

CHAPTER 2

UH-1N CREW CHIEF/AERIAL OBSERVER  
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CHAPTER 2

UH-1N CREW CHIEF/AERIAL OBSERVER

200. MARINE LIGHT ATTACK SQUADRON UH-1N UNIT TEMPLATE, MISSION STATEMENT, CORE COMPETENCY SKILLS

NOTE

The capabilities defined and described in the core capability and unit template sections are provided to ensure each like squadron maintains a common base of training and depth of capabilities. When resources permit, and when in the judgment of the commander additional training would significantly increase the unit's warfighting capability, training to a level above these base capabilities is permitted. It is incumbent upon and expected of the commander to balance any increase in the depth of core capabilities against the long term health and readiness of the unit while staying within resource constraints.

1. HMLA Mission. Support the MAGTF Commander by providing offensive air support, utility support, armed escort and airborne supporting arms coordination, day or night under all weather conditions during expeditionary, joint or combined operations.

2. UH-1 Mission Essential Task List (METL)

- a. (UJTL TA 1.1.2) Conduct Shipboard Deck helicopter Landing Qualifications
- b. (UJTL TA 1.1.4) Conduct Sea and Air Deployment Operations
  - Maintain the capability to deploy and operate from advanced bases, expeditionary airfields, Forward Operating Bases (FOBs), and naval shipping.
  - Perform organizational maintenance on assigned aircraft.
- c. (UJTL TA 1.2.1) Conduct Air Assault Operations and Air Assault
  - Provided assault support transport of combat troops.
  - Provide support for casualty evacuation operations.
  - Provide armed escort for assault helicopters.
- d. (UJTL TA 1.2.3) Conduct Amphibious Assault and Raid Operations
  - Conduct assault support for maritime special operations.
  - Provide armed escort for airborne and surface forces.
- e. (UJTL TA 3.2.1) Conduct Fire Support
  - Provide fire support for forward and rear area forces against point and area targets.
- f. (UJTL TA 3.2.2) Conduct Close Air Support
  - Conduct escort of friendly ground forces.
  - Conduct Assault Support Escort.
- g. (UJTL TA 3.2.3) Conduct Interdiction Operations
  - Conduct armed reconnaissance

- h. (UJTL TA 3.2.8) Conduct Air-to-Air Operations
  - Maintain self-defense capability from air-to-air threats.
- i. (UJTL TA 3.3) Coordinate Battlespace Maneuver and Integrate with Firepower
  - Conduct combined arms coordination and control operations.
  - Provide airborne command, control and coordination for assault support operations.
  - Conduct multi-sensor imagery, visual reconnaissance, and provide Battle Damage Assessment.
- j. (UJTL TA 6.2) Conduct Joint Personnel Recovery
  - Conduct Tactical Recovery of Aircraft and Personnel (TRAP) operations.
  - Augment local Search and Rescue (SAR) assets.
- k. (UJTL TA 6.3) Conduct Rear Area Security
  - Provide fire support and security for rear area forces.
- l. (UJTL TA 6.4) Conduct Noncombatant Evacuation
  - Provide Fire Support and escort for evacuation operations.
  - Provide support for evacuation operations.

3. Table Of Organization. Refer to Table of Organization 8970 managed by Total Force Structure, MCCDC, for current authorized organizational structure and personnel strength. As of this publication date, HMLA units are authorized:

HMLA SQUADRON  
18 AH-1W, 9 UH-1N  
Pilots: 44 AH-1W, 23 UH-1N  
19 Crew Chiefs  
17 Aerial Gunners/Observers

HMLA DETACHMENT  
6 AH-1W & 3 UH-1N  
Pilots: 14 AH-1W, 7 UH-1N  
5 Crew Chiefs  
5 Aerial Gunners/Observers

4. Core Capability. A core capable HMLA unit is able to sustain the number of sorties listed below on a daily basis during contingency/combat operations. The sortie rates are based on 1.5 hour average sortie duration and assumes  $\geq 70$  percent FMC aircraft and  $\geq 90$  percent T/O aircrew on hand. If unit FMC aircraft  $< 70$  percent or T/O aircrew  $< 90$  percent, core capability will be degraded by a like percentage. A core capable unit is able to accomplish all tasks designated in the unit METL from a main base, expeditionary base, or amphibious platform.

a. Core Capable Squadron. A Core Capable HMLA squadron is able to sustain 30 AH-1W and 15 UH-1N sorties per 24-hour period.

b. Core Capable Squadron (-). A Core Capable squadron (-) is able to sustain 21 AH-1W and 10 UH-1N sorties per 24-hour period.

c. Core Capable Detachment. A Core Capable detachment is able to sustain 10 AH-1W and 5 UH-1N sorties per 24-hour period.

5. METL/Core Skill Matrix. UH-1 core skills directly support the METL as follows:

METL	UH-1 CORE SKILL								
	TERF	CAL	REC	SWD	EW	ESC	ANSQ	TAC	FAC
a. Conduct Shipboard Deck helicopter Landing Qualifications							X		
b. Conduct Sea and Air Deployment Operations							X		
c. Conduct Air Assault Operations and Air Assault	X	X		X	X	X	X	X	
d. Conduct Amphibious Assault and Raid Operations	X	X	X	X	X	X	X	X	X
e. Conduct Fire Support	X		X	X	X		X	X	X
f. Conduct Close Air Support	X		X	X	X	X	X	X	X
g. Conduct Interdiction Operations	X		X	X	X	X	X	X	X
h. Conduct Air-to-Air Operations	X			X	X	X		X	
i. Coordinate Battlespace Maneuver and Integrate with Firepower	X		X	X			X	X	X
j. Conduct Joint Personnel Recovery	X	X	X	X	X		X	X	X
k. Conduct Rear Area Security	X	X	X	X	X	X	X	X	X
l. Conduct Noncombatant Evacuation	X	X	X	X	X	X	X	X	X

METL	CORE PLUS				
	CQ	HIE	DACM	NBC	MAT
a. Conduct Shipboard Deck helicopter Landing Qualifications	X				
b. Conduct Sea and Air Deployment Operations	X				
c. Conduct Air Assault Operations and Air Assault	X	X	X	X	X
d. Conduct Amphibious Assault and Raid Operations	X	X	X	X	X
e. Conduct Fire Support				X	
f. Conduct Close Air Support				X	
g. Conduct Interdiction Operations				X	
h. Conduct Air-to-Air Operations			X	X	
i. Coordinate Battlespace Mnv'r and Int w/Firepower				X	
j. Conduct Joint Personnel Recovery		X		X	X
k. Conduct Rear Area Security		X	X	X	X
l. Conduct Noncombatant Evacuation	X				X

6. UH-1N Core Model Minimum Requirements. Squadron core competency reflects the minimum level of competency a squadron must achieve to perform its core capability. UH-1 core competency is measured in terms of minimum unit Core Skill Proficiency (CSP) and minimum numbers of flight leaders per paragraphs a. and b. below:

a. Minimum Unit CSP Requirements. As a minimum, in order to be considered Core Competent, a unit must possess the following numbers of UH-1 crews who are proficient in each core skill (Unit CSP). In order to be considered proficient in a core skill (individual CSP), a UH-1 crewmember must attain and maintain proficiency in core skill events, as delineated in paragraphs (1) and (2) below. The standard UH-1N crew consists of 2 Pilots, a Crew Chief, and an AO/AG.

\* NOTE: CQ, HIE, DACM, NBC, and MAT are core plus skills. Proficiency in these skills is not required to obtain unit CSP. Below are UH-1 community recommended unit/individual CSP standards for CQ, HIE, DACM, NBC, and MAT.

T&R Manual, UH-1

UH-1N Unit CSP Requirements Squadron				
CORE SKILL *CORE PLUS	Pilots	Crew Chiefs	AO/AGs	Crews
TERF	12	6	6	6
CAL	12	6	6	6
REC	12	--	--	6
SWD	10	5	5	5
EW	6	3	3	3
ESC	10	5	5	5
ANSQ	8	4	4	4
TAC	8	4	4	4
FAC	4	--	--	4
*CQ	4	2	2	2
*HIE	4	2	2	2
*DACM	6	3	3	3
*NBC	2	1	1	1
*MAT	4	2	2	2

UH-1N Unit CSP Requirements Squadron (-)				
CORE SKILL *CORE PLUS	Pilots	Crew Chiefs	AO/AGs	Crews
TERF	8	4	4	4
CAL	8	4	4	4
REC	8	--	--	4
SWD	6	3	3	3
EW	4	2	2	2
ESC	6	3	3	3
ANSQ	4	2	2	2
TAC	4	2	2	2
FAC	2	--	--	2
*CQ	2	1	1	1
*HIE	2	1	1	1
*DACM	2	1	1	1
*NBC	2	1	1	1
*MAT	2	1	1	1

T&R Manual, UH-1

UH-1N Unit CSP Requirements Detachment				
CORE SKILL *CORE PLUS	Pilots	Crew Chiefs	AO/AGs	Crews
TERF	6	3	3	3
CAL	6	3	3	3
REC	6	--	--	6
SWD	4	2	2	2
EW	4	2	2	2
ESC	4	2	2	2
ANSQ	4	2	2	2
TAC	4	2	2	2
FAC	1	--	--	1
*CQ	6	3	3	3
*HIE	2	1	1	1
*DACM	2	1	1	1
*NBC	2	1	1	1
*MAT	2	1	1	1

(1) Events Required to Attain Individual CSP. To initially attain CSP, a UH-1 crewmember must successfully complete all of the T&R events listed in the chart below for that core skill.

UH-1N Crew Chief	TERF	CAL	SWD	ESC	ANSQ	TAC
T&R event requirements to attain competency	210 211	220 221 223	240 241 242 243 244 245	250 322	311 312 313	261 320 321

UH-1N Crew Chief	CQ	HIE	DACM	NBC
T&R event requirements to attain competency	431 432 433 434 435	400 401 402 403 404	410 411 412 413 414	420
		405 406	415 416	

UH-1N AO/AG	TERF	CAL	SWD	ESC	ANSQ	TAC
T&R event requirements to attain competency	210 211	220 221 223	240 241 242 243 244 245	250 322	311 312 313	261 320 321

T&R Manual, UH-1

UH-1N AO/AG	CQ	HIE	DACM	NBC
T&R event requirements to attain competency	431	400	410	420
	432	401	411	
	433	402	412	
	434	403	413	
	435	404	414	
		405	415	
		406	416	

(2) Events Required to Maintain Individual CSP. To maintain CSP, an individual must maintain proficiency in all of the T&R events listed in the chart below for that core skill.

UH-1N Crew Chief	TERF	NS	CAL	SWD	ANSQ	TAC	ESC
T&R event requirements to maintain CSP	211	215	221	243	313	261	322
			223	244		321	
				245			
				315			
				316			
				317			

UH-1N Crew Chief	HIE	DACM	CQ	NBC
T&R event requirements to maintain CSP	400	410	431	420
	401	411	432	
	402	412	433	
		414	434	
		415	435	
		416		

UH-1N AO/AG	TERF	CAL	SWD	ANSQ	TAC
T&R event requirements to maintain CSP	211	221	243	313	321
		223	244		
			245		
			315		
			316		
			317		

UH-1N AO/AG	DACM	CQ	NBC
T&R event requirements to maintain CSP	410	431	420
	411	432	
	412	433	
	414	434	
	415	435	
	416		

b. Minimum Combat Leader Requirements. As a minimum, in order to be considered Core Competent, a unit must possess the following numbers of UH-1 aircrew with the listed flight leadership designations.

DESIGNATION	SQDN	SQDN(-)	DETACHMENT
UHC	9	6	3
SECTION LD	5	3	2
DIVISION LD	2	1	1
*FLIGHT LD	4	3	1
*AMC	4	3	1

\* Flight Lead and AMC Combat Leader requirements apply to HMLA squadron, not individual aircraft models (may be filled by UH or AH pilot).

7. Qualifications and Designations Tables. The tables below delineate T&R events required to be completed to attain initial qualifications and designations. All stage lectures, briefs, squadron training and prerequisites shall be complete prior to completing final events. Qualification and designation letters signed by the commanding officer shall be placed in individual NATOPS and APR/MPR jackets. Loss of proficiency in all qualification events of a core skill causes the associated qualification to be lost. Regaining a qualification requires completing all R coded syllabus events associated with that qualification.

Qualification	Initial Event Qualification Requirements.
NATOPS (RQD-601)	IAW OPNAV 3710.7 and an annual qualification letter signed by the CO.
TERF/CAL (QUAL-610)	210, 211, 220, 221, 223
NSQ HLL (QUAL-611)	215, 243 or 244 or 245, 261
NSQ LLL (QUAL-612)	311, 312, 313,
CQ (QUAL-615)	431, 433
NVDCQ (QUAL-616)	432, 434
NIGHT CQ (QUAL-617)	435
RWDACM (QUAL-618)	411, 412
DACM (QUAL-619)	414, 415, 416
SWD GAU-16 (QUAL-620)	240, 243, 261, 315, and NSQ LLL
SWD GAU-17 (QUAL-621)	241, 244, 261, 316, and NSQ LLL
SWD M240 (QUAL-622)	242, 245, 261, 317, and NSQ LLL

Designation	Designation Requirements
CC/AO	CSIX-181
CCI (IDSG 680)	500, 504. Must be a TERFI, AGI, and NSQ LLL.
TERFI (IDSG 681)	IAW MAWTS-1 Course Catalog.
AGI GAU-16 (IDSG 682)	
AGI GAU-17 (IDSG 683)	
AGI M240 (IDSG 684)	
DACMI (IDSG 688)	
NSFI (IDSG 694)	
NSSI (IDSG 695)	
NSI (IDSG 696)	
WTI (IDSG 699)	

a. Instructor Requirements. A squadron should possess the following numbers of UH-1 aircrew with the listed instructor designations IAW MCO 3500.12C (WTPP).

INSTRUCTOR DESIGNATION	Squadron		
	Pilots	Crew Chiefs	AO/AGs
BIP	4	--	--
TERFI	4	3	--
WTO	4	--	--
NSI	3	3	--
WTI	3	3	--
FAC(A)I	2	--	--
TAC(A)I	1	--	--
DACMI	2	2	--
C/C AGI	--	4	--

INSTRUCTOR DESIGNATION	Squadron (-)		
	Pilots	Crew Chiefs	AO/AGs
BIP	2	--	--
TERFI	2	3	--
WTO	2	--	--
NSI	2	2	--
WTI	2	2	--
FAC(A)I	1	--	--
TAC(A)I	1	--	--
DACMI	1	1	--
C/C AGI	--	3	--

INSTRUCTOR DESIGNATION	Detachment		
	Pilots	Crew Chiefs	AO/AGs
BIP	2	--	--
TERFI	2	1	--
WTO	2	--	--
NSI	1	1	--
WTI	1	1	--
FAC(A)I	1	--	--
TAC(A)I	0	--	--
DACMI	1	1	--
C/C AGI	--	1	--

b. Currency. 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. Loss of currency does not affect a loss of CRP. 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 4 of the T&R Program Manual.

c. Proficiency. A measure of achievement of a specific skill. Units shall emphasize proficiency training in core competencies. Refly factors establish the maximum time between demonstration of those particular skills. CRP is a measurement of "demonstrated proficiency." If an aircrew member exceeds the refly factor for a particular event, the individual loses CRP for that particular event. To regain proficiency, an individual shall complete the delinquent events with a proficient crewman/flight lead. If an entire unit loses proficiency, unit instructors shall regain proficiency by completing an event with an instructor from a like unit. If this is 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, he shall regain proficiency with another aircraft commander or as designated by his commanding officer.

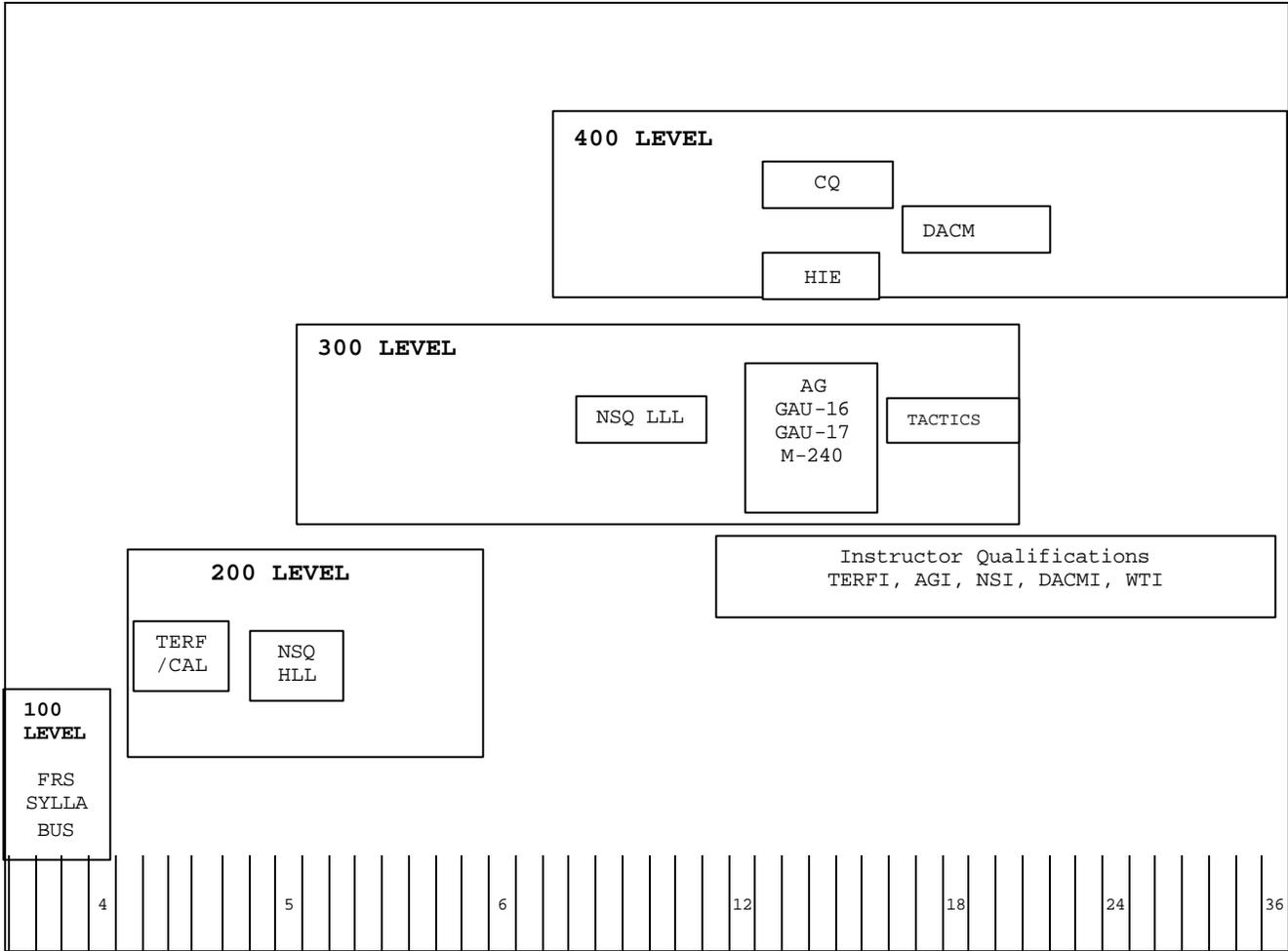


Figure 2-1.--Notional Training Progression Model.

201. PROGRAMS OF INSTRUCTION (POI) FOR BASIC/TRANSITION CREW CHIEF

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-2	UH-1N Familiarization	Training Squadron
3-8	Ground School	Training Squadron
9-19	Core Skill Introduction Phase	Training Squadron
20-24	Core Skill Basic Phase	Tactical Squadron
25-28	Core Skill Advanced Phase	Tactical Squadron
29-32	Core Skill Plus Phase	Tactical Squadron

202. POI FOR CONVERSION CREW CHIEF

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-5	UH-1N Familiarization	Training Squadron
6-10	Ground School	Training Squadron
11-20	Core Skill Introduction Phase	Training Squadron
21-23	Core Skill Basic Phase	Tactical Squadron
24-26	Core Skill Advanced Phase	Tactical Squadron
27-34	Core Skill Plus Phase	Tactical Squadron

203. POI FOR REFRESHER CREW CHIEF

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-4	UH-1N Familiarization	Tactical Squadron
5	Ground School	Tactical Squadron
6-11	Core Skill Introduction Phase	Tactical Squadron
12-13	Core Skill Basic Phase	Tactical Squadron
14-15	Core Skill Advanced Phase	Tactical Squadron
16-18	Core Skill Plus Phase	Tactical Squadron

204. POI FOR BASIC, TRANSITION, CONVERSION AND REFRESHER AERIAL OBSERVER

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-2	Ground School	Tactical Squadron
3-15	Flight Training	Tactical Squadron

210. GROUND/ACADEMIC TRAINING COURSES OF INSTRUCTION

<u>COURSE</u>	<u>ACTIVITY</u>
UH-1N Familiarization	Fleet Replacement Squadron
SERE School	NAS Brunswick, ME/NAS North Island, CA
Appropriate Aerial Gunnery School	Squadron
Aviation Physiology/ Aviation Water Survival	See OPNAVINST 3710.7_

211. SQUADRON LEVEL TRAINING

Publications and Related Directives  
 Communications Procedures  
 Maintenance Procedures  
 Safety  
 Weapons Training  
 MAWTS-1 Academic Support Package  
 Map Interpretation  
 Night Vision Device Operation  
 Search and Rescue  
 Helicopter Loading  
 Fueling and Servicing  
 Equipment Stowing  
 Helicopter Inspection  
 Preservation and Cleaning of Helicopter and Corrosion Control  
 Aircraft Recognition  
 Troubleshooting (Ground/Inflight)

220. FLIGHT TRAINING FOR BASIC/TRANSITION CREW CHIEF

1. Core Skill Introduction Phase

STAGE	NO. EVENTS	NO. HOURS	CRP
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	4/0	6.0/0.0	13.0/0.0
Formation	2/0	3.0/0.0	7.0/0.0
Terrain Flight	2/0	3.0/0.0	7.0/0.0
Navigation	2/0	3.0/0.0	7.0/0.0
Aerial Gunnery	1/1	1.5/1.0	4.0/2.0
Confined Area Landings	3/0	4.5/0.0	10.0/0.0
External Weight	1/0	1.5/0.0	3.0/0.0
Core Skill Introduction Evaluation	1/0	1.5/0.0	7.0/0.0
<b>TOTAL FOR PHASE</b>	<b>16/1</b>	<b>24.0/1.0</b>	<b>58.0/2.0</b>
<b>COMBINED TOTALS</b>	<b>17</b>	<b>25.0</b>	<b>60.0</b>
<b>ACCUMULATION FOR BASIC/TRANSITION POI</b>	<b>17</b>	<b>25.0</b>	<b>60.0</b>

2. Core Skill Basic Phase

STAGE	NO. EVENTS	NO. HOURS	CRP
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Terrain Flight/Navigation	2/0	3.0/0.0	2.0/0.0
Confined Area Landings	3/0	4.5/0.0	3.0/0.0
Aerial Gunnery	6/0	9.0/0.0	6.0/0.0
Escort	1/0	1.5/0.0	1.5/0.0
Night Systems	1/0	1.5/0.0	1.0/0.0
Tactics	1/0	1.5/0.0	1.5/0.0
<b>TOTAL FOR PHASE</b>	<b>14/0</b>	<b>21.0/0.0</b>	<b>15.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>14</b>	<b>21.0</b>	<b>15.0</b>
<b>ACCUMULATION FOR BASIC/TRANSITION POI</b>	<b>31</b>	<b>46.0</b>	<b>75.0</b>

3. Core Skill Advanced Phase

STAGE	NO. EVENTS	NO. HOURS	CRP
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Night Systems Qualification	3/0	4.5/0.0	7.5/0.0
Aerial gunnery	3/0	4.5/0.0	6.0/0.0
Tactics	2/0	4.0/0.0	4.5/0.0
Escort	1/0	1.5/0.0	2.0/0.0
<b>TOTAL FOR PHASE</b>	<b>9/0</b>	<b>14.5/0.0</b>	<b>20.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>9</b>	<b>14.5</b>	<b>20.0</b>
<b>ACCUMULATION FOR BASIC/TRANSITION POI</b>	<b>40</b>	<b>60.5</b>	<b>95.0</b>

4. Core Skill Plus Phase

STAGE	NO. EVENTS	NO. HOURS	CRP
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Helicopter Insertion/Extraction (HIE)	7/0	7.0/0.0	1.4/0.0
Defensive Air Combat Maneuvers	6/0	6.5/0.0	1.4/0.0
Nuclear, Biological, & Chemical	1/0	1.0/0.0	0.2/0.0
Carrier Qualification	5/0	5.0/0.0	2.0/0.0
<b>TOTAL FOR PHASE</b>	<b>19/0</b>	<b>19.5/0.0</b>	<b>5.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>19</b>	<b>19.5</b>	<b>5.0</b>
<b>TOTAL FOR BASIC/TRANSITION POI</b>	<b>59</b>	<b>80</b>	<b>100.0</b>

221. FLIGHT TRAINING FOR BASIC/TRANSITION AERIAL OBSERVER1. Core Skill Introduction Phase

<u>STAGE</u>	<u>NO. EVENTS</u>	<u>NO. HOURS</u>	<u>CRP</u>
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	2/0	3.0/0.0	4.0/0.0
Formation	2/0	3.0/0.0	10.0/0.0
Terrain Flight	2/0	3.0/0.0	10.0/0.0
Navigation	1/0	1.5/0.0	5.0/0.0
Aerial Gunnery	1/1	1.5/1.0	5.0/1.0
Confined Area Landings	2/0	3.0/0.0	10.0/0.0
Core Skill Introduction Evaluation	1/0	1.5/0.0	15.0/0.0
<b>TOTAL FOR PHASE</b>	<b>11/1</b>	<b>16.5/1.0</b>	<b>59.0/1.0</b>
<b>COMBINED TOTALS</b>	<b>12</b>	<b>17.5</b>	<b>60.0</b>
<b>ACCUMULATION FOR BASIC/TRANSITION POI</b>	<b>12</b>	<b>17.5</b>	<b>60.0</b>

2. Core Skill Basic Phase

<u>STAGE</u>	<u>NO. EVENTS</u>	<u>NO. HOURS</u>	<u>CRP</u>
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Terrain Flight/Navigation	2/0	3.0/0.0	2.5/0.0
Confined Area Landings	3/0	4.5/0.0	4.5/0.0
Aerial Gunnery	6/0	9.0/0.0	6.0/0.0
Night Systems	1/0	1.5/0.0	1.0/0.0
Tactics	1/0	1.5/0.0	1.5/0.0
<b>TOTAL FOR PHASE</b>	<b>13/0</b>	<b>19.5/0.0</b>	<b>15.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>13</b>	<b>19.5</b>	<b>15.0</b>
<b>ACCUMULATION FOR BASIC/TRANSITION POI</b>	<b>25</b>	<b>37.0</b>	<b>75.0</b>

3. Core Skill Advanced Phase

<u>STAGE</u>	<u>NO. EVENTS</u>	<u>NO. HOURS</u>	<u>CRP</u>
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Advanced Night Systems Qualification	3/0	4.5/0.0	7.5/0.0
Aerial Gunnery	3/0	4.5/0.0	7.5/0.0
Tactics	2/0	3.0/0.0	5.0/0.0
<b>TOTAL FOR PHASE</b>	<b>8/0</b>	<b>12.5/0.0</b>	<b>20.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>8</b>	<b>12.5</b>	<b>20.0</b>
<b>ACCUMULATION FOR BASIC/TRANSITION POI</b>	<b>33</b>	<b>49.5</b>	<b>95.0</b>

4. Core Skill Plus Phase

<u>STAGE</u>	<u>NO. EVENTS</u>	<u>NO. HOURS</u>	<u>CRP</u>
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Defensive Air Combat Maneuvers	6/0	6.5/0.0	2.6/0.0
Nuclear, Biological & Chemical	1/0	1.0/0.0	0.5/0.0
Carrier Qualification	5/0	5.0/0.0	1.9/0.0
<b>TOTAL FOR PHASE</b>	<b>12/0</b>	<b>12.5/0.0</b>	<b>5.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>12</b>	<b>12.5</b>	<b>5.0</b>
<b>TOTAL FOR BASIC/TRANSITION POI</b>	<b>45</b>	<b>62.0</b>	<b>100.0</b>

222. FLIGHT TRAINING FOR CONVERSION CREW CHIEF1. Core Skill Introduction Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	3/0	4.5/0.0
Formation	2/0	3.0/0.0
Terrain Flight	1/0	1.5/0.0
Navigation	1/0	1.5/0.0
Aerial Gunnery	1/0	1.5/0.0
Confined Area Landings	2/0	3.0/0.0
External Weight	1/0	1.5/0.0
Core Skill Introduction Evaluation	1/0	1.5/0.0
<b>TOTAL FOR PHASE</b>	<b>12/0</b>	<b>18.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>12</b>	<b>18.0</b>
<b>ACCUMULATION FOR CONVERSION POI</b>	<b>12</b>	<b>18.0</b>

2. Core Skill Basic Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Terrain Flight/Navigation	2/0	3.0/0.0
Confined Area Landings	3/0	4.5/0.0
Aerial Gunnery	6/0	9.0/0.0
Escort	1/0	1.5/0.0
Night Systems	1/0	1.5/0.0
Tactics	1/0	1.5/0.0
<b>TOTAL FOR PHASE</b>	<b>14/0</b>	<b>21.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>14</b>	<b>21.0</b>
<b>ACCUMULATION FOR CONVERSION POI</b>	<b>26</b>	<b>39.0</b>

3. Core Skill Advanced Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Advanced Night Systems Qualification	2/0	3.0/0.0
Aerial Gunnery	3/0	4.5/0.0
Escort	1/0	1.5/0.0
Tactics	2/0	3.0/0.0
<b>TOTAL FOR PHASE</b>	<b>8/0</b>	<b>12.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>8</b>	<b>12.0</b>
<b>ACCUMULATION FOR CONVERSION POI</b>	<b>34</b>	<b>51.0</b>

4. Core Skill Plus Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Helicopter Insertion/Extraction (HIE)	6/0	6.0/0.0
Defensive Air Combat Maneuvers	6/0	6.5/0.0
Nuclear, Biological, & Chemical	1/0	1.5/0.0
Carrier Qualification	5/0	5.0/0.0
<b>TOTAL FOR PHASE</b>	<b>18/0</b>	<b>19.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>18</b>	<b>19.0</b>
<b>TOTAL FOR CONVERSION POI</b>	<b>52</b>	<b>70.0</b>

223. FLIGHT TRAINING FOR CONVERSION AERIAL OBSERVER

1. Core Skill Introduction Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	1/0	1.5/0.0
Formation	2/0	3.0/0.0
Terrain Flight	1/0	1.5/0.0
Navigation	1/0	1.5/0.0
Aerial Gunnery	1/0	1.5/0.0
Confined Area Landings	2/0	3.0/0.0
Core Skill Introduction Evaluation	1/0	1.5/0.0
<b>TOTAL FOR PHASE</b>	<b>9/0</b>	<b>14.5/0.0</b>
<b>COMBINED TOTALS</b>	<b>9</b>	<b>14.5</b>
<b>ACCUMULATION FOR CONVERSION AO POI</b>	<b>9</b>	<b>14.5</b>

2. Core Skill Basic Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Terrain Flight/Navigation	2/0	3.0/0.0
Confined Area Landings	2/0	3.0/0.0
Aerial Gunnery	6/0	9.0/0.0
Night Systems	1/0	1.5/0.0
Tactics	1/0	1.5/0.0
<b>TOTAL FOR PHASE</b>	<b>12/0</b>	<b>18.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>12</b>	<b>18.0</b>
<b>ACCUMULATION FOR CONVERSION AO POI</b>	<b>21</b>	<b>32.5</b>

3. Core Skill Advanced Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Advanced Night Systems Qualification	2/0	3.0/0.0
Aerial Gunnery	3/0	4.5/0.0
Tactics	2/0	3.0/0.0
<b>TOTAL FOR PHASE</b>	<b>7/0</b>	<b>10.5/0.0</b>
<b>COMBINED TOTALS</b>	<b>7</b>	<b>10.5</b>
<b>ACCUMULATION FOR CONVERSION AO POI</b>	<b>28</b>	<b>43.0</b>

4. Core Skill Plus Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Defensive Air Combat Maneuvers	6/0	6.5/0.0
Nuclear, Biological, & Chemical	1/0	1.5/0.0
Carrier Qualification	5/0	5.0/0.0
<b>TOTAL FOR PHASE</b>	<b>12/0</b>	<b>12.5/0.0</b>
<b>COMBINED TOTALS</b>	<b>12</b>	<b>12.5</b>
<b>TOTAL FOR CONVERSION AO POI</b>	<b>40</b>	<b>55.5</b>

224. FLIGHT TRAINING FOR REFRESHER CREW CHIEF1. Core Skill Introduction Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	3/0	4.5/0.0
Formation	1/0	1.5/0.0
Terrain Flight	1/0	1.5/0.0
Navigation	1/0	1.5/0.0
Aerial Gunnery	1/0	1.5/0.0
Confined Area Landings	1/0	1.5/0.0
Core Skill Introduction Evaluation	<u>1/0</u>	<u>1.5/0.0</u>
<b>TOTAL FOR PHASE</b>	<b>9/0</b>	<b>13.5/0.0</b>
<b>COMBINED TOTALS</b>	<b>9</b>	<b>13.5</b>
<b>ACCUMULATION FOR REFRESHER POI</b>	<b>9</b>	<b>13.5</b>

2. Core Skill Basic Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Terrain Flight/Navigation	1/0	1.5/0.0
Confined Area Landings	2/0	3.0/0.0
Aerial Gunnery	3/0	4.5/0.0
Night Systems	1/0	1.5/0.0
Tactics	<u>1/0</u>	<u>1.5/0.0</u>
<b>TOTAL FOR PHASE</b>	<b>8/0</b>	<b>12.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>8</b>	<b>12.0</b>
<b>ACCUMULATION FOR REFRESHER POI</b>	<b>17</b>	<b>25.5</b>

3. Core Skill Advanced Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Advanced Night Systems Qualification	1/0	1.5/0.0
Aerial Gunnery	3/0	4.5/0.0
Escort	1/0	1.5/0.0
Tactics	<u>1/0</u>	<u>1.5/0.0</u>
<b>TOTAL FOR PHASE</b>	<b>6/0</b>	<b>9.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>6</b>	<b>9.0</b>
<b>ACCUMULATION FOR REFRESHER POI</b>	<b>23</b>	<b>34.5</b>

4. Core Skill Plus Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Helicopter Insertion/Extraction (HIE)	3/0	3.0/0.0
Defensive Air Combat Maneuvers	6/0	6.5/0.0
Nuclear, Biological, & Chemical	1/0	1.5/0.0
Carrier Qualification	<u>5/0</u>	<u>5.0/0.0</u>
<b>TOTAL FOR PHASE</b>	<b>15/0</b>	<b>16.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>15</b>	<b>16.0</b>
<b>TOTAL FOR REFRESHER POI</b>	<b>38</b>	<b>50.5</b>

225. FLIGHT TRAINING FOR REFRESHER AERIAL OBSERVER1. Core Skill Introduction Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	1/0	1.5/0.0
Formation	2/0	3.0/0.0
Terrain Flight	1/0	1.5/0.0
Navigation	1/0	1.5/0.0
Aerial Gunnery	1/0	1.5/0.0
Confined Area Landings	1/0	1.5/0.0
Core Skill Introduction Evaluation	<u>1/0</u>	<u>1.5/0.0</u>
<b>TOTAL FOR PHASE</b>	<b>8/0</b>	<b>12.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>8</b>	<b>12.0</b>
<b>ACCUMULATION FOR REFRESHER AO POI</b>	<b>8</b>	<b>12.0</b>

2. Core Skill Basic Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Terrain Flight/Navigation	1/0	1.5/0.0
Confined Area Landings	1/0	1.5/0.0
Aerial Gunnery	3/0	4.5/0.0
Night Systems	1/0	1.5/0.0
Tactics	<u>1/0</u>	<u>1.5/0.0</u>
<b>TOTAL FOR PHASE</b>	<b>7/0</b>	<b>10.5/0.0</b>
<b>COMBINED TOTALS</b>	<b>7</b>	<b>10.5</b>
<b>ACCUMULATION FOR REFRESHER AO POI</b>	<b>15</b>	<b>22.5</b>

3. Core Skill Advanced Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Advanced Night Systems Qualification	1/0	1.5/0.0
Aerial Gunnery	3/0	4.5/0.0
Tactics	<u>1/0</u>	<u>1.5/0.0</u>
<b>TOTAL FOR PHASE</b>	<b>5/0</b>	<b>7.5/0.0</b>
<b>COMBINED TOTALS</b>	<b>5</b>	<b>7.5</b>
<b>ACCUMULATION FOR REFRESHER AO POI</b>	<b>20</b>	<b>29.5</b>

4. Core Skill Plus Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Defensive Air Combat Maneuvers	6/0	6.5/0.0
Nuclear, Biological, & Chemical	1/0	1.5/0.0
Carrier Qualification	<u>5/0</u>	<u>5.0/0.0</u>
<b>TOTAL FOR PHASE</b>	<b>12/0</b>	<b>13.0/0.0</b>
<b>COMBINED TOTALS</b>	<b>12</b>	<b>13.0</b>
<b>ACCUMULATION FOR REFRESHER AO POI</b>	<b>32</b>	<b>42.5</b>

226. FLIGHT TRAINING FOR INSTRUCTOR CREW CHIEF

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Instructor Crew Chief	<u>2/0</u>	<u>3.0/0.0</u>
<b>TOTAL</b>	<b>2</b>	<b>3.0</b>

227. GRADUATE LEVEL COURSES. There are six graduate level courses that qualify instructors for specific portions of the T&R syllabus. Requirements for instructor certification are contained in the MAWTS-1 Course Catalog.

228. SIMULATOR TRAINING. Although a current flight simulator for crew chiefs or AOs does not exist, a request is in process.

229. EVENT TRAINING. The aircraft is used for those events designated with an A and the flight simulator is used for those events designated with an S. To give commanding officers the maximum amount of flexibility for training, some events allow for the optional use of simulators or aircraft. Those events will use A/S for aircraft preferred, simulator optional and S/A for simulator preferred, aircraft optional.

230. FLIGHT/SIMULATOR PERFORMANCE REQUIREMENTS

1. General

a. This Manual generalizes mission guidance to allow for varying local conditions and allows this Manual to remain unclassified. DC AVN and CG MCCDC encourage squadrons to use the full range of tactics in tactical manuals and adopt the latest developed and proven tactics.

b. This Manual designs the Core Skill Introduction phase for an instructor and trainee to maximize training and to minimize syllabus support hours.

c. All events shall terminate with a comprehensive debrief with emphasis on aircrew performance using all evaluation techniques.

d. Aircrew shall fly events annotated with an N at least 30 minutes after official sunset. Aircrew may fly events annotated with (N) at night.

e. Aircrew shall fly events annotated with an NS with NVGs for the entire flight. Aircrew may fly events annotated with "(NS)" using NVGs.

f. Crew Chief Under Instruction (CCUI) shall complete the appropriate FRS ground school instruction prior to commencement of flight training.

2. Squadron Syllabus Assignment

a. Basic Crew Chiefs and Aerial Observers. Basic Crew Chiefs (CC) and Aerial Observers (AO) will be assigned to fly the entire syllabus. Transition CCs and AOs shall fly the basic syllabus. Conversion and Refresher CCs and AOs will fly those events designated by a C or R respectively in the flight description. The squadron training officer shall enter all Aircrew Training Forms (ATFs) in section 3 of the APR. These ATFs will replace ATFs previously entered in section 3. Figures 2-2/2-3 show refly interval and Combat Readiness Percentage (CRP).

b. Secondary MOS CCs. To alleviate inventory shortages of primary MOS crew chiefs, authority is granted to individual unit commanders to train and designate personnel as secondary MOS 6174 only. The source population is restricted to personnel that are from within the 61xx occupational field. Waivers for other MOSS may be requested via DC AVN (ASM) on a case-by-case basis.

(1) The number of secondary MOS CCs that a unit commander is authorized to designate is limited to the current staffing formula,  $1.6 \text{ CC} \times \text{PAA} = \# \text{CCs}$ , minus primary designated CCs assigned. On-hand primary MOS CCs shall have priority for crewmember orders and hazardous duty incentive pay.

(2) Secondary MOS CCs complete normal NATOPS requirements to include flight physical, physiology, and water survival prior to flight. Consideration should be made for SERE training.

(3) If secondary MOS CCs are already designated AOs they only need to complete Core Skill Introduction phase events not previously completed. Otherwise, the entire phase must be completed.

(4) Prior to designation by the unit commander, the respective FRS instructor or MAG Enlisted NATOPS Standardization Evaluator shall certify the individual's qualification to ensure MOS standardization. This evaluation shall follow all the same procedures as a primary MOS CC evaluation IAW NATOPS.

3. Aircrew Evaluation Flights. All Aircrew shall have a NATOPS evaluation form completed upon completion of either CSIX-181 or RQD-601.

4. Aircrew Training Forms (ATFs)

a. An ATF is required for any initial flight of any sortie completed by a Basic, Transition, Conversion, or Refresher pilot or as recommended by the squadron Standardization Board.

b. 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.

c. MAWTS-1 will maintain an ATF database that establishes minimum requirements for each syllabus event. Access for individual units will be possible at the MAWTS-1 website.

5. Instructor Requirements

a. The minimum instructor requirements are listed in the Crew Requirements section of each event.

b. CCUI may complete any flight not requiring an instructor with a CC that is proficient and qualified in that stage of training. CCI must be designated to instruct in a particular stage of training.

c. Instructors are required for any event that requires an NSI, AGI, TERFI or DACMI.

6. Event Completion. Compliance with the written event description is mandatory for syllabus event completion. Times indicated for each event are only recommendations.

7. Sequence. Training should be accomplished by flying events within a stage in sequence and stages in sequence when practical.

8. Definitions

a. Discuss

(1) The instructor shall discuss a procedure or task during the brief, inflight, or de-brief.

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

b. Demonstrate

(1) The instructor performs the task or crew function.

(2) The CCUI observes and is responsible for the knowledge of the task or crew function prior to the flight.

c. Introduce

(1) At his option, the instructor may perform the task or crew function with an accompanying description, or he may coach the CCUI without demonstration.

(2) The CCUI shall perform the task or crew function with coaching as necessary and is responsible for all applicable knowledge prior to the flight.

d. Review

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

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

231. CORE SKILL INTRODUCTION PHASE

1. Purpose. To develop a Core Skill Introduction CC/AO. At the completion of this phase the CCUI/AOUI will be designated CC/AO, NATOPS qualified and rate the 6174 MOS as specified in the CSIX-181.

2. General. Completion of this phase meets the requirements for the CCUI/AOUI to be designated a CC/AO. At the discretion of the squadron commanding officer a letter designating the CCUI/AOUI a CC/AO shall be placed in the NATOPS jacket, APR and a tracking code of RQD-601 shall be logged. Proficiency will have been gained in FAM, FORM, TERF, NAV, CAL and SWD. NVDs will be utilized during the FAM, FORM, TERF, NAV and CAL stages.

3. Familiarization (FAM)

a. Purpose. To become familiar with flight characteristics, aircraft systems, limitations, and emergency procedures. Develop proficiency in assisting pilots in all aspects of FAM flight, both day and night.

b. General

(1) At the completion of this stage, the CCUI/AOUI should be able to demonstrate the ability to assist pilots in all aspects of FAM flight, both day and night.

(2) AOUI Requirement: FAM-101, FAM-115.

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

d. Ground/Academic Training. UH-1N aircraft familiarization must be completed prior to flight training.

e. Flight Training. (4 Sorties, 6.0 Hours).

FAM-101

1.5

1 UH-1N A

Goal. Introduce normal ground and flight procedures.

Requirements

(1) Brief/discuss engine fire on ground and fire in the aircraft on the ground.

(2) Introduce duties of the CC to include preflight, starting, taxi, takeoff, inflight lookout, landing, and postflight procedures.

(3) Demonstrate use of ICS, voice procedures, sighting, using clock systems, and estimating distance.

Performance Standards. Display knowledge of ICS voice procedures, CC duties to include preflight, starting, taxi/takeoff, inflight, landing, all applicable emergency procedures.

Prerequisite. N/A.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

FAM-102

1.5

C,R 1 UH-1N A

Goal. Introduce communications, passenger procedures, normal and emergency procedures.

Requirements

(1) Brief/discuss takeoff and landing emergencies, fire in flight, smoke elimination, ditching procedures, aircraft engine and transmission limitations.

(2) Introduce the duties of the CC during precautionary/emergency landings, including autorotations.

(3) Introduce communication/navigation equipment and CDNU. Introduce passenger brief, include passenger emergency procedures.

(4) Introduce aircraft weight and balance calculations and CC responsibilities in loading.

Performance Standards. Display knowledge of ICS voice procedures, CC duties to include preflight, starting, taxi/takeoff, inflight, landing, all applicable emergency procedures.

Prerequisite. FAM-101.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

FAM-112

1.5 C,R 1 UH-1N A N

Goal. Unaided night introduction.

Requirement

(1) Review preflight, starting, taxi, takeoff, landing, postflight procedures, and aircraft radio operation.

(2) Review the duties of the CC during precautionary/emergency landings with emphasis on night operations.

(3) Introduce night preflight/postflight, aircraft lighting systems, airfield lighting/terminology, and night lookout.

Performance Standards. Display knowledge of night operations and demonstrate ability to perform CC duties in night environment.

Prerequisite. FAM-102.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

FAM-115

1.5 C,R 1 UH-1N A NS

Goal. Introduce NVD techniques during HLL.

Requirements

(1) Brief/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, and aircrew coordination.

(2) Introduce the wear and use of NVDs.

Performance Standards. Display ability to perform CC duties using NVDs.

Prerequisite. FAM-112.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSFI or NSI/CCUI or AOUI.

4. Formation (FORM)

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

b. General. AOUI requirements: FORM-131, FORM-132.

- c. Crew Requirement. As listed at the end of each event.
- d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.
- e. Flight Training. (2 Sorties, 3.0 Hours).

<u>FORM-131</u>	<u>1.5</u>	<u>C,R 2 UH-1N A</u>
	<u>Goal</u> . Introduce tactical formations.	
	<u>Requirement</u>	
	(1) Brief/discuss combat cruise, combat spread, TAC turns, cross turns, split turns, and break turns.	
	(2) Discuss ordnance delivery patterns.	
	(3) Introduce CC responsibilities associated with tactical formations and maneuvers.	
	(4) Review hand and arm signals, lookout procedures, and CC responsibilities associated with formation flying.	
	<u>Performance Standards</u> . Display thorough knowledge of tactical formation maneuvers. Demonstrate proficiency assisting pilots in tactical formation maneuvers.	
	<u>Prerequisite</u> . FAM-102.	
	<u>Ordnance</u> . N/A.	
	<u>External Syllabus Support</u> . N/A.	
	<u>Crew</u> . CCI/CCUI or AOUI.	
<u>FORM-132</u>	<u>1.5</u>	<u>C,R 2 UH-1N A NS</u>
	<u>Goal</u> . NVD FORM introduction.	
	<u>Requirement</u> . Review hand and arm signals, lookout procedures, and CC responsibilities associated with formation flying at night.	
	<u>Performance Standards</u> . Demonstrate proficiency assisting pilots in night formation maneuvers.	
	<u>Prerequisite</u> . FAM-115, FORM-131.	
	<u>Ordnance</u> . N/A.	
	<u>External Syllabus Support</u> . N/A.	
	<u>Crew</u> . NSFII or NSI/CCUI or AOUI.	

5. Terrain Flight (TERF)

- a. Purpose. To develop aircrew coordination required during TERF.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilot in TERF.

(2) AOUI requirement: TERF-140, TERF-141.

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

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course

e. Flight Training. (2 Sorties, 3.0 Hours).

TERF-140            1.5                    1 UH-1N A

Goal. Introduce TERF techniques.

Requirement

(1) Brief/discuss aircraft clearance and aircraft emergencies during TERF altitudes.

(2) Introduce blade walk, power checks, masking/unmasking, NOE quickstops, bunt, roll, low level, contour, and NOE profiles emphasizing vertical relief of the earth and vegetation.

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

Prerequisite. FAM-102.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. TERFI/CCUI or AOUI.

TERF-141            1.5                    C,R 1 UH-1N A NS

Goal. Introduce TERF techniques using NVDs.

Requirement

(1) Brief/discuss NVD considerations in the TERF environment.

(2) Introduce blade walk, power checks, masking/unmasking, NOE quickstops, bunt, roll, low level, contour, and NOE profiles emphasizing vertical relief of the earth and vegetation with NVGs.

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

Prerequisite. FAM-115, TERF-140.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSFI or NSI/CCUI or AOUI.

6. Navigation Flight (NAV)

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

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilots in all phases of inflight navigation.

(2) AOUI requirement. NAV-152.

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

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (2 Sorties, 3.0 Hours).

NAV-151            1.5                    1 UH-1N

Goal. Introduce aircrew duties during TERF navigation.

Requirement

(1) Review lookout and aircrew coordination required during TERF.

(2) Introduce the use of checkpoints, time distance checks, barrier features, prominent terrain features, map legend, and map preparation.

Performance Standards. Display ability to assist pilots in TERF navigation.

Prerequisite. FAM-102 and TERF-140.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

NAV-152            1.5                    C,R 1 UH-1N NS

Goal. Introduce night navigation on NVDs.

Requirement

(1) Brief/discuss HLL, LLL, effects of moon angle and meteorological effects on NVDs.

(2) Introduce the use of checkpoints, time distance checks, barrier features and prominent terrain features while using NVDs and NVD map preparation.

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

Prerequisite. FAM-115.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSFI or NSI/CCUI or AOUI.

7. Specific Weapons Delivery (SWD)

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

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate knowledge of weapons systems and ordnance delivery with crew served weapons.

(2) AOUI requirements: SSWD-160 and SWD-161.

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

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Simulator Training. (1 Event, 1.0 Hour).

f. Flight Training. (1 Sortie, 1.5 Hours).

SSWD-160            1.0                    S

Goal. Introduce weapons and checklist procedures.

Requirement. Introduce ordnance loading, preflight, operations, postflight, safety procedures, weapons conditions and ordnance weapons checklist. When range is available for simulator, practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination and weapons safety.

Performance Standards. Display knowledge and ability to safely employ crew served weapons IAW applicable checklists.

Prerequisite. N/A.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. UH-1N Deck Simulator Assembly.

Crew. AGI/CCUI or AOUI.

SWD-161            1.5                    C,R 1 UH-1N A

Goal. Introduce aerial gunnery training.

Requirement

(1) Discuss attack patterns, section operations, sighting procedures, malfunction/stoppage procedures and WORM formula.

(2) Demonstrate/introduce ordnance loading, preflight, operations, postflight, safety procedures, weapons conditions and ordnance weapons checklist.

(3) Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination and weapons safety.

Performance Standards. Display knowledge and ability to safely employ crew served weapons IAW applicable checklists.

Prerequisite. FAM-102, SSWD-160.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. Aerial gunnery range.

Crew. AGI/CCUI or AOUI.

8. Confined Area Landings (CAL)

a. Purpose. To become familiar with crew responsibilities during operations in confined areas. All aspects of aircrew coordination shall be thoroughly briefed.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilot in all aspects of CALs.

(2) AOUI requirements: CAL-171, CAL-172.

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

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (3 Sorties, 4.5 Hours).

CAL-170

1.5

1 UH-1N A

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

Requirement

(1) Brief/discuss power settling, landing zone brief, dynamic rollover, slope landings and aircrew coordination.

(2) Introduce lookout procedures required to assist the pilot when operating in a confined area, HIE approaches stressing safety procedures, aircraft clearance from obstacles, and terrain suitability.

Performance Standards. Display ability to safely conduct CALs and HIE approaches IAW NATOPS.

Prerequisite. FAM-102.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

CAL-171

1.5 C 1 UH-1N A

Goal. Introduce tactical CAL approaches.

Requirement

(1) Brief/discuss threat conditions, tactical approaches and departures. Reference UH-1N Tactical Manual.

(2) Introduce procedures required to assist the pilot when operating in a low to high threat environment. Stress safety procedures, aircraft clearance from obstacles, and terrain suitability.

Performance Standards. Display ability to safely conduct tactical CALs and HIE approaches IAW NATOPS.

Prerequisite. CAL-170.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

CAL-172

1.5 C,R 1 UH-1N A N NS

Goal. Introduce night unaided to aided CALs.

Requirement

(1) Brief/discuss brown/white out and the effects of moisture; emphasize aircrew coordination.

(2) Introduce procedures required to assist the pilot when operating in a confined area at night. Stress safety procedures, aircraft clearance from obstacles, terrain suitability, and the use of ground lighting systems.

Performance Standards. Display ability to safely conduct CALs and HIE approaches IAW NATOPS while using NVDs.

Prerequisite. FAM-115, CAL-170.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSFII or NSI/CCUI or AOUI.

9. External Weights (EXT)

a. Purpose. To introduce the CCUI to operations while using the hook and hoist.

b. General. At the completion of this stage, the CCUI will be able to demonstrate knowledge and ability to safely conduct hook/hoist operations.

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

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (1 Sortie, 1.5 Hours).

EXT-175

1.5

C UH-1N A

Goal. Introduce external load/hoist procedures.

Requirement

(1) Brief/discuss aircrew coordination, hand and arm signals, ICS terminology, hook/hoist limitations/malfunctions, load release, and emergency procedures.

(2) Brief/discuss the use of Chicago grip, quick splice, and cable cutters.

(3) Introduce

(a) Operational check of hoist/hook.

(b) Use of rescue strop and jungle penetrator.

(c) Cargo hook pendant and manual release.

(d) Emergency procedures for external hook/rescue hoist.

(4) Conduct at least two hook-up, flight and release operations for cargo hook. Two hoisting operations using a suitable weight.

Performance standards. Demonstrate proper ICS terminology, hook/hoist operation and installation.

Prerequisite. FAM-102.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

10. Crew Chief/Aerial Observer Core Skill Introduction Check (CSIX)

a. Purpose. To evaluate proficiency in the performance of Core Skill Introduction CC/AO duties per UH-1N NATOPS Manuals.

b. General. Completion of this stage meets the requirements for designation as a CC and MOS 6174 or AO. This sortie will serve as the initial NATOPS Evaluation.

c. Crew Requirements. Initial CSIX-181 for CCUI must be conducted by FRS or NATOPS Evaluator. Initial CSIX-181 for AOUI may be conducted by squadron NATOPS Instructor/Assistant NATOPS Instructor.

d. Ground/Academic Training. Open and closed book tests must be successfully completed per appropriate UH-1N NATOPS Flight Manuals prior to Core Skill Introduction evaluation flight.

e. Flight Training. (1 Sortie, 1.5 Hours).

CSIX-181            2.0                    C,R E 1 UH-1N A

Goal. Core Skill Introduction Check.

Requirement. Conduct a CC/AO NATOPS evaluation per criteria in the UH-1N NATOPS manuals.

Performance Standards. IAW NATOPS Flight Manual.

Prerequisite. Core Skill Introduction phase complete. (Add a sentence to clarify AO prereqs, i.e. FAM-102, 115; FORM-131, 132; TERF-140, 142; NAV 151; AG-160, 161; CAL-170, 172)

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NE, NI OR ANI/CCUI or AOUI.

232. CORE SKILL BASIC PHASE

1. Purpose. To produce a TERF/CAL and NSQ (HLL) qualified CC/AO.

2. General

a. After completing CAL-223, a TERF/CAL qualification letter signed by the commanding officer shall be placed in the NATOPS with a copy in the APR and a flight logbook entry.

b. After completing TAC-261, a NSQ (HLL) qualification letter signed by the commanding officer shall be placed in the NATOPS with a copy in the APR and a flight logbook entry.

c. All NS flights in this phase of training shall be flown under HLL conditions.

3. Ground Training. Requirements are listed per stage of flight and must be completed prior to the associated stage of flight.

4. Terrain Flight/Navigation (TERF)

a. Purpose

(1) To become proficient with crew functions and responsibilities while navigating without the use of radio navigational aids at TERF altitudes.

(2) To become familiar with CC responsibilities during formation flight in the TERF environment.

b. General. AOUI Requirement: TERF-210, 211.

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

d. Ground/Academic Training. Review the appropriate section of the UH-1N MAWTS-1 Academic Support Package lectures.

e. Flight Training. (2 Sorties, 3.0 Hours).

TERF-210            1.5                    C 1 UH-1N A

Goal. Review TERF maneuvers and navigation.

Requirement

(1) Review the use of checkpoints, time distance checks, barrier features, prominent terrain features, map legend, map preparation, hand and arm signals.

(2) Introduce flight in the low level, contour and NOE profiles.

(3) Flight to be completed in contour/NOE mode.

Performance Standards. Demonstrate the ability to perform and understand TERF navigation.

Prerequisite. CSIX-181.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. TERFI/CCUI or AOUI.

TERF-211            1.5                    C,R 2 UH-1N A NS

Goal. Review TERF navigation while using NVDs.

Requirement

(1) Demonstrate lookout procedures required to assist the pilot when operating in a TERF environment. Stress safety procedures, aircraft clearance from obstacles, and terrain suitability while using NVDs.

(2) Demonstrate the use of checkpoints, time distance checks, barrier features, prominent terrain features, map legend, and map preparation while using NVDs.

(3) Review use of AVN-20-20 Eye Lane System Resolution Test Set.

Performance Standards. Demonstrate the ability to safely execute TERF navigation while using NVDs.

Prerequisite. TERF-210.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

5. Night Systems (NS)

a. Purpose. To develop the ability to use thermal imaging to increase situational awareness, aircrew coordination, and gain familiarity with laser range finding.

b. General

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

(2) AOUI Requirement: NS-215.

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

d. Ground/Academic Training. To be accomplished prior to any flight training in this phase. Review the UH-1N Tactical Manual, Chapter 23 (NTIS), MAWTS-1 Laser Safety Lecture.

e. Flight Training. (1 Sortie, 1.5 Hours).

NS-215

1.5

C,R 1 UH-1N A NS

Goal. Familiarize the CCUI and AOUI with terminology, preflight, postflight, switchology and flight operation of NTIS.

Requirement

(1) Discuss terminology, Laser Safety procedures and specific aircrew training issues during NTIS operations.

(2) Demonstrate a thorough understanding of the NTIS, its components (TFU, CEU, HCU, VDU, and VCR), NTIS power-up procedures and knowledge of operations.

Performance Standards. Demonstrate basic knowledge and understanding of FLIR/NTIS operations.

Prerequisite. TERF-211.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

6. Confined Area Landings (CAL)

a. Purpose

(1) To develop aircrew coordination when operating in a confined area.

(2) To develop proficiency to conduct operations while using NVDs.

b. General

(1) After successfully completing CAL-223, a TERF/CAL qualification letter signed by the commanding officer shall be placed in the NATOPS with a copy in the APR and a flight log book entry.

(2) AOUI requirement: CAL-220, 223.

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

d. Ground/Academic Training. NA.

e. Flight Training. (3 Sorties, 4.5 Hours).

CAL-220

1.5

C 2 UH-1N A

Goal. Introduce section CAL operations and HIE approaches.

Requirement

(1) Review procedures to assist the pilot when operating in a confined area.

(2) Review formation and lookout procedures stressing responsibilities during section operations.

Performance Standards. Demonstrate the ability to assist pilots in operating in a confined area to include proper crew coordination, aircraft clearance, and wingman awareness.

Prerequisite. TERF-210.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. TERFI/CCUI or AOUI.

CAL-221

1.5

C,R 2 UH-1N A NS

Goal. Introduce section CAL operations and HIE approaches while using NVDs.

Requirement

(1) Review procedures to assist the pilot when operating in confined areas with NVDs.

(2) Introduce crew responsibilities relative to section operations while using NVDs.

Performance Standards. Demonstrate the ability to assist pilots during section operations in confined areas and HIE approaches while using NVDs.

Prerequisite. TERF-211 and CAL-220.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

CAL-223

1.5

C,R 2 UH-1N A NS

Goal. Display proficiency during section CAL operations and HIE approaches while using NVDS.

Requirement

(1) Review procedures to assist the pilot when operating in confined areas with NVDS.

(2) Introduce crew responsibilities relative to section operations while using NVDS.

Performance Standards. Display proficiency during section operations in confined areas and HIE approaches while using NVDS.

Prerequisite. CAL-221.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

7. Specific Weapons Delivery (SWD)

a. Purpose. To develop proficiency in conducting SWD ordnance delivery.

b. General

(1) Upon successful completion of this stage the CCUI/AOUI will be able to demonstrate knowledge of weapons systems and proficiency in BCWD with crew served weapons. Each flight in this stage will be completed with appropriate documentation to include ATFs with round counts.

(2) AOUI Requirements. SWD-240 through SWD-245.

(3) Section operations should be used if available.

(4) Weapon mounted lasers should be used for all NVD flights.

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

d. Ground/Academic Training. Review MAWTS-1 Academic Support Package lectures, Aerial Gunnery Manual and applicable weapons checklist. Prior to commencing each flight, the CCUI/AOUI shall receive appropriate ground training by an aerial gun instructor for the respective weapon and laser usage.

e. Flight Training. (6 Sorties, 9.0 Hours).

SWD-240

1.5

C 1 UH-1N A

Goal. Introduce GAU-16, .50 caliber machine gun.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons while stressing aircrew coordination.

Performance Standards. Demonstrate basic knowledge of nomenclature, cycle of operation and ability to safely and effectively employ the GAU-16.

Prerequisite. SWD-161, CAL-220.

Ordnance. 300 rds .50 cal GAU-16.

External Syllabus Support. Aerial gunnery range.

Crew. AGI/CCUI or AOUI.

SWD-241

1.5                      C 1 UH-1N A

Goal. Introduce GAU-17.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons while stressing aircrew coordination.

Performance Standards. Demonstrate basic knowledge of nomenclature, cycle of operation and ability to safely and effectively employ the GAU-17.

Prerequisite. SWD-161, CAL-220.

Ordnance. 1500 rds 7.62 mm GAU-17.

External Syllabus Support. Aerial gunnery range.

Crew. AGI/CCUI or AOUI.

SWD-242

1.5                      C 1 UH-1N A

Goal. Introduce M-240.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons stressing aircrew coordination.

Performance Standards. Demonstrate basic knowledge of nomenclature, cycle of operation and ability to safely and effectively employ the M-240.

Prerequisite. SWD-161, CAL-220.

Ordnance. 400 rds 7.62 mm M-240.

External Syllabus Support. Aerial gunnery range.

Crew. AGI/CCUI or AOUI.

SWD-243

1.5 C,R 1 UH-1N A NS

Goal. Introduce GAU-16 gunnery while using NVDs.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination while using NVDs.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-16 while using NVDs.

Prerequisite. CAL-223, SWD-240.

Ordnance. 300 rds .50 cal GAU-16.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

SWD-244

1.5 C,R 1 UH-1N A NS

Goal. Introduce GAU-17 gunnery while using NVDs.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination while using NVDs.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-17 while using NVDs.

Prerequisite. CAL-223, SWD-241.

Ordnance. 1500 rds 7.62 mm GAU-17.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

SWD-245

1.5 C,R 1 UH-1N A NS

Goal. Introduce M-240 gunnery while using NVDs.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination while using NVDs.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the M-240 while using NVDs.

Prerequisite. CAL-223, SWD-242.

Ordnance. 400 rds 7.62 mm M-240.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

#### 8. Escort (ESC)

a. Purpose. To develop proficiency in CC and SWD duties during heliborne or surface escort formations and maneuvers per current tactical doctrine.

b. General. Aircrew will develop a working knowledge of escort formations, maneuvers, and responsibilities associated with heliborne operations.

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

d. Ground/Academic Training. Review the MAWTS-1 Course Catalog Section IV, UH-1N, Escort for appropriate courses.

e. Ordnance. Ordnance is optional for this stage of training.

f. Flight Training. (1 Sortie, 1.5 Hours).

ESC-250            1.5                    C 2 OR MORE ACFT A (N)(NS)

Goal. Introduce helicopter escort procedures (day or night).

#### Requirement

(1) Discuss escort flight aircrew responsibilities.  
(2) Introduce basic escort principles, formations, techniques and responsibilities per tactical doctrine for helicopters and surface vehicles.

(3) Brief and review lookout doctrine and sectors of fire.

Performance Standards. Demonstrate the ability to safely and effectively employ crew served weapons while operating as escort aircraft.

Prerequisite. CAL-223. If flown at night with ordnance, one of the following: SWD-243, SWD-244, or SWD-245.

Ordnance. 1500 rds 7.62 mm GAU-17, 300 rounds .50 Cal GAU-16, 400 rds 7.62 mm M-240.

External Syllabus Support. Two or more assault helicopters, aerial gunnery range.

Crew. AGI (NSI)/CCUI or AOUI.

#### 9. Tactics (TAC)

a. Purpose. To develop aircrew coordination required for tactical missions, to be flown under HLL.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilot in the conduct of a tactical mission. Completion of this stage meets the requirements for qualification as Night Systems Qualified High Light Level [NSQ (HLL)]. A qualification letter shall be placed in the NATOPS Jacket with a copy in the APR and a flight logbook entry. These flights shall be conducted IAW MCO 3501.4, MCCRES, Volume III, Section C.

(2) AOUI requirement: TAC-261.

c. Ground/Academic Training. Review required MAWTS-1 Academic Support Package Lectures.

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

e. Flight Training. (1 Sortie, 1.5 Hours).

TAC-261                      1.5                      C,R 2 UH-1N A NS

Goal. Introduce tactical CC responsibilities.

Requirement

(1) Introduce CC responsibilities assisting the pilot in accomplishing tactical missions to include threat profiles, HIE and ordnance considerations.

(2) Demonstrate the ability to perform CC duties in the night TERF/CAL environment.

(3) Crew served ordnance shall be used during the conduct of this flight if available.

Performance Standards. Display ability to perform aircrew responsibilities in a tactical environment.

Prerequisite. CAL-223, NS-215, and one of the following: SWD-243, SWD-244, or SWD-245.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

233. CORE SKILL ADVANCED PHASE

1. Purpose. To achieve core skill advanced certification.

2. General. Upon completion of the Advanced Night Systems Qualification (ANSQ) stage the aircrew will be LLL complete. Completion of this stage meets the requirements of NSQ (LLL).

3. Ground Training. Ground training requirements are listed per stage and must be completed prior to beginning that stage of training. Academics are promulgated IAW the UH-1N T&R Manual and MAWTS-1 Course Catalog.

4. Advanced Night Systems Qualification (ANSQ)

a. Purpose. To develop proficiency in a confined area while using NVGs below .0022 lux.

b. General

(1) CCUI and AOUI shall be NSQ (HLL).

(2) AOUI requirement: ANSQ-311, ANSQ-312, and ANSQ-313.

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

d. Ground/Academic Training. Review the MAWTS-1 Course Catalog NVD Manual.

e. Flight Training. (3 Sorties, 4.5 Hours).

ANSQ-311            1.5                    1 UH-1N A NS

Goal. Develop proficiency in CALs while using NVDs during LLL conditions.

Requirement

(1) Brief/discuss comfort levels, NVG map preparation and aircrew coordination.

(2) Conduct low work and navigation skills while using NVDs during LLL.

Performance Standards. Display proficiency during confined area operations and HIE approaches while using NVDs under LLL conditions.

Prerequisite. TAC-261.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

ANSQ-312            1.5                    C 2 UH-1N A N NS

Goal. Introduce TERF and navigational aircrew coordination on NVDs during LLL.

Requirement. Aircrew will develop proficiency in the TERF environment in low level, contour and NOE flight.

Performance Standards. Display proficiency in all aspects of CAL and TERF navigation under LLL conditions.

Prerequisite. ANSQ-311.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

ANSQ-313            1.5                    C,R 2 UH-1N A NS

Goal. Introduce night section tactical helicopter operations using NVGs under LLL.

Requirement. Conduct a tactical assault support mission in a low to medium threat environment. Aircrew will refine aircrew coordination skills and lookout doctrine.

Performance Standards. Display ability to conduct a tactical assault support mission in a low to medium threat environment under LLL conditions.

Prerequisite. ANSQ-312.

Ordinance. N/A.

External Syllabus Support. One or more assault helicopters.

Crew. NSI/CCUI or AOUI.

5. Specific Weapons Delivery (SWD)

a. Purpose. To develop techniques and profiles in conducting SWD gunnery under LLL conditions.

b. General

(1) Flights in this stage will be flown to expand the capabilities of the UH-1N CC and aerial gunner. Review the MAWTS-1 Academic Support Package Lectures and Aerial Gunnery Manual.

(2) AOUI requirement: SWD-315, SWD-316, and SWD-317.

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

d. Flight Training. (3 Sorties, 4.5 Hours).

SWD-315            1.5                    C,R 2 UH-1N A NS

Goal. Introduce SWD GAU-16 gunnery under LLL conditions.

Requirement

(1) Brief/discuss NVD ordnance delivery in low light conditions, muzzle flash, rocket slag, weapons malfunction/stoppage and aircrew coordination.

(2) Emphasis on crew served weapons employment, weapons conditions, malfunctions, weapons preflight and arming/dearming.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-16 while using NVDS under LLL conditions.

Prerequisite. SWD-243.

Ordinance. 300 rds .50 Cal GAU-16.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

SWD-316

1.5 C,R 2 UH-1N A NS

Goal. Introduce SWD GAU-17 gunnery under LLL conditions.

Requirement

(1) Brief/discuss NVD ordnance delivery in low light conditions, muzzle flash, rocket slag, weapons malfunction/stoppage and aircrew coordination.

(2) Emphasis on crew served weapons employment, weapons conditions, malfunctions, weapons preflight and arming/dearming.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-17 while using NVDS under LLL conditions.

Prerequisite. SWD-244.

Ordnance. 1500 rds 7.62 mm GAU-17.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

SWD-317

1.5 C,R 2 UH-1N A NS

Goal. Introduce SWD M-240 gunnery under low LLL conditions.

Requirement

(1) Brief/discuss NVD ordnance delivery in low light conditions, muzzle flash, rocket slag, weapons malfunction/stoppage and aircrew coordination.

(2) Emphasis on aircrew coordination, crew served weapons employment, weapons conditions, malfunctions, weapons preflight and arming/dearming.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the M-240 while using NVDS under LLL conditions.

Prerequisite. SWD-245.

Ordnance. 400 rds 7.62 mm M-240.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/CCUI or AOUI.

6. Tactics (TAC)

- a. Purpose. To develop aircrew coordination for night tactical missions.

b. General

(1) The CCUI/SWDUI will refine crew responsibilities during night tactical missions.

(2) AOUI requirements: TAC-320, TAC-321.

c. Ground/Academic Training. Review UH-1N Tactical Manual and MAWTS-1 Course Catalog.

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

e. Flight Training. (2 Sorties, 3.0 Hours).

TAC-320            1.5                    C 1 UH-1N A NS

Goal. Refine aircrew coordination during a night tactical mission in a medium/high threat environment. Develop aircrew coordination during night MEDEVAC, RECON inserts, TRAP, or Raids under MCCRES or WTI standards.

Requirement

(1) Brief/discuss aircrew coordination, comfort levels, situational awareness, and terrain suitability/obstacle/clearance.

(2) Conduct a tactical mission using escort and assault aircraft. Introduce helicopter maneuvers, formations, gunner techniques, and CC responsibilities per current tactical doctrine.

Performance Standards. Display ability to perform aircrew responsibilities in a tactical environment.

Prerequisite. TAC-261.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. Escort aircraft optional, aerial gunnery range.

Crew. NSI/CCUI or AOUI.

TAC-321            1.5                    C,R 2 UH-1N A NS

Goal. Refine aircrew coordination during a night tactical mission in a medium/high threat environment.

Requirement

(1) Brief/discuss aircrew coordination, comfort levels, situational awareness, and terrain suitability/obstacle/clearance.

(2) Conduct a night tactical mission demonstrating SWD using NVDs. Introduce helicopter maneuvers, formations, gunner techniques, and CC responsibilities.

Performance Standards. Display ability to perform aircrew responsibilities in a tactical environment.

Prerequisite. TAC-320.

Ordinance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. Escort aircraft optional, aerial gunnery range.

Crew. NSI/CCUI or AOUI.

7. Escort (ESC)

a. Purpose. To develop proficiency in prescribed heliborne or surface escort formations and maneuvers per current tactical doctrine.

b. General. The CCUI/AOUI will develop a working knowledge of escort formations, maneuvers, and techniques associated with heliborne operations.

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

d. Ground/Academic Training. Review the UH-1N Tactical Manual section on escort procedures and MAWTS-1 Course Catalog.

e. Flight Training. (1 Sortie, 1.5 Hours).

ESC-322                    1.5                    C,R 2 OR MORE ACFT A NS

Goal. Introduce helicopter escort procedures.

Requirement

(1) Brief/discuss escort responsibilities to include sectors of fire and transports sectors of fire.

(2) Review escort principles, formations, techniques and responsibilities per tactical doctrine for helicopter and surface vehicles.

(3) Demonstrate knowledge of procedures required to escort surface vehicles or other helicopters.

Performance Standards. Demonstrate the ability to safely and effectively employ crew served weapons while operating as escort aircraft.

Prerequisite. ESC-250.

Ordinance. 1500 rds 7.62 mm GAU-17, 300 rds .50 Cal GAU-16, or 400 rds 7.62 mm M-240.

External Syllabus Support. 1 or 2 assault aircraft/1 convoy, aerial gunnery range.

Crew. NSI/CCUI or AOUI.

234. CORE SKILL PLUS PHASE

1. Purpose. To certify the CCUI in large scale integrated mission events; events having unique mission taskings; events having a low probability of execution in combat, or high-risk relative events.

2. General

a. Completion of the RWDACM stage meets the requirements for the CCUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI as RWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-618 shall be logged.

b. Completion of the FWDACM stage meets the requirements for the CCUI to be FWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI as FWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-619 shall be logged.

c. Completion of CQ-430 meets the requirement for the CCUI to be unaided CQ qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI as unaided CQ qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-617 shall be logged.

3. Helicopter Insertion/Extraction (HIE)

a. Purpose. To develop the ability to perform HIE operations.

b. General. Review MAWTS-1 Academic Support Package Lectures. Prior to conducting HIE a face-to-face brief with the Fastrope/Rappel/Spie/Jump Master is required.

c. Crew Requirement. As listed at the end of each event. If passengers are embarked, aircrew must be NSQ.

d. Flight Training. (6 Sorties, 6.0 Hours).

HIE-400                    1.0                    C,R 1 UH-1N A (N)(NS)

Goal. Introduce techniques for paradrop operations.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in paradrop operations.

Prerequisite. CAL-223. Initial flight will be flown under day conditions.

Ordinance. N/A.

External Syllabus Support. Jump Master.

Crew. CCI (NSI)/CCUI or AOUI.

HIE-401                    1.0                    C,R 1 UH-1N A (N)(NS)

Goal. Introduce techniques for water insertions.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in water insertion operations.

Prerequisite. CAL-223.

Ordnance. N/A.

External Syllabus Support. HRST Master.

Crew. CCI (NSI)/CCUI or AOUI.

HIE-402

1.0 C,R 1 UH-1N A

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

Requirement. Brief/discuss aircraft rigging, insertion/extraction techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in SPIE or Jacob's Ladder operations.

Prerequisite. CAL-223.

Ordnance. N/A.

External Syllabus Support. HRST Master.

Crew. CCI/CCUI or AOUI.

HIE-403

1.0 C 1 UH-1N A

Goal. Introduce techniques for insertion using fastrope.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in fastrope operations.

Prerequisite. CAL-223.

Ordnance. N/A.

External Syllabus Support. HRST Master.

Crew. CCI/CCUI or AOUI.

HIE-404

1.0 C 1 UH-1N A

Goal. Introduce techniques for insertion using rappel.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in rappel operations.

Prerequisite. CAL-223.

Ordnance. N/A.

External Syllabus Support. HRST Master.

Crew. CCI/CCUI or AOUI.

HIE-405

1.0 C 1 UH-1N A

Goal. Introduce techniques for emergency rescue hoist and external load procedures.

Requirement

(1) Brief and discuss engine failures, tail rotor emergencies, inadvertent IMC, settling with power, aircraft rigging, hook capabilities, hoist capabilities, aircrew coordination, HST procedures, ground crew brief, emergencies, and load jettison.

(2) Demonstrate/introduce proper techniques for external loads and hoist pickup.

(3) Complete three iterations of hoist operations (extract) or three iterations of hook procedures (pick-up, transit, delivery).

Performance Standards. Conduct flight and hook/hoist procedures IAW the UH-1N NATOPS Manual, UH-1N TACMAN, HIE Manual, and local directives.

Prerequisite. EXT-175.

Ordnance. N/A.

External Syllabus Support. Appropriate external weight.

Crew. CCI/CCUI or AOUI.

HIE-406

1.0 C 1 UH-1N A NS

Goal. Introduce techniques for insertion with fastrope or rappel using NVDs.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in fastrope or rappel operations while using NVDs.

Prerequisite. HIE-403 or HIE-404. Day flight will be flown before flying applicable night flight.

Ordnance. N/A.

External Syllabus Support. HRST Master.

Crew. NSI/CCUI or AOUI.

4. Rotary Wing Defensive Air Combat Maneuvering (RWDACM)

a. Purpose. To develop aircrew responsibility, coordination and situational awareness required during defensive maneuvering against RW aircraft.

b. General

(1) The CCUI and AOUI will develop crew responsibilities in assisting the pilots in accomplishing defensive maneuvers. Once complete with the stage and RQD-618 the CC/AO may be qualified in writing RWDACM by the squadron commander.

(2) AOUI requirements: Same as CCUI.

(3) CCUI and AOUI must complete RQD-618 to be RWDACM Qualified.

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

d. Ground Training. Review applicable Tactical Manual, MAWTS-1 Academic Support Package lectures, and DACM Manual.

e. Flight Training. (3 Sorties, 3.5 Hours).

DACM-410            1.5            C,R 1 UH-1N A

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

Requirement. Introduce AAG using shadow gunnery. Towed banner, dart, or Moving Land Target (MLT) may be used if available.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ crew served weapons.

Prerequisite. Any one of the following; SWD-240, 241, or 242.

Ordnance. 1500 rds 7.62 mm GAU-17, 300 rds .50 Cal GAU-16, or 400 rds 7.62 mm M-240.

External Syllabus Support. MLT range, banner, or dart.

Crew. AGI/CCUI or AOUI.

DACM-411            1.0            C,R 1 UH-1N A

Goal. Introduce CC responsibilities during 1 v 1 RWDACM maneuvers.

Requirement

(1) Introduce basic defensive maneuvers, lookout procedures and identification of aircraft, missiles and AAA threats.

(2) Brief/discuss aircrew coordination, situational awareness and the use of crew served weapons against known threats.

Performance Standards. CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 Assault Support Package, and DACM Manual.

Prerequisite. CAL-223.

Ordnance. N/A.

External Syllabus Support. One adversary helicopter, dissimilar if available.

Crew. DACMI/CCUI or AOUI.

DACM-412

1.0 C,R 2 UH-1N A

Goal. Introduce CC responsibilities during 2 v 1 RWDACM maneuvers.

Requirement

(1) Introduce basic defensive maneuvers, lookout procedures and identification of aircraft, missiles and AAA threats.

(2) Brief/discuss aircrew coordination, situational awareness and the use of crew served weapons against known threats.

Performance Standards. CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 Assault Support Package, and DACM manual.

Prerequisites. DACM-411.

Ordnance. N/A.

External Syllabus Support. One adversary helicopter, dissimilar if available.

Crew. DACMI/CCUI or AOUI.

5. Fixed Wing Defensive Air Combat Maneuvers (FWDACM)

a. Purpose. To develop the aircrew coordination and situational awareness required during Defensive Maneuvers (DM) against FW threats.

b. General

(1) The CCUI/AOUI will develop crew responsibilities in assisting the pilots in accomplishing defensive maneuvers. Completion of this stage meets the requirements for designation as DACM Qualified. A qualification letter shall be placed in the NATOPS with a copy in the APR and a flight logbook entry.

(2) AOUI requirements: Same as CCUI.

(3) Upon completion of this stage of training, CCUI and AOUI will be qualified in all aspects of DACM.

- c. Crew Requirements. As listed at the end of each event.
- d. Ground Training. Review applicable MAWTS-1 Academic Support Package lectures and DACM Manual.
- e. Flight Training. (3 Sorties, 3.0 Hours).

<u>DACM-414</u>	<u>1.0</u>	<u>C,R 1 UH-1N A</u>
	<u>Goal</u> .	Introduce CC responsibilities during 1 v 1 FWDACM.
	<u>Requirement</u>	
	(1)	Review lookout procedures and identification of aircraft, missiles and AAA threat.
	(2)	Introduce section DM against airborne FW threats.
	(3)	Brief/discuss aircrew coordination, situational awareness and crew served weapons against known threats.
	<u>Performance Standards</u> .	CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 ASP, and DACM manual.
	<u>Prerequisite</u> .	DACM-412.
	<u>Ordnance</u> .	N/A.
	<u>External Syllabus Support</u> .	One adversary FW aircraft.
	<u>Crew</u> .	DACMI/CCUI or AOUI.
<u>DACM-415</u>	<u>1.0</u>	<u>C,R 2 UH-1N A</u>
	<u>Goal</u> .	Introduce CC responsibilities during 2 v 1 FWDACM.
	<u>Requirement</u>	
	(1)	Review lookout procedures and identification of aircraft, missiles and AAA threat.
	(2)	Introduce section DM against airborne FW threats.
	(3)	Brief/discuss aircrew coordination, situational awareness and crew served weapons against known threats.
	<u>Performance Standards</u> .	CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 ASP, and DACM Manual.
	<u>Prerequisite</u> .	DACM-414.
	<u>Ordnance</u> .	N/A.
	<u>External Syllabus Support</u> .	One FW adversary.
	<u>Crew</u> .	DACMI/CCUI or AOUI.
<u>DACM-416</u>	<u>1.0</u>	<u>C,R 2 UH-1N A</u>
	<u>Goal</u> .	Introduce CC responsibilities during 2 Escort v 2 FWDACM.

Requirement

(1) Review helicopter escort procedures, lookout procedures and identification of aircraft, missiles and AAA threat.

(2) Introduce section DM against airborne FW threats while supporting assault package.

(3) Brief/discuss aircrew coordination, situational awareness and crew served weapons against known threats.

Performance Standards. CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 ASP, and DACM manual.

Prerequisite. DACM-415.

Ordinance. N/A.

External Syllabus Support. 2 FW adversary and one assault aircraft (optional).

Crew. DACMI/CCUI or AOUI.

6. Nuclear, Biological, and Chemical Warfare (NBC)

a. Purpose. To develop proficiency with the AR-5 protective assembly during normal and tactical flight operations.

b. General

(1) For the safe execution of initial NBC flights, one pilot and one aircrewman shall remain unmasked. On subsequent flights, all aircrew may remain masked.

(2) AOUI requirement: NBC-420.

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

d. Ground/Academic Training

(1) Discuss and review NBC information contained in the appropriate Tactical Manual.

(2) Discuss hookup and operating procedures in the aircraft.

(3) Brief and discuss egress drills with full NBC protective equipment. Simulate both over-land and over-water emergencies.

e. Flight Training. (1 Sortie, 1.5 Hours).

NBC-420

1.0

C,R 1 UH-1N A

Goal. Conduct normal and tactical flight operations in a NBC environment.

Requirement. Conduct low work, pattern work, CALs, and autorotations. The CCUI and AOUI shall wear the protective mask for the duration of the flight.

Performance Standards. Demonstrate the ability to perform aircrew responsibilities in the NBC environment.

Prerequisite. CAL-223.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

7. Carrier Qualification (CQ)

a. Purpose. To introduce and develop the aircrew coordination required for flight operations from a carrier deck or air capable ship day and night.

b. General

(1) The CCUI/AG will become familiar with those procedures required for actual shipboard operations. Refer to LHA/LHD NATOPS and NWP-42 for carrier and air capable ship operations.

(2) Minimum of 5 landings for each CQ.

c. Ground/Academic Training. Review required equipment for shipboard/over-water operations.

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

e. Flight Training. (5 Sorties, 5.0 Hours).

CQ-431            1.0                    C,R 1 UH-1N A

Goal. Introduce day FCLPs.

Requirement. Introduce day FCLP patterns, approaches, and landings. Brief and discuss flight deck procedures, LSE signals, emergency/ditching procedures, and raft usage.

Performance Standards. Demonstrate the ability/knowledge to perform shipboard flight operations to include LSE hand and arm signals.

Prerequisite. CSIX-181.

Ordinance. N/A.

External Syllabus Support. FCLP pad.

Crew. CCI/CCUI or AOUI.

CQ-432            1.0                    C,R 1 UH-1N A N NS

Goal. Introduce night and NVD FCLPs.

Requirement. Introduce night, unaided and aided FCLP patterns and landings. Brief and discuss flight deck procedures, LSE signals, emergency/ditching procedures, and raft usage.

Performance Standards. Demonstrate the ability/knowledge to perform unaided and aided shipboard flight operations to include LSE hand and arm signals.

Prerequisite. CQ-431.

External Syllabus Support. Lit/NVD compatible FCLP landing pad.

Crew. NSI/CCUI or AOUI.

CQ-433

1.0 C,R 1 UH-1N A

Goal. Conduct day CQ flight.

Requirement. Day qualification.

Performance Standards. Demonstrate the ability/knowledge to perform shipboard flight operations to include LSE hand and arm signals.

Prerequisite. CQ-431.

Ordinance. N/A.

External Syllabus Support. Landing platform afloat.

Crew. CCI/CCUI or AOUI.

CQ-434

1.0 C,R 1 UH-1N A NS

Goal. Conduct NVG CQ flight.

Requirement

(1) Introduce night shipboard operation procedures while using NVDs.

(2) NVD qualification.

Performance Standards. Demonstrate the ability/knowledge to perform aided shipboard flight operations to include LSE hand and arm signals.

Prerequisite. CQ-432, 433.

Ordinance. N/A.

External Syllabus Support. NVD compatible landing platform afloat.

Crew. NSI/CCUI or AOUI.

CQ-435

1.0 C,R 1 UH-1N A N

Goal. Night unaided CQ introduction.

Requirement

(1) Introduce night unaided shipboard operation procedures.

(2) Night unaided shipboard qualification.

Performance Standards. Demonstrate the ability/knowledge to perform unaided shipboard flight operations to include the LSE hand and arm signals.

Prerequisite. CQ-432.

Ordnance. N/A.

External Syllabus Support. Lit landing platform afloat.

Crew. CCI/CCUI or AOUI.

250. INSTRUCTOR TRAINING

1. Purpose. To develop standardized FRS instructor CCs with the ability to teach flight skills requisite to qualification as a Core Skill Introduction CC.

2. General. Upon completion of the Crew Chief Instructor (CCI) stage, the IUT may be designated a CCI by the FRS squadron commanding officer. The CCIUT must be a TERFI, AGI, and NSQ (LLL) prior to beginning CCIUT training.

3. CCI

a. Ground Training. CCIUT stage lecture.

b. Flight Training. (2 Sorties, 3.0 Hours).

CCI-500            1.5                    E 1 UH-1N A

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

Requirement

(1) Demonstrate standard NATOPS procedures to include hand and arm signals.

(2) Emphasize aircrew coordination and comfort level.

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

Prerequisite. TAC-261.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

CCI-504            1.5                    E 1 UH-1N A

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

Requirement

(1) Brief/discuss aircrew coordination, lost comm, ICS terminology, lookout doctrine, emergency procedures, load oscillation, and load release.

(2) Instruct at least two hookups, flight, and release operations.

(3) Instruct procedures, signals, and communications for hoist procedures.

Performance Standards. Demonstrate instructional techniques to CCUIs during external weight and hoisting procedures.

Prerequisite. CCI-500.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

251. GRADUATE LEVEL COURSES

1. General. There are seven graduate level courses that qualify instructors for specific portions of the T&R syllabus. These courses are as follows:

- a. Weapons and Tactics Instructor (WTI).
- b. Night Systems FAM Instructor (NSFI).
- c. Night Systems Instructor (NSI).
- d. Night Systems SAR Instructor (NSSI).
- e. Terrain Flight Instructor (TERFI).
- f. Defensive Air Combat Maneuvers Instructor (DACMI).
- g. Aerial Gunnery Instructor (AGI)

2. The above courses and their respective training codes are listed in the MAWTS-1 Course Catalog.

252. REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS (RQD)

1. NATOPS Evaluation Stage

- a. Purpose. To conduct NATOPS evaluation.
- b. General. Flights flown in this stage are evaluation flights. CRP is not awarded for these flights. CRP credit may be realized by logging the junior training code(s) listed in the flight description on the NAVFLIRS along with the RQD code.
- c. Ground Training. Per applicable directives.
- d. Crew Requirement. NATOPS Evaluator or Instructor and CC or AO.

- e. Flight Training. (1 Sortie, 1.5 Hours).

RQD-601                    1.5                    C,R E 1 UH-1N A

Goal. Conduct the annual NATOPS evaluation.

Requirement. Conduct a CC NATOPS evaluation per criteria in the UH-1N NATOPS Manual.

Performance Standards. IAW NATOPS.

Prerequisite. CSIX-181.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. ANI/CCUI or AOUI.

2. Qualification Stage

- a. Purpose. To track qualifications.

- b. General

(1) Codes in this stage are qualification codes. CRP credit may be realized by logging the junior training code(s) listed in the flight description on the NAVFLIRS along with the RQD code. This code shall be logged on initial qualification flight only.

(2) DACM-618 will be flown as an actual flight and logged with an ATF.

- c. Ground Training. Per applicable directives.

- d. Crew Requirement. IAW applicable training stage.

- e. Flight Training. (1 Sortie, 1.0 Hour)

QUAL-610                    C,R E UH-1N A

Goal. Tracking code for TERF qualification.

Requirement. Successfully complete the requirements of CAL-223. Code shall be logged in conjunction with CAL-223.

Prerequisite. See CAL-223.

QUAL-611                    C,R E UH-1N A

Goal. Tracking code for Night Systems (HLL) qualification.

Requirement. Successfully complete the requirements of TAC-261. This code shall be logged in conjunction with TAC-261.

Prerequisite. See TAC-261.

QUAL-612

C, R E UH-1N A

Goal. Tracking code for Advanced Night Systems (LLL) qualification.

Requirement. Successfully complete the requirements of ANSQ-312. This code shall be logged in conjunction with ANSQ-312.

Prerequisite. See ANSQ-312.

QUAL-615

C, R E UH-1N A

Goal. Tracking code for Day Carrier qualification.

Requirement. Successfully complete the requirements of CQ-433. This code shall be logged in conjunction with CQ-433.

Prerequisite. See CQ-433.

QUAL-616

C, R E UH-1N A

Goal. Tracking code for NVD Carrier qualification (NVDCQ).

Requirement. Successfully complete the requirements of CQ-434. This code shall be logged in conjunction with CQ-434.

Prerequisite. See CQ-434.

QUAL-617

C, R E UH-1N A

Goal. Tracking code for night unaided Carrier Qualification (Night CQ).

Requirement. Successfully complete the requirements of CQ-435. This code shall be logged in conjunction with CQ-435.

Prerequisite. See CQ-435.

QUAL-618

C, R E UH-1N A

Goal. Tracking code for RWDACM qualification.

Requirement. Completion of the RWDACM stage meets the requirements for the PUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as RWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-618 shall be logged.

Prerequisite. DACM-412.

QUAL-619

C, R E UH-1N A

Goal. Tracking code for FWDACM qualification.

Requirement. Successfully complete the requirements of DACM-416. This code shall be logged in conjunction with DACM-416.

Prerequisite. See DACM-416.

3. Aerial Gunner Qualification Stage

a. Purpose. To achieve qualification as an aerial gunner.

b. General

(1) Completion of this stage qualifies the CCUI/AOUI for designation as an aerial gunner on the respective weapon. Appropriate documentation (ATFs with rounds-count) will be completed for each weapon prior to designation as aerial gunner. A designation qualification letter shall be placed in the NATOPS Jacket with a copy in the APR and flight log book entry.

(2) AOUI requirement: RQD-620, 621, and 622.

c. Ground Training. Review MAWTS-1 Academic Support Package lectures and Aerial Gunnery Manual. Written examinations shall be administered prior to each individual weapon evaluation flight.

d. Crew Requirement. NSI and CCUI or AOUI.

e. Flight Training. (3 Sorties, 4.5 Hours).

QUAL-620            1.5                    C,R E 2 UH-1N A NS

Goal. GAU-16 aerial gunner qualification.

Requirement

(1) Discuss/brief weapon troubleshooting and malfunctions.

(2) Lasers should be used if available.

(3) Review BCWD principles.

Performance Standards. Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, and troubleshooting procedures. Demonstrate proficiency in safe and effective employment of the GAU-16 while using NVDs.

Prerequisite. NSQ (LLL), ESC-322, and SWD-315.

Ordinance. 300 rds 7.62mm GAU-16.

External Syllabus Support. Aerial gunnery range.

QUAL-621            1.5                    C,R E 2 UH-1N A NS

Goal. GAU-17 aerial gunner qualification.

Requirement

(1) Discuss/brief weapon troubleshooting and malfunctions.

(2) Lasers should be utilized if available.

(3) Review BCWD principles.

Performance Standards. Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, and troubleshooting procedures. Demonstrate proficiency in safe and effective employment of the GAU-17 while using NVDs.

Prerequisite. NSQ (LLL), ESC-322, and SWD-316.

Ordnance. 1500 rds 7.62mm GAU-17.

External Syllabus Support. Aerial gunnery range.

QUAL-622

1.5 C,R E 2 UH-1N A NS

Goal. M-240 aerial gunner qualification.

Requirement

- (1) Discuss/brief weapon troubleshooting and malfunctions.
- (2) Lasers should be used if available.
- (3) Review BCWD principles.

Performance Standards. Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, and troubleshooting procedures. Demonstrate proficiency in safe and effective employment of the M-240 while using NVDs.

Prerequisite. NSQ (LLL), ESC-322, and SWD-317.

Ordnance. 400 rds 7.62mm M-240.

External Syllabus Support. Aerial gunnery range.

#### 4. Designation Stage

a. Purpose. To track designations.

b. General. Codes in this stage are designation codes. CRP credit may be realized by logging the junior training code(s) listed in the flight description on the NAVFLIRS along with the RQD code. This code shall be logged on initial designation flights only.

c. Ground Training. Per applicable directives.

d. Crew Requirement. IAW applicable training stage.

e. Flight Training. IAW applicable training stage.

IDSG-680

C,R E UH-1N A

Goal. Tracking code for CCI designation.

Requirement. Successfully complete the requirements of CCI-504. Code shall be logged in conjunction CCI-504.

Performance Standards. See CCI-504.

Prerequisite. See CCI-504.

Ordnance. N/A.

External Syllabus Support. See CCI-504.

IDSG-681

C,R E UH-1N A

Goal. Tracking code for TERFI designation.

Requirement. Successfully complete requirements per the MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-682

C,R E UH-1N A

Goal. Tracking code for AGI GAU-16 designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-683

C,R E UH-1N A

Goal. Tracking code for AGI GAU-17 designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-684

C,R E UH-1N A

Goal. Tracking code for AGI M-240 designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-688

C,R E UH-1N A

Goal. Tracking code for DACMI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-694

C,R E UH-1N A

Goal. Tracking code for NSFI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-695

C,R E UH-1N A

Goal. Tracking code for NSSI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-696

C,R E UH-1N A

Goal. Tracking code for NSI designation.

Requirement. Successfully complete the requirements IAW MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-699

C,R E UH-1N A

Goal. Tracking code for WTI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

260. ORDNANCE REQUIREMENTS. Annual ordnance requirements are developed on a "per crew" basis per OPNAVNOTE 8010.

Basic/Transition/Conversion

ORDNANCE	100 SERIES	200 SERIES	300 SERIES	400 SERIES	500 SERIES	600 SERIES	REFRESH	ANNUAL *
7.62mm	3,800	9,500	7,600	1,900	7,600	1,900	17,100	13,300
.50 Cal	600	1,500	1,200	300	1200	300	2,700	2,100

\*Annual ordnance requirements maintain an aircrew member at proficiency.

NOTE: The 200, 300 and 600 series expenditures are firm. The CCUI/AOUI must shoot all of these rounds. For the 100 and 400 series flights, any weapon may be fired for flexibility. Ordnance requirements are computed firing 1500 rounds 7.62 mm or 300 rounds .50 Cal on these flights.

## Core Skill Introduction Phase

STAGE	FLT CODE	FLT HRS	REFLY INTERVAL	CRP	C	R	E	N	NS	A/C OR SIM	# A/C
FAM	101	1.5	*	3.0						A	1
FAM	102	1.5	*	3.0	X	X				A	1
FAM	112	1.5	*	3.0	X	X		N		A	1
FAM	115	1.5	*	4.0	X	X			NS	A	1
FORM	131	1.5	*	3.0	X	X				A	2
FORM	132	1.5	*	4.0	X	X			NS	A	2
TERF	140	1.5	*	3.0						A	1
TERF	141	1.5	*	4.0	X	X			NS	A	1
NAV	151	1.5	*	3.0						A	1
NAV	152	1.5	*	4.0	X	X			NS	A	1
SSWD	160	0.0	*	2.0						S	
SWD	161	1.5	*	4.0	X	X				A	1
CAL	170	1.5	*	3.0						A	1
CAL	171	1.5	*	3.0	X					A	1
CAL	172	1.5	*	4.0	X	X		N	NS	A	1
EXT	175	1.5	*	3.0	X					A	1
CSIX	181	2.0	*	7.0	X	X	X			A	1
Sub Total 100		24.5		60.0							
Pre 100		0.0		0.0							
100 Level Total		24.5		60.0							

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage.

## Core Skill Basic Phase

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
TERF	210	1.5	180	1.0	X					A	1
TERF	211	1.5	180	1.0	X	X			NS	A	2
NS	215	1.5	180	1.0	X	X			NS	A	1
CAL	220	1.5	180	1.0	X					A	2
CAL	221	1.5	180	1.0	X	X			NS	A	2
CAL	223	1.5	180	1.0	X	X			NS	A	2
SWD	240	1.5	180	1.0	X					A	1
SWD	241	1.5	180	1.0	X					A	1
SWD	242	1.5	180	1.0	X					A	1
SWD	243	1.5	180	1.0	X	X			NS	A	1
SWD	244	1.5	180	1.0	X	X			NS	A	1
SWD	245	1.5	180	1.0	X	X			NS	A	1
ESC	250	1.5	180	1.5	X			(N)	(NS)	A	2
TAC	261	1.5	180	1.5	X	X			NS	A	2
Sub Total 200		23.0		15.0							
Total 100		24.5		60.0							
Total 100 & 200		47.5		75.0							

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage--Continued.

**Core Skill Advanced Phase**

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	ACFT OR SIM	# A/C
ANSQ	311	1.5	180	2.5					NS	A	1
ANSQ	312	1.5	180	2.5	X				NS	A	2
ANSQ	313	1.5	180	2.5	X	X			NS	A	2
SWD	315	1.5	180	2.0	X	X			NS	A	2
SWD	316	1.5	180	2.0	X	X			NS	A	2
SWD	317	1.5	180	2.0	X	X			NS	A	2
TAC	320	1.5	180	2.0	X				NS	A	1
TAC	321	1.5	180	2.5	X	X			NS	A	2
ESC	322	1.5	180	2.0	X	X			NS	A	2
Sub Total 300		15.5		20.0							
Total 100 & 200		47.5		75.0							
Total 100, 200 & 300		63.0		95.0							

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage--Continued.

**Core Skill Plus Phase**

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
HIE	400	1.0	365	0.2	X	X		(N)	(NS)	A	1
HIE	401	1.0	365	0.2	X	X		(N)	(NS)	A	1
HIE	402	1.0	365	0.2	X	X				A	1
HIE	403	1.0	365	0.2	X					A	1
HIE	404	1.0	365	0.2	X					A	1
HIE	405	1.0	365	0.2	X					A	1
HIE	406	1.0	365	0.2	X				NS	A	1
DACM	410	1.5	365	0.2	X	X				A	1
DACM	411	1.0	365	0.2	X	X				A	1
DACM	412	1.0	365	0.2	X	X				A	2
DACM	414	1.0	365	0.2	X	X				A	1
DACM	415	1.0	365	0.2	X	X				A	2
DACM	416	1.0	365	0.4	X	X				A	2
NBC	420	1.0	365	0.2	X	X				A	1
CQ	431	1.0	365	0.4	X	X				A	1
CQ	432	1.0	365	0.4	X	X		N	NS	A	1
CQ	433	1.0	365	0.5	X	X				A	1
CQ	434	1.0	365	0.5	X	X			NS	A	1
CQ	435	1.0	365	0.2	X	X		N		A	1
Sub Total 400		15.5		5.0							
Total 100, 200, & 300		63.0		95.0							
Total 100, 200, 300, 400		78.5		100.0							

**Instructor Training**

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
CCI	500	1.5	*				X			A	1
CCI	504	1.5	*				X			A	1
Sub Total 500 Level		3.0									

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage--Continued.

## Requirements, Qualifications, and Designations

STAGE	CODE	FLT HRS	REFLY INTERVAL	TRACK	C	R	E	N	NS	A/C OR SIM	# A/C	NOTES
RQD	601	1.5	365		X	X	X			A	1	NATOPS CHECK
QUAL	610		*	X	X	X	X					TERF QUAL
QUAL	611		*	X	X	X	X					NSQ HLL
QUAL	612		*	X	X	X	X					NSQ LLL
QUAL	615		*	X	X	X	X					CQ DAY
QUAL	616		*	X	X	X	X					NVDCQ
QUAL	617		*	X	X	X	X					CQ UNAIDED
QUAL	618		*	X	X	X	X					DACM (RW)
QUAL	619		*	X	X	X	X					DACM
QUAL	620	1.5	*		X	X	X		X	A	2	GAU-16 QUAL
QUAL	621	1.5	*		X	X	X		X	A	2	GAU-17 QUAL
QUAL	622	1.5	*		X	X	X		X	A	2	M-240 QUAL
IDSG	680		*	X	X	X	X					CCI
IDSG	681		*	X	X	X	X					TERFI
IDSG	682		*	X	X	X	X					AGI GAU-16
IDSG	683		*	X	X	X	X					AGI GAU-17
IDSG	684		*	X	X	X	X					AGI M-240
IDSG	688		*	X	X	X	X					DACMI
IDSG	694		*	X	X	X	X					NSFI
IDSG	695		*	X	X	X	X					NSSI
IDSG	696		*	X	X	X	X					NSI
IDSG	699		*	X	X	X	X					WTI
		FLT HRS										
Sub Total		7.0										

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage--Continued.

## Core Skill Introduction Phase

STAGE	FLT CODE	FLT HRS	REFLY INTERVAL	CRP	C	R	E	N	NS	A/C OR SIM	# A/C
FAM	101	1.5	*	2.0						A	1
FAM	115	1.5	*	2.0	X	X			NS	A	1
FORM	131	1.5	*	5.0	X	X				A	2
FORM	132	1.5	*	5.0	X	X			NS	A	2
TERF	140	1.5	*	5.0						A	1
TERF	141	1.5	*	5.0	X	X			NS	A	1
NAV	152	1.5	*	5.0	X	X			NS	A	1
SSWD	160	N/A	*	1.0						S	
SWD	161	1.5	*	5.0	X	X				A	1
CAL	171	1.5	*	5.0	X					A	1
CAL	172	1.5	*	5.0	X	X		N	NS	A	1
CSIX	181	1.5	*	15.0	X	X	X			A	1
Sub Total 100		16.5		60.0							
Pre 100		0.0		0.0							
100 Level Total		16.5		60.0							

## Core Skill Basic Phase

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP	C	R	E	N	NS	A/C OR SIM	# A/C
TERF	210	1.5	180	1.0	X					A	1
TERF	211	1.5	180	1.5	X	X			NS	A	2
NS	215	1.5	180	1.0	X	X			NS	A	1
CAL	220	1.5	180	1.5	X					A	2
CAL	221	1.5	180	1.0	X	X			NS	A	2
CAL	223	1.5	180	1.5	X	X			NS	A	2
SWD	240	1.5	180	1.0	X					A	1
SWD	241	1.5	180	1.0	X					A	1
SWD	242	1.5	180	1.0	X					A	1
SWD	243	1.5	180	1.0	X	X			NS	A	1
SWD	244	1.5	180	1.0	X	X			NS	A	1
SWD	245	1.5	180	1.0	X	X			NS	A	1
TAC	261	1.5	180	1.5	X	X			NS	A	2
Sub Total 200		20.0		15.0							
Total 100		16.5		60.0							
Total 100 & 200		36.5		75.0							

Figure 2-3.--AO Refly Interval, Combat Readiness Percentage.

## Core Skill Advanced Phase

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
ANSQ	311	1.5	180	2.5					NS	A	1
ANSQ	312	1.5	180	2.5	X				NS	A	2
ANSQ	313	1.5	180	2.5	X	X			NS	A	2
SWD	315	1.5	180	2.5	X	X			NS	A	2
SWD	316	1.5	180	2.5	X	X			NS	A	2
SWD	317	1.5	180	2.5	X	X			NS	A	2
TAC	320	1.5	180	2.5	X				NS	A	1
TAC	321	1.5	180	2.5	X	X			NS	A	2
Sub Total 300		14.0		20.0							
Total 100 & 200		36.5		75.0							
Total 100, 200 & 300		50.5		95.0							

## Core Skill Plus Phase

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
DACM	410	1.5	365	0.2	X	X				A	1
DACM	411	1.0	365	0.2	X	X				A	1
RWDACM	412	1.0	365	0.4	X	X				A	2
DACM	414	1.0	365	0.4	X	X				A	1
DACM	415	1.0	365	0.4	X	X				A	2
DACM	416	1.0	365	1.0	X	X				A	2
NBC	420	1.0	365	0.5	X	X				A	1
CQ	431	1.0	365	0.4	X	X				A	1
CQ	432	1.0	365	0.4	X	X		N	NS	A	1
CQ	433	1.0	365	0.4	X	X				A	1
CQ	434	1.0	365	0.5	X	X			NS	A	1
CQ	435	1.0	365	0.2	X	X		N		A	1
Sub Total 400		8.5		5.0							
Total 100, 200, & 300		50.5		95.0							
Total 100, 200, 300, 400		59.0		100.0							

Figure 2-3.--AO Refly Interval, Combat Readiness Percentage--Continued.

**Requirements, Qualifications, and Designations**

STAGE	CODE	FLT HRS	REFLY INTERVAL	TRACK	C	R	E	N	NS	A/C OR SIM	# A/C	NOTES
RQD	601	1.5	365		X	X	X			A	1	NATOPS CHECK
QUAL	610		*	X	X	X	X					TERF QUAL
QUAL	611		*	X	X	X	X					NSQ HLL
QUAL	612		*	X	X	X	X					NSQ LLL
QUAL	615		*	X	X	X	X					CQ DAY
QUAL	616		*	X	X	X	X					NVDCQ
QUAL	617		*	X	X	X	X					CQ UNAIDED
QUAL	618		*	X	X	X	X					DACM (RW)
QUAL	619		*	X	X	X	X					DACM
QUAL	620	1.5	*		X	X	X		X	A	2	GAU-16 QUAL
QUAL	621	1.5	*		X	X	X		X	A	2	GAU-17 QUAL
QUAL	622	1.5	*		X	X	X		X	A	2	M-240 QUAL
IDSG	682		*	X	X	X	X					AGI GAU-16
IDSG	683		*	X	X	X	X					AGI GAU-17
IDSG	684		*	X	X	X	X					AGI M-240
		FLT HRS										
Sub Total		6.0										

Figure 2-3.--AO Refly Interval, Combat Readiness Percentage--Continued.

MOS 6174 FLIGHT UPDATE CHAINING

<u>STAGE</u>	<u>FLIGHT</u>	<u>FLIGHTS UPDATED</u>
TERF	210	
	211	210
NS	215	211, 210
CAL	220	
	221	220
	223	220, 221
SWD	240	
	241	
	242	
	243	210, 211, 220, 221, 240
	244	210, 211, 220, 241
	245	210, 211, 220, 221, 242
ESC	250	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245
TAC	261	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245
ANSQ	311	220, 221
	312	210, 211, 220, 221, 223, 311
	313	210, 211, 220, 221, 223, 311, 312
SWD	315	240, 243
	316	241, 244
	317	242, 245
TAC	320	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245, 261
	321	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245, 261, 320
ESC	322	250
HIE	400	
	401	
	402	
	403	
	404	
	405	403
DACM	410	240, 241, 242
	411	
	412	411
	414	
	415	414
	416	414, 415
NBC	421	

Figure 2-4.--MOS 6174 Flight Update Chaining.

<u>STAGE</u>	<u>FLIGHT</u>	<u>FLIGHTS UPDATED</u>
CQ	431	
	432	431
	433	431,
	434	431, 432, 433
	435	431, 432, 433

Figure 2-4.--MOS 6174 Flight Update Chaining--Continued.

## AERIAL GUNNER/OBSERVER FLIGHT UPDATE CHAINING

STAGE	FLIGHT	FLIGHTS UPDATED
TERF	210	
	211	210
NS	215	210, 211
CAL	220	
	221	220
	223	220, 221
SWD	240	
	241	
	242	
	243	240
	244	241
	245	242
TAC	261	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245
ANSQ	311	220, 221, 223
	312	220, 221, 223, 311
	313	210, 211, 220, 221, 223, 311, 312
SWD	315	240, 243
	316	241, 244
	317	242, 245
TAC	320	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245, 261
	321	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245, 261,
	320	
DACM	410	240, 241, 242
	411	
	412	411
	414	
	415	414
	416	414, 415
NBC	420	
CQ	431	
	432	431
	433	431
	434	431, 432, 433
	435	431, 432, 433

Figure 2-5.--Aerial Gunner/Observer Flight Update Chaining.