CHAPTER 3

UH-1Y CREW CHIEF/AERIAL OBSERVER

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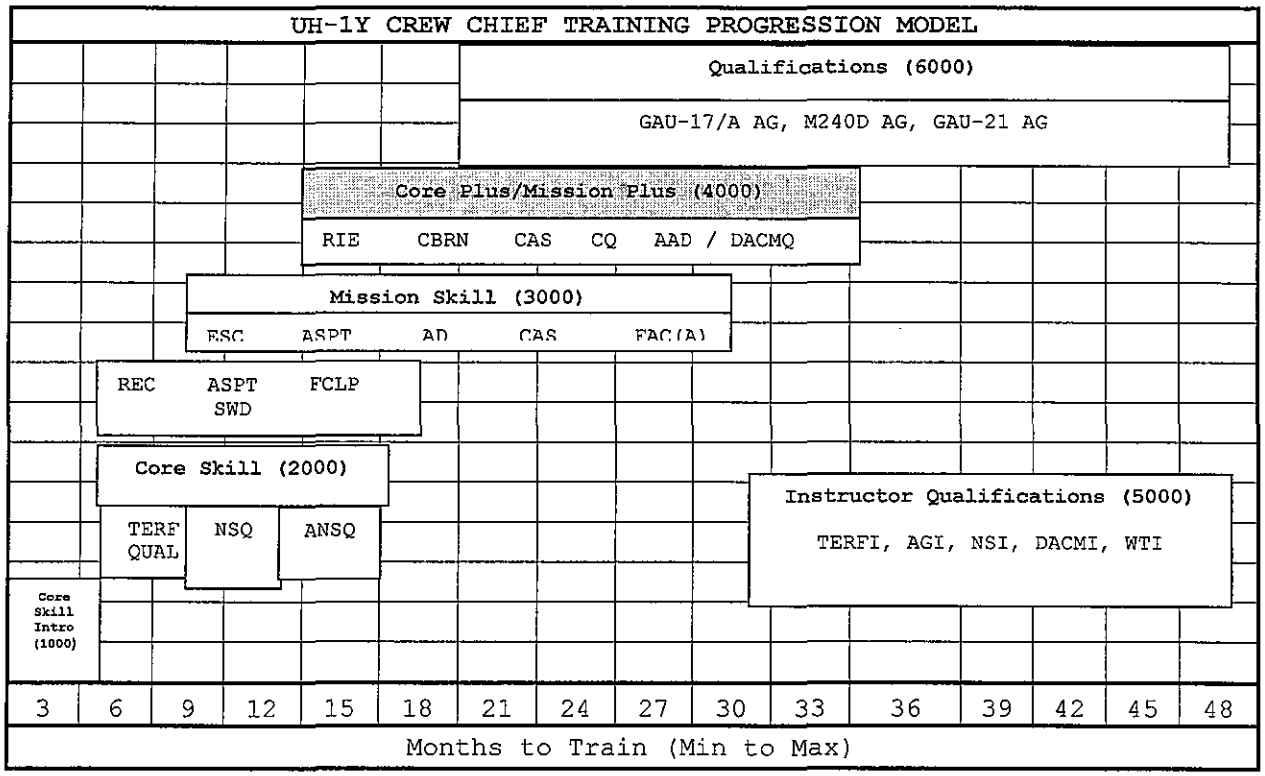
CHAPTER 3

UH-1Y CREW CHIEF/AERIAL OBSERVER

3.0 UH-1Y CREW CHIEF/AERIAL OBSERVER INDIVIDUAL TRAINING AND READINESS REQUIREMENTS. This T&R syllabus is based on specific goals and performance standards designed to ensure individual proficiency in Core and Mission Skills. The goal of this chapter is to develop individual and unit warfighting capabilities.

3.1 UH-1Y CREW CHIEF/AERIAL OBSERVER TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the minimum to maximum time per phase for the UH-1Y crewmember. Units should use the model as a guide to generate individual training plans.



3.2 PROFICIENCY & CURRENCY

3.2.1 Proficiency. Proficiency is a measure of achievement in the execution of a specific skill. Refly factors establish the maximum time between demonstration of those particular skills. To regain proficiency, an individual shall complete the delinquent events with a proficient crew chief. If an entire unit loses proficiency, unit instructors shall regain proficiency by completing an event with an instructor from a like unit. If not feasible, the instructor shall regain proficiency by completing the event with another instructor. If a unit has only one instructor and cannot complete the event with an instructor from another unit, the instructor shall regain proficiency with the next highest qualified crew chief available or as designated by the commanding officer.

3.2.2 Currency. Currency is a control measure used to provide an additional margin of safety based on exposure frequency to a particular skill. It is a measure of time since the last event demanding that specific skill. For example, currency determines minimum altitudes in rules of

conduct based upon the most recent low altitude fly date. Specific currency requirements for individual type mission profiles can be found in Chapter 3 of the Aviation T&R Program Manual.

3.3 INDIVIDUAL CORE SKILL PROFICIENCY REQUIREMENTS

3.3.1 Management of individual CSP serves as the foundation for developing proficiency requirements in DRRS-MC.

3.3.2 Individual CSP is a "Yes/No" status assigned to an individual by Core Skill. When an individual attains and maintains CSP in a Core Skill, the individual counts towards CMMR Unit CSP requirements for that Core Skill.

3.3.3 Proficiency is attained by individual Core Skill where the training events for each skill are determined by POI assignment.

3.3.4 Once proficiency has been attained by Core Skill (by any POI assignment) then the individual maintains proficiency by executing those events noted in the Maintain table and in the Maintain POI column of the Attain and Maintain Table. An individual maintains proficiency by individual Core Skill.

Note

Individuals may be attaining proficiency in some Core Skills while maintaining proficiency in other Core Skills.

3.3.5 Once proficiency has been attained, should one lose proficiency in an event in the "Maintain POI" column, proficiency can be re-attained by demonstrating proficiency in the delinquent event. Should an individual lose proficiency in all events in the "Maintain POI" column by Core Skill, the individual will be assigned to the Refresher POI for that Skill. To regain proficiency for that Core Skill the individual must demonstrate proficiency in all R-coded events for that Skill.

CORE SKILLS (2000 Phase) ATTAIN AND MAINTAIN PROFICIENCY						
SKILL	STAGE	T&R DESCRIPTION	ATTAIN PROFICIENCY			MAINTAIN PROFICIENCY
			BASIC POI	REFRESHER POI	SERIES CONV POI	
TERF	TERF	INTRO TERF NAV	2100			
	TERF	REVIEW NVD TERF ~NS	2101R	2101R	2101R	2101R
REC	SREC	SENSOR FAM	2300			
	REC	SENSOR FAM	2301R	2301R		2301R
ASPT	ASPT	TAC LANDINGS	2400			
	ASPT	~NS NVD TAC LDGS	2401			
	ASPT	SECTION TAC LANDINGS	2402R	2402R	2402R	
	ASPT	~NS NVD SECTION TAC	2403R	2403R	2403R	2403R
FCLP	FCLP	DAY FCLP	2501R	2501R		
	FCLP	NIGHT AND NVD FCLP	2502R	2502R		2502R
SWD	SWD	GAU-17/A INTRO	2601R	2601R	2601R	
	SWD	M240D INTRO	2602R	2602R		
	SWD	GAU-21 INTRO	2603R	2603R		
	SWD	~NS NVD GAU-17/A INT	2605			
	SWD	~NS NVD M240D INTRO	2606			
	SWD	~NS NVD GAU-21 INTRO	2607			
	SWD	LLL NVD GAU-17/A INT	2609R	2609R	2609R	2609R
	SWD	LLL NVD M240D INTRO	2610R	2610R	2610R	2610R
	SWD	LLL NVD GAU-21 INTRO	2611R	2611R	2611R	2611R
ANSQ	ANSQ	LLL NVD TERF/NAV	2702R	2702R		
	ANSQ	LLL NVD SECTION TAC	2703			
	ANSQ	LLL NVD TAC ASPT	2704R	2704R	2704R	2704R

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.

3.4 INDIVIDUAL MISSION SKILL PROFICIENCY REQUIREMENTS

3.4.1 Management of individual MSP serves as the foundation for developing proficiency requirements in DRRS-MC.

3.4.2 Individual MSP is a "Yes/No" status assigned to an individual by Mission Skill. When an individual attains and maintains MSP in a Mission Skill, the individual counts towards CMMR Unit MSP requirements for that Mission Skill.

3.4.3 Proficiency is attained by individual Mission Skill where the training events for each skill are determined by POI assignment.

3.4.4 Once proficiency has been attained by Mission Skill (by any POI assignment) then the individual maintains proficiency by executing those events noted in the Maintain table and in the Maintain POI column of the Attain and Maintain Table. An individual maintains proficiency by individual Mission Skill.

Note

Individuals may be attaining proficiency in some Mission Skills while maintaining proficiency in other Mission Skills.

3.4.5 Once proficiency has been attained, should one lose proficiency in an event in the "Maintain POI" column, proficiency can be re-attained by demonstrating proficiency in the delinquent event. Should an individual lose proficiency in all events in the "Maintain POI" column by Mission Skill, the individual will be assigned to the Refresher POI for that Skill. To regain proficiency for that Mission Skill the individual must demonstrate proficiency in all R-coded events for that Skill.

MISSION SKILLS (3000 Phase) ATTAIN AND MAINTAIN PROFICIENCY						
SKILL	STAGE	T&R DESCRIPTION	ATTAIN PROFICIENCY			MAINTAIN PROFICIENCY
			BASIC POI	REFRESHER POI	SERIES CONV POI	
ESC	ESC	HELO ESCORT	3100			
	ESC	NIGHT HELO ESCORT	3101R	3101R		3101R
	ESC	SURFACE ESCORT	3103			
	ANSQ	LLL NVD TERF/NAV	2702R	2702R		2702R
ASPT	ASPT	FASTROPE	3200R	3200R		
	ASPT	NVD FASTROPE	3201R	3201R		3201R
	ANSQ	LLL NVD TERF/NAV	2702R	2702R		2702R
AD	AD	TAC LOADING	3206		3206	
	AD	EXTERNALS	3207R	3207R	3207R	3207R
	ANSQ	LLL NVD TERF/NAV	2702R	2702R		2702R
CAS	CAS	CAS	3303R	3303R		3303R
	ANSQ	LLL NVD TAC ASPT	2704R	2704R	2704R	2704R
FAC(A)	FAC(A)	FAC(A)	3403R	3403R		3403R
	ANSQ	LLL NVD TAC ASPT	2704R	2704R	2704R	2704R

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.

3.5 INDIVIDUAL CORE PLUS SKILL PROFICIENCY REQUIREMENTS

3.5.1 Management of individual CPSP serves as the foundation for developing proficiency requirements in DRRS-MC.

3.5.2 Individual CPSP is a "Yes/No" status assigned to an individual by Core Plus Skill. When an individual attains and maintains CPSP in a Core Plus Skill, the individual counts towards CMMR Unit CPSP requirements for that Core Plus Skill.

3.5.3 Proficiency is attained by individual Core Plus Skill where the training events for each skill are determined by POI assignment.

3.5.4 Once proficiency has been attained by Core Plus Skill (by any POI assignment) then the individual maintains proficiency by executing those events noted in the Maintain table and in the Maintain POI column of the Attain and Maintain Table. An individual maintains proficiency by individual Core Plus Skill.

Note
Individuals may be attaining proficiency in some Core Plus Skills while maintaining proficiency in other Core Plus Skills.

3.5.5 Once proficiency has been attained, should one lose proficiency in an event in the "Maintain POI" column, proficiency can be re-attained by demonstrating proficiency in the delinquent event. Should an individual lose proficiency in all events in the "Maintain POI" column by Core Plus Skill, the individual will be assigned to the Refresher POI for that Skill. To regain proficiency for that Core Plus Skill the individual must demonstrate proficiency in all R-coded events for that Skill.

CORE PLUS (4000 Phase) ATTAIN AND MAINTAIN PROFICIENCY						
SKILL	STAGE	T&R DESCRIPTION	ATTAIN PROFICIENCY			MAINTAIN PROFICIENCY
			BASIC POI	REFRESHER POI	SERIES CONV POI	
RIE	ASPT	PARADROP OPS INTRO	4100			
	ASPT	HELOCAST INTRO	4101			
	ASPT	SPIE INTRO	4102R	4102R		4102R
	ASPT	MAT INTRO/HIE	4104R	4104R		4104R
	ASPT	RAPPEL	4105R	4105R		4105R
	ANSQ	LLL NVD TERF/NAV	2702R	2702R		2702R
CAS	CAS	URBAN CAS	4200R	4200R		4200R
	ANSQ	LLL NVD TAC ASPT	2704R	2704R	2704R	2704R
AAD	DACM	Air-to-air gunnery	4300R	4300R		4300R
	DACM	1V1 RW	4301R	4301R	4301R	4301R
	DACM	2V1 RW	4302R	4302R		4302R
	DACM	1V1 FW	4304			
	DACM	2V2 FW	4305R	4305R		4305R
CBRN	CBRN	A/P23P-14A(V) OR A/P	4400R	4400R		4400R
CQ	CQ	DAY CQ	4600R	4600R		
	CQ	NVD CQ	4601R	4601R		4601R
	CQ	UNAIDED CQ	4602R	4602R		
	ANSQ	LLL NVD TERF/NAV	2702			2702

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.

3.6 REQUIREMENTS, QUALIFICATION AND DESIGNATION TABLES. 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 required stage lectures, briefs, squadron training, prerequisites, and other criteria shall be completed prior to completing final events. Qualification and designation letters shall be signed by the commanding officer and placed in the individual's NATOPS jacket. 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.

UH-1Y CC/AO INDIVIDUAL QUALIFICATION REQUIREMENTS	
Qualification	**Event Requirements**
NATOPS	6101, IAW OPNAV 3710.7 and an annual qualification letter signed by the commanding officer.
TERF	2100, 2101, 2400, 2401
NSQ	TERFQ, 2300, 2301, 2402, 2403
ANSQ	NSQ, 2702, 2703, 2704 and one of the following [2609, 2610 or 2611, must manually verify completion of these events in M-SHARP]
CQ	2501, 4600
NVDCQ	2501, 2502, 4600, 4601
UNAIDED CQ	2501, 2502, 4600, 4602
RWDACM	TERFQ, 4301, 4302
FWDACM	TERFQ, 4304, 4305
AG GAU-17/A	ANSQ, 2601, 2605, 2609, 3101, 3303, 6301
AG M240D	ANSQ, 2602, 2606, 2610, 3101, 3303, 6302
AG GAU-21	ANSQ, 2603, 2607, 2611, 3101, 3303, 6303

UH-1Y CC/AO INDIVIDUAL DESIGNATION REQUIREMENTS	
Designation	**Event Requirements**
CC/AO	CSIX-1901
FRSI	AGI GAU-17/A, AGI M-240D, AGI GAU-21, 5300, 5301
TERFI AGI GAU-17/A AGI M-240D AGI GAU-21 DACMI NSFI NSSI NSI WTI	IAW the MAWTS-1 Course Catalogs. Designations for TERFI and AGI are signed by the unit commanding officer. DACMI, NSI, and WTI designations are signed by the MAWTS-1 Commanding Officer and forwarded to squadron commanding officers. Squadron commanding officers should designate crew chiefs who satisfactorily complete the evaluation flight(s) and have an ATF filed in the APR. FRS and SAR commanding officers should designate NSFIs and NSSIs as appropriate per the MAWTS-1 Course Catalog.

3.7 PROGRAMS OF INSTRUCTION (POI). In accordance with POI updating rules, in order for all events in a stage to be updated once the R coded events for the stage have been flown, there has to be a previously flown date present, either proficient or delinquent, otherwise the event will be recognized as incomplete and must be flown. ***Therefore, all refresher and series conversion aircrew shall ensure previously flown events are logged, based on the last date flown.*** If the flight was flown under a previous T&R (UH-1Y or UH-1N), reference the UH-1Y Syllabus Matrix at the end of the Chapter to ensure events are converted correctly. ***Enlisted Aircrew Training Managers (EATM) shall ensure enlisted aircrew are placed in the appropriate syllabus (B, R, SC) in MSHARP, in order to ensure MSHARP functions properly.***

3.7.1 Basic/Transition (B/T) POI. The Transition POI mirrors the Basic POI. Basic and Transition enlisted aircrew are required to fly the entire syllabus.

3.7.2 Series Conversion (SC) POI. The Series Conversion syllabus is provided for personnel proficient in the UH-1N converting directly to the UH-1Y. After performing event conversion in accordance with (T&R Syllabus Matrix), previously designated UH-1N aircrew in the Series Conversion syllabus shall fly all "SC" coded events if the crewmember is proficient in the UH-1N. The Series Conversion syllabus is predicated on the experience of the Series Conversion aircrew and is primarily designed for aircrews that are not out of the UH-1N for longer than 485 days and is beginning the series conversion within days of the last UH-1N flight. Aircrew that fall outside this date window shall comply with the Refresher POI syllabus. The commanding officer may tailor the Series Conversion syllabus to fit the experience, and proficiency, of the Series Conversion aircrew per T&R Program Manual. All UH-1N aircrew qualified and proficient LLL that are undergoing a Series Conversion syllabus may fly all "NS" and "(NS)" flights under HLL or LLL conditions. M-SHARP will not automatically convert UH-1N events for proficiency in the UH-1Y. The training officer will have to manually enter these dates, for each aircrew, before commencing training in the Series Conversion POI.

3.7.2.1 Upon completion of SWD-2609, SWD-2610 and ASPT-2704 events for the Series Conversion syllabus, the crewmember may be re-designated/qualified ANSQ LLL, AG GAU-17/A, AG M-240D, TERFI, AGI GAU-17/A, AGI M-240D, NSI, and WTI (if previously held in the UH-1N) as appropriate by the squadron commanding officer. CQ and DACM events are not required to be completed prior to regaining the above qualifications/designations in the series conversion syllabus.

3.7.2.2 Upon completion of DACM-4301 events for the Series Conversion syllabus, the crewmember may be re-designated/qualified RWDACM, FWDACM and DACMI (if previously held in the UH-1N) as appropriate by the squadron commanding officer.

3.7.2.3 For series conversion from the UH-1Y to the UH-1N see the UH-1N T&R.

WEEKS	COURSE	PERFORMING ACTIVITY
1	UH-1Y Familiarization	USMC UH-1Y FRS
2	Ground School	USMC UH-1Y FRS
3-8	Core Skill Introduction Training	USMC UH-1Y FRS
9-14	Core Skill/Mission Skill Training	Tactical Squadron
15-16	Core Plus Skill Training	Tactical Squadron

3.7.3 Refresher (R) POI. A Refresher syllabus is provided for personnel returning to an operational squadron who have previously completed the UH-1Y Basic or Series Conversion POI. Experienced aircrew (completed at least one fleet tour in an operational unit) returning to a squadron, who have not flown in an UH-1Y for more than 485 days shall be placed in the Refresher POI.

3.7.3.1 The Refresher syllabus is predicated on the experience of the Refresher aircrew. Aircrew in the Refresher syllabus should fly all "R" coded events; however, aircrew need not fly every event within a stage of training to be re-qualified in that stage. The commanding officer may tailor the Refresher syllabus to fit the experience of the Refresher aircrew per the T&R Program Manual. This assumes that the Refresher has had previous proficiency in that stage of training. If the aircrew has no previous proficiency in a stage or particular event, then the aircrew should fly the entire stage or all events not previously flown. The Refresher syllabus applies only up to the stage achieved during the prior tour. After completion of appropriate Refresher syllabus, the aircrew will complete the entire remaining syllabus. Prerequisites apply only to replacement aircrew and not to Refresher aircrew.

3.7.3.2 Previously designated UH-1N aircrew shall complete all R coded events that are delinquent or incomplete and any other (non R coded) events that are also incomplete. Incomplete events will either be new events with no direct comparison to a UH-1N event or an event with no proficiency date because the aircrew never performed it in the UH-1N. ***M-SHARP will not automatically convert UH-1N T&R syllabus codes for proficiency in the UH-1Y. The Enlisted Aircrew Training Manager will have to manually enter these dates for each CC/AO before commencing Core Skill training in the Refresher POI at the tactical unit.*** At the discretion of the commanding officer, aircrew under the Refresher POI who were previously ANSQ qualified may conduct NS or (NS) Refresher syllabus events under HLL or LLL conditions.

WEEKS	COURSE	PERFORMING ACTIVITY
1	UH-1Y Familiarization	Tactical Squadron
2-3	Ground School	Tactical Squadron
4-8	Core Skill Introduction Training	Tactical Squadron
9-18	Core Skill/Mission Skill Training	Tactical Squadron
19-21	Core Plus Skill Training	Tactical Squadron

3.7.4 MAWTS-1 Level Instructor POI

WEEKS	COURSE	PERFORMING ACTIVITY
24	Night Systems Instructor	MAWTS-1
24	Defensive Aerial Combat Maneuvering Instructor	MAWTS-1

3.7.5 BASIC/TRANSITION, SERIES CONVERSION AND REFRESHER AERIAL OBSERVER

WEEKS	COURSE	PERFORMING ACTIVITY
1	UH-1Y Familiarization	Tactical Squadron
2-3	Ground School	Tactical Squadron
4-17	Core Skill Introduction Training	Tactical Squadron
18-121	Core Skill/Mission Skill Training	Tactical Squadron
51-141	Core Plus Skill Training	Tactical Squadron

3.8 ACADEMIC TRAINING

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

3.8.2 Academic training requirements are listed separately for each phase of flight training. Training may be completed earlier in stage but should be completed by the appropriate sortie(s). Course descriptions are as follows:

3.8.2.1 Interactive Courseware (ICW). This is a Computer Based Training (CBT) syllabus for Core Skill Introduction training. It consists of both self-paced lessons and instructor-presented phase lectures.

3.8.2.2 Academic Support Package (ASP). These are MAWTS-1 prepared classes available on CD-ROM or the MAWTS-1 websites. All material is contained on CDs or the websites, both classified and unclassified. These can be either self-paced lessons or instructor-presented lectures. The classes listed are only the Generics, Common or Specific UH-1 classes.

3.8.2.3 Computer Based Training. These are software and/or hardware

computer training aids designed to augment training for specific systems.

3.8.2.4 Squadron Developed Training. Squadron-developed curriculum is used to enhance the above programs. Recognition training should be continuous.

3.8.2.5 Websites. The MAWTS-1 websites have classes, publications and other pertinent material and are included below.

NIPR:
https://vcepub.tecom.usmc.mil/sites/msc/magtftc/mawts1/departments1/ASD/UH-1%20Division.aspx

SIPR: http://www.mawts1.usmc.smil.mil/ Click on Departments, UH-1 for general information, then select Departments, Academics, Generics, Common or Specific for WTI classified and unclassified courseware. Click on ASP for Academic Support Package courseware.

3.8.2.6 Graduate Level Courses. There are 9 graduate level courses (TERFI, AGI GAU-17, AGI M240D, AGI GAU-21, NSFI, NSSI, DACMI, NSI, and WTI) that qualify instructors for specific portions of the T&R syllabus. The requirements for these instructor certifications are contained in the MAWTS-1 Course Catalogs.

3.8.2.7 External academic courses of instruction available to complete the syllabus are listed below:

COURSE	ACTIVITY
Survival, Evasion, Resistance, and Escape (SERE) Course	NAS Brunswick ME NAS North Island CA
NITE lab	Any Approved Course
Weapons and Tactics Instructor (WTI) Course	MAWTS-1

3.9 EVENT REQUIREMENTS

3.9.1 General. The MAWTS-1 Course Catalog contains a summary matrix of all ground, academic, simulator, and flight requirements for each stage of the T&R. This matrix will be put in the Aircrew Performance Record (APR) of all aircrew to thoroughly track training progression. As each training event is completed, the EATM will input the date of completion.

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

All flights shall terminate with a comprehensive debrief with emphasis on aircrew performance utilizing all evaluation techniques available (e.g. videotape, participating aircrews, external support personnel).

An ATF is required for any initial event completed by a Basic/Transition, Refresher or Series Conversion aircrew, or as recommended by the Squadron Standardization Board. If the commanding officer has waived/deferred a syllabus sortie, the squadron training officer shall place a waiver/deferral letter in section 3 of the APR. Standardized ATFs can be obtained by the T&R sponsor, MAWTS-1.

All aircrew will have an APR. The EATM shall ensure each ATF is entered in section 3 of the APR.

When operational commanders assign HMLA squadrons to prolonged commitments where specific T&R training is not available (e.g., MEU deployments, sustained combat deployments), it is expected that degradation

in some mission areas will occur. Commanding officers are authorized to defer training in specific missions that are not relevant to their current deployment situation. Once the squadron or detachment has returned from the deployment, every effort should be made to achieve the deferred training for the affected crewmember.

Compliance with the written flight description is mandatory for syllabus event completion. In the absence of a flight simulator, completion of a syllabus event is not required to complete that stage. Completion of those events should be accomplished as soon as practical upon simulator availability. Should the command desire, simulator events can be flown in the aircraft for T&R credit.

Training should be accomplished by flying events within a stage in sequence and stages in sequence when practical. As an example, prerequisites allow a CCUI/AOUI to fly events in other stages while waiting for the next HLL or LLL period.

Specific rules of conduct requirements for individual type missions (NVG training, CQs, DACM, etc.) can be found in Chapter 3 of the Aviation T&R Program Manual.

3.9.2 Event Header

3.9.2.1 Sortie Duration. Times indicated for each event are recommendations. When scheduling sorties, Enlisted Aircrew Training Managers are allowed to schedule additional training codes based on anticipated mission sets. This is allowed as long as the performance standards are met for each sortie and sufficient time is available during the flight to accomplish those sorties. If multiple syllabus events are to be accomplished during a single flight evolution, appropriate planning, briefing, and debriefing time shall be allotted to ensure that requisite training objectives can be met.

3.9.2.2 Refly Factor. Refly (proficiency interval) factors reflect the maximum time between syllabus events. Refly factors are delineated in days. If not applicable, an asterisk (*) will be used to indicate the event has no refly interval - it is a one-time training requirement (unless R-coded).

3.9.2.3 Programs of Instruction. Delineates event requirements for specific syllabi.

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

Code	Environmental Condition
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*	Event Shall be flown or conducted at night unaided.
(N*)	Event may be flown or conducted at night; if at night, shall be flown unaided.

3.9.2.5 "E"-Coded Events. Delineates a special event that requires an evaluation. The "E"-coded event also requires an ATF upon execution of every occurrence.

3.9.2.6 Device Codes. Refer to the following table for device codes:

Symbol	Device
A	Event performed in aircraft.

S	Event performed in simulator or a simulated practical application.
A/S	Event performed in aircraft preferred/simulator optional.
S/A	Event performed in simulator preferred/aircraft optional.

3.9.3 Event Body

3.9.3.1 Requirement. The requirement lists specific tasks for the event and indicates what the individual should accomplish.

3.9.3.1.1 Discuss. The IP shall discuss a procedure or maneuver during the brief, in flight, or debrief. The CCUI/AOUI is responsible for knowledge of the applicable procedures prior to the brief.

3.9.3.1.2 Demonstrate. The ICC performs the procedure with accompanying description. The CCUI/AOUI observes the procedure and is responsible for the knowledge of the procedure prior to the sortie.

3.9.3.1.3 Introduce. The ICC may perform the procedure with an accompanying description, or the ICC may coach the CCUI/AOUI through the procedure without demonstration. The CCUI/AOUI shall perform the procedure with coaching, as necessary, and is responsible for knowledge of the procedure prior to the sortie.

3.9.3.1.4 Review. The ICC observes and grades the procedure without coaching the CCUI/AOUI. An airborne critique of the CCUI/AOUI performance is at the option of the instructor. The CCUI/AOUI is expected to perform the procedure without coaching and devoid of procedural error at a level acceptable to warrant progress into the next stage of training.

3.9.3.2 Performance Standards. Performance standards are listed for each T&R event description. These are training standards for individual aircrew performance and shall be utilized by the evaluator as a guideline to determine the satisfactory completion of each event. If the aircrew did not successfully attain the performance standards, the training code shall not be logged as a completed flight. ***Logging multiple training codes on an initial single sortie shall be avoided.***

3.9.3.2.1 Crew served weapons ordnance delivery standards for all phases of training are defined in the following table.

CREW SERVED WEAPONS ENGAGEMENT STANDARDS		
CORE SKILL INTRODUCTION & CORE SKILL PHASE (1000 & 2000)		
DAY & HLL		
RANGE	MAJORITY OF IMPACTS	PERFORMANCE
1500 METERS	Within 50 meter radius	Rounds on target by second burst
1000 METERS	Within 25 meter radius	
500 METERS	Within 15 meter radius	
LLL		
RANGE	MAJORITY OF IMPACTS	PERFORMANCE
1500 METERS	Within 40 meter radius	Rounds on target by second burst
1000 METERS	Within 20 meter radius	
500 METERS	Within 10 meter radius	
MISSION SKILL PHASE (3000)		
RANGE	MAJORITY OF IMPACTS	PERFORMANCE
1500 METERS	Within 40 meter radius	Rounds on target by second burst
1000 METERS	Within 20 meter radius	
500 METERS	Within 10 meter radius	
CORE SKILL PLUS PHASE (4000)		
RANGE	MAJORITY OF IMPACTS	PERFORMANCE
1500 METERS	Within 40 meter radius	Rounds on target by second burst
1000 METERS	Within 20 meter radius	
500 METERS	Within 10 meter radius	
REQUIREMENTS & QUALIFICATIONS PHASE (6000)		
RANGE	MAJORITY OF IMPACTS	PERFORMANCE
1500 METERS	Within 30 meter radius	First burst accuracy
1000 METERS	Within 15 meter radius	
500 METERS	Within 5 meter radius	

3.9.3.2.2 Grading Standards

3.9.3.2.2.1 Complete. The CCUI/AOUI has demonstrated sufficient grasp of the concepts and skills to proceed to the next training evolution or be designated appropriately.

3.9.3.2.2.2 Incomplete. Describes a training event that is not declared 'Complete' due to circumstances beyond the control of the aircrew. Examples may include, but are not limited to: WX, time constraints, aircraft or simulator maintenance, external support inadequate. 'Incomplete' shall not be used to obscure reporting of a substandard performance.

3.9.3.2.2.3 Requires Additional Training (RAT). A RAT is used when the CCUI/AOUI has not yet demonstrated sufficient grasp of the required skills and concepts to progress in the syllabus. A RAT is not derogatory in nature. Instructor remediation recommendations should specifically identify the deficient area(s) for addressing shortcomings in terms of reading assignments, courseware, additional flight, simulator, or other appropriate training. The Instructor assigning a R.A.T. synopsis is responsible for ensuring the recommendation has been endorsed by Squadron leadership and adhered to by the student unless a higher authority intervenes with additional guidance.

3.9.3.2.2.4 Unsatisfactory. Identifies a condition where the CCUI/AOUI has proven unable to meet performance standards due to a lack of preparation, lack of effort, consistent inability to demonstrate improvement or resistance to instruction. Significant safety of flight incidents that are of a direct result of the CC/AO under training actions should be considered unsatisfactory. The instructor assigning this event synopsis is responsible for ensuring recommendations for remediation, if applicable, are proposed through the DSS & Operations Department.

3.9.3.3 Prerequisites. Events (academic or flight/simulator) that must be completed prior to the initiation of the event. Events preceding a "~" indicate prerequisites dependent on optional conditions (e.g. environmental and ordnance). For example SWD-2607~NS ORD, indicates that *if* the event is flown under HLL (NS) and ordnance is utilized (ORD), SWD-2607 is a required prerequisite.

3.9.3.4 Ordnance/Range/Target/External Syllabus Support. Items required to successfully complete the required training.

3.9.3.5 Crew Requirements. The crew requirements listed at the end of each event are requirements for initial stage training flights. For operational flights the minimum crew requirements are defined by OPNAVINST, NATOPS, and NAVMC 3500.14. When not clearly defined by higher directives, the squadron commanding officer, DOSS, or local SOPs may dictate the minimum crew requirements.

3.10 SECONDARY AMOS CREW CHIEF. All efforts shall be made with MMEA-84 to receive assignment of Primary MOS crew chiefs prior to utilizing the secondary AMOS program. If inventory shortages cannot be filled through MMEA-84, authorization is granted to individual unit commanding officers to train secondary AMOS 6174 under the following guidelines:

3.10.1 The number of secondary MOS crew chiefs that an individual unit commander may train is limited to the current staffing formula; 1.6 CC x primary assigned aircraft (PAA) = number of crew chiefs minus primary/additional MOS crew chiefs on hand. For example, if a squadron has

14 primary/additional MOS crew chiefs assigned, and the staffing formula computes to 19 total crew chiefs, unit commanders may only request to train a maximum of 5 secondary AMOS crew chiefs to equal PAA.

3.10.2 To ensure standardization of training and aviation adaptability, all requested trainees shall be designated an Aerial Observer prior to starting secondary AMOS training.

3.10.3 The source population shall be restricted to aviation maintenance MOS of 6114, 6154, and 6324 only. All requests shall be submitted via AMHS message format to CG TECOM ASB for approval prior to trainee starting flight syllabus. Message shall include:

(1) Organization requesting training of secondary AMOS crew chief.

(2) Name, rank, MOS, and SSN of trainee.

(3) Total number of crew chiefs rated by PAA.

(4) Total number of primary and secondary AMOS crew chiefs assigned to requesting MCC.

(5) Adequate justification for training a secondary AMOS crew chief.

(6) Faxed copy of initial AO NATOPS evaluation report (OPNAV 3710.7 form).

3.10.4 Upon receipt of request, TECOM ASB will approve/disapprove request via ASL/ASM and notify requesting command through DMS format. Approved training will be conducted in strict compliance with this Manual and MCO P1200.7, Military Occupational Specialties Manual. Additional requirements are outlined below:

3.10.4.1 To ensure MOS standardization all Core Skill Introduction (1000 level series) codes shall be flown with a current Enlisted Weapons and Tactics Instructor (MOS 6177) or NATOPS Evaluator/Instructor holding a primary MOS of 6174. Only a currently assigned and designated FRS Crew Chief instructor (FRSI) shall administer the Core Skill Introduction evaluation flight (CSIX-1901).

3.10.4.2 The Total Time to Train (TTT) secondary AMOS crew chiefs shall not exceed six months. The date of initial flight and completion of evaluation flight define the TTT.

3.10.4.3 Core Skill Introduction flights previously flown as an Aerial Observer will transfer to the training of the secondary AMOS Crew Chief, provided those flights were flown with the secondary AMOS candidate acting in the capacity of a crew chief.

3.10.4.4 Core Skill Introduction flights not previously flown or that do not meet the above requirement shall be flown with the secondary AMOS candidate acting in the capacity of a crew chief.

3.10.5 Only the FRS commanding officer has the authority to designate the secondary AMOS of 6174. The evaluation flight may be flown at the respective FRS or individual requesting squadron. Requesting commands shall coordinate with the FRS for scheduling of the evaluation flight. TAD funding for either

the trainee or FRS CC instructor shall be the responsibility of the requesting squadron.

3.10.6 The FRSI shall administer the oral and Core Skill Introduction evaluation flight (CSIX-1901) and closed book NATOPS examination. Prior to Core Skill Introduction evaluation flight parent commands shall ensure:

(1) Nominees complete squadron approved open book NATOPS examination.

(2) Prior to designation, nominees shall attend SERE training.

3.10.7 Upon completion of Core Skill Introduction evaluation flight, copies of all certifications and evaluations shall be submitted to the FRS Commanding officer for secondary AMOS certification/approval. Documents to be submitted are:

(1) Copy of current flight physical.

(2) Copy of physiology/water survival Form 3760.32.

(3) Copy of all crew chief 1000 series ATFs.

(4) Copy of current flight orders.

(5) Copy of section III(c), examination record, OPNAV 3760/32G.

(6) Copy of initial AO evaluation form, OPNAV 3710.7.

(7) Original Crew Chief evaluation form, OPNAV 3710.7.

(8) Copy of SERE completion certificate.

(9) Marines listed as instructor on 1000 phase ATFs must submit a copy of respective WTI certificate or NATOPS Evaluator/Instructor designation. The primary purpose of this documentation is to assist the model manager in tracking the certification process and identifies positive/negative trends in the training process. Evaluation standards applicable to primary MOS crew chiefs shall be strictly adhered to for secondary AMOS crew chiefs.

3.10.8 The FRSI shall forward original OPNAV 3710.7 form to FRS Commanding officer for approval. The FRS commanding officer shall sign the NATOPS evaluation and a Crew Chief designation letter and forward to the originating command for insertion into trainees NATOPS jacket.

3.10.9 In order to facilitate management of the MOS end strengths, secondary AMOS crew chiefs desiring a primary 6174 MOS will forward the appropriate AA form to MMEA-6 requesting a lateral move from a secondary AMOS Crew Chief to a primary MOS Crew Chief.

3.10.10 On hand primary designated MOS Crew Chiefs shall have priority for crewmember flight orders IAW MCO 1326.2G, Administration of Temporary Indefinite Flight Orders.

3.10.11 Core Skill, Mission Skill, and Core Plus Skill events previously completed by the secondary AMOS crew chief in the Aerial Observer syllabus may transfer to their crew chief syllabus upon designation by the FRS

Commanding officer and at the discretion of the crewmember's commanding officer. Flights not previously completed as an Aerial Observer shall be flown by the AMOS Crew Chief; an ATF shall be written and filed in their APR. Qualifications attained previously may transfer at the unit commanding officer's discretion.

3.10.12 This policy applies to Marines currently in training and is effective immediately. This is not applicable to Marines designated prior to this revision, or Marines currently assigned to the Executive Flight Detachment of HMX-1.

3.11 CORE SKILL INTRODUCTION ACADEMIC PHASE (1000)

3.11.1 Purpose. To develop a Core Skill Introduction complete crew chief or aerial observer. These academics facilitate understanding of basic functions/operations in the UH-1Y and ensure individuals possess the requisite knowledge to perform entry level crewmember functions.

3.11.2 General. These academics are intended to be an integrated series of academic events contained within each phase of training. Accordingly, academic events serve as pre-requisites to selected flight events or stages.

Core Skill Introduction academic events are listed below.

CORE SKILL INTRODUCTION PHASE	
TRAINING CODES	COURSEWARE
ACAD-1000	CURRENT FRS ACADEMIC SYLLABUS

3.12 CORE SKILL INTRODUCTION PHASE (1000)

3.12.1 Purpose. To develop a Core Skill Introduction complete Crew Chief or Aerial Observer, and to prepare the CCUI/AOUI for follow on Core Skill Phase training. At the completion of this phase the CCUI/AOUI will be designated as a crew chief or aerial observer.

3.12.2 General. Completion of this phase meets the requirements for the designation as a Crew Chief with an MOS of 6174 or an Aerial Observer with an MOS of 6199. At the discretion of the squadron commanding officer a letter designating the CC/AO, shall be placed in the NATOPS jacket and an entry made in the flight log book.

The Core Skill Introduction phase flight syllabus must be completed within (6) months (180) days following the first CCUI/AOUI flight. If six months have elapsed since the completion of any CCUI AOUI flight, that flight must be re-flown prior to completing the CSIX-1901.

3.12.2.1 Stages. The following stages are included in the Core Skill Introduction Phase of training.

CORE SKILL INTRODUCTION PHASE	
PAR NO.	STAGE NAME
3.12.3	Familiarization (FAM)
3.12.4	Formation (FORM)
3.12.5	Terrain Flight (TERF)
3.12.6	Navigation (NAV)
3.12.7	Specific Weapons Delivery (SWD)
3.12.8	Assault Support (ASPT)
3.12.9	Core Skill Introduction Check (CSIX)

3.12.3 Familiarization (FAM)

3.12.3.1 Purpose. To develop familiarity with aircraft flight characteristics, limitations, and emergency procedures during day and night operations. Develop proficiency in assisting pilots in all aspects of FAM flight and to instill basic CRM procedures throughout the familiarization stage.

3.12.3.2 General. At the completion of this stage, the CCUI/AOUI shall have demonstrated the ability to assist pilots in all aspects of FAM flight, both day and night.

AOUI Requirement. FAM-1100 through 1102

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW HMLAT-303 curriculum requirements.

FAM-1100	1.5	*		D	A	1 UH-1Y

Goal. Introduce normal ground and flight procedures.

Requirements

Discuss
- Engine Fire on Start (external)
- APU Fire

Demonstrate
- Use of ICS
- Voice procedures
- Lighting
- Using the clock code system
- Estimating distance

Introduce
- Preflight
- Starting
- Taxi
- Takeoff
- In-flight
- Lookout
- Landing
- Postflight

Performance Standards
- Display knowledge of ICS voice procedure and all applicable emergency procedures.
- Perform crewmember duties during all phases of flight in accordance with UH-1Y NATOPS.

Prerequisite. ACAD-1000

Crew. FRSI or TERFI/CCUI or AOUI

FAM-1101	1.5	*	SC	D	A	1 UH-1Y

Goal. Introduce communications, passenger procedures, normal and

emergency procedures.

Requirements

Discuss
Engine Failures in Flight
Fire in flight
Smoke and Fumes Elimination
Ditching procedures
Aircraft, engine, and transmission limitations

Introduce
Precautionary/emergency landings
Autorotations
Communication/navigation equipment (CDNU)
Passenger briefs
Passenger emergency procedures
Weight and balance calculations
Responsibilities during loading

Performance Standards
Display knowledge of ICS voice procedures and all applicable emergency procedures.

Perform crewmember duties during all phases of flight in accordance with UH-1Y NATOPS.

Prerequisite. FAM-1100

Crew. FRSI or TERFI/CCUI or AOUI

FAM-1102	1.5	*	SC	NS	A	1 UH-1Y

Goal. Introduce NVD techniques (HLL).

Requirements

Discuss
NVD preflight/adjustment/focusing
NVD eye lane
ANV-20-20 Eye Lane System Resolution Test Set use
NVD emergencies/malfunctions
Aircraft emergencies while using NVDs
Aircrew coordination

Introduce
Wear and use of NVDs

Performance Standards
Display ability to perform crewmember duties using NVDs.

Prerequisite. FAM-1101

Crew. NSFI or NSI/CCUI or AOUI

3.12.4 Formation (FORM)

3.12.4.1 Purpose. To become familiar with crew functions and responsibilities required during formation flying.

3.12.4.2 General. At the completion of this stage, the CCUI/AOUI shall have demonstrated the ability to assist pilots in all aspects of formation flight, both day and night.

AOUI requirements. FORM-1301

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW HMLAT-303 curriculum requirements.

FORM-1301	1.5	*	D	A	2 UH-1Y

Goal. Introduce formation flight and tactical formation flight maneuvering.

Requirements

Discuss
- Parade
- Cruise
- Combat cruise
- Combat spread
- Tac turn
- Center turn
- In-place turn
- Split turn
- Cross turn
- Break turn
- Dig and pinch/resume
- Reversal
- Shackle turn
- Cover
- Ordnance delivery patterns

Introduce
- Tactical formations
- Maneuvers
- Hand and arm signals

Review
- Lookout procedures
- Crewmember responsibilities

Performance Standards

Display thorough knowledge of Tactical formation maneuvers.
Demonstrate proficiency assisting pilots in Tactical formation maneuvers.

Prerequisite. FAM-1101

Crew. FRSI or TERFI/CCUI or AOUI

FORM-1303	1.5	*	NS	A	2 UH-1Y

Goal. Introduce NVD formation flight and tactical formation flight maneuvering (HLL).

Requirements

Review
Hand and arm signals
Lookout procedures
Crewmember responsibilities associated with formation flying at night

Performance Standards
Demonstrate proficiency assisting pilots in night formation maneuvers.

Prerequisite. FAM-1102 and 1301

Crew. NSFI or NSI/CCUI or AOUI

3.12.5 Terrain Flight (TERF)

3.12.5.1 Purpose. To develop aircrew coordination required during TERF.

3.12.5.2 General. At the completion of this stage, the CCUI/AOUI shall have demonstrated the ability to assist the pilot in TERF.

AOUI requirement. TERF-1401

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW HMLAT-303 curriculum requirements.

TERF-1401	1.0	*	SC	D	A	1 UH-1Y

Goal. Introduce TERF techniques.

Requirements

Discuss
Aircraft clearance
Aircraft emergencies during TERF altitudes

Introduce
Blade walk
Power checks
Masking/unmasking
NOE quickstops
Bunt
Roll
Low level, contour, and NOE profiles

Performance Standards
Display knowledge and ability to assist pilots in TERF environment.

Prerequisite. FAM-1101

External Syllabus Support. Authorized TERF Area

Crew. FRSI or TERFI/CCUI or AOUI

TERF-1403	1.0	*		NS	A	1 UH-1Y

Goal. Introduce NVD TERF techniques (HLL).

Requirements

Discuss
NVD considerations in the TERF environment

Introduce
Blade walk
Power checks
Masking/unmasking
NOE quickstops
Bunt
Roll
Low level, contour, and NOE profiles on NVDs

Performance Standards
Display knowledge and ability to assist pilots in TERF environment while using NVDs.

Prerequisites. FAM-1102, TERF-1401

External Syllabus Support. Authorized TERF Area

Crew. NSFI or NSI/CCUI or AOUI

3.12.6 Navigation Flight (NAV)

3.12.6.1 Purpose. To become familiar with crew functions and responsibilities while navigating without use of radio navigational aids.

3.12.6.2 General. At the completion of this stage, the CCUI/AOUI shall have demonstrated the ability to assist the pilots in all phases of in-flight navigation.

AOUI requirement. NAV-1500

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW HMLAT-303 curriculum requirements.

NAV-1500	1.5	*	(NS)	A	1 UH-1Y

Goal. Introduce aircrew duties during day or HLL navigation.

Requirements

Introduce
Checkpoints
Time distance checks
Barrier features
Prominent terrain features
Map legends
Map preparation
Route card usage

Review
Lookout procedures
Aircrew coordination required during navigation

Performance Standards

Display the knowledge and ability to assist pilots in navigation during the day or night environment.

Prerequisite. FAM-1102

Crew. FRSI or TERFI (NSFI or NSI)/CCUI or AOUI

3.12.7 Specific Weapons Delivery (SWD)

3.12.7.1 Purpose. To familiarize the aircrew with the procedures required to provide fire on targets of opportunity.

3.12.7.2 General. At the completion of this stage, the CCUI/AOUI shall have demonstrated knowledge of weapons systems and ordnance delivery with crew served weapons. If there is no UH-1Y enlisted aircrew simulator or static weapons trainer available, the SSWD-1600 may be logged in conjunction with SWD-1601.

AOUI requirements. SSWD-1600 and 1601

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW HMLAT-303 curriculum requirements.

SSWD-1600	1.5	*	D	S/A	1 UH-1Y

Goal. Introduce weapons and checklist procedures.

Requirements

Introduce
- Ordnance loading
- Preflight/post-flight of the weapon
- Operations
- Safety procedures
- Weapons conditions
- Ordnance weapons checklist
- Practice firing weapons on pre-briefed targets
- Crew coordination

Performance Standards
Display knowledge and ability to safely employ crew served weapons IAW crew served weapons engagement standards.

Prerequisite. N/A

Ordnance. 1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

External Syllabus Support. UH-1Y enlisted aircrew simulator or Static Weapons Trainer.

Range Requirement. Live fire range (Static Weapons Trainer)

Crew. AGI/CCUI or AOUI

SWD-1601	1.5	*	D	A	1 UH-1Y

Goal. Introduce aerial gunnery training.

Requirements

Discuss
- Attack patterns
- Section operations
- Sighting procedures
- Malfunction/stoppage procedures
- Range estimation techniques.

Introduce
- Ordnance loading
- Preflight/post-flight of the weapon
- Operations
- Safety procedures
- Weapons conditions
- Ordnance weapons checklist
- Practice firing weapons on pre-briefed targets
- Crew coordination

Performance Standards

Display knowledge and ability to safely employ crew served weapons IAW crew served weapons employment table.

Prerequisites. FAM-1101, SSWD-1600

Ordnance. 1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

Range Requirement. Aerial gunnery range

Crew. AGI/CCUI or AOUI

3.12.8 Assault Support (ASPT)

3.12.8.1 Purpose. To become familiar with crew responsibilities during operations in confined areas and safely conduct hook/hoist operations. All aspects of aircrew coordination shall be thoroughly briefed.

3.12.8.2 General. At the completion of this stage, the CCUI/AOUI shall have demonstrated the ability to assist the pilot in all aspects of confined areas, Tactical Landings, and hook/hoist operations IAW UH-1Y NATOPS and NTTP 3-22.3-UH1.

AOUI requirements. ASPT-1801, 1802 and 1803.

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW HMLAT-303 curriculum requirements.

ASPT-1800	1.5	*	D	A	1 UH-1Y

Goal. Introduce confined area operations, to include HIE approaches.

Requirement

Discuss
- Settling with power
- Landing zone brief
- Dynamic rollover
- Slope landings

Aircrew coordination
HIE approaches

Introduce
Lookout procedures during CALs
Safety procedures
Aircraft clearance from obstacles
Terrain suitability
Approach/departure routes
Wave-off procedures

Performance Standards
Display ability to safely conduct confined area landings.

Prerequisite. FAM-1101

Crew. FRSI or TERFI/CCUI

ASPT-1801	1.5	*	SC	D	A	1 UH-1Y

Goal. Introduce Tactical Landing approaches.

Requirements

Discuss
Threat conditions
Tactical approaches/departures

Introduce
Operating in a low to high threat environment
Safety procedures
Aircraft clearance from obstacles
Terrain suitability
Approach/departure route
Wave-off procedures

Performance Standards
Display ability to safely conduct TACTICAL landings and HIE approaches per NATOPS.

Prerequisites. ASPT-1800 (FAM-1101 for AOUI)

Crew. FRSI or TERFI/CCUI or AOUI

ASPT-1802	1.5	*	SC	NS	A	1 UH-1Y

Goal. Introduce night Tactical and Confined Area Landings while using NVDs (HLL)

Requirements

Discuss
Brown/white out
Effects of moisture
Crew coordination

Introduce
Confined area landing night operating procedures
Safety procedures
Aircraft obstacle clearance

Terrain suitability
Approach/departure routes
Wave-off procedures
Ground lighting systems

Performance Standards
Display ability to safely conduct confined area landings and Tactical landings while using NVDs.

Prerequisite. FAM-1102, ASPT-1801

Crew. NSFI or NSI/CCUI or AOUI

ASPT-1803	1.5	*	NS	A	1 UH-1Y

Goal. Review night Tactical Landings to include HIE approaches using NVDs (HLL).

Requirements

Discuss
Brown/white out
Effects of moisture
Crew coordination

Introduce
Confined area landing night operating procedures
Safety procedures
Aircraft obstacle clearance
Terrain suitability
Approach/departure routes
Wave-off procedures
Ground lighting systems

Performance Standards
Display ability to safely conduct confined area landings, Tactical landings, and HIE approaches while using NVDs.

Prerequisite. ASPT-1802

Crew. NSFI or NSI/CCUI or AOUI

ASPT-1804	1.5	*	D	A/S	1 UH-1Y

Goal. Introduce external load/hoist procedures.

Requirements

Discuss
Aircrew coordination
Hand and arm signals
ICS terminology
Hook/hoist limitations/malfunctions
Load release
Emergency procedures
Chicago grip, quick splice, and cable cutters

Introduce
Operational check of hoist/hook
Use of rescue strop and jungle penetrator

Cargo hook pendant and manual release
Emergency procedures for external hook/rescue hoist

Performance standards
Demonstrate proper ICS terminology, hook/hoist operation and installation.
Perform at least two hook-up, flight and release operations for cargo hook.
Perform two hoisting operations using a suitable weight.

Prerequisite. FAM-1101

External Syllabus Support. External weight, hoist if available

Crew. FRSI/CCUI

3.12.9 Core Skill Introduction Check (CSIX)

3.12.9.1 Purpose. To evaluate proficiency in the performance of Core Skill Introduction CC/AO duties and conduct an initial NATOPS/CRM Evaluation per the UH-1Y NATOPS and OPNAVINST 1542.7 series.

3.12.9.2 General. Upon completion of the evaluation event, the CCUI/AOUI can be designated a CC/AO at the discretion of the FRS/squadron commanding officer.

AOUI requirements. CSIX-1901

Crew Requirements. Initial CSIX-1901 for CCUI must be conducted by the FRS. Initial CSIX-1901 for AOUI may be conducted by squadron Assistant NATOPS Instructor.

Ground/Academic Training. NATOPS open book test, NATOPS closed book test and ground CRM training must be completed per the UH-1Y NATOPS and OPNAVINST 1542.7 series prior to commencing the CSIX-1901 flight event.

CSIX-1901	1.0	*	SC	(NS)	E	A	1 UH-1Y

Goal. Core Skill Introduction NATOPS and CRM evaluation.

Requirement
Conduct a CC/AO Initial NATOPS and CRM evaluation per criteria in the UH-1Y NATOPS and OPNAVINST 1542.7 series.

Performance Standards
IAW UH-1Y NATOPS and OPNAVINST 1542.7 series.

Prerequisite. Core Skill Introduction phase complete, CRM ground training, NATOPS open book test, NATOPS closed book test

Crew. CRMF designated ANI(NSFI or NSI)/CCUI or AOUI

3.13 CORE SKILL ACADEMIC PHASE (2000)

3.13.1 Purpose. To develop a Core Skill complete Crew Chief or Aerial Observer. These academics facilitate understanding of functions/operations in the UH-1Y and ensure individuals possess the requisite knowledge to be TERF, NSQ and ANSQ qualified. The focus of this training is combat proficiency.

3.13.2 General. These academics are intended to be an integrated series of academic lectures contained within each phase of training. Accordingly, academic events are like any other event in that they serve as prerequisites to selected flight events or stages.

The lectures are contained in the MAWTS-1 Enlisted Aircrew Academic Support Package. The codes associated with these academic requirements do not require ATFs. At the completion of each ACAD event, the appropriate training code shall be logged in M-SHARP by the EATM. The codes below are for lectures only; readings and guided discussions are NOT included and are contained only in the course catalog. Reference the current UH-1Y Course Catalog for the most recent academic requirements.

Core Skill academic events are listed below.

CORE SKILL ACADEMIC PHASE	
TRAINING CODES	COURSEWARE
GENERAL REQUIREMENTS	
ACAD-2050	EA TACTICAL AIRCREW CONSIDERATIONS AND RESPONSIBILITIES
TERF	
ACAD-2051	TERRAIN FLIGHT FOR ENLISTED AIRCREW
ACAD-2052	EA NIGHT VISION TRAINING
SWD	
ACAD-2053	EA FUNDAMENTALS OF AERIAL GUNNERY
ACAD-2055	EA GAU-17/A MACHINE GUN
ACAD-2056	EA M240D MACHINE GUN
ACAD-2057	EA GAU-21 MACHINE GUN
ACAD-2058	EA LASER Aiming DEVICES
ACAD-2059	EA LASER BORESIGHTING
ANSQ	
ACAD-2060	EA INTRO TO INSERTS AND RAID OPERATIONS

3.14 CORE SKILL PHASE (2000)

3.14.1 Purpose. To produce a TERF, NSQ, and ANSQ qualified CC/AO.

3.14.2 General. Upon completion of this phase, the aircrew will be TERF, NSQ, and ANSQ complete and may conduct additional missions as specified by the Squadron Commander.

After completing TERF-2100,2101 and ASPT-2400,2401, the CCUI/AOUI meets the requirements to be Terrain Flight Qualified (TERFQ). At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as TERFQ shall be placed in the NATOPS jacket and an entry made in the flight log book.

After completing ASPT-2403, the CCUI/AOUI meets the requirements to be Night Systems Qualified (NSQ). At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as NSQ shall be placed in the NATOPS jacket and an entry made in the flight log book.

After completing ANSQ-2704, the CCUI/AOUI meets the requirements to be Advanced Night Systems Qualified (ANSQ). At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as ANSQ shall be placed in the NATOPS jacket and an entry made in the flight log book.

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

	CORE SKILL PHASE
PAR NO.	STAGE NAME
3.14.3	Terrain Flight (TERF)
3.14.4	Reconnaissance (REC)
3.14.5	Assault Support (ASPT)
3.14.6	Field Carrier Landing Practice (FCLP)
3.14.7	Specific Weapons Delivery (SWD)
3.14.8	Advanced Night Systems Qualification (ANSQ)

3.14.3 Terrain Flight (TERF)

3.14.3.1 Purpose. To refine proficiency in terrain flight and navigation.

3.14.3.2 General. CCUI/AOUI will demonstrate proficiency in terrain flight and navigation.

AOUI Requirement. TERF-2100 and 2101

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW the MAWTS-1 UH-1 Course Catalog.

TERF-2100 1.0 180 R D A 1 UH-1Y

Goal. Introduce TERF navigation.

Requirements

Discuss
- Safety precautions when operating in a TERF environment
- Tactical considerations during TERF
- Obstacle avoidance

Introduce
- TERF Navigation
- Use of checkpoints
- Time distance checks
- Barrier features
- Prominent terrain features
- Map legend
- Map preparation
- Route cards

Review
- TERF Profiles
- TERF maneuvers
- Blade walk
- Power checks

Performance Standards
- Demonstrate the ability to safely perform TERF navigation in low level, contour, and NOE environments.
- Demonstrate the ability to conduct all TERF maneuvers IAW the UH-1Y NATOPS, MDG and NTTP.

Prerequisites. ACAD-2050 and 2051, CSIX-1901

Range Requirement. Authorized TERF route, high bird if required

Crew. TERFI/CCUI or AOUI

TERF-2101	1.0	180	R,SC,M	NS	A	1	UH-1Y

Goal. Review TERF maneuvers and navigation using NVDs (HLL).

Requirements

Discuss
- Safety precautions when operating in a TERF environment
- Safety precautions when flying on NVGs
- Terrain suitability
- TERF maneuvers at night

Introduce
- NVD lookout procedures during TERF
- Use of the ANV-20/20 NVD Infinity Focus Device

Review
- Checkpoints
- Time distance checks
- Barrier features
- Prominent terrain features
- Map legend
- Map preparation
- Route cards

Performance Standards
- Demonstrate the ability to safely perform TERF navigation in low level, contour, and NOE environments.
- Demonstrate the ability to conduct all TERF maneuvers IAW the UH-1Y NATOPS, MDG and NTTP.

Prerequisite. ACAD-2052, TERF-2100

Range Requirement. Authorized TERF route, high bird if required

Crew. NSI/CCUI or AOUI

3.14.4 Reconnaissance (REC)

3.14.4.1 Purpose. To develop proficiency in reconnaissance operations.

3.14.4.2 General. The CCUI/AOUI will demonstrate proficiency in sensor employment for target detection, recognition and identification during reconnaissance operations.

The CCUI/AOUI shall be familiar with the use of the Night Thermal Imaging System (NTIS). The CCUI/AOUI will safely conduct operational tasks prior to and during NTIS operations.

The SREC-2300 shall be conducted on the ground in an aircraft/simulator configured with an operable FLIR. All efforts should be made to utilize BSB II configured aircraft for these events.

AOUI Requirement. REC-2300 and 2301

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW the MAWTS-1 UH-1 Course Catalog.

SREC-2300 0.0 * (NS) A/S 1 STATIC UH-1Y

Goal. Familiarize the CCUI and AOUI with terminology, preflight, post-flight, switchology of NTIS.

Requirements

Discuss
- Terminology
- LRF operation and Laser safety considerations
- CRM as it relates to NTIS
- Integration of handheld optics and aircraft sensor systems

Introduce
- Sensor system power up
- Controller operation
- Laser operations
- Shutdown procedures

Performance Standards
Demonstrate basic knowledge and understanding of FLIR/NTIS operations to include; track, polarity, freeze, cage, zoom and safe LRF utilization.

Prerequisite. ACAD-2050, CSIX-1901

External Syllabus Support. Aircraft with APU or auxiliary power source

Crew. NSI/CCUI or AOUI

REC-2301 1.0 365 R,M (NS) A 1 UH-1Y

Goal. Review terminology, preflight, post-flight, switchology, and flight operation of FLIR/NTIS.

Requirements

Discuss
- Terminology
- LRF operations and Laser safety considerations
- CRM as it relates to NTIS
- Integration of handheld optics and aircraft sensor systems

Review
- Sensor system power up
- Controller operation
- Laser operations
- Shutdown procedures

Performance Standards
Demonstrate knowledge and understanding of FLIR/NTIS operations to include; track, polarity, freeze, cage, zoom and safe LRF utilization.
Locate and demonstrate the ability to assist crew with target correlation utilizing the FLIR/NTIS.

Prerequisite. SREC-2300

Range Requirement. LASER safe range, if available

External Syllabus Support. Thermally augmented threat vehicles, if available

Crew. NSI/CCUI or AOUI

3.14.5 Assault Support (ASPT)

3.14.5.1 Purpose. To develop proficiency in section tactical approaches, landings and departures during day and HLL conditions.

3.14.6.2 General. The CCUI/AOUI will demonstrate proficiency in tactical landings, tactical approaches and section assault support skills.

AOUI Requirement. ASPT-2400 through 2403

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW the MAWTS-1 UH-1 Course Catalog.

ASPT-2400	1.5	*	D	A	1 UH-1Y

Goal. Develop proficiency in tactical approaches, landings and departures.

Requirements

Discuss
- Tactical approaches, landings and departures
- Individual waveoffs
- HIE operations
- Safety and NATOPS limitations
- Reduced Visibility Landings (RVLs) and CRM
- Terrain/obstacle clearance
- ICS terminology
- Crew coordination during Tactical Landing and HIE approaches

Introduce
- Tactical approaches/departures
- Slope landings
- HIE terminology and operations

Performance Standards
- Demonstrate the ability to assist pilots in a minimum of 8 landings, with a minimum of 1 simulated/actual reduced visibility landing.
- Demonstrate proper crew coordination during takeoff/landings and aircraft clearance.

Prerequisites. ACAD-2050, CSIX-1901

Crew. TERFI/CCUI or AOUI

ASPT-2401	1.5	*	NS	A	1 UH-1Y

Goal. Develop proficiency in tactical approaches, landings and departures utilizing NVDs during (HLL).

Requirements

Discuss
- Crew coordination during Tactical Landings and HIE approaches
- RVL considerations
- Closure rates and drift
- NVD lookout procedures during tactical landings and HIE approaches
- Use of the ANV-20/20 NVD Infinity Focus Device

Introduce
- Tactical approaches/departures while using NVDs
- HIE terminology and operations at night

Review
- Tactical approaches/departures
- HIE operations
- Safety and NATOPS limitations
- Terrain/obstacle clearance
- ICS terminology

Performance Standards

Demonstrate the ability to assist pilots in a minimum of 8 landings, with a minimum of 1 simulated/actual reduced visibility landing.

Demonstrate proper crew coordination during takeoffs/landings, and aircraft obstacle clearance.

Prerequisites. ACAD-2052, ASPT-2400

Crew. NSI/CCUI or AOUI

ASPT-2402	1.5	120	R,SC	D	A	2 UH-1Y

Goal. Introduce tactical assault support ingress profiles and landing formations IAW UH-1 NTTP.

Requirements

Introduce
- Section tactical approaches, landings and departures
- Single Point, Single Axis Ingress Profile
- Single Point, Dual Axis Ingress Profile
- Multiple Point, Single Axis Ingress Profile
- Multiple Point, Dual Axis Ingress Profile

Review
- Tactical approaches/departures
- Section mechanics
- HIE operations
- Safety and NATOPS limitations
- Terrain/obstacle clearance
- ICS terminology
- Crew coordination during Tactical Landings and HIE approaches
- Brown/white out considerations
- Closure rates and drift

Performance Standards

Demonstrate the ability to assist pilots with minimum of 4 ingress profiles accomplished as lead and 4 ingress profiles accomplished as the wingman.

A minimum of two ingress profiles shall end in an HIE approach.

Demonstrate proper crew coordination, aircraft clearance, and wingman awareness.

Prerequisites. TERF-2100, ASPT-2400

Crew. TERFI/CCUI or AOUI

ASPT-2403	1.5	120	R,SC,M	NS	A	2 UH-1Y

Goal. Conduct tactical assault support ingress profiles and landing formations IAW UH-1 NTTP (HLL).

Requirements

Discuss
Previously discussed stage items.

Review
Section tactical ingress profiles, approaches, landings and departures
Simultaneous landings
Low to high rejoin IAW UH-1 NTTP
Slope landings
Section tactical approaches, landings and departures at night
NVD compatible landing zone lighting aids
Use of overt / IR searchlight
NVD scan patterns during approach and landing in lead and -2 positions
Night RVLs
Far/near ITG
Sensor usage in zone identification
Fastrope/Rappel Profiles and communication
Flight and individual waveoffs

Evaluate
CCUI's ability to assist the pilots in safely conducting tactical ingress profiles, approaches and landings under HLL conditions

Performance Standards
Demonstrate the ability to assist pilots with minimum of 4 ingress profiles accomplished as lead and 4 ingress profiles accomplished as the wingman.
A minimum of 2 ingress profiles shall end in an HIE approach.
Demonstrate proper crew coordination, aircraft clearance, and wingman awareness.

Prerequisite. REC-2301, ASPT-2400 through 2402, TERFQ

Crew. NSI/CCUI or AOUI

3.14.6 Field Carrier Landing Practice (FCLP)

3.14.6.1 Purpose. To introduce flight operations from a carrier deck or air capable ship by introducing day and night FCLPs.

3.14.6.2 General. The CCUI/AOUI will demonstrate proper communications, patterns and aviation operations in the shipboard environment. Consideration should be given to conducting FCLPs to both LSD/LPD and LHA/LHD deck configurations. Refer to appropriate NATOPS and LHA/LHD/MCS NATOPS manuals for shipboard operations.

AOUI requirement. FCLP-2501 and 2502.

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW the MAWTS-1 UH-1 Course Catalog.

FCLP-2501	1.0	365	R	D	A	1 UH-1Y

Goal. Introduce day FCLP operations.

Requirements

Discuss
- Types of air capable ships
- Shipboard specific crew coordination
- LSE signals
- Emergency and ditching procedures
- Wind limitation charts
- Shipboard terminology
- Alpha, Delta, and Charlie patterns
- High wind start procedures
- Hazards of Electromagnetic Radiation to Ordnance (HERO) conditions
- Passenger procedures for shipboard operations

Introduce
- Shipboard patterns
- Closure rate
- Proper ICS/Radio terminology
- Landing procedures to an FCLP pad
- High wind start procedures

Review
- Ditching procedures
- Required personal and aircraft survival equipment

Performance Standards
- Perform a high wind start.
- Conduct a minimum of 5 day FCLP landings per the UH-1Y NATOPS and shipboard NATOPS manuals.

Prerequisite. ASPT-2400

External Syllabus Support. FCLP pad

Crew. TERFI/CCUI or AOUI

FCLP-2502	1.0	365	R,M	N*/NS	A	1 UH-1Y

Goal. Introduce night and NVD FCLP operations.

Requirements

Discuss
- Night unaided and NVG shipboard lighting
- Night unaided and NVG safety considerations
- Aircraft lighting configurations
- Night unaided and NVG flight over open water
- Physiological effects with no horizon

Introduce
- Night unaided/NVD patterns
- Closure rate and decent rates
- Landing procedures to an FCLP pad

Review
- Ditching procedures
- Required personal and aircraft survival equipment
- Alpha, Delta and Charlie patterns
- Air capable ships
- Shipboard specific crew coordination
- LSE signals
- Shipboard terminology
- Proper ICS/Radio terminology

Performance Standards
Conduct a minimum of 5 unaided and 5 NVD landings IAW the UH-1Y NATOPS and shipboard NATOPS manuals

Prerequisite. ASPT-2401, FCLP-2501

External Syllabus Support. FCLP pad with overt and NVD deck lighting

Crew. NSI/CCUI or AOUI

3.14.7 Specific Weapons Delivery (SWD)

3.14.7.1 Purpose. To develop proficiency in SWD and weapons system employment.

3.14.7.2 General. Upon successful completion of this stage the CCUI/AOUI will demonstrate knowledge of weapons systems and proficiency in BCWD with crew served weapons. Section operations should be used if available. Weapon mounted Lasers should be used for all SWD NVD flights. Refer to paragraph 3.9.3.2.1 for crew served weapons ordnance delivery standards.

AOUI Requirements. SWD-2601,2602,2603,2605,2606,2607,2609,2610 and 2611

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

Ground/Academic Training. IAW the MAWTS-1 UH-1 Course Catalog. Prior to commencing each flight, the CCUI/AOUI shall receive appropriate ground training by an Aerial Gunnery Instructor/Night Systems Instructor for the respective weapons and Laser usage.

SWD-2601	1.5	180	R,SC	D	A	1 UH-1Y

Goal. Introduce GAU-17/A machine gun employment.

Requirements

Discuss
- Safety considerations associated with ordnance evolutions
- Weapons Checklist procedures
- Crew coordination
- Attack profiles
- Range estimation
- Squadron ordnance SOPs
- CALA and Arm/De-arm procedures

Switchology

Introduce
Ordnance loading
Weapon system preflight
Weapon system employment
Weapon system post-flight
Cycle of operation
Weapon system troubleshooting and malfunction procedures
Proper switchology
Attack profiles

Review
Weapon system emergency procedures
Weapons control procedures
Verbal/non-verbal fire control commands
Fundamentals of aerial gunnery

Performance Standards
Demonstrate basic knowledge of nomenclature and cycle of operation.
Demonstrate the ability to safely and effectively employ the GAU-17/A IAW crew served weapons employment table.
Demonstrate proper disassembly, inspection and reassembly of the weapon system.

Prerequisite. ACAD-2053 and 2055, TERF-2100, ASPT-2400

Ordnance. 1,500 rounds 7.62mm

Range Requirement. Aerial gunnery range

Crew. AGI/CCUI or AOUI

SWD-2602	1.5	180	R	D	A	1 UH-1Y

Goal. Introduce M240D machine gun employment.

Requirements

Discuss
Safety considerations associated with ordnance evolutions
Weapons Checklist procedures
Crew coordination
Attack profiles
Range estimation
Squadron ordnance SOPs
CALA and Arm/De-arm procedures

Introduce
Ordnance loading
Weapon system preflight
Weapon system employment
Weapon system post-flight
Cycle of operation
Weapon system troubleshooting and malfunction procedures
Attack profiles

Review
Weapon system emergency procedures
Weapons control procedures

Verbal/non-verbal fire control commands
Fundamentals of aerial gunnery

Performance Standards
Demonstrate basic knowledge of nomenclature and cycle of operation.
Demonstrate the ability to safely and effectively employ the M240D IAW crew served weapons employment table.
Demonstrate proper disassembly, inspection and reassembly of the weapon system.

Prerequisites. ACAD-2053 and 2056, TERF-2100, ASPT-2400

Ordnance. 400 rounds 7.62mm

Range Requirement. Aerial gunnery range

Crew. AGI/CCUI or AOUI

SWD-2603	1.5	180	R	D	A	1 UH-1Y

Goal. Introduce GAU-21 .50 caliber machine gun employment.

Requirements

Discuss
Safety considerations associated with ordnance evolutions
Weapons Checklist procedures
Crew coordination
Attack profiles
Range estimation
Squadron ordnance SOPs
CALA and Arm/De-arm procedures

Introduce
Ordnance loading
Weapon system preflight
Weapon system employment
Weapon system post-flight
Cycle of operation
Weapon system troubleshooting and malfunction procedures
Attack profiles

Review
Weapon system emergency procedures
Weapons control procedures
Verbal/non-verbal fire control commands
Fundamentals of aerial gunnery

Performance Standards
Demonstrate basic knowledge of nomenclature and cycle of operation.
Demonstrate the ability to safely and effectively employ the GAU-21 IAW crew served weapons employment table.
Demonstrate proper disassembly, inspection and reassembly of the weapon system.

Prerequisites. ACAD-2053 and 2057, TERF-2100, ASPT-2400

Ordnance. 600 rounds .50 cal

Range Requirement. Aerial gunnery range

Crew. AGI/CCUI or AOUI

SWD-2605	1.5	*	NS	A	1 UH-1Y

Goal. Introduce GAU-17/A machine gun employment (HLL).

Requirement

Discuss
- Safety considerations associated with ordnance evolutions during night time operations
- Range estimation
- CALA and Arm/De-arm procedures
- Laser Aiming Devices

Introduce
- Weapons employment during NVD operations
- Preflight, post-flight, and usage of Laser Aiming Devices
- Laser terminology

Review
- Weapons Checklist procedures
- Crew coordination
- Attack profiles
- Switchology

Performance Standards
- Demonstrate detailed knowledge of nomenclature and cycle of operation.
- Demonstrate the ability to safely and effectively employ the GAU-17/A IAW crew served weapons employment table.
- Demonstrate proper jam clearing and troubleshooting techniques while using NVDs.

Prerequisites. ACAD-2058 and 2059, SWD-2601, TERFQ

Ordnance. 1,500 rounds 7.62mm

Range Requirement. Aerial gunnery range

Crew. NSI/CCUI or AOUI

SWD-2606	1.5	*	NS	A	1 UH-1Y

Goal. Introduce M240D machine gun employment (HLL).

Requirements

Discuss
- Safety considerations associated with ordnance evolutions during night time operations
- Range estimation
- CALA and Arm/De-arm procedures
- Laser Aiming Devices

Introduce
- Weapons employment during NVD operations
- Preflight, post-flight, and usage of Laser Aiming Devices
- Laser terminology

Review
Weapons Checklist procedures
Crew coordination
Attack profiles

Performance Standards
Demonstrate detailed knowledge of nomenclature and cycle of operation.
Demonstrate the ability to safely and effectively employ the M240D IAW crew served weapons employment table.
Demonstrate proper jam clearing and troubleshooting techniques while using NVDs.

Prerequisites. ACAD-2058 and 2059, SWD-2602, TERFQ

Ordnance. 400 rounds 7.62mm

Range Requirement. Aerial gunnery range

Crew. NSI/CCUI or AOUI

SWD-2607	1.5	*	NS	A	1 UH-1Y

Goal. Introduce GAU-21 .50 caliber machine gun employment (HLL).

Requirements

Discuss
Safety considerations associated with ordnance evolutions during night time operations
Range estimation
CALA and Arm/De-arm procedures
Laser Aiming Devices

Introduce
Weapons employment during NVD operations
Preflight, post-flight, and usage of Laser Aiming Devices
Laser terminology

Review
Weapons Checklist procedures
Crew coordination
Attack profiles

Performance Standards
Demonstrate detailed knowledge of nomenclature and cycle of operation.
Demonstrate the ability to safely and effectively employ the GAU-21 IAW crew served weapons employment table.
Demonstrate proper jam clearing and troubleshooting techniques IAW checklist procedures while using NVDs.

Prerequisite. ACAD-2058 and 2059, SWD-2603, TERFQ

Ordnance. 600 rounds .50 cal

Range Requirement. Aerial gunnery range

Crew. NSI/CCUI or AOUI

SWD-2609 2.0 180 R,SC,M NS A 2 H-1

Goal. Introduce GAU-17/A machine gun employment (LLL).

Requirements

Discuss
Safety considerations associated with ordnance evolutions during night time operations
Penetration checklist procedures
Aircraft Survival Equipment (ASE)
Sensor integration
Ordnance effects on NVDs during LLL operations

Introduce
Weapons employment during LLL operations
Integration of FLIR to aid in acquiring targets

Review
Weapons Checklist procedures
Crew coordination
Attack profiles
Preflight, post-flight, and usage of Laser Aiming Devices
Laser terminology and operating characteristics

Performance Standards
Demonstrate detailed knowledge of nomenclature and cycle of operation.
Demonstrate proficiency in all aspects of GAU-17/A weapons employment IAW crew served weapons employment table.
Demonstrate proper jam clearing and troubleshooting techniques while on NVDs IAW checklist procedures.

Prerequisite. SWD-2605, NSQ HLL

Ordnance. 1,500 rounds 7.62mm

Range Requirement. Aerial gunnery range

Crew. NSI/CCUI or AOUI

SWD-2610 2.0 180 R,SC,M NS A 2 H-1

Goal. Introduce M-240D machine gun employment (LLL).

Requirements

Discuss
Safety considerations associated with ordnance evolutions during night time operations
Penetration checklist procedures
Aircraft Survival Equipment (ASE)
Sensor integration
Ordnance effects using NVDs during LLL operations

Introduce
Weapons employment during LLL operations

Integration of FLIR to aid in acquiring targets

Review
Weapons Checklist procedures
Crew coordination
Attack profiles
Preflight, post-flight, and usage of Laser Aiming Devices
Laser terminology and operating characteristics

Performance Standards
Demonstrate detailed knowledge of nomenclature and cycle of operation.
Demonstrate proficiency in all aspects of M-240D weapons employment IAW crew served weapons employment table.
Demonstrate proper jam clearing and troubleshooting techniques while on NVDs IAW checklist procedures.

Prerequisites. SWD-2606, NSQ HLL

Ordnance. 400 rounds 7.62mm

Range Requirement. Aerial gunnery range

Crew. NSI/CCUI or AOUI

SWD-2611	2.0	180	R,SC,M	NS	A	2 H-1

Goal. Introduce GAU-21 .50 caliber machine gun employment (LLL).

Requirements

Discuss
Safety considerations associated with ordnance evolutions during night time operations
Penetration checklist procedures
Aircraft Survival Equipment (ASE)
Sensor integration
Ordnance effects on NVDs during LLL operations

Introduce
Weapons employment during LLL operations
Integration of FLIR to aid in acquiring targets

Review
Weapons Checklist procedures
Crew coordination
Attack profiles
Preflight, post-flight, and usage of Laser Aiming Devices
Laser terminology and operating characteristics

Performance Standards
Demonstrate detailed knowledge of nomenclature and cycle of operation.
Demonstrate proficiency in all aspects of GAU-21 weapons employment IAW crew served weapons employment table.
Demonstrate proper jam clearing and troubleshooting techniques IAW checklist procedures while using NVDs.

Prerequisites. SWD-2607, NSQ HLL

Ordnance. 600 rounds .50 cal

Range Requirement. Aerial gunnery range

Crew. NSI/CCUI or AOUI

3.14.8 Advanced Night Systems Qualification (ANSQ)

3.14.8.1 Purpose. To develop proficiency during LLL operations.

3.14.8.2 General. At the completion of this stage, the CCUI/AOUI shall demonstrate core skills proficiency under LLL conditions. Refer to paragraph 3.9.3.2.1 for crew served weapons ordnance delivery standards.

AOUI requirement. ANSQ-2702, 2703 and 2704

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW the MAWTS-1 UH-1 Course Catalog.

ANSQ-2702	1.5	180	R	NS	A	2 H-1

Goal. Develop proficiency in tactical formation flight and TERF navigation (LLL).

Requirements

Discuss
- Safety precautions when flying during Low Light Level conditions
- Terrain suitability
- Section mechanics during TERF
- LLL formation flight considerations

Introduce
- TERF maneuvers in the LLL environment

Review
- Safety precautions when operating in a TERF environment
- NVD lookout procedures during TERF
- Use of the ANV-20/20 NVD Infinity Focus Device

Performance Standards
- Demonstrate proficiency in all TERF maneuvers IAW the UH-1Y NATOPS, MDG and NTTP.
- Demonstrate the ability to accurately prepare a map and assist the pilots in navigation in the TERF environment.

Prerequisite. NSQ

Range Requirement. Authorized TERF route, high bird if required

Crew. NSI/CCUI or AOUI

ANSQ-2703	1.5	*		NS	A	2 UH-1Y

Goal. Review section tactical ingress profiles, approaches, landings, and departures (LLL).

Requirements

Discuss
Section tactics under LLL conditions
Reduced Visibility Landings (RVLs) and CRM

Introduce
Section Tactical landings under LLL conditions
Review
Section mechanics
HIE operations
Safety and NATOPS limitations
Reduced Visibility Landings (RVLs) and CRM
Closure rates and drift

Performance Standards
Demonstrate the ability to assist pilots in a minimum of 4 landings as lead and 4 landings as the wingman.
A minimum of 2 approaches shall end in an HIE profile.

Prerequisite. NSQ

External Syllabus Support. Unlit field or remote landing site free from artificial illumination

Crew. NSI/CCUI or AOUI

ANSQ-2704	1.5	180	R,SC,M	NS	A	2 H-1

Goal. Demonstrate proficiency of crewmember responsibilities during a tactical ASPT mission while employing crew served weapons (LLL).

Requirements

Discuss
Crewmember responsibilities in a tactical environment
Threat profiles and counter-tactics
METT-TSL considerations
Aircraft Survivability Equipment (ASE)
Sensor integration
Sectors of fire

Introduce
Threat counter-tactics and profiles

Review
Considerations of delivering ordnance when inserting/extracting troops
Tactical approaches/departures
Section mechanics
Safety and aircraft limitations
Terrain/obstacle clearance
Closure rates and drift

Performance Standards
Demonstrate proficiency in all aspects of goggle usage and knowledge.
Demonstrate proficiency in all aspects of tactical landings while conducting a minimum of 2 landings.
Deliver ordnance during a minimum of one landing profile. Safe and effective employment of applicable weapon IAW crew served system weapons employment table.

Prerequisite. ACAD-2060, ANSQ-2702, 2703 and one of the following: SWD-2609, 2610 or 2611 based on configuration.

Ordnance. 1,500 rounds 7.62mm GAU-17/A, or 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

Range Requirement. Aerial gunnery range

Crew. NSI/CCUI or AOUI

3.15 MISSION SKILL ACADEMIC PHASE (3000)

3.15.1 Purpose. To develop a Mission Skill proficient Crew Chief or Aerial Observer. These academics facilitate understanding of operations in the UH-1Y and MAGTF level functions to ensure individuals possess the requisite knowledge to perform crewmember functions in those Mission Skills.

3.15.2 General. These academics are intended to be an integrated series of academic lectures contained within each phase of training. Accordingly, academic events are like any other event in that they serve as prerequisites to selected flight events or stages.
3.15.2.1 Completion of the academic events in conjunction with the Mission Skill flight phase meets the requirements for the CCUI/AOUI to be proficient in those specific mission skills.

The lectures are contained in the MAWTS-1 Enlisted Aircrew Academic Support Package. The codes associated with these academic requirements do not require ATFs. At the completion of each ACAD event, the appropriate training code shall be logged in M-SHARP by the EATM. The codes below are for lectures only; readings and guided discussions are NOT included and are contained only in the course catalog. Reference the current UH-1Y Course Catalog for the most recent academic requirements.

3.15.2.2 Core Skill academic events are listed below.

MISSION SKILL ACADEMIC PHASE	
TRAINING CODES	COURSEWARE
ESC	
ACAD-3050	EA BASIC PRINCIPLES OF ESCORT OPERATIONS
ACAD-3054	EA CASEVAC CONSIDERATIONS
ASPT	
ACAD-3051	EA UH-1 HELICOPTER INSERTION AND EXTRACTION (HIE)
CAS	
ACAD-3053	EA INTRO TO CAS AND FAC(A)

3.16 MISSION SKILL PHASE (3000)

3.16.1 Purpose. To produce a mission skill proficient CC/AO. Upon completion of the Mission Skills Phase aircrew shall be proficient in all Mission Essential Tasks.

3.16.2 General. Upon completion of this phase, the aircrew will be ESC, ASPT, AD, CAS, and FAC(A) complete and may conduct additional missions as specified by the squadron commander.

3.16.2.1 Stages. The following stages are included in the Mission Skill

Phase of training.

	MISSION SKILL PHASE
PAR NO.	STAGE NAME
3.16.3	Escort (ESC)
3.16.4	Assault Support (ASPT)
3.16.5	Air Delivery (AD)
3.16.6	Close Air Support (CAS)
3.16.7	Forward Air Controller (Airborne)[FAC(A)]

3.16.3 Escort (ESC)

3.16.3.1 Purpose. To develop proficiency in prescribed airborne and surface escort formations and maneuvers.

3.16.3.2 General. The CCUI/AOUI will develop a detailed understanding and functional knowledge of escort formations, maneuvers and techniques associated with assault support and surface operations.

Ordnance is optional for this stage of training, however it is strongly recommended. If ordnance is utilized, the CCUI/AOUI shall have completed the Core Skills SWD flight corresponding to the appropriate ordnance load and event condition. Refer to paragraph 3.9.3.2.1 for crew served weapons ordnance delivery standards.

AOUI requirements. ESC-3100 and 3101

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW the MAWTS-1 UH-1 Course Catalog.

ESC-3100 1.5 * D A 2 H-1

Goal. Introduce day assault support escort procedures.

Requirements

Discuss
- Purpose of escort
- Responsibilities of escort and assault aircraft
- Sectors of fire
- Winter/devil criteria
- Types of escort
- Six missions of assault support escort

Introduce
- Escort formations
- Techniques and responsibilities per Tactical doctrine for escort

Review
- Lookout doctrine
- Sectors of fire

Performance Standards

Demonstrate the ability to conduct escort operations.

If ordnance is utilized, safe and effective employment of applicable weapon IAW crew served system weapons employment table.

Prerequisite. ACAD-3050, REC-2301, TERFQ (SWD-2601, 2602 or 2603~ORD based on configuration)

Ordnance. Optional. 1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

Range Requirement. Aerial gunnery range (if required)

External Syllabus Support. One or more assault support aircraft

Crew. AGI/CCUI or AOUI

ESC-3101	1.5	365	R,M	NS	A	2 H-1

Goal. Introduce night assault support escort.

Requirements

Discuss
- Night LZ clearance/coverage techniques and procedures
- Responsibilities of escort and assault aircraft
- Types of escort in relation to threat levels
- Route reconnaissance

Introduce
- Night helicopter escort procedures
- Threat counter tactics in defense of the assault aircraft

Review
- Lookout doctrine
- Sectors of fire
- Responsibilities of escort and assault aircraft

Performance Standards
- Demonstrate the ability to conduct escort operations in the night environment.
- If ordnance is utilized, safe and effective employment of applicable weapon IAW crew served system weapons employment table.

Prerequisites. ESC-3100, NSQ HLL (SWD-2605, 2606 or 2607~NS ORD based on configuration)
ESC-3100, ANSQ LLL (SWD-2609, 2610 or 2611~LLL ORD based on configuration)

Ordnance. Optional. 1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

Range Requirement. Aerial gunnery range (if required)

External Syllabus Support. One or more assault support aircraft

Crew. NSI/CCUI or AOUI

ESC-3103	1.5	*		(NS)	A	2 H-1

Goal. Introduce surface force escort operations.

Requirements

Discuss
- Purpose of surface escort
- Responsibilities of escort aircraft
- Sectors of fire/fragmentation patterns
- Route reconnaissance procedures
- Types of escort
- Tactics, techniques, and procedures of surface forces

Introduce
- Route coverage patterns
- Actions in the objective area
- Ordnance delivery geometry, techniques, and procedures in support of surface forces
- Techniques and responsibilities per Tactical doctrine for escort

Review
- Lookout doctrine
- Sectors of fire

Performance Standards
- Exhibit a thorough understanding of surface force escort responsibilities in support of the GCE scheme of maneuver.
- If ordnance is utilized, safe and effective employment of applicable weapon system IAW crew served system weapons employment table.

Prerequisite. ACAD-3050 and 3054, TERFQ (SWD-2601, 2602 or 2603~DAY ORD based on configuration)
ACAD-3050 and 3054, NSQ HLL (SWD-2605, 2606 or 2607~NS ORD based on configuration)
ACAD-3050 and 3054, ANSQ LLL (SWD-2609, 2610 or 2611~LLL ORD based on configuration)

Ordnance. Optional. 1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

Range Requirement. Aerial gunnery range (if required)

External Syllabus Support. One ground/amphibious unit, minimum 3 vehicles

Crew. AGI (NSI)/CCUI

3.16.4 Assault Support Operations (ASPT)

3.16.4.1 Purpose. To develop procedures and skills to tactically employ the UH-1Y, while conducting a variety of combat assault support missions.

3.16.4.2 General. Upon the completion ASPT event the CCUI/AOUI will be MISSION SKILLS proficient for ASPT. Prior to conducting HIE, a face-to-face brief with the HRST Master is required. Actual ordnance for crew served weapons should be incorporated to the maximum extent practical.

AOUI requirements. Not required

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

Ground/Academic Training. IAW MAWTS-1 UH-1 Course Catalog.

ASPT-3200	1.0	365	R	D	A	1 UH-1Y

Goal. Develop proficiency in tactical fastrope operations.

Requirements

Discuss
- Configuration
- Passenger briefing considerations
- Fastrope profiles
- Cabin management
- Gunner threat reaction
- HRST master briefing requirements
- HIE manual/applicable local orders

Introduce
- Fastrope gantry installation
- Fastrope profiles
- Communication procedures
- Rope release procedures
- HRST briefing

Review
- Passenger briefing

Performance Standards
Display proper crew coordination and communications IAW UH-1 NTTP.
Display the ability to safely perform fastrope operations.

Prerequisites. ACAD-3051, TERFQ

Range Requirements. Simulated/Actual rooftop or landing point. (authorized fastrope site)

External Syllabus Support. HRST Master and at least two ropers

Crew. TERFI/CCUI

ASPT-3201	1.0	365	R,M	NS	A	1 UH-1Y

Goal. Develop proficiency in tactical fastrope operations at night.

Requirements

Discuss
- Aircrew/HRST master coordination using NVDs
- Aircraft and roper emergencies using NVDs
- Passenger briefing considerations
- Fastrope profiles
- Cabin management
- Gunner threat reaction
- HRST master breifing requirements
- HIE manual/applicable local orders

Review
- Fastrope gantry installation
- Fastrope profiles
- Communication procedures
- Rope release procedures
- HRST briefing

Performance Standards
Display proper crew coordination and communications IAW UH-1 NTTP.
Display the ability to safely perform fastrope operations using NVDs.

Prerequisites. ASPT-3200, NSQ~NS, ANSQ~LLL

Range Requirements. Simulated/Actual rooftop or landing point. (authorized fastrope site)

External Syllabus Support. HRST Master and at least two ropers

Crew. NSI/CCUI

3.16.5 Air Delivery (AD)

3.16.5.1 Purpose. To develop procedures and skills to tactically employ the UH-1Y while conducting aerial delivery.

3.16.5.2 General. Upon completion of the AD stage, the crew chief will be Mission Skills proficient for AD.

AOUI requirements. Not required

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

Ground/Academic Training. IAW MAWTS-1 UH-1 Course Catalog.

AD-3206	0.0	*	SC	(NS)	A STATIC	1 UH-1Y

Goal. Develop proficiency at the loading and unloading of cargo and passengers on a static UH-1Y

Requirements

Discuss
- Cabin configuration management
- Aircraft assault support configuration considerations
- Assault support mission specific kits
- Combat Restraint System
- Combat resupply planning configuration
- Internal transport of cargo
- On/Off drills and rehearsals
- PZ operations
- Cargo lifting devices
- Helicopter Support team (HST)
- External cargo safety considerations
- TFOA avoidance
- Escort requirements
- Signal plan
- Manifest procedures
- Aircraft MACO markings
- Accountability procedures
- Required communication
- Crew/passenger hand and arm signals

Introduce
- Load and unload a static UH-1Y with airworthy combat cargo configurations
- Passenger securing procedures and checks

Passenger briefing requirements
ON/off drills

Review
Aircraft configuration
Actions on contact

Performance standards
CCUI shall brief UH-1Y cargo and passenger loading and unloading procedures.
CCUI shall load and unload cargo and passengers in an efficient and airworthy manner.

Prerequisites. N/A

Ordnance. Configured with weapons (no ordnance)

External Syllabus Support. Troops embarked (6 preferred) and actual cargo

Crew. TERFI/CCUI

AD-3207	1.0	730	R,SC,M	(NS)	A	1 UH-1Y

Goal. Conduct tactical external cargo procedures.

Requirements

Discuss
Aircrew coordination
Hand and arm signals
ICS terminology
Hook limitations/malfunctions
Load release
Emergency procedures
Chicago grip, quick splice, and cable cutters

Review
Operational check of cargo hook
Cargo hook pendant and manual release
Emergency procedures for external operations
Review TERF profiles

Performance standards
Demonstrate proper ICS terminology, hook operation and installation.
Perform at least two hook-up, flight and release operations for cargo hook.

Prerequisite. TERF-2100, ASPT-2400 (NSQ~NS, ANSQ~LLL)

External Syllabus Support. Appropriate external load

Crew. TERFI (NSI)/CCUI

3.16.6 Close Air Support (CAS)

3.16.6.1 Purpose. To develop procedures and skills to tactically employ the UH-1Y while conducting CAS missions.

3.16.6.2 General. Upon completion of this stage the aircrew will have

demonstrated the ability to assist in the execution of CAS missions.

Refer to paragraph 3.9.3.2.1 for crew served weapons ordnance delivery standards.

AOUI requirement. CAS-3303

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

Ground/Academic Training. IAW MAWTS-1 UH-1 Course Catalog.

CAS-3303	1.5	180	R,M	(NS)	A	2 H-1

Goal. Develop proficiency in tactical crewmember responsibilities while providing CAS to ground forces.

Requirements

Discuss
- Rules of engagement
- Gridded reference graphic (GRG)
- CAS check-in procedures
- Friendly marking techniques and procedures
- Threat systems and counter-tactics
- ASE utilization
- Airspace Coordination Measures
- Types of Terminal Control
- Crew member responsibilities during FAC(A)
- FAC(A) Terminology

Introduce
- Ordnance considerations and effects in proximity to the forward line of troops
- Attack briefs
- Objective area mechanics
- 9-lines and 5-lines
- Sensor integration
- Target correlation

Performance Standards
- Display ability to perform a minimum of 4 RW CAS missions utilizing 5-line or 9-line attack briefs.
- Display proficiency in the use of applicable weapon system IAW crew served system weapons employment table.

Prerequisites. ACAD-3053, ANSQ LLL and one of the following: SWD-2609, 2610 or 2611 based on configuration

Ordnance. 1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

Range Requirement. Aerial gunnery range

Crew. AGI(NSI)/CCUI or AOUI

3.16.7 Forward Air Controller (Airborne) [FAC(A)]

3.16.7.1 Purpose. To familiarize the aircrew with responsibilities and communication required to assist pilots while conducting FAC(A).

3.16.7.2 General. At the completion of this stage, the CCUI/AOUI will have

an increased knowledge of CAS and FAC(A) procedures used to control RW/FW aircraft and supporting arms under varied environmental and threat conditions.

Ordnance is optional for this stage of training. However, it is strongly recommended. If ordnance is utilized the aircrew shall have completed the SWD flight corresponding to the ordnance load. Refer to paragraph 3.9.3.2.1 for crew served weapons ordnance delivery standards.

AOUI requirements. FACA-3403

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

Ground/Academic Training. IAW MAWTS-1 UH-1 Course Catalog.

FACA-3403 1.5 365 R,M (NS) A 1 UH-1Y

Goal. Develop proficiency in tactical crewmember responsibilities while conducting FAC(A).

Requirements

Discuss
- CAS aircraft capabilities
- Weapons to target matching
- Types of Terminal Control
- Friendly marking techniques and procedures
- Airspace Coordination measures
- SEAD procedures
- Task sharing in the FAC(A) environment
- FAC(A) terminology

Review
- Objective area mechanics
- Attack briefs
- 9-lines and 5-lines
- Sensor integration
- FAC(A) terminology

Performance Standards
- Display the ability to assist the pilots in task sharing during FAC(A) controls.
- CCUI/AOUI must be present in the controlling aircraft that is providing FAC(A) controls.
- If flown with ordnance, display proficiency in the use of applicable weapon system IAW crew served system weapons employment table.

Prerequisites. ACAD-3053, CAS-3303 (SWD-2601, 2602, or 2603~DAY ORD based on configuration)
ACAD-3053, CAS-3303 (SWD-2605, 2606, or 2607~NS ORD based on configuration)
ACAD-3053, CAS-3303 (SWD-2609, 2610, or 2611~LLL ORD based on configuration)

Ordnance. Optional. 1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

Range Requirement. Aerial gunnery range

External Syllabus Support. One CAS aircraft

Crew. AGI(NSI)/CCUI or AOUI

3.17 CORE PLUS/MISSION PLUS ACADEMIC PHASE (4000)

3.17.1 Purpose. To develop a Core Plus Skill complete Crew Chief or Aerial Observer. These academics facilitate understanding of high threat operations in the UH-1Y and MAGTF/Joint level functions to ensure individuals possess the requisite knowledge to execute unique mission tasking, events having a low probability of execution in combat, are theater specific, and/or are high-risk events.

3.17.2 General. These academics are intended to be an integrated series of academic lectures contained within each phase of training. Accordingly, academic events are like any other event in that they serve as prerequisites to selected flight events or stages.

Completion of these academics and accompanying Core Plus/Mission Plus flights meet the requirements for the Crew Chief or Aerial Observer to be proficient in those specific Core Plus/Mission Plus missions.

The lectures are contained in the MAWTS-1 Enlisted Aircrew Academic Support Package. The codes associated with these academic requirements do not require ATFs. At the completion of each ACAD event, the appropriate training code shall be logged in M-SHARP by the EATM. The codes below are for lectures only; readings and guided discussions are NOT included and are contained only in the course catalog. Reference the current UH-1Y Course Catalog for the most recent academic requirements.

3.17.2.1 Core Skill academic events are listed below.

CORE PLUS/MISSION PLUS ACADEMIC PHASE	
TRAINING CODES	COURSEWARE
DACM	
ACAD-4050	EA INTRO TO DACM
ACAD-4051	EA RW DACM
ACAD-4052	EA FW DACM

3.18 CORE PLUS/MISSION PLUS SKILL PHASE (4000)

3.18.1 Purpose. To certify the CCUI/AOUI in large scale integrated mission events having unique mission tasking, a low probability of execution in combat, are theater specific, and/or are relatively high-threat events.

3.18.2 General. Upon completion of each individual stage, the CCUI/AOUI will be considered Core Plus/Mission Plus proficient in that stage.

Completion of DACM-4302 meets the requirements for the CCUI/AOUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as RWDACM qualified shall be placed in the NATOPS jacket and an entry made in the flight log book.

Completion of DACM-4305 meets the requirements for the CCUI/AOUI to be FWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as FWDACM qualified shall be placed in the NATOPS jacket and an entry made in the flight log book.

Completion of CBRN-4400 meets the requirements for the CCUI/AOUI to be CBRN qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as CBRN qualified shall be placed in the NATOPS jacket and an entry made in the flight log book.

Completion of CQ-4600 meets the requirement for the CCUI/AOUI to be Day CQ qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as Day CQ qualified shall be placed in the NATOPS jacket and an entry made in the flight log book.

Completion of CQ-4601 meets the requirement for the CCUI/AOUI to be NVD CQ qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as NVD CQ qualified shall be placed in the NATOPS jacket and an entry made in the flight log book.

Completion of CQ-4602 meets the requirement for the CCUI/AOUI to be Unaided CQ qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as Unaided CQ qualified shall be placed in the NATOPS jacket and an entry made in the flight log book.

3.18.2.1 Stages. The following stages are included in the Core Plus/Mission Plus Phase of training.

	CORE PLUS SKILL PHASE
PAR NO.	STAGE NAME
3.18.3	Assault Support (ASPT)
3.18.4	Close Air Support (CAS)
3.18.5	Defensive Air Combat Maneuvering (DACM)
3.18.6	Chemical, Biological, Radiological and Nuclear Warfare (CBRN)
3.18.7	Carrier Qualified (CQ)

3.18.3 Assault Support (ASPT)

3.18.3.1 Purpose. To develop the ability to perform specialized assault support missions.

3.18.3.2 General. Upon completion of each event the aircrew will be considered capable of performing that particular mission.

Prior to conducting HIE a face-to-face brief with the HRST/Helocast/Jump Master is required. Initial Basic and Transition flight events shall be flown under day conditions.

AOUI requirement. ASPT-4104

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW MAWTS-1 UH-1 Course Catalog.

ASPT-4100 1.0 * (NS) A 1 UH-1Y

Goal. Introduce techniques for paradrop operations.

Requirements

Discuss
- Aircraft rigging for static line operations
- Aircraft rigging for free fall operations
- Insertion techniques
- Aircrew coordination

Hung jumper emergency procedures
Altitude, airspeed, and weather restrictions

Introduce
Delivery profiles
Static line retrieval
Crew/Jump Master coordination
Aircraft rigging procedures

Review
Passenger briefing

Performance Standards
Display proper crew coordination and ability to safely perform paradrop operations.

Prerequisites. ACAD-3051, ASPT-2400 (NSQ~NS, ANSQ~LLL)

Range Requirement. Drop Zone or authorized paraops area

External Syllabus Support. Jump Master and two jumpers (Jump master may be one of the jumpers)

Crew. TERFI (NSI)/CCUI

ASPT-4101 1.0 * (NS) A 1 UH-1Y

Goal. Introduce techniques for water insertion.

Requirements

Discuss
Aircraft rigging for helocast operations
Insertion techniques
Aircrew coordination
Altitude, airspeed, and sea state restrictions
Emergency procedures

Introduce
Delivery profiles
Crew/Helocast Master coordination
Aircraft rigging procedures

Review
Passenger briefing

Performance Standards
Display proper crew coordination and the ability to safely perform helocast operations.

Prerequisites. ACAD-3051, TERF-2100 (NSQ~NS, ANSQ~LLL)

Range Requirement. Water drop zone or authorized helocast area

External Syllabus Support. Helocast Master and two swimmers (Helocast Master may be one of the swimmers)

Crew. TERFI (NSI)/CCUI

ASPT-4102 1.5 365 R,M (NS) A 1 UH-1Y

Goal. Introduce techniques for insertion/extraction using the Special Patrol Insertion/Extraction (SPIE) rig or Jacob's Ladder.

Requirements

Discuss
- Aircraft rigging SPIE operations
- Aircraft rigging for Jacob's ladder operations
- Insertion/extraction techniques
- Aircrew coordination
- Altitude, airspeed, and weather restrictions
- "Cut Rope" and emergency procedures

Introduce
- Insert/extract profiles
- Crew/HRST Master coordination
- Aircraft rigging procedures

Review
- Passenger briefing

Performance Standards
Display proper crew coordination and the ability to safely perform SPIE or Jacob's Ladder operations.

Prerequisites. ACAD-3051, TERFQ (NSQ~NS, ANSQ~LLL)

Range Requirement. Drop zone/landing zone or authorized SPIE area

External Syllabus Support. HRST Master and two ropers

Crew. TERFI (NSI)/CCUI

ASPT-4104	2.0	365	R,M	(NS)	A	1 UH-1Y

Goal. Introduce Mountain Area Training.

Requirements

Discuss
- Tactical approaches, landings, and departures
- High altitude operations
- HIE operations
- Loss of tail rotor effectiveness
- Brown/White out considerations
- Terrain/obstacle clearance
- Turbulence
- Orographic lifting and downdrafts

Introduce
- Tactical approaches, landings, and departures
- High altitude operations
- HIE terminology and operations

Performance Standards
Demonstrate the ability to assist pilots in operating in mountainous areas while performing a minimum of 5 mountain area landings and 2 HIE profiles.
Demonstrate proper crew coordination, ICS terminology and terrain

clearance while operating in a mountainous environment.

Prerequisites. TERFQ (NSQ~NS, ANSQ~LLL)

Crew. TERFI (NSI)/CCUI or AOUI

ASPT-4105 1.0 365 R.M (NS) A 1 UH-1Y

Goal. Introduce techniques for insertion using rappel.
Requirements

Discuss
- Aircraft rigging
- Insertion techniques
- Aircrew/HRST master coordination
- Aircraft and roper emergencies

Introduce
- Aircraft preparation for rappel
- Rappel profiles
- Communication procedures
- "Cut Rope" procedures
- HRST briefing

Review
- Passenger briefing

Performance Standards
Display proper crew coordination and communications IAW UH-1 NTTP.
Display the ability to safely perform rappel operations.

Prerequisite. ACAD-3051, TERFQ (NSQ~NS, ANSQ~LLL)

External Syllabus Support. HRST Master and at least two ropers

Crew. TERFI (NSI)/CCUI

3.18.4 Close Air Support (CAS)

3.18.4.1 Purpose. To refine proficiency in Close Air Support missions.

3.18.4.2 General. At the completion of this stage, the CCUI/AOUI will have demonstrated the ability to deliver accurate fires in the execution of an Urban CAS mission under varied environmental and higher threat conditions.

Ordnance is optional for this stage of training, however it is strongly recommended. If ordnance is utilized, the CCUI/AOUI shall have completed the Core Skills SWD flight corresponding to the appropriate ordnance load and event condition. Refer to paragraph 3.9.3.2.1 for crew served weapons ordnance delivery standards.

AOUI requirement. CAS-4200

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

Ground/Academic Training. IAW the MAWTS-1 UH-1 Course Catalog.

CAS-4200 1.5 365 R,M (NS) A 2 H-1

Goal. Refine CAS procedures in an urban environment.

Requirements

Discuss
Urban terrain considerations
Altitude considerations for weapons and visual reference
Weapon selection
ROE/PID
Collateral Damage Estimate(CDE)
Gridded Reference Graphic(GRG)
Urban threat considerations

Review
GRG usage
Sensor integration
Target correlation

Performance Standards
Display ability to perform aircrew responsibilities in a tactical urban environment.
If flown with ordnance, display proficiency in the use of applicable weapon system IAW crew served system weapons employment table.
Display ability to utilize gridded reference graphic (GRG) to enhance aircrew situational awareness.

Prerequisites. ACAD-3053, CAS-3303 (SWD-2601, 2602, or 2603~DAY ORD based on configuration)ACAD-3053, CAS-3303 (SWD-2605, 2606, or 2607~NS ORD based on configuration)
ACAD-3053, CAS-3303 (SWD-2609, 2610, or 2611~LLL ORD based on configuration)

Ordnance. Optional. 1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

Range Requirement. Aerial gunnery range

External Syllabus Support. JTAC with appropriate marking devices (if available), suitable urban environment or MOUT facility.

Crew. AGI(NSI)/CCUI/AOUI

3.18.5 Defensive Air Combat Maneuvering (DACM)

3.18.5.1 Purpose. To demonstrate and introduce DACM and to qualify the CCUI/AOUI as RWDACM and FWDACM complete.

3.18.5.2 General. At the completion of this stage, the CCUI/AOUI will be proficient in the conduct of the DACM and have a thorough knowledge of weapons employment, aircraft control, and threat tactics of RW and FW adversaries.

Refer to paragraph 3.9.3.2.1 for crew served weapons ordnance delivery standards.

Until a CC/AO door gunner simulator linked to the UH-1Y simulator is available for training, DACM-4300 is not required for RWDACM/FWDACM stage completion.

AOUI requirements: DACM-4300 through 4305

Crew Requirement. As listed at the end of each event. All participants must be TERF Qualified.

Ground/Academic Training. IAW MAWTS-1 UH-1 Course Catalog.

DACM-4300	1.5	485	R,M	D	A	1 UH-1Y

Goal. Introduce air-to-air gunnery (AAG).

Requirements

Discuss
- Weapons capabilities/limitations
- Range and lead/lag estimation
- Aerial ballistics
- Aircrew coordination
- Time of flight (TOF)

Introduce
- AAG using shadow gunnery or Moving Land Target (MLT)
- Aircrew coordination during moving target engagements
- Range and lead/lag estimation

Review
- Fundamentals of aerial gunnery
- Appropriate weapon system characteristics

Performance Standards
- Demonstrate detailed knowledge of nomenclature, cycle of operation and BCWD.
- Demonstrate the ability to safely and effectively employ crew served weapons against moving targets IAW crew served system weapons employment table.

Prerequisites. SWD-2601, 2602 or 2603 based on configuration.

Ordnance. 1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21.

Range Requirement. Aerial gunnery range or MLT range

Crew. AGI/CCUI or AOUI

DACM-4301	1.0	*	R,SC	D	A	1 UH-1Y

Goal Introduce 1 v 1 RWDACM.

Requirements

Discuss
- Aircraft limitations
- Rotary wing threat aircraft capabilities/limitations
- Standard DACM terminology
- Aircrew coordination
- Ps, Vc, E-M diagrams
- Line numbers/DACM training rules

Introduce
- Basic defensive maneuvers against RW threats

Lookout procedures and identification of aircraft
Range estimation/optimal engagement distances
Standard DACM terminology
Line numbers

Review
Fundamentals of aerial gunnery
Time of flight (TOF)/aerial ballistics

Performance Standards
Conduct one complete line number sequence (from both friendly and adversary roles).
Execute proper reactions to RW threat attacks.

Prerequisites. ACAD-4050 and 4051, TERFQ

External Syllabus Support. One adversary helicopter and appropriate air-to-air training area

Crew. DACMI/CCUI or AOUI

DACM-4302	1.0	485	R,M	D	A	2 H-1

Goal. Introduce 2 v 1 RWDACM.

Requirements

Discuss
Standard DACM terminology
Mutual support
Aircrew coordination
Line numbers/DACM training rules
Free and engaged roles and responsibilities

Introduce
Basic defensive maneuvers
Section mechanics
Free and engaged roles

Review
Fundamentals of aerial gunnery
Time of flight (TOF)/aerial ballistics
Basic defensive maneuvers
Lookout procedures and identification of aircraft
Range estimation/optimal engagement distances
Standard DACM terminology

Performance Standards
Conduct one complete line number sequence (from both friendly and adversary roles).
Execute proper reactions to RW threat attacks.

Prerequisite. DACM-4301

External Syllabus Support. One adversary helicopter and appropriate air-to-air training area

Crew. DACMI/CCUI or AOUI

DACM-4304	1.0	*		D	A	1 UH-1Y

Goal. Introduce 1 v 1 FWDACM.

Requirement

Discuss
- Aircraft limitations
- Lookout procedures and identification of aircraft
- FW threat aircraft capabilities/limitations
- Line numbers/DACM rules
- Standard terminology
- Aircrew coordination
- Ps, V_c, E-M diagrams

Introduce
- Basic defensive maneuvers against FW threats
- Lookout procedures and identification of aircraft
- Range estimation/optimal engagement distances
- Standard terminology
- Line numbers

Review
- Fundamentals of aerial gunnery
- Time of flight (TOF)/aerial ballistics

Performance Standards
- Conduct a minimum of one (1) line number sequence.
- Execute proper reactions to FW threat attacks.

Prerequisites. ACAD-4050 and 4052, TERFQ

External Syllabus Support. One FW adversary and appropriate air-to-air training area

Crew. DACMI/CCUI or AOUI

DACM-4305	1.0	485	R,M	D	A	2 H-1

Goal. Introduce 2 v 2 FWDACM.

Requirements

Discuss
- Standard DACM terminology
- Mutual support
- Aircrew coordination
- Line numbers/DACM training rules
- Free and engaged roles and responsibilities

Introduce
- Basic defensive maneuvers
- Section mechanics
- Free and engaged roles

Review
- Fundamentals of aerial gunnery
- Time of flight (TOF)/aerial ballistics
- Basic defensive maneuvers
- Lookout procedures and identification of aircraft
- Range estimation/optimal engagement distances
- Standard DACM terminology

Performance Standards
Conduct a minimum of one (1) line number sequence.
Execute proper reactions to FW threat attacks.

Prerequisite. DACM-4304

External Syllabus Support. Two FW adversary and appropriate air-to-air training area

Crew. DACMI/CCUI or AOUI

3.18.6 Chemical, Biological, Radiological and Nuclear warfare (CBRN)

3.18.6.1 Purpose. To introduce the CCUI/AOUI to operations while wearing the aviator's CBR protective mask.

3.18.6.2 General. This event is designed to expand the capabilities of the aircrew in CBRN operations.

AOUI requirement. SCBR-4400

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. Review appropriate section of UH-1Y NTRP for information on the aviator's CBR protective mask prior to flight. The crewmember will complete protective mask familiarization lecture and aircraft egress with mask. Discuss capabilities and disadvantages of CBR protective mask, to include protective mask emergency procedures. Review all MOPP conditions.

CBRN-4400	1.0	*	R,M	D	A	1 UH-1Y

Goal. CBR protective mask introduction.

Requirements

Discuss
Protective mask introduction
Physiological effects
Operating in an CBRN environment
Emergency egress
Battery failure
NVD considerations

Introduce
Conduct FAM maneuvers while wearing the protective mask.

Performance Standards
Demonstrate the ability to perform aircrew responsibilities in the CBRN environment while wearing the protective mask.

Prerequisite. ASPT-2400

Crew. TERFI/CCUI or AOUI

3.18.7 Carrier Qualification (CQ)

3.18.7.1 Purpose. To introduce day and night flight operations from a

carrier deck or air capable ship.

3.18.7.2 General. IAW applicable directives, CCUI/AOUI will emphasize proper communication procedures, patterns, and aviation operations in the shipboard environment. Refer to appropriate NATOPS and appropriate shipboard NATOPS Manuals for carrier operations. CCUI/AOUI shall complete the FCLP stage prior to commencing this stage.

Initial Night Systems Carrier Qualification training shall be accomplished under High Light Level conditions. Requalification and proficiency training may be accomplished under any light level condition.

Once complete with each stage the CC/AO may be Day CQ, Night CQ or NVD CQ (as appropriate) in writing at the discretion of the commanding officer.

AOUI requirement. CQ-4600 through 4602

Crew Requirement. As listed at the end of each event.

Ground/Academic Training. IAW the MAWTS-1 UH-1 Course Catalog. Review required equipment for shipboard/over-water operations.

CQ-4600	1.0	365	R	D	A	1 UH-1Y

Goal. Conduct day shipboard landing qualification.

Requirements

Discuss
- Shipboard safety equipment location and marking
- Requirements for carrying PAX over water

Introduce
- Shipboard patterns
- Closure rate
- Proper ICS/Radio terminology
- Flight deck procedures

Review
- Air capable ships
- Shipboard specific crew coordination
- LSE signals
- Emergency and ditching procedures
- Wind limitation charts
- Shipboard terminology
- Alpha, Delta and Charlie patterns
- Hazards of Electromagnetic Radiation to Ordnance (HERO) conditions

Performance Standards
- Demonstrate the ability to conduct daytime shipboard operations per the UH-1Y NATOPS and shipboard NATOPS manuals.
- Demonstrate the ability to conduct a minimum of 5 CQ landings.
- Demonstrate the ability to conduct a rotor brake start.
- Demonstrate the ability to conduct shipboard refueling.

Prerequisite. FCLP-2501

External Syllabus Support. Landing platform afloat

Crew. TERFI/CCUI or AOUI

CQ-4601	1.0	365	R,M	NS	A	1 UH-1Y

Goal. Conduct NVD shipboard landing qualification.

Requirements

Discuss
NVG shipboard lighting

Introduce
Closure rate and decent rates

Review
NVG safety considerations
Aircraft lighting configurations
NVG flight over open water
Physiological effects with no horizon

Performance Standards
Demonstrate the ability to conduct NVD shipboard operations per the UH-1Y NATOPS and shipboard NATOPS manuals.
Demonstrate the ability to conduct a minimum of 5 CQ landings.
Demonstrate the ability to conduct shipboard refueling.

Prerequisite. FCLP-2502, CQ-4600, NSQ

External Syllabus Support. Landing platform afloat

Crew. NSI/CCUI or AOUI

CQ-4602	1.0	365	R	N*	A	1 UH-1Y

Goal. Conduct night unaided shipboard landing qualification.

Requirements

Discuss
Night unaided shipboard lighting
Night unaided safety considerations
Aircraft lighting configurations

Review
Ditching procedures
Required personal and aircraft survival equipment
Alpha, Delta, and Charlie patterns
Air capable ships
Shipboard specific crew coordination
LSE signals
Shipboard terminology
Proper ICS/Radio terminology

Performance Standards
Demonstrate the ability to conduct night unaided shipboard operations per the UH-1Y NATOPS and shipboard NATOPS manuals.
Demonstrate the ability to conduct a minimum of 5 CQ landings.

Prerequisite. FCLP-2502, CQ-4600

External Syllabus Support. Landing platform afloat

Crew. NSI/CCUI or AOUI

3.19 INSTRUCTOR UNDER TRAINING PHASE (5000)

3.19.1 Purpose. To develop standardized instructor Crew Chiefs with the ability to teach flight skills and knowledge necessary to qualify/designate Crew Chiefs and Aerial Observers IAW this T&R and the UH-1Y Course Catalog.

3.19.2 General. This Phase only covers the FRSI stage in detail. For other instructor designation syllabi refer to the UH-1Y Course Catalog for execution of those POI's.

3.19.2.1 Stages. The following stages are included in the Instructor Phase of training.

	INSTRUCTOR PHASE
PAR NO.	STAGE NAME
3.19.3	Terrain Flight Instructor (TERFI)
3.19.4	Fleet Replacement Squadron Instructor (FRSI)
3.19.5	Aerial Gunner Instructor (AGI)
3.19.6	Night Systems Familiarization Instructor (NSFI)
3.19.7	Defensive Air Combat Maneuvering Instructor (DACMI)
3.19.8	Night Systems Instructor (NSI)

3.19.3 Terrain Flight Instructor (TERFI)

3.19.3.1 Purpose. To certify a UH-1 crew chief as a Terrain Flight Instructor (TERFI) capable of safely and effectively conducting ground academic and day time airborne instruction of TERF, NAV, ASPT, CQ's, FORM, Externals and CBRN.

TERF-5100 1.5 * (NS) A 1 UH-1Y

Requirement. Reference the current UH-1Y Course Catalog for the TERFI POI.

TERF-5101 1.5 * R (NS) E A 2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the TERFI POI.

3.19.4 Fleet Replacement Squadron Instructor (FRSI)

3.19.4.1 Purpose. To certify the IUT as a Fleet Replacement Squadron Instructor capable of instructing 1000 level events.

3.19.4.1 General. Upon completion of the Fleet Replacement Squadron Instructor (FRSI) stage, the FRSIUT may be designated a FRSI by the FRS squadron commanding officer. A letter designating the CC as a FRSI shall be placed in the NATOPS jacket and an entry made in the flight log book.

The FRSIUT shall be a TERFI, AGI GAU-21, AGI GAU-17/A, AGI M-240D, and NSQ (LLL) prior to beginning FRSIUT training.

Crew Requirement. As listed at the end of each event.

Ground Training. FRSIUT stage lecture.

FRSI-5300 2.0 * R D E A 1 UH-1Y

Goal. FRSIUT will demonstrate techniques of instructing/evaluating normal ground procedures, passenger, and in flight procedures for the Core Skill Introduction phase of training.

Requirements

Review
Standard NATOPS procedures to include hand and arm signals
Aircrew coordination and comfort level

Performance Standards
Demonstrate instructional techniques to instruct CCUIs in the Core Skill Introduction phase.

Prerequisites. GAU-17/A AGI, M240D AGI and GAU-21 AGI

Crew. FRSI/FRSIUT

FRSI-5301 2.0 * R D E A 1 UH-1Y

Goal. Demonstrate techniques of instructing/evaluating external weight and hoist operations and procedures.

Requirements

Review
Aircrew coordination
Lost communication
ICS terminology
Lookout doctrine
Emergency procedures
Load oscillation and load release.

Performance Standards
Instruct at least two hookups, flight, and release operations.
Instruct procedures, signals, and communications for hoist procedures.
Demonstrate instructional techniques to CCUIs during external weight and hoisting procedures.

Prerequisite. FRSI-5300

External Syllabus Support. Appropriate external weight

Crew. FRSI/FRSIUT

3.19.5 Aerial Gunner Instructor (AGI)

3.19.5.1 Purpose. To certify a UH-1 crew chief as an Aerial Gunner Instructor (AGI) capable of safely and effectively conducting ground academic and day time airborne instruction in the employment of crew served weapons in

all aspects of Tactical flight.

AGI-5420	1.5	*		(NS)		A	2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the AGI POI.

AGI-5421	1.5	*	R	NS	E	A	2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the AGI POI.

AGI-5430	1.5	*		(NS)		A	2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the AGI POI.

AGI-5431	1.5	*	R	NS	E	A	2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the AGI POI.

AGI-5440	1.5	*		(NS)		A	2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the AGI POI.

AGI-5441	1.5	*	R	NS	E	A	2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the AGI POI.

3.19.6 Night Systems Familiarization Instructor (NSFI)

3.19.6.1 Purpose. To certify a UH-1 Fleet Replacement Squadron (FRS) crew chief instructor as a Night Systems Familiarization Instructor (NSFI) capable of safely and effectively conducting ground and airborne instruction of night vision device (NVD) flight during Core Skill Introduction phase under high light level conditions only.

NSFI-5600	1.5	*		NS		A	1 UH-1Y

Requirement. Reference the current UH-1Y Course Catalog for the NSFI POI.

NSFI-5601	1.5	*	R	NS	E	A	1 UH-1Y

Requirement. Reference the current UH-1Y Course Catalog for the NSFI POI.

3.19.7 Defensive Air Combat Maneuvers Instructor (DACMI)

3.19.7.1 Purpose. To certify a UH-1 crew chief as a Rotary Wing Defensive Air Combat Maneuvers Instructor (RW DACMI) and Fixed Wing Defensive Air Combat Maneuvers Instructor (FW DACMI) capable of safely and effectively conducting ground academic and airborne instruction of the UH-1Y DACM flight syllabus.

DACM-5800	1.5	*		D		A	1 UH-1Y

Requirement. Reference the current UH-1Y Course Catalog for the RW DACMI POI.

DACM-5801 1.5 * D A 2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the FW DACMI POI.

DACM-5802 1.5 * R D E A 2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the RW DACMI POI.

DACM-5803 1.5 * R D E A 2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the FW DACMI POI.

3.19.8 Night Systems Instructor (NSI)

3.19.8.1 Purpose. To certify a UH-1 crew chief as a Night Systems Instructor (NSI) capable of safely and effectively conducting ground academic and airborne instruction of the UH-1 Night Vision Device (NVD) flight syllabus.

NSI-5900 1.5 * NS A 1 UH-1Y

Requirement. Reference the current UH-1Y Course Catalog for the NSI POI.

NSI-5901 1.5 * NS A 2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the NSI POI.

NSI-5904 2.0 * R NS E A 2 H-1

Requirement. Reference the current UH-1Y Course Catalog for the NSI POI.

3.20 REQUIREMENTS AND QUALIFICATIONS PHASE (6000)

3.20.1 Purpose. To outline the requirements for qualifications and designations.

3.20.2 General. 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 before that qualification/designation can be utilized.

Completion of the NTPS-6101 sortie meets the requirements for the CCUI/AOUI to be NATOPS qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI/AOUI as NATOPS qualified shall be placed in the NATOPS jacket and an entry made in the flight log book.

Completion of the Aerial Gunner Qualification Stage QUAL-6301 meets the requirements for the CCUI/AOUI to be eligible for the GAU-17 AG qualification. At the discretion of the squadron commanding officer a letter designating the CCUI/AOUI as GAU-17 AG QUAL shall be placed in the NATOPS jacket and an entry made in the flight log book.

Completion of the Aerial Gunner Qualification Stage QUAL-6302 meets the requirements for the CCUI/AOUI to be eligible for the M240D AG qualification. At the discretion of the squadron commanding officer a letter designating the CCUI/AOUI as M240D AG QUAL shall be placed in the NATOPS jacket and an entry made in the flight log book.

Completion of the Aerial Gunner Qualification Stage QUAL-6303 meets the requirements for the CCUI/AOUI to be eligible for the GAU-21 AG qualification. At the discretion of the squadron commanding officer a letter designating the CCUI/AOUI as GAU-21 AG QUAL shall be placed in the NATOPS jacket and an entry made in the flight log book.

3.20.3 NATOPS Qualification

3.20.3.1 Purpose. To certify the CCUI/AOUI as NATOPS qualified in the UH-1Y.

3.20.3.2 General. The NATOPS qualification is an annual requirement. A designated NATOPS Instructor/Assistant NATOPS Instructor shall evaluate NTPS-6101.

Completion of this stage meets the requirements for the annual NATOPS evaluation.

The NTPS-6101 event may be logged in conjunction with any operational or training flight.

Individuals have 60 days to complete the NATOPS evaluation process from the start of NTPS-6001 to the completion of NTPS-6101.

Documentation of the most recent NATOPS open book, closed book, and EP exams shall be logged in the individual NATOPS Flight Personnel Training/Qualification Jacket in Section III, Part C. In addition to filing the exams in Section III, Part C; NATOPS open book, closed book, and EP examination scores shall be recorded using a 4.0 scale on the OPNAVINST 3760/32G examination record form.

Documentation of the annual NATOPS Evaluation Reports shall be filed in the individual NATOPS Flight Personnel Training/Qualification Jacket in Section III, Part D. The Annual NATOPS Evaluation Reports will be retained permanently in the NATOPS Jacket.

NTPS-6001, NTPS-6002 and NTPS-6003 do not require ATFs.

AOUI requirements. NTPS-6001, NTPS-6002, NTPS-6003, NTPS-6101

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

Ground/Academic Training. IAW NATOPS.

NTPS-6002	1.5	365	R,SC,M	E	Open Book NATOPS Evaluation

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

Performance Standards. Achieve a grade of qualified IAW NATOPS.

NTPS-6003	1.0	365	R,SC,M	E	Closed Book NATOPS Evaluation

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

Performance Standards. Achieve a grade of qualified IAW NATOPS.

NTPS-6004 1.0 365 R,SC,M E Oral NATOPS Evaluation

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

The oral examination may be conducted prior to or as part of the flight evaluation.

Performance Standards. Achieve a grade of qualified IAW NATOPS.

NTPS-6101 1.0 365 R,SC,M (NS) E A 1 UH-1Y

Goal. Conduct an annual NATOPS check.

Requirement. Successfully conduct the evaluation IAW OPNAVINST 3710.7 and NATOPS.

Performance Standards. IAW OPNAVINST 3710.7 and NATOPS

Prerequisites. Grade of qualified on NTPS-6002 and 6003

Crew. ANI (ANI designated NSI)/CCUI or AOUI

Performance Standards. IAW OPNAVINST 3710.7 and NATOPS

3.20.4 Annual Crew Resource Management (CRM) Evaluation

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

3.20.4.2 General. Completion of this stage meets the requirements for the annual CRM flight evaluation and ground training.

The CRM-6102 event may be logged in conjunction with any operational or training flight. However, it should be completed in conjunction with the annual NATOPS check, when possible.

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 NTPS-6101. Additionally annual CRM flight evaluations shall be documented in the individual aircrew logbooks.

AOUI requirements. CRM-6010, CRM-6110

Crew Requirements. CRMF (CRMF Designated NSI)/CCUI or AOUI

Ground/Academic Training. IAW OPNAVINST 1542.7 series.

CRM-6005 1.0 365 R,SC,M 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.

CRM-6102 1.0 365 R,SC,M (NS) E A 1 UH-1Y

Goal. Conduct an annual Crew Resource Management evaluation.

Requirement. Successfully conduct the evaluation IAW OPNAVINST 3710.7 and NATOPS. The evaluation should be conducted in conjunction with the annual NATOPS evaluation flight, when possible.

Performance Standards. IAW OPNAVINST 3710.7 and NATOPS

Prerequisite. CRM-6005

Crew. CRMF (CRMF designated NSI)/CCUI or AOUI

3.20.5 Aerial Gunner Qualification Stage

3.20.5.1 Purpose. To achieve qualification as an aerial gunner.

3.20.5.2 General. Completion of this stage qualifies the CCUI/AOUI for qualification as an aerial gunner on the respective weapons.

Appropriate documentation (ATFs with rounds-count) will be completed for each weapon prior to qualification as an aerial gunner.

A qualification letter shall be placed in the NATOPS Jacket and an entry made in the flight log book.

Initial prerequisite events for a Basic or Transition POI shall not be flown in conjunction with this stage.

Refer to paragraph 3.9.3.2.1 for crew served weapons ordnance delivery standards.

AOUI requirement. QUAL-6301 through 6303

Crew Requirement. NSI/CCUI or AOUI

Ground Training. Refer to UH-1Y Course Catalog for applicable required readings. Written examinations shall be administered prior to each individual weapon evaluation flight.

QUAL-6301	1.5	1095	R,M	NS	A	2 H-1

Goal. GAU-17/A aerial gunner qualification.

Requirements

Review
- BCWD principles
- Cycle of operation/nomenclature
- Weapons checklist usage
- Weapons malfunctions and troubleshooting procedures
- Laser usage and system knowledge
- Airspace Coordination Measures
- Tactical aircrew responsibilities
- Threat counter tactics
- Switchology

Performance Standards
- Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, understanding of mission brief and troubleshooting procedures.
- Demonstrate proficiency in safe and effective employment of the GAU-17/A while using NVDs IAW the crew served weapons matrix.

Meet or exceed accuracy outlined in crew served weapons engagement standards table.

Prerequisites. SWD-2609, ESC-3101, CAS-3303, ANSQ LLL

Crew. NSI/CCUI or AOUI

Ordnance. 1,500 rounds 7.62mm

Range Requirement. Aerial gunnery range

QUAL-6302	1.5	1095	R,M	NS	A	2 H-1

Goal. M-240D aerial gunner qualification.

Requirements

Review
- BCWD principles
- Cycle of operation/nomenclature
- Weapons checklist usage
- Weapons malfunctions and troubleshooting procedures
- Laser usage and system knowledge
- Airspace Coordination Measures
- Tactical aircrew responsibilities
- Threat counter tactics

Performance Standards
- Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, understanding of mission brief and troubleshooting procedures.
- Demonstrate proficiency in safe and effective employment of the M-240D while using NVDs IAW the crew served weapons matrix.
- Meet or exceed accuracy outlined in crew served weapons engagement standards table.

Prerequisites. SWD-2610, ESC-3101, CAS-3303, ANSQ LLL

Crew. NSI/CCUI or AOUI

Ordnance. 400 rounds 7.62mm

Range Requirement. Aerial gunnery range

QUAL-6303	1.5	1095	R,M	NS	A	2 H-1

Goal. GAU-21 aerial gunner qualification.

Requirements

Review
- BCWD principles
- Cycle of operation/nomenclature
- Weapons checklist usage
- Weapons malfunctions and troubleshooting procedures
- Laser usage and system knowledge
- Airspace Coordination Measures
- Tactical aircrew responsibilities
- Threat counter tactics

Performance Standards

Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, understanding of mission brief and troubleshooting procedures.

Demonstrate proficiency in safe and effective employment of the GAU-21 while using NVDs IAW the crew served weapons matrix.

Meet or exceed accuracy outlined in crew served weapons engagement standards table.

Prerequisites. SWD-2611, ESC-3101, CAS-3303, ANSQ LLL

Crew. NSI/CCUI or AOUI

Ordnance. 600 rounds .50cal

Range Requirement. Aerial gunnery range

3.21 SYLLABUS MATRICES

3.21.1 General. The following matrices are provided in accordance with NAVMC 3500.14.

3.21.2 T&R Chaining. Event chaining allows for the completion of more complex and/or advanced events using the same skills to update proficiency status of events. Only events in a sequence entailing demonstration of equivalent skills shall be chained.

When a T&R event is logged, the proficiency dates of other T&R events (usually lower in number) may be updated. The T&R code that is logged is known as the "chaining code," and the updated codes are "chained codes." Chained codes are not always updated when a chaining code is logged.

3.21.2.2 Conditional Chaining. The following environmental conditions further specify which T&R codes are chain-updated:

Night Systems Optional. Chained codes annotated with a tilde after them, e.g. 2101~NS are only chain-updated if the chaining code is flown using night systems.

Light Level Optional. Chained codes annotated with a tilde and an 'NS' after them, e.g. 2101~NS are only chain-updated if the chaining code is flown using night systems during HLL. Chained codes annotated with a tilde and a 'LLL' after them, e.g. 2701~LLL are only chain-updated if the chaining code is flown using night systems during LLL.

3.22 CREW CHIEF AND AERIAL OBSERVER T&R SYLLABUS MATRICES

UH-1Y CREW CHIEF AND AERIAL OBSERVER T&R SYLLABUS MATRIX (2000-6000 Phase)

SKILL	STAGE	T&R DESCRIPTION	EVENT NUMBER BASIC	ATTAIN B	ATTAIN R	ATTAIN SC	MAINTAIN	ACAD #	ACAD TIME	SIM #	SIM TIME	FLIGHT #	FLIGHT TIME	COND	SEAT	TYPE	# A/C	NETWORK	NUM-NET	REFLY	EVAL	EOM	EVENT CONV
CORE SKILLS (2000 Phase)																							
ACAD	ACAD	EA TACR	2050	X					1.0							G				*			
	ACAD	EA TERF	2051	X					1.0							G				*			
	ACAD	EA NVD TRAINING	2052	X					1.0							G				*			
	ACAD	EA FUNDAG	2053	X					1.0							G				*			
	ACAD	EA GAU-17/A	2055	X					1.0							G				*			
	ACAD	EA M240D INTRO	2056	X					1.0							G				*			
	ACAD	EA GAU-21	2057	X					1.0							G				*			
	ACAD	EA LAD	2058	X					1.0							G				*			
	ACAD	EA LASER BORESIGHT	2059	X					1.0							G				*			
	ACAD	EA INTRO TO INSRT/RAID	2060	X					1.0							G				*			
ACAD TOTAL								10	10.0	0	0.0	0	0.0										
TERF	TERF	INTRO TERF NAV	2100	X									1.0	D		A	1			180			2100
	TERF	REVIEW NVD TERF ~NS	2101R	X	X	X	X						1.0	NS		A	1			180			2101
TERF TOTAL								0	0.0	0	0.0	2	2.0										
REC	SREC	SENSOR FAM	2300	X					0.0					(NS)		A/S	1			*			2300
	REC	SENSOR FAM	2301R	X	X		X						0.5	(NS)		A	1			365			2300
REC TOTAL								1	0.0	0	0.0	1	0.5										
ASPT	ASPT	TAC LANDINGS	2400	X									1.5	D		A	1			*			2400
	ASPT	~NS NVD TAC LDGS	2401	X									1.5	NS		A	1			*			2401
	ASPT	SECTION TAC LANDINGS	2402R	X	X	X							1.5	D		A	2			120			2400
	ASPT	~NS NVD SECTION TAC	2403R	X	X	X	X						1.5	NS		A	2			120			2402
ASPT TOTAL								0	0.0	0	0.0	4	6.0										
FCLP	FCLP	DAY FCLP	2501R	X	X								1.0	D		A	1			365			2501
	FCLP	NIGHT AND NVD FCLP	2502R	X	X		X						1.0	N*/NS		A	1			365			2502
FCLP TOTAL								0	0.0	0	0.0	2	2.0										
SWD	SWD	GAU-17/A INTRO	2601R	X	X	X							1.5	D		A	1			180			2601
	SWD	M240D INTRO	2602R	X	X								1.5	D		A	1			180			2602
	SWD	GAU-21 INTRO	2603R	X	X								1.5	D		A	1			180			2603
	SWD	~NS NVD GAU-17/A INT	2605	X									1.5	NS		A	1			*			2605
	SWD	~NS NVD M240D INTRO	2606	X									1.5	NS		A	1			*			2606
	SWD	~NS NVD GAU-21 INTRO	2607	X									1.5	NS		A	1			*			2607
	SWD	LLL NVD GAU-17/A INT	2609R	X	X	X	X						2.0	NS		A	2			180			2609
	SWD	LLL NVD M240D INTRO	2610R	X	X	X	X						2.0	NS		A	2			180			2610
	SWD	LLL NVD GAU-21 INTRO	2611R	X	X	X	X						2.0	NS		A	2			180			2611
SWD TOTAL								0	0.0	0	0.0	9	15.0										
ANSQ	ANSQ	LLL NVD TERF/NAV	2702R	X	X								1.5	NS		A	2			180			2702
	ANSQ	LLL NVD SECTION TAC	2703	X									1.5	NS		A	2			*			2703
	ANSQ	LLL NVD TAC ASPT	2704R	X	X	X	X						1.5	NS		A	2			180			2704
ANSQ TOTAL								0	0.0	0	0.0	3	4.5										

UH-1Y CREW CHIEF AND AERIAL OBSERVER T&R SYLLABUS MATRIX (2000-6000 Phase)

SKILL	STAGE	T&R DESCRIPTION	EVENT NUMBER BASIC	ATTAIN B	ATTAIN R	ATTAIN SC	MAINTAIN	ACAD #	ACAD TIME	SIM #	SIM TIME	FLIGHT #	FLIGHT TIME	COND	SEAT	TYPE	# A/C	NETWORK	NUM-NET	REFLY	EVAL	EOM	EVENT CONV
MISSION SKILLS (3000 Phase)																							
ACAD	ACAD	ESCORT	3050	X					1.0							G				*			
	ACAD	HIE	3051	X					1.0							G				*			
	ACAD	INTRO TO CAS & FAC(A)	3053	X					1.0							G				*			
	ACAD	CASEVAC CONSIDERATIONS	3054	X					1.0							G				*			
ACAD TOTAL								4	4.0	0	0.0	0	0.0										
ESC	ESC	HELO ESCORT	3100	X									1.5	D		A	2			*			3101
	ESC	NIGHT HELO ESCORT	3101R	X	X		X						1.5	NS		A	2			365			3102
	ESC	SURFACE ESCORT	3103	X									1.5	(NS)		A	2			*			3100
	ANSQ	LLL NVD TERF/NAV	2702R	X	X		X																
ESC TOTAL								0	0.0	0	0.0	3	4.5										
ASPT	ASPT	FASTROPE	3200R	X	X								1.0	D		A	1			365			3200
	ASPT	NVD FASTROPE	3201R	X	X		X						1.0	NS		A	1			365			3202
	ANSQ	LLL NVD TERF/NAV	2702R	X	X		X																
ASPT TOTAL								0	0.0	0	0.0	2	2.0										
AD	AD	TAC LOADING	3206	X		X			0.0					(NS)		A	1			*			2704
	AD	EXTERNALS	3207R	X	X	X	X						1.0	(NS)		A	1			730			4103
	ANSQ	LLL NVD TERF/NAV	2702R	X	X		X																
AD TOTAL								2	0.0	1	0.0	2	1.0										
CAS	CAS	CAS	3303R	X	X		X						1.5	(NS)		A	2			180			3303
	ANSQ	LLL NVD TAC ASPT	2704R	X	X	X	X																
CAS TOTAL								0	0.0	0	0.0	1	1.5										
FAC(A)	FAC(A)	FAC(A)	3403R	X	X		X						1.5	(NS)		A	1			365			3403
	ANSQ	LLL NVD TAC ASPT	2704R	X	X	X	X																
FAC(A) SKILL TOTAL								0	0.0	0	0.0	1	2.0										
CORE PLUS (4000 Phase)																							
ACAD	ACAD	INTRO TO DACM	4050	X					1.0							G				*			
	ACAD	RW DACM	4051	X					1.0							G				*			
	ACAD	FW DACM	4052	X					1.0							G				*			
ACAD SKILL TOTAL								3	3.0	0	0.0	0	0.0										
RIE	ASPT	PARADROP OPS INTRO	4100	X									1.0	(NS)		A	1			*			4100
	ASPT	HELOCAST INTRO	4101	X									1.0	(NS)		A	1			*			4101
	ASPT	SPIE INTRO	4102R	X	X		X						1.5	(NS)		A	1			365			4102
	ASPT	MAT INTRO/HIE	4104R	X	X		X						2.0	(NS)		A	1			365			4104
	ASPT	RAPPEL	4105R	X	X		X						1.0	(NS)		A	1			365			3201
	ANSQ	LLL NVD TERF/NAV	2702R	X	X		X																
ASPT SKILL TOTAL								0	0.0	0	0.0	4	5.5										
CAS	CAS	URBAN CAS	4200R	X	X		X						1.5	(NS)		A	2			365			5100
	ANSQ	LLL NVD TAC ASPT	2704R	X	X	X	X																
CAS TOTAL								0	0.0	0	0.0	1	1.5										
AAD	DACM	Air-to-air gunnery	4300R	X	X		X						1.5	D		A	1			485			4300
	DACM	1V1 RW	4301R	X	X	X							1.0	D		A	1			*			4301

UH-1Y CREW CHIEF AND AERIAL OBSERVER T&R SYLLABUS MATRIX (2000-6000 Phase)																								
SKILL	STAGE	T&R DESCRIPTION	EVENT NUMBER BASIC	ATTAIN			MAINTAIN	ACAD		SIM		FLIGHT		COND	SEAT	TYPE	# A/C	NETWORK	NUM-NET	REFLY	EVAL	EOM	EVENT CONV
				B	R	SC		#	TIME	#	TIME	#	TIME										
	DACM	2V1 RW	4302R	X	X		X						1.0	D		A	2			485			4302
	DACM	1V1 FW	4304	X									1.0	D		A	1			*			4304
	DACM	2V2 FW	4305R	X	X		X						1.0	D		A	2			485			4305
DACM TOTAL								0	0.0	0	0.0	5	5.5										
CBRN	CBRN	A/P23P-14A(V) OR A/P	4400R	X	X		X						1.0	D		A	1			*			
CBRN TOTAL								0	0.0	0	0.0	1	1.0										
CQ	CQ	DAY CQ	4600R	X	X								1.0	D		A	1			365			4600
	CQ	NVD CQ	4601R	X	X		X						1.0	NS		A	1			365			4601
	CQ	UNAIDED CQ	4602R	X	X								1.0	N*		A	1			365			4602
CQ TOTAL								0	0.0	0	0.0	3	3.0										
INSTRUCTOR TRAINING (5000 Phase)																							
TERF I	TERF I	TERFI IUT	5100	X									1.5	(NS)		A	1			*			5100
	TERF I	TERFI CERT	5101R	X	X								1.5	(NS)		A	2			*	X		5101
TERF I TOTAL								0	0.0	0	0.0	2	3.0										
AGI	AGI	GAU-17/A IUT	5420	X									1.5	(NS)		A	2			*			5420
	AGI	CAU-17/A CERT	5421R	X	X								1.5	NS		A	2			*	X		5421
	AGI	M240D IUT	5430	X									1.5	(NS)		A	2			*			5430
	AGI	M240D CERT	5431R	X	X								1.5	NS		A	2			*	X		5431
	AGI	GAU-21 IUT	5440	X									1.5	(NS)		A	2			*			5440
	AGI	GAU-21 CERT	5441R	X	X								1.5	NS		A	2			*	X		5441
AGI TOTAL								0	0.0	0	0.0	6	9.0										
DACMI	DACMI	DACM RW IUT	5800	X									1.5	D		A	1			*			5800
	DACMI	DACM FW IUT	5801	X									1.5	D		A	2			*			5801
	DACMI	DACM RW CERT	5802R	X	X								1.5	D		A	2			*	X		5802
	DACMI	DACM FW CERT	5803R	X	X								1.5	D		A	2			*	X		5803
DACMI TOTAL								0	0.0	0	0.0	4	6.0										
NSI	NSI	NSI TERF/TAC LANDING	5900	X									1.5	NS		A	1			*			5900
	NSI	NSI TAC ORD DELIVERY	5901	X									1.5	NS		A	2			*			5901
	NSI	NSI CERT	5904R	X	X								2.0	NS		A	2			*	X		5904
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGANTION (6000 Phase)																							
NSI TOTAL								0	0.0	0	0.0	3	5.0										
NTPS	NTPS	NATOPS OPEN BOOK	6002R	X	X	X	X		1.5							G				365	X	X	6001
	NTPS	NATOPS CLOSED BOOK	6003R	X	X	X	X		1.0							G				365	X	X	6002
	NTPS	NATOPS ORAL EXAM	6004R	X	X	X	X		1.0							G				365	X	X	6003
	NTPS	ANNUAL NATOPS EVAL	6101R	X	X	X	X						1.0	(NS)		A	1			365	X	X	6101
NTPS TOTAL								3	3.5	0	0.0	1	1.0										
CRM	CRM	ANN CRM GND TRAINING	6005	X	X		X		1.0							G				365	X	X	6010
	CRM	ANN CRM EVAL FLIGHT	6102R	X	X	X	X						1.0	(NS)		A	1			365	X	X	6110
CRM TOTAL								1	1.0	0	0.0	1	1.0										
QUAL	QUAL	GAU-17/A GUNNER QUAL	6301R	X	X		X						1.5	NS		A	2			1095			6301

UH-1Y CREW CHIEF AND AERIAL OBSERVER T&R SYLLABUS MATRIX (2000-6000 Phase)

SKILL	STAGE	T&R DESCRIPTION	EVENT NUMBER BASIC	ATTAIN			MAINTAIN	ACAD		SIM		FLIGHT		COND	SEAT	TYPE	# A/C	NETWORK	NUM-NET	REFLY	EVAL	EOM	EVENT CONV
				B	R	SC		#	TIME	#	TIME	#	TIME										
	QUAL	M240D GUNNER QUALIFC	6302R	X	X		X						1.5	NS		A	2			1095			6302
	QUAL	GAU-21 GUNNER QUALIF	6303R	X	X		X						1.5	NS		A	2			1095			6303
		QUAL TOTAL						0	0.0	0	0.0	3	4.5										

3.22.1 UH-1Y Crew Chief And Aerial Observer Ordnance And Range Table

UH-1Y CREW CHIEF AND AERIAL OBSERVER ORDNANCE, RANGE AND EXTERNAL SYLLABUS SUPPORT TABLE (2000-6000 Phase)										
SKILL	STAGE	T&R DESCRIPTION	EVENT NUM	ORDNANCE	ORDNANCE QUANITY	ORDNANCE NOTES	RANGE	RANGE NOTES	EXTERNAL SYLLABUS SUPPORT	EXTERNAL SYLLABUS NOTES
CORE SKILLS (2000 Phase)										
TERF	TERF	INTRO TERF NAV	2100						Authorized TERF route, high bird if required	
	TERF	REVIEW NVD TERF ~NS	2101R						Authorized TERF route, high bird if required	
REC	SREC	SENSOR FAM	2300						A/C with APU or aux power source	
	REC	SENSOR FAM	2301R				Laser safe range if available		Thermally augmented threat vehicles if available	
ASPT	ASPT	TAC LANDINGS	2400							
	ASPT	~NS NVD TAC LDGS	2401							
	ASPT	SECTION TAC LANDINGS	2402R							
	ASPT	~NS NVD SECTION TAC	2403R							
FCLP	FCLP	DAY FCLP	2501R						FCLP pad	
	FCLP	NIGHT AND NVD FCLP	2502R						FCLP pad with overt and NVD deck lighting	
SWD	SWD	GAU-17/A INTRO	2601R	7.62mm	1,500 rounds		AG range			
	SWD	M240D INTRO	2602R	7.62mm	400 rounds		AG range			
	SWD	GAU-21 INTRO	2603R	.50 cal	600 rounds		AG range			
	SWD	~NS NVD GAU-17/A INT	2605	7.62mm	1,500 rounds		AG range			
	SWD	~NS NVD M240D INTRO	2606	7.62mm	400 rounds		AG range			
	SWD	~NS NVD GAU-21 INTRO	2607	.50 cal	600 rounds		AG range			
	SWD	LLL NVD GAU-17/A INT	2609R	7.62mm	1,500 rounds		AG range			
	SWD	LLL NVD M240D INTRO	2610R	7.62mm	400 rounds		AG range			
	SWD	LLL NVD GAU-21 INTRO	2611R	.50 cal	600 rounds		AG range			
ANSQ	ANSQ	LLL NVD TERF/NAV	2702						Authorized TERF route, high bird if required	
	ANSQ	LLL NVD SECTION TAC	2703							
	ANSQ	LLL NVD TAC ASPT	2704R		1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21		AG range			
MISSION SKILLS (3000 Phase)										
ESC	ESC	HELO ESCORT	3100		1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21	Optional	AG range	(if required)	One or more assault support aircraft	
	ESC	NIGHT HELO ESCORT	3101R		1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21	Optional	AG range	(if required)	One or more assault support aircraft	
	ESC	SURFACE ESCORT	3103		1,500 rounds 7.62mm GAU-	Optional	AG range	(if	One	

UH-1Y CREW CHIEF AND AERIAL OBSERVER ORDNANCE, RANGE AND EXTERNAL SYLLABUS SUPPORT TABLE (2000-6000 Phase)

SKILL	STAGE	T&R DESCRIPTION	EVENT	ORDNANCE	ORDNANCE	ORDNANCE	RANGE	RANGE	EXTERNAL	EXTERNAL
					17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21			required)	ground/amphibious unit, minimum 3 vehicles	
ASPT	ASPT	FASTROPE	3200R				Sim/Actual rooftop or landing point (authorized fastrope site)		HRST Master and at least two ropers	
	ASPT	NVD FASTROPE	3201R				Sim/Actual rooftop or landing point. (authorized fastrope site)		HRST Master and at least two ropers	
AD	AD	TAC LOADING	3206	Configured with weapons		no ordnance			Troops embarked (6 preferred) and actual cargo	
	AD	EXTERNALS	3207R						Appropriate external load	
CAS	CAS	CAS	3303R		1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21		AG range			
FAC(A)	FAC(A)	FAC(A)	3403R		1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21	Optional	AG range		One CAS aircraft	
CORE PLUS (4000 Phase)										
RIE	ASPT	PARADROP OPS INTRO	4100				Drop Zone or authorized paraops area		Jump Master and two jumpers	Jump master may be one of the jumpers
	ASPT	HELOCAST INTRO	4101				Water drop zone or authorized helocast area		Helocast Master and two swimmers	Helocast Master may be one of the swimmers
	ASPT	SPIE INTRO	4102R				Drop zone/landing zone or authorized SPIE area		HRST Master and two ropers	
	ASPT	MAT INTRO/HIE	4104R							
	ASPT	RAPPEL	4105R						HRST Master and ropers	
CAS	CAS	URBAN CAS	4200R		1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21	Optional	AG range		JTAC with appropriate marking devices (if available), suitable urban environment or MOUT facility	
AAD	DACM	Air-to-air gunnery	4300R		1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21		AG range or MLT range			
	DACM	1V1 RW	4301R						One adversary helicopter	Dissimilar if available
	DACM	2V1 RW	4302R						One adversary helicopter	Dissimilar if available
	DACM	1V1 FW	4304						1 FW aggressor aircraft	
	DACM	2V2 FW	4305R						2 FW aggressor aircraft	
CBRN	CBRN	A/P23P-14A(V) OR A/P	4400R							
CQ	CQ	DAY CQ	4600R						Landing platform afloat	
	CQ	NVD CQ	4601R						Landing platform afloat	
	CQ	UNAIDED CQ	4602R						Landing platform afloat	

UH-1Y CREW CHIEF AND AERIAL OBSERVER ORDNANCE, RANGE AND EXTERNAL SYLLABUS SUPPORT TABLE (2000-6000 Phase)										
SKILL	STAGE	T&R DESCRIPTION	EVENT	ORDNANCE	ORDNANCE	ORDNANCE	RANGE	RANGE	EXTERNAL	EXTERNAL
INSTRUCTOR TRAINING (5000 Phase)										
TERF I	TERF I	TERFI IUT	5100						Authorized TERF route, high bird if required	
	TERF I	TERFI CERT	5101R						Authorized TERF route, high bird if required	
AGI	AGI	GAU-17/A IUT	5420	7.62mm	1,500 rounds		AG range			
	AGI	CAU-17/A CERT	5421R	7.62mm	1,500 rounds		AG range			
	AGI	M240D IUT	5430	7.62mm	400 rounds		AG range			
	AGI	M240D CERT	5431R	7.62mm	400 rounds		AG range			
	AGI	GAU-21 IUT	5440	.50 cal	600 rounds		AG range			
	AGI	GAU-21 CERT	5441R	.50 cal	600 rounds		AG range			
DACMI	DACMI	DACM RW IUT	5800							
	DACMI	DACM FW IUT	5801							
	DACMI	DACM RW CERT	5802R							
	DACMI	DACM FW CERT	5803R							
NSI	NSI	NSI TERF/TAC LANDING	5900							
	NSI	NSI TAC ORD DELIVERY	5901							
	NSI	NSI CERT	5904R							
REQUIREMENTS, CERTIFICATIONS, DESIGNATIONS, AND QUALIFICATIONS (RCQD) (6000 Phase)										
NTPS	NTPS	NATOPS OPEN BOOK	6002R							
	NTPS	NATOPS CLOSED BOOK	6003R							
	NTPS	NATOPS ORAL EXAM	6004R							
	NTPS	ANNUAL NATOPS EVAL	6101R							
CRM	CRM	ANN CRM GND TRAINING	6005							
	CRM	ANN CRM EVAL FLIGHT	6102R							
QUAL	QUAL	GAU-17/A GUNNER QUAL	6301R	7.62mm	1,500 rounds		AG range			
	QUAL	M240D GUNNER QUALIFC	6302R	7.62mm	400 rounds		AG range			
	QUAL	GAU-21 GUNNER QUALIF	6303R	.50 cal	600 rounds		AG range			

3.22.2 UH-1Y Crew Chief And Aerial Observer Prerequisite And Chaining Table (2000-6000 Phase)

UH-1Y CREW CHIEF AND AERIAL OBSERVER PREREQUISITE AND CHAINING TABLE (2000-6000 Phase)							
SKILL	STAGE	T&R DESCRIPTION	EVENT NUM	PREREQUISITE	PREREQUISITE NOTES	CHAINING	CHAINING NOTES
CORE SKILLS (2000 Phase)							
TERF	TERF	INTRO TERF NAV	2100	2050,2051,1901			
	TERF	REVIEW NVD TERF ~NS	2101R	2052,2100		2100	
REC	SREC	SENSOR FAM	2300	2050,1901			
	REC	SENSOR FAM	2301R	2300			
ASPT	ASPT	TAC LANDINGS	2400	2050,1901			
	ASPT	~NS NVD TAC LDGS	2401	2052,2400			
	ASPT	SECTION TAC LANDINGS	2402R	2100,2400			
	ASPT	~NS NVD SECTION TAC	2403R	2101,2301,2401,2402,	TERFQ	2402	
FCLP	FCLP	DAY FCLP	2501R	2400			
	FCLP	NIGHT AND NVD FCLP	2502R	2401,2501		2501	
SWD	SWD	GAU-17/A INTRO	2601R	2053,2055,2100,2400		2301,6301	
	SWD	M240D INTRO	2602R	2053,2056,2100,2400		2301,6302	
	SWD	GAU-21 INTRO	2603R	2053,2057,2100,2400		2301,6303	
	SWD	~NS NVD GAU-17/A INT	2605	2058,2059,2101,2401,2601	TERFQ	2301,2601,6301	
	SWD	~NS NVD M240D INTRO	2606	2058,2059,2101,2401,2602	TERFQ	2301,2602,6302	
	SWD	~NS NVD GAU-21 INTRO	2607	2058,2059,2101,2401,2603	TERFQ	2301,2603,6303	
	SWD	LLL NVD GAU-17/A INT	2609R	2403,2605	NSQ	2301,2601,6301	
	SWD	LLL NVD M240D INTRO	2610R	2403,2606	NSQ	2301,2602,6302	
	SWD	LLL NVD GAU-21 INTRO	2611R	2403,2607	NSQ	2301,2603,6303	
ANSQ	ANSQ	LLL NVD TERF/NAV	2702R	2403	NSQ	2100,2101	
	ANSQ	LLL NVD SECTION TAC	2703	2403	NSQ	2402,2403	
	ANSQ	LLL NVD TAC ASPT	2704R	2060,2702,2703	2609,2610 or 2611 based on configuration	2402,2403,2702	2609,2610 or 2611 based on configuration
MISSION SKILLS (3000 Phase)							
ESC	ESC	HELO ESCORT	3100	2101,2301,2401,3050	TERFQ. 2601,2602 or 2603~ORD based on configuration	2301	2601,2602 or 2603~ORD based on configuration
	ESC	NIGHT HELO ESCORT	3101R	3100,2403,2704~LLL.	NSQ,2605,2606 or 2607~NS ORD. 2609,2610 or 2611~LLL ORD based on configuration	2301	2601,2602 or 2603~NS ORD. 2609,2610 or 2611~LLL ORD based on configuration
	ESC	SURFACE ESCORT	3103	3050,3054,2101,2401,2403~NS, 2704~LLL.	TERFQ,2601,2602 or 2603~DAY ORD. 2605,2606 or 2607~NS ORD. 2609,2610 or 2611~LLL ORD based on configuration	2301	2601,2602 or 2603~DAY ORD or NS. 2609,2610, or 2611~LLL ORD based on configuration
ASPT	ASPT	FASTROPE	3200R	3051,2101,2401			
	ASPT	NVD FASTROPE	3201R	3200. 2403. 2704~LLL	NSQ	3200	
AD	AD	TAC LOADING	3206				
	AD	EXTERNALS	3207R	2100,2400,2403~NS,2704~LLL		2100,2101~NS	
CAS	CAS	CAS	3303R	3053,2704	2609,2610, or 2611 based on configuration	2301	2601,2602 or 2603~DAY ORD or NS. 2609,2610, or 2611~LLL ORD based on configuration

UH-1Y CREW CHIEF AND AERIAL OBSERVER PREREQUISITE AND CHAINING TABLE (2000-6000 Phase)							
SKILL	STAGE	T&R DESCRIPTION	EVENT NUM	PREREQUISITE	PREREQUISITE NOTES	CHAINING	CHAINING NOTES
FAC(A)	FAC(A)	FAC(A)	3403R	3053,3303	2609,2610, or 2611 based on configuration	2301	
CORE PLUS (4000 Phase)							
RIE	ASPT	PARADROP OPS INTRO	4100	3051,2400,2403~NS,2704~LLL			
	ASPT	HELOCAST INTRO	4101	3051,2100,2403~NS,2704~LLL		2100,2101~NS	
	ASPT	SPIE INTRO	4102R	3051,2101,2401,2403~NS,2704~LLL	TERFQ	2100	
	ASPT	MAT INTRO/HIE	4104R	2101,2401,2403~NS,2704~LLL	TERFQ	2100,2101~NS	
	ASPT	RAPPEL	4105R	3051,2101,2401,2403~NS,2704~LLL	TERFQ	2100,2101~NS	
CAS	CAS	URBAN CAS	4200R	3053,3303.	2601,2602 or 2603~DAY ORD. 2605,2606 or 2607~ORD ~NS. 2609,2610 or 2611~LLL ORD based on configuration	3303	2601,2602 or 2603~DAY ORD or NS. 2609,2610, or 2611~LLL ORD based on configuration
AAD	DACM	Air-to-air gunnery	4300R		2601,2602, or 2603 based on configuration		2601,2602, or 2603 based on configuration
	DACM	1V1 RW	4301R	4050,4051,2101,2401	TERFQ	2100	
	DACM	2V1 RW	4302R	4301	TERFQ	2100	
	DACM	1V1 FW	4304	4050,4052,2101,2401	TERFQ	2100	
	DACM	2V2 FW	4305R	4304	TERFQ	2100	
CBRN	CBRN	A/P23P-14A(V) OR A/P	4400R	2400			
CQ	CQ	DAY CQ	4600R	2501		2501	
	CQ	NVD CQ	4601R	2502,4600,2403	NSQ	2501,2502,4600,4602	
	CQ	UNAIDED CQ	4602R	2502,4600		2501,2502,4600	
INSTRUCTOR TRAINING (5000 Phase)							
TERF I	TERF I	TERFI IUT	5100	6301,6302,6303	Triple gunner	2100,2101~NS	
	TERF I	TERFI CERT	5101R	5100		2100,2101~NS	
AGI	AGI	GAU-17/A IUT	5420	5101	TERFI	2301,2601	2609~LLL
	AGI	CAU-17/A CERT	5421R	5420		2301,2601	2609~LLL
	AGI	M240D IUT	5430	5101	TERFI	2301,2602	2610~LLL
	AGI	M240D CERT	5431R	5430		2301,2602	2610~LLL
	AGI	GAU-21 IUT	5440	5101	TERFI	2301,2603	2611~LLL
	AGI	GAU-21 CERT	5441R	5440		2301,2603	2611~LLL
DACMI	DACMI	DACM RW IUT	5800	4302	Single AGI	2100,4302	
	DACMI	DACM FW IUT	5801	4305	Single AGI	2100,4305	
	DACMI	DACM RW CERT	5802R	5800	Single AGI	2100,4302	
	DACMI	DACM FW CERT	5803R	5801	Single AGI	2100,4305	
NSI	NSI	NSI TERF/TAC LANDING	5900	5421,5431,5441	Triple AGI	2100,2101,2402,2403,2702	
	NSI	NSI TAC ORD DELIVERY	5901	5421,5431,5441	Triple AGI	2301,2702,3303	2601,2602 or 2603~NS ORD. 2609,2610, or 2611~LLL ORD based on configuration
	NSI	NSI CERT	5904R	5900,5901		2301,2402,2403,2702,2704,3303	2609,2610 or 2611 based on configuration
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGANTIONS (6000 Phase)							
NTPS	NTPS	NATOPS OPEN BOOK	6002R				
	NTPS	NATOPS CLOSED BOOK	6003R				

UH-1Y CREW CHIEF AND AERIAL OBSERVER PREREQUISITE AND CHAINING TABLE (2000-6000 Phase)							
SKILL	STAGE	T&R DESCRIPTION	EVENT NUM	PREREQUISITE	PREREQUISITE NOTES	CHAINING	CHAINING NOTES
	NTPS	NATOPS ORAL EXAM	6004R				
	NTPS	ANNUAL NATOPS EVAL	6101R	6002,6003,6004			
CRM	CRM	ANN CRM GND TRAINING	6005				
	CRM	ANN CRM EVAL FLIGHT	6102R	6005			
QUAL	QUAL	GAU-17/A GUNNER QUAL	6301R	2609,2704,3101,3303	ANSQ		
	QUAL	M240D GUNNER QUALIFC	6302R	2610,2704,3101,3303	ANSQ		
	QUAL	GAU-21 GUNNER QUALIF	6303R	2611,2704,3101,3303	ANSQ		

3.22.3 UH-1Y Crew Chief And Aerial Observer T&R Syllabus Matrix (1000 Phase)

UH-1Y CREW CHIEF CORE SKILL INTRODUCTION TRAINING (1000 & FRS 5000 PHASE)																								
SKILL	STAGE	T&R DESCRIPTION	EVENT NUMBER	B	R	SC	# ACAD EVENTS	ACAD TIME	# SIM EVENTS	SIM TIME	# FLT EVENTS	FLIGHT TIME	COND	TYPE	# A/C or Sim	PREREQUISITE	PREREQUISITE NOTES	ORDNANCE NOTES	RANGE	RANGE NOTES	EXTERNAL SYLLABUS SUPPORT	EVAL	EVENT CONV
ACAD	ACAD	FRS SYLLABUS		X				1.0						G									
ACAD SKILL TOTAL							1	1.0	0	0.0	0	0.0											
FAM	FAM	GRND PROC	1100	X								1.5	D	A	1	1000							
	FAM	PAX/EPS	1101	X		X						1.5	D	A	1	1100							
	FAM	HLL NVD INTRO	1102	X		X						1.5	NS	A	1	1101							
FAM SKILL TOTAL							0	0.0	0	0.0	3	4.5											
FORM	FORM	TAC FORM INTRO	1301	X								1.5	D	A	2	1101							
	FORM	NVD FORM INTRO	1303	X								1.5	NS	A	2	1102,1301							
FORM SKILL TOTAL							0	0.0	0	0.0	2	3.0											
TERF	TERF	TERF INTRO	1401	X		X						1.0	D	A	1	1101					Auth TERF Area		
	TERF	NVD TERF INTRO	1403	X								1.0	NS	A	1	1102,1401					Auth TERF Area		
TERF SKILL TOTAL							0	0.0	0	0.0	2	2.0											
NAV	NAV	NAV INTRO	1500	X								1.5	(NS)	A	1	1102							
NAV SKILL TOTAL							0	0.0	0	0.0	1	1.5											
SWD	SSWD	SSWD	S1600	X						1.5			D	S/A	1			1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21	Live fire range	If using the Static Weapons Trainer	UH-1Y enlisted aircrew sim or Static Weapons Trainer		
	SWD	BCWD INTRO	1601	X								1.5	D	A	1	1101,1600		1,500 rounds 7.62mm GAU-17/A, 400 rounds 7.62mm M-240D, or 600 rounds .50 cal GAU-21	Aerial gunnery range				
SWD SKILL TOTAL							0	0.0	1	1.5	1	1.5											
ASPT	ASPT	CAL/HIE INTRO	1800	X								1.5	D	A	1	1101							

UH-1Y CREW CHIEF CORE SKILL INTRODUCTION TRAINING (1000 & FRS 5000 PHASE)																							
SKILL	STAGE	T&R DESCRIPTION	EVENT NUMBER	B	R	SC	# ACAD EVENTS	ACAD TIME	# SIM EVENTS	SIM TIME	# FLT EVENTS	FLIGHT TIME	COND	TYPE	# A/C or Sim	PREREQUISITE	PREREQUISITE NOTES	ORDNANCE NOTES	RANGE	RANGE NOTES	EXTERNAL SYLLABUS SUPPORT	EVAL	EVENT CONV
	ASPT	TAC LANDING INTRO	1801	X		X						1.5	D	A	1	1800	FAM-1101 for AOUI						
	ASPT	INTRO NS CAL/HIE	1802	X		X						1.5	NS	A	1	1102,1801							
	ASPT	REVIEW NS CALS	1803	X								1.5	NS	A	1	1802							
	ASPT	EXT/HOIST INTRO	1804	X								1.5	D	A/S	1	1101					Ext load, hoist		
ASPT SKILL TOTAL							0	0.0	0	0.0	5	7.5											
CSIX	CSIX	CORE SKILL CHECK	1901	X		X						1.0	(NS)	A	1	1100-1102,1301,1303,1401,1403,1500,1600, 1601,1800-1804	1800 and 1804 not required for AOUI					X	
CSIX SKILL TOTAL							0	0.0	0	0.0	1	1.0											
1000 PHASE TOTAL							1	1.0	1	1.5	15	21.0											
UH-1Y CREW CHIEF FRS INSTRUCTOR TRAINING (5000 PHASE)																							
FRSI	FRSI	INTRO INST	5300R	X	X							2.0	D	A	1	5421,5431,5441	Triple AGI					X	
	FRSI	EXT/HOIST OPS	5301R	X	X							2.0	D	A	1	5300					Ext load	X	
FRSI SKILL TOTAL							0	0.0	0	0.0	2	4.0											
NSFI	NSFI	NSFI IUT	5600	X								1.5	NS	A	1	5301	FRSI						
	NSFI	NSFI CERT	5601R	X	X							1.5	NS	A	1	5600						X	
NSFI SKILL TOTAL							0	0.0	0	0.0	2	3.0											

3.23 SYLLABUS EVALUATION FORMS. MAWTS-1, the syllabus sponsor, maintains and updates training and readiness grade sheets.

3.24 T&R QUICK REFERENCE GUIDE

UH-1Y T&R CODES QUICK REFERENCE		
TERF	2100*	DAY TERF
	2101*	NVD TERF
REC	2300*	SENSOR FAM (GROUND) (2)
	2301*	SENSOR FAM (AIR) (2)
ASPT	2400*	TAC LANDINGS
	2401*	~NS NVD TAC LANDINGS
	2402*	SECTION TAC LANDINGS
	2403*	~NS NVD SECTION TAC LAND (NSQ)
FCLP	2501*	DAY FCLP
	2502*	NVD FCLP
SWD	2601*	GAU-17/A INTRO
	2602*	M-240D INTRO
	2603*	GAU-21 INTRO
	2605*	~NS NVD GAU-17/A INTRO
	2606*	~NS NVD M-240D INTRO
	2607*	~NS NVD GAU-21 INTRO
	2609*	LLL NVD GAU-17/A INTRO
	2610*	LLL NVD M 240D INTRO
	2611*	LLL NVD GAU-21 INTRO
ANSQ	2702*	LLL NVD TERF/NAV
	2703*	LLL NVD SECTION TAC LANDINGS
	2704*	LLL NVD TAC ASPT (ANSQ)
ESC	3100*	HELO ESCORT (1)
	3101*	NIGHT HELO ESCORT (1)
	3103	SERFACE ESCORT (1) (2) (3)
ASPT	3200	FASTROPE
	3201	NVD FASTROPE (3)
AD	3206	TAC LOADING (2)
	3207	EXTERNALS (2) (3)
CAS	3303*	CAS (2) (3)
FAC(A)	3403*	FAC(A) (2) (3)
ASPT	4100	PARADROP INTRO (2) (3)
	4101	HELOCAST INTRO (2) (3)
	4102	SPIE INTRO (2) (3)
	4104*	MAT INTRO/HIE (2) (3)
	4105	RAPPEL (2) (3)
CAS	4200*	URBAN CAS (2) (3)
DACM	4300*	AIR-TO-AIR GUNNERY
	4301*	1V1 RW
	4302*	2V1 RW
	4304*	1V1 FW
	4305*	2V2 FW
CBRN	4400*	PROTECTIVE MASK FAM
CQ	4600*	DAY CQ
	4601*	NVD CQ
	4602*	UNAIDED CQ
TERF	5100	TERFI IUT (2) (3)
	5101	TERFI CERT (2) (3)
FRSI	5300	FRS INSTRUCTOR EVALUATION
	5301	FRS INSTRUCTOR EVALUATION
AGI	5420	GAU-17/A IUT (2) (3)
	5421	GAU-17/A CERT (3)
	5430	M240D IUT (2) (3)
	5431	M240D CERT (3)
	5440	GAU-21 IUT (2) (3)
	5441	GAU-21 CERT (3)
NSFI	5600	NSFI IUT
	5601	NSFI CERT
DACMI	5800	DACMI RW IUT
	5801	DACMI FW IUT
	5802	DACMI RW CERT
	5803	DACMI FW CERT
NSI	5900	NSI TERF/TAC LANDING IUT (3)
	5901	NSI TAC ORD DELIVERY IUT (3)
	5904	NSI CERT
NTPS	6002*	NATOPS OPEN BOOK
	6003*	NATOPS CLOSED BOOK
	6004*	NATOPS ORAL EXAM
	6101*	NATOPS CHECK (2) (3)
CRM	6005*	CRM GROUND
	6102*	CRM FLT (2) (3)
QUAL	6301*	GAU-17/A GUNNER QUAL
	6302*	M-240D GUNNER QUAL
	6303*	GAU-21 GUNNER QUAL
1	ORD OPTIONAL	
2	NIGHT OPTIONAL	
3	HLL/LLL OPTIONAL	
ASTERISK (*)	EVENTS REQUIRED FOR AERIAL OBSERVERS	