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Encl: (1) HH-1N T&R Manual

1. Purpose. To revise standards and regulations regarding the training of HH-1N aircrew per the reference.

2. Information. Significant revisions are as follows:

a. Establishment of Mission Essential Task List (METL) To facilitate MET-based readiness.

b. Incorporation of Marine Corps Task (MCT) list.

c. Emphasis on Mission Skills to support MET-based reporting.

d. Inclusion of Aviation Career Progression Model (ACPM) training requirements.

e. Re-naming and re-numbering of Phases from 3-digit to 4-digit event codes.

3. Recommendations. Recommended changes to this Manual are invited, and may be submitted via the syllabus sponsor and the appropriate chain of command to: Commanding General, Training and Education Command, Aviation Training Division using standard Naval correspondence or the Automated Message Handling System plain language address: CG TECOM ATD.

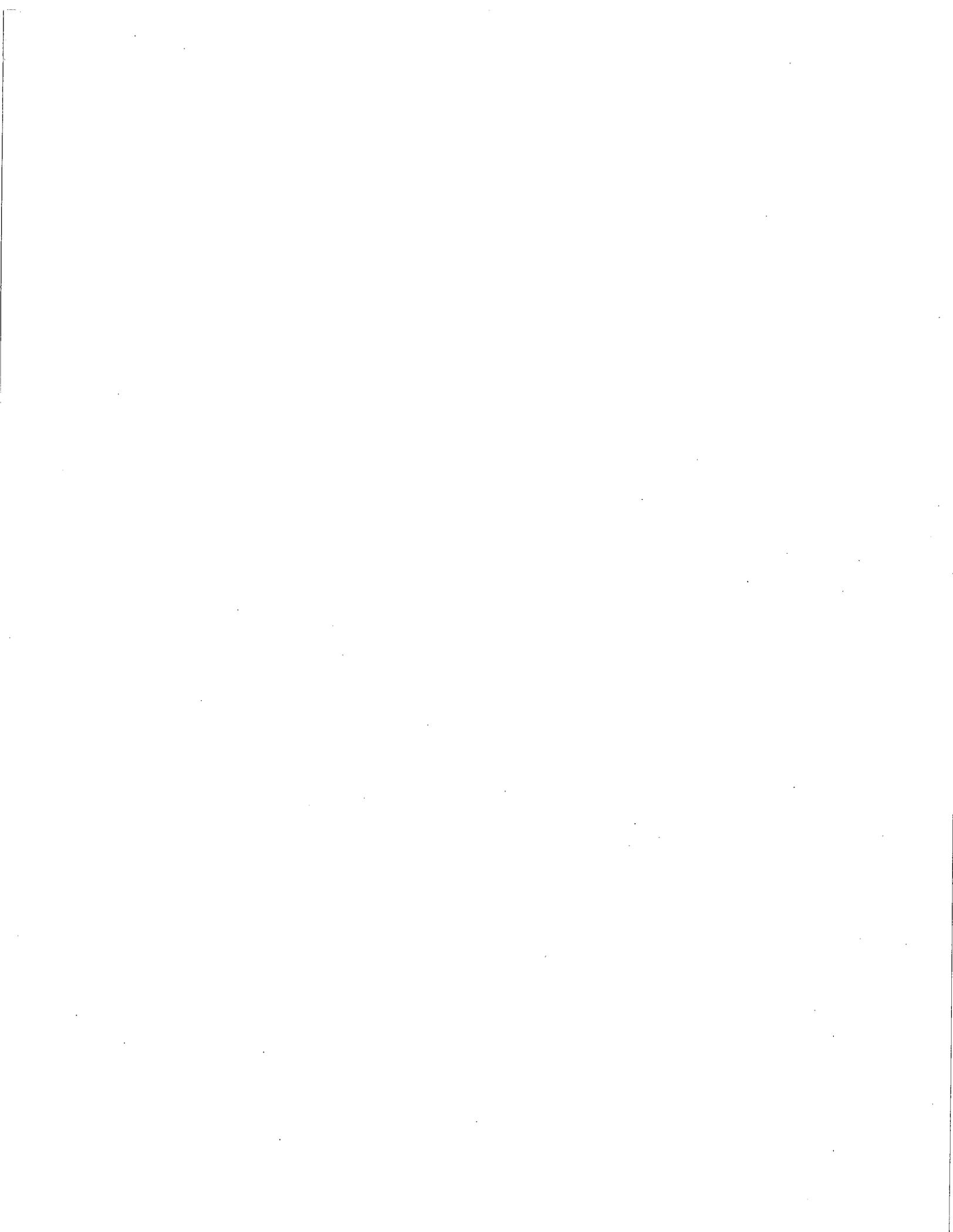
4. Reserve Applicability. This Manual is not applicable to the Marine Corps Total Force.

5. Certification. Reviewed and approved this date.

  
R. C. FOX  
By direction

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CHAPTER 1

MCAS YUMA H-1 SEARCH AND RESCUE UNIT (SRU)  
TRAINING AND READINESS UNIT REQUIREMENTS

	<u>PARAGRAPH</u>	<u>PAGE</u>
SRU TRAINING AND READINESS UNIT REQUIREMENTS.....	100	1-3
SRU MISSION.....	101	1-3
SRU TABLE OF ORGANIZATION (T/O).....	102	1-3
SRU SKILL ABBREVIATIONS.....	103	1-3
SRU MISSION ESSENTIAL TASK LIST (METL) .....	104	1-4
SRU MET TO CORE/MISSION/CORE PLUS SKILL MATRIX.....	105	1-4
SRU CORE MODEL MINIMUM REQUIREMENTS (CMMR) SKILLS PROFICIENCY REQUIREMENTS .....	106	1-5
SRU QUALIFICATIONS AND DESIGNATIONS.....	107	1-5
SRU INSTRUCTOR REQUIREMENTS.....	108	1-5

NAVMC 3500.91  
18 Mar 11

CHAPTER 1

H-1 SEARCH AND RESCUE UNIT TRAINING AND READINESS UNIT REQUIREMENTS

100. MCAS YUMA H-1 SRU TRAINING AND READINESS REQUIREMENTS. The goal of the SRU is to attain and maintain SAR and Firefighting support capabilities to support MCAS Yuma and the local community while conserving resources. The standards established in this program are validated by subject matter experts to maximize SAR capabilities for assigned METs. These standards describe proficiency in mission skills and aviation leadership. Training events are based on specific requirements and performance standards to ensure a common base of training and depth of mission capability.

101. SRU MISSION. The primary mission of the MCAS Yuma Search and Rescue Unit is to provide support for military flight operations within a 100 nautical mile radius of MCAS Yuma. Additionally, through the provisions of the National SAR Plan and MCO 3130.2, MCAS Yuma will also respond to community SAR, Firefighting and MEDEVACs on a not-to-interfere with military requirements basis.

102. TABLE OF ORGANIZATION (T/O). Refer to T/O #8361 managed by Total Force Structure, MCCDC, for current authorized organizational structure and personnel strength. Information below depicts UH-1/HH-1N T/O information as of the date of this Manual.

**SRU, Yuma**

- 3 UH/HH-1 Aircraft
- 8 Pilots
- 8 Crew Chiefs
- 4 In-Flight Medical Technicians

103. SKILL ABBREVIATIONS

<b>SRU</b>	Search and Rescue Unit
<b>SAR</b>	Search and Rescue
<b>SHC</b>	SAR Helicopter Aircraft Commander
<b>H2P</b>	Helicopter Second Pilot (PQM qualified in all copilot duties)
<b>PUI</b>	Pilot Under Instruction
<b>IP</b>	Instructor Pilot
<b>SIP</b>	SAR Instructor Pilot
<b>CC</b>	Crew Chief
<b>CCI</b>	Crew Chief Instructor
<b>CCUI</b>	Crew Chief Under Instruction
<b>IFMT</b>	In-Flight Medical Technician
<b>IFMTUI</b>	In-Flight Medical Technician Under Instruction
<b>IFMTI</b>	In-Flight Medical Technician Instructor
<b>AS</b>	Airlift Support
<b>AF</b>	Aerial Firefighting
<b>NSSI</b>	Night Systems SAR Instructor
<b>SL</b>	Section Leader

104. SRU MISSION ESSENTIAL TASK LIST (METL)

1. Core METL. The METL is a list of specified tasks that SRU, Yuma is

designed to perform. Core METs are drawn from the Marine Corps Task List (MCTL) and are standardized by type unit.

Core METL

- MCT 1.3.4.1.2 Provide Operational Airlift Support (AS)
- MCT 1.3.4.1.3 Provide Aerial Search and Rescue Services (SAR)
- MCT 1.3.4.4 Provide Aerial Firefighting Support (AF)

2. MET Output Standards. The required level of performance that SRU, Yuma must be capable of sustaining during regular and contingency operations by MET to be considered MET ready. Output standards will be demonstrated through the incorporation of Unit Training Events.

SRU YUMA (H-1) (3 Aircraft)				
MET OUTPUT STANDARDS				
MCT	MET	OUTPUT STANDARDS		
		MAXIMUM DAILY SORTIES	MAXIMUM MCT SORTIES	CMMR CREWS
MCT 1.3.4.1.2	Provide Operational Airlift Support (AS)	9	9	3
MCT 1.3.4.1.3	Provide Aerial Search and Rescue Services (SAR)		9	3
MCT 1.3.4.4	Provide Aerial Firefighting Support (AF)		9	3

105. SRU MET TO CORE/MISSION/CORE PLUS SKILL MATRIX. This matrix provides a pictorial view of the relationship between the Mission Essential Task (MET) and each Core Skill, Mission Skill and Core Plus skill required to perform the MET.

SRU YUMA (H-1)									
MARINE CORPS TASK TO CORE/MISSION/CORE PLUS SKILL MATRIX									
MARINE CORPS TASK (MCT) // MISSION ESSENTIAL TASK (MET)	CORE SKILL (2000 PHASE)					MISSION SKILLS (3000 PHASE)			CORE PLUS (4000 PHASE)
	FAM	INST	NAV	CAL	NS	AIRLIFT SUPPORT (AS)	AERIAL SAR (SAR)	AERIAL FIRE FIGHTING (AF)	FORM
MCT 1.3.4.1.2 AS	X	X				X			X
MCT 1.3.4.1.3 SAR	X	X	X	X	X		X		
MCT 1.3.4.4 AF	X	X	X	X	X			X	
CORE PLUS									
THERE ARE NO CORE PLUS METs FOR THE SRU									

106. SRU CORE MODEL MINIMUM REQUIREMENT (CMMR) SKILLS PROFICIENCY REQUIREMENTS. The CMMR is the optimum number of aircrew to execute each

stage of flight as detailed below. The numbers associated with each crew position column reflect the number of proficient aircrew required.

SRU YUMA (H-1)					
CORE/MISSION/CORE PLUS SKILLS CMMR					
STAGE	PILOTS (SHC)	PILOTS (H2P)	CREW CHIEFS	IFMT	CREWS
FAM	6		5	3	3
INST	6		5	3	3
NAV	3	3	5	3	3
SAR	3	3	5	3	3
NS	6		5	3	3
CAL	6		5	3	3
MISSION SKILLS (3000 PHASE)					
AS	6		6	3	3
SAR	6		6	3	3
AF	6		6	3	3
CORE PLUS (4000 PHASE)					
FORM	6		6	3	3

107. SRU QUALIFICATIONS AND DESIGNATIONS

1. CMMR Flight Leadership Requirements. At a minimum, in order to be considered Core Competent, SRU Yuma must possess the following number of listed flight leadership designations.

SRU YUMA (H-1)	
FLIGHT LEADERSHIP (6000 PHASE)	
DESIGNATION	PILOTS
H2P	4
SHC	4
SEC LDR	2

2. Qualifications and Designations

SRU YUMA (H-1)			
DESIGNATION	PILOT	CREW CHIEF	IFMT
FCP	3	N/A	N/A
CREW CHIEF	N/A	3	N/A
IFMT	N/A	N/A	3

108. INSTRUCTOR REQUIREMENTS. SRU Yuma should possess the following numbers of personnel with the instructor designations listed in the matrix.

SRU YUMA (UH-1/HH-1N)			
INSTRUCTOR TRAINING (5000 PHASE)			
DESIGNATIONS	PILOTS	CREW CHIEFS	IFMT
NATOPS	2		
Instrument	2		
NSSI	2		
SAR Instructor	2		
CC Instructor		2	
IFMT Instructor			2

CHAPTER 2  
UH-1/HH-1N SAR PILOT

	<u>PARAGRAPH</u>	<u>PAGE</u>
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS.....	200	2-3
TRAINING PROGRESSION MODEL.....	201	2-3
INDIVIDUAL CORE SKILL PROFICIENCY REQUIREMENTS.....	202	2-3
INDIVIDUAL MISSION SKILL PROFICIENCY REQUIREMENTS.....	203	2-4
CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS .....	204	2-5
PROGRAMS OF INSTRUCTION.....	205	2-5
ACADEMIC TRAINING .....	206	2-6
SYLLABUS NOTES (GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS).....	207	2-6
CORE SKILL TRAINING (2000 PHASE).....	208	2-8
MISSION SKILL TRAINING (3000 PHASE).....	209	2-15
CORE PLUS TRAINING (4000 PHASE).....	210	2-22
INSTRUCTOR TRAINING (5000 PHASE).....	211	2-22
REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS (RQD) (6000 PHASE).....	212	2-24
AVIATION CAREER PROGRESSION MODEL (8000 PHASE).....	213	2-30
T&R SYLLABUS MATRIX AND ATTAIN/MAINTAIN TABLES.....	214	2-32

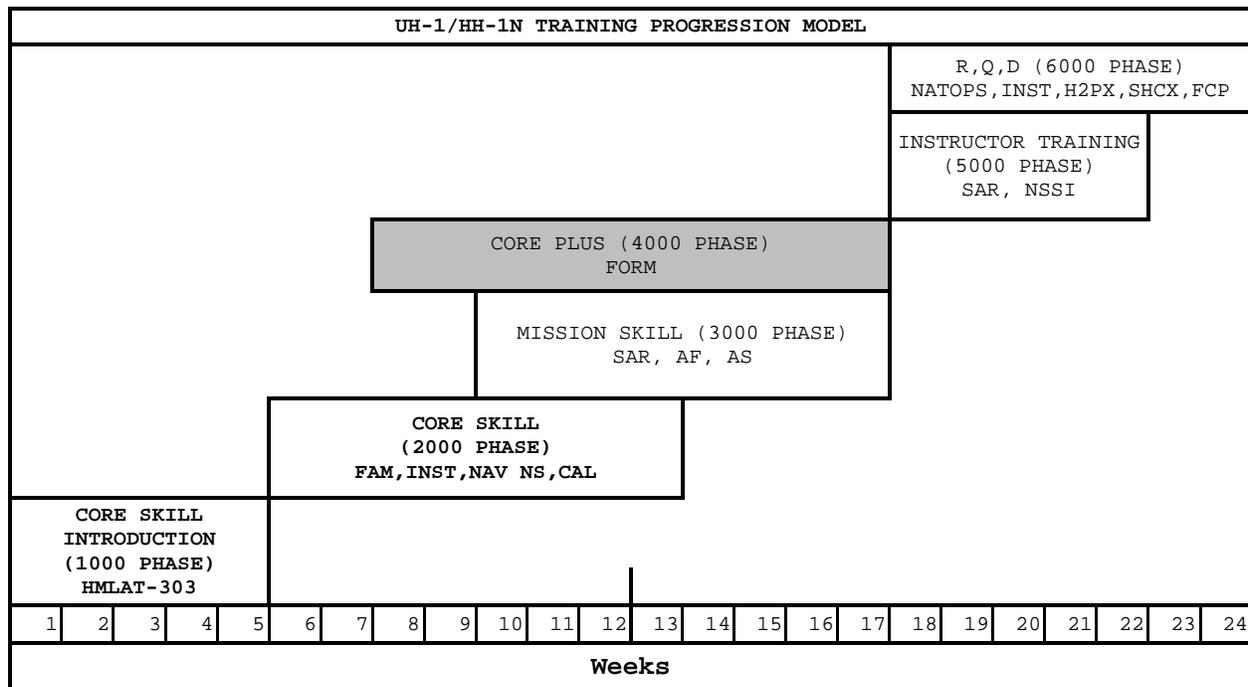
NAVMAC 3500.91  
18 Mar 11

CHAPTER 2

UH-1/HH-1N SAR PILOT

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

201. TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the pilot (7563). This model reflect minimum to maximum time to train for various skills. The SRU should use the model as a point of departure to generate individual training plans.



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

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

YUMA SRU, PILOT					
INDIVIDUAL CORE SKILL PROFICIENCY ATTAIN TABLE (2000 PHASE)					
FAM	INST	NAV	NS		CAL
2100	2200	2300R	2400	2401	2500
2101		2301R	2402	2403	
		2302R	2404R	2405	
		2303R	2406R		

An R Suffix and Grey highlight = Refresher

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

**\*NOTE\***

Specific Maintain events are selected by community SMEs to update corresponding skills in the Attain table. Maintaining proficiency in these select events will ensure the individual will never go delinquent in that corresponding skill in the Attain table.

YUMA SRU, PILOT				
INDIVIDUAL CORE SKILL PROFICIENCY MAINTAIN TABLE (2000 PHASE)				
FAM	INST	NAV	NS	CAL
			2406R	

An R Suffix and Grey highlight = Refresher

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

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

YUMA SRU, PILOT (H2P)	
INDIVIDUAL MISSION SKILL PROFICIENCY ATTAIN TABLE (3000 PHASE)	
SAR	AS
3100	3500R
3101	
3102R	

An R Suffix and Grey highlight = Refresher

YUMA SRU, PILOT (SHC)		
INDIVIDUAL MISSION SKILL PROFICIENCY ATTAIN TABLE (3000 PHASE)		
AF	SAR	
3200R	3300	3301
3201R	3302R	3303R
	3304	3305
	3306R	3307R
	3308	3309R
	3310	3311R
	3312R	3313R

An R Suffix and Grey highlight = Refresher

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

**\*Note\***

Specific Maintain events are selected by community SMEs to update corresponding skills in the Attain table. Maintaining proficiency in these select events will ensure the individual will never go delinquent in that corresponding skill in the Attain table.

YUMA SRU, PILOT (H2P)	
INDIVIDUAL MISSION SKILL PROFICIENCY MAINTAIN TABLE (3000 PHASE)	
SAR	AS
3102R	3500R
An R Suffix and Grey highlight = Refresher	

YUMA SRU, PILOT (SHC)	
INDIVIDUAL MISSION SKILL PROFICIENCY MAINTAIN TABLE (3000 PHASE)	
AF	SAR
3201R	3307R
	3311R
An R Suffix and Grey highlight = Refresher	

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

YUMA SRU, PILOT (SHC)
INDIVIDUAL CORE PLUS SKILL PROFICIENCY
ATTAIN AND MAINTAIN TABLE (4000 PHASE)
FORM
4100R

204. CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS. The tables below delineate T&R events required to be completed to attain proficiency, and initial qualifications and designations. In addition to event requirements, all stage lectures, briefs, squadron training, prerequisites and other criteria shall be completed prior to completing final events. Qualification and Designation letters signed by the Commanding Officer shall be placed in Individual Performance Records (IPR) and NATOPS jackets. 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.

YUMA SRU, PILOT	
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (R,C,Q,& D) (6000 PHASE)	
R,C,Q,& D	Event Requirements
<b>Designations</b>	
SAR H2P	6300
SAR Helicopter Commander (SHC)	6400,6401,6402
Functional Check Pilot (FCP)	6020,6021,6200,6201,6202,6203,6204,6205
NSSI	5200,5201,5202
SAR Instructor	5100,5101,5102
Section Leader	4100 and Commanding Officers Designation
<b>Qualifications</b>	
NATOPS Evaluation	6001,6002,6003,6101
Instrument Evaluation	6004,6005,6101
CRM	6010,6110

205. PROGRAMS OF INSTRUCTION. Timeframes referenced below indicate the approximate amount of time required to complete a specific phase. They are not meant to indicate cumulative time required to achieve MSP.

1. PROGRAMS OF INSTRUCTION (POI) FOR BASIC/CONVERSION SAR PILOT

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-4	Ground School	SRU
4-8	H2P Training	SRU
4-8	SHC Training	SRU
1-2	Full Mission Qualification Training	SRU

\* Timeline indicates best case scenario.

2. POI FOR REFRESHER SAR PILOT

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-2	Ground School	SRU
2-4	H2P Training	SRU
2-4	SHC Training	SRU
1-2	Full Mission Qualification Training	SRU

3. POI FOR INSTRUCTOR SAR PILOT

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-3	SAR Instructor Training (Day)	SRU
1-3	Phase I NSSI Training	SRU

206. ACADEMIC TRAINING

1. Academic training shall be conducted for each phase/stage of the syllabus as applicable. Where indicated, standardized academic training materials exist and may be obtained from the sponsoring activity.

2. Academic courses of instruction available to complete the syllabus are listed below:

<u>COURSE</u>	<u>ACTIVITY</u>
NITELAB	MAWTS-1
Aircraft Systems	SRU
Emergency Procedures	SRU
Weight & Balance and Performance Data	SRU
All Weather Operations	SRU
Communications	SRU
Passenger Briefing	SRU
Local Course Rules	SRU
Aircrew Coordination and Responsibilities	SRU
Search Planning	SRU
SAR equipment and techniques	SRU
SAR Publications	SRU
SC, SMC, OSC, and SRU Responsibilities	SRU
Command SAR Plans and SOP	SRU
Night Operations Course	SRU

207. SYLLABUS NOTES (GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS)

1. General

a. When assigned to a UH-1/HH-1N SAR billet, a naval aviator who is currently UH-1N NATOPS qualified shall complete the Refresher POI and, unless previously UH-1/HH-1N (SAR) qualified, all SAR events.

b. When assigned to a UH-1/HH-1N SAR billet, a naval aviator who is currently UH-1N NATOPS qualified, and who was previously UH-1/HH-1N (SAR) qualified shall complete the refresher POI.

- c. When assigned to a UH-1/HH-1N SAR billet, a naval aviator who is not currently UH-1N NATOPS qualified shall complete conversion training at the FRS, as set forth in MCO P3500.16, Chapter 6, then complete the Basic POI.
- d. All events, to include simulators, shall begin with a comprehensive brief with emphasis on administrative procedures, CRM, ORM, mission performance standards and aircrew expectations.
- e. All flights shall terminate with a comprehensive debrief with emphasis on aircrew performance utilizing all evaluation techniques.
- f. An ATF is required for any initial event completed by a Basic or Refresher Aircrew. 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 IPR.
- g. All pilots will have an ATJ. The squadron training officer shall ensure each ATF is entered in section 3 of the ATJ.
- h. Pilots shall fly events annotated with an N at least 30 minutes after official sunset. Events shall be flown in accordance with environmental conditions listed in the matrix below:

ENVIRONMENTAL CONDITIONS	
Code	Meaning
D	Shall be flown or conducted during day.
N	Shall be flown or conducted at night (using available night vision devices or flown unaided).
(N)	May be flown or conducted day or night; if at night, available night vision devices may be used or flown unaided.
NS	Shall be flown or conducted at night using available night vision devices.
(NS)	May be flown or conducted day or night; if at night, available night vision devices shall be used.
N*	Shall be flown or conducted unaided at night.
(N*)	May be flown or conducted at night; if at night, shall be flown unaided.
Note - If the event is to be flown in the simulator the Simulator Instructor shall set the desired environmental conditions for the event.	

2. T&R Phases

- a. The 2000 phase is considered to be Core Skill training. Completion of the 2000 phase should provide the PUI with the prerequisites required to progress to the Mission Skill training.
- b. The 3000 phase is considered to be Mission Skill training. Completion of the 3000 phase ensures aircrew are trained to execute all SRU missions as a qualified aircrew member.
- c. The 4000 phase is considered Core Plus training. This phase contains unique training standards applicable to formation flying.
- d. The 5000 phase contains instructor workup and evaluation certification syllabus events.
- e. The 6000 phase contains requirements, qualifications and designations syllabus events.
- f. The 8000 phase contains the Aviation Career Progression Model.

3. Sequence. When practical, training should be accomplished by flying events within a stage in sequence and stages within a phase in sequence.

4. Definitions

a. Discuss

- (1) The IP shall discuss a procedure or maneuver during the brief, inflight, or debrief.
- (2) The PUI is responsible for knowledge of the applicable procedures prior to the briefing.

b. Demonstrate

- (1) The IP performs the maneuver with accompanying description.
- (2) The PUI observes the maneuver and is responsible for the knowledge of the procedures prior to the sortie.

c. Introduce

- (1) At his option, the IP may perform the maneuver with an accompanying description, or he may coach the PUI through the maneuver without demonstration.
- (2) The PUI shall perform the maneuver with coaching as necessary and is responsible for knowledge of the procedures prior to the sortie.

d. Review

- (1) The IP observes and grades the maneuver without coaching the PUI. An airborne critique of PUI performance is at the option of the instructor.
- (2) The PUI is expected to perform the maneuver without coaching and devoid of procedural error at a level acceptable to warrant progress into the next stage of training.

5. Event Completion. Event completion is predicated upon demonstrated proficiency. When an individual successfully accomplishes the requirements of an event per the performance standards, the instructor 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, in the instructor's opinion, the PUI does not adequately perform a required event, then all or parts of the sortie shall be repeated until adequate performance is demonstrated. If an individual fails to accomplish the requirements of an event per the performance standards, the instructor should not log that event and the proficiency status for that event remains unchanged. Times indicated for each event are for planning purposes only.

208. CORE SKILL TRAINING (2000 PHASE)

1. General

- a. Training conducted during the H2P Qualification Training should concentrate on preparing the PUI to serve as a copilot during actual SAR missions. PUI should complete all 2000 series events before commencing 3000 series phase.
- b. Prior to flight, the PUI shall have completed the NATOPS open and closed book examinations within the previous 12 months.
- c. If the pilot arrives NSQ(LL) then the following flights are not required: NVD 2400-2403.
- d. If the pilot arrives as a current PQM then the following flights are not required: FAM 2100/2101, INST 2200 and AS 3500 is automatically updated.
- e. Stages
  - Familiarization (FAM)
  - Instruments (INST)
  - Navigation (NAV)
  - Night Systems (NS)
  - Confined Area Landings (CAL)



Performance Standard. PUI should have a sound knowledge of aircraft performance and characteristics and all emergency procedures. At completion, PUI should be able to locate VFR reporting points at night.

Prerequisite. FAM-2100

3. H2P Instruments (INST)

a. Purpose. To maintain proficiency in instrument flight skills and to introduce instrument procedures applicable to the local area/mission.

b. General. Instrument flights, whether day or night, should be conducted under actual conditions where practical or hooded in the case of simulated instrument flight.

c. Crew Requirement. PUI/IP/QO.

INST-2200 1.5 \* B 1 UH-1/HH-1N A (N\*)

Goal. Review instrument procedures applicable to the local area.

Requirement

Brief/Discuss:

FLIP documents  
Local instrument procedures (emphasizing those applicable to actual SAR missions)  
Emergency procedures applicable to instrument flight

Review:

Flight planning  
Basic air work  
Climbs/descents  
Navigation procedures  
Holding  
Instrument approaches (precision and non-precision)  
Equipment use

Performance Standard. PUI should demonstrate complete knowledge of instrument procedures and demonstrate complete competence in all instrument approaches and procedures. Conduct at least one non-precision and one precision approach maintaining parameters within 10kts of airspeed, 100' of altitude and 10deg of heading.

Prerequisite. FAM-2100

4. H2P Navigation (NAV)

a. Purpose. Familiarize PUI with navigation in the local mission area during day and night operations.

b. General. Navigational flights should be flown with emphasis on challenges encountered in mountainous, desert navigation. If copilot is not NSQ the IP must be an NSSI.

c. Crew Requirement. PUI/IP/CC. (IP must be an NSSI or NSI)

NAV-2300 1.5 \* B,R 1 UH-1/HH-1N A D

Goal. Introduce the PUI to navigational procedures in the local operating area.

Requirement.

Discuss:

Maps, charts and other navigational aids in the local operating area  
Effects of local weather and other variables on navigation

Introduce:

Hospitals, roads and landmarks in the local operating area  
Training sites  
Capabilities, limitations and use of hand held GPS

Performance Standard. PUI should have general knowledge of local operating area.

Prerequisite. FAM-2100

NAV-2301 1.5 \* B,R 1 UH-1/HH-1N A N

Goal. Repeat NAV-2300 at night.

Requirement

Brief/Discuss:

Navigational aids/checkpoints in the local operating area with regard to the night environment.  
Effects of local weather and other variables on navigation

Introduce:

Hospitals, roads and landmarks in the local operating area at night  
Training sites at night

Performance Standard. PUI should be able to point out major navigational landmarks in local operating area and remain oriented at night.

Prerequisite. FAM-2101, NAV-2300

NAV-2302 2.0 \* B,R 1 UH-1/HH-1N A D

Goal. Familiarize the PUI with remote portions of the unit's area of responsibility and/or locations outside the general area where training flights are frequently conducted during daylight. Focus should be on outlying fields/fuel destinations and hospitals.

Requirement. Review - Navigate to remote locations as dictated by local unit requirements.

Performance Standard. PUI will demonstrate general familiarity with remote portions of area of responsibility or locations outside area.

Prerequisite. NAV-2301

NAV-2303 2.0 \* B,R 1 UH-1/HH-1N N

Goal. Familiarize the PUI with remote portions of the unit's area of responsibility or locations outside the area where missions are frequently conducted during night.

Requirement. Review - Navigate to remote locations as dictated by local unit requirements at night.

Performance Standard. PUI will demonstrate ability to navigate to remote portions of AOR or locations outside area at night.

Prerequisite. FAM-2101, NAV-2302

5. H2P Night Systems (NS)

a. Purpose. To provide the ability to safely utilize NVDs while conducting search and rescue operations during hours of darkness under both High Light Level (HLL) conditions and Low Light Level (LLL) conditions.

b. General. Rappels, hoists, and short hauls shall not be conducted while any crewmember is wearing NVDs.



Performance Standard. PUI should be competent in operating/navigating in local area to include flying in mountainous terrain during HLL conditions.

Prerequisite. NS-2400,CAL-2500

NS-2402      1.5      \*      B                      1      UH-1/HH-1N      A      NS

Goal. Continue to develop proficiency in the HLL environment.

Requirement

Review

NVD CAL and MAL procedures

NVD navigational techniques and NVD emergency procedures

Performance Standard. PUI should demonstrate competence during all maneuvers, navigation, and CAL/MAL landings. PUI should also be able to navigate in the local operating area using NVDs during HLL conditions.

Prerequisite. NS-2401

NS-2403      1.5      \*      B,R                      1      UH-1/HH-1N      A      NS

Goal. Continue work on crew coordination and competency in the HLL environment during a night SAR mission. Introduce copilot duties during rappel, hoist and short haul ops at night.

Requirement

Discuss

Crew coordination/copilot duties during a night technical evolution

Comfort levels

Situational awareness

Terrain suitability and obstacle clearance

Review

Procedures for NVD navigation

Map preparation

CALs and MALs

NVD emergency procedures

Proficiency in the use of NVDs above .0022 lux in all ground and flight phases

Performance Standard. PUI must be able to accomplish all phases of preflight, flight, and post flight while using NVDs in HLL conditions during a simulated SAR event.

Prerequisite. NS-2402

NS 2404      1.5      \*      B                      1      UH-1/HH-1N      A      NS

Goal. Perform NVD low work and pattern work during LLL conditions. Practice copilot duties during rappel, hoist, and short haul operations.

Requirement

Discuss

NVD use during LLL conditions

Battery failure

Crew coordination

Introduce: Low work and pattern work.

Performance Standard. PUI should be able to accomplish all low work requirements during LLL conditions.

Prerequisite. NS 2403

NS 2405 1.5 90 B,R 1 UH-1/HH-1N A NS

Goal. Develop proficiency in CALs, MALs, and navigation procedures while using NVDs during LLL conditions. Practice copilot duties during rappel, hoist, and short haul operations.

Requirement

Discuss

Comfort levels  
Map preparation  
Crew coordination

Introduce

CALs, MALs under LLL conditions  
LLL navigation

Performance Standard. PUI should be able to competently navigate in the local operating area under LLL conditions and be able to conduct safe MALs and CALs while operating in mountainous terrain.

Prerequisite. NS 2404

NS 2406 1.5 \* B,R 1 UH-1/HH-1N A NS

Goal. Continue work on proficiency in copilot duties in the LLL environment while simulating a SAR mission.

Requirement

Discuss

Comfort levels  
Map preparation  
Crew coordination

Review

CALs, MALs  
Navigation flight  
All ground and flight procedures

Performance Standard. PUI should be able to competently operate in the LLL environment and perform copilot duties during all phases of flight while conducting a simulated SAR mission.

Prerequisite. NS 2405

6. CAL

- a. Purpose. To refine proficiency in confined and mountainous area flight techniques.
- b. General. Emphasis should be placed on crew responsibilities during CAL landings in a mountainous desert environment to include importance of ingress and egress routes and power requirements for different landing and departure scenarios.
- c. Crew Requirement. IP/PUI/CC. (IP must be an NSSI or NSI)

CAL-2500 1.5 \* B 1 UH-1/HH-1N A (N)

Goal. Practice confined and mountainous area landings.

Requirement

Discuss

Interior and exterior a/c lighting including the SX-16 Nightsun.  
Crew coordination  
Power checks  
Mountain winds  
Landing site evaluation  
Power settling

Effects of high altitude  
Turbulent air flight techniques  
Local area weather

Introduce/Review

Power checks  
One skid landings  
Downwind landings  
Slope landings  
Minimum rotor clearance approaches  
HOGE at 50-150 feet AGL  
Approach planning  
Precision/obstacle approaches  
Max power takeoffs  
Crosswind/no-hover landings  
Wave offs  
Power control  
Area navigation  
Landing zone selection/identification in rough or mountainous terrain (including the use of unprepared landing sites where available).

Performance Standard. PUI will demonstrate ability to act as aircraft commander during CAL and MAL operations.

Prerequisite. FAM-2100

209. MISSION SKILL TRAINING (3000 PHASE)

1. General. Mission skill training prepares the PUI for duties during actual mission events. Once completed the PUI will be able to accomplish all duties required and should be a fully functional member of the crew. Prior to SHC 6300 a locally prepared reading list which shall include appropriate sections from the NATOPS manual, 3-50, OPNAV 3130, MCO 3130, the unit SOP, and other locally pertinent publications shall be completed.

2. Stage

H2P Mission Qualification Training

Search and Rescue (SAR)  
Assault Support (AS)

SHC Mission Qualification Training

Aerial Firefighting (AF)  
Search and Rescue (SAR)

3. H2P Search and Rescue (SAR)

- a. Purpose. To introduce basic SAR techniques and practice copilot's duties during search and rescue operations.
- b. General. These SAR flights are to emphasize copilot responsibilities during SAR operations.
- c. Crew Requirement. PUI/IP/CC/IFMT (IP must be an NSSI or NSI)

SAR-3100      1.5      \*      B                      1      UH-1/HH-1N      A      D

Goal. Introduce basic search patterns, local air ambulance, and airfield mishap procedures.

Requirement

Discuss

Basic search patterns  
Copilot's duties during air ambulance operations  
Aircraft equipment

Local communications procedures  
Mission response/execution procedures

Introduce

Contour, track line, creeping line, parallel, sector, and square search patterns

Procedures for airfield mishaps and other local air ambulance missions

Performance Standard. PUI should have working knowledge of basic search patterns. Conduct at least 2 of the above search patterns.

Prerequisite. CAL-2500

SAR-3101 1.5 \* B 1 UH-1/HH-1N A D

Goal. Review copilot duties during rappel, hoist and short haul operations.

Requirement

Discuss: Procedures for rappel, hoist and short haul operations including emergency procedures

Introduce

Copilots duties during rappel, hoist and short haul operations  
Consider intro to HOGE ops from left seat as prep for contingency if PAC(right seat) is incapacitated etc...?

Review: Any two search patterns

Performance Standard. PUI should have basic understanding of rappel, hoist and short haul operations, a competent understanding of search patterns, and be capable of performing copilot duties during a daytime technical evolution.

Prerequisite. CAL-2500

SAR-3102 1.5 180 B,R 1 UH-1/HH-1N A N

Goal. Introduce copilot duties during rappel, hoist and short haul operations at night.

Requirement

Discuss: Lighting for night SAR operations

Introduce: Techniques for standoff lighting while hovering and HOGE operations from the left seat

Review: SAR-3101 at night practicing 2 different search patterns

Performance Standard. PUI should demonstrate competent knowledge of all types of technical evolutions and be able to perform copilot duties at night.

Prerequisite. SAR-3101

4. Assault Support (AS)

- a. Purpose. To designate pilots as proficient and capable of executing the Assault Support mission.
- b. General. At the completion of the 2100 and 2200 stage flights pilots will be qualified to execute the Assault Support Mission as aircraft commander. If already a qualified PQM, 2100 and 2200 stage flights are waived and AS-3500 designation will automatically be entered into M-Sharp.
- c. Crew Requirement. PUI/IP/CC

AS-3500                      730    B,R

Goal.    Designate pilots as AS mission capable.

Requirement.    Complete events 2100, 2101, 2200.

Performance Standard.    None

Prerequisite.    2100,2101,2200

5. SHC AF

Purpose.    To qualify the PUI as a SHC capable of safely and effectively executing AF missions.

Crew Requirement.    PUI/IP/CC

AF-3200        2.0    \*        B,R                      1        UH-1/HH-1N    A    D

Goal.    Train in Aerial Firefighting techniques.

Requirement.    Conduct at least 5 bucket operations.

Discuss

- Bambi bucket operations
- "Fire FAC" direction/comms
- ICS communication
- EP's
- Weight & balance

Introduce.    Bambi bucket operations in flight

Performance Standard.    PUI should be able to safely execute Bambi bucket operations.

Prerequisite.    H2PX-6200

AF-3201        2.0    180    B,R                      1        UH-1/HH-1N    A    D

Goal.    Review Aerial Firefighting techniques.

Requirement.    Conduct at least 4 bucket operations, 2 of which are cross-slop drops.

Discuss

- Cross-slope drops
- Fuel types
- Forest fire-fighter/smoke jumper TTPs
- Wind/thermal effects

Introduce.    Cross slope drops.

Performance Standard.    PUI should be able to safely execute Bambi bucket operations.

Prerequisite.    AF-3200

External Syllabus Support.    Ground control personnel should be used where practical.    IP may simulate as required.

6. SHC SAR

a. Purpose.    To develop proficiency as the Aircraft Commander in inland search and rescue techniques and to further refine proficiency in confined area and mountainous operations.

b. General.    Emphasis should be placed on SHC responsibilities for coordination and execution of SAR procedures in desert, mountainous conditions.

c. Crew Requirement.    IP/PUI/CC/IFMT.

SAR-3300 1.5 \* B 1 UH-1/HH-1N A D

Goal. Introduce rappelling operations with PUI at the controls.

Requirement. Perform a minimum of 5 evolutions.

Discuss

Rappelling procedures techniques  
Emergency procedures  
CRM

Introduce

Rappel operations in a simple environment at 100-200 feet AGL.  
Emphasize altitude, drift, and yaw control.

Review. Local area navigation.

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappelling operations.

Prerequisite. H2PX-6200

SAR-3301 1.5 \* B 1 UH-1/HH-1N A D

Goal. Introduce hoist operations with PUI at the controls.

Requirement. Perform a minimum of 2 evolutions.

Discuss

Hoist procedures and techniques  
Emergency procedures

Introduce

Hoist operations in a simple environment at 75-150 feet AGL.  
Emphasize altitude, drift, and yaw control.

Review: Local area navigation.

Performance Standard. PUI will demonstrate ability to act as aircraft commander during hoist operations.

Prerequisite. H2PX-6200, SAR-3308

SAR-3302 1.5 180 B,R 1 UH-1/HH-1N A D

Goal. Practice combined rappel and hoist operations.

Requirement. Perform a minimum of two full evolutions.

Discuss: Procedures for combined rappel and hoist operations.

Review

Combined rappel and hoist operations as dictated by local geographical conditions.  
Conduct operations at 75-150 feet AGL in a simple environment  
Emphasize altitude, drift, and yaw control  
Local area navigation

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappel and hoist operations.

Prerequisite. SAR-3300, SAR-3301

SAR-3303 1.5 180 B,R 1 UH-1/HH-1N A N

Goal. Introduce combined rappel and hoist operations at night.

Requirement. Perform a minimum of 2 hoist evolutions.

Discuss: Illumination techniques including standoff lighting.

Review

Combined rappel and hoist operations as dictated by local geographical conditions  
Conduct operations at 75-150 feet AGL in a simple terrain

Emphasize altitude, drift, and yaw control  
Review local area navigation

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappel and hoist operations at night.

Prerequisite. SAR-3302, SAR-3308, SAR-3310

SAR-3304 1.5 \* B 1 UH-1/HH-1N A D

Goal. Introduce rappel and hoist operations in rough terrain with PUI at the controls.

Requirement. Perform a minimum of 2 evolutions.

Discuss

Mountainous area flying techniques  
Local communications procedures  
Factors affecting rappel & hoist maneuvers in rough terrain.

Introduce

Rappel & hoist techniques in mountainous and very confined areas (including ravines & pinnacles where practical)  
Conduct operations at 75-150 feet AGL, simulating realistic conditions while emphasizing altitude, drift, and yaw control

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappel and hoist operations in rough terrain.

Prerequisite. SAR-3303, SAR-3308

SAR-3305 1.5 \* B 1 UH-1/HH-1N A N

Goal. Introduce rappel and hoist operations in rough terrain at night with PUI at the controls.

Requirement. Perform a minimum of 2 evolutions.

Discuss

Mountainous area flying techniques  
Local communications procedures  
Factors affecting rappel & hoist maneuvers in rough terrain.  
Vertigo  
Rig zone lighting techniques

Introduce

Rappel & hoist techniques in mountainous and very confined areas (including ravines & pinnacles where practical)  
Conduct operations at 75-150 feet AGL, simulating realistic conditions while emphasizing altitude, drift, and yaw control

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappel and hoist operations in rough terrain at night.

Prerequisite. SAR-3304, SAR-3310

SAR-3306 1.5 30 B,R 1 UH-1/HH-1N A D

Goal. Practice rappel and hoist operations in rough terrain.

Requirement. Perform a minimum of 2 evolutions.

Review

Rappel & hoist techniques in mountainous and very confined areas (including ravines & pinnacles where practical)  
Conduct operations at 75-150 feet AGL, simulating realistic conditions while emphasizing altitude, drift, and yaw control  
One skid landings  
Slope landings  
Minimum rotor clearance approaches  
Power checks

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappel and hoist operations in rough terrain.

Prerequisite. SAR-3304

SAR-3307 1.5 30 B,R 1 UH-1/HH-1N A N

Goal. Practice rappel and hoist operations in rough terrain at night.

Requirement. Perform a minimum of 2 evolutions.

Review

Short haul emergency procedures  
Rappel and short haul operations in simple terrain as required  
Emphasize altitude, drift, and yaw control.

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappel and hoist operations in rough terrain.

Prerequisite. SAR-3306

SAR-3308 1.5 180 B 1 UH-1/HH-1N A D

Goal. Introduce rappel and short haul operations with PUI at the controls.

Requirement. Perform a minimum of 2 evolutions.

Discuss: Short haul emergency procedures.

Introduce

Rappel and short haul operations in simple terrain  
Emphasize altitude, drift, and yaw control

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappel and short haul operations.

Prerequisite. SAR-3302

SAR-3309 1.5 30 B,R 1 UH-1/HH-1N A D

Goal. Practice rappel and short haul operations in rough terrain.

Requirement. Review SAR 3308 in rough terrain.

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappel and short haul operations in rough terrain.

Prerequisite. SAR-3308

SAR-3310 1.5 180 B 1 UH-1/HH-1N A N

Goal. Introduce rappel and short haul operations at night with PUI at the controls.

Requirement.

Discuss: Short haul emergency procedures at night

Introduce

Rappel and short haul operations in a simple terrain at night  
Emphasize altitude, drift, and yaw control.

Performance Standard. PUI will demonstrate ability to act as aircraft commander during rappel and hoist operations at night. PUI will accomplish at least 2 evolutions as acting SHC while PAC from right seat.

Prerequisite. SAR-3308

SAR-3311    1.5    30    B,R                    1            UH-1/HH-1N    A    N

Goal. Practice rappel and short haul operations in rough terrain at night.

Requirement

Discuss: Short haul emergency procedures in rough terrain at night.

Review

Rappel and short haul operations in rough terrain at night  
Emphasize altitude, drift, and yaw control

Performance Standard

PUI will demonstrate ability to act as aircraft commander during  
rappel and short haul operations in rough terrain at night  
PUI will accomplish at least 2 evolutions as acting SHC while PAC  
from right seat.

Prerequisite. SAR-3310

SAR-3312    1.5    \*            B,R                    1            UH-1/HH-1N    A    D

Goal. Practice all SAR procedures during a simulated SAR scenario.

Requirement.

Discuss

Search pattern types, search methods and techniques  
Air ambulance procedures  
Communications  
Required documentation  
Review: Using a scenario.  
Aerial search patterns  
1 short haul or 1 rappel and hoist evolution  
Communications, navigation, and all other SAR mission areas

Performance Standard. PUI will demonstrate ability to act as aircraft  
commander during a simulated SAR scenario.

Prerequisite. SAR-3309

SAR-3313    1.5    \*            B,R                    1            UH-1/HH-1N    A    N

Goal. Practice all SAR procedures during a simulated SAR scenario at night.

Requirement

Discuss

Search pattern types  
Air ambulance procedures  
Communications  
Required documentation

Review: Using a scenario.

Practice aerial search patterns  
1 short haul or 1 rappel and hoist evolution  
Communications, navigation, and all other SAR mission areas

Performance Standard. PUI will demonstrate ability to act as aircraft  
commander during a simulated SAR scenario at night.

Prerequisite. SAR-3312, SAR-3311

210. CORE PLUS TRAINING (4000 PHASE)

1. General. At least one pilot in the flight shall be a designated section leader.

2. FORM

- a. Purpose. To provide the SRU pilots capable of flying a unit mission while flying formation.
- b. Crew Requirements. IP(SL)/PUI/CC

FORM 4100 1.5 365 B,R 2 UH-1/HH-1N A (N)

Goal. Review formation procedures and maneuvers.

Requirement

Review

- Section takeoffs
- Parade position
- Parade turns
- Climbs and descents
- Cross-over
- Break-up & rendezvous'
- Overruns
- Lead changes
- Section landings
- Cruise position
- Scouting line

Performance Standard. PUI should demonstrate the ability to safely execute all formation maneuvers.

Prerequisite. FAM-2100, CAL-2500

211. INSTRUCTOR TRAINING (5000 PHASE)

1. General

- a. An IUT will be qualified to instruct all flights in a particular stage of training once he has completed the corresponding IUT stage flight.
- b. Techniques of instruction and standardization will be stressed on all IUT flights. More emphasis should be placed on discussion of standardization criteria and proper procedures than on the actual flying portion of each IUT flight.
- c. The IP will play the role of the PUI and the IUT will instruct to the greatest extent possible on all IUT flights.
- d. Night System Instructor (NSI) or Night System SAR Instructor (NSSI) training will be conducted per the MAWTS-1 Course Catalog.

2. Stages

- SAR Instructor Pilot (SIP)
- Night Systems SAR Instructor (NSSI)

3. SIP

- a. Purpose. To designate qualified SHCs as daytime SAR Instructor Pilots.
- b. Crew Requirements. IUT/IP (IUT/IP/CC/IFMT for IUT-5102,5102)

IUT 5100 1.0 \* B,R E 1 UH-1/HH-1N A D

Goal. Prepare the IUT to instruct day FAM/INST/NAV/CAL stage flights.

Requirement

Discuss

Procedures for all FAM/INST/NAV/CAL maneuvers  
Standardization criteria  
Safety parameters for each

Review. All FAM/INST/NAV/CAL maneuvers with emphasis on appropriate safety margins.

Performance Standard. IUT should demonstrate the ability to competently instruct FAM/INST/NAV/CAL stage flights.

Prerequisite. SHCX-6402

IUT 5101 1.0 \* B,R E 1 UH-1/HH-1N A D

Goal. Qualify the IUT to instruct day SAR stage flights.

Requirement

Discuss

Procedures for all day technical maneuvers  
Standardization criteria  
Safety parameters for each

Review. All day technical maneuvers with emphasis on appropriate safety margins.

Performance Standard. IUT should demonstrate the ability to competently instruct day technical stage flights.

Prerequisite. IUT-5100

IUT 5102 1.0 \* B,R E 1 UH-1/HH-1N A N

Goal. Qualify the IUT to instruct night SAR stage flights.

Requirement

Discuss

Procedures for all night technical maneuvers  
Standardization criteria  
Safety parameters for each

Review. All night technical maneuvers with emphasis on appropriate safety margins.

Performance Standard. IUT should demonstrate the ability to competently instruct night technical stage flights.

Prerequisite. IUT-5101

4. NSSI

- a. Purpose. To designate qualified SHCs as Night Systems SAR Instructors.
- b. General. Flights will be flown IAW the MAWTS-1 course catalog.
- c. Crew Requirements. NSI/IUT/CC

NS-5200 1.5 \* B,R E 1 UH-1/HH-1N A NS

Goal. See MAWTS-1 UH-1N Course Catalog Chapter 3 Event NS-550

NS-5201 1.5 \* B,R E 1 UH-1/HH-1N A NS

Goal. MAWTS-1 UH-1N Course Catalog Chapter 3 Event NS-551

NS-5202      1.5      \*      B,R      E      1      UH-1/HH-1N      A      NS

Goal. MAWTS-1 UH-1N Course Catalog Chapter 3 Event NS-552E

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

1. Purpose to outline the requirements for qualifications, designations, certifications, and flight leadership.
2. General
  - a. Once the flight to attain the qualification/designation is complete, a letter from the squadron commanding officer awarding the qualification/designation shall be placed in the NATOPS and IPR before that qualification/designation can be utilized.
  - b. Completion of the RQRD-6100 sortie meets the requirements for the PUI to be instrument qualified. At the discretion of the squadron commanding officer a letter designating the PUI as Instrument qualified shall be placed in the NATOPS jacket and IPR.
  - c. Completion of the RQRD-6101 sortie meets the requirements for the PUI to be NATOPS qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as NATOPS qualified shall be placed in the NATOPS jacket and IPR.
  - d. Completion of FCF stage meets the requirements for the PUI to be eligible for the FCP designation. At the discretion of the squadron commanding officer a letter designating the PUI as an FCP shall be placed in the NATOPS jacket and IPR.
3. Instrument/NATOPS certifications
  - a. Purpose. To certify the PUI as instrument rated and NATOPS qualified in the UH-1Y/HH-1N.
  - b. General
    - (1) Instrument and NATOPS certifications are annual requirements.
    - (2) PUI shall log annual instrument minimum requirements prior to event IAW OPNAVINST 3710.
    - (3) Aircraft shall be configured with an operable NAVAID/TACAN.
  - c. Crew Requirements. As listed at the end of each event.
  - d. Ground/Academic Training. IAW OPNAVINST 3710.7 and NATOPS.

NTPS-6001      2.0      365      B,R      E      Open Book NATOPS Evaluation

Goal. To evaluate airman's knowledge of normal/emergency procedure, systems and aircraft limitation.

Performance Standards. Achieve a grade of qualified IAW NATOPS.

NTPS-6002      1.0      365      B,R      E      Closed Book NATOPS Evaluation

Goal. To evaluate airman's knowledge of normal/emergency procedure, systems and aircraft limitation.

Performance Standards. Achieve a grade of qualified IAW NATOPS.

NTPS-6003      1.0      365      B,R      E      Oral NATOPS Evaluation

Goals

To evaluate airman's knowledge of normal/emergency procedure, systems and aircraft limitation  
The oral examination may be conducted prior to or as part of the flight evaluation

Performance Standards. Achieve a grade of qualified IAW NATOPS.

INST-6004 8.0 365 B,R E Instrument Ground School

Goal. Attend an TYCOM approved instrument ground school per OPNAVINST 3710.7.

Performance Standards. Achieve a grade of qualified IAW OPNAVINST 3710.7.

INST-6005 1.0 365 B,R E Instrument Ground School Exam

Goal. Satisfactorily pass the IGS exam.

RQRD-6100 1.5 365 R E 1 UH-1Y/HH-1N A/S-TEN (N\*)

Goal. OS - Conduct an annual instrument check.

Requirement. Successfully conduct the check IAW applicable directives.

Performance Standards. IAW the NATOPS, MDG and Instrument Flight Manual (IFM).

Prerequisite. IAW OPNAVINST 3710, NTPS-6004, NTPS-6005.

Crew. BIP-IFBM/PUI (QO).

RQRD-6101 1.5 365 R E 1 UH-1Y/HH-1N (N)

Goal. OS - Conduct annual NATOPS check.

Requirement. Successfully conduct the evaluation IAW applicable directives. Recommend that a portion of the NATOPS check be flown at night.

Performance Standards. Conduct flight IAW the UH-1/HH-1N NATOPS Manual.

Prerequisites. IAW NATOPS, NTPS-6001, NTPS-6002, NTPS-6003.

Crew. NI or ANI(NSI required if flown using NVDs)/PUI/QO.

4. Annual Crew Resource Management (CRM) Evaluation

a. Purpose. Conduct annual CRM ground training and flight evaluation.

b. General

(1) Completion of this stage meets the requirements for the annual CRM flight evaluation and ground training.

(2) The CRM-6110 event may be logged in conjunction with any operational or training flight.

(3) CRM training and flight evaluations shall be logged in the individual NATOPS Flight Personnel Training/Qualification Jacket in section II, part C on enclosure.

(4) In addition to Section II part C entries, CRM flight evaluation shall be commented on in the remarks section of the NATOPS evaluation form when the flight is flown in conjunction with RQRD-6101.

(5) Additionally annual CRM flight evaluations shall be documented in the individual aircrew logbooks.

c. Crew Requirements. CRMF (CRMF Designated NSI)

d. Ground/Academic Training. IAW OPNAVINST 1542.7 series.

CRM-6010 N/A 365 B,R E Annual CRM Ground Training

Goal. Receive annual CRM training.

Requirement. IAW OPNAVINST 1542.7 series receive instruction in CRM history, Seven Critical Skills, OPNAVINST 1542.7 series and a T/M specific case study or scenario.

RQRD-6110 0.0 365 B,R E CRM EVAL (NS)

Goal. Discuss CRM principles in general and specifically the CRM requirements required in the unique SAR and AF missions of the SRU. Execute a simulated mission with the requirement that the PUI show an in depth knowledge of CRM skills during the brief, flight, and post flight.

Requirement

Discuss

Decision Making  
Assertiveness  
Mission Analysis  
Communication  
Leadership  
Adaptability/Flexibility  
Situational Awareness

Review. All discussed items in a simulated mission under actual flight conditions.

Performance Standard. Demonstrate capability to competently use all resources available, to include crew, external agencies, weather and mission analysis to operate safely in the unique missions of the Squadron. May be flown in conjunction with NATOPS evaluation.

Prerequisite. CRM-6010.

RQRD-6111 0.5 90 B,R E 1 FTD/UH-1/HH-1N S/A (N)

Goal. Complete a quarterly emergency procedures simulator review. If no simulator is available may be completed on any scheduled flight.

Requirement

The results of the quarterly emergency simulator review (cockpit/cabin drill) will be annotated on the appropriate ATF and may be maintained in the individual's Aircrew Performance Record (APR) or other appropriate location.

These exams/reviews shall be retained for one year based on each aircrew's annual NATOPS evaluation.

Performance Standard. Know all memorized emergency procedures, emergency cockpit egress, and general location of important switches such as Generator, Battery, HYD, TRIM, etc.

5. Functional Check Flight (FCF)

a. Purpose. To introduce and develop proficiency in FCF procedures.

b. General

PUI shall demonstrate an understanding of and proficiency in the maintenance procedures involved in FCFs. PUI will also demonstrate a detailed knowledge of aircraft systems and administrative maintenance procedures.

Aircraft can be FMC or PMC.

PUI will be a PQM prior to FCP 6205.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Selected reading material from OPNAVINST 4790, UH-1N/HH-1N NATOPS, SOPs, and MIMs as designated by the squadron Commanding Officer. PUI must also complete locally generated FCF open and closed-book exams.

FCP-6020 1.0 \* B E FCP Open Book Exam

Goal. Satisfactorily pass the open-book FCP exam.

FCP-6021 1.0 \* B E FCP Closed Book Exam

Goal. Satisfactorily pass the closed-book FCP exam.

SFCP-6200 1.5 \* B E WST/APT//UH-1 S/A D

Goal. RS - Demonstrate/introduce full-card FCF procedures.

Requirement

Discuss

ODO brief procedures  
FCF paperwork process  
ADB contents  
Crew requirements/authorized crewmembers  
Weather requirements  
Testing areas  
QA brief  
FCF profiles  
The proper completion of M-SHARP/NALCOMIS/OOMA paperwork following FCFs  
Emergency procedures during FCFs  
Structural vs. access panels  
Functional ground turn requirements  
The importance of proper preflights and postflights

Demonstrate

All items in the FCF Checklist  
If conducted in an aircraft, demonstrate IMD-HUMS procedures for main/tail rotor track & balance and vibration diagnostics

Performance Standards

IAW NATOPS, OPNAVINST 4790, and local SOP  
PUI must demonstrate familiarity with systems, FCF checklists, procedures, and maneuvers.

Prerequisites. DESG-6300, FCP-6020, and readings.

Crew. FCP/PUI/(CC).

FCP-6201 1.5 \* B E 1 UH-1/HH-1N A D

Goal. Demonstrate/introduce ground and in-flight FCF procedures.

Requirement

Discuss. All items in the FCF checklist.Demonstrate/Introduce  
Preflight preparation for ground work  
Purpose of ground power assurance, engine rigging and trim adjustments  
FGT requirements, and safe for flight items  
In-flight procedures

Performance Standards. IAW NATOPS, PUI must demonstrate familiarity with FCF checklists and procedures.

Prerequisites. SFCF-6200.

Crew. BIP-FCP/PUI

FCP-6202 1.5 \* B E 1 H-1N/HH-1N A D

Goal. Introduce ground and in-flight FCF procedures.

Requirement

Discuss. Power assurance, droop compensation, SCAS & autorotation RPMs

Demonstrate/Review. All ground and in-flight FCF procedures outlined in NATOPS.

Performance Standards. IAW NATOPS, PUI must demonstrate familiarity with FCF checklists, procedures, and maneuvers.

Prerequisites. FCF-6201

Crew. BIP-FCP/PUI

FCP-6203 1.5 \* B,R E 1 H-1N/HH-1N A D

Goal. RS - Review FCF procedures.

Requirement

Discuss. Hydraulic samples, functional check flight (FCF) vs. functional ground turn (FGT) procedures and requirements, daily and turnaround inspections.

Review. All ground and in-flight FCF procedures outlined in NATOPS PUI shall conduct the ground, hover, and in flight FCF procedures with supervision from IP.

Performance Standards. IAW NATOPS, PUI shall demonstrate proficiency in all FCF checklists, procedures, and maneuvers.

Prerequisites. FCF-6202.

Crew. BIP-FCP/PUI.

FCP-6204 1.5 \* B,R E 1 H-1N/HH-1N A D

Goal. RS - Introduce main rotor and tail rotor track and balance/vibanal procedures.

Requirement

Discuss/Introduce

Operation of 8500 Vase gear and subsequent adjustments. Length of instruction will be at the IP's discretion once learning objectives are met.

Difference between main rotor track and balance and vibanal and when they are required, relationship between track and balance, types of adjustments to rotor head (PCL, weight, sweep and trim tab), blade scope and its effect on track and balance, proper positioning of gear on aircraft, methods of determining adjustments to rotor head, factors used when calculating autorotation RPM (gross weight and DA), relationship between flat pitch torque and autorotation RPM.

Difference between tail rotor track and balance and vib analysis and when they are required, relationship between track and balance, types of adjustments to tail rotor (PCL and weight), safe for flight items, definitions of chordwise and spanwise adjustments, proper positioning of gear on aircraft and methods of determining adjustments to tail rotor.

Introduce. Main rotor and tail rotor track and balance/vib analysis flight profiles and importance.

Performance Standards

IAW NATOPS, PUI shall demonstrate knowledge and comprehension of main rotor track and balance/vib analysis procedures.

PUI must also observe track and balance/vibanal equipment installation and preflight, post-flight results, and subsequent adjustments.

Prerequisites. SFCF-6203.

Crew. BIP-FCP/PUI.

FCP-6205 1.5 \* B,R E 1 H-1N/HH-1N A D

Goal. RS - Conduct FCP evaluation.

Requirement

Review

- QA brief and preflight paperwork requirements
- Full card test profile including ground work, vibration work and flight work
- QA debrief and postflight paperwork requirements
- All previously discussed items

Performance Standards

IAW OPNAVINST 4790, SOPs and MIMs. PUI show proficiency in all FCP checklists, procedures and maneuvers  
The IUT will perform a full card test profile with no assistance from the IP

Prerequisites. FCF-6200-6204, successful completion of the FCP closed book test.

External Syllabus Support. None.

Crew. FCF Standardization Pilot designated by CO.

H2PX-6300 1.5 \* B,R E 1 UH-1N/HH-1N A (N)

Goal. H2P SAR evaluation flight.

Requirement. Review: All previously introduced maneuvers and emergency procedures from entire syllabus with emphasis placed on copilot duties and responsibilities along with effective crew coordination.

Performance Standard. PUI must demonstrate a thorough knowledge of the aircraft systems, emergency procedures, normal operating procedures from the left seat, along with basic search and rescue procedures. Emphasis is placed on copilot responsibilities during all maneuvers.

Prerequisite. 2000 Phase Complete, SAR-3100, SAR-3102

SHCX-6400 1.5 \* B,R E 1 UH-1/HH-1N A D

Goal. Conduct day SHC initial evaluation flight.

Requirement.

Review. During a search and rescue scenario(s)the PUI must demonstrate a thorough knowledge of:

- A/C systems
- A/C capabilities
- A/C limitations
- Emergency procedures
- Working knowledge of the National SAR System
- Thorough knowledge of the local SAR mission

Ability to operate the aircraft in varying rescue procedures. May include a technical evolution (at IPs digression)

Performance Standard. PUI will demonstrate ability to act as aircraft commander during any scenario presented.

Prerequisite. 2000 and 3000 Phases complete

SHCX-6401 1.5 \* B,R E 1 UH-1N/HH-1N A N

Goal. Conduct night portion of initial SHC evaluation flight.

Requirement

Review. During a search and rescue scenario(s) the PUI must demonstrate a thorough knowledge of:

- A/C systems
- A/C capabilities
- A/C limitations
- Emergency procedures
- Working knowledge of the National SAR System
- Thorough knowledge of the local SAR mission
- Ability to operate the aircraft in varying rescue procedures at night. May include a technical evolution (at IPs digression)

Performance Standard. PUI will demonstrate ability to act as aircraft commander during at night with any scenario presented.

Prerequisite. SHCX 6400

SHCX-6402 1.5 365 B,R E 1 UH-1N/HH-1N A (N)

Goal. Conduct annual SHC evaluation flight.

Requirement.

Review:

- SAR procedures
- Emergency procedures
- All maneuvers associated with local SAR mission

Performance Standard. PUI will demonstrate ability to act as aircraft commander during any scenario presented. Conduct at least 1 technical evolution. May be flown in conjunction with annual NATOPs evaluation.

Prerequisite. SHCX-6401

213. AVIATION CAREER PROGRESSION MODEL (8000 PHASE)

1. Purpose

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

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

b. All tactical T/M/S T&R manuals have ACPM training requirements embedded within the progressive training phases, including the flight leadership POI. If not already completed prior to assignment to VMR-1 or a VMR det (C-9, 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.

2. General

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

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

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

214. T&R SYLLABUS MATRIX AND ATTAIN/MAINTAIN TABLES

1. T&R Syllabus Matrix

STAGE	TRNG CODE	# OF A/C	FLT HOURS	REFLY INTERVAL	POI	EVAL	TYPE	TOTAL #	COND	PREREQ	EVENT DESCR	CHAINING	EVENT CONV
<b>CORE SKILL TRAINING (2000 PHASE EVENTS)</b>													
<b>FAMILIARIZATION (FAM)</b>													
FAM	2100		1.5	*	B		A	1	D	6000,6001	FAM Review		200
FAM	2101		1.5	*	B		A	1	N	2100	FAM Review		201
<b>FAM TOTAL</b>		<b>2</b>	<b>3.0</b>										
<b>INSTRUMENTS (INST)</b>													
INST	2200		1.5	*	B		A	1	(N*)	2100	INST Review		210
<b>INST TOTAL</b>		<b>1</b>	<b>1.5</b>										
<b>NAVIGATION (NAV)</b>													
NAV	2300		1.5	*	B,R		A	1	D	2100	Area FAM		220
NAV	2301		1.5	*	B,R		A	1	N	2101,2300	Night Area FAM		221
NAV	2302		2.0	*	B,R		A	1	D	2301	Remote Area NAV		330
NAV	2303		2.0	*	B,R		A	1	N	2101,2302	Night Remote Area NAV		331
<b>NAV TOTAL</b>		<b>4</b>	<b>7.0</b>										
<b>NIGHT SYSTEMS (NS)</b>													
NS	2400		1.5	*	B		A	1	NS	2101	HHL NVD FAM		620
NS	2401		1.5	*	B		A	1	NS	2400,2500	HHL CALs/MALs		621, 622
NS	2402		1.5	*	B		A	1	NS	2401	HHL Review		623
NS	2403		1.5	*	B,R		A	1	NS	2402	HHL Eval		624
NS	2404		1.5	*	B		A	1	NS	2403	LLL FAM		630
NS	2405		1.5	90	B,R		A	1	NS	2404	LLL CALs/MALs		631
NS	2406		1.5	*	B,R		A	1	NS	2405	LLL Eval		632
<b>NS TOTAL</b>		<b>7</b>	<b>10.5</b>										
<b>CONFINED AREA LANDINGS (CAL)</b>													
CAL	2500		1.5	*	B		A	1	(N)	2100	CALs/MALs Practice		300, 301
<b>CAL TOTAL</b>		<b>1</b>	<b>1.5</b>										
<b>MISSION SKILL TRAINING (3000 PHASE EVENTS)</b>													
<b>SEARCH AND RESCUE (SAR)</b>													
SAR	3100		1.5	*	B		A	1	D	2500	SAR Intro		230
SAR	3101		1.5	*	B		A	1	D	2500	Rappel, Hoist, Short Haul Intro		231
SAR	3102		1.5	180	B,R		A	1	N	3101	Night Review		232
<b>SAR TOTAL</b>		<b>3</b>	<b>4.5</b>										
<b>ASSAULT SUPPORT (AS)</b>													
AS	3500			730	B,R					2100,2101,2200	Assault Support		
<b>AS TOTAL</b>		<b>1</b>	<b>0.0</b>										
<b>AERIAL FIREFIGHTING (AF)</b>													
AF	3200		2.0	*	B,R		A	1	D	6200	AF 1		
AF	3201		2.0	180	B,R		A	1	D	3200	AF 2		
<b>AF TOTAL</b>		<b>2</b>	<b>4.0</b>										
<b>SEARCH AND RESCUE (SAR)</b>													
SAR	3300		1.5	*	B		A	1	D	6200	Rappelling Ops		310
SAR	3301		1.5	*	B		A	1	D	3308,6200	Hoist Ops		311
SAR	3302		1.5	180	B,R		A	1	D	3300,3301	Review Rappel and Hoist Ops		312
SAR	3303		1.5	180	B,R		A	1	N	3302,3308,3310	Night Rappel and Hoist Ops		313

STAGE	TRNG CODE	# OF A/C	FLT HOURS	REFLY INTERVAL	POI	EVAL	TYPE	TOTAL #	COND	PREREQ	EVENT DESCR	CHAINING	EVENT CONV
SAR	3304		1.5	*	B		A	1	D	3303,3308	Rough Terrain Rappel and Hoist Ops		314
SAR	3305		1.5	*	B		A	1	N	3304,3310	Night Rough Terrain Rappel and Hoist Ops		315
SAR	3306		1.5	30	B,R		A	1	D	3304	Rough Terrain Rappel and Hoist Ops Review		316
SAR	3307		1.5	30	B,R		A	1	N	3306	Review Night Rough Terrain Ops		317
SAR	3308		1.5	180	B		A	1	D	3302	Rappel and Short Haul Ops Intro		318
SAR	3309		1.5	30	B,R		A	1	D	3308	Rappel and Short Haul in Rough Terrain		319
SAR	3310		1.5	180	B		A	1	N	3308	Night Rappel and Short Haul Ops Intro		320
SAR	3311		1.5	30	B,R		A	1	N	3310	Night Rappel and Short Haul Ops Practice		321
SAR	3312		1.5	*	B,R		A	1	D	3309	Simulated SAR Scenario		322
SAR	3313		1.5	*	B,R		A	1	N	3311,3312	Night Simulated SAR Scenario		323
<b>SAR TOTAL</b>		<b>14</b>	<b>21.0</b>										
<b>CORE PLUS TRAINING (4000 PHASE EVENTS)</b>													
<b>FORMATION (FORM)</b>													
FORM	4100	1	1.5	365	B,R		A	2	(N)	2100,2500	FORM Review		610
<b>FORM TOTAL</b>		<b>1</b>	<b>1.5</b>										
<b>INSTRUCTOR TRAINING (5000 PHASE EVENTS)</b>													
<b>SAR INSTRUCTOR</b>													
IUT	5100	1	1.0	*	B,R	E	A	1	D	6402	FAM/INST Qual		500
IUT	5101	1	1.0	*	B,R	E	A	1	D	5100	NAV/CAL Qual		501
IUT	5102	1	1.0	*	B,R	E	A	1	N	5101	SAR Qual		502
<b>SAR INST TOTAL</b>		<b>3</b>	<b>3.0</b>										
<b>NSSI</b>													
NSSI	5200	1	1.5	*	B,R	E	A	1	NS	6402	NSSI Qual		
NSSI	5201	1	1.5	*	B,R	E	A	1	NS	5200	NSSI Qual		
NSSI	5202	1	1.5	*	B,R	E	A	1	NS	5201	NSSI Qual		
<b>NSSI TOTAL</b>		<b>3</b>	<b>4.5</b>										
<b>REQUIREMENT, QUALIFICATIONS, AND DESIGNATIONS (RQD)</b>													
<b>ACADEMICS (ACAD)</b>													
NTPS	6001			365	B,R	E					NATOPS Open Book		
NTPS	6002			365	B,R	E				6001	NATOPS Closed Book		
NTPS	6003			365	B,R	E				6001,6002	NATOPS Oral Evaluation		
NTPS	6004			365	B,R						Instrument Ground School		

STAGE	TRNG CODE	# OF A/C	FLT HOURS	REFLY INTERVAL	POI	EVAL	TYPE	TOTAL #	COND	PREREQ	EVENT DESCR	CHAINING	EVENT CONV
NTPS	6005			365	B,R	E					Instrument Ground School Exam		
CRM	6010			365	B,R	E					Annual CRM Training		
FCP	6020			*	B,R	E					FCP Open Book Exam		
FCP	6021			*	B,R	E					FCP Closed Book Exam		
<b>NATOPS REQUIREMENTS (NATOPS)</b>													
RQRD	6100	1	1.5	365	B,R	E	A	1	(N)	6001,6002,6003	Annual NATOPS Check		
RQRD	6101	1	1.5	365	B,R	E	A	1	(N)	6004,6005	Annual Instrument Check		
CRM	6110			365	B,R	E	A	1	(N)	6010	Annual CRM Tracking Code		
RQRD	6111	1	0.5	90	B,R	E	A	1	(N)		Quarterly EP Sim Review		
<b>FUNCTIONAL CHECK PILOT (FCP)</b>													
SFCP	6200		1.5	*	B	E	S/A	1	D	6300,6020	FCP DEMO/INTRO		
FCP	6201	1	1.5	*	B	E	A	1	D	6200	FCP DEMO/INTRO		
FCP	6202	1	1.5	*	B	E	A	1	D	6201	INTRO MR TRK/BAL PROCED		
FCP	6203	1	1.5	*	B,R	E	A	1	D	6202	INTRO T/R TRK/BAL		
FCP	6204	1	1.5	*	B,R	E	A	1	D	6203	REVIEW FCF PROCED		
FCP	6205	1	1.5	*	B,R	E	A	1	D	6204,6021	FCP EVALUATION		
<b>COPILOT DESIGNATION FLIGHT (H2PX)</b>													
H2PX	6300	1	1.5	*	B,R	E	A	1	(N)	2000 Phase Complete 3100,3102	H2P SAR Eval		240
<b>SAR HELICOPTER COMMANDER DESIGNATION FLIGHTS (SHCX)</b>													
SHCX	6400	1	1.5	*	B,R	E	A	1	D	2000,3000 Phase Complete	SHC SAR Eval (Day)		401
SHCX	6401	1	1.5	*	B,R	E	A	1	N	6300	SHC SAR Eval (Night)		402
SHCX	6402	1	1.5	365	B,R	E	A	1	(N)	6301	SHC Annual SAR Eval		400
<b>RQD TOTAL</b>		<b>12</b>	<b>18.5</b>										

2. Attain/Maintain Matrix

UH-1Y/HH-1N PILOT ATTAIN/MAINTAIN MATRIX											
T&R DESCRIPTION	T&R EVENT			BASIC POI		REFRESHER POI		MAINTAIN		PREREQUISITE	CHAINING
	STAG E	CODE	RE FLY	STA GE	CODE	STAG E	CODE	STAG E	CODE		
<b>CORE SKILL (2000 PHASE)</b>											
DAY FAM/COURSE RULES	FAM	2100	*		2100			FAM			
NIGHT FAM/COURSE RULES	FAM	2101	*	FAM	2101			FAM		2100	
INST PROC	INST	2200	*	INST	2200	INST		INST			
DAY LOCAL AREA	NAV	2300	*		2300		2300			2100	
NIGHT LOCAL AREA	NAV	2301	*	NAV	2301	NAV	2301	NAV		2101,2300	
DAY REMOTE	NAV	2302	*		2302		2302			2301	
NIGHT REMOTE	NAV	2303	*		2303		2303			2101,2302	
HLL LOW WORK	NS	2400	*		2400					2101	
HLL CAL/MALs	NS	2401	*		2401					2400,2500	
HLL REV	NS	2402	*		2402					2401	
HLL EVAL	NS	2403	*	NS	2403	NS	2403	NS		2402	
LLL LOW WORK	NS	2404	*		2404					2403	
LLL CALs/MALs	NS	2405	90		2405		2405		2405	2404	
LLL SAR EVAL	NS	2406	*		2406		2406			2405	
DAY/NIGHT CAL/MAL	CAL	2500	*	CAL	2500	CAL		CAL		2100,2101	
<b>MISSION SKILL (3000 PHASE)</b>											
CP INTRO SAR DAY	SAR	3100	*		3100					2500	
CP RAPPEL/HOIST/S HORT HAUL DAY	SAR	3101	*	SAR	3101	SAR		SAR		2500	
CP RAPPEL/HOIST/S HORT HAUL NIGHT	SAR	3102	180		3102		3102		3102	3101	
ASSAULT SUPPORT	AS	3500	730	AS	3500	AS	3500	AS		2100,2101 2200	
INTRO AF	AF	3200	*	AF	3200	AF	3200	AF		6200	
REV AF	AF	3201	180		3201		3201		3201	3200	
RAPPEL OPS DAY	SAR	3300	*		3300					6200	
HOIST OPS DAY	SAR	3301	*		3301					3308,6200	
REV RAPPEL & HOIST DAY	SAR	3302	180		3302		3302			3300,3301	
NIGHT RAPPEL & HOIST	SAR	3303	180		3303		3303			3302,3308, 3310	3302
RAPPEL & HOIST ROUGH TERRAIN DAY	SAR	3304	*		3304					3303,3308	3302
RAPPEL & HOIST ROUGH TERRAIN NIGHT	SAR	3305	*	SAR	3305	SAR		SAR		3304,3310	3303,3302
REV RAPPEL & HOIST ROUGH TERRAIN DAY	SAR	3306	30		3306		3306			3304	3302
REV RAPPEL & HOIST ROUGH TERRAIN NIGHT	SAR	3307	30		3307		3307		3307	3306	3306,3303,3302
INTRO RAPPEL & SHORT HAUL DAY	SAR	3308	180		3308					3302	
REVIEW RAPPEL & SHORT HAUL ROUGH TERRAIN DAY	SAR	3309	30		3309		3309			3308	3308

NAVMAC 3500.91  
18 Mar 11

UH-1Y/HH-1N PILOT ATTAIN/MAINTAIN MATRIX											
T&R DESCRIPTION	T&R EVENT			BASIC POI		REFRESHER POI		MAINTAIN		PREREQUISITE	CHAINING
	STAG E	CODE	RE FLY	STA GE	CODE	STAG E	CODE	STAG E	CODE		
INTRO RAPPEL & SHORT HAUL NIGHT	SAR	3310	180		3310					3308	3309,3308,3307,3306,3303, 3302
REV RAPPEL & SHORT HAUL NIGHT	SAR	3311	30		3311		3311		3311	3310	3310,3309,3308
SAR EXERCISE DAY	SAR	3312	*		3312		3312			3309	
SAR EXERCISE NIGHT	SAR	3313	*		3313		3313			3311,3312	
<b>CORE PLUS (4000 PHASE)</b>											
REV FORM	FORM	4100	365	FOR M	4100				4100	2100,2500 2400~NS	

CHAPTER 3  
UH-1/HH-1N CREW CHIEF

	<u>PARAGRAPH</u>	<u>PAGE</u>
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS.....	300	3- 3
TRAINING PROGRESSION MODEL.....	301	3- 3
INDIVIDUAL CORE SKILL PROFICIENCY REQUIREMENTS.....	302	3-3
INDIVIDUAL MISSION SKILL PROFICIENCY REQUIREMENTS.....	303	3-4
INDIVIDUAL CORE PLUS SKILL PROFICIENCY REQUIREMENTS.....	304	3-4
CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS .....	305	3-5
PROGRAMS OF INSTRUCTION.....	306	3- 5
ACADEMIC TRAINING .....	307	3- 5
SYLLABUS NOTES (GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS) .....	308	3-6
CORE SKILL PHASE (2000).....	309	3-8
MISSION SKILL PHASE (3000).....	310	3-15
CORE PLUS PHASE (4000).....	311	3-21
INSTRUCTOR TRAINING PHASE (5000).....	312	3-22
REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS (RQD) (6000).....	313	3- 23
T&R SYLLABUS MATRIX AND ATTAIN/MAINTAIN TABLES.....	314	3-25

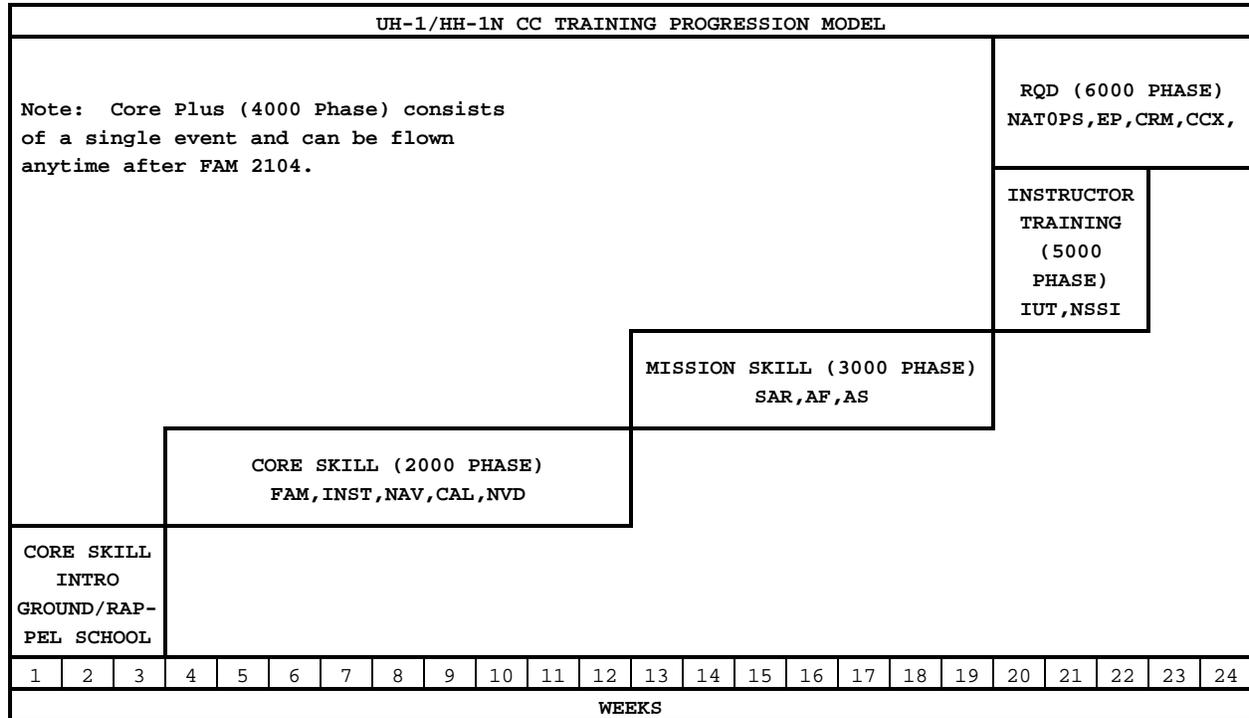
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CHAPTER 3

UH-1/HH-1N CREW CHIEF

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

301. TRAINING PROGRESSION MODEL. This model represents the recommended training progression for a Crew Chief (6174). The SRU should use the model as a point of departure to generate individual training plans.



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

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

YUMA SRU, CREW CHIEF			
Individual Core Skill Proficiency Attain Table (2000 PHASE)			
FAM	NAV	CAL	NS
2100	2300R	2400	2500
2101	2301R	2401	2501
2102	2302R	2402	2502
2103R	2303R	2403R	2503
2104R		2404	2504R
		2405R	2505R
		2406R	2506R
		2407R	2507R

An R Suffix and Grey highlight = Refresher

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

**\*NOTE\***

Specific maintain events are selected by community SMEs to update corresponding skills in the Attain table. Maintaining proficiency in these select events will ensure the individual will never go delinquent in that corresponding skill in the Attain table.

YUMA SRU, CREW CHIEF			
Individual Core Skill Proficiency Maintain Table (2000 PHASE)			
FAM	NAV	CAL	NS
		2407R	2506R
An R Suffix and Grey highlight = Refresher			

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

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

YUMA SRU, CREW CHIEF				
INDIVIDUAL MISSION SKILL PROFICIENCY ATTAIN TABLE (3000 PHASE)				
SAR			AF	AS
3100	3101	3102	3200	3300R
3103	3104R	3105	3201R	
3106	3107R	3108R		
3109R	3110R	3111R		
3112R	3113R	3114R		
3115R	3116R	3117R		
An R Suffix and Grey highlight = Refresher				

2. Events Required to Maintain Individual MSP. To maintain MSP an individual must maintain proficiency in all 3000 phase T&R events listed for that Mission Skill. Once attained, MSP is maintained via NATOPS and OPNAV 3710.7 requirements, as well as Squadron SOPs.

YUMA SRU, CREW CHIEF				
INDIVIDUAL MISSION SKILL PROFICIENCY MAINTAIN TABLE (3000 PHASE)				
SAR			AF	AS
3104R	3115R		3201R	3330R
An R Prefix and Grey highlight = Refresher				

304. INDIVIDUAL CORE PLUS SKILL PROFICIENCY (CPSP)REQUIREMENTS. A Core Plus crew consists of individuals representing each crew position who have achieved and currently maintain Individual CPSP. To be considered proficient in a Mission Skill an individual must attain and maintain proficiency in Core Plus events as delineated below.

YUMA SRU CREW CHIEF
ATTAIN AND MAINTAIN CORE PLUS SKILL TABLE
(4000 PHASE)
FORM
4100R

305. CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS. The tables below delineate T&R events required to be completed to attain proficiency, and initial qualifications and designations. In addition to event requirements, all stage lectures, briefs, squadron training, prerequisites and other criteria shall be completed prior to completing final events. Qualification and Designation letters signed by the Commanding Officer shall be placed in Individual Performance Records (IPR) and NATOPS jackets. 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.

YUMA SRU, CREW CHIEF	
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (R,C,Q,& D) (6000 PHASE)	
R,C,Q,& D	EVENT REQUIREMENTS
<b>QUALIFICATIONS</b>	
Night Systems Qualification	NS-2500 THRU NS-2507
<b>DESIGNATIONS</b>	
SAR Crew Chief	CCX 6200, 6201
SAR Crew Chief Instructor	IUT-5100, 5101
Night Systems SAR Instructor	NSSI 5200, 5201, 5202

306. PROGRAMS OF INSTRUCTION. Timeframes referenced below indicate the approximate amount of time required to complete a specific phase. They are not meant to indicate cumulative time required to achieve MSP.

1. PROGRAMS OF INSTRUCTION (POI) FOR BASIC CREW CHIEF

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-2	Rappel School	HSC-3
2-4	Ground School	SRU
16-22	Search and Rescue Training	SRU

2. POI FOR CONVERSION AND REFRESHER CREW CHIEF

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-2	Ground School	SRU
2-4	Rappel School	HSC-3
12-20	Search and Rescue Training	SRU

3. POI FOR INSTRUCTOR TRAINING

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1	Instructor Training	SRU

307. ACADEMIC TRAINING

1. Academic training shall be conducted for each phase/stage of the syllabus as applicable. Where indicated, standardized academic training materials exist and may be obtained from the sponsoring activity.

2. Academic courses of instruction available to complete the syllabus are listed below:

<u>COURSE</u>	<u>ACTIVITY</u>
Publications and related directives	SRU
Survival and First Aid	SRU
Communication procedures	SRU
Aircrew coordination/responsibilities	SRU
Safety	SRU
Search and Rescue Equipment	SRU
Emergency Procedures	SRU
Local Course Rules	SRU

308. SYLLABUS NOTES (GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS)

1. General

a. When assigned to a UH-1/HH-1N SAR billet, a designated Crew Chief (6174) who holds a current UH-1N NATOPS qualification shall complete the refresher syllabus.

b. When assigned to a UH-1/HH-1N (SAR) billet, a designated Crew Chief (MOS 6174) who previously held a UH-1/HH-1N (SAR) qualification shall complete the refresher syllabus.

c. When assigned to a UH-1/HH-1N (SAR) billet, designated Crew Chiefs (MOS 6172, 6173, 6175) shall complete the basic syllabus along with appropriate plane captain prerequisites.

d. CCUI should complete all stages within each phase before progressing to the next phase.

e. An ATF is required for any initial event completed by a Basic or Refresher Aircrew. 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.

f. Compliance with the written flight description is mandatory for syllabus event completion. CRM will be stressed and evaluated throughout each stage.

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

ENVIRONMENTAL CONDITIONS	
Code	Meaning
D	Shall be flown or conducted during day.
N	Shall be flown or conducted at night (using available night vision devices or flown unaided).
(N)	May be flown or conducted day or night; if at night, available night vision devices may be used or flown unaided.
NS	Shall be flown or conducted at night using available night vision devices.
(NS)	May be flown or conducted day or night; if at night, available night vision devices shall be used.
N*	Shall be flown or conducted unaided at night.
(N*)	May be flown or conducted at night; if at night, shall be flown unaided.
Note - If the event is to be flown in the simulator the Simulator Instructor shall set the desired environmental conditions for the event.	

2. T&R Phases

a. The 2000 phase is considered to be Core Skill training. Completion of the 2000 phase should provide the aircrew with the prerequisites required to execute SAR Mission Skills on all SAR missions.

b. The 3000 phase is considered to be Mission Skill training. Completion of the 3000 phase ensures aircrew are trained to execute all SUR missions as a qualified Crew Chief.

c. The 4000 phase is considered Core Plus training. This phase contains

unique training standards applicable to formation flying.

d. The 5000 phase contains instructor workup and evaluation certification syllabus events.

e. The 6000 phase contains requirements, qualifications and designations syllabus events.

3. Sequence. When practical, training should be accomplished by flying events within a stage in sequence and stages within a phase in sequence.

4. Definitions

a. Discuss

(1) The CCI shall discuss a procedure or maneuver during the brief, inflight, or debrief.

(2) The CCUI is responsible for knowledge of the applicable procedures prior to the briefing.

b. Demonstrate

(1) The CCI performs the maneuver with accompanying description.

(2) The CCUI observes the maneuver and is responsible for the knowledge of the procedures prior to the sortie.

c. Introduce

(1) At his option, the CCI may perform the maneuver with an accompanying description, or he may coach the CCUI through the maneuver without demonstration.

(2) The CCUI shall perform the maneuver with coaching as necessary and is responsible for knowledge of the procedures prior to the sortie.

d. Review

(1) The CCI observes and grades the maneuver without coaching the CCUI. An airborne critique of CCUI performance is at the option of the instructor.

(2) The CCUI is expected to perform the maneuver without coaching and devoid of procedural error at a level acceptable to warrant progress into the next stage of training.

5. Event Completion. 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, in the instructor's opinion, the CCUI does not adequately perform a required event, then all or parts of the sortie shall be repeated until adequate performance is demonstrated. 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.



Emergency procedures  
Aircraft limitations  
Passenger briefing  
Flight characteristics  
Performance Standard. CCUI will demonstrate familiarity with  
preflight, post flight and general in-flight procedures.  
Prerequisite. FAM-2100

FAM-2102    1.5    \*        B                    1        UH-1/HH-1N    A    D

Goal. Familiarize the CCUI with UH-1/HH-1N emergency procedures.  
Requirement

Discuss

CC responsibilities  
Emergency procedures

Introduce: Simulated in-flight emergencies

Review

All previous FAM procedures  
CC responsibilities  
Lookout procedures  
Takeoff/landing procedures

Performance Standard. CCUI will demonstrate familiarity with  
preflight, post flight, general rescue CC in-flight procedures and in-  
flight emergency procedures.  
Prerequisite. FAM-2101

FAM-2103    1.5    \*        B,R                    1        UH-1/HH-1N    A    N

Goal. Familiarize the CCUI with normal procedures at night.

Requirement. Review: FAM 2101 at night.

Performance Standard. CCUI will demonstrate competent knowledge of CC  
procedures during pre/post flight, and normal in-flight maneuvers.

Prerequisite. FAM-2102

FAM-2104    1.5    \*        B,R                    1        UH-1/HH-1N    A    N

Goal. Familiarize the CCUI with emergency procedures at night.

Requirement. Review: FAM 2102 at night.

Performance Standard. CCUI will demonstrate competence with  
preflight, post flight and general in-flight responsibilities,  
including during emergency procedures at night.

Prerequisite. FAM-2103

### 3. Navigation (NAV)

a. Purpose. To become familiar with navigation in the local operating  
area during day and night operations.

b. General. Navigational flights should be flown with emphasis on  
challenges encountered in mountainous, desert navigation and the ability to  
navigate to and from hospitals in the area.

c. Crew Requirement. CCUI/CCI (CCI must be an NSSI or NSI)

NAV-2300    1.5    \*        B,R                    1        UH-1/HH-1N    A    D

Goal. Introduce the CCUI to navigational procedures in the local  
operating area.

Requirement.

Discuss

Maps, charts and other navigational aids in the local  
operating area

Effects of local weather and other variables on navigation  
Introduce  
Hospitals, roads and landmarks in the local operating area  
Training sites  
Capabilities, limitations and use of hand held GPS  
Performance Standard. CCUI should have general knowledge of local operating area.  
Prerequisite. FAM-2101

NAV-2301 1.5 \* B,R 1 UH-1/HH-1N A N

Goal. Repeat NAV-2300 at night.  
Requirement.

Brief/Discuss  
Navigational aids/checkpoints in the local operating area with regard to the night environment.  
Effects of local weather and other variables on navigation  
Introduce  
Hospitals, roads and landmarks in the local operating area at night  
Training sites at night  
Performance Standard. CCUI should be able to point out major navigational landmarks in local operating area and remain oriented at night.  
Prerequisite. FAM-2104, NAV-2300

NAV-2302 2.0 \* B,R 1 UH-1/HH-1N A D

Goal. Familiarize the CCUI with remote portions of the unit's area of responsibility and/or locations outside the general area where training flights are frequently conducted during daylight. Focus should be on outlying fields/fuel destinations and hospitals.  
Requirement  
Review: Navigate to remote locations as dictated by local unit requirements.  
Performance Standard. CCUI will demonstrate general knowledge of remote portions of area of responsibility or locations outside area.  
Prerequisite. NAV-2300

NAV-2303 2.0 \* B,R 1 UH-1/HH-1N A N

Goal. Familiarize the CCUI with remote portions of the unit's area of responsibility or locations outside the area where missions are frequently conducted during night.  
Requirement  
Review: Navigate to remote locations as dictated by local unit requirements at night.  
Performance Standard. CCUI will demonstrate ability to navigate to remote portions of AOR or locations outside area at night.  
Prerequisite. NAV-2302

#### 4. Confined Area Landings (CAL)

a. Purpose. To train CCUI on responsibilities during MALs, CALs, slope landings, and one skid landings. CCUI will also be introduced to and become comfortable with mountainous area flying.

b. General. Emphasis should be placed on CC responsibilities during CAL/MALs in the local AOR.

c. Crew Requirement. CCUI/CCI. (CCI must be an NSSI or NSI)

CAL-2400    1.5    \*    B                    1    UH-1/HH-1N    A    D

Goal. Familiarize CCUI with CAL procedures and mountainous terrain characteristics.

Requirement

Discuss

Mountainous wind characteristics

Settling with power

Recognizing power settling

Introduce: Proper clearance techniques and lookout procedures during CALs.

Review: Local CAL site locations by landing in various CALs.

Performance Standard. CCUI will demonstrate a basic knowledge of CC responsibilities while flying in mountainous areas and making CALs.

Prerequisite. FAM-2102

CAL-2401    1.5    \*    B                    1    UH-1/HH-1N    A    D

Goal. Build CCUI's confidence in crew responsibilities during CALs.

Requirement

Discuss: One skid and sloped landing procedures.

Introduce: One skid and sloped landing procedures.

Review: Normal CAL procedures and locations within the local operating area.

Performance Standard. CCUI should understand and perform CC responsibilities during CALs with minimal assistance.

Prerequisite. CAL-2400

CAL-2402    1.5    \*    B                    1    UH-1/HH-1N    A    N

Goal. Familiarize CCUI with CAL operations at night.

Requirement

Discuss

HIGE and HOGE theory and procedures

Zone briefs

Approach and departure routes from CALs

Wave off recognition and procedures.

Introduce

Zone briefs

Approach and departure routes from CALs

Wave off recognition and procedures.

Performance Standard. CCUI should have complete understanding of CC responsibilities during CALs and demonstrate an ability to apply those responsibilities at night.

Prerequisite. CAL-2401

CAL-2403    1.5    180    B,R                    1    UH-1/HH-1N    A    D

Goal. Demonstrated proficiency in responsibilities during sloped and one-skid landings.

Requirement

Discuss

Emergency procedures

Aircraft limitations

Dynamic rollover characteristics

Introduce:

Review: Sloped and one-skid landings.

Performance Standard. CCUI will demonstrate the ability to act without supervision during sloped and one-skid landings.

Prerequisite. CAL-2401



5. Night Systems (NS)

a. Purpose. To provide the ability to safely utilize NVDs while conducting search and rescue operations during hours of darkness under both High Light Level (HLL) conditions and Low Light Level (LLL) conditions.

b. General. The instructor Crew Chief shall be a designated NSI. At the successful completion of this stage the CCUI be NSSQ HLL and LLL. Rappels, hoists, and short hauls shall not be conducted while any crewmember is wearing NVDs.

c. Crew Requirement. CCI/CCUI. (CCI must be an NSSI or NSI)

d. Academic Training. Review the MAWTS-1 NVD manual and the MAWTS-1 Crew Chief course ENLISTED AIRCREW NIGHT VISION TRAINING, prior to conducting NVD flights.

NS-2500 1.5 \* B 1 UH-1/HH-1N A NS

Goal. Introduce NVD low work and pattern work during HLL conditions.  
Requirement

Discuss

Use of NVDs,  
Goggle and de-goggle procedures  
NVD battery failure  
NVD tube failure  
Crew/ cockpit coordination.

Introduce

Taxi  
Low work  
Takeoffs/landings at an unlighted field or remote landing site  
Quick stops  
Slide on landings  
Autorotations (90 degree, 180 degree)  
Single engine failures  
Hovering/taxiing autorotations

Performance Standard. Demonstrate the ability to prepare, don and use NVDs and to resolve battery and tube failures.

Prerequisite. FAM-2104

NS-2501 1.5 \* B 1 UH-1/HH-1N A NS

Goal. Demonstrate/introduce confined area operations using NVDs during HLL conditions.

Requirement

Discuss

Inadvertent IMC procedures  
Visual illusions  
Night flight techniques

Demonstrate/Introduce

Confined area approaches  
Takeoff and landings (to include the application of steep approaches) using NVDs to a lighted or unlit confined area  
Use aircraft ground lighting systems; e.g. chemlights

Review: NVD 2500

Performance Standard. CCUI should be comfortable with CC responsibilities using NVDs during CAL operations.

Prerequisite. NS-2500, CAL-2402

NS-2502      1.5      \*      B      1      UH-1/HH-1N      A      NS

Goal. Demonstrate/introduce mountain area operations using NVDs during HLL conditions.

Requirement

Discuss

- Inadvertent IMC procedures
- Visual illusions
- Night flight techniques
- Slope, grade, and wind considerations
- Wave-off

Demonstrate

Proficiency with NVDs while conducting CAL operations and navigation procedures

Introduce: NVD MAL procedures

Review

- Lookout procedures required during navigation and confined area landing
- Stress safety procedures, aircraft clearance and terrain effects while using NVDs.
- The use of check points, time distance checks, barrier features, prominent terrain features, and map preparation while using NVDs.

Performance Standard. CCUI should be able to perform all CC responsibilities during MAL operations using NVDs during HLL conditions.

Prerequisite. NS-2501

NS-2503      1.5      \*      B      1      UH-1/HH-1N      A      NS

Goal. Continue to develop proficiency in the HLL environment.

Requirement

Review

- NVD CAL and MAL procedures
- NVD navigational techniques and NVD emergency procedures

Performance Standard. CCUI should be capable of performing all CC functions during HLL conditions while executing MALs and CALs.

Prerequisite. NS-2502

NS-2504      1.5      \*      B,R      1      UH-1/HH-1N      A      NS

Goal. Proficiency in crew coordination and competency in the HLL environment during a night SAR mission.

Requirement

Discuss

- Crew coordination
- Comfort levels
- Situational awareness
- Terrain suitability and obstacle clearance

Review

- Procedures for NVD navigation
- Map preparation
- CALs and MALs
- NVD emergency procedures
- Proficiency in the use of NVDs above .0022 lux in all ground and flight phases

Performance Standard. CCUI should demonstrate complete competence in performing a night SAR mission in HLL conditions.

Prerequisite. NS-2503



d. Stages

Search and Rescue (SAR)  
Aerial Firefighting (AF)  
Assault Support (AS)

2. Search and Rescue (SAR)

a. Purpose. To develop proficiency in Search and Rescue techniques and procedures.

b. General. Due to local SAR demands the need for specific rescue techniques varies between SAR commands. The two recognized rescue procedures are short haul and stokes evolutions. As used herein stokes evolution refers to the rappel of the corpsman/rescue aircrewman, egress of the stokes litter, and finally a hoist of either both stokes litter and corpsman, or both separately. Short haul herein refers to short hauling Rescue Aircrewman (RA), combined RA/patient, or RA/stokes litter. CCUI will undergo ground training to become familiar with rappelling techniques. This will include a brief of aircraft rigging, short haul, and stokes voice procedures. The CCUI will also attend a demonstration of all SAR equipment to be used during this phase of training. While conducting stokes evolutions during this phase of training, the use of "live" victims in the stokes litter is PROHIBITED.

c. Crew Requirement. CCUI/CCI/ (CCI must be an NSSI or NSI)

SAR-3100    1.5    \*    B,R            1    UH-1/HH-1N    A    D

Goal. Familiarize CCUI with conducting aircraft rappelling operations.

Requirement

Discuss

Aircraft rigging procedures  
Equipment safety inspection requirements  
Rappel Master Techniques  
Lost communication procedures  
Rappelling emergency procedures

Introduce

Rappel Master responsibilities  
Special safety precautions  
Conduct at least four rappels; 2 at 100', 1 at 150', and 1 at 200'

Performance Standard. CCUI will have a basic working knowledge of aircraft rigging and procedures for rappelling.

Prerequisite. CAL-2401

SAR-3101    2.0    \*    B            1    UH-1/HH-1N    A    D

Goal. Introduce short haul procedures in simple terrain.

Requirement

Discuss

Single engine failure while in a hover  
Emergency rope cutting procedures

Introduce

Short haul in terrain free of obstacles  
Crew coordination during short haul  
Standardized voice procedures

Review

Rappel Master Techniques  
Safety Responsibilities

Performance Standard. CCUI will demonstrate a working knowledge of short haul procedures and complete at least two evolutions.

Prerequisite. CAL-2401



Jammed Hoist  
Runaway hoist  
Hoist entanglement procedures  
Use of the quick splice  
One skid and slope landings

Introduce

Stokes evolution in moderately rough terrain  
CAL technique emphasizing one skid and slope landings

Review

Stokes evolution in moderately rough terrain while  
conducting a minimum of 2 rappel events with recovery by  
using the hoist.

CAL technique emphasizing one skid and slope landings.

Performance Standard. CCUI will demonstrate working knowledge of  
stokes use in moderately rough terrain and proper techniques in  
communicating with pilots during slope and one skid landings.

Prerequisite. SAR-3102

SAR-3106    2.0    180    B                    1            UH-1/HH-1N    A    N

Goal. Introduce stokes evolution in rough terrain.

Requirement

Brief/Discuss: Mountain area flying and applicable local  
communications procedures.

Review: Stokes evolution in mountainous terrain and CALs  
(include ravines and pinnacles where practical), conducting a  
minimum of 2 evolutions.

Performance Standard. CCUI will demonstrate a working knowledge of  
stokes work in mountainous terrain and CALs.

Prerequisite. SAR-3105

SAR-3107    2.0    30        B,R                    1            UH-1/HH-1N    A    D

Goal. Refine stokes evolution and Short Hauls in moderate or rough  
terrain.

Requirement

Discuss

Search Patterns

Search profiles and aircraft employment during searches

Review

Stokes/Short Haul evolutions in moderate or rough terrain, at  
the discretion of the CCI.

Conduct 1 hoist evolution and 1 Short Haul.

Performance Standard. CCUI will demonstrate the ability to complete  
stokes evolutions in moderate or rough terrain independent of CCI  
guidance.

Prerequisite. SAR-3105

SAR-3108    1.5    \*        B,R                    1            UH-1/HH-1N    A    N

Goal. Proficiency gained in rappel master techniques and safety  
responsibilities in the night environment.

Requirement

Discuss

Rappel master techniques

Emergency Procedures

Aircraft lighting and configuration for the night  
environment.

Safety responsibilities

Introduce/Review

Rappel master techniques/responsibilities

Safety responsibilities

Performance Standard. CCUI will complete at least four CAL site rappels while demonstrating complete competence in acting as Rappel Master.

Prerequisite. SAR-3100

SAR-3109 2.0 \* B,R 1 UH-1/HH-1N A N

Goal. Practice short haul procedures in simple terrain at night.

Requirement. Review: SAR 3101 at night.

Performance Standard. CCUI will demonstrate the ability to perform short haul procedures at night without supervision.

Prerequisite. SAR-3101

SAR-3110 2.0 \* B,R 1 UH-1/HH-1N A N

Goal. Practice short haul evolution in moderate terrain at night.

Requirement. Review: SAR 3102 at night.

Performance Standard. CCUI will demonstrate complete knowledge of stokes work in moderate terrain while performing a minimum of two evolutions at night. CCUI will demonstrate the ability to rapidly and safely execute the short haul while helping ensure, through proper voice procedures, minimal movement over the pickup point.

Prerequisite. SAR-3109

SAR-3111 2.0 30 B,R 1 UH-1/HH-1N A N

Goal. Practice short haul procedures in rough terrain at night.

Requirement

Discuss

Short haul emergency procedures

Factors affecting short hauls in rough terrain to include cliff and vertical face procedures

Review: Short haul procedures in rough terrain simulating realistic conditions during the night environment.

Performance Standard. CCUI will demonstrate a working knowledge of short haul procedures in rough terrain while performing a minimum of 2 evolutions with one being performed using cliff or vertical face techniques.

Prerequisite. SAR-3110

SAR-3112 2.0 180 B,R 1 UH-1/HH-1N A N

Goal. Introduce stokes evolution at night while in simple terrain.

Requirement. Review: SAR 3104 at night

Performance Standard. CCUI will demonstrate a working knowledge of stokes evolution conducted at night.

Prerequisite. SAR-3109

SAR-3113 2.0 180 B,R 1 UH-1/HH-1N A N

Goal. Introduce stokes evolution in moderately rough terrain at night.

Requirement. Review: SAR 3105 at night

Performance Standard. CCUI will demonstrate a complete knowledge of stokes responsibilities and a working knowledge of stokes evolutions in moderately rough terrain at night.

Prerequisite. SAR-3112

SAR-3114 2.0 180 B,R 1 UH-1/HH-1N A N

Goal. Practice stokes evolution in rough terrain at night.

Requirement. Review: SAR 3106 at night.  
Performance Standard. CCUI will demonstrate a working knowledge of stokes work in rough terrain at night.  
Prerequisite. SAR-3113

SAR-3115 2.0 30 B,R 1 UH-1/HH-1N A N

Goal. Refine stokes evolution and Short Hauls in moderate or rough terrain at night.

Requirement

Discuss

Search Patterns in the night environment  
Aircraft lights and NVDs during night searches  
Search profiles and aircraft employment during searches

Review

Stokes/Short Haul evolutions in moderate or rough terrain, at the discretion of the CCI.  
Conduct 1 hoist evolution and 1 Short Haul.

Performance Standard. CCUI will demonstrate the ability to complete stokes evolutions in moderate or rough terrain independent of CCI guidance.

Prerequisite. SAR-3114

SAR-3116 2.0 \* B,R 1 UH-1/HH-1N A D

Goal. Practice all SAR procedures during a simulated SAR scenario.

Requirement.

Discuss: All emergency procedures and aircraft limitations, air ambulance, and on-scene procedures.

Review: Simulated rescue mission involving one short haul and one stokes evolution in rough terrain to include all facets of an actual mission from alert to patient delivery.

Performance Standard. CCUI should be able to operate independent of any instruction or coaching by CCI during simulated SAR scenario.

Prerequisite. SAR-3107

SAR-3117 2.0 \* B,R 1 UH-1/HH-1N A N

Goal. Practice all SAR procedures during a simulated night SAR scenario.

Requirement. Review: SAR 3116 at night.

Performance Standard. CCUI should be able to operate independent of any instruction or coaching by CCI during simulated SAR scenario at night.

Prerequisite. SAR-3115

### 3. Aerial Firefighting (AF)

a. Purpose. To qualify the CCUI in the Aerial Firefighting mission.

b. Crew Requirements. CC/CCUI

AF-3200 2.0 \* B,R 1 UH-1/HH-1N A D

Goal. Familiarize the CCUI with conducting aerial firefighting operations.

Requirement

Discuss

Cargo Hook operations  
Aircraft/Bambi Bucket rigging procedures  
Aircraft employment and profiles while conducting AF Ops.

Introduce

Safety precautions associated with Aerial Firefighting.  
Conduct a minimum of 5 drops at varying altitudes and  
airspeeds.

Performance Standard. CCUI will have a basic working knowledge of  
aircraft rigging and procedures for aerial firefighting.

Prerequisite. 2000 PHASE COMPLETE

AF-3201      2.0    180    B,R                    1            UH-1/HH-1N    A    D

Goal. To qualify the CCUI in the Aerial Firefighting mission.  
Requirement

Brief/Discuss

Procedures for all Aerial Firefighting maneuvers.  
Special Safety precautions during cargo operations.

Review

Aerial Firefighting procedures, simulating realistic  
conditions while conducting a minimum of 5 drops with the  
Bambi Bucket.

Performance Standard. CCUI should be able to act independent of any  
instruction or coaching by the CCI during Aerial Firefighting  
evolutions. Drops should be timely and on target.

Prerequisite. AF-3200

External Syllabus Support. Ground control personnel should be used  
where practical. SHC may simulate as required.

4. Assault Support (AS)

a. Purpose. To qualify the CCUI in the Assault Support mission.

AS-3301      730    B,R

Goal. Qualify CCUI in the Assault Support mission.

Requirement. Complete 2100, 2300 Series Events

Prerequisite. NATOPS-6000, NATOPS-6001

311. CORE PLUS PHASE (4000)

1. General. CCUI will have a general understanding of CC responsibilities  
during formation flying prior to flight.

2. Formation Flying (FORM)

a. Purpose. To develop the ability to assist as necessary and as  
requested by pilots during formation flying.

b. Crew Requirements. CCI/CCUI

FORM-4100    1.5    \*      B                    2            UH-1/HH-1N    A    N

Goal. Review CC responsibilities during formation procedures and  
maneuvers.

Requirement

Review

Section takeoffs  
Parade position  
Parade turns  
Climbs and descents  
Cross-over  
Break-up & rendezvous

Overruns  
Lead changes  
Section landings  
Cruise position  
Scouting line

Performance Standard. CCUI will demonstrate a thorough knowledge of CC responsibilities during all phases of formation flight.  
Prerequisite. FAM STAGE COMPLETE

312. INSTRUCTOR TRAINING PHASE (5000)

1. General

a. An CCUI will be qualified to instruct all flights in a particular stage of training once he has completed the corresponding CCUI stage flight.

b. Techniques of instruction and standardization will be stressed on all IUT flights. More emphasis should be placed on discussion of standardization criteria and proper procedures than on the actual flying portion of each IUT flight.

c. The CCI will play the role of the CCUI and the CCUI will instruct to the greatest extent possible on all CCUI flights.

d. Night System Instructor (NSI) training will be conducted per the MAWTS-1 Course Catalog.

2. Stages

Basic Instructor (IUT)  
Night Systems Instructor (NSSI)

3. Basic Instructor (IUT)

a. Purpose. To designate qualified CCs as instructors.

b. Crew Requirements. CCUI/ICC (CCUI/CCI/CC for IUT 5101)

IUT-5100      1.5      \*      B,R      E      1      UH-1/HH-1N      A      (N)

Goal. Qualify the IUT to instruct FAM/NAV/CAL stage flights.

Requirement

Brief/Discuss

Procedures for all FAM/NAV/CAL maneuvers  
Standardization criteria  
Safety parameters for each

Review

All FAM/NAV/CAL maneuvers with emphasis on appropriate safety margins.

Performance Standard. CCUI should demonstrate complete knowledge of CC responsibilities and be able to confidently and clearly instruct during all phases of FAM/NAV/CAL maneuvers/landings.

Prerequisite. CCX-6201

External Syllabus Support.

IUT-5101      1.5      \*      B,R      E      1      UH-1/HH-1N      A      (N)

Goal. Qualify the CCUI to instruct SAR stage flights.

Requirement

Brief/Discuss: Procedures for all SAR flights to include all safety precautions and standardization.

Review: All SAR requirements with emphasis on appropriate safety margins.

Performance Standard. CCUI should demonstrate complete knowledge of CC responsibilities and be able to confidently and clearly instruct during all phases of a SAR mission.  
Prerequisite. IUT-5100

4. Night Systems SAR Instructor (NSSI)
  - a. Purpose. To designate qualified CCs as NSSI instructors.
  - b. Crew Requirements. (CCI/CCUI) (CCI must be an NSSI or NSI)

NSSI-5200 1.5 \* B,R E 1 UH-1/HH-1N A NS

Goal. See MAWTS-1 UH-1N Course Catalog Chapter 12 Event NS-562  
Performance Standard. MAWTS-1 UH-1N Course Catalog Chapter 12 Event NS-562  
Prerequisite. CCX-6201  
External Syllabus Support. MAWTS-1 UH-1N Course Catalog Chapter 12 Event NS-562

NSSI-5201 1.5 \* B,R E 1 UH-1/HH-1N A NS

Goal. MAWTS-1 UH-1N Course Catalog Chapter 12 Event NS-563  
Performance Standard. MAWTS-1 UH-1N Course Catalog Chapter 12 Event NS-563  
Prerequisite. NSSI-5200  
External Syllabus Support. MAWTS-1 UH-1N Course Catalog Chapter 12 Event NS-563

NSSI-5202 1.5 \* B,R E 1 UH-1/HH-1N A NS

Goal. MAWTS-1 UH-1N Course Catalog Chapter 12 Event NS-564E  
Performance Standard. MAWTS-1 UH-1N Course Catalog Chapter 12 Event NS-564E  
Prerequisite. NSSI-5201  
External Syllabus Support. MAWTS-1 UH-1N Course Catalog Chapter 12 Event NS-564E

313. REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS (RQD) (6000 PHASE)

1. General

a. The requirements, qualifications, and designations events are designed to qualify Crew Chiefs for normal annual currency requirements and to provide the SRU with a cadre of selected Crew Chiefs that are capable of accomplishing the unique SAR and AF missions of the Squadron.

b. Once a CCUI has been designated as a SAR Crew Chief the annual CCRX-6300 will be used to maintain this qualification. This flight may be flown in conjunction with the annual NATOPS flight.

NATOPS-6000 365 B,R E

Goal. NATOPS Open Book exam.  
Prerequisite. None

NATOPS-6001 365 B,R E

Goal. NATOPS Closed Book Exam.  
Prerequisite. NATOPS-6000

NAVMAC 3500.91  
18 Mar 11

NATOPS EP-6002 30 B,R E

Goal. Monthly EP exam.

NATOPS-6100 1.5 365 B,R E 1 VH-3D A (N)

Goal. Annual NATOPS Check.

Prerequisite. NATOPS-6001

NATOPS-6101 1.5 365 B,R E 1 UH-1/HH-1N A (N)

Goal. Discuss CRM principles in general and specifically the CRM requirements required in the unique SAR missions of the SRU. Execute a simulated mission with the requirement that the CC show an in depth knowledge of CRM skills during the brief, flight, and post flight.

Requirement

Discuss

Decision Making  
Assertiveness  
Mission Analysis  
Communication  
Leadership  
Adaptability/Flexibility  
Situational Awareness

Review All discussed items in a simulated mission under actual flight conditions.

Performance Standard. Demonstrate capability to competently use all resources available, to include crew, external agencies, weather and mission analysis to operate safely in the unique missions of the SRU.  
Prerequisite. Completion of annual CRM Ground Training

CCX-6200 1.5 \* B,R E 1 UH-1/HH-1N A D

Goal. Qualify CCUI as CC during day operations.

Requirement. Complete simulated SAR mission.

Performance Standard. CCUI will demonstrate a thorough knowledge of helicopter systems, emergency procedures, CALs, MALs, hoist and rappel operations, rescue procedures, and the ability to perform these events under varying emergency and meteorological conditions without assistance.

Prerequisite. 2000 AND 3000 PHASE COMPLETE

CCX-6201 1.5 \* B,R E 1 UH-1/HH-1N A N

Goal. Qualify CCUI as CC during night operations.

Requirement. Complete simulated SAR mission.

Performance Standard. CCUI will demonstrate a thorough knowledge of helicopter systems, emergency procedures, CALs, MALs, hoist and rappel operations, rescue procedures, and the ability to perform these events under varying emergency and meteorological conditions at night and without assistance.

Prerequisite. CCX-6200

CCX-6300 1.5 365 B,R E 1 UH-1/HH-1N A (N)

Goal. Conduct annual CC evaluation flight.

Requirement

Review

SAR procedures  
Emergency procedures

All maneuvers associated with local SAR mission  
Performance Standard. CC will demonstrate ability to perform all  
duties during any scenario presented. \*Conduct at least 1 technical  
evolution  
Prerequisite. CCX-6200, CCX-6201

314. T&R SYLLABUS MATRIX AND ATTAIN/MAINTAIN TABLES

1. Syllabus Matrix

STAGE	TRNG CODE	# OF FLTS	FLT HRS	REFLY INTERVAL	POI	EVAL	TYPE	TOTAL #	COND	PREREQ	EVENT DESCRIPTION	CHAINING EVENT CONV
<b>CORE SKILL TRAINING (2000 PHASE EVENTS)</b>												
<b>FAMILIARIZATION (FAM)</b>												
FAM	2100		1.5	*	B		A	1	D	6000	FAM 1	200
FAM	2101		1.5	*	B		A	1	D	2100	FAM 2	201
FAM	2102		1.5	*	B		A	1	D	2101	Emergency Procedures	
FAM	2103		1.5	*	B,R		A	1	N	2102	Night FAM	
FAM	2104		1.5	*	B,R		A	1	N	2103	Night Emergency Procedures	
<b>FAM TOTAL</b>	<b>5</b>		<b>7.5</b>									
<b>NAVIGATION (NAV)</b>												
NAV	2300		1.5	*	B,R		A	1	D	2101	Area FAM	220
NAV	2301		1.5	*	B,R		A	1	N	2104	Night Area FAM	221
NAV	2302		2.0	*	B,R		A	1	D	2300	Remote Area NAV	
NAV	2303		2.0	*	B,R		A	1	N	2302	Night Remote Area NAV	
<b>NAV TOTAL</b>	<b>4</b>		<b>7.0</b>									
<b>CONFINED AREA LANDINGS (CAL)</b>												
CAL	2400		1.5	*	B		A	1	D	2102	CAL FAM	
CAL	2401		1.5	*	B		A	1	D	2400	CAL FAM 2	
CAL	2402		1.5	*	B		A	1	N	2401	Night CAL FAM	
CAL	2403		1.5	180	B,R		A	1	D	2401	Sloped/1 Skid Landing	
CAL	2404		1.5	90	B		A	1	D	2403	CAL FAM 3	
CAL	2405		1.5	90	B,R		A	1	D	2404	CAL FAM 4	
CAL	2406		1.5	*	B,R		A	1	N	2405	CAL Review	
CAL	2407		1.5	90	B,R		A	1	N	2406	Night CAL Review	
<b>CAL TOTAL</b>	<b>8</b>		<b>12.0</b>									
<b>NIGHT SYSTEMS (NS)</b>												
NS	2500		1.5	*	B		A	1	NS	2104	HHL FAM	620
NS	2501		1.5	*	B		A	1	NS	2402,2500	HHL CAL FAM	621
NS	2502		1.5	*	B		A	1	NS	2501	HHL MAL FAM	622
NS	2503		1.5	*	B		A	1	NS	2502	HHL Review	623
NS	2504		1.5	*	B,R		A	1	NS	2503	HHL Check	624
NS	2505		1.5	*	B,R		A	1	NS	2504	LLL FAM	630
NS	2506		1.5	90	B,R		A	1	NS	2505	LLL CALs/MALs	631
NS	2507		1.5	*	B,R		A	1	NS	2506	LLL Check	632
<b>NVD TOTAL</b>	<b>8</b>		<b>12.0</b>									
<b>MISSION SKILL TRAINING (3000 PHASE EVENTS)</b>												
<b>SEARCH AND RESCUE (SAR)</b>												
SAR	3100		1.5	*	B,R		A	1	D	2401	Rappel Ops	230
SAR	3101		2.0	*	B		A	1	D	2401	Short Haul in Simple Terrain	231
SAR	3102		2.0	*	B		A	1	D	3101	Short Haul in Moderate Terrain	232
SAR	3103		1.0	*	B		A	1	D	3102	Short Haul in Rough Terrain	240
SAR	3104		2.0	180	B,R		A	1	D	2401	Hoist Ops in Simple Terrain	310
SAR	3105		2.0	180	B		A	1	D	3102	Stokes Ops in Moderate Terrain	311
SAR	3106		2.0	180	B		A	1	N	3105	Night Stokes in Rough Terrain	312
SAR	3107		2.0	30	B,R		A	1	D	3105	Stokes and Short Hauls in Moderate Terrain	313
SAR	3108		1.5	*	B,R		A	1	N	3100	Night Rappel Master Techniques	314
SAR	3109		2.0	*	B,R		A	1	N	3101	Night Short Haul Ops in Simple Terrain	315
SAR	3110		2.0	*	B,R		A	1	N	3109	Night Short Haul in Moderate Terrain	316
SAR	3111		2.0	30	B,R		A	1	N	3110	Night Short Haul Ops in Rough Terrain	317
SAR	3112		2.0	180	B,R		A	1	N	3109	Night Stokes in Simple Terrain	318
SAR	3113		2.0	180	B,R		A	1	N	3112	Night Stokes in Moderate Terrain	319
SAR	3114		2.0	180	B,R		A	1	N	3113	Night Stokes in Rough Terrain	320
SAR	3115		2.0	30	B,R		A	1	N	3114	Night Stokes and Short Haul in Moderate/Rough Terrain	321
SAR	3116		2.0	*	B,R		A	1	D	3107	Sim SAR Scenario	322
SAR	3117		2.0	*	B,R		A	1	N	3115	Night Sim SAR Scenario	323
<b>SAR TOTAL</b>	<b>18</b>		<b>34.0</b>									

STAGE	TRNG CODE	# OF FLTS	FLT HRS	REFLY INTERVAL	POI	EVAL	TTYPE	TOTAL #	COND	PREREQ	EVENT DESCRIPTION	CHAINING	EVENT CONV
<b>Aerial Firefighting (AF)</b>													
AF	3200		2.0	*	B,R		A	1	D	2000 PHASE COMPLETE			
AF	3201		2.0	180	B,R		A	1	D	3200			
<b>AF TOTAL</b>	<b>2</b>	<b>4.0</b>											
<b>Assault Support (AS)</b>													
AS	3300			730	B,R					2100,2300 Events Complete	AS Tracking Code		
<b>AS TOTAL</b>	<b>1</b>	<b>0.0</b>											
<b>CORE PLUS TRAINING (4000 PHASE EVENTS)</b>													
<b>FORMATION (FORM)</b>													
FORM	4100		1.5	365	B,R		A	2	(N)	FAM STAGE COMPLETE	FORM Review		610
<b>FORM TOTAL</b>	<b>1</b>	<b>1.5</b>											
<b>INSTRUCTOR TRAINING (5000 PHASE EVENTS)</b>													
IUT	5100		1.5	*	B,R	E	A	1	(N)	CCX6201	FAM/NAV/INST/CAL Qualifications		500
IUT	5101		1.5	*	B,R	E	A	1	(N)	5100	SAR Qualification		501
NSSI	5200		1.5	*	B,R	E	A	1	NS	CCX6201			
NSSI	5201		1.5	*	B,R	E	A	1	NS	5200			
NSSI	5202		1.5	*	B,R	E	A	1	NS	5201			
<b>IT TOTAL</b>	<b>5</b>	<b>7.5</b>											
<b>REQUIREMENT, QUALIFICATIONS, AND DESIGNATIONS (RQD, 6000 PHASE EVENTS)</b>													
<b>ACADEMICS (ACAD)</b>													
ACAD	6000			365		E					NATOPS Open Book		
ACAD	6001			365		E				6000	NATOPS Closed Book		
ACAD	6002			30		E					EP Test		
<b>NATOPS</b>													
NATOPS	6100		1.5	365		E	A	1	(N)		Annual NATOPS Check		
NATOPS	6101		1.5	365	B,R	E	A	1	(N)		CRM Review		
<b>CREW CHIEF DESIGNATION FLIGHTS (CCX)</b>													
CCX	6200		1.5	*	B,R	E	A	1	D	2000,3000 STAGE COMPLETE	DAY CC Qualification		400
CCX	6201		1.5	*	B,R	E	A	1	N	6200	Night CC Qualification		401
CCX	6300		1.5	365	B,R	E	A	1	N	6200,6201	Annual CC Eval		
<b>RQD TOTAL</b>	<b>5</b>	<b>7.5</b>											

1. Attain/Maintain Tables

UH-1/HH-1N CC T&R ATTAIN/MAINTAIN MATRIX											
T&R DESCRIPTION	T&R EVENT			BASIC POI		REFRESHER POI		MAINTAIN		PREREQUISITE	CHAINING
	STAGE	CODE	RE FLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
<b>CORE SKILLS (2000 PHASE)</b>											
FAM 1	FAM	2100	*		2100					6000	
FAM 2	FAM	2101	*		2101					2100	
EMERGENCY PROCEDURES	FAM	2102	*	FAM	2102	FAM		FAM		2101	
Night FAM	FAM	2103	*		2103		2103			2102	
Night EPs	FAM	2104	*		2104		2104			2103	
AREA FAM	NAV	2300	*		2300		2300			2101	
NIGHT AREA FAM	NAV	2301	*		2301		2301			2104, 2300	
REMOTE AREA FAM	NAV	2302	*	NAV	2302	NAV	2302	NAV		2301	
NIGHT REMOTE AREA FAM	NAV	2303	*		2303		2303			2302	
CAL FAM	CAL	2400	*		2400					2104	
CAL FAM 2	CAL	2401	*		2401					2400	
NIGHT CAL FAM	CAL	2402	*		2402					2401, 2501~NS	
SLOPED/1 SKID LANDINGS	CAL	2403	180		2403		2403			2402	
CAL FAM 3	CAL	2404	90	CAL	2404	CAL		CAL		2403	2403
CAL FAM 4	CAL	2405	90		2405		2405			2404	2403, 2404
CAL REVIEW	CAL	2406	*		2406		2406			2405	
NIGHT CAL REVIEW	CAL	2407	90		2407		2407		2407	2406	2403, 2404, 2405
HLL LOW WORK	NS	2500	*		2500					2104	
HLL CAL	NS	2501	*		2501					2402, 2500	
HLL MALs	NS	2502	*		2502					2501	
HLL REV	NS	2503	*		2503					2502	
HLL EVAL	NS	2504	*	NS	2504	NS	2504	NS		2503	
LLL LOW WORK	NS	2505	*		2505		2505			2504	
LLL CALs/MALs	NS	2506	90		2506		2506		2506	2505	
LLL SAR EVAL	NVD	2507	*		2507		2507			2506	
<b>MISSION SKILL (3000 PHASE)</b>											
RAPPEL OPS	SAR	3100	*		3100		3100			2401	
SHORT HAUL IN SIMPLE TERRAIN	SAR	3101	*	SAR	3101	SAR		SAR		2401	
SHORT HAUL IN MODERATE TERRAIN	SAR	3102	*		3102					3101	
SHORT HAUL IN ROUGH TERRAIN	SAR	3103	*		3103					3102	
HOIST OPS IN SIMPLE TERRAIN	SAR	3104	180		3104		3104		3104	2401	
STOKES OPS IN MODERATE TERRAIN	SAR	3105	180		3105					3102	
NIGHT STOKES IN ROUGH TERRAIN	SAR	3106	180		3106					3105	3105
STOKES/SHORT HAUL IN MODERATE TERRAIN	SAR	3107	30		3107		3107			3105	3105, 3106
NIGHT RAPPEL MASTER	SAR	3108	*		3108		3108			3100	
NIGHT SHORT HAUL IN SIMPLE TERRAIN	SAR	3109	*		3109		3109			3101	

UH-1/HH-1N CC T&R ATTAIN/MAINTAIN MATRIX											
T&R DESCRIPTION	T&R EVENT			BASIC POI		REFRESHER POI		MAINTAIN		PREREQUISITE	CHAINING
	STAGE	CODE	RE FLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
NIGHT SHORT HAUL IN MODERATE TERRAIN	SAR	3110	*		3110		3110			3109	
NIGHT SHORT HAUL IN ROUGH TERRAIN	SAR	3111	30		3111		3111			3110	
NIGHT STOKES IN SIMPLE TERRAIN	SAR	3112	180		3112		3112			3109	
NIGHT STOKES IN MODERATE TERRAIN	SAR	3113	180		3113		3113			3112	3105, 3107, 3111, 3112
NIGHT STOKES IN ROUGH TERRAIN	SAR	3114	180		3114		3114			3113	3105, 3107, 3111, 3112, 3113
NIGHT STOKES/SHORT HAULIN MODERATE/ROUGH TERRAIN	SAR	3115	30		3115		3115	3115		3114	3105, 3106, 3107, 3111, 3112, 3113, 3114
SIMULATED SAR SCENARIO	SAR	3116	*		3116		3116			3107	
NIGHT SIMULATED SAR SCENARIO	SAR	3117	*		3117		3117			3115	
INTRO AF	AF	3200	*	AF	3200	AF	3200	AF		2000 PHASE COMPLETE	
REV AF	AF	3201	180		3201		3201		3201	3200	
ASSAULT SUPPORT	AS	3500	730	AS	3500	AS	3500	AS	3500	2100, 2101, 2200	
<b>CORE PLUS (4000 PHASE)</b>											
FORM	FORM	4100	365	FORM	4100		4100		4100	FAM STAGE COMPLETE	

CHAPTER 4

UH-1/HH-1N IN-FLIGHT MEDICAL TECHNICIAN

	<u>PARAGRAPH</u>	<u>PAGE</u>
INDIVIDUAL TRAINING AND READINESS REQUIREMENTS.....	400	4-3
TRAINING PROGRESSION MODEL.....	401	4-3
INDIVIDUAL CORE SKILL PROFICIENCY REQUIREMENTS.....	402	4-3
INDIVIDUAL MISSION SKILL PROFICIENCY REQUIREMENTS.....	403	4-4
INDIVIDUAL CORE PLUS SKILL PROFICIENCY REQUIREMENTS.....	404	4-4
CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS .....	405	4-5
PROGRAMS OF INSTRUCTION.....	406	4-5
ACADEMIC TRAINING .....	407	4-5
SYLLABUS NOTES (GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS.....	408	4-6
CORE SKILL TRAINING (2000 PHASE).....	409	4-8
MISSION SKILL TRAINING (3000 PHASE).....	410	4-16
CORE PLUS TRAINING (4000 PHASE).....	411	4-22
INSTRUCTOR TRAINING (5000 PHASE).....	412	4-23
REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS (RQD) (6000 PHASE).....	413	4-24
T&R SYLLABUS MATRIX AND ATTAIN/MAINTAIN TABLES.....	414	4-26

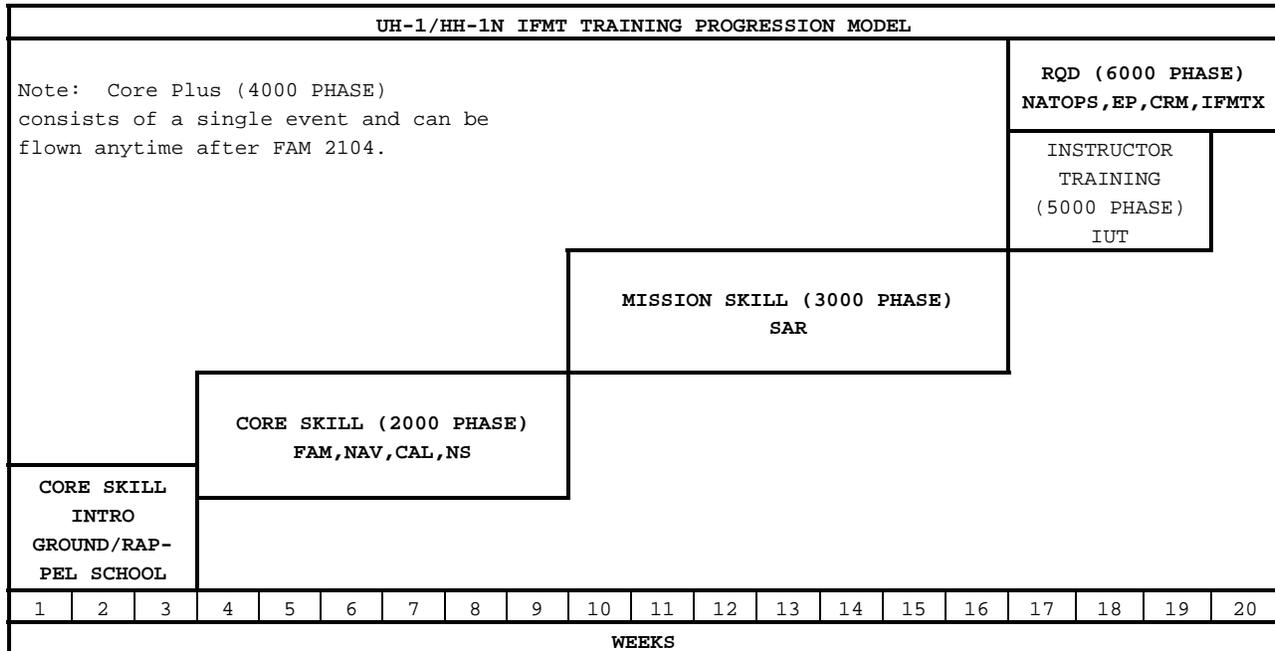
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18 Mar 11

CHAPTER 4

UH-1/HH-1N IN-FLIGHT MEDICAL TECHNICIAN

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

401. TRAINING PROGRESSION MODEL. This model represents the recommended training progression for an In-Flight Medical Technician. The SRU should use the model as a point of departure to generate individual training plans.



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

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

YUMA SRU, IFMT			
INDIVIDUAL CORE SKILL PROFICIENCY ATTAIN TABLE (2000 PHASE)			
FAM	NAV	CAL	NS
2100	2300	2400	2501
2101	2301R	2401R	2502
2102	2302R	2402R	2503
2103R		2403R	2504R
2104R		2404R	2505
			2506R
			2507R

An R suffix and Grey highlight = Refresher

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

**\*NOTE\***

Specific maintain events are selected by community SMEs to update corresponding skills in the Attain table. Maintaining proficiency in these select events will ensure the individual will never go delinquent in that corresponding skill in the Attain table.

YUMA SRU, IFMT			
INDIVIDUAL CORE SKILL PROFICIENCY MAINTAIN TABLE (3000 PHASE)			
FAM	NAV	CAL	NS
		2404R	2506R
An R suffix and Grey highlight = Refresher			

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

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

YUMA SRU, IFMT			
INDIVIDUAL MISSION SKILL PROFICIENCY ATTAIN TABLE (3000 PHASE)			
SAR			
3100R	3101R	3102R	3103
3104	3105R	3106	3107R
3108R	3109R	3110R	3111R
3112R	3113R	3114R	3115R
3116	3117R	3118R	3119R
An R suffix and Grey highlight = Refresher			

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

**\*NOTE\***

Specific maintain events are selected by community SMEs to update corresponding skills in the Attain table. Maintaining proficiency in these select events will ensure the individual will never go delinquent in that corresponding skill in the Attain table.

YUMA SRU, IFMT	
INDIVIDUAL MISSION SKILL PROFICIENCY MAINTAIN TABLE (3000 PHASE)	
SAR	
3105R	3107R
3113R	3114R
3115R	3117R
An R suffix and Grey highlight = Refresher	

404. INDIVIDUAL CORE PLUS SKILL PROFICIENCY (CPSP)REQUIREMENTS. A Core Plus crew consists of individuals representing each crew position who have achieved and currently maintain Individual CPSP. To be considered proficient in a Mission Skill an individual must attain and maintain proficiency in Core Plus events as delineated below.

YUMA SRU IFMT
ATTAIN AND MAINTAIN CORE PLUS SKILL TABLE
(4000 PHASE)
FORM
4100R

405. CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS. The tables below delineate T&R events required to be completed to attain proficiency, and initial qualifications and designations. In addition to event requirements, all stage lectures, briefs, squadron training, prerequisites and other criteria shall be completed prior to completing final events. Qualification and Designation letters signed by the Commanding Officer shall be placed in Individual Performance Records (IPR) and NATOPS jackets. 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. Any VH-NSFI event must be given by a VH-NSI.

YUMA SRU, IFMT	
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (R,C,Q,& D) (6000 PHASE)	
R,C,Q,& D	EVENT REQUIREMENTS
<b>QUALIFICATIONS</b>	
NSQ	NS 2500-2507
<b>DESIGNATIONS</b>	
IFMT	IFMTX 6200-6202
IFMT INSTRUCTOR	IUT 5100-5101

406. PROGRAMS OF INSTRUCTION. Timeframes referenced below indicate the approximate amount of time required to complete a specific phase. They are not meant to indicate cumulative time required to achieve MSP.

1. PROGRAMS OF INSTRUCTION (POI) FOR BASIC AND CONVERSION IN-FLIGHT MEDICAL TECHNICIAN

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-2	Rappel School	HSC-3
1-2	Ground School	SRU
8-16	Search and Rescue Training	SRU

2. POI FOR REFRESHER IN-FLIGHT MEDICAL TECHNICIAN

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-2	Rappel School	HSC-3
1-2	Ground School	SRU
8-12	Search and Rescue Training	SRU

3. POI FOR INSTRUCTOR TRAINING

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1	Instructor Training	SRU

407. ACADEMIC TRAINING

1. Academic training shall be conducted for each phase/stage of the syllabus as applicable. Where indicated, standardized academic training materials exist and may be obtained from the sponsoring activity.

2. Academic courses of instruction available to complete the syllabus are listed below:

<u>COURSE</u>	<u>ACTIVITY</u>
Aviation Medicine	NAMI
Naval Aircrew Candidate School	NATC
SERE	SERE
Flight Medic School	USASAM
Naval Rappelling School	HSC-3
I.V. Certification*	NRMC

CPR Certification*	NRMC
Advanced Cardiac Life Support (ACLS)*	USASAM
NITELAB	MAWTS-1
Aircrew Safety and Emergency Procedures	SRU
Preflight Rigging and Maintenance of Medical/ Rescue Gear	SRU
Paramedic/local EMS and SAR responsibilities	SRU
Rescue Reports	SRU
Aircrew Coordination and Responsibilities	SRU
Cockpit Orientation	SRU
Use of navigational publications and charts	SRU
NATOPS flight manual and checklist usage	SRU
Night Operations Course	SRU

NOTE: Courses identified with an asterisk (\*) have currency limits and must be renewed per current directives. ACLS training is recommended only if available.

408. SYLLABUS NOTES (GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS)

1. General

a. When assigned to a UH-1/HH-1N SAR billet, a crewman who is not currently UH-1/HH-1N (SAR) qualified shall complete the Basic/Conversion POI. Corpsman are normally assigned as UH-1/HH-1N (SAR) Inflight Medical Technicians.

b. When assigned to a UH-1/HH-1N (SAR) billet, a crewman who was previously UH-1/HH-1N (SAR) qualified shall complete the Refresher POI.

c. When used in this chapter IFMTI refers to the Inflight Medical Technician Instructor, IFMTUI refers to the Inflight Medical Technician Under Instruction, and IFMT refers to a qualified Inflight Medical Technician.

d. An IFMTI is required for each flight in the POI. The IFMTUI will occupy the IFMT position except when the IFMTI is demonstrating a maneuver. A SAR crew chief is required for all CAL, SAR and EVAL flights.

e. IFMTUI should complete all stages within each phase before progressing to the next phase.

f. An ATF is required for any initial event completed by a Basic or Refresher Aircrew. 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 IPR.

g. Compliance with the written flight description is mandatory for syllabus event completion. CRM will be stressed and evaluated throughout each stage.

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

ENVIRONMENTAL CONDITIONS	
Code	Meaning
D	Shall be flown or conducted during day.
N	Shall be flown or conducted at night (using available night vision devices or flown unaided).
(N)	May be flown or conducted day or night; if at night, available night vision devices may be used or flown unaided.
NS	Shall be flown or conducted at night using available night vision devices.
(NS)	May be flown or conducted day or night; if at night, available night vision devices shall be used.
N*	Shall be flown or conducted unaided at night.
(N*)	May be flown or conducted at night; if at night, shall be flown unaided.
Note - If the event is to be flown in the simulator the Simulator Instructor shall set the desired environmental conditions for the event.	

i. Upon successful completion of the appropriate POI, and a minimum of 50 UH-1/HH-1N (SAR) flight hours a IFMTUI will become eligible for IFMT designation. Designation will be per OPNAVINST 3710.7 and the UH-1/HH-1N NATOPS flight manual.

## 2. T&R Phases

a. The 2000 phase is considered to be Core Skill training. Completion of the 2000 phase should provide the aircrew with the prerequisites required to execute SRU Mission Skills on all SRU missions.

b. The 3000 phase is considered to be Mission Skill training. Completion of the 3000 phase ensures aircrew are trained to execute all SRU missions as a qualified SAR In-Flight Medical Technician.

c. The 4000 phase is considered Core Plus training. This phase contains unique training standards applicable to formation flying.

d. The 5000 phase contains instructor workup and evaluation certification syllabus events.

e. The 6000 phase contains requirements, qualifications and designations syllabus events.

3. Sequence. When practical, training should be accomplished by flying events within a stage in sequence and stages within a phase in sequence.

## 4. Definitions

### a. Discuss

(1) The IFMTI shall discuss a procedure or maneuver during the brief, inflight, or debrief.

(2) The IFMTUI is responsible for knowledge of the applicable procedures prior to the briefing.

### b. Demonstrate

(1) The IFMT performs the maneuver with accompanying description.

(2) The IFMTUI observes the maneuver and is responsible for the knowledge of the procedures prior to the sortie.

c. Introduce

(1) At his option, the IFMTI may perform the maneuver with an accompanying description, or he may coach the IFMTUI through the maneuver without demonstration.

(2) The IFMTUI shall perform the maneuver with coaching as necessary and is responsible for knowledge of the procedures prior to the sortie.

d. Review

(1) The IFMT observes and grades the maneuver without coaching the IFMTUI. An airborne critique of IFMTUI performance is at the option of the instructor.

(2) The IFMTUI is expected to perform the maneuver without coaching and devoid of procedural error at a level acceptable to warrant progress into the next stage of training.

5. Event Completion. 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, in the instructor's opinion, the IFMTUI does not adequately perform a required event, then all or parts of the sortie shall be repeated until adequate performance is demonstrated. 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.

409. CORE SKILL TRAINING (2000 PHASE)

1. General

a. Training conducted during the core skill phase should concentrate on preparing the IFMTUI to serve as a In-Flight Medical Technician during all SRU missions.

b. A locally prepared reading list which shall include appropriate sections from the NATOPS manual, NWP 19, NWP 19-1, NWP 55-8-SAR, the unit SOP, and other locally pertinent publications will be completed prior to IFMTX 6200.

c. Stages

Familiarization (FAM)  
Navigation (NAV)  
Confined Area Landings (CAL)  
Night Vision Devices (NS)

2. Familiarization (FAM)

a. Purpose. To become familiar with the responsibilities of the UH-1/HH-1N IFMT during normal flight to include aircraft flight characteristics, limitations, aircraft systems, and proficiency in assisting the Crew Chief in all aspects of flight.

b. Crew Requirement. IFMTI/IFMTUI/CC. (IFMTI or CC must be NSSI or NSI)

FAM-2100    1.0    \*    B                    1    UH-1/HH-1N    A    D

Goal. Introduce normal operating procedures for UH-1/HH-1N.  
Requirement

Brief/Discuss

- Passenger briefing
- Aircraft configuration
- In-flight emergency procedures
- Local area of responsibility
- Aircraft security
- Local course rules

Introduce

- Preflight
- Post flight
- Start procedures
- In-flight emergency procedures
- Lookout procedures
- Conduct an egress drill

Performance Standard. IFMTUI will demonstrate familiarity with preflight, post flight and general in-flight procedures.

FAM-2101    1.0    \*    B                    1    UH-1/HH-1N    A    D

Goal. Continued familiarization with the UH-1/HH-1N.  
Requirement.

Brief/Discuss: In-flight emergency procedures

Introduce

- Zone briefs
- Lookout procedures
- Radio communication procedures
- Takeoff & landing procedures

Review

- Start procedures
- Emergency procedures
- Aircraft limitations
- Passenger briefing
- Flight characteristics

Performance Standard. IFMTUI will demonstrate familiarity with preflight, post flight and general in-flight procedures.

Prerequisite. FAM-2100

FAM-2102    1.0    \*    B                    1    UH-1/HH-1N    A    D

Goal. Continue to familiarize the IFMTUI with UH-1/HH-1N operating procedures.

Requirement

Brief/Discuss

- IFMT responsibilities
- Emergency procedures
- Radio and observation procedures
- Emphasize NATOPS qualified observer duties

Introduce: Simulated in-flight emergencies

Review

All previous FAM procedures  
IFMT responsibilities  
Lookout procedures  
Takeoff/landing procedures  
Performance Standard. IFMTUI will demonstrate familiarity with preflight, post flight, general rescue IFMT in-flight procedures and in-flight emergency procedures.  
Prerequisite. FAM-2101

FAM-2103 1.0 \* B,R 1 UH-1/HH-1N A D

Goal. Familiarize the IFMTUI with emergency procedures.  
Requirement.

Brief/Discuss

All previous items of discussion  
IFMT responsibilities during ground and in-flight emergencies

Introduce

Autorotations/cut guns  
Single/Dual engine failures  
Hydraulic malfunctions

Review: All previous FAM work.

Performance Standard. IFMTUI will demonstrate competent knowledge of IFMT procedures during pre/post flight, normal in-flight maneuvers and during emergencies.

Prerequisite. FAM-2102

FAM-2104 1.5 \* B,R 1 UH-1/HH-1N A N

Goal. Familiarize the IFMTUI with procedures at night.

Requirement. Review FAM 2102 and FAM 2103 at night.

Performance Standard. IFMTUI will demonstrate competence with preflight, post flight and general in-flight responsibilities, including during emergency procedures at night.

Prerequisite. FAM-2103

3. Navigation (NAV)

a. Purpose. To become familiar with navigation in the local operating area during day and night operations.

b. General. Navigational flights should be flown with emphasis on challenges encountered in mountainous, desert navigation. The IFMTUI shall complete the Naval Rappelling Course before conducting any rappelling operations during this stage of training.

c. Crew Requirement. IFMTI/IFMTUI/CC. (IFMTI or CC must be NSSI or NSI)

NAV-2300 1.0 \* B 1 UH-1/HH-1N A D

Goal. Introduce the IFMTI to navigational procedures in the local operating area.

Requirement.

Brief/Discuss

Maps, charts and other navigational aids in the local operating area

Map location of hospitals, surrounding cities, local highways, and outlying communities

Effects of local weather and other variables on navigation

Introduce:

Hospitals and roads

Training sites

Landmarks in the local operating area.  
Performance Standard. At the completion of the flight IFMTUI should have a basic understanding of the local operating area, to include location of hospitals, major roads, cities and landmarks.  
Prerequisite. FAM-2103

NAV-2301    1.5    \*    B,R                    1    UH-1/HH-1N    A    D

Goal. Introduce IFMTUI to navigating to and from local operating area CAL sites.

Requirement.

Brief/Discuss: Local operating area to include CAL sites.

Introduce: Navigation procedures to all local CAL sites to include recognition of major landmarks enroute.

Review

Emergency procedures

Navigating to local hospitals

Major highways/roads

Navigational landmarks

Local geographical and man made navigation aids

Performance Standard. IFMTUI should be able to assist in navigating within the local operating area without assistance from IFMTI

Prerequisite. NAV-2300

NAV-2302    1.5    \*    B,R                    1    UH-1/HH-1N    A    N

Goal. Introduce IFMTUI to navigating in the local area at night.

Requirement. Repeat NAV 2301 at night.

Performance Standard. IFMTUI will demonstrate a basic understanding of the local operating area at night and be able to point out major navigational aids, highways, and hospitals.

Prerequisite. NAV-2301

#### 4. Confined Area Landings (CAL)

a. Purpose. To refine IFMTUI proficiency in confined and mountainous area techniques and responsibilities.

b. General. Emphasis should be placed on IFMT responsibilities during CAL landings in a mountainous desert environment.

c. Crew Requirement. IFMTI/IFMTUI/CC (IFMTI or CC must be NSSI or NSI)

CAL-2400    1.5    \*    B                        1    UH-1/HH-1N    A    D

Goal. Familiarize IFMTUI with CAL procedures and mountainous terrain characteristics.

Requirement

Brief/Discuss

Emergency procedures

Zone briefs

Wave off instructions

Obstacle clearance during approach/departure

Determination of wind direction

Touchdown clearance

Dynamic rollover characteristics

Introduce

Zone briefs

Wave off instructions

Obstacle clearance during approach/departure

Determination of wind direction

Touchdown clearance

Review: Local CAL site locations by landing in various CALs.  
Performance Standard. IFMTUI will demonstrate a basic knowledge of IFMT responsibilities while flying in mountainous areas and making CALs.

Prerequisite. FAM-2104

CAL-2401      1.5      \*      B,R                      1      UH-1/HH-1N    A    D

Goal. Build IFMTUI's confidence in crew responsibilities during CALs.  
Requirement.

Brief/Discuss: One skid and sloped landing procedures.

Introduce: One skid and sloped landing procedures.

Review: Normal CAL procedures and locations within the local operating area.

Performance Standard. IFMTUI should understand IFMT responsibilities during CALs and be able to perform all duties of an IFMT with minimal assistance.

Prerequisite. CAL-2400

CAL-2402      1.5      \*      B,R                      1      UH-1/HH-1N    A    N

Goal. Familiarize IFMTUI with CAL operations at night.  
Requirement

Brief/Discuss

HIGE and HOGE theory and procedures

Slope and one skid landings

Depth perception at night

Masking of terrain and obstacles at night

Review

Zone briefs

Approach and departure routes from CALs

Wave off recognition and procedures

Slope and one skid landings

Performance Standard. IFMTUI should have complete understanding of CC responsibilities during CALs and demonstrate an ability to apply those responsibilities at night.

Prerequisite. CAL-2401

CAL-2403      1.5      180      B,R                      1      UH-1/HH-1N    A    D

Goal. Demonstrated proficiency in responsibilities during sloped and one-skid landings.

Requirement

Brief/Discuss

Emergency procedures

Aircraft limitations

Dynamic rollover characteristics

Review

Sloped and one-skid landing

Wave off recognition and execution

Approach/Departure and landing clearance

Performance Standard. IFMTUI will demonstrate the ability to act without supervision during CAL approach, sloped and one-skid landings and recognizing and executing responsibilities during a waveoff.

Prerequisite. CAL-2401

CAL-2404    1.5    90    B,R                    1            UH-1/HH-1N    A    N

Goal. Continued work on proficiency in advanced CAL operations.

Requirement

Brief/Discuss

Emergency procedures

CC responsibilities during all types of CAL landings

Review

Approach/departure routes

CAL sites in local area

Effect of different terrain features on landings

Obstacles and obstacle clearance

Waveoff recognition and responsibilities

Zone briefs

Sloped and one-skid landings

Performance Standard. IFMTUI will demonstrate the ability to complete all IFMT responsibilities associated with mountainous area flying, CAL approaches of all types and landings to include slope and one-skid landings with no assistance.

Prerequisite. CAL-2402

5. Night Systems (NS)

a. Purpose. To provide the ability to safely utilize NVDs while conducting search and rescue operations during hours of darkness under both High Light Level (HLL) conditions and Low Light Level (LLL) conditions.

b. General. The CC shall be a designated NSSI or NSI and shall be the instructor on all NS events for the IFMTUI. At the successful completion of this stage the IFMTUI will be NSQ HLL and LLL. Rappels, hoists, and short hauls shall not be conducted while any crewmember is wearing NVDs.

c. Crew Requirement. CCI/IFMTUI (CC must be NSSI or NSI)

d. Academic Training. Review the MAWTS-1 NVD manual and the MAWTS-1 In-Flight Medical Technician course ENLISTED AIRCREW NIGHT VISION TRAINING, prior to conducting NVD flights.

NS-2500    1.5    \*    B                    1            UH-1/HH-1N    A    NS

Goal. Introduce NVD low work and pattern work.

Requirement.

Brief/Discuss

Use of NVDs,

Goggle and de-goggle procedures

NVD battery failure

NVD tube failure

Crew/ cockpit coordination.

Introduce

Taxi

Low work

Takeoffs/landings at an unlighted field or remote landing site

Quick stops

Slide on landings

Autorotations (90 degree, 180 degree)

Single engine failures

Hovering/taxiing autorotations

Performance Standard. Demonstrate the ability to prepare, don and use NVDs and to resolve battery and tube failures.

Prerequisite. FAM-2104

NS-2501      1.5      \*      B                      1      UH-1/HH-1N    A    NS

Goal.    Demonstrate/introduce confined area operations using NVDs.  
Requirement

Brief/Discuss

Inadvertent IMC procedures  
Visual illusions  
Night flight techniques

Demonstrate/Introduce

Confined area approaches  
Takeoff and landings (to include the application of steep approaches) using NVDs to a lighted or unlit confined area  
Use aircraft ground lighting systems; e.g. chemlights

Review:    NVD 2400

Performance Standard.    IFMTUI should be comfortable with IFMT responsibilities using NVDs during CAL operations.

Prerequisite.    CAL-2404, NS-2500

NS-2502      1.5      \*      B                      1      UH-1/HH-1N    A    NS

Goal.    Demonstrate/introduce mountain area operations using NVDs.  
Requirement

Brief/Discuss

Inadvertent IMC procedures  
Visual illusions  
Night flight techniques  
Slope, grade, and wind considerations  
Wave-off

Demonstrate

Proficiency with NVDs while conducting CAL operations and navigation procedures

Introduce:    NVD MAL procedures

Review

Lookout procedures required during navigation and confined area landing  
Stress safety procedures, aircraft clearance and terrain effects while using NVDs.  
The use of check points, time distance checks, barrier features, prominent terrain features, and map preparation while using NVDs.

Performance Standard.    IFMTUI should be able to perform all IFMT responsibilities during MAL operations using NVDs during HHL conditions.

Prerequisite.    NS-2501

NS-2503      1.5      \*      B                      1      UH-1/HH-1N    A    NS

Goal.    Continue to develop proficiency in the HLL environment.  
Requirement

Review

NVD CAL and MAL procedures  
NVD navigational techniques and NVD emergency procedures

Performance Standard.    IFMTUI should be capable of performing all IFMT functions during HHL conditions while executing MALs and CALs.

Prerequisite.    NS-2502

NS-2504      1.5    \*      B,R                    1      UH-1/HH-1N    A    NS

Goal. Evaluate crew coordination and competency in the HLL environment during a night SAR mission.

Requirement

Brief/Discuss

- Crew coordination
- Comfort levels
- Situational awareness
- Terrain suitability and obstacle clearance

Review

- Procedures for NVD navigation
- Map preparation
- CALs and MALs
- NVD emergency procedures
- Proficiency in the use of NVDs above .0022 lux in all ground and flight phases

Performance Standard. IFMTUI should demonstrate complete competence in performing a night SAR mission in HLL conditions.

Prerequisite. NS-2503

NS-2505      1.5    \*      B                        1      UH-1/HH-1N    A    NS

Goal. Perform NVD low work and pattern work during low light level conditions.

Requirement

Brief/Discuss

- NVD use during LLL conditions
- Battery failure
- Crew coordination

Introduce: Low work and pattern work.

Performance Standard. Demonstrate competency in the use of NVDs and the ability to perform all duties of IFMT during LLL conditions.

Prerequisite. NS-2504

NS-2506      1.5    90     B,R                    1      UH-1/HH-1N    A    NS

Goal. Develop proficiency in CALs, MALs, and navigation procedures while using NVDs during low light level conditions.

Requirement

Brief/Discuss

- Comfort levels
- Map preparation
- Crew coordination

Introduce

- CALs, MALs
- Navigation flight

Performance Standard. Demonstrate competency in all IFMT responsibilities conducting CALs and MALs during LLL conditions.

Prerequisite. NS-2505

NS-2507      1.5    \*      B,R                    1      UH-1/HH-1N    A    NS

Goal. Evaluate proficiency in the low light level environment while simulating a SAR mission.

Requirement

Brief/Discuss

- Comfort levels
- Map preparation
- Crew coordination

Review

CALs, MALs  
Navigation flight  
All ground and flight procedures  
Performance Standard. Demonstrate complete competency in all maneuvers during LLL conditions while conducting a SAR mission.  
Prerequisite. NS-2506

410. MISSION SKILL TRAINING (3000 PHASE)

1. General. The IFMTUI shall complete the NATOPS Open and Closed book exam and be CPR qualified prior to CCX phase.

2. Search and Rescue (SAR)

a. Purpose. To develop proficiency in Search and Rescue techniques and procedures.

b. General. Due to local SAR demands the need for specific rescue techniques varies between SAR commands. The two recognized rescue procedures are short haul and stokes evolution. As used herein stokes evolution refers to the rappel of the corpsman/rescue aircrewman, egress of the stokes litter, and finally a hoist of either both stokes litter and corpsman, or both separately. Short haul herein refers to short hauling combined IFMT/patient. The IFMTUI shall be currently certified for IV insertion and CPR before designation as an IFMT. The IFMTUI shall complete the Naval Rappelling Course before conducting any rappelling operations during this stage of training. Before conducting rappel operations from the aircraft, IFMTUI will perform a minimum of five tower rappels and quick stop proficiency. IFMTUI will undergo ground training to become familiar with rappelling techniques. This will include a brief of aircraft rigging, short haul, and stokes voice procedures. The IFMTUI will also attend a demonstration of all SAR equipment to be used during this phase of training. While conducting stokes evolutions during this phase of training, the use of live victims in the stokes litter is PROHIBITED.

c. Crew Requirement. IFMTI/IFMTUI/CC (IFMTI or CC must be NSSI or NSI)

SAR-3100 1.5 \* B,R 1 UH-1/HH-1N A D

Goal. Familiarize IFMTUI with conducting aircraft rappelling operations in simple terrain at various altitudes.

Requirement

Brief/Discuss

Aircraft rigging procedures  
Equipment safety inspection requirements  
Proper wear of rappel harness and SAR equipment  
Lost communication procedures  
Hand and arm signals  
Rappelling emergency procedures  
Safety responsibilities

Ground Training

5 hangar rappels completed, demonstrate quick stop proficiency  
Map Study  
A/C Inventory

Demonstrate

Demonstrate Rappel Master (take out Master, master means instructor) responsibilities.  
5 rappels at various altitudes  
2 at 100'  
2 at 150'  
1 at 200'

Safety precautions

Performance Standard. IFMTUI will have basic working knowledge of aircraft rigging for rappelling and basic rappelling procedures.  
Prerequisite. Ground training complete.

SAR-3101 1.5 \* B,R 1 UH-1/HH-1N A D

Goal. To become proficient at rappel master techniques and safety responsibilities.

Requirement. Review SAR 3100

Performance Standard. IFMTUI will demonstrate competent knowledge of safety measures, rigging of aircraft, and rappel master techniques.

Review: Discussion/Ground training of SAR-3100

Prerequisite. SAR-3100

SAR-3102 1.5 \* B,R 1 UH-1/HH-1N A D

Goal. Practice rappel operations and introduce hoist operations in simple terrain.

Requirement.

Brief/Discuss

Rappelling safety procedures

Proper rigging procedures for rappel and hoisting operations

Voice procedures

Hoist limitations

Maximum weight limitations for IFMT equipment

Emergency procedures while conducting hoist and rappel procedures

Ground Training

Map Study

Aircraft inventory

Perform 2 complete evolution in the hangar of a simulated hoist.

Demonstrate: Hoisting procedures. Introduce: A minimum of two rappels at 100', one at 150', one at 200'.

Hoists as desired.

Review: Rappelling procedures

Performance Standard. IFMTUI will demonstrate independent competence in rappel procedures and basic understanding of hoist operations by conducting 4 rappel events with recovery by using the hoist.

Prerequisite. SAR-3101

SAR-3103 1.5 \* B 1 UH-1/HH-1N A N

Goal. Introduce rappel and hoist operations at night in simple terrain.

Requirement Review SAR 2502 at night.

Brief/Discuss

Proper use of all A/C lights

Proper use of chem sticks

Ground Training

Map Study

Aircraft inventory

Performance Standard. IFMTUI will demonstrate independent competence in rappel procedures and basic understanding of hoist operations by conducting 4 rappel events with recovery by using the hoist at night.

Prerequisite. SAR-3102



SAR-3107    1.5    180    B,R                    1            UH-1/HH-1N    A    N

Goal. Practice rappel and hoist operations in conjunction with a weighted stokes litter at night in moderate terrain.

Requirement

Review: SAR 3105 and CAL 2604

Brief/Discuss

Discuss CALs at night

Discuss night issues involving patient care on the ground.

Ground Training

Map study

Aircraft Inventory

Performance Standard. IFMTUI will demonstrate a competent knowledge of rappel and hoist operations at night while using a stokes litter.

Prerequisite. SAR-3106

SAR-3108    1.5    \*            B,R                    1            UH-1/HH-1N    A    D

Goal. Introduce short haul operations in simple terrain.

Requirement

Brief/Discuss

Proper rigging

Hand and arm signals

Altitude Calls

Emergency procedures

Ground Training

Complete one full hangar evolution of a short haul.

Map study

Aircraft Inventory

Introduce: Short haul procedures in area free of obstacles

Performance Standard. IFMTUI will demonstrate a basic knowledge of short haul operations while conducting a minimum of four 50-100 meter short haul evolutions in an area free of obstacles.

Prerequisite. SAR-3105

SAR-3109    1.5    \*            B,R                    1            UH-1/HH-1N    A    D

Goal. Introduce short haul operations in simple terrain in conjunction with a weighted litter and rescue vest or strop.

Requirement

Brief/Discuss

Proper rigging

Hand and arm signals

Altitude calls with a patient or litter

Emergency procedures

Ground Training

Complete one full hangar evolution of a short haul.

Map study

Aircraft Inventory

Introduce: Short haul procedures in area free of obstacles

Performance Standard. IFMTUI will demonstrate a basic knowledge of short haul operations while conducting a minimum of two 50-100 meter short haul evolutions in an area free of obstacles with a weighted litter. IFMTUI will demonstrate a basic knowledge of short haul operations while conducting a minimum of two 50-100 meter short haul evolutions in an area free of obstacles with a rescue vest or strop.

Prerequisite. SAR-3108

SAR-3110 1.5 \* B,R 1 UH-1/HH-1N A N

Goal. Introduce short haul operations at night in simple terrain.

Requirement

Brief/Discuss

- Hand and arm signals
- Use of chem sticks at night
- Use of extra equipment at night

Ground Training

- Complete one full hangar evolution of a short haul at night.
- Map study
- Aircraft Inventory

Review: SAR 3108 at night.

Performance Standard. IFMTUI will demonstrate a working knowledge of short haul operations at night while conducting a minimum of four 50-100 meter short haul evolutions in an area free of obstacles.

Prerequisite. SAR-3107

SAR-3111 1.5 \* B,R 1 UH-1/HH-1N A D

Goal. Introduce moderate terrain short haul operations.

Requirement

Brief/Discuss

- Proper rigging
- Hand and arm signals

Ground Training

- Map study
- Aircraft Inventory
- One complete hangar evolution of a short haul.

Performance Standard. IFMTUI will demonstrate a working knowledge of short haul operations while conducting a minimum of two 100 meter short hauls in moderate terrain

Prerequisite. SAR-3109

SAR-3112 1.5 \* B,R 1 UH-1/HH-1N A D

Goal. Introduce rough terrain short haul operations.

Requirement

Brief/Discuss

- Proper rigging
- Hand and arm signals for a vertical face
- Emergency Procedures for cliff or vertical face

Ground Training

- Map study
- Aircraft inventory
- Hangar evolution of a short haul

Performance Standard. IFMTUI will demonstrate a working knowledge of short haul operations while conducting a minimum of three 100 meter short hauls in rough terrain with one evolution using cliff or vertical face

Prerequisite. SAR-3111

SAR-3113 1.5 90 B,R 1 UH-1/HH-1N A D

Goal. Introduce rough terrain short haul operations with a weighted litter.

Requirement

Brief/Discuss

- Proper rigging
- Hand and arm signals
- Emergency Procedures

Actions required to protect patient from terrain

Ground Training

Map study

Aircraft inventory

Hangar evolution of a short haul with a litter.

Performance Standard. IFMTUI will demonstrate a working knowledge of short haul operations while conducting a minimum of two 100 meter short hauls in rough terrain with a weighted litter

Prerequisite. SAR-3112

SAR-3114 1.5 90 B,R 1 UH-1/HH-1N A N

Goal. Introduce rugged terrain short haul operations at night.

Requirement

Review: SAR 2510 at night.

Brief/Discuss

Proper rigging

Hand and arm signals

Use of chem. Sticks at night

Ground Training

Map Study

Aircraft inventory

Hangar evolution of a night short haul.

Performance Standard. IFMTUI will demonstrate a working knowledge of short haul procedures in rough terrain while performing a minimum of two evolutions .

Prerequisite. SAR-3110

SAR-3115 1.5 90 B,R 1 UH-1/HH-1N A D

Goal. Practice rappel and hoist operations. Introduce Single Litter

Hoist

Requirement

Brief/Discuss

Search patterns

Scanning techniques

SAR-TACAID

Ground Training

Map Study

Aircraft Inventory

Single Litter hoist operations

Review

Rescue litter evolution in mountainous terrain and CAL sites

Hoist emergency procedures

Belay line control

Minimum rotor clearances

Standardized voice procedures

Introduce: Single litter hoist operations

Performance Standard. IFMTUI will demonstrate complete knowledge of rappel and hoist operations in rough terrain. IFMTUI will demonstrate basic knowledge of one Single Litter Hoist in rough terrain.

Prerequisite. SAR-3113

SAR-3116 1.5 \* B 1 UH-1/HH-1N A N

Goal. Practice rappel and hoist operations at night.

Requirement. Review: SAR 3115 at night.

Brief/Discuss

Search Patterns at night

Scanning techniques at night

Searching with A/C lights, NVGs  
Ground Training  
Map Study  
Aircraft Inventory  
SAR-TACAID

Performance Standard. IFMTUI will demonstrate the ability to perform rappel and hoist operations at night without supervision.  
Prerequisite. SAR-3115

SAR-3117 1.5 90 B,R 1 UH-1/HH-1N A N

Goal. Practice rappel and hoist operations at night.  
Requirement. Review: SAR 3115 at night.

Brief/Discuss  
Hand and arm signals  
Proper rigging

Ground Training  
Map Study  
Aircraft Inventory

Performance Standard. IFMTUI should be able to act independently as the acting IFMT during rappel and hoist operations in rough terrain at night.

Prerequisite. SAR-3116

SAR-3118 1.5 \* B,R 1 UH-1/HH-1N A D

Goal. Review all SAR procedures during a simulated search and rescue scenario.

Requirement. Using a simple mission scenario, execute all facets of a simulated rescue mission. Scenario should include communication, navigation to the rescue area, and return to a major hospital.

Performance Standard. IFMTUI should be able to act independently as the acting IFMT during simulated rescue mission.

Prerequisite. SAR-3115

SAR-3119 1.5 \* B,R 1 UH-1/HH-1N A N

Goal. Review all SAR procedures during a simulated search and rescue scenario at night.

Requirement. Review SAR 2515 at night.

Performance Standard. IFMTUI should be able to operate independent of any instruction or coaching by IFMTI during simulated SAR scenario at night.

Prerequisite. SAR-3117

411. CORE PLUS TRAINING (4000 PHASE)

1. General. IFMTUI will have a general understanding of responsibilities during formation flying prior to flight.

2. Formation (FORM)

a. Purpose. To develop the ability to assist with proper lookout doctrine during formation flights in support of SAR missions.

b. Crew Requirements. IP/PUI/CC

FORM-4100 1.5 365 B 2 UH-1/HH-1N A (N)

Goal. Review IFMT responsibilities during formation procedures and maneuvers.

Requirement

Review

Section takeoffs  
Parade position  
Parade turns  
Climbs and descents  
Cross-over  
Break-up & rendezvous  
Overruns  
Lead changes  
Section landings  
Cruise position  
Scouting line

Performance Standard. IFMTUI will demonstrate a thorough knowledge of IFMT responsibilities during all phases of formation flight.

Prerequisite. FAM-2104

412. INSTRUCTOR TRAINING (5000 PHASE)

1. General

a. An IFMT will be qualified to instruct all flights in a particular stage of training once he has completed the corresponding IFMTI stage of flight.

b. Techniques of instruction and standardization will be stressed on all IUT flights. More emphasis should be placed on discussion of standardization criteria and proper procedures than on the actual flying portion of each IUT flight.

c. The IFMTI will play the role of the IFMTUI and the IFMTUI will instruct to the greatest extent possible on all IFMTUI flights.

2. Instructor Under Training (IUT)

a. Purpose. To designate qualified IFMTs as instructors.

b. Crew Requirements. IFMTI/IFMTUI/CC

IUT-5100 1.5 \* B,R E 1 UH-1/HH-1N A (N)

Goal. Qualify the IUT to instruct FAM/NAV/CAL stage flights.

Requirement

Brief/Discuss

Procedures for all FAM/NAV/CAL maneuvers  
Standardization criteria  
Safety parameters for each

Review

All FAM/NAV/CAL maneuvers with emphasis on appropriate safety margins.

Performance Standard. IFMTUI should demonstrate complete knowledge of IFMT responsibilities and be able to confidently and clearly instruct during all phases of FAM/NAV/CAL maneuvers/landings.

Prerequisite. IFMTX-6202

IUT-5101    1.5    \*    B,R                    1            UH-1/HH-1N    A    D

Goal.    Qualify the IFMTUI to instruct day SAR stage flights.

Requirement

Brief/Discuss:    Procedures for all day SAR flights to include all safety precautions and standardization.

Review.    All day SAR requirements with emphasis on appropriate safety margins.

Performance Standard:    IFMTUI should demonstrate complete knowledge of IFMT responsibilities and be able to confidently and clearly instruct during all phases of a day SAR mission.

Prerequisite.    IUT 5100

IUT-5102    1.5    \*    B,R                    1            UH-1/HH-1N    A    N

Goal.    Qualify the IFMTUI to instruct night SAR stage flights.

Requirement

Brief/Discuss:    Procedures for all night SAR flights to include all safety precautions and standardization.

Review.    All night SAR requirements with emphasis on appropriate safety margins.

Performance Standard.    IFMTUI should demonstrate complete knowledge of IFMT responsibilities and be able to confidently and clearly instruct during all phases of a night SAR mission.

Prerequisite.    IUT 5101

413.    REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS (6000 PHASE)

1.    The requirements, qualifications, and designations events are designed to qualify IFMTs for normal annual currency requirements and to provide the SRU with a cadre of selected IFMTs that are capable of accomplishing the unique SAR mission of the Squadron.

2.    Once a IFMTUI has been designated as a SAR IFMT the annual IFMTX-6300 will be used to maintain this qualification. This flight may be flown in conjunction with the annual NATOPS flight.

ACAD-6000                    365    B,R    E

Goal.    NATOPS Open Book exam.

ACAD-6001                    365    B,R    E

Goal.    NATOPS Closed Book Exam.

Prerequisite.    NATOPS Open Book Exam

ACAD-6003                    30    B,R    E

Goal.    Monthly EP exam.

NATOPS-6100    1.5    365    B,R    E            1            UH-1/HH-1N    A    (N)

Goal.    Annual NATOPS Check.

Prerequisite.    NATOPS-6000, NATOPS-6001

NATOPS-6101 1.5 365 B,R E 1 UH-1/HH-1N A (N)

Goal. Discuss CRM principles in general and specifically the CRM requirements required in the unique SAR missions of the SRU. Execute a simulated mission with the requirement that the IFMT show an in depth knowledge of CRM skills during the brief, flight, and post flight.

Requirement

Discuss

Decision Making  
Assertiveness  
Mission Analysis  
Communication  
Leadership  
Adaptability/Flexibility  
Situational Awareness

Review. All discussed items in a simulated mission under actual flight conditions.

Performance Standard. Demonstrate capability to competently use all resources available, to include crew, external agencies, weather and mission analysis to operate safely in the unique missions of the SRU.

Prerequisite. Completion of annual CRM Ground Training.

NATOPS-6103 0.5 90 B,R E 1 UH-1/HH-1N A/S (N)

Goal. Complete a quarterly emergency procedures simulator review. If a simulator is not available a static aircraft may be used.

Requirement. The results of the quarterly emergency simulator review (cockpit/cabin drill) will be annotated on the appropriate ATF and may be maintained in the individual's Aircrew Performance Record (APR) or other appropriate location. These exams/reviews shall be retained for one year based on each aircrew's annual NATOPS evaluation.

Performance Standard. Know all memorized emergency procedures such as emergency cockpit egress.

IFMTX-6200 1.5 \* B,R E 1 UH-1/HH-1N A D

Goal. Qualify IFMTUI as IFMT during day operations.

Requirement. Complete simulated SAR mission.

Performance Standard. IFMTUI will demonstrate a thorough knowledge of helicopter systems, emergency procedures, CALs, MALs, hoist and rappel operations, rescue/medical procedures, and the ability to perform these events under varying emergency and meteorological conditions.

Prerequisite. SAR-3118

IFMTX-6201 1.5 \* B,R E 1 UH-1/HH-1N A N

Goal. Qualify IFMTUI as CC during night operations.

Requirement. Complete simulated SAR mission.

Performance Standard. IFMTUI will demonstrate a thorough knowledge of helicopter systems, emergency procedures, CALs, MALs, hoist and rappel operations, rescue/medical procedures, and the ability to perform these events under varying emergency and meteorological conditions.

Prerequisite. IFMTX-6200

IFMTX-6202 1.5 365 B,R E 1 UH-1/HH-1N A (N)

Goal. Conduct annual IFMT evaluation flight.

Requirement.

Review:

SAR procedures

Emergency procedures

All maneuvers associated with local SAR mission

Performance Standard. IFMT will demonstrate ability to perform all duties during any scenario presented. \*Conduct at least 1 technical evolution

Prerequisite. IFMTX-6201

414. T&R SYLLABUS MATRIX AND ATTAIN/MAINTAIN TABLES

1. T&R Syllabus Matrix

UH-1/HH-1N IFMT T&R SYLLABUS MATRIX												
STAGE	TRNG CODE	# of FLTS	FLT HRS	REFLY INTERVAL	POI	EVAL	TYPE	TOTAL #	CONDI	PREREQ	EVENT DESCRIPTION	CHAINING EVENT CONV
<b>CORE SKILL TRAINING (2000 PHASE EVENTS)</b>												
<b>FAMILIARIZATION (FAM)</b>												
FAM	2100		1.0	*	B		A	1	D		FAM 1	200
FAM	2101		1.0	*	B		A	1	D	2100	FAM 2	201
FAM	2102		1.0	*	B		A	1	D	2101	FAM 3	
FAM	2103		1.0	*	B,R		A	1	D	2102	FAM 4	
FAM	2104		1.5	*	B,R		A	1	N	2103	FAM 5	
<b>FAM TOTAL</b>	<b>5</b>		<b>5.5</b>									
<b>NAVIGATION (NAV)</b>												
NAV	2300		1.0	*	B		A	1	D	2103	NAV 1	220
NAV	2301		1.5	*	B,R		A	1	D	2300	NAV 2	221
NAV	2302		1.5	*	B,R		A	1	N	2301	Night NAV	
<b>NAV TOTAL</b>	<b>3</b>		<b>4.0</b>									
<b>CONFINED AREA LANDINGS (CAL)</b>												
CAL	2400		1.5	*	B		A	1	D	2104	CAL/MAL Intro	
CAL	2401		1.5	*	B,R		A	1	D	2400	CAL/MAL Practice	
CAL	2402		1.5	*	B,R		A	1	N	2401	Night CAL	
CAL	2403		1.5	180	B,R		A	1	D	2401	Sloped/One Skid Landings	
CAL	2404		1.5	90	B,R		A	1	N	2402	CAL Review	
<b>CAL TOTAL</b>	<b>5</b>		<b>7.5</b>									
<b>NIGHT VISION DEVICE (NVD)</b>												
NS	2500		1.5	*	B		A	1	NS	2104	HLL FAM	620
NS	2501		1.5	*	B		A	1	NS	2404,2500	HLL CALs	621
NS	2502		1.5	*	B		A	1	NS	2501	HLL MALS	622
NS	2503		1.5	*	B		A	1	NS	2502	HLL Review	623
NS	2504		1.5	*	B,R		A	1	NS	2503	HLL Check	624
NS	2505		1.5	*	B		A	1	NS	2504	LLL FAM	630
NS	2506		1.5	90	B,R		A	1	NS	2505	LLL CALs/MALS	631
NS	2507		1.5	*	B,R		A	1	NS	2506	LLL Check	632
<b>NVD TOTAL</b>	<b>8</b>		<b>12.0</b>									

UH-1/HH-1N IFMT T&R SYLLABUS MATRIX													
STAGE	TRNG CODE	# of FLTS	FLT HRS	REFLY INTERVAL	POI	EVAL	TYPE	TOTAL #	CONDI	PREREQ	EVENT DESCRIPTION	CHAINING	EVENT CONV
<b>MISSION SKILL TRAINING (3000 PHASE EVENTS)</b>													
<b>SEARCH AND RESCUE (SAR)</b>													
SAR	3100		1.5	*	B,R		A	1	D	Ground Training Complete	Rappel Ops 1 in Simple Terrain		230
SAR	3101		1.5	*	B,R		A	1	D	3100	Rappel Ops 2 in Simple Terrain		231
SAR	3102		1.5	*	B,R		A	1	D	3101	Rappel Ops 3 and Hoist Intro in Simple Terrain		232
SAR	3103		1.5	*	B		A	1	N	3102	Night Rappel/Hoist		240
SAR	3104		1.5	*	B		A	1	D	3102	Stokes Litter with Rappel/Hoist Ops with weighted litter in Moderate Terrain		310
SAR	3105		1.5	180	B,R		A	1	D	3104	Practice Rappel and Hoist Ops with Weighted Litter		311
SAR	3106		1.5	*	B		A	1	N	3103	Night Rappel/Hoist Ops using weighted litter in Simple Terrain		312
SAR	3107		1.5	180	B,R		A	1	N	3106	Night Rappel/Hoist Ops using weighted litter in Moderate Terrain		313
SAR	3108		1.5	*	B,R		A	1	D	3105	Short Haul Ops in Simple Terrain		314
SAR	3109		1.5	*	B,R		A	1	D	3108	Short Haul Ops with weighted litter and Rescue Vest or Strop		315
SAR	3110		1.5	*	B,R		A	1	N	3107	Night Short Haul Ops in Simple Terrain		316
SAR	3111		1.5	*	B,R		A	1	D	3109	Short Haul Ops in Moderate Terrain		317
SAR	3112		1.5	*	B,R		A	1	D	3111	Short Haul Ops Rough Terrain		318
SAR	3113		1.5	90	B,R		A	1	D	3112	Short Haul Ops with a Weighted Litter in Rough Terrain		319
SAR	3114		1.5	90	B,R		A	1	N	3110	Night Short Haul Ops in Rough Terrain		320
SAR	3115		1.5	90	B,R		A	1	D	3113	Rappel/Hoist Ops. Intro Single Litter Hoist		321
SAR	3116		1.5	*	B		A	1	N	3115	Night Rappel/Hoist Ops		322
SAR	3117		1.5	90	B,R		A	1	N	3116	Night Rappel/Hoist Ops 2		
SAR	3118		1.5	*	B,R		A	1	D	3115	Simulated SAR Scenario		
SAR	3119		1.5	*	B,R		A	1	N	3117	Night Simulated SAR Scenario		
<b>SAR TOTAL</b>	<b>20</b>	<b>30.0</b>											
<b>CORE PLUS TRAINING (4000 PHASE EVENTS)</b>													
<b>FORMATION (FORM)</b>													
FORM	4100		1.5	365	B,R		A	2	(N)	2104	FORM Review		610
<b>FORM TOTAL</b>	<b>1</b>	<b>1.5</b>											
<b>INSTRUCTOR TRAINING (5000 PHASE EVENTS)</b>													
<b>INSTRUCTOR UNDER TRAINING (IUT)</b>													
IUT	5100		1.5	*	B,R	E	A	1	(N)	6202	FAM/NAVCAL Instructor Qualification		500
IUT	5101		1.5	*	B,R	E	A	1	D	5100	Day SAR Instructor Qualification		501
IUT	5102		1.5	*	B,R	E	A	1	N	5101	Night SAR Instructor Qualification		
<b>IUT TOTAL</b>	<b>3</b>	<b>4.5</b>											
<b>REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS (RQD)</b>													
<b>ACADEMICS (ACAD)</b>													
ACAD	6000			365	B,R	E					NATOPS Open Book		
ACAD	6001			365	B,R	E					NATOPS Closed Book		
ACAD	6002			90	B,R	E					EP Test		
<b>NATOPS REQUIREMENTS (NATOPS)</b>													
NATOPS	6100		1.5	365	B,R	E	A	1	(N)		Annual NATOPS EVAL		
NATOPS	6101		1.5	365	B,R	E	A	1	(N)		CRM EVAL		
NATOPS	6103			90	B,R	E	S/A		(N)		Quarterly EP Review		
<b>IFMT QUALIFICATION FLIGHTS (IFMTX)</b>													
IFMTX	6200		1.5	*	B,R	E	A	1	D	3118	IFMT Day EVAL		400
IFMTX	6201		1.5	*	B,R	E	A	1	N	6200	IFMT Night EVAL		401
IFMTX	6202		1.5	365	B,R	E	A	1	(N)	6201	Annual IFMT EVAL		
<b>RQD TOTAL</b>	<b>9</b>	<b>7.5</b>											

2. Attain/Maintain Tables

UH-1/HH-1N IFMT T&R ATTAIN/MAINTAIN MATRIX											
T&R DESCRIPTION	T&R EVENT			BASIC POI		REFRESHER POI		MAINTAIN		PREREQUISITE	CHAINING
	STAGE	CODE	REFLY	STAGE	CODE	STAGE	CODE	STAGE	CODE		
CORE SKILLS (2000 PHASE)											
Normal Procedures	FAM	2100	*	FAM	2100	FAM		FAM		6000	
Normal Procedures	FAM	2101	*		2101					2100	
Normal Procedures	FAM	2102	*		2102					2101	
Emergency Procedures	FAM	2103	*		2103				2103	2102	
Night FAM	FAM	2104	*		2104				2104	2103	
Local Area NAV	NAV	2300	*	NAV	2300	NAV		NAV		2104	
CAL Site NAV	NAV	2301	*		2301				2301	2300	
Night NAV	NAV	2302	*		2302				2302	2301	
CAL FAM	CAL	2400	*	CAL	2400	CAL		CAL		2104	
CAL FAM 2	CAL	2401	*		2401				2401	2400	
Night CAL FAM	CAL	2402	*		2402				2402	2401	
Sloped/1 Skid Landings	CAL	2403	180		2403				2403	2402	
Night CAL Advanced	CAL	2404	90		2404				2404	2404	2403
HLL LOW WORK	NS	2500	*	NS	2500	NS		NS		2104	
HLL CAL	NS	2501	*		2501					2500	
HLL MALs	NS	2502	*		2502					2501	
HLL REV	NS	2503	*		2503					2502	
HLL EVAL	NS	2504	*		2504				2504	2503	
LLL LOW WORK	NS	2505	*		2505					2504	
LLL CALs/MALs	NS	2506	90		2506				2506	2406	2505
LLL SAR EVAL	NS	2507	*		2507				2507		2506

MISSION SKILL (3000 PHASE)											
Rappel Ops in Simple Terrain	SAR	3100	*		3100		3100			2104	
Rappel Master Techniques	SAR	3101	*		3101		3101			2500	
Rappel/Hoist Ops in Simple Terrain	SAR	3102	*		3102		3102			2501	
Night Rappel/Hoist Ops in Simple Terrain	SAR	3103	*		3103					2502	
Rappel/Hoist Ops with Weighted Litter in Moderate Terrain	SAR	3104	*		3104					2503	
Rappel/Hoist Ops with Weighted Litter in Rough Terrain	SAR	3105	180		3105		3105		3105	2504	
Night Rappel/Hoist Ops with Weighted Litter in Simple Terrain	SAR	3106	*		3106					2505	
Night Rappel/Hoist Ops with Weighted Litter in Moderate Terrain	SAR	3107	180		3107		3107		3107	2506	3105
Short Haul Ops in Simple Terrain	SAR	3108	*		3108		3108			2507	
Short Haul Ops with Weighted Litter in Simple Terrain	SAR	3109	*	SAR	3109	SAR	3109	SAR		2508	
Night Short Haul Ops in Simple Terrain	SAR	3110	*		3110		3110			2509	
Short Haul Ops in Moderate Terrain	SAR	3111	*		3111		3111			2510	
Short Haul Ops in Rough Terrain	SAR	3112	*		3112		3112			2511	
Short Haul Ops with Weighted Litter in Rough Terrain	SAR	3113	90		3113		3113		3113	2512	
Night Short Haul Ops in Rough Terrain	SAR	3114	90		3114		3114		3114	2513	3113
Rappel/Hoist Ops with Single Litter Hoist	SAR	3115	90		3115		3115		3115	2514	3105
Night Rappel/Hoist Ops	SAR	3116	*		3116					2515	
Night Rappel/Hoist Ops	SAR	3117	90		3117		3117		3117	2516	3115, 3107, 3105
Simulated Day SAR	SAR	3118	*		3118		3118			2517	
Simulated Night SAR	SAR	3119	*		3119		3119			2518	
CORE PLUS (4000 PHASE)											
FORM	FORM	4100	365	FORM	4100	FORM	4100	FORM	4100	FAM STAGE COMPLETE	