	<u> </u>			4.0							1103	1103
	SIM	1104	CACT SIM 4	B	S	1	(N*)	Ш	*		0.0		4.0	0	0.0			1	<u> </u>	1104	1104
	INITIAL SIM TOTAL 0 0.														0.0						
		1	CACT GND SCHI	1	1	1	1	<u> </u>	C	ACI I	RECU	JKK	ENT A		JEMICS ((REC ACAD)		T	Ĩ		
REC	ACAD	1001	REFRESH	B,R,M	G				365		8.0					1000				1020	1001
ACAD	ACAD	1006	WEATHER RADAR	B,R,M	G				365		2.0									L	1003
	ACAD	1005	CACT INT RECURRENT	B,R,M	G		<u> </u>		730		8.0					1004		<u> </u>		<u> </u>	1005
			REC ACAD TO	TAL						3	18.0	0	0.0	0	0.0						
	an c	1105				1.	0.140	1	0.65		T REC	UR	RENT	SIM	ULATOR	(REC SIM)		1	1	1105	1105
REC	SIM	1105	CACT SIM 5	B,R,M	S	1	(N*)		365				4.0							1107	1105
SIM	SIM	1100	CACT SIM 6	B,K,M	5	1	(IN*) (N*)		265				4.0							1108	1100
	51111	1107	PEC SIM TOT	D,K,M	3	1	(11)	4	305	0	0.0	3	4.0	0	0.0		-		<u> </u>	1109	1107
			KEC SINI IOI	AL						U	COR	E T	RAIN		(2000 PH	ASF)					
											F/	MI	LIAR	ZAT	ION (FA)	M)					
	ACAD	2000	INTRO UC-12 A/C	В	G	1	D		*		3.0					1104			[2000	2000
	ACAD	2001	FMS PROCEDURES	В	G		D		*		3.0					2000				2001	2001
FAM	FAM	2101	INTRO UC-12 A/C	В	Α	1	D		*						2.0	2000,2001				2101	2100
	FAM	2102	RIGHT SEAT PROCEDURES	B,R,S,M	А	1	D		365						2.0	2101				2102	2101
	TOTAL FAM STAGE 2													2	4.0			-			
												INS	TRUM	IENT	rs (inst)						
INST	INST	2200	INTRO INST/NAV	В	Α	1	(N*)		*						2.0	2001				2200	2200
11031	INST	2201	PRACTICE INST/NAV	B,R,S,M	Α	1	(N*)		365						2.0	2200				2201	2201
			TOTAL INST ST	ГAGE						0	0.0	0	0.0	2	4.0						
	CO	RE TRA	AINING (2000 PHAS	E EVENI	rs) T	OT	4L			2	6.0	0	0.0	4	8.0						
											MISSI	ON	TRAI	NIN	G (3000 Pl	HASE)					

NAVMC 3500.102C 26 Jun 19

									UC-12	2F/N	1/W/W+	+ QU	JALIFI	ED C)BSERVE	R T&R MATRIX					
SKILL	PREFIX	TRNG CODE	T&R DESCRIPTION	POI	DEVICE	NUMBER	CONDITION	EVALUATION	PROFICIENCY INTERVAL	# ACAD	ACAD TIME	WIS #	SIM TIME	# FLIGHT	FLIGHT TIME	PREREQUISITES	CHAINING	MIRROR UC-12F/M to UC-12W	MIRROR UC-12W to UC-12F/M	UC-12F/M CONV	UC-12W CONV
		•								OP	ERATI	ION/	AL SUI	PPO	RT AIRL	IFT (OSA)		1	1		
OSA	OSA	3100	OSA	B,R,M	Α	1	(N)		365						2.0	2000 PHASE COMPLETE,6100	2201,3200,2102	3100	3100	3100	3100
TOTAL OSA STAGE 0											0.0	0	0.0	1	2.0						
														S SU	J PPORT ((ALS)					
ALS	ALS	3200	ALS	B,R,M	Α	1	(N)		365						2.0	2000 PHASE COMPLETE,6100	2201,3100,2102	3200	3200	3200	3200
			TOTAL ALS ST	AGE						0	0.0	0	0.0	1	2.0						
	TOT	AL MIS	SION TRAINING (3	8000 PHAS	<mark>SE E</mark> V	VEN	TS)			0	0.0	0	0.0	2	4.0						
										0	CORE I	PLU:	S TRA	ININ	<mark>IG (4000 J</mark>	PHASE)					
	1	1	Extended over weter and	1			<u> </u>				C	ORI	E PLUS	6 AC	ADEMIC	28					
ACAD	ACAD	4001	overseas operations	B,R,S,M					730		4.0							4001	4001	4001	4001
TOTAL ACAD STAGE												0		0	L						
	1	n	r	1					EXPE	EDI	TIONAI	RY S	HORE	-BA	SED OPE	RATIONS (EXP)	-	1	1		
EXP	EXP	4200	Unimproved Runway Operations	B,R,S,M	Α	1	(N*)		*						1.5	2000 PHASE Complete,6100	3100,3200	4200	4200	4200	4200
			TOTAL EXP ST	AGE						0	0.0	0	0.0	1	1.5						
										Ι	NTERN	IAT	IONAL	PRO	OCEDURE	ES (INT)					
DIT	INT	4300	INTL OSA	В	Α	1	(N*)		*						3.0	4001	3200,3100,2102,2201			4300	4300
INT	INT	4301	LONG RANGE/OVERWATER	B,R,S,M	Α	1	(N*)		1095						3.0	4001	3200,3100,2102,2201			4301	4301
	1	-	TOTAL INT ST	AGE						0	0.0	0	0.0	2	6.0			-	-	-	-
										NIC	GHT SY	YSTI	EMS (N	IS)	{UC-12W	/W+ Only}					
NS	NS	4400	Intro NS Procedures	B,R,M	Α	1	NS		180						2.0						4400
			TOTAL INT ST	AGE						0	0.0	0	0.0	1	2.0						
						REO	QUIRI	EME	ENT, (QUA	LIFIC.	ATI	<mark>ONS,</mark> A	ND	DESIGN/	ATIONS (RQD) (6000 PHASE)				
	1	I	1	1							R	QD /	ACADI	EMI	CS (ACA	D)		T	1		
	ACAD	6000	NATOPS Open Book Exam	B,R,S,M	G			Х	365		4.0				 		6009			6000	6000
	ACAD	6001	Exam	B,R,S,M	G			Х	365		2.0					6000	6009			6001	6001
	ACAD	6002	NATOPS Oral Exam	B,R,S,M	G			Х	365		2.0					6000,6001				6002	6002
	ACAD	6003	Instrument Ground School	B,R,M	G			Х	365		8.0							6003	6003	6003	6003
ACAD	ACAD	6004	Instrument Exam	B,R,M	G			Х	365		2.0				L	6003		6004	6004	6004	6004
	ACAD	6005	Instrument Oral Exam	B,R,M	G			Х	365		2.0				L	6004		6005	6005	6005	6005
	ACAD	6006	CRM BASIC	B,R,M	G			Х	365		1.0				ļ			6006	6006	6006	6006
	ACAD	6007	CRM T/M/S	B,R,M	G			Х	365		1.0				 					6007	6007
	ACAD	6009	Monthly EP Exam	B,R,S,M	G				30		1.0	0	0.0	0						6009	6009
			TOTAL ACAD S	TAGE			_			9	25.0	0,			0.0					_	
							[VATU	5 (1	(IFS)	6000 6001 6002 2000 Phase					
NTPS	NTPS	6100	NATOPS Evaluation	B,R,S,M	A/S	1	(N*)	Х	365						2.0	Complete,8200-8250	2101,2201,2401,6103			6100	6100
	NTPS	6103	Quarterly EP Eval	B,R,S,M	A/S	1	(N*)		90						0.5					6103	6103

NAVMC 3500.102C 26 Jun 19

									UC-1	2F/M	1/W/W	+Ql	JALIF	ED (OBSERV	ER T&R MATRIX					
SKILL	PREFIX	TRNG CODE	T&R DESCRIPTION	POI	DEVICE	NUMBER	CONDITION	EVALUATION	PROFICIENCY INTERVAL	# ACAD	ACAI TIME	# SIM	SIM TIMI	# FLIGHT	FLIGH TIME	T PREREQUISITES	CHAINING	MIRROR UC-12F/M to UC-12W	MIRROR UC-12W to UC-12F/M	UC-12F/M CONV	UC-12W CONV
			NATOPS TOT	`AL						0	0.0	0	0.0	2	2.5						
												DRT	OUAL	IFI	ED OBSE	RVER (OO)					
	0.0	6700			Ι.		-		0.65							2000 Phase	c100			6500	
QO	QO	6500	QO Evaluation	B,R,M	A	1	D		365						1.5	Complete,6000,6001.6003	6103			6500	6500
			TOTAL INST ST	AGE						0	0.0	0	0.0	1	1.5						
										AVIA	TION CA	REER	PROGRE	SSION	MODEL (AC	PM) (8000 PHASE)					
	ACPM	8200	MACCS AGENCIES,						*		0.6					2000 PHASE		8200	8200	8200	8200
	ACPM	8201	MWCS BRIEF				-		*		0.4					2000 PHASE		8201	8201	8201	8201
	ACPM	8202	ACA AND AIRSPACE				-		*		0.5					2000 PHASE		8202	8202	8202	8202
	ACPM	8210	AVIATION GROUND SUPPORT						*		0.6					2000 PHASE		8210	8210	8210	8210
	ACPM	8230	ACE BATTLESTAFF						*		0.6					2000 PHASE		8230	8230	8230	8230
	ACPM	8231	BATTLE COMMAND						*		0.3					2000 PHASE		8231	8231	8231	8231
	ACPM	8240	SIX FUNCTIONS						*		1.3			-		2000 PHASE		8240	8240	8240	8240
	ACPM	8241	JTAR/ASR INTRODUCTION						*		0.5					2000 PHASE		8241	8241	8241	8241
	ACPM	8242	SITE COMMAND PRIMER						*		0.7					2000 PHASE		8242	8242	8242	8242
	ACPM	8250	(TAGS)						*		0.6					2000 PHASE		8250	8250	8250	8250
	ACPM	8300	AIR DEFENSE						*		0.6					3000 PHASE		8300	8300	8300	8300
	ACPM	8310	(FARP) OPERATIONS						*		0.4					3000 PHASE		8310	8310	8310	8310
	ACPM	8311	TACTICAL FUEL SYSTEMS						*		0.2					3000 PHASE		8311	8311	8311	8311
	ACPM	8320	JOINT STRUCTURE						*		1.3					3000 PHASE		8320	8320	8320	8320
	ACPM	8321	JOINT AIR TASKING						*		0.3					3000 PHASE		8321	8321	8321	8321
ACPM	ACPM	8322	JOINT AIR TASKING CYCLE PHASE 2:						*	1	0.2					3000 PHASE		8322	8322	8322	8322
	ACPM	8323	JOINT AIR TASKING CYCLE						*		0.2					3000 PHASE		8323	8323	8323	8323
	ACPM	8324	JOINT AIR TASKING CYCLE		1				*		0.2					3000 PHASE		8324	8324	8324	8324
	ACPM	8325	PHASE 4: JOINT AIR TASKING CYCLE						*		0.2	-				3000 PHASE		8325	8325	8325	8325
	ACPM	8226	PHASE 5: JOINT AIR TASKING CYCLE						*	_	0.2					2000 PHASE		8226	8326	8226	8226
	ACPM	9240	PHASE 6: INTEGRATING EIRES						*		0.5			-		2000 PHASE		8240	8240	8240	8240
	ACPM	8340	INTEGRATING FIRES					-	*		0.5	-	-	_	-	2000 PHASE		8250	8250	8340	8250
1	ACPM	8351	TACRON ORGANIZATIONS		+			-	*		U.5				-	3000 PHASE		8351	8351	8351	8351
1	ACPM	8630	(TACC)		1				*		0.7		-			6000 PHASE		8630	8630	8630	8630
	ACPM	8660	IOINT OPS INTRO	1	1				*		0.4					6000 PHASE		8660	8660	8660	8660
	ACPM	8640	IOINT DATA NETWORK	1					*		0.4		1			6000 PHASE		8640	8640	8640	8640
1	ACPM	8641	MAGTE THEATER		+			1	*		1.5					6000 PHASE		8641	8641	8641	8641
1	ACPM	8620	ESG/CSG INTEGRATION		1				*		TBD					6000 PHASE		8620	8620	8620	8620
			TOTAL ACPM STA	GE			<u> </u>	•	<u>.</u>	28	13.9	0	0.0	0	0.0		•				

4.18 DC/A LETTER 17 MAY 2010; REMOVAL OF NFO WAIVER OPTION

DEPARTMENT OF THE NAVY HEADQUARTERS UNITED STATES MARINE CORPS 3000 MARINE CORPS PENTAGON WASHINGTON, DC 20350-3000 IN REPLY REFER TO 3710 AVN 17 May 2010 From: Deputy Commandant for Aviation, United States Marine Corps Chief of Naval Operations, Code OPNAV N88 Commander Naval Air Systems Command; Code Air 4:0P To: Chief of Naval Air Training, Code 00 Commander, U.S. Marine Corps Forces Command, Code DOSS, G3 Commander, U.S. Marine Forces Pacific, Code DOSS, G3 Commander, Naval Reserve Forces Command, Code 00 Commanding General, 4th Marine Aircraft Wing, Code DOSS, G3 Commander, Naval Safety Center, Code 00 Chief, Bureau of Medicine and Surgery, Code NAMI, ASTI Subj: REMOVAL OF NFO WAIVER OPTION FROM UC-12B/F/W NATOPS I have been briefed on the issue of UC-12 NATOPS waivers for 1. USMC NFO aircrew, a program that has served the Marine Corps well over many years. I do not support a change to OPNAV 3710.7, UC-12 NATOPS, or the UC-12 T&R syllabus that will eliminate the NFO Waiver or Qualified Observer syllabus. 2. The Navy may elect to strike the NFO Waiver for its VR/OSA units, leaving the Marine Corps the option to utilize the waiver. It is essential that the NFO waiver remain available to Marine Aviation in order to support USMC UC-12 unit missions. 3. Given the solid safety record over the years of USMC NFO's in UC-12 aircraft, there is no cause to remove the waiver as an interim or permanent change to the NATOPS Flight Manual or UC-12 Training & Readiness (T&R) Manual. Retention of the waiver provides Marine Corps Aviation flexibility in staffing through 2025. Utilization of the NFO waiver shall be used wisely to support OSA missions. Vating dir. GEORGE J. TRAUTMAN III Copy to: Commander, Fleet Logistics Support Wing, Code 00

4.19 DC/A MSG 101812Z JUN 10 USMC UC-12BFW NFO-QO WAIVER

USMC UC-12BFW NAVAL FLIGHT OFFICER-QUALIFIED OBSERVER (NFO-QO) WAIVER RETENTION AND TASKS

DTG: 101812Z Jun 10 Precedence: ROUTINE DAC: General To: CMC WASHINGTON DC I (UC), CMC WASHINGTON DC L LF (UC), CMC WASHINGTON DC MRA MP(UC), CMC WASHINGTON DC MRA(UC), CMC WASHINGTON DC PPO(UC), COMMARFORCOM ALD(UC), COMMARFORCOM G-1(UC), COMMARFORCOM G3-5-7(UC), COMMARFORCOM(UC), CG MCIEAST(UC), MCAS NEW RIVER NC(UC), HHS MCAS BEAUFORT SC(UC), HHS MCAS NEW RIVER NC(UC), COMMARFORPAC ALD(UC), COMMARFORPAC G1(UC), COMMARFORPAC G3(UC), COMMARFORPAC(UC), CG MCI WEST(UC), CO MCAS MIRAMAR CA(UC), HHS MCAS MIRAMAR CA(UC), HHS MCAS YUMA AZ(UC), CG MCB CAMP BUTLER JP(UC), MCAS IWAKUNI JP(UC), MCAS YUMA AZ(UC), MCAS FUTENMA JP(UC), HHS MCAS FUTENMA JP(UC), COMMARFORRES G1(UC), COMMARFORRES G3(UC), COMMARFORRES(UC), CG 4TH MAW ALD(UC), CG 4TH MAW G1(UC), CG 4TH MAW G3(UC), CG MCCDC QUANTICO VA(UC), CG TECOM ATB(UC), CNO WASHINGTON DC(UC), COMNAVAIRFOR SAN DIEGO CA, COMNAVAIRFORES SAN DIEGO CA(UC), COMNAVAIRSYSCOM PATUXENT RIVER MD(UC), CMC WASHINGTON DC AVN APW(UC), CMC WASHINGTON DC AVN ASL(UC), CMC WASHINGTON DC AVN ASM(UC), CMC WASHINGTON DC AVN(UC), CMC WASHINGTON DC AVN APC(UC), CMC WASHINGTON DC AVN APP(UC), COMNAVFACENGCOM WASHINGTON DC(UC), COMFLELOGSUPPWING FORT WORTH TX(UC), BUMED WASHINGTON DC(UC), VMR DET ANDREWS(UC), VMR DET NEW ORLEANS(UC) _____ UNCLASSIFIED// MSGID/GENADMIN/CMC WASHINGTON DC AVN// SUBJ/USMC UC-12BFW NAVAL FLIGHT OFFICER-QUALIFIED OBSERVER (NFO-QO) WAIVER RETENTION AND TASKS// REF/A/MSGID: LTR/HOMC DC AVN 3710 17 MAY 2010// REF/B/OPNAV3710.7U// REF/C/A1-C12BM-NFM-00 NATOPS FLIGHT MANUAL NAVY MODEL UC-12BFM AIRCRAFT// REF/D/ NAVMC 3500.30 UC-12 TRAINING & READINESS MANUAL// AMPN/REF A IS DC AVIATION LETTER STATING INTENT TO RETAIN UC-12 NFO-QO WAIVER FOR USMC AVIATION UNITS// REF B IS OPNAV INSTRUCTION 3710.7U NATOPS GENERAL FLIGHT AND OPERATING INSTRUCTIONS//REF C IS THE UC-12B/F/M NATOPS FLIGHT MANUAL//REF D IS THE USMC UC-12 TRAINING & READINESS MANUAL// POC/HOUDE, R.J./CTR/APP-48/-/TEL:703-693-8539/EMAIL: ROBERT.HOUDE.CTR@USMC.MIL// GENTEXT/REMARKS// 1. PER REF A, DEPUTY COMMANDANT FOR AVIATION (DC AVN) STATED INTENT IS TO MAINTAIN OR INCLUDE NFO-QO COPILOT WAIVER IN ALL UC-12 TMS NATOPS FLIGHT MANUALS (NFM). SPECIFIC GUIDANCE FOLLOWS, WHICH SUPPORTS USMC

USE OF NFO-QO IN THE PERFORMANCE OF COPILOT DUTIES FOR TRANSPORT MISSIONS. 2. NFO-QO ISSUE HAS GENERATED DISCUSSION CONCERNING INTERPRETATION OF OPNAV 3710.7U AND UC-12 NATOPS FLIGHT MANUAL (NFM). NAVAL SAFETY CENTER UC-12 DATA ANALYSIS CONTAINS NO HAZREP OR MISHAP CAUSAL OR CONTRIBUTING FACTORS ATTRIBUTABLE TO NFOS ACTING AS COPILOTS IN UC-12 AIRCRAFT. HISTORIC PERFORMANCE OF USMC NFOS ACTING AS COPILOT IN CONDUCT OF TRANSPORT MISSIONS, CLEARLY DEMONSTRATES THAT PROPERLY TRAINED AND QUALIFIED NFOS PROVIDE USMC OSA UNIT COMMANDING OFFICERS

WITH AIRCREW FULLY CAPABLE OF EXECUTING OSA TRANSPORT MISSIONS IN UC-12 AIRCRAFT. 3. HQMC SERVICE POSITION. A. REF B STATES "THE MINIMUM FLIGHT CREW REQUIREMENTS FOR NAVAL AIRCRAFT ARE SET FORTH IN THE APPLICABLE NATOPS MANUAL FOR INDIVIDUAL AIRCRAFT MODELS." THE UC-12B/F/M NFM HAS CLEAR GUIDANCE DEFINING THE MINIMUM FLIGHT CREW NECESSARY FOR TRAINING, POST-MAINTENANCE FUNCTIONAL CHECK FLIGHT, AND TRANSPORT MISSIONS. B. COMMANDER FLEET LOGISTICS SUPPORT WING (CFLSW) JRB FT. WORTH IS UC-12B/F/M MODEL MANAGER. CFLSW PROPOSED AN INTERIM NATOPS CHANGE TO REMOVE NFO-QO FROM REF C, WHICH STATES "WHEN A QUALIFIED NFO IS ASSIGNED AS COPILOT, HIS/HER DUTIES ARE THE SAME AS LISTED BELOW, EXCEPT HE/SHE SHALL NOT ASSUME PHYSICAL CONTROL OF THE AIRCRAFT." B.1. DC AVN DOES NOT SUPPORT REMOVAL OF NFO-OO FROM REF C. NAVY MAY REMOVE THE NFO-QO OPTION FOR ITS VR/OSA UNITS, USMC SHALL RETAIN NFO-QO WAIVER. B.2. NFO-QO RISK MANAGEMENT AND MITIGATION CONTROLS ARE IN PLACE TO ADDRESS SAFE UC-12 MISSION OPERATIONS. PRECEDENCE AND PAST PERFORMANCE OF NFOS ACTING AS COPILOTS WARRANT THE RETENTION OF THE NFO-QO WAIVER FOR THE UC-12B/F/M NFM FOR USMC NFOS. C. THE UC-12F/M/W/W+ NFM IS CURRENTLY IN "DRAFT." IT SHALL INCLUDE THE SAME SUPPORTING LANGUAGE THE UC-12B/F/M NFM HAS CURRENTLY REGARDING THE NFO-OO CREW POSITION. THIS ACTION SUPPORTS COMMANDING OFFICERS WITH PROPERLY TRAINED AIRCREW TO FULLY EXECUTE TRANSPORT MISSIONS, AS CURRENTLY DEFINED. D. IN THE FUTURE, WHEN INCREASED CAPABILITIES ARE ADDED TO THE UC-12F/M/W/W+, THE ROLE OF THE COPILOT (SPECIFICALLY NFO-QO) WILL BE RE-EVALUATED IN SUPPORT OF THOSE ADDITIONAL WARFIGHTING CAPABILITIES ADDED TO THESE AIRCRAFT PLATFORMS. 4. TASKS. A. FOR COMMANDER FLEET LOGISTICS SUPPORT WING UC-12B/F/M NATOPS PROGRAM MANAGER: RETAIN NFO WAIVER LANGUAGE FOR USMC NFOS IN UC-12B/F/M NFM. B. FOR UC-12F/M/W/W+ MODEL MANAGER (VMR DET BELLE CHASSE, LA.): 1) ENSURE NFO-QO WAIVER LANGUAGE, CREW DESCRIPTION, CREW QUALIFICATION AND CHECKLISTS FOR USMC UC-12F/M/W/W+ NFO-QO IS INCLUDED IN ALL UC-12F/M/W/W+ NATOPS PUBLICATIONS AS APPLICABLE. 2) ENSURE LANGUAGE MATCHES THAT FOUND IN THE UC-12B/F/M NFM. 3) ENSURE NFO-OO SYLLABUS IS INCLUDED IN REF D FOR ALL USMC UC-12 TRAINING & READINESS MANUALS AS APPROPRIATE. C. FOR HOMC AVIATION PLANS & POLICY (APP) AND AVIATION WEAPON SYSTEM REQUIREMENTS (APW) BRANCHES: SUBMIT INTERIM CHANGE TO OPNAV 3710.7U TO INCLUDE LANGUAGE WHICH SUPPORTS USMC NFO-OO UC-12 COPILOT POSITION. LANGUAGE WILL CLARIFY NFO WAIVER AND SUPPORT UC-12 MODEL MANAGERS IN EXECUTION OF THEIR DUTIES. 5. POCS: A. POC/NELSON, T.M./COL/APP-B1/TEL:703-693-8553DSN 223/ EMAIL: THOMAS.M.NELSON@USMC.MIL// B. POC/HOUDE, R./CTR/APP-48/TEL:703-693-8539DSN 223/ EMAIL: ROBERT.HOUDE.CTR@USMC.MIL // C. POC/GIERBER, G/CTR/APW-71A/TEL:703-693-8451DSN 223/

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