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From: Commandant of the Marine Corps  
To: Distribution List

Subj: KC-130J TRAINING AND READINESS (T&R) MANUAL

Ref: (a) NAVMC 3500.14C

Encl: (1) KC-130 T&R Manual

1. Purpose. In accordance with the reference, publish revised standards and regulations regarding the training of KC-130J aircrew.
2. Cancellation. NAVMC 3500.53A
3. Scope. Highlights of major T&R planning considerations included in this KC-130J T&R Manual are as follows:
  - a. Incorporation of the Harvest Hawk Program of Instruction into Chapters 2 and 3.
  - b. Creation of a Crewmaster Chapter by consolidating the former Chapters 3 (Crew Chief) and 4 (Loadmaster) into one chapter.
  - c. Addition of the following Mission Essential Tasks: Close Air Support and Multi-sensor Imagery Reconnaissance.
4. Information. Recommended changes to this Manual should be submitted via the syllabus sponsor and the appropriate chain of command to: Commanding General (CG), Training and Education Command (TECOM), Marine Air Ground Task Force Training and Education Standards Division (MTESD) (C 465), Aviation Standards Branch using standard Naval correspondence or the Automated Message Handling System plain language address: CG TECOM MTESD.
5. Command. This Manual is applicable to the Marine Corps Total Force.
6. Certification. Reviewed and approved this date.

  
T. M. MURRAY  
By direction

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CHAPTER 1

KC-130J TRAINING AND READINESS UNIT REQUIREMENTS

1.0 TRAINING AND READINESS REQUIREMENTS. The Marine Aviation Training and Readiness (T&R) Program provides the Marine Air-Ground Task Force (MAGTF) commander with an Aviation Combat Element (ACE) capable of executing the six functions of Marine Aviation. The T&R Program is the fundamental tool used by commanders to construct, attain, and maintain effective training programs. The standards established in this program are validated by subject matter experts to maximize combat capabilities for assigned METs while conserving resources. These standards describe and define unit capabilities and requirements necessary to maintain proficiency in mission skills and combat leadership. Training events are based on specific requirements and performance standards to ensure a common base of training and depth of combat capability.

1.1 VMGR MISSION. Support the MAGTF Commander by providing air-to-air refueling, assault support, and close air support, day or night under all weather conditions during expeditionary, joint, or combined operations.

1.2 VMGR TABLE OF ORGANIZATION (T/O). Refer to Table of Organization managed by Total Force Structure, MCCDC, for current authorized organizational structure and personnel strength for KC-130J squadrons. As of this publication date; VMGR Squadrons are authorized:

KC-130J Table of Organization					
Squadron	Squadron (15 Aircraft)	Squadron (-) (12 Aircraft)	Squadron (-) (9 Aircraft)	Detachment (3 Aircraft)	VMGR Aircrew Training Unit (ATU)
Pilots	49	38	27	11	5
TPC	30	24	18	6	5
CP (T2P/T3P)	19	14	9	5	0
Crewmaster	83	67	51	16	9

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1.3 SIX FUNCTIONS OF MARINE AVIATION

SIX FUNCTIONS OF MARINE AVIATION		
FUNCTION	ABBREVIATION	DESCRIPTION
Offensive Air Support	OAS	OAS involves air operations that are conducted against enemy installations, facilities, and personnel in order to directly assist in the attainment of MAGTF objectives by destroying enemy resources or isolating enemy military forces. Its primary support of the warfighting functions is to provide fires and force protection through CAS and DAS.
Assault Support	ASPT	ASPT contributes to the warfighting functions of maneuver and logistics. Maneuver warfare demands rapid, flexible maneuverability to achieve a decision. Assault support uses aircraft to provide tactical mobility and logistic support to the MAGTF for the movement of high priority personnel and cargo within the immediate area of operations (or the evacuation of personnel and cargo).
Anti-Air Warfare	AAW	AAW is the actions used to destroy or reduce the enemy air and missile threat to an acceptable level. The primary purpose of AAW is to gain and maintain whatever degree of air superiority is required; this permits the conduct of operations without prohibitive interference by opposing air and missile forces. AAW's other purpose is force protection.
Electronic Warfare	EW	EW is any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. EW supports the warfighting functions of fires, command and control, and intelligence through the three major subdivisions: electronic attack, electronic protection, and electronic warfare support.
Control of Aircraft & Missiles	CoA&M	The control of aircraft and missiles supports the warfighting function of Command and Control. The ACE commander maintains centralized command, while control is decentralized and executed through the Marine Air Command and Control System (MACCS). CoA&M integrates the other five functions of Marine Aviation by providing the commander with the ability to exercise Command and Control authority over Marine Aviation assets.
Aerial Reconnaissance	AerRec	AerRec employs visual observation and/or sensors in aerial vehicles to acquire intelligence information. It supports the intelligence warfighting function and is employed tactically, operationally, and strategically. The three types of air reconnaissance are visual, multi-sensor imagery, and electronic.

1.4 ABBREVIATIONS

ALZ	ASSAULT LANDING ZONE
TN	TACTICAL NAVIGATION
TR	THREAT REACTION
CPL	CARGO AND PASSENGER LOADING
CPT	COCKPIT PROCEDURES TRAINING
LAT	LOW ALTITUDE TACTICS
LRN	LONG RANGE NAVIGATION
NS(H)	NIGHT SYSTEMS HIGH
AAR	AIR TO AIR REFUELING
ADGR	AVIATION DELIVERED GROUND REFUELING
AD	AIR DELIVERY
DT	DEFENSIVE TACTICS
NS(L)	NIGHT SYSTEMS LOW
BI	BATTLEFIELD ILLUMINATION
CAS	CLOSE AIR SUPPORT
MIR	MULTI-SENSORY IMAGERY RECONNAISSANCE
ANI	ASSISTANT NATOPS INSTRUCTOR
FRSI	FLEET REPLACEMENT SQUADRON INSTRUCTOR
NSI	NIGHT SYSTEMS INSTRUCTOR
LATI	LOW ALTITUDE TACTICS INSTRUCTOR

NSLATI	NIGHT SYSTEMS LOW ALTITUDE TACTICS INSTRUCTOR
DTI	DEFENSE TACTICS INSTRUCTOR
FLSE	FLIGHT LEADERSHIP STANDARDIZATION EVALUATOR
WTI	WEAPONS TACTICS INSTRUCTOR
CPLI	CARGO PASSENGER LOADING INSTRUCTOR
MI	MISSION INSTRUCTOR
SI	SYSTEMS INSTRUCTOR
ADI	AIRDROP INSTRUCTOR
FCO-I	FIRE CONTROL OFFICER INSTRUCTOR
HH-I	HARVEST HAWK INSTRUCTOR
PC	PLANE CAPTAIN

1.5 DEFINITIONS

TERM	DEFINITION
Core Model	The Core Model is the basic foundation or standardized format by which all T&Rs are constructed. The Core model provides the capability of quantifying both unit and individual training requirements and measuring readiness. This is accomplished by linking community Mission Statements, Mission Essential Task Lists, Output Standards, Core Skill Proficiency Requirements and Combat Leadership Matrices
Core Skill	Fundamental, environmental, or conditional capabilities required to perform basic functions. These basic functions serve as tactical enablers that allow crews to progress to the more complex Mission Skills. Primarily 2000 Phase events but may be introduced in the 1000 Phase.
Mission Skill	Mission Skills enable a unit to execute a specific MET. They are comprised of advanced event(s) that are focused on MET performance and draw upon the knowledge, aeronautical abilities, and situational awareness developed during Core Skill training. 3000 Phase events.
Core Plus Skill	Training events that can be theater specific or that have a low likelihood of occurrence. They may be Fundamental, environmental, or conditional capabilities required to perform basic functions. 4000 Phase events.
Core Plus Mission	Training events that can be theater specific or that have a low likelihood of occurrence. They are comprised of advanced event(s) that are focused on Core Plus MET performance and draw upon the knowledge, aeronautical abilities, and situational awareness. 4000 Phase events.
Core Skill Proficiency (CSP)	CSP is a measure of training completion for 2000 Phase events. CSP is attained by executing all events listed in the Attain Table for each Core Skill. The individual must be simultaneously proficient in all events within that Core Skill to attain CSP.
Mission Skill Proficiency (MSP)	MSP is a measure of training completion for 3000 Phase events. MSP is attained by executing all events listed in the Attain Table for each Mission Skill. The individual must be simultaneously proficient in all events within that Mission Skill to attain MSP. MSP is directly related to Training Readiness.
Core Plus Skill Proficiency (CPSP)	CPSP is a measure of training completion for 4000 Phase "Skill" events. CPSP is attained by executing all events listed in the Attain Table for each Core Plus Skill. The individual must be simultaneously proficient in all events within that Core Plus Skill to attain CPSP
Core Plus Mission Proficiency (CPMP)	CPMP is a measure of training completion for 4000 Phase "Mission" events. CPMP is attained by executing all events listed in the Attain Table for each Core Plus Mission. The individual must be simultaneously proficient in all events within that Core Plus Mission to attain CPMP
Core Model Training Standard (CMTS)	CMTS is an objective optimum training standard used by squadrons that reflects the number of individuals trained to CSP/MSP, per crew position. The CMTS is for internal squadron planning only and is not utilized for readiness reporting. The numbers are determined by individual communities.
Core Model Minimum Requirement (CMMR)	CMMR represents the minimum crew definition qualifications and designations, the number of crews required per MET, and minimum Combat Leadership requirements for readiness reporting purposes.

1.6 MISSION ESSENTIAL TASK LIST (METL). The METL is a list of specified tasks a unit is expected to execute. Core METs are drawn from the Marine Corps Task List (MCTL), are standardized by type unit, and are used for reporting Core squadron readiness in DRRS-MC. Core Plus METs reflect additional capabilities to support missions or plans which are limited in scope, theater specific, or have a lower probability of execution. Core Plus METs may be included in readiness reporting when contained within an Assigned Mission METL. An Assigned Mission METL consists of only selected METs (drawn from Core and Core Plus METs) necessary for that Assigned Mission. Chapter 7 of the Aviation T&R Program Manual provides additional information on Aviation Training Readiness policy.

VMGR KC-130J		
MISSION ESSENTIAL TASK LIST (METL)		
CORE		
MET	ABBREVIATION	DESCRIPTION
MCT 1.3.3.3.2	EXP	Conduct Aviation Operations from Expeditionary Shore-Based Sites
MCT 1.3.4.1	AT	Conduct Combat Assault Transport
MCT 1.3.4.2	AAR	Conduct Air-to-Air Refueling
MCT 1.3.4.2.1	ADGR	Provide Aviation-Delivered Ground Refueling
MCT 4.3.4	AD	Conduct Air Delivery
CORE PLUS		
MET	ABBREVIATION	DESCRIPTION
MCT 1.3.4.3	BI	Provide Aviation Delivered Battlefield Illumination
MCT 3.2.3.1.1	CAS	Conduct Close Air Support
MCT 2.2.5.2.2	MIR	Conduct Multi-Sensory Imagery Reconnaissance

1.7 MISSION ESSENTIAL TASK (MET) TO SIX FUNCTIONS OF MARINE AVIATION

VMGR KC-130J							
MISSION ESSENTIAL TASK (MET) TO SIX FUNCTIONS OF MARINE AVIATION							
CORE							
MET	ABBREVIATION	SIX FUNCTIONS OF MARINE AVIATION					
		OAS	ASPT	AAW	EW	CoA&M	AerRec
MCT 1.3.3.3.2	EXP		X				
MCT 1.3.4.1	AT		X				
MCT 1.3.4.2	AAR	X	X				
MCT 1.3.4.2.1	ADGR		X				
MCT 4.3.4	AD		X				
CORE PLUS							
MCT 1.3.4.3	BI	X	X				
MCT 3.2.3.1.1	CAS	X					X
MCT 2.2.5.2.2	MIR	X					X



1.8 MET TO CORE/MISSION/CORE PLUS SKILL MATRIX. Depicts the relationship between a MET and each Core/Mission/Core Plus/Mission Plus skill associated with the MET for readiness reporting and resource allocation purposes. There shall be a one-to-one relationship between the MET and a corresponding Mission Skill. For example: the MET for EXP shows a one-to-one relationship with the EXP Mission Skill; the CAS MET shows a one-to-one relationship with the CAS Mission Skill, and so on. Shading indicates Core Plus.

VMGR KC-130J																							
MET TO CORE SKILLS/MISSION SKILLS/CORE PLUS SKILLS/MISSION PLUS SKILLS																							
MET	CORE												CORE PLUS (4000 PHASE)										
	CORE SKILLS (2000 Phase)								MISSION SKILLS (3000 Phase)				SKILLS							MISSION PLUS			
	LSF	NS (H)	LRN	TN	LAT	AAR	FORM	IR TR	ALZ	AT	AAR	ADGR	AD	TN	NS (L)	RF TR	DT	HH	BAS	AD	BI	CAS	MIR
1.3.3.3.2 EXP	X	X					X	X								X	X						
1.3.4.1 AT	X	X	X	X	X		X	X		X						X	X	X					
1.3.4.2 AAR	X	X		X		X	X	X			X			X		X	X						
1.3.4.2.1 ADGR	X	X										X											
4.3.4 AD	X	X		X			X	X					X	X		X	X			X			
CORE PLUS																							
1.3.4.3 BI		X					X								X	X	X	X		X			
3.2.3.1.1 CAS		X					X			X							X	X				X	
2.2.5.2.2 MIR		X					X			X							X	X					X

1.9 MISSION ESSENTIAL TASK (MET) OUTPUT STANDARDS. The following MET output standards are the required level of performance a VMGR squadron must be capable of sustaining during contingency/combat operations by MET to be considered MET-ready. Output standards will be demonstrated through the incorporation of unit training events. A core capable VMGR squadron is able to sustain the number of sorties listed below on a daily basis during contingency/combat operations. The sortie rates are based on 2.6 hour average sortie duration. It assumes >70% FMC aircraft and >90% T/O aircrew on hand. If unit FMC aircraft is <70% or T/O aircrew <90%, core capability will be degraded by a like percentage.

VMGR KC-130J SQUADRON (12 AIRCRAFT) / DETACHMENT (6 AIRCRAFT)			
15 Aircraft squadron / 12 Aircraft squadron(-) / 9 Aircraft squadron(-) / 3 Aircraft detachment			
MET OUTPUT STANDARDS MATRIX			
CORE			
MET	ABBREVIATION	MAXIMUM DAILY SORTIES	MAXIMUM SORTIES PER MET
		SQUADRON/DETACHMENT	SQUADRON/DETACHMENT
MCT 1.3.3.3.2	EXP	20/16/12/4	13/10/6/3
MCT 1.3.4.1	AT		20/16/12/4
MCT 1.3.4.2	AAR		20/16/12/4
MCT 1.3.4.2.1	ADGR		2 Points*
MCT 4.3.4	AD		9/6/5/1
CORE PLUS			
MET	ABBREVIATION	MAXIMUM DAILY SORTIES	MAXIMUM SORTIES PER MET
		SQUADRON/DETACHMENT	SQUADRON/DETACHMENT
MCT 1.3.4.3	BI	20/16/12/4	8/6/5/1
MCT 3.2.3.1.1	CAS		6/6/3/3
MCT 2.2.5.2.2	MIR		6/6/3/3

\*The output standard for Aviation-Delivered Ground Refueling is not stated in sorties but on refueling points provided.

1.10 CORE MODEL MINIMUM REQUIREMENTS (CMMR) FOR READINESS REPORTING (DRRS-MC). The paragraphs and tables below delineate the minimum aircrew qualifications and designations required to execute the MET output standards of para 1.9. Chapter 7 of the Aviation T&R Program Manual provides additional guidance and a detailed description of readiness reporting using the Defense Readiness Reporting System - Marine Corps (DRRS-MC).

1.10.1 The CMMR Readiness Reporting Matrix delineates the minimum crew definition qualifications and designations, the number of crews required per MET, and minimum Combat Leadership requirements for readiness reporting purposes. The number of crews formed using the below minimum standards per crew capture the readiness capability of a squadron to perform the MET sorties under all light levels.

VMGR KC-130J								
CMMR READINESS REPORTING MATRIX								
KC-130J MINIMUM CREW QUALIFICATIONS / DESIGNATIONS REQUIRED FOR MET CAPABILITY								
CORE								
METS	CREW POSITION				CREWS REQUIRED PER MET (CREW CMMR)			
MCT	PILOT	COPILOT	FCO	CM	SQD 15 A/C	SQDN (-) 12 A/C	SQDN (-) 9 A/C	DET 3 A/C
1.3.3.3.2 (ALZ)	MSP, TPC	MSP	N/A	2 x MSP	8	6	4	2
1.3.4.1 (AT)	N/A	N/A	N/A	2 x MSP	21	16	11	5
1.3.4.2 (AAR)	MSP, TPC	MSP	N/A	2 x AAR CSP	15	12	9	3
1.3.4.2.1 (ADGR)	MSP, TPC	MSP	N/A	3 x MSP*	8	6	4	2
4.3.4 (AD)	MSP, TPC	MSP	N/A	3 x MSP	5	4	3	1
CORE PLUS								
MET	PILOT	CO-PILOT	FCO	CREWMASTER	SQD	DET 12	DET 9	DET 3
1.3.4.3 (BI)	MSP, TPC	MSP	N/A	3 x MSP**	5	4	3	1
3.2.3.1.1 (CAS)	MSP, TPC, FCO	MSP	MSP	MSP	4	4	2	2
2.2.5.2.2 (MIR)	MSP, TPC, FCO	MSP	MSP	N/A	4	4	2	2
COMBAT LEADERSHIP								
DESIGNATION			15 Aircraft	12 Aircraft	9 Aircraft	3 Aircraft		
Transport Plane Commander (TPC)			23	18	13	5		
Section Leader (SL)			10	8	6	2		
Division Leader (DL)			5	4	3	1		
TAC RAC			7	6	5	1		
STRAT RAC			4	3	2	1		
QASO (Crewmaster Only)			5	4	3	1		
RS (Crewmaster Only)			8	6	4	2		

\* One Crewmaster shall be a Refueling Supervisor.

\*\* One Crewmaster shall be a Quality Assurance Safety Officer.

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1.11 CORE MODEL TRAINING STANDARD (CMTS). The CMTS is the optimum training standard reflecting the number of aircrews trained to CSP/MSP, per crew position to execute each stage of flight as detailed below. The CMTS Matrix depicts the training goal and optimum depth of training desired for each squadron as they develop their squadron training plan. It is not utilized for readiness reporting (DRRS-MC) purposes. At a minimum, the CMTS shall enable a squadron to form CMMR crews for Mission Skills (and Mission Plus Skills when required). For single-seat aircraft, the number of aircrews trained to MSP standards in the CMTS Matrix and CMMR may be the same.

1.11.1 Tactical Squadron

VMGR KC-130J CMTS MATRIX			
15 A/C squadron / 12 A/C squadron(-) / 9 A/C squadron(-) / 3 A/C detachment			
CORE SKILLS (2000 PHASE)			
SKILL	PILOT	FCO	CREWMASTER
LSF	30/24/18/6	N/A	N/A
NS(H)	30/24/18/6	N/A	30/24/18/6
LRN	30/24/18/6	N/A	30/24/18/6
TN	22/16/10/6	N/A	22/16/10/6
LAT	10/8/6/2	N/A	N/A
AAR	N/A	N/A	30/24/18/6
FORM	22/18/14/4	N/A	N/A
IR TR	30/24/18/6	N/A	30/24/18/6
MISSION SKILLS (3000 PHASE)			
MISSION	PILOT	FCO	CREWMASTER
ALZ	16/12/8/4	N/A	16/12/8/4
AT	N/A	N/A	42/32/22/10
AAR	30/24/18/6	N/A	15/12/9/3
ADGR	16/12/8/4	N/A	24/18/12/6
AD	10/8/6/2	N/A	15/12/9/3
CORE PLUS (4000 PHASE)			
CORE PLUS SKILLS	PILOT	FCO	CREWMASTER
NS(L)	8/6/4/2	N/A	N/A
TN	8/6/4/0	N/A	N/A
RF TR	8/6/4/2	N/A	N/A
DT	6/4/2/2	N/A	6/4/2/2
HH	8/8/4/4	6/6/3/3	12/12/6/6
BAS	8/8/4/4	6/6/3/3	12/12/6/6
AD	6/4/2/2	N/A	6/4/2/2
MISSION PLUS	PILOT	FCO	CREWMASTER
BI	10/8/6/2	N/A	20/16/12/4
CAS	8/8/4/4	6/6/3/3	12/12/6/6
MIR	8/8/4/4	6/6/3/3	N/A

Note<sup>1</sup>: In the Core Plus METS the first number represents the number of individuals the squadron is expected to train at all times in order to retain a cadre of capability within the squadron. The second number represents the number of MET capable individuals the squadron must train if that MET becomes required within an Assigned Mission/Directed Mission Set.

1.12 INSTRUCTOR DESIGNATIONS (5000 Phase)

VMGR KC-130J CMTS INSTRUCTOR MATRIX										
INSTRUCTOR REQUIREMENTS (5000 PHASE)										
DESIGNATION	PILOT					CREWMASTER*				
	AIRCRAFT				FRS	AIRCRAFT				FRS
	15	12	9	3		15	12	9	3	
ANI	5	4	3	1	4	7	6	4	2	2
BIP	10	8	5	2	N/A	N/A	N/A	N/A	N/A	N/A
FRSI	3	3	0	0	5	N/A	N/A	N/A	N/A	N/A
NSI	5	4	3	1	2	5	4	3	1	2
LATI	5	4	3	1	2	N/A	N/A	N/A	N/A	N/A
NSLATI	3	2	1	1	0	N/A	N/A	N/A	N/A	N/A
DTI	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
FLSE	3	2	1	1	2	N/A	N/A	N/A	N/A	N/A
WTI	3	2	1	1	0	5	4	3	1	0
CPLI	N/A	N/A	N/A	N/A	N/A	12	10	8	1	6
MI	N/A	N/A	N/A	N/A	N/A	12	10	8	1	6
SI	N/A	N/A	N/A	N/A	N/A	12	10	8	1	6
ADI	3	2	1	1	N/A	7	6	5	1	6
FCO-I	2	2	1	1	0	N/A	N/A	N/A	N/A	N/A

\*CM - During the transition to CM (1) CMCC ANI and (1) CMLM ANI is equivalent to (1) CM ANI [Ex. (9) CMCC ANI's and (7) CMLM ANI's would equal (7) CM ANI's].

1.13 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD) (6000 Phase)

1.13.1 Tactical squadron

VMGR CMMR				
QUALIFICATIONS (6000 PHASE)				
QUALIFICATIONS	15 Aircraft	12 Aircraft	9 Aircraft	3 Aircraft
FCF (Pilot)	5	4	3	1
FCF (Crewmaster)	5	4	3	1

1.13.2 FRS

VMGR FRS	
FLIGHT LEADERSHIP (6000 PHASE)	
DESIGNATIONS	PILOTS
TPC	5
SEC LDR	3
DIV LDR	2

1.14 ORDNANCE REQUIREMENTS. See KC-130J CCRM (Ordnance Module) for specific squadron requirements.

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**VMGR**

Core

MCT 1.3.3.3.2 Conduct Aviation Operations From Expeditionary Shore-Based Sites  
MCT 1.3.4.1 Conduct Combat Assault Transport  
MCT 1.3.4.2 Conduct Air-to-Air Refueling  
MCT 1.3.4.2.1 Provide Aviation-Delivered Ground Refueling  
MCT 4.3.4 Conduct Air Delivery

Core Plus

MCT 1.3.4.3 Provide Aviation Delivered Battlefield Illumination  
MCT 3.2.3.1.1 Conduct Close Air Support  
MCT 2.2.5.2.2 Conduct Multi-sensor Imagery Reconnaissance

**MCT 1.3.3.3.2      Conduct Aviation Operations From Expeditionary Shore-Based Sites**

**Conditions:**

**C 2.5.4.1.3 Runway Length:**

Long (> 8200 ft); Commercial (5000 to 8200 ft); Short (3500 to 5000 ft); Very short (< 3500 ft).

**C 1.3.2.1 Light**

Light available to illuminate objects from natural or manmade sources.

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

**C 1.3.1.3.1 Air Temperature**

Atmospheric temperature at ground level (degrees Fahrenheit).

Descriptors: Hot (> 85 F); Temperate (40 to 85 F); Cold (10 to 39 F); Very cold (< 10 F).

**C 2.7.2 Air Superiority**

The extent to which operations in the air, over sea and/or, over land can be conducted with acceptable losses due to hostile air forces and air defense systems action. Descriptors: Full (Air Supremacy); General; Local.

**C 2.5.4.1.4 Runway Weight Bearing Capacity**

Descriptors: Low (C-130).

**Standards:**

**KC-130J [15 A/C squadron/12 A/C squadron(-)/9 A/C squadron(-)/3 A/C Det]**

**Personnel**

- 22/17/12/4 aircrews formed (KC-130J)
- 90% of squadron T/O personnel MOS qualified and deployable
  - o And Level 2 (L2) IAW ALERTS.

**Equipment**

- 70% Full Mission Capable (FMC) aircraft of PAA
  - o 10/8/4/2 aircraft (KC-130J)
- OR
- Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.
- Operational support equipment fully supports MCT

**Training**

- 8/6/4/2 Crews ALZ Mission Skill proficient IAW T&R requirements

**Output Standards**

- 13/10/6/3 sorties daily sustained during contingency/combat operations



MCT 1.3.4.1      Conduct Combat Assault Transport

Conditions:

**C 2.5.4.1.3 Runway Length:**

Long (> 8200 ft); Commercial (5000 to 8200 ft); Short (3500 to 5000 ft); Very short (< 3500 ft).

**C 1.3.2.1 Light**

Light available to illuminate objects from natural or manmade sources.

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

**C.1.3.2.3 Aviation Meteorological Conditions**

Current weather/flight conditions affecting flight rules next 24 hours.

Descriptors: VMC (Conditions that permit flight using external cues and a distinguishable horizon.)

**C 2.5.4.1.4 Runway Weight Bearing Capacity** Low (C-130).

**C 1.3.1.3.3 Surface Wind Velocity**

The speed at which air moves through the atmosphere at an altitude up to 500 feet.

Descriptors: Light (< 7 mph); Moderate (7 to 24 mph); Strong (25 to 46 mph)

KTS -

**C 1.1.1.2 Terrain Elevation**

Height of immediate terrain in reference to sea level.

Descriptors: Very high (> 10,000 ft); High (6,000 to 10,000 ft); Moderately high (3,000 to 6,000 ft); Moderately low (1,000 to 3,000 ft); Low (500 to 1,000 ft); Very low (< 500 ft).

**C 2.7.2 Air Superiority**

The extent to which operations in the air, over sea and/or, over land can be conducted with acceptable losses due to hostile air forces and air defense systems action. Descriptors: Full (Air Supremacy); General; Local.

Standards:

KC-130J [15 A/C squadron/12 A/C squadron(-)/9 A/C squadron(-)/3 A/C Det]

Personnel

- 22/17/12/4 aircrews formed (KC-130J)
- 90% of squadron T/O personnel MOS qualified and deployable
  - And Level 2 (L2) IAW ALERTS.

Equipment

- 70% Full Mission Capable (FMC) aircraft of PAA
  - 10/8/4/2 aircraft (KC-130J)

OR

Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.

- Operational support equipment fully supports MCT

Training

- 21/16/11/5 Crews AT Mission Skill proficient IAW T&R requirements

Output Standards

- 20/16/12/4 sorties daily sustained during contingency/combat operations

**MCT 1.3.4.2**            **Conduct Air-to-Air Refueling**

**Conditions:**

**C 1.3.2.1 Light**

Light available to illuminate objects from natural or manmade sources.  
Descriptors: Bright (sunny day); Day (overcast day); low (dusk, dawn, moonlit, streetlight lit); Negligible (overcast night)

**C 2.7.2 Air Superiority**

The extent to which operations in the air, over sea and/or, over land can be conducted with acceptable losses due to hostile air forces and air defense systems action. Descriptors: Full (Air Supremacy); General; Local.

**Standards:**

KC-130J [15 A/C squadron/12 A/C squadron(-)/9 A/C squadron(-)/3 A/C Det]

**Personnel**

- 22/17/12/4 aircrews formed (KC-130J)
- 90% of squadron T/O personnel MOS qualified and deployable
  - And Level 2 (L2) IAW ALERTS.

**Equipment**

- 70% Full Mission Capable (FMC) aircraft of PAA
  - 10/8/4/2 aircraft (KC-130J)
- OR
- Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.
- Operational support equipment fully supports MCT

**Training**

- 15/12/9/3 Crews AAR Mission Skill proficient IAW T&R requirements

**Output Standards**

- 20/16/12/4 sorties daily sustained during contingency/combat operations

MCT 1.3.4.2.1      Provide Aviation Delivered Ground Refueling

Conditions:

**C 2.5.4.1.3 Runway Length:**

Long (> 8200 ft); Commercial (5000 to 8200 ft); Short (3500 to 5000 ft)

**C 1.3.2.1 Light**

Light available to illuminate objects from natural or manmade sources.  
Descriptors: Bright (sunny day); Day (overcast day); low (dusk, dawn, moonlit, streetlight lit); Negligible (overcast night)

**C 2.7.2 Air Superiority**

The extent to which operations in the air, over sea and/or, over land can be conducted with acceptable losses due to hostile air forces and air defense systems action. Descriptors: Full (Air Supremacy); General; Local.

**C 2.5.4.1.4 Runway Weight Bearing Capacity:** Low (C-130).

Standards:

KC-130J [15 A/C squadron/12 A/C squadron(-)/9 A/C squadron(-)/3 A/C Det]

Personnel

- 22/17/12/4 aircrews formed (KC-130J)
- 90% of squadron T/O personnel MOS qualified and deployable
  - And Level 2 (L2) IAW ALERTS.

Equipment

- 70% Full Mission Capable (FMC) aircraft of PAA
  - 10/8/4/2 aircraft (KC-130J)
- OR
- Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.
- Operational support equipment fully supports MCT

Training

- 8/6/4/2 Crews ADGR Mission Core Skill proficient IAW T&R requirements

Output Standards

- Provide (2) refueling points capable of transferring 90 GPM IFR Drogue and Probe, One IFR Pump

**MCT 4.3.4**                    **Conduct Air Delivery**

**Conditions:**

**C 1.3.2.1 Light**

Light available to illuminate objects from natural or manmade sources.  
Descriptors: Bright (sunny day); Day (overcast day); low (dusk, dawn, moonlit, streetlight lit); Negligible (overcast night)

**C 1.3.1.3.3 Surface Wind Velocity**

The speed at which air moves through the atmosphere at an altitude up to 500 feet.  
Descriptors: Light (< 7 mph); Moderate (7 to 24 mph); Strong (25 to 46 mph)  
KTS -

**C 2.7.2 Air Superiority**

The extent to which operations in the air, over sea and/or, over land can be conducted with acceptable losses due to hostile air forces and air defense systems action. Descriptors: Full (Air Supremacy); General; Local.

**Standards:**

KC-130J [15 A/C squadron/12 A/C squadron(-)/9 A/C squadron(-)/3 A/C Det]

**Personnel**

- 22/17/12/4 aircrews formed (KC-130J)
- 90% of squadron T/O personnel MOS qualified and deployable
  - o And Level 2 (L2) IAW ALERTS

**Equipment**

- 70% Full Mission Capable (FMC) aircraft of PAA
    - o 10/8/4/2 aircraft (KC-130J)
- OR
- Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.
- Operational support equipment fully supports MCT

**Training**

- 5/4/3/1 Crews AD Mission Skill proficient IAW T&R requirements

**Output Standards**

- 9/6/5/1 sorties daily sustained during contingency/combat operations

Core Plus

MCT 1.3.4.3      Provide Aviation Delivered Battlefield Illumination

Conditions:

**C 2.7.2 Air Superiority**

The extent to which operations in the air, over sea and/or, over land can be conducted with acceptable losses due to hostile air forces and air defense systems action. Descriptors: Full (Air Supremacy); General; Local.

Standards:

KC-130J [15 A/C squadron/12 A/C squadron(-)/9 A/C squadron(-)/3 A/C Det]

Personnel

- 22/17/12/4 aircrews formed (KC-130J)
- 90% of squadron T/O personnel MOS qualified and deployable
  - Ahd Level 2 (L2) IAW ALERTS.

Equipment

- 70% Full Mission Capable (FMC) aircraft of PAA
  - 10/8/4/2 aircraft (KC-130J)

OR

Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.

- Operational support equipment fully supports MCT

Training

- 5/4/3/1 Crews BI Core Plus proficient IAW T&R requirements

Output Standards

- 8/6/5/1 sorties daily sustained during contingency/combat operations

MCT 3.2.3.1.1 Conduct Close Air Support (CAS)

Conditions:

**C 2.7.2 Air Superiority**

The extent to which operations in the air, over sea and/or, over land can be conducted with acceptable losses due to hostile air forces and air defense systems action. Descriptors: Full (Air Supremacy); General; Local.

Standards:

KC-130J [15 A/C squadron/12 A/C squadron(-)/9 A/C squadron(-)/3 A/C Det]

Personnel

- 22/17/12/4 aircrews formed (KC-130J)
- 90% of squadron T/O personnel MOS qualified and deployable
  - o And Level 2 (L2) IAW ALERTS

Equipment

- 70% Full Mission Capable (FMC) aircraft of PAA
  - o 10/8/4/2 aircraft (KC-130J)

OR

Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.

- Operational support equipment fully supports MCT

Training

- 4/4/2/2 Crews CAS Core Plus proficient IAW T&R requirements

Output Standards

- 6/6/3/3 sortie daily sustained during contingency/combat operations

MCT 2.2.5.2.2 Conduct Multi-sensor Imagery Reconnaissance

Conditions:

**C.1.3.1.3.11 Ceiling**

Height of lowest cloud cover above sea level.

Descriptors: Medium (3,000 to 10,000 feet); High (>10,000 feet)

**C 1.3.2 Visibility**

Maximum distance to see an object given the moisture and particulate matter (dust, salt, ash) suspended in the atmosphere.

Descriptors: Moderate (1 to 3 NM); Good (3 to 10 NM); High (10 to 20 NM); Unlimited (>20 NM)

**C 2.7.2 Air Superiority**

The extent to which operations in the air, over sea and/or, over land can be conducted with acceptable losses due to hostile air forces and air defense systems action. Descriptors: Full (Air Supremacy); General; Local.

Standards:

KC-130J [15 A/C squadron/12 A/C squadron(-)/9 A/C squadron(-)/3 A/C Det]

Personnel

- 22/17/12/4 aircrews formed (KC-130J)
- 90% of squadron T/O personnel MOS qualified and deployable
  - And Level 2 (L2) IAW ALERTS.

Equipment

- 70% Full Mission Capable (FMC) aircraft of PAA
  - 10/8/4/2 aircraft (KC-130J)

OR

Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.

- Operational support equipment fully supports MCT

Training

- 4/4/2/2 Crews MIR Core Plus proficient IAW T&R requirements

Output Standards

- 6/6/3/3 sortie daily sustained during contingency/combat operations





CHAPTER 2

KC-130J PILOT (MOS 7556/7557)

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

**\*Note\***

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

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

CORE SKILL (2000 Phase) ATTAIN AND MAINTAIN PROFICIENCY TABLE							
ATTAIN PROFICIENCY				MAINTAIN PROFICIENCY			
BASIC POI		SERIES CONVERSION POI		REFRESHER POI		MAINTAIN POI	
SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #
LSF	2100	LSF	2100	LSF	2100		
NS (H)	2150	NS (H)	2150	NS (H)	2150	NS (H)	
	2151		2151		2151		2151
LRN	2160	LRN	2160	LRN		LRN	
	2161		2161				
	2162		2162		2162		2162
TN	2200	TN	2200	TN	2200	TN	
	2201		2201		2201		
	2250		2250		2250		
	2251		2251		2251		2251
LAT	2260	LAT	2260	LAT		LAT	
	2261		2261		2261		2261
FORM	2300	FORM	2300	FORM	2300	FORM	
	2301		2301		2301		2301
	2350		2350		2350		2350
IR TR	2400	IR TR	2400	IR TR	2400	IR TR	2400

**\*NOTE\***

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

2.3 INDIVIDUAL MISSION SKILL PROFICIENCY REQUIREMENTS

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

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

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

2.3.4 Once proficiency has been attained by Mission Skill (by any POI assignment) then the individual maintains proficiency by executing those

events noted in the maintain table and in the Maintain POI column of the Attain and Maintain Table. An individual maintains proficiency by individual Mission Skill.

**\*Note\***

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

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

MISSION SKILL (3000 Phase) ATTAIN AND MAINTAIN PROFICIENCY TABLE							
ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY	
BASIC POI		SERIES CONVERSION POI		REFRESHER POI		MAINTAIN POI	
SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #
ALZ	3500	ALZ	3500	ALZ	3500	ALZ	
	3501		3501		3501		
	3502		3502		3502		
	3503		3503		3503		3503
	3550		3550		3550		3550
AAR	3600	AAR	3600	AAR	3600	AAR	
	3601		3601		3601		
	3602		3602		3602		3602
	3650		3650		3650		3650
ADGR	3660	ADGR		ADGR	3660	ADGR	3660
AD	3700	AD	3700	AD	3700	AD	
	3701		3701		3701		
	3702		3702		3702		
	3703		3703		3703		3703
	3704		3704		3704		
	3705		3705		3705		3705

**\*NOTE\***

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

2.3.6 INDIVIDUAL CORE PLUS SKILL PROFICIENCY REQUIREMENTS

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

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

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

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

Attain and Maintain Table. An individual maintains proficiency by individual Core Plus Skill.

**\*Note\***

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

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

PILOT CORE PLUS (4000 Phase) ATTAIN AND MAINTAIN PROFICIENCY TABLE							
ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY	
BASIC POI		SERIES CONVERSION POI		REFRESHER POI		MAINTAIN POI	
SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #
TN	4200	TN	4200	TN	4200	TN	4200
NS (L)	4250	NS (L)	4250	NS (L)	4250	NS (L)	4251
	4251		4251		4251		
RF TR	4400	RF TR	4400	RF TR	4400	RF TR	4401
	4401		4401		4401		
DT	4410	DT	4410	DT	4410	DT	4411
	4411		4411		4411		
AD	4700	AD	4700	AD	4700	AD	4700
	4701		4701		4701		4701
	4702		4702		4702		4702
BI	4710	BI	4710	BI	4710	BI	4710
HH	4800	HH	4800	HH		HH	
	4801		4801				
	4802		4802				
	4803		4803				
BAS	4810	BAS	4810	BAS		BAS	
	4811		4811				
	4812		4812				
MIR	4820	MIR	4820	MIR	4820	MIR	4820
CAS	4830	CAS	4830	CAS	4830	CAS	4830
	4840		4840				

**\*NOTE\***

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

2.3.12 FCO Attain and Maintain table.

FCO CORE PLUS (4000 Phase) ATTAIN AND MAINTAIN PROFICIENCY TABLE							
ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY	
BASIC POI		SERIES CONVERSION POI		REFRESHER POI		MAINTAIN POI	
SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #
HH	4800	HH	4800	HH		HH	
	4801		4801				
	4802		4802				
	4803		4803				
BAS	4810	BAS	4810	BAS		BAS	
	4811		4811				
	4812		4812				
MIR	4820	MIR	4820	MIR	4820	MIR	4820
CAS	4830	CAS	4830	CAS	4830	CAS	4830
	4840		4840		4840		

2.4 REQUIREMENTS, QUALIFICATION AND DESIGNATION TABLES. The tables below delineate T&R events required to be completed to attain proficiency, and initial qualifications and designations. In addition to event requirements, all required stage lectures, briefs, squadron training, prerequisites, and other criteria shall be completed prior to completing final events. Qualification and designation letters shall be signed by the commanding officer and placed in the individual's NATOPS jacket. Loss of proficiency in all qualification events causes the associated qualification to be lost. Regaining a qualification requires completing all R-coded syllabus events associated with that qualification.

KC-130J PILOT INDIVIDUAL QUALIFICATION REQUIREMENTS	
Qualification	Event Requirements
NSQ(H)	NS(H)-2150, NS(H)-2151, TN-2250, TN-2251, 10 hours total NVD time (minimum 5 hours LLL).
NSQ(L)	NS(L)-4250, NS(L)-4251, NSQ(H), and LATQ.
LATQ	LAT-2260 and, LAT-2261 and TR-2400.
DTQ	TR-2400, DT-4410, DT-4411, and LATQ.
HH	HH-4802, HH-4803, BAS-4810, BAS-4811, MIR-4820, CAS-4830, CAS-4840
FCO	HH-4800, HH4801, HH-4802, HH-4803, BAS-4810, BAS-4811, BAS-4812, MIR-4820, CAS-4830, CAS-4840, NTPS-6101

KC-130J PILOT INDIVIDUAL DESIGNATION REQUIREMENTS	
Designation	Event Requirements
T3P	NTPS-6010, NTPS-6011, NTPS-6012, NTPS-6110 and Core Skill Introduction Phase Complete.
T2P	NTPS-6010, NTPS-6011, NTPS-6012, NTPS-6013, NTPS-6111, ACPM-82XX, 400 total hours, 2000 Core Skill Phase complete (deferred at CO's discretion) and command specific directives.
TPC	NTPS-6010, NTPS-6011, NTPS-6012, NTPS-6112 through NTPS-6118, Core Skill and Mission Skill Phases complete (deferred at CO's discretion), ACPM 83XX Phase Complete, 700 total hours, and command specific directives.
Standard Inst	INST-6030, INST-6031, INST-6130, and IAW OPNAVINST 3710.7.
Special Inst	INST-6030, INST-6031, INST-6131, and IAW OPNAVINST 3710.7.
Instrument Flight Board Member	INST-6130, and either ANI, NI, GNE or NE (administratively entered into M-SHARP).
BIP	TN-2200, TN-2201, AAR-3600, AAR-3601, AAR-3602, AAR-3650, ADGR-3660, NSQ(H), LATQ, LSF-2101, NTPS-6101 and 100 TPC hours in series.
PARTIAL FCP	FCP-6005, FCP-6105, IAW OPNAVINST 4790 and command specific directives.
FCP	FCP-6106, with 150 TPC hrs in series, a minimum 3 FCFs (2 "A" Profiles), IAW OPNAVINST 4790 and command specific directives.

ANI	NI-5140 and NI-5141. APRB recommendation, 100 TPC hours.
NI	NI-5140 and NI-5141. Certification by the Group NATOPS Evaluator or Model Manger. APRB recommendation, 100 TPC hours.
GNE	NI-5140 and NI-5141. GNE is designated by the group commanding officer. APRB recommendation, 100 TPC hours.
FRSI	NI-5141, FRSI-5145, FRSI-5146, and FRSI-5147.
NSI	BIP, NS(H)-5150, NS(H)-5151, NS(H)-5152 and 100 hours total NVD time (minimum 50 hours LLL). Refer to MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the IUT will be designated a NSI by the commanding officer.
LATI	TR-2400, TR-4400, LAT-5210, LAT-5211, LAT-5212, BIP, and LATQ. Refer to MAWTS-1 KC-130J Course Catalog.
NSLATI	NSI, WTI, NS(L)-5250, and NS(L)-5251. Refer to MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the IUT will be designated a NSLATI by the commanding officer.
SEC LEAD	Mission Skill Phase complete, NSQ(H), 100 TPC hours, Minimum 2 flights as TPC/Wingman, SL-6300, SL-6301, and Section Lead Academics complete.
DIV LEAD	200 TPC hours, 2 flights as a designated SL, DL-6303, DL-6304, and Division Lead Academics complete.
TACTICAL RAC	RAC-6310, RAC-6311, TACRAC Academics complete
STRATEGIC RAC	Division Lead, TACRAC, RAC-6313, RAC-6314, and STRATRAC Academics complete.
FLSE	Division Lead, FLSE-5320, and a designation letter signed by the group commanding officer. FLSE requires certification by the FLSE program coordinator or FLSE model manager.
DTI	LATQ, DTQ, DT-5410, DT-5411, and DT-5412. Refer to MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the IUT will be designated a DTI by the commanding officer.
ALZI	ALZ-3500, ALZ-3501, ALZ-3502, ALZ-3503, ALZ-3550, ALZ-5500, BIP, and either ANI or NSI.
ADI	BIP, AD-3702, AD-3703, AD-3704, AD-3705, BI-4710, AD-5700, AD-5701 and either AD-4700, AD-4701, or AD-4702.
HHI	Refer to MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the IUT will be designated a WTI by the commanding officer.
FCOI	Refer to MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the IUT will be designated a WTI by the commanding officer.
WTI	Refer to MAWTS-1 WTI Course Catalog. Upon certification by MAWTS-1, the IUT will be designated a WTI by the CO.

2.5 PROGRAMS OF INSTRUCTION (POI)

2.5.1 Basic/Transition (B/T) POI. The Transition POI mirrors the Basic POI.

WEEKS	COURSE	PERFORMING ACTIVITY
1-18	Core Skill Introduction Training	USMC KC-130J ATU
19	Core Skill Introduction Training	Tactical Squadron
20-81	Core Skill Training	Tactical Squadron
82-156	Mission Skill Training	Tactical Squadron
157-181	Core Plus Skill Training	Tactical Squadron



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2.5.2 Series Conversion (SC) POI

WEEKS	COURSE	PERFORMING ACTIVITY
1-16	Core Skill Introduction Training	USMC KC-130J ATU
17	Core Skill Introduction Training	Tactical Squadron
18-57	Core Skill Training	Tactical Squadron
58-82	Mission Skill Training	Tactical Squadron
83-107	Core Plus Skill Training	Tactical Squadron

2.5.3 Modified Refresher/Refresher (MR/R) POI. The MR POI mirrors the R POI.

WEEKS	COURSE	PERFORMING ACTIVITY
1-3	Core Skill Introduction Training	USMC KC-130J ATU
4	Core Skill Introduction Training	Tactical Squadron
5-34	Core Skill Training	Tactical Squadron
35-39	Mission Skill Training	Tactical Squadron
40-50	Core Plus Skill Training	Tactical Squadron

2.5.4 Fleet Replacement Squadron and NATOPS/Assistant NATOPS POI

WEEKS	COURSE	PERFORMING ACTIVITY
1	NATOPS/Assistant NATOPS Instructor	Tactical Squadron
1	Fleet Replacement Squadron Instructor	Tactical Squadron

2.5.5 Basic Instructor Pilot and Stage Instructor POI

WEEKS	COURSE	PERFORMING ACTIVITY
2	Basic Instructor Pilot	Tactical Squadron
1	Assault Landing Zone Stage	Tactical Squadron
1	Air Delivery Stage	Tactical Squadron

2.5.6 MAWTS-1 Level Instructor POI

WEEKS	COURSE	PERFORMING ACTIVITY
1	Night Systems Instructor	MAWTS-1
1	Low Altitude Tactics Instructor	Tactical Squadron
1	Night Systems LAT Instructor	MAWTS-1
1	Defensive Tactics Instructor	MAWTS-1
1	Harvest HAWK Instructor	MAWTS-1
1	Fire Control Officer Instructor	MAWTS-1
7	Weapons and Tactics Instructor	MAWTS-1

2.5.7 Flight Leadership POI

WEEKS	COURSE	PERFORMING ACTIVITY
1	Section Leader	Tactical Squadron
1	Division Leader	Tactical Squadron
1	Tactical Refueling Area Commander	Tactical Squadron
1	Strategic Refueling Area Commander	Tactical Squadron
1	Flight Leadership Standardization Evaluator	Group Designated

2.6 ACADEMIC TRAINING

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

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

COURSE	ACTIVITY
Survival, Evasion, Resistance, and Escape (SERE) Course	NAS Brunswick ME NAS North Island CA
NITE lab	Any Approved Course
Weapons and Tactics Instructor (WTI)	MAWTS-1
Environmental Survival Courses	Regional/Seasonal Survival Schools
Advanced Airlift Tactics Training Course (AATTC)	AATTC, St. Joseph MO
Combat Aircrew Training	MAC CATS, Nellis AFB
Pilot Instructor Course (PIN3)	USAF JMATS, Little Rock AFB
Basic Instructor Training Course (BITC)	Local MATSS

2.7 CORE SKILL INTRODUCTION PHASE (1000)

2.7.1 General. Upon completion of this phase of training, the pilot will be a NATOPS qualified pilot, MOS designated 7556. The pilot will be capable of basic aircraft operation to include instrument flight, normal and emergency procedures, Crew Resource Management, and computer-based mission planning. This phase also introduces tactical flight operations. Any code not required for a particular Program of Instruction (POI) (SC,R) shall not be considered a prerequisite for progression to the next syllabus event. Pilots will brief for 1.5 hours prior to all CPT and FAM simulator events and debrief for .5 hours following. Pilots will brief for 2.5 hours prior to all other simulator events and debrief for .5 hours following.

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

Par No.	Stage Name
2.7.2	Cockpit Procedure Trainer (CPT)
2.7.3	Familiarization (FAM)
2.7.4	Night Systems High [NS(H)]
2.7.5	Long Range Navigation (LRN)
2.7.6	Tactical Navigation (TN)
2.7.7	Formation (FORM)
2.7.8	Threat Reaction (TR)
2.7.9	Assault Landing Zone (ALZ)
2.7.10	Air to Air Refueling (AAR)
2.7.11	Air Delivery (AD)
2.7.12	Familiarization (FCRM)

2.7.1.2 Crew Requirements. Events conducted in the simulator require either a Fleet Replacement Squadron Instructor (FRSI) or Contract Instructor (CI) with the required designations. Events that are conducted in the aircraft shall be with an FRSI with the required designations.

The KC-130J Model Manager shall be responsible for Core Skill Introduction Phase standardization. Tactical Squadrons shall maintain qualified FRSIs in order to conduct 1000 phase training in accordance with NAVMC 3500.14.

KC-130J CIs represent varying aviation backgrounds and experience levels and shall be qualified in accordance with section 212 of this Manual prior to administering the Core Skill Introduction syllabus.

Instructors shall be responsible for mission briefs. Students may conduct a mission brief only after observing the instructor brief a mission in that specific stage.

#### 2.7.2 COCKPIT PROCEDURES TRAINING (CPT)

2.7.2.1 Purpose. To familiarize the pilot with the cockpit and aircraft systems; NATOPS normal flows, procedures, and checklists; and emergency procedures and checklists.

2.7.2.2 General. In the event of WST nonavailability, events should be conducted in the aircraft.

Academic/Ground Training. ATU approved ground training curriculum.

CPT-1100    2.0    \*    B, SC    D    S    1 WST

Goal. Introduce the pilot to normal cockpit checklist procedures and the aircraft lighting and oxygen system.

Requirement. The flight will introduce the KC-130J cockpit environment. The instructor will discuss and introduce aircraft seats, parking brakes, lighting, oxygen system, and normal checklist procedures.

#### Performance Standards

Demonstrate a basic level of familiarity with the general cockpit environment.



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Demonstrate the ability to perform basic cockpit flows and checklist procedures with assistance from the instructor and reference to the NFM.

Prerequisite. CPT-1101 and ATU approved ground training curriculum.

References. NFM and CNI Manual.

CPT-1103      2.0      \*      B,SC      D      S      1 WST

Goal. Introduce the pilot to AMU and HDD operations.

Requirement. The flight will introduce Avionics Management Unit (AMU) and Heads Down Display (HDD) operations. The instructor will discuss and introduce AMU, HDD, aircraft soft panels, and designated avionics systems. The student will practice normal checklist procedures and CNI-MS operations. Review: CNBP operations.

Performance Standards

Demonstrate the ability to follow the instructor through an introduction to the AMU and HDDs design and operations.

Identify basic facts, terms and procedures associated with the AMU and HDDs.

Demonstrate the ability to perform basic cockpit flows and checklist procedures with assistance from the instructor and reference to the NFM.

Prerequisite. CPT-1102 and ATU approved ground training curriculum.

References. NFM and CNI Manual.

CPT-1104      2.0      \*      B,SC      D      S      1 WST

Goal. Introduce the pilot to HUD operations.

Requirement. The flight will introduce Heads Up Display (HUD) operations. The instructor will discuss and introduce HUDs. The student will practice normal checklist procedures and CNI-MS operations. Review Items: AMU, HDD, aircraft soft panels, and designated avionics systems.

Performance Standards

Demonstrate the ability to follow the instructor through an introduction to HUD operations and identify associated basic facts, terms and procedures.

Demonstrate the ability to perform basic cockpit flows and checklist procedures with assistance from the instructor and reference to the NFM.

Prerequisite. CPT-1103 and ATU approved ground training curriculum.

References. NFM and CNI Manual.

CPT-1105    2.0    \*        B,SC            D                    S/A    1 WST/KC-130J

Goal. Introduce flight plan entry, monitoring, and modification.

Requirement. The flight will emphasize flight route entry, monitoring, and modification via the CNI-MS. The instructor will discuss and introduce CNI-MS flight plan operations including airspace/airways navigation and holding. The student will practice normal checklist procedures. Review Item: HUD.

Performance Standards

Demonstrate the ability to follow the instructor through an introduction to flight plan entry, monitoring, and modification procedures.

Identify basic facts, terms and procedures associated with CNI-MU flight plan programming and manipulation.

Demonstrate the ability to complete basic cockpit flows and checklist procedures with limited instructor intervention and limited reference to the NFM.

Prerequisite. CPT-1104 and ATU approved ground training curriculum.

References. NFM and CNI Manual.

CPT-1106    2.0    \*        B,SC            D                    S        1 WST

Goal. Introduce the pilot to additional instrument flight functions and CNI-MS recovery procedures.

Requirement. The flight will emphasize CNI-MS arrival procedures. The instructor will discuss and introduce Standard Terminal Arrival (STAR), high altitude penetration programming, and CNI-MS malfunctions. The student will practice normal checklist procedures. Review Item: Overall CNI-MS operations.

Performance Standards

Demonstrate a basic level of familiarity with the procedures for programming STARS into the CNI-MU, CNI-MS recovery procedures, and CNI-SP failure procedures.

Demonstrate the ability to complete basic cockpit flows and checklist procedures with limited instructor intervention and limited reference to the NFM.

Prerequisite. CPT-1105 and ATU approved ground training curriculum.

References. NFM and CNI Manual.

CPT-1107    2.0    \*        B,SC,R          D                    S/A    1 WST/KC-130J

Goal. Practice normal checklist procedures. Introduce emergency checklist procedures. Introduce fuel, APU, engine systems, and related emergencies.

Requirement. The flight will introduce fuel, APU, and engine systems operations. The instructor will discuss and introduce fuel, APU, and engine systems operations, and designated emergency procedures. Auxiliary/External transfer pump failures: A minimum of one auxiliary transfer pump failure and one external transfer pump failure will be performed. The student will practice normal checklist procedures. Review Items: Interior Inspection and Power Up Checks.

Performance Standards

Demonstrate a basic level of familiarity with fuel, APU, and engine system operations and emergency procedures.

Identify basic facts, terms and operating procedures associated with each introduced system.

Complete basic cockpit flows and checklist procedures with occasional instructor intervention and limited reference to the NFM.

Prerequisite. CPT-1106 and ATU approved ground training curriculum.

References. NFM.

CPT-1108    2.0    \*    B,SC,R    D    S/A    1 WST/KC-130J

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Goal. Practice normal and emergency checklist procedures. Introduce propulsion and hydraulic systems and related emergencies.

Requirement. The instructor will discuss and introduce propeller and hydraulic systems operations, designated emergency procedures, and touch and go procedures. The student will practice normal checklist procedures.

Performance Standards

Demonstrate a basic level of familiarity with propulsion and hydraulic system operations and emergency procedures.

Identify basic facts, terms and operating procedures associated with each introduced system.

Demonstrate the ability to complete basic cockpit flows and checklist procedures with occasional instructor intervention and limited reference to the NFM.

Prerequisite. CPT-1107 and ATU approved ground training curriculum.

References. NFM.

CPT-1109    2.0    \*    B,SC,R    D    S/A    1 WST/KC-130J

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Goal. Practice normal and emergency checklist procedures. Introduce electrical system and related emergencies. Introduce BIU backup mode operations.

Requirement. The instructor will discuss and introduce electrical system operations and designated emergency procedures. The student will practice normal checklist and touch and go procedures.

Performance Standards

Demonstrate a basic level of familiarity with electrical system operations, electrical system emergency procedures, and BIU backup mode operations.

Identify basic facts, terms and operating procedures associated with each introduced system.

Demonstrate the ability to complete basic cockpit flows and checklist procedures with occasional instructor intervention and limited reference to the NFM.

Prerequisite. CPT-1108 and ATU approved ground training curriculum.

References. NFM.

CPT-1110    2.0    \*        B, SC, R        D                    S/A    1 WST/KC-130J

Goal. Practice normal and emergency checklist procedures. Introduce bleed air, environmental, and ice protection systems and related emergencies.

Requirement. The instructor will discuss and introduce bleed air, environmental, and ice protection systems operation and designated emergencies. Bleed air emergency procedures: A minimum of one Wing Bleed Air Leak (or not isolated), one Cross-Ship Bleed Air Leak (or not isolated), one Underfloor Bleed Air Leak (or not isolated), and one Nacelle Bleed Air Leak (or not isolated) will be performed. The student will practice normal checklist and touch and go procedures.

Performance Standards

Demonstrate a basic level of familiarity with the bleed air, environmental control, and ice protection systems and related emergencies.

Identify basic facts, terms and procedures associated with each introduced system.

Complete basic cockpit flows and checklist procedures without instructor intervention and with limited reference to the NFM.

Prerequisite. CPT-1109 and ATU approved ground training curriculum.

References. NFM.

CPT-1111    2.0    \*        B, SC, R        D                    S/A    1 WST/KC-130J

Goal. Review normal checklist procedures. Introduce autoflight and flight control systems and related emergencies. Introduce fuel management procedures. Practice selected emergency procedures.



Requirement. The instructor will discuss and introduce flight control and Automatic Flight Control System (AFCS) operations and fuel management procedures. The student will practice touch and go procedures. Review normal checklist procedures.

Performance Standards

Demonstrate a basic level of familiarity with the flight control systems, the Automatic Flight Control System (AFCS), fuel management procedures, and related emergency procedures.

Identify basic facts, terms and operating procedures associated with each introduced system.

Complete all basic cockpit flows and checklist procedures without instructor intervention or reference to the NFM.

Prerequisite. CPT-1110 and ATU approved ground training curriculum.

References. NFM.

2.7.3 FAMILIARIZATION (FAM)

2.7.3.1 Purpose. Introduce the pilot to Familiarization Core Introduction skills. Upon completion of this stage, the pilot will be proficient in the use of cockpit controls, aircraft systems, selected aircraft maneuvers, and execution of NATOPS normal and emergency checklists and procedures.

2.7.3.2 General. Pilots in the Basic, and Series Conversion POIs shall fly a minimum of two simulator flights under night conditions. Students will brief for 1.5 hours prior to all WST events and debrief for .5 hours following.

Academic/Ground Training. ATU approved ground training curriculum. Review NFM, NFM supplements, FAR/AIM, and appropriate aircraft systems CBT/IBT lessons.

FAM-1112      2.0      \*      B, SC      D      S/A      1 WST/KC-130J

Goal. Introduce basic KC-130J visual flight maneuvers. Practice and review selected aircraft maneuvers and emergencies.

Requirement. The flight will introduce basic KC-130J visual flight operations. Instruction will concentrate on basic flight maneuvers to include takeoffs, airwork, visual approaches, and landings. The student will practice touch and go procedures, fuel management procedures, and designated emergencies.

Performance Standards

Demonstrate a basic level of familiarity with the normal takeoff, climbout, stall recovery, unusual attitude recovery, visual approach, full stop landing and touch and go procedures IAW the NFM.

Basic air work standards include +/- 10 KIAS, 200 ft of assigned altitude, 10 degrees of assigned heading, and angle of bank within 10 degrees during steep turns.



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Prerequisite. FAM-1113 and ATU approved ground training curriculum.

References. NFM, OPNAVINST 3710.7, and NA 00-80T-112.

FAM-1115    2.0    \*    B,SC    N\*    S/A    1 WST/KC-130J

Goal. Develop proficiency in KC-130J night visual flight maneuvers. Introduce and practice selected aircraft maneuvers and emergencies.

Requirement. The flight will introduce KC-130J night visual flight operations. The instructor will discuss and introduce designated emergency procedures and the Windshear/Ground Collision Avoidance System (GCAS) PULL UP Alert Recovery Procedure. The student will practice basic flight maneuvers to include crosswind takeoffs and landings, visual approaches, fuel management, and designated emergency procedures. Review Item: Touch and go procedures.

Performance Standards

In addition to the standards established for FAM 1112-1114 above, demonstrate a working knowledge of and perform basic visual flight maneuvers during night VMC conditions.

Demonstrate competence with touch and go procedures IAW the NFM and without instructor intervention.

Prerequisite. FAM-1114 and ATU approved ground training curriculum.

References. NFM, OPNAVINST 3710.7, and NA 00-80T-112.

FAM-1116    2.0    \*    B,SC,R    D    S/A    1 WST/KC-130J

Goal. Develop proficiency in KC-130J instrument flight operations. Introduce selected aircraft maneuvers and emergencies.

Requirement. The flight will introduce KC-130J instrument flight operations. The instructor will discuss and introduce Instrument Flight Rules (IFR) mission planning and basic IFR procedures to include takeoffs, unusual attitudes, holding, instrument/missed approaches, and designated emergencies. Review Items: Landings.

Performance Standards

Refine basic air work standards include +/- 5 KIAS, 100 ft of assigned altitude, 5 degrees of assigned heading.

Demonstrate a working knowledge of and perform an ITO, holding procedures, ILS and NDB approach programming, and perform designated emergencies IAW the NFM.

Demonstrate competence with landing procedures IAW the NFM.

Prerequisite. FAM-1115 and ATU approved ground training curriculum.

References. NFM, OPNAVINST 3710.7, and NA 00-80T-112.

FAM-1117    2.0    \*    B,SC    N\*    S/A    1 WST/KC-130J

Goal. Develop proficiency in KC-130J instrument flight operations.

Introduce and practice selected aircraft maneuvers and emergencies.

Requirement. The flight will emphasize KC-130J instrument flight operations. The instructor will discuss hot weather operating procedures and discuss/introduce Localizer-Back Course (LOC-BC) procedures, Holding in Lieu of Procedure Turn procedures, and Procedure Track procedures. The student will practice basic IFR procedures to include takeoffs, holding, instrument/missed approaches, and designated emergencies. Review Items: Landings.

Performance Standards

In addition to the basic air work standards established in FAM-1116 above, demonstrate a working knowledge of TACAN, VOR, Localizer and Localizer Back Course approach programming.

Comply with published holding procedures, missed approach instructions and designated emergencies IAW the NFM.

Demonstrate competence with 100% and 50% flap landings and touch and go procedures.

Prerequisite. FAM-1116 and ATU approved ground training curriculum.

References. NFM and NA 00-80T-112.

FAM-1118 2.0 \* B D S/A 1 WST/KC-130J

Goal. Develop proficiency in KC-130J instrument flight operations. Introduce and practice selected aircraft maneuvers and emergencies.

Requirement. The flight will emphasize KC-130J instrument flight operations. The instructor will discuss and introduce radar approaches, circling approaches, reverse taxi, and the wing fire emergency procedure. The student will practice basic IFR procedures to include takeoffs, holding, missed approaches, and designated emergencies. Review Items: Landings.

Performance Standards

In addition to the basic air work standards established in FAM-1117 above, demonstrate a working knowledge of reverse taxi operations, PAR, ASR, and circling approach procedures.

Do not descend below minimums during instrument approaches.

Demonstrate competence with 100%, 50%, and flaps up landings and touch and go procedures.

Prerequisite. FAM-1117 and ATU approved ground training curriculum.

References. NFM and NA 00-80T-112.

FAM-1119 2.0 \* B D S/A 1 WST/KC-130J

Goal. Develop proficiency in KC-130J instrument flight operations. Introduce and practice selected aircraft maneuvers and emergencies.

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Requirement. The flight will introduce KC-130J instrument flight en route operations. The instructor will discuss cold weather operating procedures and discuss/introduce Standard Instrument Departures (SIDs), Standard Terminal Arrivals (STARs), Traffic Alert and Collision Avoidance System (TCAS) escape procedures, and designated emergencies. The student will practice basic IFR procedures to include instrument takeoff, instrument approaches, and missed approaches. Review Items: Airspace/Airways navigation and landings.

Performance Standards

In addition to the basic air work standards established in FAM-1118 above, demonstrate a working knowledge of Standard Instrument Departure procedures, TCAS operations, and airspace/airways navigation, and selected emergency procedures.

Do not descend below minimums during instrument approaches.

Demonstrate competence with 100%, 50%, and flaps up landings and touch and go procedures.

Prerequisite. FAM-1118 and ATU approved ground training curriculum.

References. NFM, OPNAVINST 3710.7, NA 00-80T-112, GP, and AIM.

FAM-1120 2.0 \* B,SC,R N\* S/A 1 WST/KC-130J

Goal. Develop proficiency in KC-130J instrument flight operations. Introduce and practice selected aircraft maneuvers and emergencies.

Requirement. The flight will emphasize KC-130J instrument flight en route operations, including an introduction of no-HUD operations. The instructor will discuss and introduce high altitude approach procedures and designated emergencies. The student will practice basic IFR procedures to include takeoff, SID, airspace/airways navigation, CNI-MS programming, and instrument/missed approaches. Review Items: Airspace/Airways navigation and landings.

Performance Standards

In addition to the basic air work standards established in FAM-1119 above, demonstrate a working knowledge of penetration approach procedures and selected emergency procedures.

Demonstrate competence with basic instrument approach procedures, normal 100% and 50% landings and touch and go procedures.

Prerequisite. FAM-1119 and ATU approved ground training curriculum.

References. NFM, GP, and NA 00-80T-112.

FAM-1121 2.0 \* B,SC D S/A 1 WST/KC-130J

Goal. Develop proficiency in KC-130J asymmetric flight operations. Introduce and practice selected aircraft maneuvers and emergencies.

Requirement. The flight will introduce KC-130J asymmetric engine configuration operations. The instructor will discuss and introduce engine failures on takeoff, One Engine Inoperative (OEI)



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Demonstrate CRM IAW the NFM.

Prerequisite. FAM-1122 and ATU approved ground training curriculum.

References. NFM and NA 00-80T-112.

FAM-1124    2.0    \*        B, SC            D            S        1 WST

Goal. Develop proficiency in KC-130J special procedures. Introduce and practice selected aircraft maneuvers and emergencies.

Requirement. The flight will introduce KC-130J flight manual special procedures. The instructor will discuss and introduce emergency APU start, engine start without AC electrical power, Automatic Thrust Control System (ATCS) inoperative takeoff, flaps up takeoff, three-engine takeoff, airstarts, and designated emergency procedures. The student will practice a One Engine Inoperative instrument approach and designated emergency procedures. Review Item: Landings.

Performance Standards

Demonstrate a basic level of competence with special procedures, (ATCS inoperative takeoff, flaps up takeoff, three engine takeoff).

Demonstrate competence in no flap landings and OEI in VFR conditions.

Demonstrate CRM IAW the NFM.

Prerequisite. FAM-1123 and ATU approved ground training curriculum.

References. NFM and PERF.

FAM-1125    2.0    \*        B, SC            D            S        1 WST

Goal. Develop proficiency in KC-130J flight operations. Introduce and practice selected aircraft maneuvers and emergencies.

Requirement. The flight will emphasize KC-130J electrical, flap system, and propulsion emergency procedures. The instructor will discuss designated emergency procedures. The student will practice normal and One Engine Inoperative (OEI) instrument/missed approaches and designated emergency procedures. Review Item: Landings and OEI landings/go-arounds.

Performance Standards

Demonstrate competence in One-Engine-Inoperative Approaches, missed approaches, and landings in low visibility.

Demonstrate No HUD procedures by maintaining altitude within 200 feet, airspeed within 15 KIAS and heading within 15 degrees.

Demonstrate CRM IAW the NFM.

Prerequisite. FAM-1124 and ATU approved ground training curriculum.

References. NFM and NA 00-80T-112.





The student will practice basic IFR procedures assisted by autoflight systems to include SID, airspace/airways navigation, CNI-MS programming, TCAS escape procedures, holding, instrument/missed approaches, and designated emergencies. Review Items: ITO and landings.

Performance Standards

Demonstrate competence in the automation pyramid (level of automation used at any specific time being the most appropriate for the situation).

Demonstrate competence in One-Engine-Inoperative Approaches, missed approaches, and landings in low visibility.

Demonstrate CRM IAW the NFM.

Prerequisite. FAM-1127 and ATU approved ground training curriculum.

References. NFM, CNI, OPNAVINST 3710.7, and NA 00-80T-112.

FAM-1129    2.0    \*        B                    N\*                    S/A    1 WST/KC-130J

Goal. Develop proficiency in KC-130J autoflight operations. Introduce and practice selected aircraft maneuvers and emergencies.

Requirement. The flight will emphasize KC-130J instrument flight en route operations. The instructor will discuss autoflight operations. The student will practice basic IFR procedures assisted by autoflight systems to include SID, airspace/airways navigation, CNI-MS programming, instrument/missed approaches, and designated emergencies. Review Items: ITO and landings.

Performance Standards

Demonstrate competence in the automation pyramid (level of automation used at any specific time being the most appropriate for the situation).

Demonstrate competence in One-Engine-Inoperative Approaches (OEI), missed approaches, and landings in low visibility.

Demonstrate CRM IAW the NFM.

Prerequisite. FAM-1128 and ATU approved ground training curriculum.

References. NFM, OPNAVINST 3710.7, NA 00-80T-112, and AIM.

FAM-1130    2.0    \*        B,SC                    D                    S/A    1 WST/KC-130J

Goal. Review selected aircraft maneuvers and emergencies.

Requirement. The flight will review KC-130J flight operations in preparation for the Aircrew Training Unit (ATU) FAM evaluation. The student will review selected visual/instrument maneuvers and designated emergencies.

Performance Standards

Demonstrate competence with 100%, 50%, and flaps up landings and touch and go procedures.

Demonstrate competence in clearance execution, crew briefing, ITO, emergency return, air work IAW NFM, OEI instrument approaches, and OEI missed approaches.

Demonstrate CRM IAW the NFM.

Prerequisite. FAM-1129 and ATU approved ground training curriculum.

References. NFM and NA 00-80T-112.

FAM-1131 2.0 \* B,SC,R D E S/A 1 WST/KC-130J

Goal. Demonstrate proficiency in selected aircraft maneuvers and emergencies.

Requirement. This flight is the ATU FAM evaluation. The student will demonstrate proficiency in selected visual/instrument maneuvers and designated emergencies.

Performance Standards

Demonstrate competence with 100%, 50%, and flaps up landings and touch and go procedures.

Demonstrate competence in clearance execution, crew briefing, ITO, emergency return, air work IAW NFM, OEI instrument approaches, OEI missed approaches, No HUD approaches, and circling approaches.

Demonstrate CRM IAW the NFM.

Prerequisite. FAM-1130 and ATU approved ground training curriculum.

References. NFM and NA 00-80T-112.

FAM-1132 3.0 \* B,SC D A 1 KC-130J

Goal. Introduce aircraft emergency and miscellaneous equipment.

Requirement. This lesson is designed to provide the ATU student with hands-on exposure to the KC-130J aircraft. The instructor will discuss and introduce aircraft exterior inspection, cargo compartment lighting, emergency and miscellaneous equipment, and emergency exits.

Performance Standard. Demonstrate competence of emergency equipment and knowledge of preflight responsibilities.

Prerequisite. CPT-1111 and ATU approved ground training curriculum.

External Syllabus Support. KC-130J.

References. NFM.

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2.7.4 NIGHT SYSTEMS HIGH (NS(H))

2.7.4.1 Purpose. Introduce the pilot to operating aircraft at night using night vision devices in a non-LAT environment.

Crew Requirements. FRSI NSI or CI NSI.

Academic/Ground Training. Attend NITE lab, MAWTS-1 NVD ASPs and ATU approved ground training curriculum.

NS(H)-1150 2.0 \* B,SC NS S/A 1 WST/KC-130J

Goal. Introduce NVD procedures.

Requirement. The flight will introduce KC-130J Night Systems (NS) operations under High Light Level (HLL) (at or above .0022 LUX) and Low Light Level (LLL) (below .0022 LUX) conditions. The instructor will discuss NVD operations, to include the use of oxygen mask with helmets/NVDs, aircraft lighting considerations, and sandy/dusty conditions operating procedures and introduce designated visual maneuvers with NVDs donned. The effects of shadowing, cultural lighting, and weather on NVD performance will be emphasized. The student will perform a minimum of four touch and go landings and one full stop landing under various lighting conditions.

Performance Standards

Demonstrate competence with 100% and 50% landings and touch and go procedures while on goggles.

Demonstrate competence in goggle/degoggle considerations and procedures, aircraft lighting, differences in HLL and LLL, and SLAP data.

Prerequisite. FAM-1127, NITE Lab, MAWTS-1 NVD ASPs, and ATU approved ground training curriculum.

External Syllabus Support. NITE Lab.

References. NFM, NA 00-80T-112, ANTPP, and NVD Manual.

2.7.5 LONG RANGE NAVIGATION (LRN)

2.7.5.1 Purpose. Introduce the pilot to long range, overwater, International Civil Aviation Organization (ICAO) environment procedures.

Crew Requirements. FRSI or CI LRNI.

Academic/Ground Training. ATU approved ground training curriculum.

LRN-1160 2.0 \* B,SC D S/A 1 WST/KC-130J

Goal. Introduce long range, overwater, ICAO environment procedures.

Requirement. The flight will introduce KC-130J long range, overwater, ICAO environment procedures. The instructor will discuss mission planning and aircraft radios utilized in the overwater, nonradar environment. The instructor will discuss/introduce long range flight

procedures, border clearance procedures, fuel management procedures, ICAO instrument procedures, and designated emergency procedures. The student will practice alternate fuel management procedures. Review Item: Fuel management.

Performance Standards

Demonstrate competence in utilizing OPARS and CFPS in producing overwater flight plan.

Demonstrate competence in fuel planning, master flight plan and master plotting chart.

Demonstrate competence in coast out, waypoint, and coast in procedures.

Prerequisite. FAM-1127 and ATU approved ground training curriculum.

References. NFM, PERF, OPNAVINST 3710.7, NA 00-80T-112, DOD FLIP Area Planning, GP, FIH, Enroute IFR Supplement, FCG.

2.7.6 TACTICAL NAVIGATION (TN)

2.7.6.1 Purpose. Introduce the pilot to Tactical Navigation (TN) operations.

Crew Requirements. FRSI BIP or CI TNI.

Academic/Ground Training. ATU approved ground training curriculum.

TN-1200      2.0      \*      B,SC      D      S/A      1 WST/KC-130J

Goal. Introduce TN procedures.

Requirement. The flight will introduce KC-130J low level flight operations. The instructor will discuss low level mission planning and use of applicable aircraft systems (HUD, GCAS, TAWS, and the Digital Map Display System) in the low level environment. The instructor will discuss and introduce low level flight, time control, and FENCE check procedures. The flight will be conducted on a Military Training Route (MTR) and contain a minimum of six waypoints. Flight altitude will be per the T&R Program Manual non-Low Altitude Tactics (LAT) minimums.

Performance Standards

Demonstrate competence in CFPS generated flight plan route, Falcon view area planning chart and flip charts.

Demonstrate competence in time navigation by arriving at the objective within +/-30 seconds.

Demonstrate CRM IAW the NFM and ANTP.

Prerequisite. FAM-1127 and ATU approved ground training curriculum.

References. NFM, CNI Manual, OPNAVINST 3710.7, ANTP, and Program Manual.

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TN-1201      2.0    \*      B,SC            D                    S/A    1 WST/KC-130J

Goal.    Advanced TN procedures.

Requirement.    The purpose of the flight is to practice KC-130J advanced time control procedures.    The instructor will discuss time control procedures with emphasis on in-flight mission updates.    The student will practice low level flight; time control procedures, including in-flight time over target and threat scenario updates; and FENCE check procedures.    The flight will be conducted on a MTR and contain a minimum of six waypoints.    Flight altitude will be per the T&R Program Manual non- LAT minimums.

Performance Standards

Demonstrate competencies established in TN-1200.

Demonstrate competence in the Digital MAP Display System.

Demonstrate competence in advanced time navigation by arriving at the objective within +/- 15 seconds.

Demonstrate CRM IAW the NFM and ANTP.

Prerequisite.    TN-1200 and ATU approved ground training curriculum.

References.    NFM, CNI Manual, OPNAVINST 3710.7, ANTP, and Program Manual.

TN-1202      2.0    \*      B,SC            D                    S/A    1 WST/KC-130J

Goal.    Introduce tactical maneuvering.

Requirement.    The flight will introduce KC-130J low level tactical maneuvering.    The instructor will discuss low level mission planning pertaining to aircraft limitations, high load factors, and energy management during tactical maneuvering.    Use of the HUD during tactical maneuvering will be discussed.    The instructor will discuss and introduce jinks, bunts, ridgeline and open area crossings, zoom climbs, climbs to cope, and hard/break turns.    The student will practice low level operations and combat entry/exit checklist procedures.    Flight altitude will be per the T&R Program Manual non- LAT minimums.

Performance Standards

Demonstrate competencies established in TN-1200 and TN-1201.

Demonstrate competence in tactical maneuvering.

Demonstrate competence in advanced time navigation by arriving at the objective within +/- 5 seconds.

Demonstrate CRM IAW the NFM and ANTP.

Prerequisite.    TN-1201 and ATU approved ground training curriculum.

References. NFM, CNI Manual, OPNAVINST 3710.7, ANTPP, and Program Manual.

2.7.7 FORMATION (FORM)

2.7.7.1 Purpose. Introduce the pilot to section formation operations.

Crew Requirements. FRSI Section Leader or CI FORMI.

Academic/Ground Training. ATU approved ground training curriculum.

FORM-1300 2.0 \* B,SC D S/A 1 WST/KC-130J

Goal. Introduce section formation procedures.

Requirement. The flight will introduce KC-130J section formation operations. The instructor will discuss/introduce section formation taxi, takeoff, cruise, and recovery procedures.

Performance Standards

Demonstrate a basic level of familiarity with the formation takeoff, climbout, cruise positions, and break maneuver.

Demonstrate competence in parade echelon and parade trail.

Demonstrate competence in turns into, turns away, and break up and rendezvous.

Prerequisite. FAM-1127 and ATU approved ground training curriculum.

References. OPNAVINST 3710.7, ANTPP, 14 CFR 91, and NA 00-80T-112.

2.7.8 THREAT REACTION (TR)

2.7.8.1 Purpose. Introduce the pilot to Threat Reaction (TR) against ground-based Infrared (IR) threats.

Crew Requirements. FRSI LATI or CI IR TRI.

Academic/Ground Training. ATU approved ground training curriculum.

TR-1400 2.0 \* B,SC D S/A 1 WST/KC-130J

Goal. Introduce TR against ground-based IR threats.

Requirement. The flight will introduce KC-130J TR against ground-based IR threats. The instructor will discuss HUD missile launch warning cues. The instructor will discuss and introduce ALE-47, ALQ-157, and AAR-47 operations and tactics/maneuvers for use against IR Surface-to-Air Missile (SAM) threats. The student will be exposed to a variety of threats in the takeoff, low level, and approach phases of flight utilizing both the automatic and manual functions of the ALE-47.

Performance Standards

Demonstrate competencies established in TN-1200 through TN-1202.

Demonstrate competence in IR TR.

Demonstrate competence in set up and operation of defensive systems.

Demonstrate CRM IAW the NFM and ANTTP.

Prerequisite. FAM-1127 and ATU approved ground training curriculum.

References. NFM and ANTTP.

2.7.9 ASSAULT LANDING ZONE (ALZ)

2.7.9.1 Purpose. Introduce the pilot to improved Assault Landing Zone (ALZ) operations and tactical arrivals.

Crew Requirements. FRSI ALZI or CI ALZI.

Academic/Ground Training. ATU approved ground training curriculum.

ALZ-1500 2.0 \* B D S/A 1 WST/KC-130J

Goal. Introduce ALZ procedures.

Requirement. The flight will introduce KC-130J ALZ operations. The instructor will discuss mission planning and performance data. The instructor will discuss/introduce maximum effort takeoffs/climbouts/landings, combat offload procedures, Engine Running Onload/Offload (ERO) procedures, and passenger combat loading procedures. A minimum of four maximum effort takeoffs will be performed. A minimum of six maximum effort landings, with at least four to a full stop, will be performed. Two landings will be performed at an aircraft gross weight of ~110,000 and two at a gross weight of ~125,000. Review Items: Aborted takeoff and engine failure (takeoff).

Performance Standards

Demonstrate competence in maximum effort TOLD performance calculations.

Demonstrate competence in maximum effort landings to touch down within the first 500 feet of runway.

Prerequisite. FAM-1127 and ATU approved ground training curriculum.

References. NFM, PERF, and ANTTP.

ALZ-1501 2.0 \* B,SC D S/A 1 WST/KC-130J

Goal. Introduce tactical arrivals.

Requirement. The flight will introduce KC-130J tactical arrivals to ALZs. The instructor will discuss the Integrated Precision Radar Approach (IPRA) System. The instructor will discuss/introduce random high, random low/shallow, Infrared (IR)-cooled, and self-contained approaches. The student will practice maximum and adjusted maximum effort takeoffs, climbouts, and landings. A minimum of two maximum effort takeoffs will be performed. A minimum of four maximum

effort landings, with at least two to a full stop, will be performed.  
Review Items: Anti-skid system failure, brake system failure, ground evacuation.

Performance Standards

Demonstrate competence established in ALZ-1500.

Demonstrate competence in IPRA approach planning and procedures.

Demonstrate competence in random high and low approaches to maintain airspeed within +/- 10 KIAS, altitude +/- 100 feet, and heading +/- 10 degrees.

Prerequisite. ALZ-1500 and ATU approved ground training curriculum.

References. NFM, CNI Manual, PERF, and ANTP.

2.7.10 AIR TO AIR REFUELING (AAR)

2.7.10.1 Purpose. Introduce the pilot to FW, TR, and Helicopter AAR operations.

Crew Requirements. FRSI BIP or CI AARI.

Academic/Ground Training. ATU approved ground training curriculum.

AAR-1600    2.0    \*    B                    D                    S/A    1 WST/KC-130J

Goal. Introduce FWAAR / TAAR procedures.

Requirement. The flight will introduce KC-130J single tanker to FW and TR receiver AAR procedures. The instructor will discuss and introduce AAR system checks, FW/TR rendezvous procedures, join-up procedures, AAR procedures, breakaway procedures, post AAR procedures, and designated emergencies.

Performance Standards

Demonstrate competence in CFPS generated flight plan to include orbit point and fuel offload.

Demonstrate competence in AAR system.

Demonstrate competence in FWAAR and TAAR procedures and voice communication.

Prerequisite. FAM-1127 and ATU approved ground training curriculum.

References. NFM, CNI Manual, ANTP, ATP-56, 14 CFR 91, and AP.

AAR-1601    2.0    \*    B                    D                    S/A    1 WST/KC-130J

Goal. Introduce HAAR procedures.

Requirement. The flight will introduce KC-130J single tanker to Helicopter AAR procedures. The instructor will discuss/introduce



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helicopter rendezvous procedures and designated emergencies. The student will practice AAR system checks, join-up procedures, AAR procedures, post AAR procedures, and designated emergencies.

Performance Standards

Demonstrate competence established in AAR-1601.

Demonstrate competence in HAAR procedures and voice communication.

Prerequisite. AAR-1600 and ATU approved ground training curriculum.

References. NFM, CNI Manual, ANTP, ATP-56, 14 CFR 91, and AP.

2.7.11 AIR DELIVERY (AD)

2.7.11.1 Purpose. Introduce the pilot to Air Delivery operations.

Crew Requirements. FRSI ADI or CI ADI.

Academic/Ground Training. ATU approved ground training curriculum.

AD-1700      2.0      \*      B,SC      D      S/A      1 WST/KC-130J

Goal. Introduce AD procedures.

Requirement. The flight will introduce KC-130J AD operations. The instructor will discuss/introduce personnel, Heavy Equipment (HE), and Container Delivery System (CDS) airdrops. The student will perform a CDS airdrop with a racetrack to an HE airdrop with a final racetrack to a personnel airdrop. The initial ingress will be via low level.

Performance Standards

Demonstrate competencies established in TN-1200 through TN-1202.

Demonstrate competence in CAPS generated CARP solution and CARP summary.

Demonstrate competence in CNI-MU CARP mission pages.

Demonstrate competence in run in to Drop Zone to remain within 150 yards laterally, within 200 feet above drop altitude, and within either 10% below or 200 feet below whichever is the lesser amount.

Prerequisite. FAM-1127 and ATU approved ground training curriculum.

References. NFM, CNI Manual, ANTP, and AFI11-231.

2.7.12 FAMILIARIZATION (FCRM)

2.7.12.1 Purpose. Introduce the pilot to Familiarization Core Introduction skills in the aircraft. Upon completion of this stage, the pilot will be proficient in the use of cockpit controls, aircraft systems, selected aircraft maneuvers, execution of NATOPS normal and emergency checklists and procedures and be prepared for a T3P NATOPS and Instrument check.

Academic/Ground Training. Review NFM, NFM supplements, FAR/AIM, and appropriate aircraft systems CBT/IBT lessons.

FCRM-1800 2.0 \* B, SC, R D A 1 KC-130J

Goal. Develop crewmember technical proficiency and refine KC-130J CRM skills by familiarizing students with basic handling qualities of the KC-130J, practicing ground taxi operations, and practice visual traffic pattern and landings.

Requirement. Practice a rolling takeoff, takeoff abort, general aircraft handling, steep turns, power off stalls, slow flight, ATCS operation, TCAS warning procedures, visual traffic patterns, 50% and 100% landings. Operate the fuel system IAW primary fuel management procedures. Apply skill-based CRM principles during all mission phases.

Performance Standards

Demonstrate competence in normal takeoff, climbout, stall recovery, visual approach, full stop landing and touch and go procedures IAW the NFM.

Basic air work standards include +/- 10 KIAS, 200 ft of assigned altitude, 10 degrees of assigned heading, and angle of bank within 10 degrees during steep turns.

For approach to stall maneuvers, after the first indication of stall, recover with less than 200 feet loss of altitude.

During approach to landing maneuvers, maintain positive control of aircraft speed, power, and rate of descent.

Align aircraft with runway, maintain aircraft in trim and touchdown within the first third of the runway. Maintain directional control throughout the flare, touchdown, and rollout.

Demonstrate a basic level of familiarity with CRM procedures as established in Chapter 16 of the NFM.

Prerequisite. FAM-1131 and FAM-1132.

External Syllabus Support. SUA coordination.

FCRM-1801 2.0 \* B, SC (N\*) A 1 KC-130J

Goal. Refine technical proficiency in data entry and management (emphasizing instrument approach setup). Refine KC-130J CRM principles and use of HUD and flight director. Perform instrument approaches using full aircraft automation.

Requirement. Fly multiple precision and non-precision instrument approaches using all available navaids and aircraft automation. Practice 4-engine missed approach, visual traffic patterns, and 50% and 100% landings. Practice performance data manipulation and associated impacts on TOLD, trip fuel, and enroute time. Apply skill-based CRM principles during all mission phases.

Performance Standards

Refine basic air work standards.

Demonstrate a proficiency in CNI-MU approach building for precision and non-precision approaches.

Demonstrate competence flying instrument approaches using automation within air work standards.

Prerequisite. FAM-1800.

FCRM-1802	2.0	*	B, SC, R	(N*)	A	1 KC-130J
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Goal. Refine technical proficiency in data entry and management (emphasizing instrument approach setup). Refine KC-130J CRM principles and use of HUD and flight director. Perform instrument approaches using full aircraft automation.

Requirement. Fly multiple precision and non-precision instrument approaches emphasizing execution of procedure turns, holding, arcing and circling. If available, practice LOC BC, DP's, and STAR's. Practice 4-engine missed approach, visual traffic patterns, and 50% and 100% landings. Operate the digital map and radar systems to practice weather avoidance and windshear procedures; practice navigation position updates. Apply skill-based CRM principles during all mission phases.

Performance Standards

Demonstrate competencies established in FAM-1801.

Demonstrate proficiency in holding, arcing, procedure turn, and circling approaches.

Demonstrate competence in radar and digital map operation.

Prerequisite. FAM-1801.

FCRM-1803	2.0	*	B, SC	D	A	1 KC-130J
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Goal. Practice aircraft handling through engine out situations, emergency checklist procedures to successfully maneuver the aircraft to land. Refine KC-130J CRM principles.

Requirement. Practice instrument approaches and visual traffic patterns through 1-engine inoperative scenarios, and 3-engine go-around procedures. Practice flight using oxygen mask/smoke goggles. Discuss Hydraulic system failures. Apply skill-based CRM principles during all mission phases.

Performance Standards

Demonstrate competencies established in FAM-1802.

Demonstrate competence in One-Engine-Inoperative Air Minimum Control Speeds, Engine Failure on Takeoff Procedures, Airstart procedures, and approach, landing and go-around procedures with one engine inoperative.

Demonstrate competence in No HUD and smoke mask approach procedures.

Prerequisite. FAM-1802.

FCRM-1804      2.0 \*      B,SC,R      (N\*)      A      1 KC-130J

Goal. Review aircraft handling through engine out situations, emergency checklist procedures, and CRM to successfully maneuver the aircraft to land. Refine KC-130J CRM principles.

Requirement. Review instrument approaches and visual traffic patterns through 1-engine inoperative scenarios, 3-engine go-around procedures, and takeoff aborts. Review the interpretation and management of multiple ACAWS messages, flight using the PFD, and use of oxygen mask/smoke goggles. Asterisked emergency procedures will be emphasized. Practice operation of the ice protection system. A zero flap landing will be demonstrated. Apply skill-based CRM principles during all mission phases.

Performance Standards

Demonstrate competencies established in FAM-1803.

Demonstrate competence in asterisked emergency procedures.

Demonstrate competence in prioritizing multiple ACAWS messages.

Prerequisite. FAM-1803.

2.8      CORE SKILL PHASE (2000)

2.8.1      General. Upon completion of this phase of training, the pilot will be qualified to operate day or night in the Core Skill Phase.

2.8.1.1      Stages. The following stages are included in the Core Skill Phase of training. Refer to the MAWTS-1 Course Catalog for all stage pre-requisite academic support packages (ASPs).

Par. No.	Stage Name
2.8.2	Left Seat Fam (LSF)
2.8.3	Night Systems High [NS(H)]
2.8.4	Long Range Navigation (LRN)
2.8.5	Tactical Navigation (TN)
2.8.6	Low Altitude Training (LAT)
2.8.7	Formation (FORM)
2.8.8	Infrared Threat Reaction (IR TR)

Pilots entering the Core Skill Phase shall have completed the Core Skill Introduction Phase.

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Pilots receiving initial training as the PF or PM shall be instructed by a BIP, LATI, NSI, or WTI as specified in the stage or event. Once a pilot has completed the initial event, subsequent events may be flown with proficient aircrew for that event unless otherwise noted.

Pilots conducting NS(H) training shall be instructed by an NSI (with appropriate stage instructor designations) for all NVD events until qualified NSQ(H).

Simulator events shall be conducted with either an appropriate stage instructor or an appropriately qualified Contract Instructor (CI).

In the event of simulator non-availability, simulator events should be conducted in the aircraft. Appropriate Operational Risk Management (ORM) policies should be used to reduce risk associated with not using a simulator.

## 2.8.2 LEFT SEAT FAM (LSF)

2.8.2.1 Purpose. Introduce left seat flight procedures and crew coordination.

Crew Requirements. Shall be instructed by an ANI.

LSF-2100	2.0	*	B, SC, R, M	(N)	A	1 KC-130J
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Goal. Left seat FAM.

Requirement. Introduce left seat normal and emergency procedures. Emphasize taxi, backing and take-off/landing procedures from the left seat.

### Performance Standards

Properly execute Pilot Flows IAW NFM.

Safely taxi the aircraft and perform aircraft reverse taxiing operations.

Properly execute the Abort Takeoff procedure.

Safely land the aircraft in 50% and 100% flap landing configurations.

Prerequisite. NTPS-6110

## 2.8.3 NIGHT SYSTEMS HIGH (NS(H))

2.8.3.1 Purpose. To attain and maintain the Night Systems High Core Skill. Upon completion of this phase, the pilot will be capable of operations using NVDs during HLL or LLL conditions in the NSQ(H) non-LAT environment.

2.8.3.2 General. The NSQ(H) qualification syllabus consists of NS(H)-2150, NS(H)-2151, TN-2250, TN-2251 and requires 10 hours of total NVD time with at least 5 hours of Low Light Level (LLL) time. The initial 10 hours shall be flown in the aircraft. Pilots successfully completing these requirements shall be issued a NS(H) qualification letter by the squadron commanding officer.

Crew Requirements. Shall be instructed by a NSI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, MAWTS-1 TACAIR NVD Manual, and KC-130 ANTP.

NS(H)-2150 2.0 90 B,SC,R NS A/S 1 KC-130J/WST

Goal. HLL NVD procedures.

Requirement. Preflight shall include a flight station, cargo compartment and exterior lighting demonstration with NVDs. Emphasize the interaction between aircraft lighting with normal, NVIS and covert modes. Donning NVDs, and the use of oxygen mask with helmets/NVDs shall be practiced to proficiency. Ground operations shall include NVD taxi procedures. Flight procedures shall include takeoff, cockpit orientation at altitude, landings, aircraft operations, and NVD aircrew coordination. The flight should be conducted to emphasize variations that occur with different terrain/water, cultural lighting and altitudes (above 1000 AGL). Conduct a minimum of 4 touch-and-go landings and 1 full stop landing on a hard surface runway as the PF. Initial event shall be conducted in the aircraft.

Performance Standards

Demonstrate competence in takeoff, climbout, visual approach, full stop landing and touch and go procedures IAW the NFM with NVDs donned.

Basic air work standards include +/- 5 KIAS and 100 ft of assigned altitude.

Align aircraft with runway, maintain aircraft in trim and touchdown within the first third of the runway. Maintain directional control throughout the flare, touchdown, and rollout.

Demonstrate a basic level of familiarity with NVD operations.

Range Requirement. Airfield capable of varied airfield lighting configurations.

NS(H)-2151 2.0 90 B,SC,R,M NS A/S 1 KC-130J/WST

Goal. LLL NVD procedures.

Requirement. Conduct night operations under LLL conditions. Initial event shall be conducted in the aircraft.

Performance Standards

Demonstrate competency in a LLL environment.

Demonstrate a understanding of the Aviation T&R Program Manual and OPNAV 3710.7 as they pertain to NVD operations.

Range Requirement. Airfield capable of varied airfield lighting configurations.

2.8.4 LONG RANGE NAVIGATION (LRN)

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2.8.4.1 Purpose. To attain and maintain the long range navigation Core Skill. Upon completion of this stage, the pilot will be capable of flying to and from all ICAO environments during day or night. Should be flown in the ICAO environment.

Crew Requirements. Instructed by a TPC.

Academic/Ground Training. Review use of PFPS mission planning, OPARS, CNI-MU functionality, radar operation, ICAO procedures, FLIP GP/APs, Foreign Clearance Guide, Performance Manual, and KC-130 ANTPP.

LRN-2160    6.0    \*    B,SC    (N)    A    1 KC-130J

Goal. Introduce long-range, non-radar, ICAO environment procedures utilizing the different KC-130 flight profiles.

Requirement. Introduce long range navigation constant TAS profile flight planning (discuss maximum continuous power and max endurance profile), flight weather packets, OPARS/PFPS mission planning, discuss diplomatic clearances and appropriate publications. Practice use of FLIP enroute flight publications, coast out procedures, fuel management procedures, non-radar reporting requirements, and HF/SELCAL voice procedures.

Performance Standards

Correctly submit a Diplomatic Country Clearance Request per the Foreign Clearance Guide (if required).

Correctly utilize PFPS, OPARS, FLIP publications to file a DD-1801. Demonstrate basic familiarity with LRN procedures.

LRN-2161    6.0    \*    B,SC    (N)    A    1 KC-130J

Goal. Introduce long-range, non-radar, ICAO environment procedures utilizing a long range cruise profile.

Requirement. Introduce long range navigation long range cruise profile flight planning, flight weather packets, OPARS/PFPS mission planning, diplomatic clearances and appropriate publications. Practice use of FLIP enroute flight publications, coast out procedures, fuel management procedures, non-radar reporting procedures, and HF/SELCAL voice procedures.

Performance Standards

Demonstrate competencies established in LRN-2160.

Demonstrate proper LRN procedures.

LRN-2162    6.0    365    B,SC,R,M    (N)    A    1 KC-130J

Goal. Review long-range, non-radar, ICAO environment procedures.

Requirement. Practice long range navigation flight planning. Practice use of FLIP enroute flight publications, coast out procedures, fuel management procedures, non-radar HF/SELCAL voice procedures.

Performance Standard. Demonstrate competencies established in LRN-2161.

Prerequisite. LRN-2160 and LRN-2161.

## 2.8.5 TACTICAL NAVIGATION (TN)

2.8.5.1 Purpose. To attain and maintain the Tactical Navigation Core Skill. Upon completion of this stage, the pilot will be capable of single ship tactical ingress and egress to mission objective areas during day or night. The training includes use of CNI TIME-NAV for time constraints, tactical maneuvering, and high/low altitude navigation. All initial TN events shall be conducted in the aircraft.

Crew Requirements. TN-2200 and TN-2201 shall be instructed by a BIP. TN-2250 and TN-2251 shall be instructed by an NSI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, NFM and KC-130 ANTP.

TN-2200      2.0      \*      B,SC,R      D      A/S      1 KC-130J/WST

Goal. Tactical TIME NAV procedures (Pilot Monitoring) (PM).

Requirement. Plan and execute a VFR navigation route of at least 6 waypoints with at least 1 time constrained waypoint. Route should be conducted within SUAS or on a FLIP approved MTR. Emphasize mission planning procedures, CNI-MU management, CNI TIME NAV and vertical profile planning as well as the CRM associated with PF and PM duties. Introduce short and long term target speeds, AHD/BHD time, change in vertical/speed profile, tactical pilotage techniques and DIGIMAP/radar MAP mode familiarity. Minimum altitude per T&R Program Manual non-LAT minimums but not lower than comfort level.

### Performance Standards

Create appropriate mission planning products.

Arrive at planned TOT within +/- 30 seconds.

Demonstrate the ability to modify the route in flight IOT account for ahead/behind time.

Satisfactory completion of the procedures per the NFM and KC-130 ANTP.

Range Requirement. Appropriate SUAS or MTR scheduled.

TN-2201      2.0      365      B,SC,R      D      A/S      1 KC-130J/WST

Goal. Tactical Navigation procedures Pilot Flying (PF).

Requirement. Plan and execute a VFR navigation route on a published MTR or appropriate SUAS. The route shall consist of at least 6 waypoints. Emphasize mission planning procedures, AP/1A/B usage, Tactical Manual/Operational Guide requirements, SLAP, BASH, PFPS, TASM/AWE, and CNI-MU management. Review HUD symbology, short and long term target speeds, AHD/BHD time, change in vertical/speed profile, tactical pilotage techniques, TAWS, and DIGIMAP familiarity. Discuss aircraft limitations that are applicable for high load factor



maneuvering. Emphasize principles of energy management, masking techniques and ground mapping radar usage.

Performance Standards

Create appropriate mission planning products.

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Range Requirement. Appropriate SUAS or MTR scheduled.

TN-2250      2.0    180    B, SC, R      NS                    A/S    1 KC-130J/WST

Goal. HLL Tactical Navigation procedures (PF).

Requirement. Plan and navigate a low level route of at least 6 waypoints at night during HLL conditions. Specific emphasis shall be placed on SLAP light level planning, BASH, effects of terrain contrast, high/low albedo terrain, shadowing, cultural lighting, weather, and ground mapping radar. Minimum altitude per Aviation T&R Program Manual non-LAT minimums but not lower than comfort level.

Performance Standards

Create appropriate mission planning products.

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Range Requirement. Appropriate SUAS or MTR scheduled.

TN-2251      2.0    180    B, SC, R, M    NS                    A/S    1 KC-130J/WST

Goal. LLL Tactical Navigation procedures (PF).

Requirement. Plan and navigate a Low Level route of at least 6 waypoints at night during low light conditions. Specific emphasis shall be placed on SLAP light level planning, BASH, effects of terrain contrast, high/low albedo terrain, leg segment altitudes, shadowing, cultural lighting, weather, and ground mapping radar. Minimum altitude per Aviation T&R Program Manual minimums but not lower than comfort level.

Performance Standards

Create appropriate mission planning products.

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Range Requirement. Appropriate SUAS or MTR scheduled.

2.8.6 LOW ALTITUDE TACTICS (LAT)

2.8.6.1 Purpose. To attain and maintain the Low Altitude Tactics Core Skill. Upon completion of this stage, the pilot will be capable of single ship low altitude ingress and egress to mission objective areas during the day.

2.8.6.2 General. General LAT rules of conduct (ROC) are contained in NAVMC 3500.14 and KC-130 specific LAT guidance is contained in the KC-130 ANTP. All LAT sorties require all crew members to be LAT qualified and proficient. If a PF or PM is not qualified and/or proficient, then the other pilot seat shall be occupied by a proficient LATI. The LAT qualification requirement consists of LAT-2260 and LAT-2261. Upon completion of LAT qualification requirements, pilots shall be issued a LAT qualification letter from the squadron commanding officer.

Crew Requirements. Shall be instructed by a LATI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, NFM, and KC-130 ANTP.

LAT-2260      2.0      \*      B, SC      D      S/A      1 WST/KC-130J

Goal. Intro to LAT procedures.

Requirement. Discuss LAT ROC and LAT currency versus proficiency. Discuss the threat environment that would require a LAT profile. Introduce aircraft maneuvering that potentially produce high load factors. Review principles of energy management and masking techniques. Practice bunts, jinks, ridgeline crossings, zoom climbs/dive recoveries, terrain clearance turns, hard turns, break turns, and MAC demonstration (simulator only). Minimum altitude per NAVMC 3500.14 minimums but not lower than comfort level.

Performance Standards

Create appropriate mission planning products..

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. TN-2201.

Range Requirement. Scheduled appropriate LAT approved SUAS (restricted area/LAT approved MTR) if conducted in the aircraft.

External Syllabus Support. WST simulator and CI LATI.

LAT-2261      2.0      180      B, SC, R, M      D      A      1 KC-130J

Goal. LAT procedures.

Requirement. Review aircraft limitations that are applicable for high load factor maneuvering. Review principles of energy management and masking techniques. Practice bunts, jinks, ridgeline crossings, zoom climbs/dive recoveries, terrain clearance turns, hard turns, and break

turns. Minimum altitude per NAVMC 3500.14 minimums but not lower than comfort level. Initial event shall be conducted in aircraft.

Performance Standards

Create appropriate mission planning products.

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. LAT-2260.

Range Requirement. Scheduled appropriate LAT approved SUAS (restricted area/LAT approved MTR).

2.8.7 FORMATION (FORM)

2.8.7.1 Purpose. To attain and maintain the Formation Core Skill (Section and Division). Upon completion of this stage, the pilot will be capable of flying in a section or division during high altitude tactical ingress/egress in day or night conditions.

Crew Requirements. Shall be instructed by a Section Leader/Division Leader.

Academic/Ground Training. Review KC-130 ANTP.

FORM-2300 3.0 365 B,SC,R D A/S 2 KC-130J/WST

Goal. Introduce section formation procedures.

Requirement. Demonstrate position cues and normal/emergency procedures for section formation. Emphasize communication procedures, ground operations, take-off, join/rendezvous, tanker formations, tactical formations (AAR and TN), concepts of mutual support, lead changes, under runs, section recoveries, planned weather penetration, lost-sight, and inadvertent weather penetration procedures. Demonstrate and practice procedures for handling individual aircraft emergencies while in formation. Initial event shall be completed in an aircraft.

Performance Standards

Attain and maintain the proper bearing line while in the parade position on the left and right side of lead.

Recognize excessive closure and safely execute the underrun procedure.

Perform planned weather penetration procedures and reference position from lead via the LPCR, TCAS or TACAN A/A.

Execute the briefed inadvertent weather penetration procedures with regards to AOB, timing and altitude change if required. Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Range Requirement. Appropriate SUAS scheduled.

FORM-2301 3.0 365 B,SC,R,M (NS) A 3+ KC-130J

Goal. Division formation procedures.

Requirement. Introduce and practice division formation procedures while flying as a wingman in a flight of at least 3 aircraft. Perform running and turning rendezvous. Review considerations inherent with maintaining tanker, tactical, and cruise positions in a division formation. Practice lead change procedures. Emphasize visual cues for maintaining position and recognizing closure in a division formation. Review emergency procedures to include lost sight and inadvertent weather penetration as pertains to formation operations. Initial event should be conducted during day.

Performance Standards

Attain and maintain proper parade and cruise formation positions.

Recognize excessive closure; safely execute the underrun procedure if required.

Perform planned weather penetration procedures and reference position from lead via the LPCR, TCAS or TACAN A/A.

Execute the briefed inadvertent weather penetration procedures with regards to AOB, timing and altitude change if required.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. FORM-2300, (FORM-2350, NSQ(H) or flown with NSI&SL).

Range Requirement. Appropriate SUAS scheduled.

FORM-2350 2.0 180 B,SC,R,M NS A/S 2 KC-130J/WST

Goal. Night formation procedures.

Requirement. Practice position cues and normal/emergency procedures for formation at night. Emphasize communication procedures, ground operations, take-off, join/rendezvous, tanker formations, tactical formations, concepts of mutual support, lead changes, under runs, section recoveries, planned weather penetration, lost-sight and inadvertent weather penetration procedures. Demonstrate and practice procedures for handling individual aircraft emergencies while in formation.

Performance Standards

Attain and maintain the 45 degree bearing line while in the parade position on the left and right side of lead.

Recognize excessive closure and safely execute the underrun procedure.

Perform planned weather penetration procedures and reference position from lead via the LPCR, TCAS or TACAN A/A.

Execute the briefed inadvertent weather penetration procedures with regards to AOB, timing and altitude change if required.

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Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTPP.

Prerequisite. FORM-2300, NSQ(H) or flown with a NSI&SL. If Division, FORM-2301.

Range Requirement. Appropriate SUAS scheduled.

#### 2.8.8 INFARED THREAT REACTION(IR TR)

2.8.8.1 Purpose. To attain and maintain the Core Skill Threat Reaction (TR) in a low to medium infrared (IR) threat environment. Upon completion of this stage, the pilot will be capable of flying in a ground infrared threat environment during day or night.

#### 2.8.8.2 General

Aircraft must have an operational ASE suite that supports infrared(IR) threat reaction.

Appropriate decoy flares shall be loaded prior to flight.

Appropriate ground threat emitters shall be available.

Crew Requirements. Shall be instructed by a LATI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, NFM, KC-130 ANTPP 3-22.3, KC-130 ANTPP 3-22.1 (S).

TR-2400      2.0      180      B,SC,R,M      (NS)      A/S      1 KC-130J/WST

Goal. Ground Infrared (IR) Threat Reaction.

Requirement. Introduce the ALE-47, AAR-47, ALQ-157, HUD/HDD symbology and threat reaction. Discuss IR seeker head capabilities/limitations, threat reaction ICS calls, AAR-47 limitations and flare "cocktail". The pilot should be exposed to a variety of threat situations of increasing intensity using both the automatic and manual modes of the ALE-47 from all quadrants. Threat reaction maneuvering should include the takeoff, cruise and approach phases of flight. Initial code shall be accomplished in the aircraft during the day.

#### Performance Standards

Correct threat call verbiage.

Demonstrate proficiency and use of the ASE systems on both the hard panel and CNI-MU.

Execute the correct maneuvers.

Satisfactory completion of the maneuvers and procedures per the NFM, KC-130 ANTPP 3-22.3 and KC-130 ANTPP 3-22.1 (S).

Prerequisite. LAT-2260.

Ordnance. 30 overt and 90 covert, sim buckets may be used if live ordnance is unavailable.

Range Requirement. SUAS authorized for expendables.

External Syllabus Support. Scheduled MWS stimulator and appropriate visual threat support (Smokey SAM Team).

2.9 MISSION SKILL PHASE (3000)

2.9.1 General. Upon completion of this phase of training, the pilot will be qualified to operate day or night in the Mission Skill Phase. This includes assault landing zone, air-to-air refueling, aviation delivered ground refueling, and air delivery of cargo and personnel.

2.9.1.1 Stages. The following stages are included in the Mission Skill Phase of training. Refer to the MAWTS-1 Course Catalog for all stage pre-requisite ASPs.

Par No.	Stage Name
2.9.2	Assault Landing Zone (ALZ)
2.9.3	Air-to-Air Refueling (AAR)
2.9.4	Aviation Delivered Ground Refueling (ADGR)
2.9.5	Air Delivery (AD)

Pilots receiving initial training as the PF or PM shall be instructed by a BIP, ALZI, ADI, NSI or WTI as specified in the stage or event. Once a pilot has completed the initial event, subsequent events may be flown with proficient aircrew.

Simulator events shall be conducted with either an appropriate squadron instructor or an appropriately qualified contract instructor (CI).

In the event of WST non-availability, simulator events should be conducted in the aircraft. Appropriate Operational Risk Management (ORM) policies should be used to reduce risk associated with not using a WST.

2.9.2 ASSAULT LANDING ZONE (ALZ)

2.9.2.1 Purpose. To attain and maintain the Mission Skill of operating from an ALZ. Upon completion of this stage, the pilot will be capable of day or night ALZ operations and will be knowledgeable of unimproved ground operation considerations.

Crew Requirements. Shall be instructed by an ALZI or WTI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, NFM and KC-130 ANTP.

ALZ-3500      2.0    180    B,SC,R      D                      A/S    1 KC-130J/WST

Goal. ALZ procedures.

Requirement. Review Airfield Marking Patterns (AMP), airfield capabilities, ground floatation, minimum runway requirements and ground operations. Practice crew coordination with respect to ALZ operations. Practice maximum effort takeoffs, landings and obstacle clearance criteria with respect to TOLD. Perform a minimum of 6 touch and go landings, plus at least 1 maximum effort full stop landing and 1

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maximum effort takeoff. Initial event shall be conducted in the aircraft.

Performance Standards

For initial event, complete manual TOLD calculations utilizing appropriate charts from the KC-130J Performance Manual. Consistent landings within the touchdown zone.

Consistent speed, centerline and glideslope control.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. LSF-2100.

External Syllabus Support. ATC, MMT, MWSS EAF or USAF Special Tactics Team with appropriate AMP and Crash/Fire/Rescue Support.

ALZ-3501 2.0 365 B,SC,R (NS) A/S 1 KC-130J/WST

Goal. Tactical Arrivals.

Requirement. Introduce the random high, random low/shallow, IR cooled, and self contained approaches. Emphasize terrain study with respect to ingress/egress of the terminal area and method of arrival based on threat. Discuss energy management. At least 1 self contained approach will be developed and constructed for use. Practice use of the Integrated Precision Radar Approach (IPRA) and LZ functions of the CNI-MU.

Performance Standards

Produce flight plan/route with an abeam position using either CFPS/Falcon View or a paper chart for an IR cooled approach.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. LSF-2100, (NSQ(H) or conducted with a NSI&ALZI or WTI).

ALZ-3502 0.5 \* B,SC,R (N) A 1 KC-130J

Goal. Combat offload procedures.

Requirement. Introduce combat offload of cargo without the use of loading equipment.

Performance Standard. Properly brief and execute a combat offload per the Combat Offload Checklist and the NFM.

Prerequisite. LSF-2100 (NSQ(H) or conducted with a NSI&ALZI or WTI.)

External Syllabus Support. Sufficient ramp space and fork-lift support.

ALZ-3503 0.5 730 B,SC,R,M (NS) A 1 KC-130J

Goal. Unimproved Ground Operations.

Requirement. Review AMP, airfield capabilities, ground floatation, minimum runway requirements and ground operations with emphasis on unimproved surfaces. Practice crew coordination with respect to unimproved ground operations.

Performance Standard. Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. LSF-2100 (NSQ(H) or conducted with a NSI&ALZI or WTI.)

External Syllabus Support. ATC, MMT, MWSS EAF or USAF Special Tactics Team with appropriate AMP and Crash/Fire/Rescue Support.

ALZ-3550      2.0    180    B,SC,R,M    NS                    A/S    1 KC-130J/WST

Goal. Night ALZ procedures.

Requirement. Introduce night ALZ operations to include appropriate AMP, ground operations, crew coordination with respect to ALZ operations, maximum effort take-offs and maximum effort landings. Review max effort TOLD computations. Perform a minimum of 6 touch and go landings, plus 1 maximum effort full stop landing and 1 maximum effort takeoff. Review appropriate NFM performance charts and KC-130 ANTP. Initial event shall be flown in the aircraft.

Performance Standards

Consistent landings within the touchdown zone.

Consistent speed, centerline and glideslope control.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. LSF-2100, NS(H)-2150 if HLL, NS(H)-2151 if LLL, ALZ-3500, NSQ(H) or flown with a NSI&ALZI or WTI.

External Syllabus Support. ATC, MMT, MWSS EAF or USAF Special Tactics Team with appropriate AMP and Crash/Fire/Rescue Support.

2.9.3    AIR TO AIR REFUELING (AAR)

2.9.3.1 Purpose. To attain and maintain the Air-to-Air Refueling (AAR) Mission Skill. Upon completion of this stage, the pilot will be capable of fixed wing, tilt rotor, helicopter AAR, and AR panel operations in the day or night environment.

Crew Requirements. Shall be instructed by a BIP.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, NFM, KC-130 ANTP, and ATP-56.

AAR-3600      2.0    365    B,SC,R            (N)                    A/S    1 KC-130J/WST

Goal. FWAAR/TAAR procedures.

Requirement. Conduct single tanker FWAAR or TAAR. Emphasize mission planning using PFPS and receiver aircraft considerations. Discuss emergency procedures related to AAR and receiver capabilities and limitations. Conduct single tanker rendezvous procedures, radio



procedures and receiver management. EMCON procedures should be introduced for the completion of the initial syllabus event. The initial event shall be completed in the aircraft.

Performance Standards

Produce AAR briefing card; CFPS generated flight plan/route with orbit and appropriate fuel offload; and an appropriate refueling track using either CFPS/Falcon View or a paper chart.

Determine the receiver's location prior to the ARCT with either the LPCR, TCAS or TACAN A/A.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTTP.

Prerequisite. (NSQ(H) or flown with a NSI).

External Syllabus Support. Fixed-wing or tilt-rotor receiver aircraft.

AAR-3601    2.0    365    B,SC,R    D    A/S    1 KC-130J/WST

Goal. Day Helicopter AAR (HAAR) procedures.

Requirement. Conduct single tanker HAAR. Emphasize mission planning using PFPS and receiver aircraft considerations. Conduct helicopter rendezvous procedures (PF), radio procedures (PM) and tanker/receiver management (PM). Discuss emergency procedures related to AAR and receiver capabilities and limitations. EMCON procedures should be introduced for the completion of the initial syllabus event as well as RAC responsibilities. A minimum of 2 rendezvous as the PF are required for initial qualification. The initial event shall be completed in the aircraft.

Performance Standards

Produce AAR briefing card; CFPS generated flight plan/route with orbit and appropriate fuel offload; and an appropriate refueling track using either CFPS/Falcon View or a paper chart.

Determine the receiver's location prior to the ARCT with either the LPCR, TCAS or TACAN A/A.

Arrive over the ARCP at planned ARCT.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTTP.

Prerequisite. LSF-2100

External Syllabus Support. Helicopter receiver aircraft.

AAR-3602    2.0    180    B,SC,R,M    (N)    S/A    1 WST/KC-130J

Goal. AAR System / Panel procedures.

Requirement. Operate the refueling system with either high speed or low speed drogues during AAR as the PM. Emphasize functional knowledge

and use of the refueling system to include system limitations and normal, emergency and alternate procedures.

Performance Standards

Correctly perform AR system checks, AR system normal procedures and AR system emergency procedures.

Maintain lateral fuel balance IAW the NFM.

Observe NFM AR system limitations.

Satisfactory completion of the procedures per the NFM.

Prerequisite. AAR-3600 & AAR-3601.

External Syllabus Support. FW, TR or Helicopter receiver aircraft.

AAR-3650    2.0    180    B, SC, R, M    NS                    A/S    1 KC-130J/WST

Goal. Night HAAR procedures.

Requirement. Conduct single tanker HAAR refueling at night. Emphasize mission planning using PFPS and receiver aircraft considerations. Conduct helicopter rendezvous procedures (PF), radio procedures (PM), tanker/receiver management (PM). Discuss emergency procedures related to AAR. A minimum of 2 rendezvous as the PF are required.

Performance Standards

Produce AAR briefing card; CFPS generated flight plan/route with orbit and appropriate fuel offload; and an appropriate refueling track using either CFPS/Falcon View or a paper chart.

Determine the receiver's location prior to the ARCT with either the LPCR, TCAS or TACAN A/A.

Arrive over the ARCP at planned ARCT.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. LSF-2100, 2150~NS, 2151~LLL, AAR-3600, AAR-3601 (NSQ(H) or flown with an NSI).

External Syllabus Support. Helicopter receiver aircraft.

2.9.4    AVIATION DELIVERED GROUND REFUELING (ADGR)

2.9.4.1 Purpose. To attain and maintain the Aviation Delievered Ground Refueling Mission Skill. Upon completion of this stage, the pilot will be capable of conducting aviation delivered ground refueling of aircraft and ground vehicles in any clime and place.

Crew Requirements. Shall be instructed by a BIP.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, NFM, and KC-130 ANTP.

ADGR-3660 1.0 730 B, SC, R, M (NS) A 1 KC-130J

Goal. ADGR procedures.

Requirement. Plan and execute an ADGR mission involving actual transfer of fuel to either aircraft or ground vehicles. Emphasize personnel responsibilities to include RS and RASO and the control of receivers through the ADGR site. Additionally, discuss ADGR location, security, setup, pre/post-stage areas, standard signals, and emergencies.

Performance Standards

Integrate with loadmasters in mission planning; ensure that a tanker egress plan has been established and forecast winds are factored for receiver traffic pattern.

Produce an ADGR briefing card.

Satisfactory completion of the procedures per the NFM and KC-130 ANTP.

Prerequisite. (NSQ(H) or conducted with a NSI).

External Support. Crash/Fire/Rescue Support. Receiver aircraft or ground vehicle (as appropriate).

2.9.5 AIR DELIVERY (AD)

2.9.5.1 Purpose. To attain and maintain the Mission Skill of AD. Upon completion of this stage, the pilot will be capable of planning and executing an AD of cargo or static line personnel, day or night. Proficiency may be regained in the aircraft with a simulated drop if all checklists are completed and ramp and door/paratroop doors are opened.

Crew Requirements. Shall be instructed by an ADI or WTI.

Ground/Academic Training. Utilize academic courseware as outlined in the MAWTS-1 course catalog and review MAWTS-1 ASPs, NFM, CNI-MU Manual, and KC-130 ANTP.

AD-3700 2.0 \* B, SC, R (NS) S/A 1 WST/KC-130J

Goal. Introduction to Pilot Flying AD.

Requirement. Review pilot flying AD procedures. Low level ingress/egress recommended. Emphasis should be on HUD symbology, DZ markings and identification, slowdown procedures, checklist compliance, CRM, and flying a steady and controlled platform. At least 3 passes shall be conducted, 1 of which shall be a personnel drop if conducted in a simulator.

Performance Standards

Produce a route consisting of proper ingress/egress routing using CFPS and CAPS and perform appropriate CARP calculations.

Successfully plan and execute proper slowdown procedures.

No CARP VERT/XTRK errors resulting in a no-drop.

Correctly identify AD HUD symbology.

Efficient and correct execution of all checklist items\ Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. TN-2200, TN-2201 (NSQ(H) or flown with a NSI&ADI or WTI).

External Support. WST and CI ADI.

AD-3701      2.0    \*      B, SC, R      (NS)      S/A    1 WST/KC-130J

Goal. Introduction to Pilot Monitoring AD.

Requirement. Review pilot monitoring AD procedures. Low level ingress/egress recommended. Emphasize mission planning, manual and computer CARP calculations, CNI-MU data entry and verification, checklist execution, and in-flight updating of CNI-MU CARP INIT/PROG pages. At least 3 passes shall be conducted, 1 of which shall be a personnel drop if conducted in a simulator.

Performance Standards

Produce a route consisting of proper ingress/egress routing using CFPS and CAPS and perform appropriate CARP calculations.

Correctly enter all CARP INIT/PROG data in order to verify the pre-flight CARP, left/right & long/short distances, and green light time.

Manage all necessary CNI updates resulting in a successful drop.

Efficient and correct execution of all checklist items.

Satisfactory completion of the procedures per the NFM and KC-130 ANTP.

Prerequisite. AD-3700 (NSQ(H) or flown with a NSI&ADI or WTI).

External Support. WST and CI ADI.

AD-3702      2.0    90      B, SC, R      (NS)      A/S    1 KC-130J/WST

Goal. PF Cargo AD.

Requirement. Review cargo AD procedures as the pilot flying. Emphasis should be on HUD symbology, DZ markings and identification, slowdown procedures, checklist compliance, CRM, and flying a steady and controlled platform. Initial code shall be conducted in the aircraft with an actual CDS or heavy equipment AD and should be conducted during the day.

Performance Standards

Produce a route consisting of proper ingress/egress routing using CFPS and CAPS and perform appropriate CARP calculations.

Correctly identify AD HUD symbology.

Efficient and correct execution of all checklist items, particularly completion of drop procedures.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. AD-3700 (NSQ(H) or flown with NSI&ADI or WTI).

External Support. AD platoon for cargo rigging and DZ control.

AD-3703      2.0    90    B, SC, R, M      (NS)                      A/S    1 KC-130J/WST

Goal. PM Cargo AD.

Requirement. Review cargo AD procedures as the pilot monitoring. Emphasize mission planning, manual and computer CARP calculations, CNI-MU data entry and verification, checklist execution, and in-flight updating of CNI-MU CARP INIT/PROG pages. Initial code shall be conducted in the aircraft with an actual CDS or heavy equipment AD and should be conducted during the day.

Performance Standards

Produce a route consisting of proper ingress/egress routing using CFPS and CAPS and perform appropriate CARP calculations.

Correctly enter all CARP INIT/PROG data in order to verify the pre-flight CARP, left/right & long/short distances, and green light time.

Manage all necessary CNI updates resulting in a successful drop. Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. AD-3701 (NSQ(H) or flown with NSI&ADI or WTI).

External Support. AD platoon for cargo rigging and DZ control.

AD-3704      2.0    90    B, SC, R              (NS)                      A/S    1 KC-130J/WST

Goal. PF Personnel AD.

Requirement. Plan and execute a personnel AD mission. Emphasize HUD symbology, DZ markings and identification, slowdown procedures, checklist compliance, CRM, and flying a steady and controlled platform. Initial code shall be conducted in the aircraft with an actual personnel AD and should be conducted during the day.

Performance Standards

Produce a route consisting of proper ingress/egress routing using CFPS and CAPS and perform appropriate CARP calculations.

Correctly identify AD HUD symbology.

Efficient and correct execution of all checklist items, particularly completion of drop procedures.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. AD-3700 (NSQ(H) or flown with NSI&ADI or WTI).

External Support. Unit jumpmaster and DZ control.

AD-3705      2.0    90      B,SC,R.M      (NS)              A/S    1 KC-130J/WST

Goal. PM Personnel AD.

Requirement. Plan and execute a personnel AD mission. Emphasize mission planning, manual and computer CARP calculations, CNI-MU data entry and verification, checklist execution, and in-flight updating of CNI-MU CARP INIT/PROG pages. Initial code shall be conducted in the aircraft with an actual personnel AD and should be conducted during the day.

Performance Standards

Produce a route consisting of proper ingress/egress routing using CFPS and CAPS and perform appropriate CARP calculations.

Correctly enter all CARP INIT/PROG data in order to verify the pre-flight CARP, left/right & long/short distances, and green light time.

Manage all necessary CNI updates resulting in a successful drop. Satisfactory completion of the procedures per the NFM and KC-130 ANTP.

Prerequisite. AD-3701 (NSQ(H) or flown with NSI&ADI or WTI).

External Support. Unit jumpmaster and DZ control.

2.10      CORE PLUS SKILL PHASE (4000)

2.10.1 General. Upon completion of this phase of training, the pilot will be qualified to plan and execute low level section formation operations and night systems low operations, defensive tactics, AD (combination, HALO/HAHO, and JPADS) and Battlefield Illumination (BI) in a radar threat environment.

2.10.1.1 Stages. The following stages are included in the Core Plus Phase of training. Refer to the MAWTS-1 Course Catalog for all stage prerequisite ASPs.

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Par. No.	Stage Name
2.10.2	Tactical Navigation (TN)
2.10.3	Night Systems Low [NS(L)]
2.10.4	Threat reaction [TR(RF)]
2.10.5	Defensive Tactics (DT)
2.10.6	Air Delivery (AD)
2.10.7	Battlefield Illumination (BI)
2.10.8	Harvest HAWK (HH) Overview
2.10.9	Fire Control Officer Harvest HAWK Familiarization (FCO FAM)
2.10.10	Fire Control Officer Harvest Hawk Basic Air to Surface (FCO BAS)
2.10.11	Fire Control Officer Multi-sensor Imagery Reconnaissance (FCO MIR)
2.10.12	Fire Control Officer Close Air Support (FCO CAS)
2.10.13	Pilot Harvest HAWK Familiarization (AC FAM)
2.10.14	Pilot Harvest Hawk Basic Air to Surface (AC BAS)
2.10.15	Pilot Multi-imagery Reconnaissance (AC MIR)
2.10.16	Pilot Close Air Support (AC CAS)

Pilots receiving initial training as the PF or PM shall be instructed by a BIP, LATI, ADI, DTI, NSI, NSLATI, or WTI as specified in the stage or event. Once a pilot has completed the initial event, subsequent events may be flown with proficient aircrew.

Refer to the MAWTS-1 KC-130J Course Catalog for NSQ(L). Upon completion of the NSQ(L) qualification requirements, pilots shall be issued a NSQ(L) qualification letter from the squadron commanding officer.

Simulator events shall be conducted with either an appropriate squadron instructor or an appropriately qualified contract instructor (CI).

In the event of WST non-availability, simulator events should be conducted in the aircraft. Appropriate Operational Risk Management (ORM) policies should be used to reduce risk associated with not using a WST.

#### 2.10.2 TACTICAL NAVIGATION (TN)

2.10.2.1 Purpose. To attain and maintain the Core Plus Skill of Formation TN. Upon completion of this stage, the pilot will be capable of flying as lead or -2 in a section formation in the low level environment.

Crew Requirements. TN-4200 shall be instructed by a Section Lead (LATI if LAT) or WTI if conducted during the day. TN-4200 shall be instructed by a Section Lead&NSI or WTI if conducted at night and shall be instructed by NSLATI if conducted at night in the LAT environment.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 course catalog and review MAWTS-1 ASPs, NFM, and KC-130 ANTP.

TN-4200      3.0    365    B, SC, R, M    (NS)      A      2+ KC-130J

Goal. Formation TN procedures.

Requirement. Introduce enroute tactical formations, tactical turns, and concepts of mutual support on a low level route of at least 6 waypoints. Event should be conducted from the wingman position. Practice normal and emergency procedures for formation flights, communication procedures, ground operations, take-off, join/rendezvous,

formation recoveries, lost sight and inadvertent weather penetration procedures.

Performance Standards

Produce a flight leader form card.

Coordinate/schedule appropriate SUAS (appropriate MTR for LAT/non-LAT altitudes).

Create appropriate mission planning products.

Plan a formation TN profile including: tactical turns into/away, dig and pinch, various tactical formations, zoom climbs, lead changes, and defensive maneuvering/scatter plan.

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. TN-2201, FORM-2300, (NSQ(H) and FORM-2350), LATQ if LAT, (NSLATQ if LAT).

Range Requirement. Appropriate SUAS or MTR scheduled. Appropriate LAT approved SUAS (restricted area/LAT approved MTR) if in the LAT environment.

2.10.3 NIGHT SYSTEMS LOW [NS(L)]

2.10.3.1 Purpose. To attain and maintain the Night Systems Low Core Plus Skill. Upon completion of this stage, the pilot will be capable of operations using NVDs during HLL conditions in the LAT environment.

2.10.3.2 General. The NSQ(L) qualification syllabus consists of NS(L)-4250 and NS(L)-4251. Pilots successfully completing these requirements shall be issued a NS(L) qualification letter by the squadron commanding officer.

Crew Requirements. Shall be instructed by a NSLATI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 course catalog and review MAWTS-1 ASPs, NFM, and KC-130 ANTP.

NS(L)-4250 2.0 \* B,SC,R NS S 1 WST

Goal. Introduce HLL LAT procedures.

Requirement. Review aircraft limitations applicable for high load factor maneuvering. Review principles of energy management and masking techniques. Practice bunts, jinks, ridgeline crossings, zoom climbs, terrain clearance turns, hard turns, and break turns while using NVDs. Minimum altitude per NAVMC 3500.14 minimums but not lower than comfort level.

Performance Standards

Create appropriate mission planning products

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.



Prerequisite. NSQ(H) and LATQ.

External Syllabus Support. WST simulator.

NS(L)-4251 2.0 180 B,SC,R,M NS A 1 KC-130J

Goal. HLL LAT procedures.

Requirement. Review aircraft limitations applicable for high load factor maneuvering. Review principles of energy management and masking techniques. Practice bunts, jinks, ridgeline crossings, zoom climbs, terrain clearance turns, hard turns, and break turns while using NVDs. Minimum altitude per T&R Program Manual minimums but not lower than comfort level.

Performance Standards

Create appropriate mission planning products.

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. NS(L)-4250.

Range Requirement. Scheduled appropriate LAT approved SUAS (restricted area/LAT approved MTR).

External Syllabus Support. Scheduled appropriate LAT approved course.

2.10.4 THREAT REACTION [TR(RF)]

2.10.4.1 Purpose. To attain and maintain the Core Plus Skill of Threat Reaction (TR) in a radar threat environment. Upon completion of this stage, the pilot will be capable of flying in a ground radar threat environment during day or night.

2.10.4.2 General

Aircraft must have an operational ASE suite that supports radio frequency (RF) threat reaction.

Appropriate chaff shall be loaded prior to flight.

Appropriate ground threat emitters shall be available.

Crew Requirements. Shall be instructed by a WTI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 Course Catalog and review MAWTS-1 ASPs, NFM, KC-130 ANTP 3-22.3, KC-130 ANTP 3-22.1 (S), and KC-130J DECM CBT.

TR-4400 2.0 \* B,R,SC (NS) A/S 1 WST/KC-130J

Goal. Introduce ground radar TR.

Requirement. Introduce ALR-56M system, HUD/HDD symbology, and threat reaction. The pilot should be exposed to a variety of radar threat

scenarios and introduced to appropriate maneuver used in conjunction with the ALE-47. The appropriate modes of operation for the ALE-47 should be addressed. Shall be conducted during the day if initial event is conducted in the aircraft.

Performance Standard. Satisfactory completion of the maneuvers and procedures per the NFM, KC-130 ANTPP 3-22.3 and KC-130 ANTPP 3-22.1 (S).

Prerequisite. LAT-2261 and TR-2400.

Ordinance. 300 chaff if conducted in the aircraft.

Range Requirement. SUAS authorized for expendables if conducted in the aircraft.

External Syllabus Support. WST simulator and CI. Schedule appropriate RF threat emitters if conducted in the aircraft.

TR-4401      2.0    180    B, SC, R, M      (NS)      A      1    KC-130J

Goal. Ground radar TR.

Requirement. Review ALR-56M system, HUD/HDD symbology, and threat reaction. The pilot should be exposed to a variety of radar threat scenarios of increasing intensity and practice appropriate maneuver used in conjunction with the ALE-47. The appropriate modes of operation for the ALE-47 shall be addressed. The initial code shall be accomplished during the day.

Performance Standard. Satisfactory completion of the maneuvers and procedures per the NFM, KC-130 ANTPP 3-22.3 and KC-130 ANTPP 3-22.1 (S).

Prerequisite. TR-4400.

Ordinance. 300 chaff.

Range Requirement. SUAS authorized for expendables.

External Syllabus Support. Appropriate RF threat emitters.

#### 2.10.5 DEFENSIVE TACTICS (DT)

2.10.5.1 Purpose. To attain and maintain the Core Plus Skill of employing Defensive Tactics against an air threat by combining maneuver and use of the ASE suite. Upon completion of this stage, the pilot will be qualified in Defensive Tactics.

#### 2.10.5.2 General

Aircraft must have fully operational ASE suite.

Appropriate expendables must be loaded prior to flight.

The DT qualification requirements consist of DT-4410 and DT-4411. Upon successful completion of qualification requirements, pilots shall be issued a DT qualification letter from the squadron commanding officer. If a PF or PM is not qualified in DT, then the other pilot seat shall be occupied by a DTI.

Crew Requirements. Shall be instructed by a DTI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 course catalog and review MAWTS-1 ASPs, NFM, and KC-130 ANTP.

DT-4410      2.0    365    B, SC, R      D                      A    1    KC-130J

Goal. Defensive Tactics versus a single adversary.

Requirement. Practice defensive maneuvers emphasizing hard turns, break turns, maneuvering velocity, and lookout doctrine. Discuss rate of turn and radius of turn in relation to the adversary aircraft.

Performance Standards

Practice crew coordination with timely and accurate maneuvers and lookout calls.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. LAT-2261 and TR-2400.

Ordnance. 120 flares or sim buckets.

Range Requirement. SUAS authorized for expendables.

External Support. Appropriate single adversary aircraft.

DT-4411      2.0    365    B, SC, R, M    D                      A    1    KC-130J

Goal. Defensive Tactics versus 2 adversaries.

Requirement. Practice defensive maneuvers with 2 adversary aircraft. Emphasize lookout doctrine and discuss rate of turn and radius of turn in relation to the adversary aircraft.

Performance Standards

Practice crew coordination with timely and accurate maneuvers and lookout calls.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTP.

Prerequisite. DT-4410.

Ordnance. 120 flares or sim buckets

Range Requirement. SUAS authorized for expendables.

External Support. Appropriate section of adversary aircraft.

2.10.6 AIR DELIVERY (AD)

2.10.6.1 Purpose. To attain and maintain the Core Plus Skill of Air Delivery (AD). Upon completion of this stage, the pilot will be capable of planning and executing combination, HALO/HAHO and JPADS AD.

2.10.6.2 General. 4000-phase simulated ADs in the aircraft do not update aircrew refly interval.

Crew Requirements. Shall be instructed by an ADI or WTI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 course catalog and review MAWTS-1 ASPs, NFM, CNI-MU Manual, KC-130 ANTTP, and AFI 11-231.

AD-4700 2.0 365 B,SC,R,M (NS) A 1 KC-130J

Goal. Combination AD.

Requirement. Plan and execute a combination AD mission. Emphasize the requirement for incorporation of separate personnel and cargo CARP computations. A cargo or personnel AD (aircraft or simulator) shall have been completed within the previous 90 days.

Performance Standards

Produce proper ingress/egress routing using CFPS and CAPS and perform appropriate CARP calculations.

Efficient and correct execution of all checklist items. Correctly enter all CARP INIT/PROG data in order to verify the pre-flight CARP, left/right & long/short distances, and green light time.

Manage all necessary CNI updates resulting in a successful drop. Accurately compute the required zone dimensions.

Satisfactory completion of the procedures per the NFM and KC-130 ANTTP.

Prerequisite. AD-3702 through AD-3705 (NSQ(H)).

External Support. Air delivery platoon for cargo rigging and DZ control.

AD-4701 2.0 365 B,SC,R,M (NS) A 1 KC-130J

Goal. Military Free Fall (HAHO/HALO) AD.

Requirement. Plan and execute a Military Free Fall (MFF) AD operation. Perform in-depth mission analysis and planning of high altitude air delivery of personnel. Perform at least 1 HAHO or 1 HALO AD with in-flight HARP updates. Review applicable physiology requirements for high altitude AD operations. Emphasize tactical considerations and manual HARP computations.

Performance Standards

Manual HARP calculations.

Satisfactory completion of the procedures per the NFM and KC-130 ANTTP.

Prerequisite. AD-3704 and AD-3705 (NSQ(H)).

External Support. Military free fall unit, appropriate DZ control and flight surgeon/physiologist if applicable.

AD-4702      2.0    365    B,SC,R,M    (NS)            A      1 KC-130J

Goal. Joint Precision Air Delivery System (JPADS).

Requirement. Perform in-depth mission analysis and planning of high altitude air delivery of cargo using JPADS mission planning software. Plan and execute at least 1 JPADS air delivery. Emphasize tactical considerations and JPADS mission planning software.

Performance Standards

Account for the maximum flyout of the device.

Brief the DZ team on method of control (beacon, manual, direct, or approach).

Satisfactory completion of the procedures per the NFM and KC-130 ANTP.

Prerequisite. AD-3702 and AD-3703 (NSQ(H)).

External Support. JPADS and appropriate DZ control.

2.10.7 BATTLEFIELD ILLUMINATION (BI)

2.10.7.1 Purpose. To attain and maintain the Mission Plus Skill of Battlefield Illumination (BI). Upon completion of this phase, the pilot will be capable of planning and executing combination BI.

Crew Requirements. Shall be instructed by an ADI or WTI.

Academic/Ground Training. Utilize academic courseware as outlined in the MAWTS-1 course catalog and review MAWTS-1 ASPs, NFM, CNI-MU Manual, and KC-130 ANTP.

BI-4710      2.0    365    B,SC,R,M    N                    A      1 KC-130J

Goal. Battlefield Illumination.

Requirement. Provide illumination using procedures per the KC-130 ANTP. Emphasize mission planning and area illumination procedures.

Performance Standards

Correctly account for illumination levels.

Account for flare drift and burn-out location.

Satisfactory completion of the procedures per the NFM, KC-130 ANTP and applicable Naval weapons/ordnance publications.

Prerequisite. AD-3700 and AD-3701 (NSQ(H) or flown with NSI/ADI or WTI).

Ordnance. 14 aircraft parachute flares.

Range Requirement. SUAS authorized for aircraft parachute flares.

2.10.8 HARVEST HAWK (HH) CORE PLUS SKILL OVERVIEW

2.10.8.1 Purpose. To attain and maintain the Core Plus Skill of conducting Close Air Support and Multi-Sensor Imagery Reconnaissance.

2.10.8.2 General. Pilots and Fire Control Officers (FCOs) for Harvest HAWK will train based on the recommendation of the Aircrew Performance Review Board (APRB). There are no prerequisites for individual crewmasters.

Crew Requirements. Shall be instructed by a HHI or FCOI

Aircraft commanders are eligible to receive qualification for CAS and MIR upon completion of the 4800 phase CAS and MIR events. In order to receive qualification, all events must be completed from the left seat.

Co-pilots shall complete at least three flight coded events, and two flights from the following flight events: BAS-4811, MIR-4820, CAS-4830, or CAS-4840 in order to be considered qualified in CAS and MIR operations.

Copilots that upgrade to aircraft commander must complete BAS-4812, MIR-4820, CAS-4830, and CAS-4840 from the left seat prior to receiving qualification in CAS and MIR.

Academics/Ground Training. Squadron commanders shall ensure that prospective Harvest HAWK Pilots and FCOs complete the following MarineNet Courses prior to the start of HH Ground School (FCOs from prior CAS platforms are exempt):

- Battlespace Geometry
- CAS
- Nine-Line
- Fixed Wing Employment
- Rotary Wing Employment

All FCOs and Pilots shall receive the following classes:

- Harvest HAWK Introduction/Equipment Overview
- TCDL Operation
- TACVIEW Operation
- Digital Video Recorder
- Target Sight Sensor
- Tracker Operation
- FalconView integration
- Hellfire P AGM
- Graphical User Interface and Software
- Emergency Procedures
- Battle Management System (BMS)
- SOPGM AGM
- PSS-SOF (Aircraft Commanders and FCOs should receive certification)
- Precision Guided Munitions and Laser Considerations
- Laser Safety
- CAS Fundamentals/ Execution
- Harvest HAWK Crew Coordination
- Harvest HAWK Employment
- Talk-on Techniques and GRG Use
- CAS Practical Application/Chalk Talks

In addition to the above, FCOs that are not current KC-130J crewmembers shall receive the following KC-130J systems overview classes:

- KC-130J Emergency Equipment and Procedures
- ICS and Radio Operation
- Oxygen System Operation
- KC-130J Crew Coordination

The below table provides an overview of the syllabus.

Event	Description	AC	FCO	CP	CM	Flt Hours	Refly	Live Ord	
HH-4800	FCO Ground FAM		X <sup>(1)</sup>						
HH-4801	FCO PTT FAM		X						
HH-4802	HH Ground FAM	X	X	X	X				
HH-4803	HH Flight FAM	X	X	X		2.5			
BAS-4810	Intro to day weapons employment	X	X	X					
BAS-4811	Day weapons employment	X	X	Any 2 Of these	X	2.5			
BAS-4812	Weapons employment	X	X <sup>(2)</sup>		X	2.5		Y <sup>(2)</sup>	
MIR-4820	MIR	X	X				2.5	FCO-180 AC-365	
CAS-4830	CAS	X	X				2.5	AC/FCO- 30	
CAS-4840	Urban CAS	X	X			2.5			
NTPS-6101	FCO NATOPS check		X <sup>(1)</sup>			1.0	365		
	Total Flight Hours (minimum)	15	15	7.5	5.0				
<p>Notes:</p> <p>(1) Not required for FCOs with a current KC-130J NATOPS as a pilot.</p> <p>(2) One live SOPGM and one live Hellfire.</p> <p>(3) In order to carry ordnance, the AC and FCO must both be proficient in CAS-4840. This event may be updated by conducting actual or simulated engagements, under CAS conditions, day or night.</p>									

#### 2.10.9 FIRE CONTROL OPERATOR FAMILIARIZATION (FCO FAM)

2.10.9.1 Purpose. The purpose of this stage of instruction is to familiarize FCOs with KC-130J systems, emergency equipment, and emergency procedures.

#### 2.10.9.2 General

This stage consists of aircraft system familiarization training. Individuals possessing a current KC-130J NATOPS qualification (any crew position) shall be considered complete for this stage of training.

This training may be completed in the tactical squadron or by the Aviation Training Unit. Any KC-130J instructor or ATU instructor may instruct this phase of training.

After completion of this stage, FCOs without previous KC-130J experience should be given a familiarization flight and review the topics

covered in this stage of training. Individuals shall demonstrate knowledge of KC-130J systems and demonstrate applicable emergency procedures.

HH-4800      2.0      \*      B,SC      A      KC-130J

Goal. Ground familiarization.

Requirement

Discuss:

Applicable emergency procedures including:

- Ground evacuation.
- Bailout.
- Ditching or crash landing.
- Door open indication.
- Smoke and fume elimination.
- Rapid decompression.

Review:

- Location and operation of all entrances and exits.
- Location of emergency equipment and demonstrate their use.
- Location of key aircraft components including:
  - Oxygen system components.
  - Aircraft survivability equipment.
  - ICS and Radio systems.
  - AMU, CNI-MU, CNBP, HDD.

Introduce:

- Operation of the CNI-MU.
- Operation of the ICS and radios.
- The AMU and HDD.
- CNI-MU programming to support target area geometry such as TACPLOTs.

Performance Standards

- Locate all emergency equipment and describe its use.
- Correctly perform applicable emergency procedures.
- Identify the location of key aircraft components.
- Correctly operate the ICS and radios.

Prerequisite. APRB.

2.10.9.3 FCO Fire Control Console Familiarization

2.10.9.3.1 Purpose. The purpose of this section of instruction is to familiarize FCOs with the FCC and its operation.

2.10.8.4.2 General. This section consists of Fire Control Console (FCC) familiarization training. A Harvest HAWK system installed on an aircraft shall be used for the ground familiarization.

Upon completion of this section, individuals shall demonstrate the ability to operate the FCC.



HH-4801 2.0 \* B,SC S KC-130J HH-PTT

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Goal. Develop proficiency in FCC operation.

Requirement

Introduce:

Harvest HAWK system preflight.  
Use of the Battle Management System (BMS) laptop. Operation of TSS, using both EO and IR cameras (both polarities) in all FOVs, emphasizing level, gain, and focus adjustments.  
Use of air-to-ground (AG) and urban (UR) tracker modes.  
Manual tracking considerations  
Use of laser range-finder.  
Use of tactical laser.  
Coordinate generation and practice.  
Use of 'GO-TO' and reference position.  
Operation of Falcon View (as integrated on Harvest HAWK).

Discuss:

Harvest HAWK power up considerations.  
FCC, BMS, and TSS troubleshooting procedures.  
Shut down procedures.

Perform Boresight of TSS.

Performance Standards

Properly operate the entire FCC and associated hardware IAW applicable publications.

Generate coordinates for an object of interest within the capabilities of the system.

HH-4802 1.0 \* B,SC A KC-130J HH

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Goal. Introduce FCC operation (ground familiarization).

Requirements

Introduce all the control panels, menus, and displays of the FCC. This event may be conducted immediately prior to conducting the HH-4800 event provided ample ground time is afforded to the FCO.

Performance Standard. Correctly operate all functions of the FCC.

Prerequisite. HH-4800, HH-4801, APRB.

HH-4803 2.5 \* B,SC D A KC-130J HH

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Goal. Develop proficiency in FCC operation.

Requirements

Discuss:

Harvest HAWK power up considerations.  
Shut down procedures.  
FCC, BMS, and TSS troubleshooting procedures.

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Introduce:

Use of the Battle Management System (BMS) laptop.  
Harvest HAWK system preflight. Use of the digital video recorder.  
Operation of the TSS, using both EO and IR cameras (both polarities) in all FOVs, emphasizing level, gain, and focus adjustments.  
Using air-to-ground (AG) and urban (UR) tracker modes.  
Manual tracking considerations.  
Use of the laser range-finder.  
Use of tactical laser (if laser approved range not available, discuss use of the tactical laser).  
Coordinate generation (and practice).  
Using 'GO-TO' and reference position.  
Operation of Falcon View (as integrated on Harvest HAWK) and TCDL application.

Perform boresight of TSS.

Performance Standards

Properly preflight, power up, operate and shut down the entire FCC and associated hardware IAW applicable publications.

Generate coordinates for an object of interest within the capabilities of the system.

Prerequisite. HH-4802.

Range Requirement. Laser approved range desired.

2.10.10 FIRE CONTROL OFFICER BASIC AIR TO SURFACE (FCO BAS)

2.10.10.1 Purpose. The purpose of this stage is to develop the ability to employ the AGM-114P Hellfire and SOPGM while continuing to develop proficiency on operating the TSS to detect and recognize targets.

2.10.10.2 General

This stage focuses on employment of AGM-114P Hellfire and the SOPGM while continuing to develop proficiency on operating the TSS to detect and identify targets. Proper CAS procedures and communications (IAW JP 3-09.3 Close Air Support) should be practiced throughout by using instructor generated, standardized 9-line attack briefs to initiate each engagement.

For the purposes of this Manual, Bomb on Target (BOT) engagements will consist of on-board generated coordinates based on target capture on the TSS followed by own-ship lasing through impact. Bomb on Coordinate (BOC) engagements will consist of using coordinates generated by actual/simulated TACP, coordinates generated on the aircraft using PSS-SOF, or simulated/actual off-board laser for terminal guidance.

Crews are encouraged to use existing or self-developed gridded reference graphics or similar products during these training events. Maximum training value is achieved by incorporating theater representative products.

For SOPGM training, a CATM may be used or the BMS may be operated in indoctrination mode. At least one SOPGM engagement per event shall include opening the cargo ramp and door in order to practice checklists, crew coordination, and timing.

Crew Requirements. Shall be instructed by a qualified FCO-I.

BAS-4810 2.0 \* B,SC D S KC-130J HH-PTT

Goal. Introduce weapon employment.

Requirements

Discuss:

- Day MIR considerations.
- Weapon malfunction and emergency procedures.

Introduce

- Target correlation with aircraft commander.
- CAS procedures.
- Crew coordination.

Demonstrate knowledge of sensor system capabilities and operation.

Conduct:

- 3 simulated Hellfire engagements using BOT techniques. 1 of these engagements shall use manual tracking of the target through impact.
- 3 simulated SOPGM engagements using BOT techniques. 1 of these engagements shall use manual tracking of the target through impact.
- 1 simulated SOPGM attack using BOC techniques.

Performance Standards

Operate system IAW applicable publications.

In conjunction with the cockpit crew, establish proper geometry for weapons employment.

All weapons launches occur within weapon LAR and comply with assigned restrictions (within FAH and TOT +/- 30 seconds). Establish laser aimpoint on the target prior to launch and maintain track on desired target through simulated weapon impact (for BOT engagements).

For manual target tracking, maintain laser aimpoint within 15 meters of the target through impact.

Prerequisite. HH-4801.

BAS-4811 2.5 \* B,SC D A KC-130J HH

Goal. Introduce weapon employment.

Requirements

Discuss:

- Day MIR considerations.
- Weapon malfunction and emergency procedures.

Introduce

- Target correlation with aircraft commander.
- CAS procedures.
- Crew coordination.

Demonstrate knowledge of sensor system capabilities and operation.

Conduct:

- 3 simulated Hellfire engagements using BOT techniques. 1 of these engagements shall use manual tracking of the target through impact.
- 3 simulated SOPGM engagements using BOT techniques. 1 of these engagements shall use manual tracking of the target through impact.
- 1 simulated SOPGM attack using BOC techniques.

Performance Standards

Operate system IAW applicable publications.

In conjunction with the cockpit crew, establish proper geometry for weapons employment.

All weapons launches occur within weapon LAR and comply with assigned restrictions (within FAH and TOT +/- 30 seconds).

Establish laser aimpoint on the target prior to launch and maintain track on desired target through simulated weapon impact (for BOT engagements).

For manual target tracking, maintain laser aimpoint within 15 meters of the target through impact.

Prerequisite. HH-4803, HH-4810.

Ordinance. 1 AGM-114P CATM; 1 SOPGM CATM.

Range Requirement. Laser approved range.

BAS-4812    2.5    \*    B, SC    (N)    A    KC-130J HH

Goal. Live weapons employment.

Requirements

Discuss:

- Target location error (TLE) and coordinate generation.
- MIR considerations.
- Target correlation with the aircraft commander.

Review:

CAS procedures.  
Crew coordination.  
Weapon malfunction and emergency procedures.

Demonstrate knowledge of sensor system capabilities and operation.

Conduct:

2 simulated and 1 actual Hellfire engagements using BOT techniques. 1 of the simulated engagements shall use manual tracking of the target through impact.  
2 simulated and 1 actual SOPGM engagements using BOT techniques. 1 of the simulated engagements shall use manual tracking of the target through impact.  
1 simulated SOPGM engagement using BOC techniques.

Performance Standards

In conjunction with the cockpit crew, establish proper geometry for weapons employment.

All weapons launches occur within weapon LAR and comply with assigned restrictions (within FAH and TOT +/- 30 seconds).

Establish laser aimpoint on the target prior to launch and maintain track on desired target through simulated weapon impact (for BOT engagements).

For manual target tracking, maintain laser aimpoint within 15 meters of the target through impact.

Prerequisite. BAS-4811.

Ordnance. 1 AGM-114P and 1 SOPGM.

Range Requirement. Laser, Hellfire, and SOPGM approved range.

2.10.11 MULTI-SENSOR IMAGERY RECONNAISSANCE (MIR)

2.10.11.1 Purpose. The purpose of this stage is to develop proficiency in conducting MIR.

2.10.11.2 General

Upon completion of this stage, the FCO shall be considered qualified to conduct CAS and MIR using the Harvest HAWK system. A qualification letter by the Commanding Officer shall be placed in the FCOs NATOPS jacket.

The MIR-4820 and CAS-4830 event should be completed using support from a ground JTAC or FAC(A).

The urban CAS event (CAS-4840) shall be completed using support from a ground JTAC, an instructor on board the aircraft playing the role of the JTAC, or in support of a FAC(A).

At a minimum, 1 of the 3 flights shall be conducted at night.

Crew Requirements. Shall be instructed by a Harvest HAWK instructor.

MIR-4820 2.5 180 B,SC,R (N) A KC-130J HH

Goal. Develop proficiency in MIR.

Requirements

Discuss:

Friendly marking techniques and sensor capabilities.  
Ground convoy escort techniques and counter-IED operations/route scans.

Review:

Talk-on techniques and use of GRG.  
Communications brevity terms as it applies to MIR and CAS.

Practice:

Detection and recognition of friendly and enemy positions as directed by a JTAC.  
Point, area, and route scan techniques emphasizing counter-IED operations.  
Tracking personnel and relaying relevant details to the JTAC.

After initial event completion, this event may be logged on any sortie in which the FCO operates the TSS.

Performance Standards

Detect and identify friendly and enemy positions as directed by a JTAC.

Track personnel and properly report activity to the JTAC.  
Perform an effective sensor scan IVO friendly position as directed by a JTAC.

Conduct correct and concise communications.

Prerequisite. BAS-4803

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

2.10.12 CLOSE AIR SUPPORT (FCO CAS)

2.10.12.1 Purpose. The purpose of this stage is to develop proficiency in conducting CAS.

2.10.12.2 General

Upon completion of this stage, the FCO shall be considered qualified to conduct CAS using the Harvest HAWK system. The qualification letter by the Commanding Officer shall be placed in the FCOs NATOPS jacket.

The CAS-4830 event should be completed using support from a ground JTAC or FAC(A).

The urban CAS event (CAS-4840) shall be completed using support from a ground JTAC, an instructor on board the aircraft playing the role of the JTAC, or in support of a FAC(A).

At a minimum, 1 of the 3 flights shall be conducted at night.

Crew Requirements. Shall be instructed by a FCO-I.

CAS-4830    2.5    30    B, SC, R    (N)    A    KC-130J HH

Goal. Refine CAS procedures.

Requirements

Discuss:

Buddy-lase considerations.

Weaponneering and danger close considerations. Review CAS procedures.

Review CAS and LASER terminology.

Conduct:

CAS check-in.

3 simulated Hellfire engagements using BOT techniques.

3 simulated SOPGM engagements using BOT techniques.

1 engagement shall use manual target tracking through impact.

1 engagement shall be conducted under type 3 control.

Performance Standards

Execute standardized CAS procedures and CAS communications under the control of a JTAC/FAC(A) IAW JP 3-09.3-*Close Air Support*.

In conjunction with the cockpit crew, establish proper geometry for weapons employment.

All weapons launches occur within weapon LAR and comply with assigned restrictions (within FAH and TOT +/- 30 seconds).

Establish laser aimpoint on the target prior to launch and maintain track on desired target through simulated weapon impact (for BOT engagements).

For manual target tracking, maintain laser aimpoint within 15 meters of the target through impact.

Prerequisite. BAS-4811.

Ordnance. 1 AGM-114P CATM; 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

CAS-4840 2.5 \* B,SC (N) A KC-130J HH

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Goal. Introduce Urban CAS.

Requirements

Discuss CDE considerations.

Review:

Urban CAS procedures.  
CAS and LASER terminology.

Demonstrate use of GRG.

Conduct

MIR to CAS operations in an urban environment.  
2 simulated Hellfire engagements using BOT techniques.  
2 simulated SOPGM engagements using BOT techniques.

Performance Standards

Execute standardized CAS procedures and CAS communications under the control of a JTAC in an urban environment IAW JP 3-09.3-*Close Air Support*.

In conjunction with the cockpit crew, establish proper geometry for weapons employment.

All weapons launches occur within assigned restrictions (within FAH and TOT +/- 30 seconds).

Establish laser aimpoint on the target prior to launch and maintain track on desired target through simulated weapon impact (for BOT engagements).

Prerequisite. CAS-4830

Ordnance. 1 AGM-114P CATM; 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

2.10.13 PILOT HARVEST HAWK FAMILIARIZATION (AC FAM)

2.10.13.1 Purpose. The purpose of this stage of instruction is to familiarize pilots with the Harvest HAWK system and its operation.



2.10.13.2 General. A Harvest HAWK system installed on an aircraft shall be used for the ground familiarization. Prior to this stage of training, pilots are encouraged to use the KC-130J WST and HH-PTT to practice Harvest HAWK specific geometry and timing.

HH-4802      1.0      \*      B,SC      A      KC-130J HH

Goal. Introduce FCC operation (ground familiarization).

Requirements

An FCO will introduce and demonstrate all the control panels, menus, and displays of the FCC. This may be conducted by an FCO trainee under the supervision of a qualified FCO.

Introduce the cockpit components of the Harvest HAWK (TACVIEW displays, laser and Hellfire consent switches, jettison switches, etc.).

This event may be conducted immediately prior to conducting the HH-4803.

Performance Standard. Demonstrate an understanding of the Harvest HAWK system components and their operation.

HH-4803      2.5      \*      B,SC      D      A      KC-130J HH

Goal. Introduce Harvest HAWK operation.

Requirements

Discuss:

- Harvest HAWK power up considerations.
- Laser considerations.
- Target correlation.
- Harvest HAWK and TSS troubleshooting procedures.
- Shut down procedures.

Introduce:

- Air-to-ground (AG) and urban (UR) tracker modes.
- Operation of the TACVIEW for Falcon View and associated overlays.
- Use of PSS-SOF to generate coordinates for targets displayed on the sensor repeater (AC).

Demonstrate:

- Laser and sensor masking conditions.
- FCO demonstrates operation of the TSS, using both EO and IR cameras (both polarities) in all FOVs, emphasizing level, gain, and focus adjustments, the pilot will observe on the TACVIEW.

Practice Harvest HAWK system preflight.

Performance Standards

Demonstrate an understanding of all Harvest HAWK equipment and operating procedures IAW applicable publications.

Demonstrate the ability to correlate objects of interest on the TACVIEW sensor display.

Prerequisite. HH-4802.

Range Requirement. Suitable SUAS.

2.10.14 PILOT BASIC AIR TO SURFACE (AC BAS)

2.10.14.1 Purpose. This stage focuses on employment of AGM-114P Hellfire and the SOPGM while continuing to develop proficiency on using the TSS to detect and recognize targets.

2.10.14.2 General

Proper CAS procedures (IAW JP 3-09.3 Close Air Support) and communications should be practiced throughout by using instructor generated attack briefs to initiate each engagement.

For the purposes of this document, Bomb on Target (BOT) engagements will consist of on-board generated coordinates based on target capture on the TSS followed by own-ship lasing through impact. Bomb on Coordinate (BOC) engagements will consist of using coordinates generated by actual/simulated TACP, coordinates generated on the aircraft using PSS-SOF, or simulated/actual off-board laser for terminal guidance.

Crews are encouraged to use existing or self-developed gridded reference graphics or similar products during these training events. For SOPGM training, a CATM may be used or the BMS may be operated in indoctrination mode. At least one SOPGM engagement per event shall include opening the cargo ramp and door in order to practice checklists, crew coordination, and timing.

Crew Requirements. Shall be instructed by a HH-I.

BAS-4810      2.0      \*      B,SC      D      S      KC-130J HH-PTT

Goal. Introduce weapon employment.

Requirements

Discuss:

- Day MIR considerations.
- Weapon malfunction and emergency procedures.
- Knowledge of sensor system capabilities and operation.

Conduct:

- 3 simulated Hellfire engagements using BOT techniques.
- 3 simulated SOPGM engagements using BOT techniques.
- 1 simulated SOPGM engagement using BOC techniques.

Practice:

- Target correlation with FCO.
- Maneuvering aircraft into appropriate attack geometry (CP).
- CAS procedures.

Crew coordination.  
Performance Standards

Establish proper geometry for weapons employment.

All weapons launches occur within weapon LAR and comply with assigned restrictions (within FAH and TOT +/- 30 seconds).

BAS-4811    2.5    \*    B, SC    D    A    KC-130J HH

Goal. Introduce weapons employment.

Requirements

Discuss:

- Day MIR considerations.
- Weapon malfunction and emergency procedures.

Demonstrate knowledge of sensor system capabilities and operation.

Conduct:

- 3 simulated Hellfire engagements using BOT techniques.
- 3 simulated SOPGM engagements using BOT techniques.
- 1 simulated SOPGM engagement using BOC techniques.

Practice:

- Target correlation with FCO and generation of coordinates using PSS-SOF (AC).
- CAS procedures.
- Crew coordination.
- CNI-MU entries to support attack geometry (AC).

Maneuvering aircraft into appropriate attack geometry (CP).

Performance Standards

Establish proper geometry for weapons employment.

All weapons launches occur within weapon LAR and comply with assigned restrictions (within FAH and TOT +/- 30 seconds).

Prerequisite. HH-4803, HH-4810.

Ordnance. 1 AGM-114P CATM; 1 SOPGM CATM.

Range Requirement. Laser approved range.

BAS-4812    2.5    \*    B, SC    (N)    A    KC-130J HH

Goal. Live weapons employment.

Requirements

Discuss:

- Night MIR considerations.

Target location error (TLE) and coordinate generation.

Demonstrate knowledge of sensor system capabilities and operation.

Generate three sets of coordinates for targets displayed on the sensor using PSS-SOF (AC).

Conduct:

- 2 simulated and 1 actual Hellfire engagements using BOT techniques.
- 2 simulated and 1 actual SOPGM engagements using BOT techniques.
- 1 simulated SOPGM engagement using BOC techniques.

Review:

- Target correlation with the FCO (AC).
- CAS procedures.
- Crew coordination.
- Weapon malfunction and emergency procedures.

#### Performance Standards

In conjunction with the cockpit crew, establish proper geometry for weapons employment.

All weapons launches occur within weapon LAR and comply with assigned restrictions (within FAH and TOT +/- 30 seconds).

Properly use PSS-SOF to generate coordinates and relay to the FCO within 1 minute of target correlation.

Prerequisite. BAS-4811.

Ordinance. 1 AGM-114P and 1 SOPGM.

Range Requirement. Laser, Hellfire and SOPGM approved range.

#### 2.10.15 Multi-sensor Imagery Reconnaissance (MIR)

2.10.15.1 Purpose. The purpose of this stage is to develop proficiency in conducting MIR.

#### 2.10.15.2 General

Upon completion of this stage, aircraft commanders shall be considered qualified to conduct MIR using the Harvest HAWK system.

The MIR-4820 event should be completed using support from a ground JTAC.

At a minimum, 1 of the 3 MIR and CAS flights shall be conducted at night.

Crew Requirements. Shall be instructed by a Harvest HAWK instructor.

MIR-4820 2.5 365 R (N) A 1 KC-130J HH

Goal. Develop proficiency in MIR.

Requirement

Discuss:

Friendly marking techniques and sensor capabilities.  
Ground convoy escort techniques and counter-IED operations/route scans.

Review:

Talk-on techniques and use of GRG.  
Communications brevity terms as it applies to MIR and CAS.

Practice:

Detection and recognition of friendly and enemy positions as directed by a JTAC.  
Point, area, and route scan techniques emphasizing counter-IED operations.  
Maneuvering aircraft to minimize sensor and laser mask conditions (CP).

Performance Standards

Maintain situational awareness on sensor orientation and position.

In conjunction with the FCO, detect and recognize friendly and enemy positions as directed by a JTAC.

Conduct proper communications.

Prerequisite. BAS-4811

Ordnance. 1 AGM-114P CATM; 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

2.10.15 PILOT CLOSE AIR SUPPORT (AC CAS)

2.10.15.1 Purpose. The purpose of this stage is to develop proficiency in conducting CAS.

2.10.15.2 General

Upon completion of this stage, aircraft commanders shall be considered qualified in CAS. A letter of qualification from the commanding officer shall be placed in the pilots NATOPS jacket.

Copilot must complete one sortie in this stage in order to be considered qualified in CAS.

The CAS-4830 event should be completed using support from a ground JTAC.

The Urban CAS event (CAS-4840) shall be completed using support from a ground JTAC, with an instructor on board the aircraft playing the role of the JTAC, or in support of a FAC(A).

Crew Requirements. Shall be instructed by a HH-I.

CAS-4830      2.5    30    B,SC,R      (N)                      A      KC-130J HH

Goal. Refine CAS procedures.

Requirements

Discuss:

    Weaponing and danger close considerations.  
    Buddy-lase considerations.

Review:

    CAS procedures.  
    CAS and LASER terminology.

Monitor CAS check in from the FCO and copy SITREP (AC)

Conduct:

    3 simulated Hellfire engagements using BOT techniques.  
    3 simulated SOPGM engagements using BOT techniques.  
    1 engagement shall use manual target tracking through impact.  
    1 engagement shall be conducted under type 3 control.

Practice:

    CNI-MU entries to support attack geometry (AC).  
    Maneuvering aircraft into appropriate attack geometry (CP).

Performance Standards

Execute standardized CAS procedures and CAS communications under the control of a JTAC IAW JP 3-09.3-*Close Air Support*.

Establish proper geometry for weapons employment.

Ensure appropriate clearance is received prior to consenting to weapons release.

All weapons launches occur within weapon LAR and comply with assigned restrictions (within FAH and TOT +/- 30 seconds).

Prerequisite. CAS-4811

Ordinance. 1 AGM-114P CATM; 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

CAS-4840 2.5 \* B, SC (N) A KC-130J HH

Goal. . Introduce Urban CAS.

Requirements

Discuss CDE considerations.

Review

Urban CAS procedures.

CAS and LASER terminology.

Assist the FCO in target correlation (AC).

Practice maneuvering aircraft into appropriate attack geometry (CP).

Conduct

MIR to CAS operations in an urban environment.

2 simulated Hellfire engagements using BOT techniques.

2 simulated SOPGM engagements using BOT techniques.

Demonstrate use of GRG.

Performance Standards

Execute standardized CAS procedures and CAS communications under the control of a JTAC IAW JP 3-09.3-*Close Air Support*.

In conjunction with the FCO, establish proper geometry for weapons employment.

Ensure appropriate clearance is received prior to consenting to weapons release.

All weapons launches occur within assigned restrictions (within FAH and TOT +/- 30 seconds).

Prerequisite. CAS-4830

Ordnance. 1 AGM-114P CATM; 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

2.11 INSTRUCTOR TRAINING (5000)

2.11.1 General. The purpose of this phase of training is to train qualified pilots to instruct various levels of instruction.

Pilots shall be recommended for instructor training via Aircrew Performance Review Board (APRB). Upon recommendation, the pilot shall complete appropriate syllabus requirements. Upon completion of syllabus requirements, the commanding officer shall designate the pilot as an instructor.

Standardization will be emphasized throughout instructor training.

IUTs shall have a minimum of 100 TPC hours in series to instruct. Instructors must maintain currency and proficiency in stage to instruct in that stage.

Due to the lack of a FRS for the KC-130J community, Core Skill Introduction Instruction may occur at the fleet squadrons in accordance with NAVMC 3500.14-. FRS Instructors shall conduct this training.

### 3.11.2 BASIC INSTRUCTOR PILOT (BIP)

3.11.2.1 Purpose. To develop qualified Basic Instructor Pilots (BIPs) using a standardized instructor training program. This syllabus is designed to prepare aircraft commanders to instruct specific Core/Mission Skill events in the simulator and aircraft. This portion of the syllabus shall be used by VMGR squadrons to assist in instructor standardization.

#### 3.11.2.2 General

IUT flights will emphasize instructional techniques, briefing, and debriefing. The IUT will be capable of demonstrating all training objectives listed for the referenced syllabus flight. Emphasis on all flights is on training objectives, method of instruction, and student problem areas.

BIPs may instruct in the Core Skill (TN) and the Mission Skill (AAR and ADGR) phases.

BIPs shall be designated in writing by the squadron commanding officer.

Crew Requirements. Shall be instructed by an ANI, LATI, NSI or WTI.

#### Academic/Ground Training

Utilize academic courseware as outlined in the MAWTS-1 course catalog and review MAWTS-1 ASPs, NFM, NFM supplements, and KC-130 ANTPP.

IUTs shall satisfactorily instruct an appropriate stage ASP or ground training syllabus which shall be observed by an ANI, LATI, NSI or WTI.

BIP-5100    2.0    \*            B            (NS)    E            A/S       1 KC-130J/WST

Goal. Basic Instructor Pilot training.

Requirement. Instruct PF and PM TN procedures in the Core Skill Phase. Demonstrate the instructor skills required to instruct time navigation and low level flight while correcting common student errors. The IUT will fly in the right seat with a student in the left seat and the instructor on long cord.

Performance Standard. The IUT shall successfully demonstrate the ability to instruct a TN sortie. The IUT should utilize CFPS to plan and execute a TN route to a designated time on target (TOT). The IUT should emphasize planning to ensure terrain clearance and demonstrate the ability to modify the route in order to successfully achieve the planned TOT. The IUT shall discuss the following topics: load factor, low altitude hazards, emergencies while in the low level environment, and timing correction methods.



Prerequisite. TN Core Skill complete, NSQ(H) and LATQ.

Range Requirement. Appropriate SUAS or MTR scheduled.

External Syllabus Support. CI if conducted in a WST.

BIP-5101 2.0 \* B,R NS E A/S 1 KC-130J/WST

Goal. Basic Instructor Pilot check.

Requirement. Instruct AAR procedures in the Mission Skill Phase. The IUT will fly in the right seat with a student in the left seat and the instructor on long cord.

Performance Standard. The IUT shall successfully demonstrate the ability to instruct a night HAAR. The IUT shall discuss and demonstrate rendezvous procedures while utilizing NVDs. The IUT should discuss various tools used to effect the rendezvous (such as radar, air-to-air TACAN and TCAS). Emergency procedures while conducting night AAR (both aircraft and NVG) shall be briefed as well as fuel planning techniques. The IUT will fly the sortie from the right seat. A minimum of 1 rendezvous will be flown/demonstrated by the IUT as well as the IUT's ability to operate the AAR system correctly.

Prerequisite. AAR and ADGR Mission Skill complete, AAR-3602 and BIP-5100.

External Syllabus Support. A minimum of 1 AAR capable helicopter or a CI if conducted in a WST.

### 2.11.3 ASSISTANT NATOPS INSTRUCTOR (ANI)

2.11.3.1 Purpose. Qualify TPC as a ANI.

2.11.3.2 General. Upon completion of the ANI syllabus a pilot shall be designated an ANI or NI by the squadron commanding officer or designated a GNE by the group commanding officer.

Crew Requirements. Shall be instructed by an ANI, NI, GNE, or Model Manager.

Academic/Ground Training. Review NFM and NFM supplements.

NI-5140 2.0 \* B (N) E S/A 1 WST/KC-130J

Goal. ANI training.

Requirement. Introduce the IUT to non-NS(H) NATOPS/Instrument checkride procedures. Introduce the skills required to correct common pilot errors with the IUT in the right seat with a qualified ANI in the left seat.

#### Performance Standards

Demonstrate familiarity with common pilot errors and instructional techniques.

Maintain proper defensive posturing to maintain safe flight.

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Develop a script for a NATOPS/Instrument checkride sortie including: precision and non-precision instrument approaches, 0%, 50% and 100% flap landings and ground/take-off/in-flight/landing emergencies.

External Syllabus Support. CI if conducted in a WST.

NI-5141 2.0 365 B,R (N) E S/A 1 WST/KC-130J

Goal. ANI check.

Requirement. A NI/NE/MM will observe (on long cord) the IUT administer a NATOPS/Instrument checkride to another pilot in the left seat. Only the Model Manager can give a checkride to a GNE and an NE or the Model Manager can give a checkride to an NI.

Performance Standard. Demonstrate competencies established in NI-5140.

Prerequisite. NI-5140.

External Syllabus Support. CI if conducted in a WST.

2.11.4 FLEET REPLACEMENT SQUADRON INSTRUCTOR (FRSI)

2.11.4.1 Purpose. Qualify ANI as a FRSI.

2.11.4.2 General. Upon completion of the FRSI syllabus, a pilot shall be designated an FRSI by the commanding officer.

Crew Requirements. Shall be instructed by FRSI.

Academic/Ground Training. Review NFM and NFM supplements.

FRSI-5145 2.0 \* B (N) E S/A 1 WST/KC-130J

Goal. FRSI training.

Requirement. IUT in the left seat shall practice all FAM procedures in the Core Skill Introduction syllabus.

Performance Standards

Demonstrate familiarity with common student errors and instructional techniques.

Maintain proper defensive posturing to maintain safe flight.

Demonstrate instructional proficiency in steep turns, power off stalls, slow flight, side-slip recovery, 1-engine inoperative scenarios, 3-engine go-around procedures, takeoff aborts, and NFM memory items.

Prerequisite. NI-5141.

FRSI-5146 2.0 \* B (N) E S/A 1 WST/KC-130J

Goal. FRSI training.

Requirement. IUT in left seat shall demonstrate the ability to maintain a safe training environment while correcting common student errors as simulated by a FRSI. IUT shall be introduced to standardized

maneuver description/instruction for Core Skills Introduction FAM events.

Performance Standard. Demonstrate competencies established in FRSI-5145.

Prerequisite. FRSI-5145.

FRSI-5147 2.0 \* B,R (N) E A 1 KC-130J

Goal. FRSI check.

Requirement. IUT shall conduct a Core Skill Introduction FAM event with a student in the right seat and shall be observed by a FRSI on long cord. Upon completion of this event, the pilot shall be designated a FRSI by the commanding officer.

Performance Standard. Demonstrate competencies established in FRSI-5145.

Prerequisite. FRSI-5146.

2.11.5 FLIGHT LEADERSHIP STANDARDIZATION EVALUATOR (FLSE) (5320 thru 5321)

2.11.5.1 Purpose. Certify and designate the pilot as a FLSE.

2.11.5.2 General. Refer to NAVMC 3500.14\_, MCO 3500.109\_, and the MAWTS-1 Course Catalog. The build-up phase may be developed and supervised by a FLSE program coordinator or FLSE model manager. Upon certification, the FLSE shall be designated by the Group Commanding Officer.

Re-designation. Refer to the MAWTS-1 KC-130J Course Catalog.

Crew requirements. Refer to the MAWTS-1 KC-130J Course Catalog..

Academic/Ground Training. Refer to the MAWTS-1 KC-130J Course Catalog.

FLSE-5320 3.0 \* B,R (NS) E A 2+ KC-130J

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

FLSE-5321 3.0 365 B,R,SC,M (NS) E A 2+ KC-130J Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

FLSE-5322 0.0 90 B,R,SC,M \* \* \* Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

2.11.6 STAGE INSTRUCTOR TRAINING

2.11.6.1 Purpose. Qualify the pilot as a Stage Instructor pilot. Stage instructors may instruct in specifically designated Mission Skill areas.

2.11.6.2 General

Instructors may only instruct the stage in which they are designated and for events in which they are current and proficient.

Stage instructors shall be designated in writing by the squadron commanding officer.

Academic/Ground Training

Utilize academic courseware as outlined in the MAWTS-1 course catalog and review MAWTS-1 ASPs, NFM, NFM supplements, and KC-130 ANTPP.

IUTs shall satisfactorily instruct an appropriate stage ASP or ground training syllabus which shall be observed by either a current stage instructor or WTI.

ALZ-5500 2.0 \* B,R NS E A 1 KC-130J

Goal. ALZ stage instructor check.

Requirement. Instruct NS ALZ procedures in the Mission Skill Phase. The sortie shall be instructed by either an ALZI&NSI, ALZI&ANI or WTI. The IUT will occupy the right seat.

Performance Standard. The IUT shall successfully demonstrate the ability to instruct a NS ALZ sortie in accordance with ALZ-3550. The IUT shall brief the sortie and discuss runway surface conditions, lighting/markings configurations, minimum runway length, TOLD, and emergency procedures. IPRA and approach plate generation will also be demonstrated and discussed. The IUT will fly the sortie from the right seat and demonstrate a minimum of 3 max effort touch and go landings.

Prerequisite. ALZ Mission Skill complete (3500 thru 3503, 3550) and either ANI or NSI.

AD-5700 2.0 \* B,R (NS) E S/A 1 WST/KC-130J

Goal. AD stage instructor training.

Requirement. Instruct AD procedures in the Mission Skill Phase. The IUT will act as the PF while instructing an ADI acting as a PM student. The sortie shall be instructed by either an ADI or WTI.

Performance Standard. The IUT shall demonstrate the ability to plan, execute and instruct an AD as the PF. The IUT shall demonstrate slow-down calculations, CARP calculations using CAPS and PFPS, and manual CARP calculations. The IUT should also discuss the following: TASM, CNI-MU CARP pages, check lists, DZ markings, HUD symbology, and emergency procedures.

Prerequisite. AD Mission Skill complete (3700 thru 3705), BI-4710, either AD-4700 or AD-4701 or AD-4702, and BIP.

External Syllabus Support. WST and CI. Drop zone and AD support if conducted in the aircraft.

AD-5701 2.0 \* B,R (NS) E A 1 KC-130J

Goal. AD stage instructor check.

Requirement. Instruct AD procedures in the Mission Skill Phase. The IUT will act as the PF while instructing a PM student during an actual cargo or static line personnel drop. The sortie shall be instructed by either an ADI or WTI who is proficient in AD operations. The instructor will be on long cord.

Performance Standard. The IUT shall demonstrate the ability to plan and execute an air delivery as the PF. The IUT shall demonstrate slow-down calculations, CARP calculations using CAPS and PFPS, and manual CARP calculations. The IUT should also discuss the following: TASM, CNI-MU CARP pages, check lists, DZ markings, HUD symbology, and emergency procedures.

Prerequisite. AD-5700.

External Syllabus Support. Drop zone and AD support.

2.11.7 NIGHT SYSTEMS INSTRUCTOR (NSI) (NS(H) 5150 thru 5152)

2.11.7.1 Purpose. Certify and designate the pilot as a NSI.

2.11.7.2 General. Refer to NAVMC 3500.14\_, MCO 3500.109\_, and the MAWTS-1 Course Catalog. The build-up phase may be developed and supervised by a squadron NSI. Upon certification by MAWTS-1, the NSI shall be designated by the squadron commanding officer.

Crew requirements. Refer to the MAWTS-1 KC-130J Course Catalog.

Academic/Ground Training. Refer to the MAWTS-1 KC-130J Course Catalog.

2.11.8 LOW ALTITUDE TACTICS INSTRUCTOR (LATI) (LAT-5210 thru 5212)

2.11.8.1 Purpose. Certify and designate the pilot as a LATI.

2.11.8.2 General. Refer to NAVMC 3500.14, MCO 3500.109, and the MAWTS-1 Course Catalog. The build-up phase may be developed and supervised by a squadron LATI. Upon certification by a squadron WTI or MAWTS-1 IP, the LATI shall be designated by the squadron commanding officer.

Crew requirements. Refer to the MAWTS-1 KC-130J Course Catalog.

Academic/Ground Training. Refer to the MAWTS-1 KC-130J Course Catalog.

2.11.9 Night Systems LAT Instructor (NS LATI) (NS(L) 5250 thru 5251)

2.11.9.1 Purpose. Certify and designate the pilot as a NSLATI.

2.11.9.1 General. Refer to NAVMC 3500.14\_, MCO 3500.109\_, and the MAWTS-1 Course Catalog. The build-up phase may be developed and supervised by a squadron NSLATI. Upon certification by MAWTS-1, the NSLATI shall be designated by the squadron commanding officer.

Crew requirements. Refer to the MAWTS-1 KC-130J Course Catalog.

Academic/Ground Training. Refer to the MAWTS-1 KC-130J Course Catalog.

2.11.10 HARVEST HAWK (HH-I) and FIRE CONTROL OFFICER INSTRUCTOR (FCO-I) HH-5310 thru 5313)

2.11.10.1 Purpose. Certify and designate the pilot as a HH-I or FCO-I.

2.11.10.2 General. Refer to NAVMC 3500.14\_, MCO 3500.109\_ and the MAWTS-1 course catalog. The build-up phase may be developed and supervised by the Squadron FCO-I or HH-I. Upon certification by MAWTS-1, the HH-I/FCO-I shall be designated by the squadron commanding officer.

Crew requirements. Refer to the MAWTS-1 KC-130J Course Catalog.

Academic/Ground Training. Refer to the MAWTS-1 KC-130J Course Catalog.

2.11.11 DEFENSE TACTICS INSTRUCTOR (DTI) (DT-5410 thru 5412)

2.11.11.1 Purpose. Certify and designate the pilot as a DTI.

2.11.11.2 General. Refer to NAVMC 3500.14\_, MCO 3500.109\_, and the MAWTS-1 Course Catalog. Completion of the DT syllabus is a prerequisite. The build-up phase may be developed and supervised by a squadron DTI. Upon certification by MAWTS-1, the DTI shall be designated by the squadron commanding officer.

Crew requirements. Refer to the MAWTS-1 KC-130J Course Catalog.

Academic/Ground Training. Refer to the MAWTS-1 KC-130J Course Catalog.

2.11.12 WEAPONS AND TACTICS INSTRUCTOR (WTI)

2.11.12.1 Purpose. Certify and develop highly qualified pilots to serve as the unit training officer, to become the unit SME for mission planning, briefing/debriefing, and be responsible for planning and integrating with the MAGTF and Joint Forces. Additionally, this stage is designed to create effective and experienced unit tactics instructors.

2.11.12.2 General. Tactics and techniques will be taught per the KC-130 ANTPP and the MAWTS-1 supplements. Only MAWTS-1 instructors shall instruct/qualify flights in this stage. Qualification shall only be achieved as shown in the WTI Course Catalog. Upon certification by MAWTS-1 Commanding Officer, the WTI shall be designated by the squadron commanding officer.

Crew requirements. Refer to the MAWTS-1 WTI Course Catalog.

Academic/Ground Training. Refer to the MAWTS-1 WTI Course Catalog.

2.12 CONTRACT INSTRUCTOR (CI) TRAINING

2.12.1 General. The purpose of this phase of training is to train qualified contract simulator instructors for various levels of instruction.

CIs shall complete the POI in order to achieve stage instructor qualification. The general flow of training and evaluation is a four step qualification process that shall proceed as follows:

Observe the instruction of ground training.

Be evaluated while instructing ground training.

Observe the instruction of a stage event.









Requirement. Instruct formation procedures including all FORM maneuvers. Demonstrate ability to correct common student errors. The IUT will instruct from the IOS. The IUT shall be evaluated by a SL.

Performance Standards

The IUT shall successfully demonstrate the ability to instruct a day or night formation flight.

At a minimum, the IUT shall discuss all parade positions, turns into/away, under run procedures, visual checkpoints, closure rate estimation, and formation emergency procedures.

Prerequisite. Must be evaluated by a SL, while instructing formation procedures ground training.

External Syllabus Support. SL.

TR-5400 4.0 \* D E S 1 WST

Goal. CI IR TR stage instructor check.

Requirement. Instruct the counter-measures dispensing system (ALE-47) setup, the missile warning system (AAR-47) setup, HUD/HDD symbology and threat reaction. Discuss IR seeker head capabilities/limitations, threat reaction ICS calls, AAR-47 limitations and flare "cocktail." The pilot should be exposed to a variety of threat situations of increasing intensity using both the automatic and manual modes of the ALE-47 from all quadrants. Threat reaction maneuvering should include the takeoff, cruise and approach phases of flight.

Performance Standards

The IUT shall successfully demonstrate the ability to instruct IR TR.

At a minimum, the IUT shall discuss ALQ-157, ALE-47 and AAR-47 interaction, AAR-47 HUD and HDD symbology, and appropriate threat calls and maneuvers for various flight regimes.

Prerequisite. IUT must be evaluated by a LATI while instructing ASE Introduction, Performance Limitations and Stresses, and LAT Maneuvering ASPs.

External Syllabus Support. LATI.

ALZ-5501 4.0 \* (NS) E S 1 WST

Goal. CI ALZ stage instructor check.

Requirement. Instruct ALZ operations including Max Effort takeoff and landings, tactical arrivals, and combat offload. The IUT shall be evaluated by a ALZI or WTI.

Performance Standard. The IUT shall successfully demonstrate the ability to instruct an ALZ sortie. An IPRA will be demonstrated and discussed. The IUT will instruct from the IOS.



2.13 REQUIREMENTS, QUALIFICATIONS AND DESIGNATIONS (RQD) (6000)

2.13.1 General. To provide a vehicle for tracking codes associated with certifications, qualifications and designations. E-coded sorties are evaluation sorties. Once the flight to attain the qualification/designation is complete, a letter from the squadron commanding officer awarding the qualification/designation shall be placed in the NATOPS jacket before that qualification/designation can be utilized.

2.13.2 FCO NATOPS EVALUATION (NTPS)

2.13.2.1 Purpose. NATOPS certify FCOs that have no previous KC-130J NATOPS designation. FCOs that possess a KC-130J NATOPS designation in another crew position are not required to maintain a separate FCO NATOPS designation.

2.13.2.2 General. Any KC-130J NI or ANI, from any crew position may evaluate the FCO for the NATOPS designation. FCOs shall complete an open book and closed book NATOPS written exam prior to the evaluation event. These exams shall focus on general KC-130J emergency procedures and crew duties, but shall also include Harvest HAWK equipment operating and emergency procedures. The intent is to ensure that all FCOs can perform basic crew member emergency procedures in the cargo compartment and can safely exit the aircraft in an emergency. The evaluation event may be accomplished in conjunction with any other syllabus flight.

Crew Requirements. Any KC-130J NI or ANI may evaluate this event.

Ground Training/Evaluation. FCOs must complete an open and closed book written examination prior to this event.

NTPS-6101 1.0 365 B,SC,R,M (N\*) A KC-130J HH

Goal. NATOPS designate the FCO.

Requirement. Conduct NATOPS evaluation flight. May be conducted in conjunction with any other syllabus flight.

Performance Standard. IAW NATOPS manual, identify emergency equipment, exits, and procedures that apply to the cargo compartment.

Prerequisite. HH-4800, 4801 and at least 5 total flight hours on the KC-130J.

2.13.3 FUNCTIONAL CHECK PILOT (FCP)

2.13.3.1 Purpose. Designate the TPC as a FCP.

2.13.3.2 General. TPCs must have 150 TPC hours in series and a minimum of three Functional Check Flights (FCFs) (two "A" Profiles) to be eligible for FCP. There is no minimum hour requirement for a TPC to be designated a partial FCP. Upon completion of the evaluation flight pilots shall also log the proficiency code in order to track event proficiency. FCPs shall be designated by the commanding officer.

Crew Requirements. Shall be instructed by a FCP (FCP-6106).

Academic/Ground Training. Functional Check Pilot Examination.

FCP-6005 1.0 \* B, SC, R E Open Book Functional Check Pilot Examination

Goal. The purpose of the open book functional check pilot examination is to evaluate the airman's knowledge of the appropriate publications concerning functional check flight procedures.

Performance Standard. Achieve a minimum grade of qualified (80%) on the open book examination.

Prerequisite. NTPS-6118.

FCP-6105 4.0 \* B D E A/S 1 KC-130J/WST

Goal. Partial FCP evaluation/designation.

Requirement. The flight shall consist of a "B" profile functional check flight and be instructed by a FCP. Upon completion of this code, the pilot will be qualified to conduct B-E card FCFs.

Performance Standard. Satisfactorily execute procedures per the NFM, OPNAVINST 3710.7\_, and OPNAVINST 4790.2\_.

Prerequisite. FCP-6005, 6118, and recommendation by APRB.

FCP-6106 4.0 \* B, R, SC, M D E A/S 1 KC-130J/WST

Goal. FCP evaluation/designation.

Requirement. The flight shall consist of an "A" profile functional check flight and be instructed by a FCP. Upon completion of this code, pilot will be qualified to conduct A-E card FCFs.

Performance Standard. Satisfactorily execute procedures per the NFM, OPNAVINST 3710.7\_, and OPNAVINST 4790.2\_.

Prerequisite. FCP-6105 and recommendation by APRB.

FCP-6107 1.0 365 B, R, SC, M D A/S 1 KC-130J/WST

Goal. FCP proficiency.

Requirement. To maintain FCP proficiency a pilot shall conduct a A card FCF in the aircraft or simulator.

Prerequisite. FCP-6105 or FCP-6106.

2.13.4 KC-130J NATOPS EVALUATION POI

2.13.4.1 Purpose. To evaluate the airman's knowledge of aircraft systems, performance limitations, emergency procedures, and flight and ground operations.

2.13.4.2 General

NATOPS Evaluators/Instructors shall conduct the NATOPS evaluation in accordance with OPNAVINST 3710.7 Series and other applicable directives, instructions, and orders.

The NATOPS Evaluator shall utilize the NATOPS Model Manager generated NATOPS Aviation Training Form (ATF) and the evaluation metrics required for the accomplishment and performance of the standardized criterion to determine whether the aircrewman completed the sortie. Prior to the oral examination, the NATOPS Evaluator shall review the evaluatee's NATOPS monthly emergency procedures examinations and quarterly simulator/cockpit drills located in the APR for the previous twelve (12) months and previous NATOPS evaluations. At the discretion of the squadron commanding officer, a letter designating the pilot as NATOPS qualified shall be placed in the NATOPS jacket.

NATOPS Evaluatees shall complete and have a graded open book, closed book, and oral examination prior to the commencement of the actual NATOPS evaluation event.

NATOPS Training. All requirements delineated in the matrix below shall be completed/graded prior to the evaluation event.

SELF PACED READINGS		DATE COMPLETE
USMC KC-130J Squadron SOP		
KC-130J NATOPS Flight Manual		
OPNAVINST 3710.7 Series		
REQUIRED Evaluation Events	DATE COMP/GRADED	INSTRUCTOR
KC-130J Open Book Examination		
KC-130J Closed Book Examination		
KC-130J Oral Examination		
KC-130J Evaluation (Simulator/ Aircraft)		

NTPS-6010 3.0 365 B,SC,R,M E Open Book NATOPS Examination

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

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

NTPS-6011 1.0 365 B,SC,R,M E Closed Book NATOPS Examination

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

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

NTPS-6012 3.0 365 B,SC,R,M E Oral NATOPS Examination

Goal. The oral examination shall consist of, but not be limited to the question bank. The instructor/evaluator may draw upon their experience to propose questions of a direct and positive manner and in no way be opinionated to evaluate the airman's knowledge of the concerning normal/emergency procedures, aircraft limitations, and performance.

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

2.13.5 TRANSPORT THIRD PILOT (T3P) DESIGNATION

2.13.5.1 Purpose. Designate as a T3P.

2.13.5.2 General. After student pilots have complete Core Skill Introduction Training and NATOPS check they shall be designated T3P by the commanding officer.

Crew Requirements. Shall be instructed by an ANI/NI (simulator: CI NI).

Ground Training/Evaluation. Open and closed book NATOPS examinations and the specific requirements for T3P designation per OPNAVINST 3710.7\_.

NTPS-6110 2.0 365 B,SC,R (N) E A/S 1 KC-130J/WST

Goal. Complete T3P NATOPS flight evaluation. Conduct an objective evaluation of the airman's knowledge of mission planning, normal operating procedures (flight and ground), crew resource management, aircraft systems, performance criteria, emergency procedures, and debriefing. The focus is on normal and emergency procedures, not tactical execution. Emphasize the aforementioned items with the addition of local course rules, squadron SOP, and admin flight procedures. The NATOPS evaluation is intended to evaluate compliance with NATOPS procedures. The NATOPS evaluation is the means to measure the airman's efficiency in the execution of normal operating procedures and reaction to emergencies and malfunctions. The NATOPS evaluation process should be as much a learning tool and/or experience as it is an evaluation. Initial T3P qualification shall be conducted in the aircraft.

Requirement. Conduct NTPS-6110 evaluation flight. Upon successful completion of this event, the evaluator shall log the appropriate training code for tracking purposes. Demonstrate comprehensive knowledge and understanding of NATOPS, squadron SOP, and local course rules.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7 Series, and KC-130J NATOPS. Complies with squadron SOP and local course rules.

Prerequisite. Core Skill Introduction Phase complete, NTPS-6010, NTPS-6011, and NTPS-6012.

External Syllabus Support. CI if conducted in the WST.

2.13.6 TRANSPORT SECOND PILOT (T2P) Designation

2.13.6.1 Purpose. Designate as a T2P.

2.13.6.2 General. Upon completion of the initial examination and evaluation, this flight will be used as the annual NATOPS evaluation and the pilot shall be designated T2P by the commanding officer.

Crew Requirements. Shall be instructed by an ANI/NI or FRSI (simulator: CI NI).

Ground Training/Evaluation. Open and closed book NATOPS examinations, open book tactics examination and the specific requirements for T2P designation per OPNAVINST 3710.7. The written tactical examination will not be required for subsequent evaluations.

NTPS-6013 1.0 \* B,SC,R E Open Book Tactics Examination

Goal. The purpose of the open book tactics examination is to evaluate the airman's knowledge of the appropriate publications concerning tactics, techniques and procedures of Core and Mission Skills.

Performance Standard. Achieve a minimum grade of 80% on the open book examination.

Prerequisite. NTPS-6110.

NTPS-6111 2.0 365 B,SC,R,M (N) E S/A 1 WST/KC-130J

Goal. Complete T2P NATOPS flight evaluation. Conduct an objective evaluation of the airman's knowledge of mission planning, normal operating procedures (flight and ground), crew resource management, aircraft systems, performance criteria, emergency procedures, and debriefing. The focus is on normal and emergency procedures, not tactical execution. Emphasize the aforementioned items with the addition of local course rules, squadron SOP, and admin flight procedures. The NATOPS evaluation is intended to evaluate compliance with NATOPS procedures. The NATOPS evaluation is the means to measure the airman's efficiency in the execution of normal operating procedures and reaction to emergencies and malfunctions. The NATOPS evaluation process should be as much a learning tool and/or experience as it is an evaluation.

Requirement. Conduct NTPS-6111 evaluation flight. Upon successful completion of this event, the evaluator shall log the appropriate training code for tracking purposes. Demonstrate comprehensive knowledge and understanding of NATOPS, squadron SOP, and local course rules.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7 Series, and KC-130J NATOPS. Complies with squadron SOP and local course rules.

Prerequisite. ACPM 82XX Phase complete, NTPS-6010, NTPS-6011, NTPS-6012, and NTPS-6013.

External Syllabus Support. WST and CI NI.

#### 2.13.7 TRANSPORT PLANE COMMANDER (TPC) DESIGNATION

2.13.7.1 Purpose. Designate as a TPC.

2.13.7.2 General. This stage is intended to prepare the pilot for the upgrade to TPC. Upon completion of the initial syllabus, NTPS-6118 will be



used to track annual NATOPS evaluations and the pilot shall be designated a TPC by the commanding officer.

Crew Requirements. Shall be instructed by an ANI/NI (simulator: CI NI).

Ground Training/Evaluation. Pilots considered for TPC should be Mission Skill Phase complete, NSQ(H), currency/flight time per NFM, and the specific requirements for TPC designation per OPNAVINST 3710.7\_.

NTPS-6112 3.0 \* B, SC, R (N) S 1 WST

Goal. Prepare T2P for upgrade to TPC.

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per the NFM and NIFM.

Prerequisite. NTPS-6111 and NSQ(H).

NTPS-6113 3.0 \* B, SC, R (N) S 1 WST

Goal. Prepare T2P for upgrade to TPC.

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per the NFM and NIFM.

Prerequisite. RQD-6112.

NTPS-6114 3.0 \* B, SC, R (N) S 1 WST

Goal. Prepare T2P for upgrade to TPC.

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per the NFM and NIFM.

Prerequisite. RQD-6113.

NTPS-6115 3.0 \* B, SC, R (N) S 1 WST

Goal. Prepare T2P for upgrade to TPC.

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per the NFM and NIFM.

Prerequisite. RQD-6114.

NTPS-6116 3.0 \* B, SC, R (N) S 1 WST

Goal. Prepare T2P for upgrade to TPC.

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per the NFM and NIFM.

Prerequisite. RQD-6115.

NTPS-6117 18.0 \* B,SC (N) E A 1 KC-130J

Goal. TPC Route Check.

Requirement. Pilot will demonstrate the ability to manage all aspects of an extended mission. Evaluation should be a longrange mission involving cargo handling, international flight procedures, route planning, and aircrew management. This flight should involve multiple legs with RON.

Performance Standard. Per the NFM, FLIP, FCG and published SOPs.

Prerequisite. RQD-6116.

External Syllabus Support. Diplomatic/Flight Clearance.

NTPS-6118 2.0 365 B,SC,R,M (N) E A/S 1 KC-130J/WST

Goal. Complete TPC NATOPS flight evaluation. Conduct an objective evaluation of the airman's knowledge of mission planning, normal operating procedures (flight and ground), crew resource management, aircraft systems, performance criteria, emergency procedures, and debriefing. The focus is on normal and emergency procedures, not tactical execution. Emphasize the aforementioned items with the addition of local course rules, squadron SOP, and admin flight procedures. The NATOPS evaluation is intended to evaluate compliance with NATOPS procedures. The NATOPS evaluation is the means to measure the airman's efficiency in the execution of normal operating procedures and reaction to emergencies and malfunctions. The NATOPS evaluation process should be as much a learning tool and/or experience as it is an evaluation. Initial TPC qualification shall be conducted in the aircraft.

Requirement. Conduct NTPS-6118 evaluation flight. Upon successful completion of this event, the evaluator shall log the appropriate training code for tracking purposes. Demonstrate comprehensive knowledge and understanding of NATOPS, squadron SOP, and local course rules.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7 Series, and KC-130J NATOPS. Complies with squadron SOP and local course rules.

Prerequisite. Core Skill and Mission Skill Phase should be complete, BITC complete, ACPM 83XX Phase complete, NTPS-6010, NTPS-6011, NTPS-6012, and RQD-6112-RQD-6117.

External Syllabus Support. CI if conducted in the WST.

2.13.8 EMERGENCY PROCEDURE TRAINING

2.13.8.1 Purpose. Maintain quarterly emergency procedure training.

2.13.8.2 General. Emergency procedure training consists of a monthly EP exam and a quarterly EP simulator. In the event the simulator is unavailable, the EP review may be conducted in the cockpit either pre or post flight as a static event.

Crew Requirements. Emergency Procedure review events may be instructed by a CI NI or an ANI/NI or FRSI.

NTPS-6120 1.0 90 B,SC,R,M (N) E S/A 1 WST/KC-130J

Goal. Emergency Procedure Review.

Requirement. This flight will review KC-130J emergency procedures and fulfills the requirement of quarterly EP simulator training.

Performance Standard. Comply with KC-130J NFM Chapter 11, Emergency Procedures.

2.13.9 NATOPS INSTRUMENT EVALUATION POI

2.13.9.1 Purpose. Evaluate the pilot's knowledge and application of NATOPS instrument procedures and techniques.

2.13.9.2 General. General policy, requirements, and prerequisites concerning NATOPS instrument evaluations are contained in OPNAVINST 3710.7, NFM, and the NIFM.

Crew Requirements. Shall be instructed by an ANI/NI or FRSI (simulator: CI NI).

Ground Training/Evaluation. Ground training and evaluation shall be conducted per OPNAVINST 3710.7, NFM, and NIFM.

INST-6030 8.0 365 B,SC,R,M E Instrument Ground School

Goal. The Instrument Ground School shall be an approved Commander Naval Air Forces (CNAF) approved syllabus and at a minimum cover the following topics:

Spatial disorientation.

CNO GPS Policy Statement and GPS fundamentals to include RNAV (GPS) and Required Navigation Performance (RNP).

Reduced Vertical Separation Minimums (RVSM) procedures.

Requirements and denial reports.

Use of non-DoD instrument approach/departure reports.

Use of non-DoD GPS NOTAMS systems (Jeppeson GPS NOTAMS and Databases).

Performance Standard. Achieve a minimum grade of qualified for Instrument Ground School which also encompasses the open book examination.

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INST-6031 3.0 365 B,SC,R,M E Oral NATOPS Instrument Examination

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

Pertinent Navy or Marine Corps regulations, orders, and instructions.

Pertinent parts of the Federal Aviation Regulations (FAR), other regulations, and/or aeronautical publications which are applicable. Interpretation of weather information normally used in flight planning.

The instructor/evaluator may draw upon their experience to propose questions of a direct and positive manner and in no way be opinionated to evaluate the airman's knowledge of the NATOPS, NATOPS Instrument Flight Manual, FAR/AIM and/or aeronautical publications which are applicable, normal/emergency instrument ground and flight procedures, weather, aircraft limitations, and performance.

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

INST-6130 2.0 365 B,SC,R,M (N) E S/A 1 WST/KC-130J

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

Requirement. Conduct INST-6130, and designate pilot per OPNAVINST 3710.7\_, NFM, and the NIFM. Upon successful completion of these events, the evaluator shall log the appropriate training code for tracking purposes.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7 Series, Platform NATOPS, NATOPS Instrument Flight Manual, and training rules. All areas on the instrument flight evaluation are critical. An "Unsatisfactory" grade in any area shall result in an "Unsatisfactory" grade for the flight.

Prerequisite. INST-6030, INST-6031, and minimum experience per OPNAVINST 3710.7\_.

External Syllabus Support. CI if conducted in WST.

INST-6131 2.0 365 B,SC,R,M (N) E S/A 1 WST/KC-130J

Goal. Complete special instrument flight evaluation. Following completion of the ground evaluation events, a special instrument flight/simulator evaluation event shall be flown and completed with a grade of "Qualified." Conduct an objective evaluation of the airman's knowledge of flight planning, filing, briefing, conduct of flight under

normal operating conditions, emergency procedures, closing out flight plans, and debriefing.

Requirement. Conduct INST-6131, and designate pilot per OPNAVINST 3710.7, NFM, and the NIFM. Upon successful completion of these events, the evaluator shall log the appropriate training code for tracking purposes.

Performance Standard. Executes flight and ground operations safely IAW OPNAV 3710.7 Series, Platform NATOPS, NATOPS Instrument Flight Manual, and training rules. All areas on the instrument flight evaluation are critical. An "Unsatisfactory" grade in any area shall result in an "Unsatisfactory" grade for the flight.

Prerequisite. INST-6030, INST-6031, INST-6130, and minimum experience per OPNAVINST 3710.7.

External Syllabus Support. CI if conducted in WST.

#### 2.13.10 SECTION LEADER (SL)

2.13.10.1 Purpose. Prepare and certify the pilot for SL.

2.13.10.2 General. The pilot should review section formations, multi-plane AAR formations, planned and inadvertent weather penetrations and section recovery techniques. One flight should be flown at night. Upon completion of the evaluation flight pilots shall also log the proficiency code in order to track event proficiency. Upon certification, the SL shall be designated by the commanding officer.

Crew Requirements. Shall be instructed by a section or division lead and certified by FLSE.

Academic Training. All requirements delineated in the matrix below shall be completed and tracked prior to the SL evaluation/certification event.

SECTION LEADER (SL) MATRIX

SELF PACED READINGS	DATE COMP	
OPNAVINST 3710.7 CH 5.1.12 Formation Flying		
ANTTP 3-22.3-KC-130 CH 2.3.6 FWAAR Formation		
ANTTP 3-22.3-KC-130 CH 2.4.8 HAAR Formation		
ANTTP 3-22.3-KC-130 CH 4 Formation		
ANTTP 3-22.3-KC-130 CH 5.2.7 Formation Air Delivery		
ATP-56B Part 1 Para 406 Loss of Visual Contact		
ATP-56B Part 2 CH 2 Formation Procedures		
ATP-56B Part 3 CH 3 Formation HAAR Procedures		
ATP-56B Part 4 CH 4 Safety Procedures		
BRIEFING/CHALK TALK REQUIREMENTS	DATE COMP	INSTRUCTOR
Section Departures		
Section Formations		
Multi-Plane AAR Formations		
Planned Weather Penetration		
Inadvertent Weather Penetration		
Section Recoveries (Approaches/Overhead)		
NORDO Procedures		
SL Brief		
Section Debrief		
ADMINISTRATIVE FLIGHT REQUIREMENTS	DATE COMP	INSTRUCTOR
Formation Start, Taxi, Run-Up		
Section Takeoff		
Section Rendezvous		
Cruise/Parade Positions		
Under-run		
Cross-under		
Section Recovery		
TN/AD/AAR *		
Night Aided **		

\* One event shall be flown in conjunction with a tactical mission.  
\*\* One event should be flown at night.

SL-6300      3.0      \*      B                      (NS)                      A                      2 KC-130J

Goal. Section Leader practice.

Requirement. The SL UT is to brief, lead, and debrief a section formation evolution from takeoff to landing. Discuss flight leadership responsibilities, formation instructional techniques and common student error recognition and correction. This flight should be conducted in conjunction with a tactical mission (TN, AAR or AD).

Performance Standards

Produce a flight leader section form card.

Plan and lead a section tactical navigation with a simulated or actual air delivery or air-to-air refueling profile and produce all appropriate mission products.

Conduct a mission debrief IAW KC-130J Tactical Pocket Guide. Satisfactory completion of the maneuvers and procedures per the NFM, KC-130 ANTTP and OPNAVINST 3710.7.

Prerequisite. FORM-2300, FORM-2301, FORM-2350, 3000 phase complete, NSQ(H), BIP, 100 flight hours as a TPC, two flights as a TPC/wingman, APRB recommendation, CO approval, and SL Academics complete.

Range Requirement. Appropriate SUAS scheduled.

SL-6301      3.0    \*      B, SC, R      (NS)   E      A      2 KC-130J

Goal. SL evaluation/certification.

Requirement. The SL UT is to brief, lead, and debrief a section formation evolution from takeoff to landing. Discuss flight leadership responsibilities, formation instructional techniques and common student error recognition and correction. This flight shall be conducted in conjunction with a tactical mission (TN, AAR or AD) and evaluated by a FLSE.

Performance Standards

Produce a flight leader section form card.

Plan and lead a section tactical navigation with a simulated or actual air delivery or air-to-air refueling profile and produce all appropriate mission products.

Conduct a mission debrief IAW KC-130J Tactical Pocket Guide. Satisfactory completion of the maneuvers and procedures per the NFM, KC-130 ANTP and OPNAVINST 3710.7\_.

Prerequisite. SL-6300.

Range Requirement. Appropriate SUAS scheduled.

SL-6302      2.0    365    B, SC, R, M      (NS)      A      2 KC-130J

Goal. SL proficiency.

Requirement. To maintain proficiency as a SL a pilot shall brief, lead, and debrief (or evaluate a prospective SL) the designated event in accordance with the mission performance standards for that event. When interaction with another WST can be achieved via network simulation this event may be flown in the simulator.

Prerequisite. SL-6301.

2.13.11 DIVISION LEADER (DL)

2.13.11.1 Purpose. Prepare and certify the pilot for division leader (DL).

2.13.11.2 General. During the workup stage for DL at least one flight should be flown at night and at least one flight should be flown in conjunction with a multi-plane AAR in order to develop the prospective DL's flight leadership. The pilot should review division formations, multi-plane AAR formations, planned and inadvertent weather penetrations and division recovery techniques. All prospective DL events shall be evaluated by a designated DL. The following matrix will be used to track academic and administrative training. Upon completion of the evaluation flight pilots shall also log the proficiency code in order to track event proficiency. Upon certification, the DL shall be designated by the commanding officer.

Crew Requirements. Shall be instructed by a division lead and certified by a FLSE.

Academic Training. All requirements delineated in the matrix below shall be completed prior to the DL evaluation/certification event.

DIVISION LEADER (DL) MATRIX

SELF PACED READINGS	DATE COMP	
OPNAVINST 3710.7 CH 5.1.12 Formation Flying		
ANTTP 3-22.3-KC-130 CH 2.3.6 FWAAR Formation		
ANTTP 3-22.3-KC-130 CH 2.4.8 HAAR Formation		
ANTTP 3-22.3-KC-130 CH 4 Formation		
ANTTP 3-22.3-KC-130 CH 5.2.7 Formation Air Delivery		
ATP-56B Part 1 Para 406 Loss of Visual Contact		
ATP-56B Part 2 CH 2 Formation Procedures		
ATP-56B Part 3 CH 3 Formation HAAR Procedures		
ATP-56B Part 4 CH 4 Safety Procedures		
BRIEFING/CHALK TALK REQUIREMENTS	DATE COMP	INSTRUCTOR
Formation Departures		
Division Formations		
Multi-Plane AAR Formations		
Planned Weather Penetration		
Inadvertent Weather Penetration		
Division Recoveries (Approaches/Overhead)		
NORDO Procedures		
Division Leader Brief		
Division Debrief		
ADMINISTRATIVE FLIGHT REQUIREMENTS		
Formation Start, Taxi, Run-Up		
Division Takeoff		
Division Rendezvous		
Cruise/Parade Positions		
Underrun		
Crossunder		
Division Recovery		
TN/AD/AAR *		
Night Aided **		

\* One event should be flown in conjunction with a multi-plane AAR mission.  
\*\* One event should be flown at night.

DL-6303      3.0      \*      B      (NS)      E      A      3+ KC-130J

Goal. Division Leader practice.

Requirement. The DL UT is to brief, lead, and debrief a division formation evolution from takeoff to landing. Discuss flight leadership responsibilities and TACRAC responsibilities.

Performance Standards

Produce a flight leader division form card.

Plan and lead a division profile including: turns into (left/right), turns away (left/right), crossunders, break-up and rendezvous, underruns, overhead breaks, and inadvertent weather penetration procedures.

Conduct a mission debrief IAW KC-130J Tactical Pocket Guide. Satisfactory completion of the maneuvers and procedures per the NFM, KC-130 ANTTP and OPNAVINST 3710.7.

Prerequisite. 200 flight hours as a qualified TPC, two flights as a designated SL, APRB recommendation, CO approval, and DL academics complete.



Range Requirement. Appropriate SUAS scheduled.

DL-6304      3.0    \*      B, SC, R      (NS)    E      A      3+ KC-130J

Goal. DL evaluation/certification.

Requirement. The pilot is to brief, lead, and debrief a division formation evolution from takeoff to landing. Discuss flight leadership responsibilities as outlined in OPNAV 3710.7. This flight should be conducted during an AAR mission at night.

Performance Standards

Produce a flight leader division form card.

Plan and lead a division air-to-air refueling profile and produce all essential mission products.

Conduct a mission debrief IAW KC-130J Tactical Pocket Guide.  
Satisfactory completion of the maneuvers and procedures per the NFM, KC-130 ANTPP and OPNAVINST 3710.7.

Prerequisite. DL-6303.

Range Requirement. Appropriate SUAS scheduled.

DL-6305      2.0    365    B, SC, R, M      (NS)      A      3+ KC-130J

Goal. DL proficiency.

Requirement. To maintain proficiency as a DL a pilot shall brief, lead, and debrief (or evaluate a prospective DL) the designated event in accordance with the mission performance standards for that event.

Prerequisite. DL-6304.

2.13.12 TACTICAL REFUELING AREA COMMANDER (TACRAC)

2.13.12.1 Purpose. To attain and maintain the TACRAC skill. Upon completion of this phase, the pilot will be capable of assuming the responsibilities of a Tactical Refueling Area Commander during a FW/TR/Helicopter AAR operation during day or night.

2.13.12.2 General. Pilot shall conduct the following sortie in order to certify the TACRAC's flight leadership, mission planning comprehension with section or DL and receiver and tanker cell fuel considerations. Tactical RAC designation training should be conducted in coordination with, or shortly after SL training. The RAC-6310 shall be evaluated by a qualified TACRAC or Strategic Refueling Area Commander (STRATRAC), but the RAC-6311 evaluator shall also be a designated FLSE. Upon completion of the evaluation flight pilots shall also log the proficiency code in order to track event proficiency. At the discretion of the commanding officer, a letter designating the pilot as TACRAC shall be placed in the NATOPS jacket.

Academic Training. All requirements delineated in the matrix below shall be completed and tracked prior to the RAC evaluation/certification event.

TACTICAL REFUELING AREA COMMANDER MATRIX

SELF PACED READINGS	DATE COMP	
OPNAVINST 3710.7 CH 5.1.12 Formation Flying		
ANTTP 3-22.3-KC-130 CH 2.3.6 FWAAR Formation		
ANTTP 3-22.3-KC-130 CH 2.4.8 HAAR Formation		
ANTTP 3-22.3-KC-130 CH 4 Formation		
ATP-56B Part 1 Para 406 Loss of Visual Contact		
ATP-56B Part 2 CH 2 Formation Procedures		
ATP-56B Part 3 CH 3 Formation HAAR Procedures		
ATP-56B Part 4 CH 4 Safety Procedures		
BRIEFING/CHALK TALK REQUIREMENTS	DATE COMP	INSTRUCTOR
Air Refueling Limitations		
Multi-Plane AAR Formations		
Rendezvous Procedures		
Weather Considerations		
Planned Weather Penetration		
Inadvertent Weather Penetration		
Receiver Fuel Management		
NORDO Procedures		
Refueling Area Commander Brief		
Tanker Mgmt: TNKR Aborts/TNKR RIP		
Emergency Air Refueling Procedures		
ADMINISTRATIVE FLIGHT REQUIREMENTS	DATE COMP	INSTRUCTOR
OPARS		
ALTRV Procedures		
Radio Management/Voice Procedures		

Crew Requirements. Shall be instructed by a TACRAC or STRATRAC and certified by a TACTRAC/FLSE or STRATRAC/FLSE.

RAC-6310 3.0 \* B, SC (NS) A 2+ KC-130J

Goal. Intro to Tactical Refueling Area Commander (TACRAC).

Requirement. Conduct FW, TR, or Helicopter AAR mission planning requirements using PFPS and receiver aircraft considerations. Discuss and introduce refueling formation options, rendezvous procedures, radio procedures, NAVAID/radar/TCAS procedures, tanker/receiver management and emergency procedures related to AAR. Event should be conducted from the Dash-2 position and RAC procedures should be introduced. Discuss EMCON procedures. This event should be conducted during the day and is intended to serve as TACRAC work-up; however, it may be completed by a senior co-pilot and without APRB recommendation.

Performance Standards

Produce a multi-tanker AAR briefing card; CFPS generated flight plan/route with orbit and appropriate fuel offload for tanker force; and an appropriate refueling track using either CFPS/Falcon View or a paper chart.

Coordinate/schedule AAR airspace (SUAS or ALTRV).  
Perform all radio communications between tanker force and receiver force.

Determine the receiver's location prior to the ARCT with either the LPCR, TCAS or TACAN A/A.

Manage fuel offload of tanker aircraft according to mission planning, brief, economy, and bingo considerations.

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Manage receiver fueling according to mission planning, brief and divert considerations.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTPP.

Prerequisite. AAR-3600 and NTPS-6111.

Range Requirement. Appropriate SUAS scheduled.

External Support. Receiver aircraft.

RAC-6311      3.0      \*      B,SC,R      (NS)      E      A      2+ KC-130J

Goal. TACRAC evaluation/certification.

Requirement. Brief, conduct, and control a multi-tanker AAR mission along a static orbit refueling track. Discuss responsibilities of a Refueling Area Commander. Focus should be on refueling formation integrity, receiver management, and fuel management for the entire flight. This flight shall be evaluated by a TACRAC/FLSE or STRATRAC/FLSE.

Performance Standards

Produce a multi-tanker AAR briefing card; CFPS generated flight plan/route with orbit and appropriate fuel offload for tanker force; and an appropriate refueling track using either CFPS/Falcon View or a paper chart.

Coordinate/schedule AAR airspace (SUAS or ALTRV).

Conduct a RAC brief with all tanker force aircrew.

Determine the receiver's location and establish tanker force in the proper/briefed formation, at the ARCP at the ARCT.

Perform all radio communications between tanker force and receiver force.

Manage fuel offload of tanker aircraft according to mission planning, brief, economy, and bingo considerations.

Manage receiver fueling according to mission planning, brief and divert considerations.

Satisfactory completion of the maneuvers and procedures per the NFM and KC-130 ANTPP.

Prerequisite. RAC-6310, 6118, Designated SL (may be conducted in conjunction with SL-6300 or SL-6301).

Range Requirement. Appropriate SUAS scheduled.

External Support. Receiver aircraft.

RAC-6312      2.0      365      B,SC,R,M      (NS)      A      2+ KC-130J

Goal. TACRAC proficiency.

Requirement. To maintain proficiency as a TACRAC a pilot shall plan and execute (or evaluate a prospective TACRAC) the designated event in accordance with the mission performance standards for that event.

Prerequisite. RAC-6311.

2.13.13 STRATEGIC REFUELING AREA COMMANDER (STRATRAC)

2.13.13.1 Purpose. To attain and maintain the long range formation air-to-air refueling skill. Upon completion of this phase, the pilot will be capable of planning and executing long range over-water (multiple tanker) FW/TR/Helicopter AAR during day or night.

2.13.13.2 General. This designation qualifies the pilot to act as RAC for extended over-water tanker missions. A detailed knowledge of both tanker and receiver fuel management, altitude reservations (ALTRV) scheduling facilities coordination, long-range navigation techniques, and international flight operations is required. Commanders should select only the most skilled and experienced aircraft commanders for this qualification. Upon completion of the evaluation flight pilots shall also log the proficiency code in order to track event proficiency. At the discretion of the commanding officer, a letter designating the pilot as STRATRAC shall be placed in the NATOPS jacket.

Academic Training. All requirements delineated in the matrix below shall be completed and tracked prior to the STRATRAC evaluation/certification event.

STRATEGIC REFUELING AREA COMMANDER MATRIX

<u>SELF PACED READINGS</u>	<u>DATE COMP</u>	
OPNAVINST 3710.7 CH 5.1.12 Formation Flying		
ANTTP 3-22.3-KC-130 CH 2 Air-to-Air Refueling		
ANTTP 3-22.3-KC-130 CH 4 Formation		
ATP-56B Part 1 General Procedures		
ATP-56B Part 2 CH 2 Formation Procedures		
ATP-56B Part 3 CH 3 Formation HAAR Procedures		
Squadron Tactical Systems Operators SOP		
<u>BRIEFING/CHALK TALK REQUIREMENTS</u>	<u>DATE COMP</u>	<u>INSTRUCTOR</u>
Air Refueling Limitations		
Weather Considerations		
Tanker/Receiver Performance Data		
Multi-Plane AAR Formations		
Tanker/Receiver Fuel Management		
Control/Management of Receivers/Tankers		
Rendezvous Procedures		
Planned Weather Penetration		
Inadvertent Weather Penetration		
Contingency Planning		
Receiver to Hose Ratio		
Abort/Bingo Criteria		
Divert Planning		
NORDO Procedures		
Flight Lead/RAC/Rendezvous Controller Responsibilities		
Refueling Area Commander Brief		
Night Aided/Unaided		
Emergency Air Refueling Procedures		
<u>ADMINISTRATIVE FLIGHT REQUIREMENTS</u>	<u>DATE COMP</u>	<u>INSTRUCTOR</u>
OPARS		
ALTRV Procedures		
Radio Management/Voice Procedures		
International Flight Operations		

Crew Requirements. Shall be instructed by a STRATRAC and certified by a STRATRAC/FLSE.

RAC-6313    6.0    \*    B,SC    (NS)    A    2+ KC-130J

Goal. Introduction to Strategic Refueling Area Commander (STRATRAC).

Requirement. Conduct long range FW/TR/Helicopter AAR mission planning requirements using PFPS and receiver aircraft considerations. Discuss and introduce coordination of CORONET movements, movement control, ALTRVs, hose factor, contingency planning, RAC functions and rendezvous control. Review radio procedures, NAVAID/radar/TCAS procedures, tanker/receiver management and emergency procedures related to AAR. Demonstrate FW/TR/Helicopter AAR rendezvous planning knowledge. The student will be expected to be thoroughly familiar with ALTRV and long range AAR planning upon attainment of this training evolution.

Performance Standards

Conduct mission planning with evolution STRATRAC:

Receiver/tanker fuel requirements.

Determine optimum tanker/receiver routing with consideration of terrain, fuel, refueling area, weather and divert options.

Coordinate airspace with ALTRV scheduling facilities and submit a ALTRV request for planned AAR areas.

Conduct logistics planning of visiting airfields in order to determine suitability of runway/ramp, aviation services (fuel, customs, lavatory, etc), quarters, messing and transportation for tanker/receiver force.

Prerequisite. Designated DL (6304) and TACRAC (6311), APRB recommendation, CO approval, and STRATRAC academics complete.

Range Requirement. Appropriate SUAS scheduled.

External Support. Appropriate ALTRV coordinated with ALTRV scheduling facilities and FW/TR/Helicopter receiver force.

RAC-6314    8.0    \*    B,SC,R    (NS)    E    A    2+ KC-130J

Goal. STRATRAC evaluation/certification.

Requirement. Brief, conduct, and control a multi-tanker extended AAR mission. Discuss responsibilities of Refueling Area Commander, lead, Rendezvous Controller, Movement Control Officer, Tanker Force Commander, and Receiver Force Commander. Emphasis on ALTRV execution. This flight shall be evaluated by a STRATRAC/FLSE.

Performance Standards

Coordinate overall movement control planning effort to include: ORM analysis, ALTRV scheduling facilities/ALTRV requirements, route, tanker plan, logistics and divert contingencies.

Prepare and distribute flight planning products to all applicable tanker/receiver force participants; include: tanker plan, flight/route planning data and IMC penetration plan.

Conduct a formal movement briefing for all tanker and receiver force participants; include: route, go/no go criteria, tanker and receiver force rendezvous, refueling area, tanker plan, abort/bingo/ETP locations and criteria, communication, IMC penetration plan, bump plan, divert/contingencies, and logistics.

Rendezvous tanker force with receiver force as planned/briefed with due consideration given to changes in forecast weather, fuel planning and safety.

Ensure that all fuel transfer is in progress no later than planned/briefed abort points; otherwise direct receiver(s) to divert as applicable.

Ensure all AAR is conducted within appropriate airspace. Perform all radio communications between tanker force and receiver force during refueling evolution(s).

Manage fuel offload of tanker aircraft according to mission planning, brief, economy and bingo considerations.

Manage receiver fueling according to mission planning, brief and divert considerations. Ensure receivers have adequate fuel to arrive at destination with required fuel reserve.

Direct planned/inadvertent weather penetration procedures if required for inclement weather.

Prerequisite. RAC-6313.

Range Requirement. Appropriate SUAS scheduled.

External Syllabus Support. Appropriate ALTRV coordinated with ALTRV scheduling facilities and FW/TR/Helicopter receiver force.

RAC-6315    3.0    365    B, SC, R, M    (NS)    A    2+ KC-130J

Goal. STRATRAC proficiency.

Requirement. To maintain proficiency as a STRATRAC a pilot shall brief, lead, and debrief (or evaluate a prospective STRATRAC) the designated event in accordance with the mission performance standards for that event.

Prerequisite. RAC-6314.

2.14    AVIATION CAREER PROGRESSION MODEL (ACPM)

2.14.1    Purpose. To enhance professional understanding of Marine Aviation and the MAGTF and to ensure aviators possess the requisite skills to fill battle command and battle staff positions in support of the ACE and the MAGTF in a joint environment. ACPM academic training requirements will be tracked and managed in M-SHARP. Commanding officers shall ensure the requisite ACPM training requirements have been met prior to designating flight leaders.

2.14.2    Stages. The following stages are included in the ACPM:

Par. No.	Stage Name
2.14.3	Core Skill Training Events
2.14.4	Mission Skill Training Events
2.14.5	Flight Leadership Training Events

2.14.3 ACPM CORE SKILL TRAINING PHASE

2.14.3.1 Purpose. To provide and introduce basic integration of the ACE within the MAGTF and ACE Battle Staff planning.

2.14.3.2 General. The PUI must be qualified as a T3P prior to beginning this phase of training.

ACPM-8200 0.5 \* MACCS Agencies, Functions, and Control of Aircraft and Missiles

Learning Objectives

Understand the organization of the MACG and the agencies provided by the MACG that form the MACCS.

Understand the mission and tasks of the Tactical Air Command Center (TACC).

Understand the mission and tasks of the Tactical Air Operations Center (TAOC).

Understand the mission and tasks of marine Air Traffic Control (MATC) and the marine Air Traffic Control Mobile Team (MMT).

Understand the mission and tasks of the Direct Air Support Center (DASC).

Understand the mission and tasks of the Low Altitude Air Defense (LAAD) Battalion.

Understand the mission and tasks of the Marine Unmanned Aerial Vehicle (VMU) squadron.

Understand the mission and tasks of the Marine Wing Communication Squadron (MWCS).

ACPM-8201 0.5 \* MWCS Brief

Learning Objectives

From a list be able to identify the core competencies of the MWCS.

Without the aid of reference, describe the organization of the MWCS.

Without the aid of reference, identify key equipment used by the MWCS to support the MACCS.

ACPM-8202 0.8 \* ACA and Airspace

Learning Objectives

List the three fundamental principles of airspace command and control.

List and explain the three tenets of the integrated combat airspace command and control system.

Describe the responsibilities of the ACA.

Describe the responsibilities of the AMCT.

Understand the definitions of Air Direction and Air Control as well as the subsets of those two major categories.

List a variety of items encompassed within the ACP.

ACPM-8210 0.7 \* Aviation Ground Support

Learning Objectives

Identify the organization responsible for providing Aviation Ground Support (AGS) to the MAW.  
Identify the four concepts for MAGTF Forward Operating Bases (FOBs).  
Identify the five activities the Marine Wing Support Squadron (MWSS) performs for the ACE when deployed.  
Identify the four classifications of FOBs and state the distinguishing characteristics of each.  
Identify the fourteen functions of AGS.

ACPM-8230 1.0 \* ACE Battle Staff

Learning Objectives

To introduce and explain the intel capabilities/products available to the ACE/MAGTF.  
To introduce ALSA comm brevity terms.  
Introduce functions and responsibilities of ACE Battle Staff.

ACPM-8231 1.0 \* Battle Command Display

Learning Objectives

Introduce the Battle Command Display.

ACPM-8240 1.7 \* Six Functions of Marine Aviation

Learning Objectives

To better understand the 6 functions of Marine Corps Aviation.

ACPM-8241 1.3 \* JTAR/ASR Introduction and Practical Application

Learning Objective

Understand the ATO cycle and the request process.  
Write a technically correct JTAR.  
Write a technically correct EW JTAR.  
Write a technically correct EARF.  
Write a technically correct ASR.  
Track submitted air requests using various web-based programs.  
Introduce the Automated Tracking System.

ACPM-8242 1.0 \* Site Commander Primer

Learning Objectives

Introduce fundamentals and functions of Site Command.



ACPM-8250 0.8 \* Theater Air Ground System (TAGS)Learning Objectives

Identify the primary characteristics of TAGS.  
 Identify the primary surveillance agency within the Theater Air Control System.  
 Identify the element within the Army Air and Ground System responsible for integrating operational fires and synchronizing deep operations.  
 Identify the element within the Navy's Tactical Air Control System responsible for coordinating power projection.  
 Identify the commander within an amphibious task force who is subordinate to the Air Defense Commander (ADC) and responsible for the detection and engagement of hostile tracks in the AOA.  
 Identify the Marine Corps' contribution to overall Theater Air Ground System.

2.14.4 ACPM MISSION SKILL TRAINING EVENTS

2.14.4.1 Purpose. To provide and introduce basic integration of the ACE within the MAGTF and Joint environment.

2.14.4.2 General. The PUI must be qualified as an T3P prior to beginning this stage of training.

ACPM-8300 0.8 \* Air DefenseLearning Objectives

Outline the principles of Air Defense.  
 Understand the composition of an Integrated Air Defense System (IADS).  
 Define Active and Passive Air Defense.  
 Identify the (4) primary pillars of Passive Air Defense operations.

ACPM-8310 0.8 \* Forward Arming Refueling Point (FARP) OperationsLearning Objectives

State the mission and objective of a FARP.  
 Explain the planning considerations of a FARP.  
 Explain the techniques of employment.  
 Describe the procedures necessary for movement of aircraft through a FARP and various layouts.

ACPM-8311 0.8 \* Marine Corps Tactical Fuel SystemsLearning Objectives

State the basic history of the Bulk Fuel community.  
 Identify the four major fuel systems and their capabilities.  
 State the job description of the Bulk Fuel Specialist.

ACPM-8320 1.0 \* Joint Structure & Joint Air Operations

Learning Objectives

Understand the criteria used by the Joint Force Commander (JFC) when selecting the Joint Forces Air Component Commander (JFACC).  
Understand the duties and responsibilities of the five divisions of Joint Air and Space Operations Center (JAOC).  
Know the types of sorties the MAGTF Commander must make available to the JFACC for tasking.  
Understand the primary responsibilities of the Area Air Defense Commander (AADC).  
Understand the purpose of the Airspace Control Order (ACO).  
Become familiar with the six phases of the Joint Air Tasking Cycle.

ACPM-8321 0.3 \* Joint Air Tasking Cycle Phase 1: Strategy Development

Learning Objectives

Understand how the JFC normally provides air apportionment guidance to the Joint Forces Air Component Commander (JFACC).  
Understand the air apportionment process.  
Understand who drafts the AOD and what the AOD provides the JAOC.  
Understand how objectives and tasks are prioritized.

Prerequisite. ACPM-8320.

ACPM-8322 0.3 \* Joint Air Tasking Cycle Phase 2: Target Development

Learning Objectives

Understand the purpose of the Joint Integrated Prioritized Target List (JIPTL).  
Understand the purpose for the joint targeting coordination board and its participants.  
Understand the target development process.  
Know the product of phase 2 of the joint air tasking cycle.  
Understand what provides the foundation for phase 2 of the joint air tasking cycle.

Prerequisite. ACPM-8321.

ACPM-8323 0.3 \* Joint Air Tasking Cycle Phase 3: Weaponing and Allocation

Learning Objectives

Understand weaponing and how it is conducted within the joint air tasking cycle.  
Understand the Allocation Request Message (ALLOREQ) and how it is used in producing the MAAP.  
Understand the air allocation process.  
Understand the purpose of the MAAP team and what is contained in the MAAP.  
Understand the purpose of the Sortie Allocation (SORTIEALLOT) message.

Prerequisite. ACPM-8322.

ACPM-8324 0.3 \* Joint Air Tasking Cycle Phase 4: Joint ATO Production

Learning Objectives

Understand the role of joint ATO production within the joint air tasking cycle.  
Understand the responsibilities of the joint ATO production team.  
Understand the processes used in the production of the joint air tasking order.  
Understand how TBMCS 1.1.3 is used to produce the joint air tasking order.

Prerequisite. ACPM-8323.

ACPM-8325 0.3 \* Joint Air Tasking Cycle Phase 5: Force Execution

Learning Objectives

Understand the primary functions and responsibilities of the AOC.  
Understand how the JAOC organizes for the execution phase.  
Understand how TBMCS 1.1.3 is used during the execution phase.

Prerequisite. ACPM-8324.

ACPM-8326 0.3 \* Joint Air Tasking Cycle Phase 6: Combat Assessment

Learning Objectives

Understand the three inter-related components of combat assessment.  
Understand the key factors concerning the three components of combat assessment.  
Understand the purpose of BDA based upon current doctrine.  
Understand physical damage, functional damage, and the target system assessment process.  
Understand the purpose of the re-attack recommendation.

Prerequisite. ACPM-8325.

ACPM-8340 0.5 \* Integrating Fires & Airspace within the MAGTF

Learning Objectives

List the (14) Fire Support Principles.  
Identify and discuss the (2) types of FSCMs.  
Identify where most of the fire support coordination occurs within the MAGTF.  
Discuss the purpose of ACMs.  
Discuss the need for integrating FSCMs and ACMs.  
Identify the required components of the JFA as an FSCM.  
Identify the differences between the JFA and GARS.

ACPM-8350 0.8 \* Phasing Control Ashore

Learning Objectives

Identify the Navy agency most akin to the LF FSCC.  
Identify what must be established ashore for control to be phased from the Navy TACC to the landing force.

ACPM-8351 1.0 \* TACRON Organizations and Functions

Learning Objectives

TBD

2.14.5 ACPM FLIGHT LEADERSHIP TRAINING EVENTS

2.14.5.1 Purpose. To provide the prospective flight leader the concepts of basic integration of the MAGTF within the Joint environment.

2.14.5.2 General. Completion of Flight Leadership Training Events is required prior to the following flight leadership designations:

Section Leader: ACPM-8630, ACPM-8660.

Division Leader: ACPM-8620, ACPM-8640, ACPM-8641.

However, the PUI does not need to be in a specific flight leader syllabus in order to receive 8600 level training events.

ACPM-8630 1.0 \* Tactical Air Command Center (TACC)

Learning Objectives

Without aid of references, identify the mission of the TACC.

Without aid of references, identify the major tasks/duties of the TACC.

Without aid of references, identify the three sections being supported by intelligence.

Without aid of references, identify the key TACC personnel and their responsibilities.

Without aid of references, identify the equipment associated with a full TACC capability.

ACPM-8660 0.4 \* Joint Ops Introduction

Learning Objectives

Understand Joint Operation Command relationships.

Understand the main responsibilities for each Functional Component Commander.

ACPM-8620 1.0 \* ESG/CSG Integration

Learning Objectives

TBD

ACPM-8640 0.8 \* Joint Data NetworkLearning Objectives

Understand the four components of the JDN.

Understand the differences between the Single Integrated Air Picture (SIAP), Common Tactical Picture (CTP), and Common Operational Picture (COP).

Understand the differences between Sensor Network(s), Joint Data Network (JDN), and Joint Planning Network (JPN).

Understand how the ACE builds its CTP and how information is shared throughout the ACE and the Marine Air Command and Control System (MACCS).

Know the primary system that will "tie in" the intelligence flow throughout the Marine Aviation Command and Control System (MACCS).

ACPM-8641 1.3 \* MAGTF Theater and National ISR EmploymentLearning Objectives

Define priority intelligence requirement.

Identify basic tenets of the National Imagery Interpretability Rating Scale.

Recognize strengths and weaknesses of the EO, SAR, and IR sensors found on national satellites.

Know the three categories of SIGINT.

Identify the information requirements used in the UAS planning process.

Identify what effective planning of UAS employment involves.

Identify key planning considerations outlined for UAS employment.

Define "Non-Traditional ISR".

Identify the most common shortfalls on JTARs submitted for NTISR support.

Identify the most common shortfalls on JTARs submitted for ATARS support.

Identify different imagery products ATARS can provide.

2.15 SYLLABUS MATRICES

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

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

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

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

Night Optional. Chained codes annotated with parentheses around them, e.g. (2000), are only chain-updated if the chaining code is flown at night.

Night Systems Optional. Chained codes annotated with parentheses and NS after them, e.g. (2000 NS), are only chain-updated if the chaining code is flown using night systems.

Light Level Optional. Chained codes annotated with parentheses and HLL after them, e.g. (2000 HLL), are only chain-updated if the chaining code is flown using night systems during a high light level period. Chained codes annotated with parentheses and LLL after them, e.g. (2000 LLL), are only chain-updated if the chaining code is flown using night systems during a low light level period.

2.15.3 Syllabus Event Conversion. The syllabus event conversion information is used to convert T&R syllabus event proficiency status of the previous T&R syllabus into event proficiency status of the current T&R for individuals.

2.15.4 Pilot T&R Syllabus Matrix

KC-130J PILOT												
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIM HOURS	REFLY INTVL	DEVICE	# OF A/C	COND	POI	EVAL	ORDNANCE	EVENT CONV
<b>CORE SKILL INTRODUCTION (1000 Phase)</b>												
<b>COCKPIT PROCEDURE TRAINER (CPT)</b>												
CPT	1100	Checklist Intro	-	2.0	*	S	1	D	B, SC	-	-	
CPT	1101	CNI-MS/CNBP Intro	-	2.0	*	S	1	D	B, SC	-	-	
CPT	1102	Comm/Nav Operations	-	2.0	*	S	1	D	B, SC	-	-	
CPT	1103	AMU/HDD Operation	-	2.0	*	S	1	D	B, SC	-	-	
CPT	1104	HUD Operation	-	2.0	*	S	1	D	B, SC	-	-	
CPT	1105	Flight Programming I	-	2.0	*	S/A	1	D	B, SC	-	-	
CPT	1106	Flight Program II	-	2.0	*	S	1	D	B, SC	-	-	
CPT	1107	APU/Engine Operation	-	2.0	*	S/A	1	D	B, SC, R	-	-	
CPT	1108	Prop/Hyd Operation	-	2.0	*	S/A	1	D	B, SC, R	-	-	
CPT	1109	Elec/BIU Backup Ops	-	2.0	*	S/A	1	D	B, SC, R	-	-	
CPT	1110	Bleed Air	-	2.0	*	S/A	1	D	B, SC, R	-	-	
CPT	1111	Fuel Management	-	2.0	*	S/A	1	D	B, SC, R	-	-	
			-	24.0								
<b>FAMILIARIZATION (FAM)</b>												
FAM	1112	Visual Flight I	-	2.0	*	S/A	1	D	B, SC	-	-	
FAM	1113	Visual Flight II	-	2.0	*	S/A	1	D	B	-	-	
FAM	1114	Visual Flight III	-	2.0	*	S/A	1	D	B, R	-	-	
FAM	1115	Night Visual Flight	-	2.0	*	S/A	1	N*	B, SC	-	-	
FAM	1116	Inst Fl - ILS/NDB	-	2.0	*	S/A	1	D	B, SC, R	-	-	
FAM	1117	Inst Flt-TACAN/LOC	-	2.0	*	S/A	1	N*	B, SC	-	-	
FAM	1118	Radar Approaches	-	2.0	*	S/A	1	D	B	-	-	
FAM	1119	En Route Ops I	-	2.0	*	S/A	1	D	B	-	-	
FAM	1120	En Route Ops II	-	2.0	*	S/A	1	N*	B, SC, R	-	-	
FAM	1121	Asymmetric Ops I	-	2.0	*	S/A	1	D	B, SC	-	-	
FAM	1122	Asymmetric Ops II	-	2.0	*	S	1	D	B, SC, R	-	-	
FAM	1123	Asymmetric Ops III	-	2.0	*	S	1	D	B, SC	-	-	
FAM	1124	Special Procedures	-	2.0	*	S	1	D	B, SC	-	-	
FAM	1125	Electric/Flap/Prop EPs	-	2.0	*	S	1	D	B, SC	-	-	
FAM	1126	Hydraulic/ Flight Control EPs	-	2.0	*	S/A	1	D	B	-	-	
FAM	1127	Landing Gear EPs	-	2.0	*	S/A	1	D	B	-	-	
FAM	1128	Autoflight I	-	2.0	*	S/A	1	D	B, SC	-	-	
FAM	1129	Autoflight II	-	2.0	*	S/A	1	N*	B	-	-	
FAM	1130	Review Flight	-	2.0	*	S/A	1	D	B, SC	-	-	
FAM	1131	ATU Evaluation	-	2.0	*	S/A	1	D	B, SC, R	E	-	
FAM	1132	Preflight/ Emergency Equipment	3.0		*	A	1	D	B, SC	-	-	
			3.0	40.0								
<b>NIGHT SYSTEMS HIGH (NS(H))</b>												
NS(H)	1150	Intro to NVD Proc	-	2.0	*	S/A	1	NS	B, SC	-	-	
			-	2.0								
<b>LONG RANGE NAVIGATION (LRN)</b>												
LRN	1160	Intro to LRN Proc	-	2.0	*	S/A	1	D	B, SC	-	-	
			-	2.0								
<b>TACTICAL NAVIGATION (TN)</b>												
TN	1200	Intro to TN Proc	-	2.0	*	S/A	1	D	B, SC	-	-	
TN	1201	Advanced TN Proc	-	2.0	*	S/A	1	D	B, SC	-	-	
TN	1202	Intro to Tac Man	-	2.0	*	S/A	1	D	B, SC	-	-	
			-	6.0								

KC-130J PILOT												
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIM HOURS	REFLY INTVL	DEVICE	# OF A/C	COND	POI	EVAL	ORDNANCE	EVENT CONV
FORMATION (FORM)												
FORM	1300	Intro Sec FORM Proc	-	2.0	*	S/A	1	D	B, SC	-	-	
			-	2.0								
THREAT REACTION (TR)												
TR	1400	Intro to IR TR	-	2.0	*	S/A	1	D	B, SC	-	-	
			-	2.0								
ASSAULT LANDING ZONE (ALZ)												
ALZ	1500	Intro to ALZ Proc	-	2.0	*	S/A	1	D	B	-	-	
ALZ	1501	Intro Tac Arrivals	-	2.0	*	S/A	1	D	B, SC	-	-	
				4.0								
AIR TO AIR REFUELING (AAR)												
AAR	1600	Int FWAAR/TRAAR Proc	-	2.0	*	S/A	1	D	B	-	-	
AAR	1601	Intro to HAAR Proc	-	2.0	*	S/A	1	D	B	-	-	
			-	4.0								
AERIAL DELIVERY (AD)												
AD	1700	Intro to AD Proc	-	2.0	*	S/A	1	D	B, SC	-	-	
			-	2.0								
FAMILIARIZATION (Flight Phase conducted at Fleet Squadron)												
FCRM	1800	FAM	2.0	-	*	A	1	D	B, SC, R	-	-	
FCRM	1801	FAM	2.0	-	*	A	1	(N*)	B, SC	-	-	
FCRM	1802	FAM	2.0	-	*	A	1	(N*)	B, SC, R	-	-	
FCRM	1803	FAM	2.0	-	*	A	1	D	B, SC	-	-	
FCRM	1804	FAM	2.0	-	*	A	1	(N*)	B, SC, R	-	-	
			10.0	-								
TOTALS		FLT HRS	13.0	88.0								
CORE SKILLS (2000 Phase)												
LEFT SEAT FAM (LSF)												
LSF	2100	LEFT SEAT FAM	2.0	-	*	A	1		B, SC, R, M	-	-	6100
			2.0	-								
NIGHT SYSTEMS (NS)												
NS(H)	2150	HLL NVD Procedures	2.0	-	90	A/S	1	NS	B, SC, R	-	-	
NS(H)	2151	LLL NVD Procedures	2.0	-	90	A/S	1	NS	B, SC, R, M	-	-	
			4.0	-								
LONG RANGE NAVIGATION (LRN)												
LRN	2160	Constant TAS LRN	6.0	-	*	A	1	(N)	B, SC	-	-	
LRN	2161	LR Cruise LRN	6.0	-	*	A	1	(N)	B, SC	-	-	
LRN	2162	LRN	6.0	-	365	A	1	(N)	B, R, SC, M	-	-	
			18.0	-								
TACTICAL NAVIGATION (TN)												
TN	2200	Tac Time NAV (PM)	2.0	-	*	A/S	1	D	B, SC, R	-	-	
TN	2201	TN Procedures (PF)	2.0	-	365	A/S	1	D	B, SC, R	-	-	
TN	2250	HLL TN Proc (PF)	2.0	-	180	A/S	1	NS	B, SC, R	-	-	
TN	2251	LLL TN Proc (PF)	2.0	-	180	A/S	1	NS	B, SC, R, M	-	-	
			8.0	-								
LOW ALTITUDE TACTICS (LAT)												
LAT	2260	Intro to LAT Proc	-	2.0	*	S/A	1	D	B, SC	-	-	
LAT	2261	LAT Procedures	2.0	-	180	A	1	D	B, SC, R, M	-	-	
			2.0	2.0								
FORMATION (FORM)												
FORM	2300	Sec FORM Proc	3.0	-	365	A/S	2	D	B, SC, R	-	-	
FORM	2301	Div FORM Proc	3.0	-	365	A	3+	(NS)	B, SC, R, M	-	-	
FORM	2350	Night Sec FORM Proc	2.0	-	180	A/S	2	NS	B, SC, R, M	-	-	
			8.0	-								



KC-130J PILOT												
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIM HOURS	REFLY INTVL	DEVICE	# OF A/C	COND	POI	EVAL	ORDNANCE	EVENT CONV
THREAT REACTION (TR)												
TR	2400	Ground IR TR	2.0	-	180	A/S	1	(NS)	B, SC, R, M	-	(30 OVERT/90 COVT)	
			2.0	-								
TOTALS		FLT HRS	44.0	2.0	SIM HOURS							
# = Pilot must be NSQ (H) or event flown with a NSI if using NVDs.												
3000 MISSION SKILL												
ASSAULT LANDING ZONE (ALZ)												
ALZ	3500	ALZ Procedures	2.0	-	180	A/S	1	D	B, SC, R	-	-	
ALZ	3501	Tactical Arrivals	2.0	-	365	A/S	1	(NS)	B, SC, R	-	-	
ALZ	3502	Combat Offload	0.5	-	*	A	1	(N)	B, SC, R	-	-	
ALZ	3503	Unimproved Grd Ops	0.5	-	730	A	1	(NS)	B, SC, R, M	-	-	
ALZ	3550	Night ALZ Procedures	2.0	-	180	A/S	1	NS	B, SC, R, M	-	-	
			7.0	-								
AIR-TO-AIR REFUELING (AAR)												
AAR	3600	FWAAR/TRAAR Proc	2.0	-	365	A/S	1	(N)	B, SC, R	-	-	
AAR	3601	Day HAAR Procedures	2.0	-	365	A/S	1	D	B, SC, R	-	-	
AAR	3602	AAR Sys Panel Proc	-	2.0	180	S/A	1	(N)	B, SC, R, M	-	-	4600
AAR	3650	Night HAAR Proc	2.0	-	180	A/S	1	NS	B, SC, R, M	-	-	
			6.0	2.0								
AVIATION DELIVERED GROUND REFUELING (ADGR)												
ADGR	3660	ADGR Procedures	1.0	-	730	A	1	(NS)	B, SC, R, M	-	-	
			1.0	-								
AERIAL DELIVERY (AD)												
AD	3700	Intro to PF AD	-	2.0	*	S/A	1	(NS)	B, SC, R	-	-	
AD	3701	Intro to PM AD	-	2.0	*	S/A	1	(NS)	B, SC, R	-	-	
AD	3702	PF Cargo AD	2.0	-	90	A/S	1	(NS)	B, SC, R	-	-	
AD	3703	PM Cargo AD	2.0	-	90	A/S	1	(NS)	B, SC, R, M	-	-	
AD	3704	PF Personnel AD	2.0	-	90	A/S	1	(NS)	B, SC, R	-	-	
AD	3705	PM Personnel AD	2.0	-	90	A/S	1	(NS)	B, SC, R, M	-	-	
			8.0	4.0								
TOTALS		FLT HRS	22.0	6.0	SIM HOURS							
# = Pilot must be NSQ (H) or event flown with a NSI if using NVDs.												
! = 3702-3705 will chain any previously acquired code within the Stage.												
CORE PLUS (4000 Phase)												
TACTICAL NAVIGATION (TN)												
TN	4200	FORM TN Procedures	3.0	-	365	A	2+	(NS)	B, SC, R, M	-	-	
			3.0	-								
NIGHT SYSTEMS LOW (NS(L))												
NS(L)	4250	Intro HLL LAT Proc	-	2.0	*	S	1	NS	B, SC, R	-	-	
NS(L)	4251	HLL LAT Procedures	2.0	-	180	A	1	NS	B, SC, R, M	-	-	
			2.0	2.0								
THREAT REACTION (TR)												
TR	4400	Intro Grnd Radar TR	2.0	-	*	A/S	1	(NS)	B, SC, R	-	420 CHAFF	
TR	4401	Ground Radar TR	2.0	-	180	A	1	(NS)	B, SC, R, M	-	420 CHAFF	
			4.0	-								
DEFENSIVE TACTICS (DT)												
DT	4410	DT vs One Adversary	2.0	-	365	A	1	D	B, SC, R	-	120(30 OVERT/90 COVERT)	
DT	4411	DT vs Two Adv	2.0	-	365	A	1	D	B, SC, R, M	-	120(30 OVERT/90 COVERT)	
			4.0	-								

KC-130J PILOT												
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIM HOURS	REFLY INTVL	DEVICE	# OF A/C	COND	POI	EVAL	ORDNANCE	EVENT CONV
AERIAL DELIVERY (AD)												
AD	4700	Combination AD	2.0	-	365	A	1	(NS)	B, SC, R, M	-	-	
AD	4701	Mil Free Fall AD	2.0	-	365	A	1	(NS)	B, SC, R, M	-	-	
AD	4702	JPADS	2.0	-	365	A	1	(NS)	B, SC, R, M	-	-	
			6.0	-								
BATTLEFIELD ILLUMINATION (BI)												
BI	4710	Battlefield Illum	2.0	-	365	A	1	N	B, SC, R, M	-	14 (LUU-2/LUU-19)	
			2.0	-								
HARVEST HAWK												
HH	4800	FCO Ground FAM	2.0	-	*	A	1	D	B, SC	-	-	
HH	4801	FCO PTT FAM	-	2.0	*	S	1	D	B, SC	-	-	
HH	4802	HH Ground FAM	2.0	-	*	S/A	1	D	B, SC	-	-	
HH	4803	HH Flight FAM	2.0	-	*	A	1	D	B, SC	-	-	
			6.0	2.0								
BASIC AIR TO SURFACE (BAS)												
BAS	4810	Day Weapons Empl	-	2.5	*	S	1	D	B, SC	-	-	
BAS	4811	Day Weapons Empl	2.5	-	*	A	1	(N)	B, SC	-	-	
BAS	4812	Weapons Employment	2.5	-	*	A	1	(N)	B, SC	-	1 Hellfire, 1 SOPGM	
			5.0	2.5								
MULTI-SENSOR IMAGERY RECONNAISSANCE (MIR)												
MIR	4820	MIR Proficiency	2.5	-	180	A	1	(N)	B, SC, R, M	-	-	
			2.5	0.0								
CLOSE AIR SUPPORT (CAS)												
CAS	4830	CAS	2.5	-	30	A	1	(N)	B, SC, R, M	-	-	
CAS	4840	Urban CAS	2.5	-	*	A	1	(N)	B, SC	-	-	
			5.0	0.0								
TOTALS		FLT HRS	39.5	6.5	SIM HOURS							
# = Pilot must be NSQ (H) or event flown with a NSI if using NVDs.												

KC-130J PILOT													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT TIME	SIM HOURS	ACAD HOURS	REFLY INTERVAL	DEVICE	# OF A/C	COND	POI	EVAL	ORD	EVENT CONV
INSTRUCTOR TRAINING (5000 Phase)													
BASIC INSTRUCTOR PILOT (BIP)													
BIP	5100	BIP Training	2.0	-	-	*	A/S	1	(NS)	B	E	-	
BIP	5101	BIP Check	2.0	-	-	*	A/S	1	NS	B, R	E	-	
			4.0	-	-								
ASSISTANT NATOPS NATOPS INSTRUCTOR (ANI)													
ANI	5140	ANI Training	-	2.0	-	*	S/A	1	(N)	B	E	-	
ANI	5141	ANI Check	-	2.0	-	365	S/A	1	(N)	B, R	E	-	
			-	4.0	-								
FLEET REPLACEMENT SQUADRON INTRODUCTION (FRSI)													
FRSI	5145	FRSI Training	-	2.0	-	*	S/A	1	(N)	B	E	-	
FRSI	5146	FRSI Training	-	2.0	-	*	S/A	1	(N)	B	E	-	
FRSI	5147	FRSI Check	-	2.0	-	*	A	1	(N)	B, R	E	-	
			-	6.0	-								
FLIGHT LEADERSHIP STANDARDIZATION EVALUATOR (FLSE)													
FLSE	5320	FLSE Certification	3.0	-	-	*	A	2+	(NS)	B, R	E	-	
FLSE	5321	FLSE Annual Trng	3.0	-	-	365	A	2+	(NS)	B, SC, R, M	E	-	
FLSE	5322	FLSE Quarterly Trng	-	-	-	90	-	-	-	B, SC, R, M	-	-	
			6.0	-	-								

KC-130J PILOT													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT TIME	SIM HOURS	ACAD HOURS	REFLY INTERVAL	DEVICE	# OF A/C	COND	POI	EVAL	ORD	EVENT CONV
STAGE INSTRUCTOR													
ALZ	5500	ALZ Stage Inst Chk	2.0	-	-	*	A	1	NS	B, R	E	-	
AD	5700	AD Stage Inst Trng	-	2.0	-	*	S/A	1	(NS)	B, R	E	-	
AD	5701	AD Stage Inst Chk	2.0	-	-	*	A	1	(NS)	B, R	E	-	
			4.0	2.0	-								
MAWTS-1 POI													
NIGHT SYSTEMS INSTRUCTOR (NSI)													
NS (H)	5150	NS (H) FAM IUT	2.0	-	-	*	A	1	NS	B	E	-	
NS (H)	5151	NS (H) TN IUT	2.0	-	-	*	A	1	NS	B	E	-	
NS (H)	5152	NSI Certification	2.0	-	-	*	A	1	NS	B, R	E	-	
LAT INSTRUCTOR (LAT I)													
LAT	5210	LAT IUT	2.0	-	-	*	A	1	D	B	E	-	
LAT	5211	LAT IUT	2.0	-	-	*	A	1	D	B	E	-	
LAT	5212	LATI Certification	2.0	-	-	*	A	1	D	B, R	E	-	
NS LAT INSTRUCTOR (NSLAT I)													
NS (L)	5250	NSLAT IUT	2.0	-	-	*	A	1	NS	B	E	-	
NS (L)	5251	NSLATI Certification	2.0	-	-	*	A	1	NS	B, R	E	-	
HARVEST HARK INSTRUCTOR													
FCO	5310	FCO IUT	2.0	-	-	*	A	1	D	B	E	-	
HH	5311	HH IUT	2.0	-	-	*	A	1	D	B	E	-	
FCO	5312	FCO IUT CERT	2.0	-	-	*	A	1	D	B, R	E	-	
HH	5313	HH IUT CERT	2.0	-	-	*	A	1	D	B, R	E	-	
DEFENSIVE TACTICS INSTRUCTOR (DTI)													
DT	5410	DT IUT	1.0	-	-	*	A	1	D	B	E	-	
DT	5411	DT IUT	1.0	-	-	*	A	1	D	B	E	-	
DT	5412	DTI Certification	1.0	-	-	*	A	1	D	B, R	E	-	
			27.0	-	-								
TOTALS			41.0	12.0	-								
\$ = Refer to the MAWTS-1 KC-130J Course Catalog													
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (6000 Phase)													
FCP	6005	FCP Exam	-	-	1.0	*	-	-	-	B, SC, R	E	-	
NTPS	6010	NATOPS Open B Exam	-	-	3.0	365	-	-	-	B, SC, R, M	E	-	
NTPS	6011	NATOPS Clsd B Exam	-	-	1.0	365	-	-	-	B, SC, R, M	E	-	
NTPS	6012	NATOPS Oral Exam	-	-	1.0	365	-	-	-	B, SC, R, M	E	-	
NTPS	6013	Tactics Exam	-	-	1.0	*	-	-	-	B, SC, R	E	-	
INST	6030	IGS/Open Book Exam	-	-	8.0	365	-	-	-	B, SC, R, M	E	-	
INST	6031	Inst Oral Exam	-	-	1.0	365	-	-	-	B, SC, R, M	E	-	
NTPS	6101	FCO NATOPS Check	1.0	-	-	365	A	1	D	B, SC, R, M	E	-	
FCP	6105	Partial FCP Cert	4.0	-	-	*	A/S	1	D	B, SC, R	E	-	
FCP	6106	FCP Certification	4.0	-	-	*	A/S	1	D	B, SC, R	E	-	
FCP	6107	FCP Proficiency	1.0	-	-	365	A/S	1	D	B, SC, R, M	-	-	
NTPS	6110	T3P NATOPS Qual	2.0	-	-	365	A/S	1	(N)	B, SC, R, M	E	-	
NTPS	6111	T2P NATOPS Qual	-	2.0	-	365	S/A	1	(N)	B, SC, R, M	E	-	
NTPS	6112	TPC Upgrade SIM	-	3.0	-	*	S	1	(N)	B, SC, R	-	-	
NTPS	6113	TPC Upgrade SIM	-	3.0	-	*	S	1	(N)	B, SC, R	-	-	
NTPS	6114	TPC Upgrade SIM	-	3.0	-	*	S	1	(N)	B, SC, R	-	-	
NTPS	6115	TPC Upgrade SIM	-	3.0	-	*	S	1	(N)	B, SC, R	-	-	
NTPS	6116	TPC Upgrade SIM	-	3.0	-	*	S	1	(N)	B, SC, R	-	-	
NTPS	6117	TPC Route Check	18.0	-	-	*	A	1	(N)	B, SC	-	-	
NTPS	6118	TPC NATOPS Qual	2.0	-	-	365	A/S	1	(N)	B, SC, R, M	E	-	
NTPS	6120	EP Review	-	1.0	-	90	S/A	1	(N)	B, SC, R, M	-	-	
INST	6130	Standard Inst Check	-	2.0	-	365	S/A	1	(N)	B, SC, R, M	E	-	
INST	6131	Special Inst Check	-	2.0	-	365	S/A	1	(N)	B, SC, R, M	E	-	
SL	6300	Sec Leader Practice	3.0	-	-	*	A	2	(NS)	B	E	-	
SL	6301	Sec Leader Cert	3.0	-	-	*	A	2	(NS)	B, SC, R	E	-	
SL	6302	Sect Leader Prof	2.0	-	-	365	A	2	(NS)	B, SC, R, M	-	-	
DL	6303	Div Leader Prac	3.0	-	-	*	A	3+	(NS)	B	E	-	
DL	6304	Div Leader Cert	3.0	-	-	*	A	3+	(NS)	B, SC, R	E	-	

KC-130J PILOT													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT TIME	SIM HOURS	ACAD HOURS	REFLY INTERVAL	DEVICE	# OF A/C	COND	POI	EVAL	ORD	EVENT CONV
DL	6305	Div Leader Prof	2.0	-	-	365	A	3+	(NS)	B,SC,R,M	-	-	
RAC	6310	Intro to TACRAC	3.0	-	-	*	A	2+	(NS)	B,SC,R	E	-	
RAC	6311	TACRAC Cert	3.0	-	-	*	A	2+	(NS)	B,SC,R,M	E	-	
RAC	6312	TACRAC Proficiency	2.0	-	-	365	A	2+	(NS)	B,SC,R,M	-	-	
RAC	6313	Intro to STRATRAC	6.0	-	-	*	A	2+	(NS)	B,SC	E	-	
RAC	6314	STRATRAC Cert	8.0	-	-	*	A	2+	(NS)	B,SC,R,M	E	-	
RAC	6315	STRATRAC Prof	3.0	-	-	365	A	2+	(NS)	B,SC,R,M	-	-	
<b>TOTALS</b>			75.0	22.0	16.0								
§ = Refer to MAWTS-1 KC-130J Course Catalog.													
* = Completion of NTPS-6010, NTPS-6011, and NTPS-6012.													

KC-130J PILOT													
5000 CONTRACT INSTRUCTOR TRAINING													
STAGE	TRNG CODE	EVENT DESC	FLT/LIVE HOURS	SIM HOURS	REFLY INTVL	DEVICE	# OF A/C	CONDITIO NS	POI	EVAL	ORDNANCE	EVENT CONV	
NATOPS INSTRUCTOR (NI)													
NI	5142	CI NI Training	-	2.0	*	S	1	(N)	-	E	-	-	
NI	5143	CI NI Check	-	2.0	*	S	1	(N)	-	E	-	-	
			-	4.0									
NIGHT SYSTEMS INSTRUCTOR (NSI)													
NS(H)	5153	NS(H) IUT	-	4.0	*	S	1	NS	-	E	-	-	
NS(H)	5154	CI NSI Certification	-	4.0	*	S	1	NS	-	E	-	-	
			-	8.0									
LOW ALTITUDE TACTICS INSTRUCTOR (LATI)													
LAT	5213	LAT IUT	-	2.0	*	S	1	D	-	E	-	-	
LAT	5214	CI LATI Certification	-	2.0	*	S	1	D	-	E	-	-	
			-	4.0									
STAGE INSTRUCTOR													
LRN	5160	CI LRN Stage Instructor Check		4.0	*	S	1	(N)	-	E	-	-	
TN	5200	CI TN Stage Instructor Check	-	4.0	*	S	1	(NS)	-	E	-	-	
FORM	5300	CI FORM Stage Instructor Check	-	4.0	*	S	1	(NS)	-	E	-	-	
TR	5400	CI IR TR Stage Instructor Check	-	4.0	*	S	1	D	-	E	-	-	
ALZ	5501	CI ALZ Stage Instructor Check	-	4.0	*	S	1	(NS)	-	E	-	-	
AAR	5600	CI AAR Stage Instructor Check	-	4.0	*	S	1	(NS)	-	E	-	-	
AD	5702	CI AD Stage Instructor Check	-	4.0	*	S	1	(NS)	-	E	-	-	
<b>TOTALS</b>				28.0									
			FLT HRS	44.0	SIM HOURS								

2.15.5 FCO T&R Matrix

KC-130J FIRE SUPPORT COORDINATION OFFICER													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIM HOURS	REFLY INTVL	DEVICE	# OF A/C	COND	POI	EVAL	ORDNANCE	EVENT CONY	
HARVEST HAWK													
HH	4800	FCO Ground FAM	2.0	-	*	A	1	D	B, SC, R	-	-		
HH	4801	FCO PTT FAM	-	2.0	*	S	1	D	B, SC, R	-	-		
HH	4802	HH Ground FAM	2.0	-	*	S/A	1	D	B, SC, R	-	-		
HH	4803	HH Flight FAM	2.0	-	*	A	1	D	B, SC, R	-	-		
			6.0	2.0									
BASIC AIR TO SURFACE (BAS)													
BAS	4810	Day Weapons Empl	-	2.5	*	S	1	D	B, SC, R	-	-		
BAS	4811	Day Weapons Empl	2.5	-	*	A	1	(N)	B, SC, R	-	-		
BAS	4812	Weapons Employment	2.5	-	*	A	1	(N)	B, SC, R	-	1 Hellfire, 1 SOPGM		
			5.0	2.5									
MULTI-SENSOR IMAGERY RECONNAISSANCE (MIR)													
MIR	4820	MIR Proficiency	2.5	-	180	A	1	(N)	B, SC, R, M	-	-		
			2.5	0.0									
CLOSE AIR SUPPORT (CAS)													
CAS	4830	CAS	2.5	-	30	A	1	(N)	B, SC, R, M	-	-		
CAS	4840	Urban CAS	2.5	-	*	A	1	(N)	B, SC, R	-	-		
			5.0	0.0									
TOTALS	FLT HRS		18.5	4.5	SIM HRS								

2.15.6 Pilot ACPM

KC-130J PILOT													
8000 AVIATION CAREER PROGRESSION MODEL													
STAGE	TRNG CODE	EVENT DESC	ACAD HOURS	REFLY INTVL	DEVICE	# OF A/C	COND	POI	EVAL	ORD	EVENT CONY		
ACPM CORE SKILL													
ACPM	8200	MACCS AGENCIES,	0.5	*	-	-	-	B, SC, R	-	-	-		
ACPM	8201	MWCS BRIEF	0.5	*	-	-	-	B, SC, R	-	-	-		
ACPM	8202	ACA AND AIRSPACE	0.8	*	-	-	-	B, SC, R	-	-	-		
ACPM	8210	AVIATION GROUND SUPPORT	0.7	*	-	-	-	B, SC, R	-	-	-		
ACPM	8230	ACE BATTLE STAFF	1.0	*	-	-	-	B, SC, R	-	-	-		
ACPM	8231	BATTLE COMMAND DISPLAY	1.0	*	-	-	-	B, SC, R	-	-	-		
ACPM	8240	SIX FUNCTIONS OF MARINE AV	1.7	*	-	-	-	B, SC, R	-	-	-		
ACPM	8241	JTAR / ASR INTRODUCTION	1.3	*	-	-	-	B, SC, R	-	-	-		
ACPM	8242	SITE COMMANDER PRIMER	1.0	*	-	-	-	B, SC, R	-	-	-		
ACPM	8250	THEATER AIR GRD SYS (TAGS)	0.8	*	-	-	-	B, SC, R	-	-	-		
			9.3										
ACPM MISSION SKILL													
ACPM	8300	AIR DEFENSE	0.8	*	-	-	-	B, SC, R	-	-	-		
ACPM	8310	(FARP) OPS	0.8	*	-	-	-	B, SC, R	-	-	-		
ACPM	8311	MC TACTICAL FUEL SYSTEMS	0.8	*	-	-	-	B, SC, R	-	-	-		
ACPM	8320	JOINT STRUC & JOINT AIR OPS	1.0	*	-	-	-	B, SC, R	-	-	-		
ACPM	8321	JOINT AIR TASKING PHASE 1	0.3	*	-	-	-	B, SC, R	-	-	-		
ACPM	8322	JOINT AIR TASKING PHASE 2	0.3	*	-	-	-	B, SC, R	-	-	-		
ACPM	8323	JOINT AIR TASKING PHASE 3:	0.3	*	-	-	-	B, SC, R	-	-	-		
ACPM	8324	JOINT AIR TASKING PHASE 4:	0.3	*	-	-	-	B, SC, R	-	-	-		
ACPM	8325	JOINT AIR TASKING PHASE 5:	0.3	*	-	-	-	B, SC, R	-	-	-		
ACPM	8326	JOINT AIR TASKING PHASE 6:	0.3	*	-	-	-	B, SC, R	-	-	-		
ACPM	8340	INTEGRATING FIRES	0.5	*	-	-	-	B, SC, R	-	-	-		
ACPM	8350	ESTABLISHING CONTROL ASHORE	0.8	*	-	-	-	B, SC, R	-	-	-		
ACPM	8351	TACRON	1.0	*	-	-	-	B, SC, R	-	-	-		
			7.5										

NAVMC 3500.53B  
 19 Apr 13

ACPM FLIGHT LEADERSHIP											
SECTION LEADER											
ACPM	8630	TACC	1.0	*	-	-	-	B,SC,R	-	-	-
ACPM	8660	JOINT OPS INTRO	0.4	*	-	-	-	B,SC,R	-	-	-
			1.4								
DIVISION LEADER											
ACPM	8640	JOINT DATA NETWORK	0.8	*	-	-	-	B,SC,R	-	-	-
ACPM	8641	ISR EMPLOYMENT	0.3	*	-	-	-	B,SC,R	-	-	-
ACPM	8620	ESG / CSG INTEGRATION	1.0	*	-	-	-	B,SC,R	-	-	-
			2.1								
TOTALS			ACADEMIC HRS	20.3							

2.16 SYLLABUS EVALUATION FORMS. MAWTS-1, the syllabus sponsor, maintains and updates training and readiness gradesheets.

2.17 SIMULATOR MISSION ESSENTIAL SUBSYSTEM MATRIX (MESM)

KC-130J SIMULATOR MISSION ESSENTIAL SUBSYSTEM MATRIX (MESM) (2F199)		
Failed Sub-System	PMC For:	NMC For:
Hydraulics	Any CPT	Any other event
Aural	Any CPT	Any initial event
Visual	Any CPT	Any other event
NVG Visual		Any NS event
NVIS Lighting		Any event conducted with NVGs
TEN		Any TR event
Lead-ship		Any FORM event
RadAlts (2)	1 failed RadAlt: Any event	Both RadAlts failed: Any TN, LAT or FAM event
DIGIMAP	TN Proficiency and AD	LAT or any initial TN event
HUD (2)	1 failed HUD: CPT 1100-1103 and 1106-1110	Both HUDs failed: Any LAT; TN; or ALZ event; CPT 1104, 1105, 1111
Flight Director	Any event	
Normal Trim	1 failed yoke trim switch: Any event	Both yoke trim switches failed: Any event
AMU (2)	1 failed AMU: Any event	Both AMUs failed: Any event
CNBP (1)	1 failed CNBP: Any event	
HDD (4 Pilot HDDs)	1 failed HDD: Any event	2 failed HDDs: Any event
CNI-MU (3)	1 failed CNI-MU: Any event	2 failed CNI-MUs: Any event
MC (2)	1 failed MC: Any event	Both MCs failed: Any event
Stdbby Attitude	Any event	
Stdbby A/S, altimeter	Any event	

2.18 ATTAIN AND MAINTAIN TABLES

2.18.1 PILOT

KC-130J PILOT ATTAIN AND MAINTAIN TABLE																		
T&R EVENT INFORMATION					ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY		PREREQUISITES	CHAINING	INSTRUCTOR			
T&R DESCRIPTION	STAGE	EVENT #	RE-FLY	Dev	BASIC POI		SERIES CONV POI		REFRESHER POI		MAINTAIN POI							
					STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #						
CORE SKILLS (2000 Phase)																		
LEFT SEAT FAM	LSF	2100	*	A	LSF	2100	LSF		LSF	2100		2100	6110		ANI			
HLL NVD Procedures	NS (H)	2150	90	A/S+	NS (H)	2150	NS (H)	2150	NS (H)	2150	NS (H)				NSI			
LLL NVD Procedures		2151	90	A/S+		2151		2151		2151		2151	2151	2151		2150		NSI
CONSTANT TAS LRN	LRN	2160	*	A	LRN	2160	LRN	2160	LRN	LRN	LRN				TPC			
LONG RNG CRUISE		2161	*	A		2161		2161		LRN		LRN	LRN					TPC
LRN		2162	365	A		2162		2162		LRN		2162	LRN	2162	2160,2161			
TAC TIME NAV (PM)	TN	2200	*	A/S+	TN	2200	TN	2200	TN	2200	TN				BIP			
TN PROCEDURES (PF)		2201	365	A/S+		2201		2201		2201		2201	2201					BIP
HLL TN PROC (PF)		2250	180	A/S+		2250		2250		2250		2250	2250		2201		2201,2150	NSI
LLL TN PROC (PF)		2251	180	A/S+		2251		2251		2251		2251	2251		2251	2201	2250,2201,2151,2150	NSI
INTRO TO LAT PROC	LAT	2260	*	S/A	LAT	2260	LAT	2260	LAT		LAT		2201	2201	LATI			
LAT PROCEDURES		2261	180	A		2261		2261		2261		2261	2261	2261	2260	2201	LATI	
SEC FORM PROC	FORM	2300	365	A/S+	FORM	2300	FORM	2300	FORM	2300	FORM				SEC LEAD			
DIV FORM PROC		2301	365	A		2301		2301		2301		2301	2301	2301	2300	2300, 2150~NS,2151~LLL	DIV LEAD	
NIGHT FORM PROC		2350	180	A/S+		2350		2350		2350		2350	2350	2350	2300	2300,2150,2151	DIV LEAD, NSI	
GROUND IR TR	IR	2400	180	A/S+	IR	2400	IR	2400	IR	2400	IR	2400	2260		LATI			
MISSION SKILLS (3000 Phase)																		
ALZ PROCEDURES	ALZ	3500	180	A/S+	ALZ	3500	ALZ	3500	ALZ	3500	ALZ		2100	3501	ALZI, WTI			
TACTICAL ARRIVALS		3501	365	A/S		3501		3501		3501		3501	3501	2100	2150~NS,2151~LLL	ALZI, WTI		
COMBAT OFFLOAD		3502	*	A		3502		3502		3502		3502	3502	2100		ALZI, WTI		
UNIMPROVED GROUND OPERATIONS		3503	730	A		3503		3503		3503		3503	3503	3503	2100, 3500	3500, 2150~HLL,2151~LLL	ALZI, WTI	
NVD ALZ		3550	180	A/S+		3550		3550		3550		3550	3550	3550	3500,2150~NS,2151~LLL	3500,3501,2150,2151	ALZI, (NSI)	
FWAAR/TAAR PROC	AAR	3600	365	A/S+	AAR	3600	AAR	3600	AAR	3600	AAR			2150~NS,2151~LLL	BIP			
DAY HAAR PROC		3601	365	A/S+		3601		3601		3601		3601	3601	2100		BIP		
AAR SYS PANEL		3602	180	S/A		3602		3602		3602		3602	3602	3602	3600,3601		BIP	
NIGHT HAAR PROC		3650	180	A/S+		3650		3650		3650		3650	3650	3650	2100,3601,3600,2150~NS,2151~LLL	3600,3601,2150~NS,2151~LLL	BIP, (NSI)	
ADGR	ADGR	3660	730	A	ADGR	3660	ADGR		ADGR	3660	ADGR	3660			BIP, (NSI)			



KC-130J PILOT ATTAIN AND MAINTAIN TABLE															
T&R EVENT INFORMATION					ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY		PREREQUISITES	CHAINING	INSTRUCTOR
T&R DESCRIPTION	STAGE	EVENT #	RE-FLY	Dev	BASIC POI		SERIES CONV POI		REFRESHER POI		MAINTAIN POI				
					STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #			
INTRO TO PF AD	AD	3700	*	S/A	AD	3700	AD	3700	AD	3700	AD		2150~NS, 2151~LLL	ADI, WTI	
INTRO TO PM AD		3701	*	S/A		3701		3701				2150~NS, 2151~LLL	ADI, WTI		
PF CARGO AD		3702	90	A/S+		3702		3702		3700		3703, 3704, 3705, 2150~NS, 2151~LLL	ADI, WTI		
PM CARGO AD		3703	90	A/S+		3703		3703		3701		3702, 3704, 3705, 2150~NS, 2151~LLL	ADI, WTI		
PF PERSONNEL AD		3704	90	A/S+		3704		3704		3700		3702, 3703, 3705, 2150~NS, 2151~LLL	ADI, WTI		
PM PERSONNEL AD		3705	90	A/S+		3705		3705		3701		3702, 3703, 3704, 2150~NS, 2151~LLL	ADI, WTI		
CORE PLUS (4000 Phase)															
FORM TN PROCEDURES	TN	4200	365	A	TN	4200	TN	4200	TN	4200	TN	4200	2201, 2300	2201, 2300, 2150~NS, 2151~LLL	SEC LEAD
INTRO TO HLL LAT PROCEDURES	NS (L)	4250	*	S	NS (L)	4250	NS (L)	4250	NS (L)	4250	NS (L)		NSQ(H), LATQ	2150~NS, 2151~LLL	NS LATI
HLL LAT PROCEDURES		4251	180	A		4251		4251		4251		4250	2150~NS, 2151~LLL	NS LATI	
INTRO TO GROUND RADAR TR	TR	4400	*	A/S	TR	4400	TR	4400	TR	4400	TR		2400, 2261	2150~NS, 2151~LLL	WTI
GROUND RADAR TR		4401	180	A		4401		4401		4401		4400	2150~NS, 2151~LLL	WTI	
DT VS ONE ADVERSARY	DT	4410	365	A	DT	4410	DT	4410	DT	4410	DT		2261, 2400	4411	DEFTACI
DT VS TWO ADVERSARY		4411	365	A		4411		4411		4411		4410	4410	4410	4411
COMBINATION AD	AD	4700	365	A	AD	4700	AD	4700	AD	4700	AD	4700	3702, 3703, 3704, 3705	3702, 3703, 3704, 3705, 2150~NS, 2151~LLL	ADI, WTI
MILITARY FREE FALL		4701	365	A		4701		4701		4701		4701	3704, 3705	3704, 3705, 2150~NS, 2151~LLL	ADI, WTI
JPADS		4702	365	A		4702		4702		4702		4702	3702, 3703	3702, 3703, 2150~NS, 2151~LLL	ADI, WTI
BATTLEFIELD ILLUM	BI	4710	365	A	BI	4710	BI	4710	BI	4710	BI	4710	3700, 3701	2150~NS, 2151~LLL	ADI, WTI
FCO GROUND FAM	HH	4800	*	G	HH	4800	HH	4800	HH		HH		APRB		ANI, FCOI, HHI
FCO PTT FAM		4801	*	S		4801		4801					FCOI		
HH GROUND FAM		4802	*	G		4802		4802					4800, 4801, APRB	FCOI & HHI	
HH FLIGHT FAM		4803	*	A		4803		4803					4802	FCOI & HHI	
INTRO TO DAY WEAPONS EMPL		BAS	4810	*		S		BAS		4810		BAS	4810	BAS	
DAY WEAPONS EMPLOYMENT	4811		*	A	4811	4811				4803, 4810	FCOI & HHI				
WEAPONS EMPLOYMENT	4812		*	A	4812	4812				4811	FCOI & HHI				
MIR	MIR	4820	180	A	MIR	4820	MIR	4820	MIR	4820	MIR	4820	4803		FCOI & HHI

KC-130J PILOT ATTAIN AND MAINTAIN TABLE

T&R EVENT INFORMATION					ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY		PREREQUISITES	CHAINING	INSTRUCTOR
T&R DESCRIPTION	STAGE	EVENT #	RE-FLY	Dev	BASIC POI		SERIES CONV POI		REFRESHER POI		MAINTAIN POI				
					STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #			
CAS	CAS	4830	30	A	CAS	4830	CAS	4830	CAS	4830	CAS	4830	4811	4820	FCOI & HHI
URBAN CAS		4840	*	A		4840		4840		4830		4830	FCOI & HHI		
INSTRUCTOR TRAINING (5000 Phase)															
BIP TRAINING	BIP	5100	*	A/S	BIP	5100	BIP		BIP		BIP		CORE SKILL, MISSION SKILL NSQ(H), LATQ, COMMAND DIRECTIVES	2150~NS, 2151~LLL	ANI, LATI, NSI, WTI
BIP CHECK		5101	*	A/S		5101				5101		5100	2150~NS, 2151~LLL	ANI, LATI, NSI, WTI	
ANI TRAINING	ANI	5140	*	S/A	ANI	5140	ANI		ANI		ANI		5101, APRB		ANI, NI, NE, GNE, MM
ANI CHECK		5141	365	S/A		5141				5141		5140	NI, NE, GNE, MM		
FRSI TRAINING	FRSI	5145	*	S/A	FRSI	5145	FRSI		FRSI		FRSI		5141, APRB		FRSI
FRSI TRAINING		5146	*	S/A		5146				5145		5145	FRSI		
FRSI CHECK		5147	*	A		5147				5147		5146	FRSI		
FLSE CERTIFICATION	FLSE	5320	*	A	FLSE	5320	FLSE		FLSE		FLSE		IAW COURSE CATALOG		FLSE Coord OR FLSE MM
FLSE ANNUAL TRAINING		5321	365	A		5321		5321		5321		IAW COURSE CATALOG	ALZI/NSI, ALZI/ANI, WTI		
FLSE QUARTERLY TRAINING		5322	90	-		5322		5322		5322		IAW COURSE CATALOG			
ALZ STAGE INSTRUCTOR	ALZ	5500	*	A	ALZ	5500	ALZ		ALZ	5500	ALZ		3500, 3501, 3502, 3503, 3550, 5101, 5152, APRB		ALZI/NSI, ALZI/ANI, WTI
AD STAGE INSTRUCTOR TRAINING	AD	5700	*	S/A	AD	5700	AD		AD		AD		3700, 3701, 3702, 3703, 3704, 3705, 4700 OR 4701 OR 4702, 4710, APRB		ADI, WTI
AD STAGE INST		5701	*	A		5701				5701		5700	2150~NS, 2151~LLL	ADI, WTI	
NS (H) FAM IUT	NS (H)	5150	*	A	NS (H)	5150	NS (H)		NS (H)		NS (H)		IAW COURSE CATALOG	2150~NS, 2151~LLL	NSI
NS (H) TN IUT		5151	*	A		5151						2150~NS, 2151~LLL	NSI		
NSI (H) CERTIFICATION		5152	*	A		5152				5152			2150~NS, 2151~LLL	MAWTS IP	
LAT IUT	LAT	5210	*	A	LAT	5210	LAT		LAT		LAT		IAW COURSE CATALOG		LATI
LAT IUT		5211	*	A		5211							LATI		
LATI CERTIFICATION		5212	*	A		5212				5212			WTI		
NS LAT IUT	NS (L)	5250	*	A	NS (L)	5250	NS (L)		NS (L)		NS (L)		IAW COURSE CATALOG	2150~NS, 2151~LLL	NSLATI
NS LATI		5251	*	A		5251				5251			2150~NS, 2151~LLL	MAWTS IP	

KC-130J PILOT ATTAIN AND MAINTAIN TABLE																								
T&R EVENT INFORMATION					ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY		PREREQUISITES	CHAINING	INSTRUCTOR									
T&R DESCRIPTION	STAGE	EVENT #	RE-FLY	Dev	BASIC POI		SERIES CONV POI		REFRESHER POI		MAINTAIN POI													
					STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #												
CERTIFICATION																								
FCO IUT	HH	5310	*	A	HH	5310	HH		HH		HH		IAW COURSE CATALOG		FCOI									
HH IUT		5311	*	A		5311																	HHI	
FCO IUT CERT		5312	*	A		5312										5312								MAWTS IP
HH IUT CERT		5313	*	A		5313										5313								MAWTS IP
DT IUT	DT	5410	*	A	DT	5410	DT		DT		DT		IAW COURSE CATALOG		DTI									
DT IUT		5411	*	A		5411																	DTI	
DTI CERTIFICATION		5412	*	A		5412										5412								MAWTS IP
REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, and DESIGNATIONS (6000 Phase)																								
FCP EXAM	FCP	6005	*	G	FCP	6005	FCP	6005	FCP	6005	FCP	6005	6118											
NATOPS OPEN BOOK	NTPS	6010	365	G	NTPS	6010	NTPS	6010	NTPS	6010	NTPS	6010												
NATOPS CLOSED BOOK		6011	365	G		6011		6011		6011		6011												
NATOPS ORAL EXAM		6012	365	G		6012		6012		6012		6012												
TACTICS EXAM		6013	*	G		6013									6110									
INST GROUND SCHOOL	INST	6030	365	G	INST	6030	INST	6030	INST	6030	INST	6030												
INST ORAL EXAM		6031	365	G		6031		6031		6031		6031												
FCO NATOPS CHECK	NTPS	6101	365	A	NTPS	6101	NTPS	6101	NTPS	6101	NTPS	6101			ANI									
PARTIAL FCP DESIGNATION	FCP	6105	*	A/S	FCP	6105	FCP		FCP		FCP		6005, 6118, APRB		FCP									
FCP DESIGNATION		6106	*	A/S		6106		6106		6106		6106	6106	6105, APRB		FCP								
FCP PROFICIENCY		6107	180	A/S		6107		6107		6107		6107	6107	6105~P OR 6106										
T3P NATOPS DES	NTPS	6110	365	A/S+	NTPS	6110	NTPS	6110	NTPS	6110	NTPS	6110	6010, 6011, CORE SKILL INTRO PHASE COMPLETE, 6012	6012, 6120	ANI, CI NI									
T2P NATOPS DES		6111	365	S/A		6111		6111		6111		6111	6111	6010, 6011, 6013, 82 XX	6110, 6012, 6120	ANI, CI NI								
TPC UPGRADE SIM		6112	*	S		6112		6112		6112		6112	6112	6111, NSQ(H), 83XX	6120	CI, ANI								
TPC UPGRADE SIM		6113	*	S		6113		6113		6113		6113	6113	6112	6120	CI, ANI								
TPC UPGRADE SIM		6114	*	S		6114		6114		6114		6114	6114	6113	6120	CI, ANI								
TPC UPGRADE SIM		6115	*	S		6115		6115		6115		6115	6115	6114	6120	CI, ANI								
TPC UPGRADE SIM		6116	*	S		6116		6116		6116		6116	6116	6115	6120	CI, ANI								
TPC ROUTE CHECK		6117	*	A		6117		6117		6117		6117	6117	6111, NSQ(H), 83XX, 6116	2162, 2150~NS, 2151~LLL	ANI								
TPC NATOPS DES		6118	365	A/S		6118		6118		6118		6118	6118	6117, 6116	6110, 6111, 6120	ANI, CI NI								
EP REVIEW		6120	90	S/A		6120		6120		6120		6120	6120			ANI, CI								

KC-130J PILOT ATTAIN AND MAINTAIN TABLE																
T&R EVENT INFORMATION					ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY		PREREQUISITES	CHAINING	INSTRUCTOR	
T&R DESCRIPTION	STAGE	EVENT #	RE-FLY	Dev	BASIC POI		SERIES CONV POI		REFRESHER POI		MAINTAIN POI					
					STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #				
STAN INST CHECK	INST	6130	365	S/A†	INST	6130	INST	6130	INST	6130	INST	6130	6030		ANI, CI NI	
SPL INST CHECK		6131	365	S/A		6131		6131		6131		6131	6131	6131	6030, 6130	6130
SEC LEADER PRAC	SL	6300		A	SL	6300	SL		SL		SL		2300, 2301, 2350, 4200, 6118, 5101, APRB, 2 WINGMAN FLIGHTS AS TPC	2300, 2150~NS, 2151~LLL	SL	
SEC LEADER CERT		6301	*	A		6301		6301		6301		6301	6300	2300, (2150~HLL), (2151~LLL)	FLSE	
SEC LEADER PROF		6302	365	A		6302		6302		6302		6302	6320	6301	2300, 2150~NS, 2151~LLL	
DIV LEADER PRAC	DL	6303		A	DL	6303	DL		DL		DL		6302, APRB, 2 FLIGHTS AS A SECTION LEAD	2301, 2150~NS, 2151~LLL	DL	
DIV LEADER CERT		6304	*	A		6304		6304		6304		6304	6303	2301, 2150~NS, 2151~LLL	FLSE	
DIV LEADER PROF		6305	365	A		6305		6305		6305		6305	6305	6304	2301, 2150~NS, 2151~LLL	
INTRO TO TACRAC	RAC	6310	*	A	RAC	6310	RAC	6310	RAC		RAC		6111	2150~NS, 2151~LLL	TACRAC	
TACRAC CERT		6311	*	A		6311		6311		6311		6311	6310, 6118, APRB	2150~NS, 2151~LLL	FLSE	
TACRAC PROFICIENCY		6312	365	A		6312		6312		6312		6312	6312	6311	2150~NS, 2151~LLL	
INTRO TO STRATRAC		6313	*	A		6313		6313		6313		6313	6304, 6311, APRB	6312, 2150~NS, 2151~LLL	STRATRAC	
STRATRAC CERT		6314	*	A		6314		6314		6314		6314	6313	6312, 2150~NS, 2151~LLL	FLSE	
STRATRAC PROF		6315	365	A		6315		6315		6315		6315	6315	6314	6312, 2150~NS, 2151~LLL	

2.18.2 FCO

KC-130J FCO ATTAIN AND MAINTAIN TABLE															
T&R EVENT INFORMATION					ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY		PREREQUISITES	CHAINING	INSTRUCTOR
T&R DESCRIPTION	STAGE	EVENT #	RE-FLY	Dev	BASIC POI		SERIES CONV POI		REFRESHER POI		MAINTAIN POI				
					STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #			
CORE PLUS (4000 Phase)															
FCO GROUND FAM	HH	4800	*	G	HH	4800	HH	4800	HH		HH		APRB		ANI, FCOI, HHI
FCO PTT FAM		4801	*	S		4801		4801					FCOI		
HH GROUND FAM		4802	*	G		4802		4802					FCOI & HHI		
HH FLIGHT FAM		4803	*	A		4803		4803					FCOI & HHI		
INTRO TO DAY WEAPONS EMPL	BAS	4810	*	S	BAS	4810	BAS	4810	BAS		BAS		4801		FCOI & HHI
DAY WEAPONS EMPLOYMENT		4811	*	A		4811		4811					FCOI & HHI		
WEAPONS EMPLOYMENT		4812	*	A		4812		4812					FCOI & HHI		
MIR	MIR	4820	180	A	MIR	4820	MIR	4820	MIR	4820	MIR	4820	4803		FCOI & HHI
CAS	CAS	4830	30	A	CAS	4830	CAS	4830	CAS	4830	CAS	4830	4811	4820	FCOI & HHI
URBAN CAS		4840	*	A		4840		4840					4830	FCOI & HHI	



CHAPTER 3

KC-130J CREWMASTER

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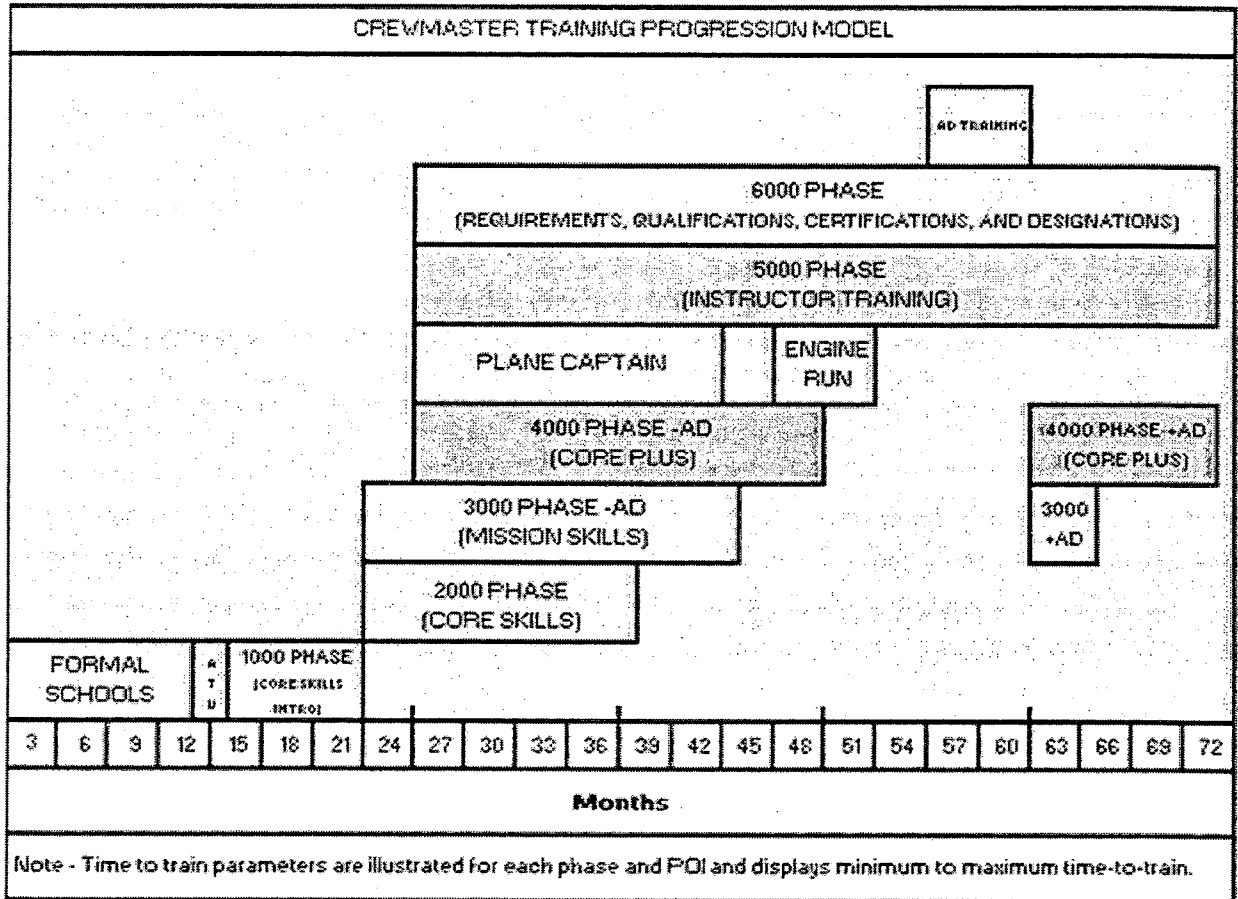


CHAPTER 3

KC-130J CREWMASTER (MOS 6276)

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

3.1 CREWMASTER TRAINING PROGRESSION MODEL. This model represents the recommended training progression for the average Crewmaster. Units should use the model as a point of departure to generate individual training plans.



3.2 ABBREVIATIONS

CREWMASTER	
CORE/MISSION/CORE PLUS ABBREVIATIONS	
AAR	Air to Air Refueling
ACAD	Academic Lectures
ADGR	Aviation Delivered Ground Refueling
AD	Air Delivery
ADI	Air Delivery Instructor
ALZ	Assault Landing Zone
ANI	Assistant NATOPS Instructor
ARO	Air Refueling System Operator
ASM	Advanced Skills Management
AT	Assault Transport
BI	Battlefield Illumination
CAS	Close Air Support
CBT	Computer Based Training
CM	Crewmaster
CMCC	Crewmaster Crew Chief
CMLM	Crewmaster Loadmaster
CMMR	Core Model Minimum Requirements
CMUI	Crewmaster Under Instruction
CPL	Cargo Passenger Load
CPLI	Cargo Passenger Load Instructor
CPT	Cockpit Procedures Trainer
FAM	Familiarization
FCF	Functional Check Flight
IUT	Instructor Under Training
LAB	Chalk Talk / Laboratory Events
MI	Mission Instructor
MSHARP	Marine Sierra Hotel Aviation Readiness Program
NI	NATOPS Instructor
NE	NATOPS Evaluator
NS	Night Systems
NSI	Night Systems Instructor
NTSP	NATOPS
NSQ	Night Systems Qualified
PC	Plane Captain
QASO	Quality Assurance Safety Observer
RS	Refueling Supervisor
SI	Systems Instructor
SIM	Simulator
SYS	Systems
TR	Threat Reaction
TN	Tactical Navigation
WTI	Weapons and Tactics Instructor

3.3 INDIVIDUAL CORE/MISSION/CORE PLUS SKILL PROFICIENCY (CSP) REQUIREMENTS

3.3.1 Management of individual CSP/MSP/CPSP/CPMP serves as the foundation for developing proficiency requirements in DRRS.

3.3.2 Individual CSP is a "Yes/No" status assigned to an individual by Core Skill. When an individual attains and maintains CSP in a Core Skill, the

individual counts towards CMMR Unit CSP requirements for that Core Skill.

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

3.3.4 Once proficiency has been attained by Core/Mission/Core Plus Skill (by any POI assignment) then the individual maintains proficiency by executing those events noted in the maintain table and in the "Maintain POI" column of the T&R syllabus matrix. An individual maintains proficiency by individual Core/Mission/Core Plus Skill.

**\*Note\***

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

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

**\*Note\***

See Chapter 2 for amplifying information on POI updating.

3.3.6 Attain/Maintain Tables

KC-130 CREWMASTER							
ATTAIN/MAINTAIN TABLES							
ATTAIN PROFICIENCY						MAINTAIN PROFICIENCY	
BASIC POI		SERIES CONVERSION POI		REFRESHER POI		MAINTAIN POI	
STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #	STAGE	EVENT #
<b>CORE SKILLS (2000 PHASE)</b>							
NS (H)	2150R	NS (H)	2150R	NS (H)	2150R	NS (H)	2150R
LRN	2160	LRN	2160	LRN	2160	LRN	2160
TN	2201	TN		TN		TN	
	2250R				2250R		2250R
IR TR	2400R	IR TR	2400R	IR TR	2400R	IR TR	2400R
AAR	2600	AAR		AAR		AAR	
	2601						
	2650R				2650R		2650R
<b>MISSION SKILLS (3000 PHASE)</b>							
ALZ	3500	ALZ	3500	ALZ		ALZ	
	3502R		3502R		3502R		3502R
AT	3510R	AT	3510R*	AT	3510R	AT	3510R
	3511R		3511R*		3511R		3511R
	3512R		3512R*		3512R		3512R
	3513R		3513R*		3513R		3513R
AAR	3610	AAR	3610	AAR		AAR	
	3611		3611				
	3612		3612				
	3613R		3613R		3613R		3613R
ADGR	3661R	ADGR		ADGR	3661R	ADGR	3661R
AD	3703R	AD	3703R	AD	3703R	AD	3703R
	3705R		3705R		3705R		3705R
<b>CORE PLUS SKILLS (4000 PHASE)</b>							
AD	4700R	AD	4700R	AD	4700R	AD	4700R
	4701R		4701R		4701R		4701R
	4703R		4703R		4703R		4703R
BI	4710	BI		BI		BI	
	4711R				4711R		4711R
CAS	4802	CAS	4802	CAS		CAS	
	4811R		4811R		4811R		4811R
"R" suffix and Grey highlight = R-coded "Refresher" event							
"*" Not applicable to KC130T Loadmasters and Crewmaster							

3.4 REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS. The tables below delineate T&R events required to be completed to attain proficiency for select certifications, qualifications and designations. In addition to event requirements, all required stage lectures, briefs, squadron training, prerequisites, and other criteria shall be completed prior to completing final events. Certification, qualification and designation letters signed by the commanding officer shall be placed in training Performance Records and NATOPS. See Chapter 2 of the Aviation T&R Program Manual on regaining lost qualifications.

3.4.1 Instructor Designations

INDIVIDUAL DESIGNATION REQUIREMENTS	
INSTRUCTOR DESIGNATION	EVENTS
CPLI	3502, 3510-3513, 5101
HHI	
MI	2150, 2160, 2201, 2250, 2600, 2601, 3502, 5101
SI	Plane Captain Qualification, 2150, 3613, 5101
ADI	3703, 3705, 4700, 4701, 4703, 5101
CM ANI	5140, 5141, IAW OPNAVINST 3710.7
CMCC ANI	5140, 5142, IAW OPNAVINST 3710.7
CMLM ANI	5140, 5143, IAW OPNAVINST 3710.7
NSI	2150, 5150, 5151, 5152, IAW the MAWTS-1 KC-130J Course Catalog (Crewmaster POI)
RS	6652
QASO	6710
WTI	IAW the MAWTS-1 WTI Course Catalog (Crewmaster POI)

3.4.2 Requirements, Qualifications, and Designations

INDIVIDUAL REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS	
R, Q & D	Event Requirements
<b>QUALIFICATIONS</b>	
NATOPS CM	IAW OPNAVINST 3710.7 and all Core Skill Introduction complete IAW NTPS-6013.
NATOPS CMCC	IAW OPNAVINST 3710.7 and the Core Skill Introduction Prerequisites IAW NTPS-6014.
NATOPS CMLM	IAW OPNAVINST 3710.7 and the Core Skill Introduction Prerequisites IAW NTPS-6015.
NSQ	2150, IAW the MAWTS-1 KC-130J Course Catalog (Crewmaster POI)
FCF*	6105, 6106, 6107
RS	6652
QASO	6710
<b>DESIGNATIONS</b>	
RS	6652
QASO	6710
PC**/**	IAW COMNAVFORINST 4790.2 and the ASM Plane Captain syllabus.
Engine Run**/**	IAW COMNAVFORINST 4790.2 and the ASM Engine Run Syllabus.
* These qualifications do not require a Qualification Letter signed by the Commanding Officer. Plane Captain and Engine Run Qualifications are granted by the Commanding Officer utilizing ASM.	
**Plane Captain and Engine Run Qualifications are not tracked in MSHARP or CMMR tables.	

3.5 PROGRAMS OF INSTRUCTION

3.5.1 Basic, Transition POI

CREWMASTER Basic POI		
Weeks	Phase of Instruction	Unit
1-6	Naval Aircrewman Candidate School	NAS Pensacola, FL
7-9	Survival, Evasion, Resistance, and Escape Course	NAS North Island, CA NAS Brunswick, ME
10-23	KC-130J Crewmaster Organizational Ground Maintenance Course	Little Rock AFB, AR/Tactical Squadron
24-26	Basic Loadmaster Course	Little Rock AFB, AR/Tactical Squadron
27-36	Loadmaster Initial Qualification Course	Little Rock AFB, AR/Tactical Squadron
37-42	ATU POI	KC-130J ATU
43-77	Core Skill Introduction Training	Tactical Squadron
78-94	Core Skill Training	Tactical Squadron
95-121	Mission Skill Training Minus Air Delivery	Tactical Squadron
122-134	Core Skill Plus Training Minus Air Delivery	Tactical Squadron
135-145	Plane Captain Training	Tactical Squadron
146-150	Engine Run Training	Tactical Squadron

3.5.2 Series Conversion POI. All series conversion candidates shall undergo the prerequisite training that will allow them to commence the entire Series Conversion Crewmaster syllabus. In order to commence and complete the entire Crewmaster (CM) syllabus an individual must have completed either the CNATT KC-130J Crew Chief Organizational Ground Maintenance Course or the ATU approved Ground Maintenance Course. The candidate must also complete both the USAF Basic Loadmaster Course and the USAF Loadmaster Initial Qualification Course or the ATU approved Loadmaster Course.

3.5.2.1 Series Conversion POI

CREWMASTER SERIES CONVERSION POI		
Weeks	Phase of Instruction	Unit
1-8	ATU Ground Maintenance Course	Tactical Squadron
1-8	ATU Loadmaster Course	Tactical Squadron
9-21	Core Skill Introduction Training	Tactical Squadron
22-26	Core Skill Training	Tactical Squadron
27-30	Mission Skill Training	Tactical Squadron
31-35	Core Skill Plus Training	Tactical Squadron
36-52	Plane Captain Training	Tactical Squadron
53-57	Engine Run Training	Tactical Squadron
58-60	Function Check Flight Training	Tactical Squadron

3.5.3 Refresher POI

CREWMASTER REFRESHER POI		
Weeks	Phase of Instruction	Unit
1-10	Core Skill Training	Tactical Squadron
11-20	Mission Skill Training	Tactical Squadron
21-30	Core Skill Plus Training	Tactical Squadron

3.5.4 Plane Captain POI. The initial foundation of the Plane Captain (PC) syllabus starts with the completion of the approved Ground Maintenance Course, completion of the Core Skill Introduction Aircraft System Familiarization stages, and the CM or CMCC NATOPS Qualification. Once the individual has met the prerequisite maintenance experience through Advance Skills Management (ASM), they may be recommended to commence the ASM KC-130J Plane Captain Syllabus. The commanding officer will designate Plane Captains utilizing the ASM PC Syllabus. The employment and use of Plane Captains will be IAW COMNAVAIRFORINST 4790.2 and the individual squadron's Standard Operating Procedures.

3.5.5 Instructor POI

CREWMASTER Instructor POI		
Weeks	Phase of Instruction	Unit
1	Standardization Training	Tactical Squadron
2-4	Flight Training	Tactical Squadron

3.6 SYLLABUS NOTES

3.6.1 Event Terms

EVENT TERMS	
TERM	DESCRIPTION
Discuss	An explanation of systems, procedures, or maneuvers during the brief, in flight, or post flight. Student is responsible for knowledge of procedures.
Demonstrate	The description and performance of a particular maneuver/event by the instructor, observed by the CMUI/student. The CMUI/student is responsible for knowledge of the procedures prior to the demonstration of a required maneuver/student.
Introduce	The instructor may demonstrate a procedure or maneuver to a student, or may coach the CMUI through the maneuver without demonstration. The CMUI performs the procedures or maneuver with coaching as necessary. The CMUI is responsible for knowledge of the procedures.
Practice	The performance of a maneuver or procedure by the CMUI/student that may have been previously introduced in order to attain a specified level of performance.
Review	Demonstrated proficiency of a maneuver by the CMUI/student.
Evaluate	Any flight designed to evaluate aircrew standardization that does not fit another category such as SARCK, HACCK, T2PCK, etc.
E-Coded	This term means an event evaluation form is required each time the event is logged. Requires evaluation by a certified standardization instructor (NATOPS I,WTI, INST Evaluator etc.)

3.7 ACADEMIC TRAINING

3.7.1 General. Academic training should be conducted for each phase/stage of the syllabus. Academic training is intended to be conducted prior to an evolution requiring flight time. Academic training consists of Computer Based Training (CBT), Academic Lectures (ACAD), Chalk Talks/Laboratory events (LAB), and Cockpit Procedural Training (CPT). CBTs are self-paced computer based modules which cover particular subjects. ACAD events are stand up instruction, such as MAWTS-1 ASPs, presented in a classroom environment by a qualified instructor. LAB and CPT events are instructor guided free-play interactive events given to an individual or entire class by a qualified instructor. Some ACAD and LAB events will be Familiarization events occurring on an actual aircraft without the use of flight time. Responsibilities for development and delivery of these courses are as follows:

3.7.1.1 Core Skill Introduction. The KC-130J Model Manager is responsible for the development of CBT and ACAD content and related materials. MAWTS-1 is responsible for the development of the academic lectures for Night Systems training. The individual Tactical Squadrons or their associated ATUs are responsible for the delivery of these academic training events. The individual Tactical Squadrons are responsible for the execution of all flight training events for the Core Skill Introduction phase.

3.7.1.2 Core Skill/Mission Skill/Core Plus Skill/Mission Plus Skills. MAWTS-1 is responsible for the development of the academic lectures that support these phases of training. The lectures will be available through the MAWTS-1 Academic Support Package (ASP). The individual Tactical Squadrons are responsible for the delivery of the academic training events for the Core Skill, Mission Skill, Core Plus Skill, and Mission Plus Skills phases.

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

Phase of Instruction	Unit
Naval Aircrewman Candidate School (NACCS)	NAS Pensacola, FL
Survival, Evasion, Resistance, and Escape Course	NAS North Island, CA
	NAS Brunswick, ME
Weapons and Tactics Instructor Course	MAWTS-1
Night Imaging and Threat Evaluation (NITE) Lab	MATSS Unit
Basic Instructor Training Course	MCAS New River, NC
Crew Resource Management Instructor	NAS Pensacola, FL or Mobile Training Team
Advanced Airlift Tactical Training Course (AATTC)	St. Joseph, MO



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3.7.3 The following external training courses are recommended in addition to the syllabus:

Phase of Instruction	Unit
Environmental Survival Course	Regional / seasonal survival schools
Joint Airdrop Inspector Course	Ft. Lee, VA
Hazardous Materials Preparer Course	MCAS New River, NC
Forklift Operators Course	Base Motor Transport
Aircraft Weight and Balance Course	CNATT

3.7.4 The following Aircrew Training references shall be used to ensure safe and standardized training, grading criteria, and aircraft operation:

NATOPS General Flight and Operating Instructions (OPNAVINST 3710.7\_)  
 USMC NATOPS General Flight and Operating Instruction MCO 3710.8  
 NATOPS Flight Manuals (NFM)  
 KC-130 NTTP Series  
 Aviation T&R Program Manual  
 Crew Resource Management Program Manual (OPNAVINST 1542.7\_)  
 MAWTS-1 KC-130J Course Catalog  
 MAWTS-1 WTI Course Catalog  
 Allied Tactical Publication - 56 (ATP-56) Air to Air Refueling  
 FMFM 10-500 Series Air Delivery Rigging Manuals (as applicable)  
 NAVAIR KC/C-130 NAVAIR 01-75GAA-9s  
 Flight Clearances (FC) - issued by NAVAIR

### 3.8 CORE SKILL INTRODUCTION PHASE (1000)

3.8.1 Purpose. To teach the Crewmaster Trainee (CMT) basic aircraft systems and introduce the core missions of the KC130J aircraft.

3.8.2 General. The CMUI will be capable of basic duties to include normal and emergency procedures and CRM after successful completion of a NATOPS evaluation. A CMT undergoing the Core Skill Introduction Phase of training may receive the 2000/3000 Phase code as long as they have completed the 1000 Phase prerequisite code. A CMT/CMUI receiving a 2000/3000 code may not fly that code as a qualified crewmember without an instructor until they are NATOPS qualified. Simulator events shall be conducted with either an appropriate stage instructor or an appropriately qualified Contract Instructor (CI).

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

Par No.	Stage Name
3.8.4	Systems (SYS) Familiarization (FAM)
3.8.5	Night Systems (NS)
3.8.6	Tactical Navigation (TN)
3.8.7	Cargo and Passenger Loading (CPL)
3.8.8	Air to Air Refueling (AAR)
3.8.9	Air Delivery (AD)

### 3.8.4 SYSTEMS (SYS)

Purpose. Train the CMUI to perform the basic NATOPS flight crew requirements, aircraft preflight, systems operation, system malfunctions, corrective actions, fault isolation, location and use of emergency equipment, ground and in-flight emergency procedures, and aircraft post flight procedures.

General. Upon completion of this phase of training the CMUI will possess a general understanding of squadron and aircraft operations to include emergency procedures.

Crew Requirements. System Instructor (SI), Contract Instructor (CI), Systems Instructor depending on the event.

Academic Training. Prior to FAM-1000, the CMUI will complete ground school courses consisting of basic aircraft systems descriptions, Crew Resource Management, Operational Risk Management, basic weight and balance, aircraft preflight and post flight procedures, normal and emergency procedures, and the donning and use of all emergency equipment. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and as directed by the KC-130J Model Manager Aviation Training Unit.

FAM-1000	3.5	*	B,SC	(N)	A	1 KC-130J
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Goal. Introduce the CMUI to in-flight procedures.

Requirement. The CMUI, under the direct supervision of a SI, MI, or CPLI will conduct an aircraft preflight and post flight inspection. The CMUI, acting as an observer, will follow and monitor as the instructor performs all normal and emergency procedures throughout the duration of a flight.

Performance Standard. Satisfactory completion per NFM, SOP, and associated instructions.

Prerequisites. ATU POI.

SYS-1001	3.5	*	B,SC	(N)	A	1 KC-130J
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Goal. Engine System Familiarization.

Requirement. The CMUI, under the direct supervision of an SI, will receive instruction on the system operation and limitations of engine systems IAW NATOPS. The CMUI will perform all normal and emergency procedures as they pertain to the engine system. Discuss and implement CRM fundamentals.

Performance Standard. CMUI will demonstrate basic understanding of the system to include Normal and Emergency Procedures, component nomenclature and location.

Prerequisites. FAM-1000, Approved Ground Maintenance Course.

CBTs. C1-05-01, C1-05-02, C1-05-03, C1-26-02, C1-27-03, C1-27-04, C1-36-01, C1-36-02, C1-36-03, C1-36-04

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SYS-1002      3.5      \*      B,SC      (N)      A      1 KC-130J

Goal. Propeller System Familiarization.

Requirement. The CMUI under the direct supervision of an SI will receive instruction on the system operation and limitations of propeller system IAW NATOPS. The CMUI will perform all normal and emergency procedures as they pertain to the propeller system. Discuss and implement CRM fundamentals.

Performance Standard. CMUI will demonstrate basic understanding of the system to include Normal and Emergency Procedures, component nomenclature and location.

Prerequisites. SYS-1001, CBT: C1-06-01, C1-28-15

SYS-1003      3.5      \*      B,SC      (N)      A      1 KC-130J

Goal. Fuel System Familiarization.

Requirement. The CMUI under the direct supervision of an SI will receive instruction on the system operation and limitations of fuel systems IAW NFM. The CMUI will perform all normal and emergency procedures as they pertain to the fuel system. Discuss and implement CRM fundamentals.

Performance Standard. CMUI will demonstrate basic understanding of the system to include normal and emergency procedures, component nomenclature and location.

Prerequisites. SYS-1002, CBT: C1-07-01, C1-07-02, C1-07-03, C1-07-04, C1-25-01, C1-25-02, C1-28-14, C1-36-05

SYS-1004      3.5      \*      B,SC      (N)      A      1 KC-130J

Goal. Electrical and Data Bus Systems Familiarization.

Requirement. The CMUI under the direct supervision of an SI will receive instruction on the system operation and limitations of electrical and data bus systems IAW NFM. The CMUI will perform all normal and emergency procedures as they pertain to the electrical and data bus systems. Discuss and implement CRM fundamentals.

Performance Standard. CMUI will demonstrate basic understanding of the systems to include normal and emergency procedures, component nomenclature and location.

Prerequisites. SYS-1003, CBT: C1-04-01, C1-04-02, C1-04-05, C1-04-07, C1-04-08, C1-24-01, C1-09-01, C1-28-03, C1-28-04, C1-28-05, C1-28-06, C1-28-07, C1-28-08, C1-28-10

SYS-1005      3.5      \*      B,SC      (N)      A      1 KC-130J

Goal. Hydraulic System Familiarization.

Requirement. The CMUI under the direct supervision of an SI will receive instruction on the system operation and limitations of hydraulic system IAW NFM. The CMUI will perform all normal and emergency procedures as they pertain to the hydraulic system. Discuss and implement CRM fundamentals.

Performance Standard. CMUI will demonstrate basic understanding of the system to include normal and emergency procedures, component nomenclature and location.

Prerequisites. SYS-1004, CBT: C1-10-01, C1-10-02, C1-10-03, C1-11-01, C1-11-02, C1-11-03, C1-12-01, C1-12-02, C1-28-11, C1-29-04, C1-38-02, C1-38-03, C1-38-04

SYS-1006      3.5    \*      B,SC            (N)            A            1 KC-130J

Goal. Bleed Air and Ice Protection Systems Familiarization.

Requirement. The CMUI under the supervision of an SI will receive instruction on the system operation and limitations of bleed air and ice protection systems IAW NFM. The CMUI will perform all normal and emergency procedures as they pertain to the bleed air and ice protection systems. Discuss and implement CRM fundamentals.

Performance Standard. CMUI will demonstrate basic understanding of the system to include normal and emergency procedures, component nomenclature and location.

Prerequisites. SYS-1005, CBT: C1-14-01, C1-16-01, C1-16-02, C1-22-01, C1-28-13.

SYS-1007      3.5    \*      B,SC            (N)            A            1 KC-130J

Goal. Air Conditioning and Pressurization Systems Familiarization.

Requirement. The CMUI under the direct supervision of an SI will receive instruction on the system operation and limitations of air conditioning and pressurization systems IAW NFM. The CMUI will perform all normal and emergency procedures as they pertain to the air conditioning and pressurization systems. Discuss and implement CRM fundamentals.

Performance Standard. CMUI will demonstrate basic understanding of the system to include normal and emergency procedures, component nomenclature and location.

Prerequisites. SYS-1006 CBT: C1-15-01, C1-15-02, C1-15-03, C1-17-02, C1-28-12, C1-28-02, C1-37-01,

SYS-1008      3.5    \*      B,SC            (N)            A            1 KC-130J

Goal. Communication and Navigation Systems Familiarization.

Requirement. The CMUI under the direct supervision of an SI will receive instruction on the system operation and limitations of communication and navigation systems IAW NFM. The CMUI will perform all normal and emergency procedures as they pertain to the

communication and navigation systems. Discuss and implement CRM fundamentals.

Performance Standard. CMUI will demonstrate basic understanding of the communication and navigation systems to include Normal and Emergency Procedures, component nomenclature and location.

Prerequisites. SYS-1007, CBT: C1-04-06, C1-18-01, C1-18-02, C1-18-03, C1-18-04, C1-18-05, C1-18-06, C1-18-07, C1-18-08, C1-18-09, C1-18-10, C1-19-01, C1-19-02, C1-19-03, C1-19-04, C1-19-05, C1-19-06, C1-19-07, C1-19-08, C1-19-09, C1-19-10, C1-41-06

SYS-1009    4.0    \*    B,SC    (N)    S    1 WST

Goal. Refine aircraft system malfunctions, crew coordination and emergencies procedures.

Requirement. Under the supervision of a SI or CI, the CMUI will participate in a simulator event to refine crew coordination of aircraft system malfunctions including emergency procedures, and refine In-flight trouble shooting.

Performance Standard. CMUI shall perform and discuss the responsibilities, duties, checklists, and crew coordination IAW the NFM.

Prerequisite. SYS-1001.

3.8.5    NIGHT SYSTEMS (NS(H))

Purpose. To introduce the use of Night Vision Devices (NVD).

General. Crewmasters conducting NS training shall be instructed by a Night Systems Instructor (NSI) for this stage.

Academic Training. MAWTS-1 NVD ASP courses and NITE lab.

NS(H)-1150    3.0    \*    B    NS    A    1 KC-130J

Goal. To introduce the CMUI to the use of NVD in the High Light Level (HLL) environment.

Requirement. The NSI will discuss NVD features, characteristics, and inspection/adjustment. The NSI will demonstrate exterior lighting with NVDs. Emphasize aircraft lighting in normal, NVIS, covert modes, and variations that occur with different terrain/water, cultural lighting and contrast under HLL.

Performance Standard. Satisfactory completion per NFM, NTTP, SOP, and OPNAVINST 3710.7\_.

Prerequisite. NITE LAB, MAWTS-1 NVD ASP ground instruction.

NS(H)-1151    3.0    \*    B    NS    A    1 KC-130J

Goal. To introduce the CMUI the use of NVD in the Low Light Level (LLL) environment.

Requirement. Conduct all operations included in NS(H)-1150 under LLL conditions.

Performance Standard. Satisfactory completion per NFM, NTTP, SOP, and OPNAVINST 3710.7.

Prerequisite. NS(H)-1150.

### 3.8.6 TACTICAL NAVIGATION (TN)

Purpose. Introduce the CMUI to the skills and duties of aft lookout doctrine in the tactical navigation environment.

General. The CMUI will be introduced to the hazards associated with the low level environment.

Crew Requirements. MI.

Academic Training. Utilize academic courseware as outlined in the appropriate chapter of the MAWTS-1 KC-130J Course Catalog.

TN-1200      2.0    \*      B                      D                      A                      KC-130J

Goal. Introduce the duties of an aft lookout observer during a day tactical navigation mission.

Requirement. The CMUI will perform the duties of an aft lookout observer during a day tactical navigation mission, perform cargo compartment preparation, attend crew briefing, discuss lookout doctrine, scan for threats and terrain clearance, conduct crew coordination, and execute FENCE checklists.

Performance Standard. Satisfactory completion per NFM, NTTP, SOP, and OPNAVINST 3710.7.

Prerequisite. FAM-1000 and CBT: C1-40-01, C1-40-02, C1-40-03, C1-40-04, C1-40-05, C1-40-06

TN-1201      2.0    \*      B,SC                      D                      A                      1 KC-130J

Goal. Introduce the duties of an ACS observer during a day tactical navigation mission.

Requirement. The CMUI will perform the duties of an ACS lookout observer during a day tactical navigation mission, attend crew briefing, discuss lookout doctrine, scan for threats and terrain clearance, conduct crew coordination, and execute FENCE checklists.

Performance Standard. Satisfactory completion per NFM, NTTP, SOP, and OPNAVINST 3710.7.

Prerequisite. FAM-1000 and CBT: C1-40-01, C1-40-02, C1-40-03, C1-40-04, C1-40-05, C1-40-06

3.8.7 ASSAULT TRANSPORT // CARGO AND PASSENGER LOADING (CPL)

Purpose. Refresh the CMUI in cargo and passenger loading. A load simulator is the preferred training device for this stage. A KC-130J aircraft may be used as a substitute. At the end of this phase of instruction the CMUI will be familiar with cargo/passenger loading techniques such as:

Preflight and configure an aircraft per mission requirements for flights involving passengers and/or cargo.

Determine available seating and/or cargo space for load planning purposes.

Utilize all KC-130 loading aids conforming to the limitations, installations, and usage of each per NAVAIR 01-75GAA-9.

Safely load and off-load cargo per NAVAIR 01-75GAA-9.

Compute weight and balance for a simulated flight transporting a passenger/cargo payload.

Hazardous Cargo considerations will be discussed throughout this stage with emphasis on compatibility and cargo jettison.

Post flight the cargo compartment.

General. The CMUI will demonstrate a general understanding of basic cargo and passenger loading.

Crew Requirements. CPLI

CPL-1510 4.0 \* B,SC (N) S/A 1 KC-130J

Goal. Perform aircraft configurations for a flight transporting passengers with baggage. Discuss tanker considerations, limitations, and tie down procedures. The CMUI will prepare a FORM F.

Requirement. Perform aircraft configurations for a flight transporting passengers with baggage. Explain tanker considerations, limitations, and loading and tie down procedures. Perform preflight and post flight and operation of the dual rail system. The CMUI will prepare a Form F. In-flight cargo jettison procedures will be thoroughly explained by the CMUI.

Performance Standard. Satisfactory completion per NFM, NAVAIR 01-75GAA-9, SOP, and OPNAVINST 3710.7.

External Syllabus Support. Base Operations and Passenger Movement.

Prerequisite. Loadmaster Skills Portion of the ATU POI.

CPL-1511 4.0 \* B,SC (N) S/A 1 KC-130J

Goal. Perform loading procedures for rolling stock cargo.

Requirement. Perform aircraft configuration for a flight transporting rolling stock, winching procedures, limitations, and loading and tie down procedures. The CMUI will prepare a Form F. In-flight cargo jettison procedures will be thoroughly explained by the CMUI.

Performance Standard. Satisfactory completion per NFM, NAVAIR 01-75GAA-9, SOP, and OPNAVINST 3710.7.

External Syllabus Support. MWSS Support.

Prerequisite. Loadmaster Skills Portion of the ATU POI.

CPL-1512    4.0    \*    B,SC    (N)    S/A    1 KC-130J

Goal. Perform palletized cargo loading procedures.

Requirement. Perform aircraft configurations for a flight transporting palletized cargo. Discuss tanker considerations and demonstrate preflight/post flight and operation of the dual rail system. A forklift should be used as the primary loading vehicle. The CMUI will prepare a Form F. In-flight cargo jettison procedures will be thoroughly explained by the CMUI.

Performance Standard. Satisfactory completion per NFM, NAVAIR 01-75GAA-9, SOP, and OPNAVINST 3710.7.

External Syllabus Support. MWSS Support.

Prerequisite. Loadmaster Skills Portion of the ATU POI.

### 3.8.8    AIR-TO-AIR REFUELING (AAR)

Purpose. Familiarize Crewmasters with basic air to air refueling procedures and terminology.

General. Train the CMUI to perform the duties of an in-flight refueling observer. At the end of this phase of training the CMUI will be able to:

Preflight the aircraft per specific mission requirements.

Compute and file an accurate weight and balance form for the aircraft.

Perform duties as an in-flight refueling observer during hose operation, informing the Aircraft Commander of the status of the refueling system and receiver aircraft.

Correctly perform all related emergency procedures.

Crew Requirements. MI.

Academic Training. The CMUI shall be familiar with the NFM, NTTP, ATP-56, associated MAWTS-1 courseware that relates to the Air to Air refueling environment, and CBT's.



AAR-1600      2.0      \*      B                      D                      A                      1 KC-130J

Goal. Introduce and review the duties of an in-flight refueling observer during a day Fixed-Wing or Tilt Rotor AAR mission.

Requirement. The CMUI will perform refueling observer duties during a day AAR mission. The observer should respond to all ICS and radio transmissions during the entire evolution. The CMUI will demonstrate a thorough understanding of all air to air refueling terminology and the use of EMCON procedures.

Performance Standard. Satisfactory completion of procedures per the NFM, NTP, and ATP-56.

Prerequisite. FAM-1000 and CBT: C1-41-01, C1-41-02, C1-41-03, C1-41-04, C1-41-05, C1-41-06

AAR-1601      2.0      \*      B                      D                      A                      1 KC-130J

Goal. Introduce and review the duties of an in-flight refueling observer during a day helicopter air to air refueling mission.

Requirement. The CMUI will perform refueling observer duties during a day air to air refueling mission. The observer should respond to all ICS and radio transmissions during the entire evolution. The CMUI will demonstrate a thorough understanding of all air to air refueling terminology and the use of EMCON procedures.

Performance Standard. Satisfactory completion of procedures per the NFM, NTP, and ATP-56.

Prerequisite. FAM-1000 and CBT: C1-45-01, C1-45-02

### 3.8.9      AIR DELIVERY (AD)

Purpose. Familiarize Crewmasters with the basic AD procedures and terminology.

General. Train the CMUI to conduct Air delivery checklist procedures while occupying the ACS.

Crew Requirements. MI

AD-1700      2.0      \*      B,SC                      D                      A                      1 KC-130J

Goal. Introduce ACS Air Delivery checklist procedures.

Requirement. The CMUI will occupy the ACS during an AD mission while conducting AD checklist procedures.

Performance Standard. Satisfactory completion of procedures per the NFM and the NTP.

Prerequisite. FAM-1000.

External Syllabus Support. AD platoon, MHE, and DZ control.

3.9 CORE SKILL PHASE

3.9.1 General. Upon completion of this phase of training, the Crewmaster will be qualified in Core Skills. These skills include Night Systems High(NS(H)), Long Range Navigation (LRN), Tactical Navigation (TN), and ground based Threat Reaction (TR).

3.9.2 Stages. The following stages are included in the Mission Skill Phase of training.

Par No.	Stage Name
3.9.3	Night Systems (NS)
3.9.4	Long Range Navigation (LRN)
3.9.5	Tactical Navigation (TN)
3.9.6	Threat Reaction (TR)
3.9.7	Air-to-Air Refueling (AAR)

3.9.3 NIGHT SYSTEMS (NS)

Purpose. To qualify and maintain proficiency utilizing night vision devices.

General. Upon completion of this event, a Night Systems Qualified (NSQ) letter shall be signed by the unit commanding officer and placed in the NATOPS jacket.

Crew Requirements. Initial event conducted with a NSI.

Academic Training. MAWTS-1 NVD ASP courses and NITE lab (includes Night Vision Systems, NS Human Factors and Night Environment ASPs).

NS(H)-2150 2.0 365 B,SC,R NS A 1 KC-130J

Goal. To qualify or maintain proficiency in NS operations.

Requirement. The CMUI will demonstrate NVD features, characteristics, and inspection/adjustment. Emphasize aircraft lighting in normal, NVIS, covert modes, and variations that occur with different terrain/water, cultural lighting and contrast under high or low light conditions.

Performance Standard. Satisfactory completion per Fixed Wing NVD Manual, NFM, NTTP, and OPNAVINST 3710.7\_\_.

Prerequisite. NS(H)-1151 and 10 hours of NVD time (5 shall be in low-light conditions).

3.9.4 LONG RANGE NAVIGATION (LRN)

Purpose. Train the Crewmaster in requirements for OCONUS operations.

General. This stage should have, at least, one mission that remains overnight outside the continental United States and requires clearing customs in a foreign country.

Academic Training. CMUI will receive instruction in the use of the Foreign Clearance Guide (FCG), Flight Information Handbook (FIH), and International Civil Aviation Organization (ICAO) procedures.

LRN-2160    6.0    \*    B, SC, R, M    (N)    A    1 KC-130J

Goal. Introduce or qualify the CMUI for LRN.

Requirement. The CMUI, under the direct supervision of a SI will perform all duties as a Crewmaster for LRN operations. The CMUI will demonstrate a thorough understanding of deployed GMS/PMA capabilities, ability to coordinate ground support and logistics as they pertain to maintenance considerations to include cold weather operations, overwater aircraft preflight, normal and alternate fuel management procedures, emergency equipment, and customs and agriculture planning.

Performance Standard. Satisfactory completion of the procedures per the NFM and pertinent ICAO publications.

Prerequisite. CBT: C1-37-02, C2-03-01, C2-03-02, C2-03-03, C1-46-01, C1-46-02, C1-46-03

3.9.5    TACTICAL NAVIGATION (TN)

Purpose. To qualify or maintain proficiency for the low level qualified Crewmaster in the tasks and requirements associated with low level flights.

Crew Requirements. MI, NSI, or WTI depending on event.

Academic Training. Review NFM, NTTP, CBT's and MAWTS-1 ASP Low Level Navigation Courseware.

TN-2201    2.0    365    B    D    A    1 KC-130J

Goal. Qualify or maintain proficiency in TN/LAT lookout duties.

Requirement. The CMUI, under the direct supervision of a MI will practice and review lookout duties during a day TN mission. The CMUI will practice and review cargo compartment preparation, crew briefing, lookout doctrine, threat scan, terrain clearance, crew coordination and FENCE checklists. The MI shall review and discuss LAT terminology and maneuvers during initial event training as they apply to crew coordination and cargo restraint.

Performance Standard. Satisfactory completion of the procedures per the NFM and NTTP.

Prerequisite. TN-1200-1201 CBT: C2-04-01, C2-04-02, C2-05-01, C2-05-02

TN-2250    2.0    365    B, R, M    NS    A    1 KC-130J

Goal. Qualify or maintain proficiency in TN/LAT lookout duties using NVDs.

Requirement. The CMUI, under the direct supervision of a MI will practice and review lookout duties during a TN mission using NVDs. The

CMUI will practice and review cargo compartment preparation, crew briefing, lookout doctrine, threat scan, crew coordination and FENCE checklists. The MI shall review and discuss LAT terminology and maneuvers during initial event training as they apply to crew coordination and cargo restraint.

Performance Standard. Satisfactory completion of the procedures per the NFM and NTTP standards.

Prerequisite. MAWTS-1 NVD ASP ground instruction, TN-2201

### 3.9.6 THREAT REACTION (TR)

Purpose. Introduce, qualify, or maintain proficiency in the use of defensive maneuvering coordinated with an Aircraft Survivability Equipment (ASE) suite against surface-to-air threat systems.

General. The aircraft must have a fully operational ASE suite and appropriate decoy flares must be loaded prior to flight. Threat emitters should be available.

Crew Requirements. MI, NSI or WTI depending on event.

Academic Training. The Crewmaster shall review pertinent chapters in the NTTP, receive the appropriate MAWTS-1 ASP's, and review the CBT's.

TR-2400      2.0      365      B,R,SC,M      (N)      A      1 KC-130J

Goal. Introduce, qualify, or maintain proficiency in the duties of a lookout observer in the surface to air threat environment.

Requirement. The CMUI, under the direct supervision of a MI or WTI will demonstrate the use of the ASE in combination with tactical maneuvering to defeat a ground-based threat. Preflight of ASE will be conducted.

Performance Standard. Satisfactory execution of procedures per the NFM and NTTP.

Prerequisite. CBT: C1-20-01, C1-40-45, C1-40-06, C2-06-01, C2-06-02, C2-06-03, C2-06-04, C2-06-05, C2-06-06, C2-07-01, 2150~NS, 2201

Ordinance. Flares.

External Syllabus Support. ASE range.

### 3.9.7 AIR-TO-AIR REFUELING OBSERVER (AAR)

Purpose. Continue instruction in AAR observer duties, or to maintain proficiency during day and night tactical refueling missions.

General. Emission control procedures may be used for any of the events in this stage.

Crew Requirement. MI, SI, or NSI depending on event.

Academic Training. Review NFM, ATP-56, NTTP, and MAWTS-1 AAR ASP.

AAR-2600 2.0 365 B D A 1 KC-130J

Goal. Qualify or maintain proficiency in AAR observer duties for Fixed Wing (FW) or Tilt Rotor (T) AAR.

Requirement. The CMUI, under the direct supervision of a MI shall perform AAR observer duties during FWAAR or TAAR refueling mission.

Performance Standard. Satisfactory completion of the procedures per the NFM, ATP-56, and NTP.

Prerequisite. AAR-1600, CBT: C4-03-01, C4-03-02

AAR-2601 2.0 365 B D A 1 KC-130J

Goal. Qualify or maintain proficiency in AAR observer duties for Helicopter AAR.

Requirement. The CMUI, under the direct supervision of a MI shall perform AAR observer duties during RW refueling mission.

Performance Standard. Satisfactory completion of the procedures per the NFM, ATP-56, and NTP.

Prerequisite. AAR-1601

AAR-2650 2.0 365 B,R,M NS A 1 KC-130J

Goal. Qualify or maintain proficiency in AAR observer duties using NVDs during AAR.

Requirement. The CMUI, under the direct supervision of an MI or NSI shall perform AAR observer duties using NVDs.

Performance Standard. Satisfactory completion of the procedures per the NFM, ATP-56, and NTP.

Prerequisite. NS-2150, AAR-2600, AAR-2601

### 3.10 MISSION SKILL PHASE

3.10.1 General. Upon completion of this phase of training, the Crewmaster will be qualified in Mission Skills. These skills include Assault Landing Zone (ALZ), Cargo and Passenger Loading (CPL), Air-to-Air Refueling (AAR), Aviation Delivered Ground Refueling (ADGR), and Air Delivery (AD). Simulator events shall be conducted with either an appropriate stage instructor or an appropriately qualified Contract Instructor (CI).

3.10.2 Stages. The following stages are included in the Mission Skill Phase of training.

Par. No.	Stage Name
3.10.3	Assault Landing Zone (ALZ)
3.10.4	Assault Transport (AT) // Cargo and Passenger Loading (CPL)
3.10.5	Air to Air Refueling Operator (ARO)
3.10.6	Aviation Delivered Ground Refueling (ADGR)
3.10.7	Air Delivery (AD)

3.10.3 ASSAULT LANDING ZONE (ALZ)

Purpose. Introduce day and night ALZ operations, culminating in aircraft preparation, combat offload, and the introduction of the use of NVDs in the ALZ environment.

Crew Requirement. MI or WTI depending on event.

Academic Training. Review ALZ operations in NTTP. Review MAWTS-1 ASP ALZ courseware.

ALZ-3500 1.0 \* B, SC (N) A 1 KC-130

Goal. Introduce, Qualify or maintain proficiency in ALZ Operations.

Requirement. The CMUI, under the direct supervision of a MI will demonstrate procedures for preparation of aircraft exterior for unimproved ALZ operations.

Performance Standard. Satisfactory completion of the procedures per the NFM, NTTP.

Prerequisite. (NS(H)-2150).

External Syllabus Support. USMC MMT, MWSS, EAF or USAF Combat Control Team with appropriate expeditionary airfield ALZ Marking/ Lighting and ARFF Support.

ALZ-3502 1.0 365 B, SC, R, M (N) A 1 KC-130

Goal. Introduce, Qualify or maintain proficiency in Combat Offload (COL).

Requirement. The CMUI, under the direct supervision of a CPLI will demonstrate the ability to prepare the cargo compartment for ALZ operations, conduct a COL, and direct the pilot in reverse taxi procedures.

Performance Standard. Satisfactory completion of the procedures per the NFM, NTTP.

Prerequisite. NS~2150, CPL-3512, NTPS-6013, NTPS-6015, CBT: C1-42-01, C1-42-02, C2-09-01, C2-09-02, C2-09-03

External Syllabus Support. Material Handling Equipment (MHE).

3.10.4 ASSAULT TRANSPORT (AT) // CARGO AND PASSENGER LOADING (CPL)

Purpose. Continue the Crewmaster's CPL instruction.

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General

Preflight and configure an aircraft per mission requirements for flights involving passengers and/or cargo.

Determine available seating and/or cargo space for load planning purposes.

Utilize all KC-130 loading aids conforming to the limitations, installations, and usage of each per NAVAIR 01-75GAA-9.

Safely load and off-load cargo per NAVAIR 01-75GAA-9.

Compute weight and balance for a simulated flight transporting a passenger/cargo payload.

Post-flight cargo compartment.

Crew Requirements. CPLI.

CPL-3510 3.0 365 B, SC, R, M (N) A 1 KC-130J

Goal. Qualify or maintain proficiency in loading passengers with bags.

Requirement. The Crewmaster will configure an aircraft for a flight transporting passengers and baggage.

Performance Standard. Per the NFM, NAVAIR 01-75GAA-9, and OPNAVINST 3710.7.

Prerequisite. CPL-1510, NTPS-6013, NTPS-6015, NS~2150, CBT: L4-02-01

CPL-3511 3.0 365 B, SC, R, M (N) A 1 KC-130J

Goal. Qualify or maintain proficiency in loading rolling stock.

Requirement. The Crewmaster will configure an aircraft for a flight transporting rolling stock.

Performance Standard. Per the NFM, NAVAIR 01-75GAA-9, and OPNAVINST 3710.7.

Prerequisite. CPL-1511, NTPS-6013, NTPS-6015, NS~2150.

CPL-3512 3.0 365 B, SC, R, M (N) A 1 KC-130J

Goal. Qualify or maintain proficiency in loading palletized cargo.

Requirement. The Crewmaster will configure and load an aircraft for a flight transporting palletized cargo. The Crewmaster shall utilize the cargo handling system to include preflight.

Performance Standard. Per the NFM, and NAVAIR 01-75GAA-9 and OPNAVINST 3710.7.

Prerequisite. CPL-1512, NTPS-6013, NTPS-6015, NS~2150





ARO-3612    4.0    \*    B, SC    (N)    S/A    1 KC-130J/WST

Goal. Refine ACS AAR procedures.

Requirement. The CMUI, under the direct supervision of a SI will be introduced to normal operations of the FW/TR/H AAR system from the ACS. Emphasize normal procedures, alternate procedures, system limitations and emergency procedures as they pertain to AAR. The CMUI will keep accurate records of the refueling evolution.

Performance Standard. Satisfactory completion of the procedures per the NFM, ATP-56, and NTTP.

Prerequisite. AAR-3611

ARO-3613    4.0    180    B, SC, R, M    (N)    A/S    1 KC-130J

Goal. Qualify and maintain proficiency in ACS AAR procedures.

Requirement. The CMUI, under the direct supervision of a SI will demonstrate the ability to perform normal operations of the Air refueling system during AAR operations. Emphasize normal procedures, alternate procedures, system operation, system limitations and emergency procedures as pertaining to AAR mission and the ability to operate, diagnose and isolate discrepancies during AAR missions. The CMUI will keep accurate records of the refueling evolution. The initial event shall be conducted in the simulator, subsequent events may be conducted in the aircraft or simulator.

Performance Standard. Satisfactory completion of the procedures per the NFM, ATP-56, and NTTP.

Prerequisite. AAR-3612

External Syllabus Support. Receiver aircraft.

3.10.6    AVIATION DELIVERED GROUND REFUELING (ADGR)

Purpose. Qualify or maintain proficiency in ADGR missions.

Academic Training. Review NTTP ADGR procedures and MAWTS-1 ADGR ASP.

ADGR-3661    2.0    365    B, R, M    (N)    A    1 KC-130J

Goal. Qualify or maintain currency in ADGR point man duties during day/night ADGR operations.

Requirement. The CMUI, under the direct supervision of a RS, will be assist the RS in the conduct of a day/night ADGR, minimum 2-point setup, including the actual transfer of fuel to aircraft or Tactical Ground Vehicles (TGV). The CMUI will man and perform all duties associated with a refueling point during an ADGR mission.

Performance Standard. Satisfactorily complete the procedures per NFM and NTPP.

Prerequisite. CBT: L1-31-02

External Syllabus Support. CFR; aircraft or TGV.

3.10.7 AIR DELIVERY (AD)

Purpose. Qualify or maintain proficiency in Container Delivery System (CDS).

Crew requirement. ADI

Academic Training. C-130 Loadmaster Mission Qualification Course (Air Delivery Training), Review the NFM, NAVAIR 01-75GAA-9, NTPP, MAWTS-1 AD ASP.

AD-3703      4.0    365    B,SC,R,M    (N)                    A                    1 KC-130J

Goal. Qualify or maintain proficiency in CDS AD.

Requirement. The CMUI, under the direct supervision of an ADI will conduct a CDS AD. The CMUI will perform preflight, rigging, briefing, loading, execution, and emergency procedures.

Performance Standard. Satisfactory completion of the procedures per the NFM, NAVAIR 01-75GAA-9, NTPP.

Prerequisite. C-130 Loadmaster Mission Qualification Course (Air Delivery Training), Applicable MAWTS-1 ASP's, CPL-3512, NTPS-6015, (NS(H)-2150), and CBT: L1-32-01, L1-32-03, L2-06-01, L2-06-02

External syllabus. AD platoon, MHE, and DZ control.

AD-3705      4.0    365    B,SC,R,M    (N)                    A                    1 KC-130J

Goal. Introduce and qualify, or maintain proficiency in static line PERS AD.

Requirement. The CMUI, under the direct supervision of an ADI will perform a static PERS AD. The CMUI will perform preflight, rigging, briefing, loading, execution, and emergency procedures.

Performance Standard. Satisfactory completion of the procedures per the NFM, NAVAIR 01-75GAA-9, NTPP.

Prerequisite. C-130 Loadmaster Mission Qualification Course (Air Delivery Training), Applicable MAWTS-1 ASP's, CPL-3510, NS-2150, CBT: L1-32-04, L1-32-05

External Syllabus Support. Parachutists, DZ control,

3.11 CORE PLUS SKILL PHASE

3.11.1 General

Upon completion of this phase of training, the Crewmaster will be qualified in Core Plus Skills. These skills include Air Delivery (AD), Battlefield Illumination (BI), and Close Air Support (CAS).

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

Par. No.	Stage Name
3.11.3	Aerial Delivery (AD)
3.11.4	Battlefield Illumination (BI)
3.11.5	Close Air Support (CAS)

3.11.3 AIR DELIVERY (AD)

Purpose. Introduce, qualify, or maintain proficiency in Crewmaster duties during an Air Delivery mission.

Academic Training. Review the NFM, NAVAIR 01-75GAA-9, NTP, MAWTS-1 Air Delivery course ware.

AD-4700      2.0    365    B, SC, R, M    (N)                    A            1 KC-130J

Goal. Introduce, qualify, or to maintain proficiency in personnel and cargo combination airdrop.

Requirement. The CMUI, under the direct supervision of an ADI will perform the duties as primary Crewmaster during a combination airdrop. The CMUI will perform preflight, rigging, briefing, loading, and execution and emergency procedures.

Performance Standard. Satisfactory completion of the procedures per the NFM, NAVAIR 01-75GAA-9, NTP.

Prerequisite. C-130 Loadmaster Mission Qualification Course (Air Delivery Training), (AD-3703), AD-3705, (AD-4703)

External support. Parachutists, AD Platoon, MHE, DZ control, and Flight Physiologist (as required).

AD-4701      2.0    365    B, SC, R, M    (N)                    A            1 KC-130J

Goal. Introduce, qualify, or maintain proficiency in high altitude airdrop operations.

Requirement. The CMUI, under the direct supervision of an ADI will conduct a high altitude airdrop. The CMUI will preflight, rig, brief, load, and execute a high altitude airdrop. The initial event shall utilize the oxygen system and pre-breathing.

Performance Standard. Satisfactory completion of the procedures per the NFM, NTP.

Prerequisite. C-130 Loadmaster Mission Qualification Course (Air Delivery Training), CPL-3510

External Support. MFF parachutists, DZ control, and Flight Physiologist (as required).

AD-4703      4.0    365    B,SC,R,M    (N)      A      1 KC-130J

Goal. Qualify or maintain proficiency in HE AD.

Requirement. The CMUI, under the direct supervision of an ADI will conduct a HE AD. The CMUI will perform preflight, rigging, briefing, loading, execution, and emergency procedures.

Performance Standard. Satisfactory completion of the procedures per the NFM, NAVAIR 01-75GAA-9, NTPP.

Prerequisite. C-130 Loadmaster Mission Qualification Course (Air Delivery Training), Applicable MAWTS-1 ASP's, CPL-3512, NTPS-6017, NS-2150, CBT: L2-07-01, L2-07-02

External Syllabus Support. AD platoon, MHE, DZ control.

3.11.4 BATTLEFIELD ILLUMINATION (BI)

Purpose. Introduce, qualify, or maintain proficiency in flare delivery procedures.

Academic Training. MAWTS-1 Battlefield Illumination ASP.

BI-4710      3.0    \*      B                    N                    A      1 KC-130J

Goal. Introduce, qualify, or maintain proficiency in battlefield illumination as a Team Member.

Requirement. The CMUI, under the direct supervision of a QASO, will demonstrate the loading and operation of the flare dispenser. The CMUI will adhere to crew coordination, safety precautions and emergency procedures.

Performance Standard. Per the NFM, NAVAIR 01-75GAA-9, and NTPP.

Ordnance. LUU-2 and/or LUU-19 Series APFs are required for initial event.

BI-4711      3.0    365    B,R                    N                    A      1 KC-130J

Goal. Introduce, qualify, or maintain proficiency in battlefield illumination as a Team Leader.

Requirement. The CMUI, under the direct supervision of a QASO, will demonstrate the loading and operation of the flare dispenser. The CMUI will adhere to crew coordination, safety precautions and emergency procedures.

Performance Standard. Per the NFM, NAVAIR 01-75GAA-9, and NTPP.

Prerequisite. BI-4710.

Ordnance. LUU-2 and/or LUU-19 Series APFs are required for initial event.

3.11.5 CLOSE AIR SUPPORT (CAS)

Purpose. The purpose of this stage of instruction is to familiarize Crewmasters with the Harvest HAWK system and its operation. The purpose of this stage is to develop Close Air Support (CAS) skills and to become proficient in the ability to employ the AGM-114P Hellfire and SOPGM while conducting applicable employment checklists.

General. A Harvest HAWK system installed on an aircraft shall be used for the ground familiarization.

Crew Requirements. Shall be instructed by a qualified Harvest HAWK Crewmaster who retains any instructor designation.

Academics. Crewmasters shall receive the following classes from a Qualified CAS Pilot, FCO or Ordnance personnel:

Harvest HAWK Introduction/ Equipment Overview  
Laser Safety  
CAS Fundamentals  
CAS Execution  
Harvest HAWK Crew Coordination  
SOPGM Handling and Troubleshooting  
Harvest HAWK Employment

CAS-4802    1.0    \*    B, SC    D    A    KC-130J HH

Goal. Introduce Harvest HAWK aircraft and operations (ground familiarization).

Requirement. Introduce the CMUI to interior and exterior preflights, the Harvest HAWK systems and operations, and all applicable checklists required for weapons employment.

Performance Standard. Correctly preflight and operate the applicable systems and checklist as a Harvest HAWK crew member.

CAS-4811    2.5    365    B,R,SC,M    (N)    A    1 KC-130J HH

Goal. Weapons employment.

Requirement. CMUI will conduct applicable checklists for 1 AGM-114P Hellfire and 1 SOPGM during employment.

Performance Standard. Operate system IAW applicable publications. In conjunction with the cockpit crew, establish proper communication and checklist response during employment.

Prerequisite. CAS-4802

Ordinance. 1 AGM-114P CATM; 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

3.12 INSTRUCTOR TRAINING STAGE

3.12.1 Instructor Training

Purpose. Introduce instructor roles and standardization, preparing the IUT for follow on qualification as a Mission Instructor (MI), Cargo Passenger Loading Instructor (CPLI), Airdrop Instructor (ADI), and Systems Instructor (SI).

General. Standardization will be emphasized throughout Instructor training.

Academic Training. CBTs, MAWTS-1 ASPs.

ACAD-5000 3.0 \* B CLSRM

Goal. Instructor training.

Requirement. The IUT will be instructed by an ANI utilizing the MAWTS-1 ASPs (Student/Instructor Roles and Student Briefing and Critique) on effective instructor roles, strategies, techniques, communication, and oral questioning appropriate to basic instructional methods for classroom and aircraft instruction.

Performance Standard. The IUT will exhibit an understanding of effective instructor roles, strategies, techniques, communication, and oral questioning appropriate to basic instructional methods.

Prerequisite. CBT: C5-01-01, C5-01-02, C5-01-03, C5-01-04, C1-01-05, C5-03-01, C5-03-02, C5-03-03.

IUT-5100    3.0    \*        B                    (N)                    A                    1 KC-130J

Goal. Continue Instructor training.

Requirement. The IUT will demonstrate the ability to correct common CMUI errors while applying effective instructional techniques.

Performance Standard. The IUT will demonstrate effective instructor roles, strategies, techniques, communication, and oral questioning appropriate to basic instructional methods.

Prerequisite. ACAD-5000

IUT-5101    3.0    \*        B,R                    (N)                    A                    1 KC-130J

Goal. Refine Instructor training.

Requirement. The IUT will demonstrate the ability to correct common CMUI errors while applying effective instructional techniques.

Performance Standard. The IUT will demonstrate effective instructor roles, strategies, techniques, communication, and oral questioning appropriate to basic instructional methods.

Prerequisite. IUT-5100

3.12.2 CARGO AND PASSENGER LOADING STAGE INSTRUCTOR TRAINING

Purpose. Qualify the IUT as a Cargo Passenger Loading Instructor (CPLI).

General. Standardization will be emphasized throughout Instructor training.

CPLI-5102    3.0    \*        B,R                    (N)                    E                    A                    1 KC-130J

Goal. Cargo Passenger Loading Instructor.

Requirement. The CM IUT will demonstrate the ability to instruct a CMUI on CPL and COL events. The IUT will demonstrate the ability to correct common CMUI errors. The CM IUT will apply standardized instructional techniques and be evaluated by a CM ANI or CMLM ANI.

Performance Standard. IAW NFM and applicable publications.

Prerequisite. IUT-5101, CPL-3510 through CPL-3513, and ALZ-3502.

3.12.3 Mission Stage Instructor Training

Purpose. Qualify the IUT as a Mission Instructor (MI).

General. Standardization will be emphasized throughout Instructor training.

MI-5103      3.0    \*    B,R                    (N)    E    A            1 KC-130J

Goal.    Mission Instructor.

Requirement.    The CM IUT will demonstrate the ability to instruct a CMUI on Core and Mission Skill events. The IUT will demonstrate the ability to correct common CMUI errors. The CM IUT will apply standardized instructional techniques and be evaluated by a CM ANI, CMCC ANI, or CMLM ANI.

Performance Standard.    IAW NFM and applicable publications.

Prerequisite.    NS-2150, TN-2201, TN-2250, LRN-2160, AAR-2600, AAR-2601, ALZ-3502 or ALZ-3500, IUT-5101.

#### 3.12.4 SYSTEMS STAGE INSTRUCTOR TRAINING

Purpose.    Qualify the IUT as a Systems Instructor (SI).

General.    Standardization will be emphasized throughout Instructor training.

SI-5104      3.0    \*    B,R                    (N)    E    A            1 KC-130J

Goal.    Systems Instructor.

Requirement.    The CM IUT will demonstrate the ability to instruct a CMUI on aircraft system inspection, theory of operation, in-flight trouble shooting, and maintenance repair. The IUT will demonstrate the ability to correct common CMUI errors. The CM IUT will apply standardized instructional techniques and be evaluated by a CM ANI or CMCC ANI.

Performance Standard.    NFM, applicable publications.

Prerequisite.    NS-2150, ARO-3613, IUT-5101, Plane Captain.

#### 3.12.5 AIR DELIVERY STAGE INSTRUCTOR TRAINING

Purpose.    Qualify the IUT as an Airdrop Instructor (ADI).

General.    Standardization will be emphasized throughout Instructor training.

Academic Training.    CBT's.

ADI-5700      3.0    \*    B,R                    (N)    E    A            1 KC-130J

Goal.    Air Delivery Instructor.

Requirement.    The CM IUT will demonstrate the ability to instruct a CMUI on AD's, and correct common CMUI errors. The CM IUT will apply standardized instructional techniques and be evaluated by a CM ANI or LM ANI.

Performance Standard.    IAW NFM and applicable publications.



Prerequisite. NS-2150, AD-3703 ,AD-3705, AD-4700, AD-4701,AD-4703,  
IUT-5101.

3.12.6 NATOPS INSTRUCTOR TRAINING

Purpose. Qualify as a NATOPS Instructor/Assistant NATOPS Instructor (ANI).

General. Standardization will be emphasized throughout Instructor training.

Academic Training. Use academic courseware as outlined in the NFM and OPNAV 3710.7.

NI-5140      2.0    \*      B                      (N)      E      A              1 KC-130J

Goal. Train the Assistant NATOPS Instructor.

Requirement. The CM will demonstrate the ability to evaluate a student CM in all facets of the duties of a CM on the KC-130J. The NATOPS Instructor or NATOPS Evaluator will conduct a comprehensive evaluation of Assistant NATOPS Instructors with emphasis on standardization and grading criteria.

Performance Standard. Per the NFM and OPNAVINST 3710.7.

Prerequisite. IUT-5101 and 1000 flight hours in the KC-130T/J aircraft.

NI-5141      2.0    \*      B,SC,R              (N)      E      A              1 KC-130J

Goal. Crewmaster ANI Evaluation flight.

Requirement. The ANI will evaluate a Crewmaster (CM), Crewmaster Crew Chief (CMCC), or a Crewmaster Loadmaster (CMLM) in NATOPS procedures under supervision of a NE/NI. At the completion of this sortie, the Crewmaster shall be designated by the Commanding Officer.

Performance Standard. IAW NFM and OPNAVINST 3710.7.

Prerequisite. NTPS-6013, NI-5140.

NI-5142      2.0    \*      B,SC,R              (N)      E      A              1 KC-130J

Goal. Crewmaster Crew Chief ANI Evaluation flight.

Requirement. The ANI will evaluate a Crewmaster (CM) or Crewmaster Crew Chief (CMCC) in NATOPS procedures under supervision of a NE/NI. At the completion of this sortie, the Crewmaster Crew Chief shall be designated by the Commanding Officer.

Performance Standard. IAW NFM and OPNAVINST 3710.7.

Prerequisite. NTPS-6014, NI-5140.

NI-5143      2.0   \*      B, SC, R            (N)   E      A            1 KC-130J

Goal. Crewmaster Loadmaster ANI Evaluation flight.

Requirement. The ANI will evaluate a Crewmaster (CM) or Crewmaster Loadmaster (CMLM) in NATOPS procedures under supervision of a NE/NI. At the completion of this sortie, the Crewmaster Loadmaster shall be designated by the Commanding Officer.

Performance Standard. IAW NFM and OPNAVINST 3710.7.

Prerequisite. NTPS-6015, NI-5140.

3.12.7 NIGHT SYSTEMS INSTRUCTOR TRAINING

Purpose. Qualify as a Night Systems Instructor (NSI).

General. Standardization will be emphasized throughout Instructor training. A MAWTS-1 Instructor shall evaluate the NS-5152 event and the workups may be conducted by squadron NSI's.

Academic Training. Use academic courseware as outlined in the NFM and the MAWTS-1 KC-130J Course Catalog.

NS-5150      3.0   \*      B                    NS   E      A            1 KC-130J

Goal. Begin Night Systems Instructor syllabus.

Requirement. IUT will demonstrate the ability to instruct a crewmember in NS Core Skill T&R events and correct common CMUI errors. The IUT will apply standardized instructional techniques.

Performance Standard. IAW MAWTS-1 KC-130J Course Catalog.

Prerequisite. NS-2150, IUT-5101, IAW MAWTS-1 KC-130J Course Catalog.

NS-5151      3.0   \*      B                    NS   E      A            1 KC-130J

Goal. Continue Night Systems Instructor syllabus.

Requirement. IUT will demonstrate the ability to instruct a crewmember in NS Mission Skill T&R events and demonstrate the ability to correct common CMUI errors. The IUT will apply standardized instructional techniques

Performance Standard. IAW MAWTS-1 KC-130J Course Catalog.

Prerequisite. NS-5150.

NS-5152      2.0   \*      B, R                NS   E      A            1 KC-130J

Goal. NSI Evaluation:

Requirement. Per MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the NSI designation shall be signed by the squadron Commanding Officer.

Performance Standard. Satisfactorily execute the procedures per NFM, NTPP, and MAWTS-1 ASP for NSI.

Prerequisite. NS-5151.

External Syllabus Support. MAWTS-1 Instructor.

### 3.12.8 WEAPONS AND TACTICS INSTRUCTOR (WTI)

Purpose. Certify the KC-130 Crewmaster Instructor as a WTI capable of safely conducting ground and airborne instruction in the KC-130 Crewmaster syllabus as outlined in MCO 3500.19 and the MAWTS-1 WTI Course Catalog.

General. The KC-130 WTI syllabus is developed by MAWTS-1 and is conducted in conjunction with the WTI Course. Upon graduation, the candidate will be certified by MAWTS-1 as a WTI Crewmaster. WTI designation can only be made by the squadron commanding officer.

Ground Training. As published in the MAWTS-1 WTI Course Catalog.

Flight Training. As published in the MAWTS-1 WTI Course Catalog.

### 3.13 CONTRACT INSTRUCTOR TRAINING

3.13.1 General. The purpose of this phase of training is to train qualified Contract Instructors for various levels of instruction to include Crewmaster ground familiarization training and operation of the simulator.

CI's should complete the POI in order to achieve each stage instructor qualification. CI's shall have been previously qualified and held the designation of at least one stage instructor qualification such as MI, SI, or CPLI. CI's should be previously qualified as NSI and CRMF in order to fully support the CM training syllabus.

CI's shall receive an annual ground evaluation in the performance of their instructor duties as they pertain to the individual's qualifications. CI's shall be designated in writing by the Model Manager.

### 3.14 REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS (RQD) PHASE

3.14.1 Purpose. Track NATOPS Qualifications.

3.14.2 General. "E"-coded sorties in the 6000 phase may be logged in conjunction with any sortie that completes its stage. CSP is not awarded for these 6000 sorties; however, CSP credit may be obtained by logging the appropriate training code(s) in the 2000-4000 phase syllabi. Once the flight to attain the qualification/designation is complete, a letter from the Squadron Commanding Officer awarding the qualification/designation shall be placed in the NATOPS Jacket before that qualification/designation can be used. Simulator events shall be conducted with either an appropriate stage instructor or an appropriately qualified Contract Instructor (CI).

3.14.3 Stages. The following stages are included in the Requirement, Qualifications, and Designation Phase of training.

Par. No.	Stage Name
3.14.4	Academic and NATOPS Evaluations (NTPS)
3.14.5	Functional Check Flight Qualification (FCF)
3.14.6	Refueling Supervisor Qualification (RS)
3.14.7	Battlefield Illumination Quality Assurance Safety Observer Qualification (QASO)

3.14.4 NATOPS Evaluation (NTPS)

Purpose. To conduct an initial or annual NATOPS exam.

NTPS-6010 3.0 365 B, SC, R, M E

Goal. NATOPS open book exam.

Requirement. Crewmaster will complete a NATOPS open book examination.

Performance Standard. Per NATOPS.

Prerequisite. Applicable 1000 Phase complete.

NTPS-6011 1.0 365 B, SC, R, M E

Goal. NATOPS closed book exam.

Requirement. Crewmaster will complete a NATOPS closed book examination.

Performance Standard. Per NATOPS.

Prerequisite. NTPS-6010.

NTPS-6012 3.0 365 B, SC, R, M E

Goal. NATOPS oral exam.

Requirement. Crewmaster will complete a NATOPS oral examination.

Performance Standard. Per NATOPS.

Prerequisites. NTPS-6011.

NTPS-6013 4.0 365 B, SC, R, M (N) E A 1 KC-130J

Goal. Crewmaster (CM) NATOPS evaluation.

Requirement. A CM ANI, or a CMCC ANI together with a CMLM ANI, will evaluate the CM per NATOPS.

Performance Standard. Per NFM.

Prerequisite. CNATT KC-130J Crew Chief Organizational Ground Maintenance Course or the ATU approved Ground Maintenance Conversion Course, and the USAF RFIQ Loadmaster Course or the ATU approved Loadmaster Course, NTPS-6010, NTPS-6011, NTPS-6012, Core Skill Introduction Phase complete.

NTPS-6014 4.0 365 B,SC,R,M (N) E A 1 KC-130J

Goal. Crewmaster Crew Chief (CMCC) NATOPS evaluation.

Requirement. A CMCC ANI or CM ANI will evaluate the CMCC per NATOPS.

Performance Standard. Per NFM.

Prerequisite. Crew Chief Ground Maintenance Course, FAM-1000 thru FAM-1009, FAM-1201, FAM-1600, FAM-1601, and FAM-1700.

NTPS-6015 4.0 365 B,SC,R,M (N) E A 1 KC-130J

Goal. Crewmaster Loadmaster (CMLM) NATOPS evaluation.

Requirement. A CMLM or CM ANI/NATOPS Instructor/Evaluator will evaluate the CMLM per NATOPS.

Performance Standard. Per NFM.

Prerequisite. RFIQ, CPL-1510, CPL-1511, CPL-1512, CPL-3513, FAM-1200, FAM-1600, and FAM-1601.

NTPS-6016 N/A 365 B,SC,R,M (N) E A 1KC-130J

Goal. Crewmaster (CM) Plane Captain Designation.

Requirement. Completion of ASM Plane Captain Syllabus as outlined in Local Command Procedure.

Performance Standard. Per COMNAVFORINST 4790.2 and Local Command Procedure.

Prerequisite. Per COMNAVFORINST 4790.2 and Local Command Procedure.

### 3.14.5 FUNCTIONAL CHECK FLIGHT (FCF)

Purpose. To continue instruction and maintain proficiency in FCF procedures. Perform all FCF procedures IAW NATOPS, COMNAVAIRFORINST 4790.2, and OPNAVINST 3710.7.

General. This phase of training shall be instructed by a SI.

Ground/Academic Training. The CMUI will be familiar with FCF procedures.

FCF-6105 2.0 365 B,SC,M D A 1 KC-130J

Goal. To introduce, qualify, and maintain currency in partial FCF Flight Profiles B, C, and D.

Requirement. To conduct a partial FCF coordinating and documenting all the requirements of the MIMS, NATOPS, SOP, and 4790.2.

Performance Standard. Per the NFM, OPNAVINST 3710.7, and COMNAVAIRFORINST 4790.2.

Prerequisite. Plane Captain.

FCF-6106 4.0 \* B,SC D S/A 1 WST/KC-130J

Goal. To introduce the CM to the Full Card FCF procedures.

Requirement. Introduce an "A" profile FCF.

Performance Standard. Per the NFM, OPNAVINST 3710.7, and COMNAVAIRFORINST 4790.2\_.

Prerequisite. ARO-3613, Plane Captain.

FCF-6107 4.0 365 B,SC,R,M D A 1 KC-130J

Goal. To qualify and maintain currency in Full Card FCF procedures.

Requirement. Conduct an "A" profile FCF.

Performance Standard. Per the NFM, OPNAVINST 3710.7, and COMNAVAIRFORINST 4790.2\_.

Prerequisite. FCF-6106.

### 3.14.6 AVIATION DELIVERED GROUND REFUELING (ADGR)

Purpose. Qualify or maintain proficiency as a Refueling Supervisor (RS) on ADGR missions.

General. Upon completion of these events the Crewmaster will be designated by the commanding officer as a Refueling Supervisor.

Academic Training. Review NTP ADGR procedures and MAWTS-1 ADGR ASP.

RS-6652 2.0 365 B,R,M (N) A 1 KC-130J

Goal. Introduce and qualify, or maintain proficiency for ADGR RS.

Requirement. The Crewmaster will plan, brief and execute a NS ADGR, minimum 2 point setup, including an actual transfer of fuel to aircraft or TGV for initial event. Subsequent events may be conducted as day ADGR, night ADGR or NS ADGR. This code will be instructed by a WTI.

Performance Standard. Satisfactory completion of the procedures per the NFM, NTP.

Prerequisite. NS-2150, ADGR-3661

External Syllabus Support: CFR, and aircraft or TGV.

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3.14.7 BATTLEFIELD ILLUMINATION QUALITY ASSURANCE SAFETY OBSERVER (BI QASO)

Purpose. Introduce, qualify, or maintain proficiency in flare delivery procedures as the Quality Assurance Safety Observer (QASO).

Academic Training. MAWTS-1 Battlefield Illumination ASP.

QASO-6710 3.0 365 B,R,M N A 1 KC-130J

Goal. Introduce, qualify, or maintain proficiency in Battlefield Illumination as a QASO.

Requirement. The CM will supervise the loading and operation of the flare dispenser. The CM will adhere to crew coordination and safety precautions while performing duties of a QASO, as defined in the NTTP. Initial instruction will be conducted by a WTI.

Performance Standard. Per the NFM, NAVAIR 01-75GAA-9, and NTTP

Prerequisites. BI-4711

Ordnance. LUU-2 and/or LUU-19 Series APFs are required for initial event.

External Support. Ordnance Qualified Personnel.

KC-130J CREWMASTER ATTAIN AND MAINTAIN TABLE

T&R EVENT INFORMATION				ATTAIN PROFICIENCY						MAINTAIN PROF		PREREQUISITES	CHAINING	INSTRUCTOR
T&R DESCRIPTION	SKILL	EVENT #	RE-FLY	BASIC POI		SC POI		REF POI		MAINTAIN POI				
				SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #			
<b>CORE SKILL INTRODUCTION (1000 PHASE)</b>														
FAM FLIGHT	FAM	1000	*	FAM	1000	FAM	1000	FAM		FAM				MI, SI, CPLI
ENGINE SYSTEMS FAM	SYS	1001	*		1001		1001					1000		SI
PROPELLER SYSTEMS FAM	SYS	1002	*		1002		1002					1001		SI
FUEL SYSTEMS FAM	SYS	1003	*		1003		1003					1002		SI
ELECTRIC AND DATA BUS	SYS	1004	*		1004		1004					1003		SI
HYDRAULIC SYSTEMS FAM	SYS	1005	*	SYS	1005	SYS	1005	SYS		SYS		1004		SI
BLEED AIR/ ICE PROT	SYS	1006	*		1006		1006					1005		SI
AIR COND/PRESS FAM	SYS	1007	*		1007		1007					1006		SI
COMM/NAV SYSTEM FAM	SYS	1008	*		1008		1008					1007		SI
SYS MALFUNCTION SIM	SYS	1009	*		1009		1009					1001		SI
HLL NS FAM	NS	1150	*	NS	1150	NS		NS		NS		1000		NSI
LLL NS FAM	NS	1151	*		1151							1000, 1150		NSI
TACNAV	TN	1200	*	TN	1200	TN		TN		TN		1000		MI
TACNAV	TN	1201	*		1201		1201					1000		MI
CARGO/PAX LOADING	CPL	1510	*		1510		1510					1000		CPLI
CARGO/PAX LOADING	CPL	1511	*	CPL	1511	CPL	1511	CPL		CPL		1000		CPLI
CARGO/PAX LOADING	CPL	1512	*		1512		1512					1000		CPLI
AIR-TO-AIR REFUELING	AAR	1600	*	AAR	1600	AAR		AAR		AAR		1000		MI
AIR-TO-AIR REFUELING	AAR	1601	*		1601							1000		MI
AIR DELIVERY	AD	1700	*	AD	1700	AD	1700	AD		AD		1000		MI
<b>CORE SKILL (2000 PHASE)</b>														
NIGHT SYSTEMS QUAL	NS	2150R	365	NS	2150R	NS	2150R	NS	2150R	NS	2150R	1151		NSI
LONG RANGE NAV	LRN	2160R	*	LRN	2160R	LRN	2160R	LRN	2160R	LRN	2160R			SI
TACNAV	TN	2201	365	TN	2201			TN		TN		1200, 1201		MI
TACNAV	TN	2250R	365		2250R			TN	2250R	TN	2250R	2201	2150, 2201	MI
THREAT REACTION	TR	2400R	365	TR	2400R	TR	2400R	TR	2400R	TR	2400R	2150~NS, 2201	2201	WTI
AIR-TO-AIR REF OBS	AAR	2600	365		2600									MI
AIR-TO-AIR REF OBS	AAR	2601	365	AAR	2601	AAR		AAR						MI
AIR-TO-AIR REF OBS	AAR	2650R	365		2650R				2650R			2150, 2600, 2601	2600, 2601, 2150	MI
<b>MISSION SKILL (3000 PHASE)</b>														
ASSAULT LANDING ZONE	ALZ	3500	*	ALZ	3500							2150~NS		MI
ASSAULT LANDING ZONE	ALZ	3502R	365		3502R	ALZ	3502	ALZ	3502R	ALZ	3502R	2150~NS, 3512	3512	CPLI
CARGO/PAX LOADING	AT	3510R	365		3510R		3510R		3510R		3510R	1510, 6013, 6015, 2150~NS		CPLI
CARGO/PAX LOADING	AT	3511R	365	AT	3511R	AT	3511R	AT	3511R	AT	3511R	1511, 6013, 6015, 2150~NS		CPLI
CARGO/PAX LOADING	AT	3512R	365		3512R		3512R		3512R		3512R	1512, 6013, 6015, 2150~NS		CPLI
CARGO/PAX LOADING	AT	3513R	365		3513R		3513R		3513R		3513R	1512, 6013, 6015, 2150~NS		CPLI
AIR REFUELING SYS OP	AAR	3610	*		3610		3610					2600, 2610, 6013 or 6014		SI
AIR REFUELING SYS OP	AAR	3611	*	AAR	3611	AAR	3611	AAR		AAR		3610		SI
AIR REFUELING SYS OP	AAR	3612	*		3612		3612					3611		SI
AIR REFUELING SYS OP	AAR	3613R	180		3613R		3613R		3613R		3613R	3612	2600, 2601	SI
ADGR	ADGR	3661R	365	ADGR	3661	ADGR		ADGR	3661R	ADGR	3661R			RS, WTI



KC-130J CREWMASTER ATTAIN AND MAINTAIN TABLE														
T&R EVENT INFORMATION				ATTAIN PROFICIENCY						MAINTAIN PROF		PREREQUISITES	CHAINING	INSTRUCTOR
T&R DESCRIPTION	SKILL	EVENT #	RE-FLY	BASIC POI		SC POI		REF POI		MAINTAIN POI				
				SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #	SKILL	EVENT #			
AIR DELIVERY	AD	3703R	365									2150~NS,3512	3512	ADI
AIR DELIVERY	AD	3705R	365	AD	3703R	AD	3705R	AD	3703R	AD	3705R	2150~NS,3510	3510	ADI
<b>CORE PLUS SKILL (4000 PHASE)</b>														
AIR DELIVERY	AD	4700R	365		4700R		4700R		4700R		4700R	(3703),3705,(4703)	3703,3705	ADI
AIR DELIVERY	AD	4701R	365	AD	4701R	AD	4701R	AD	4701R	AD	4701R	3510	3510	ADI
AIR DELIVERY	AD	4703R	365		4703R		4703R		4703R		4703R	3512	3512	ADI
BI	BI	4710	*		4710									QASO
BI	BI	4711R	365	BI	4711R	BI		BI	4711R	BI	4711R	4710		QASO
HARVEST HAWK FAM	CAS	4802	*		4802									MI
HH BAS	CAS	4811R	365	HH	4811R	HH	4811R	HH	4811R	HH	4811R			MI
<b>INSTRUCTOR TRAINING (5000 PHASE)</b>														
INST UNDER TRAINING	IUT	5000	*		5000									ANI
INST UNDER TRAINING	IUT	5100	*	IUT	5100	IUT		IUT		IUT		5000		ANI
INST UNDER TRAINING	IUT	5101R	*		5101R				5101R			5100		ANI
CARGO/PAX LOADING INST	CPLI	5102R	*	CPLI	5102R	CPLI		CPLI	5102R	CPLI		5101, 3510-3513, 3502		ANI
MISSION STAGE INST	MI	5103R	*	MI	5103R	MI		MI	5103R	MI		2150,2160,2201,2250,2600,2601,3502 or 3500,5101		ANI
SYSTEMS INST	SI	5104R	*	SI	5104R	SI		SI	5104R	SI		2150, 3613, 5101		ANI
AIR DELIVERY INST	ADI	5105R	*	ADI	5104R	ADI		ADI	5104R	ADI		3703,3705,4700,4701,4703,5101,2150~NS		ANI
NATOPS INST	NI	5140	*		5140							5101		ANI
NATOPS INST CM	NI	5141R	*		5141R		5141R		5141R			5140,6013		NI,NE
NATOPS INST CMCC	NI	5142R	*	NI	5142R	NI	5142R	NI	5142R	NI		5140,6014		NI,NE
NATOPS INST CMLM	NI	5143R	*		5143R		5143R		5143R			5140,6015		NI,NE
NIGHT SYSTEMS INST	NSI	5150	*		5150							2150~NS,5101		NSI
NIGHT SYSTEMS INST	NSI	5151	*	NSI	5151	NSI		NSI		NSI		5150		NSI
NIGHT SYSTEMS INST	NSI	5152R	*		5152R				5152R			5151		MAWTS-1 IP
<b>REQUIREMENTS, QUALIFICATIONS AND DESIGNATIONS (6000 PHASE)</b>														
NATOPS OPEN BOOK	NTPS	6010R	365		6010R		6010R		6010R		6010R			ANI
NATOPS CLOSED BOOK	NTPS	6011R	365		6011R		6011R		6011R		6011R	6010		ANI
NATOPS ORAL EXAM	NTPS	6012R	365		6012R		6012R		6012R		6012R	6011		ANI
NATOPS CM	NTPS	6013R	365	NTPS	6013R	NTPS	6013R	NTPS	6013R	NTPS	6013R	6012,1000-1700,6010,6011		ANI
NATOPS CMCC	NTPS	6014R	365		6014R		6014R		6014R		6014R	1007-1009,1201,1600,1601,1700		ANI
NATOPS CMLM	NTPS	6015R	365		6015R		6015R		6015R		6015R	1510-1512,1200,1600,1601,3513		ANI
NATOPS PC	NTPS	6016R	365		6016R		6016R		6016R		6016R	COMNAVFORINST 4790.2		ANI
FCF	FCF	6105	365		6105		6105							SI
FCF	FCF	6106	*	FCF	6106	FCF	6106	FCF		FCF		3613		SI
FCF	FCF	6107R	365		6107R		6107R		6107R		6107R	6106	6105	SI
ADGR RS	RS	6652R	365	RS	6652R	RS		RS	6652R	RS	6652R	2150~NS,3661		WTI
BI QASO	QASO	6710R	365	QASO	6710R	QASO		QASO	6710R	QASO	6710R	4711	4711	WTI

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3.16 T&R SYLLABUS MATRICES

KC-130J CREWMASTER SYLLABUS MATRIX																
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	ACAD EVENTS		SIM EVENTS		FLIGHT EVENTS		EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME	
FAM	1000	INTRO IN-FLT PROC	B, SC		A	1		(N)	*						3.5	FAM-1109
SYS	1001	ENGINES	B, SC		A	1		(N)	*						3.5	FAM-1001
SYS	1002	PROPS	B, SC		A	1		(N)	*						3.5	FAM-1002
SYS	1003	FUEL	B, SC		A	1		(N)	*						3.5	FAM-1003
SYS	1004	ELEC/DATA BUS	B, SC		A	1		(N)	*						3.5	FAM-1005
SYS	1005	HYDRAULICS	B, SC		A	1		(N)	*						3.5	FAM-1006
SYS	1006	BLEED AIR/ICE PRO	B, SC		A	1		(N)	*						3.5	FAM-1007
SYS	1007	AC/PRESS	B, SC		A	1		(N)	*						3.5	FAM-1008
SYS	1008	COMM/NAV	B, SC		A	1		(N)	*						3.5	FAM-1009
SIM	1009	MALFUNCTIONS/EPs	B, SC		S	1		(N)	*			4.0				-
TOTAL FAM/SYS/SIM STAGE												1	4.0	9	31.5	
NIGHT SYSTEMS NS(H)																
NS(H)	1150	INTRO HLL	B		A	1		NS	*						3.0	NS(H)-1150
NS(H)	1151	INTRO LLL	B		A	1		NS	*						3.0	NS(H)-1151
TOTAL NS(H) STAGE														2	6.0	
TACTICAL NAVIGATION (TN)																
TN	1200	AFT OBSERVER	B		A	1		D	*						2.0	TN-1200
TN	1201	ACS OBSERVER	B, SC		A	1		D	*						2.0	TN-2202
TOTAL TN STAGE														2	4.0	
CARGO AND PASSENGER LOADING (CPL)																
CPL	1510	PAX AND BAGS	B, SC		S/A	1		(N)	*						4.0	CPL-1515
CPL	1511	ROLLING STOCK	B, SC		S/A	1		(N)	*						4.0	CPL-1512
CPL	1512	PALLETIZED	B, SC		S/A	1		(N)	*						4.0	CPL-1514
TOTAL CPL STAGE														3	12.0	
AIR-TO-AIR REFUELING OBSERVER (AAR)																
AAR	1600	FW/TR AAR OBSERVER	B		A	1		D	*						2.0	AAR-1600
AAR	1601	H AAR OBSERVER	B		A	1		D	*						2.0	AAR-1601
TOTAL AAR STAGE														2	4.0	
AERIAL DELIVERY (AD)																
AD	1700	CHECKLIST PROC	B, SC		A	1		D	*						2.0	AD-3702
TOTAL AD STAGE														1	2.0	
TOTAL CORE SKILL INTRODUCTION (1000)												1	4.0	19	59.5	

KC-130J CREWMASTER SYLLABUS MATRIX															
STAGE	EVENT		POI	E	DEVICE		COND	REFLY	ACAD EVENTS		SIM EVENTS		FLIGHT EVENTS		EVENT CONV
	CODE	TITLE			TYPE	#			OPTION	#	TIME	#	TIME	#	
CORE SKILL TRAINING (2000 Phase)															
NIGHT SYSTEMS (NS(H))															
NS	2150	NS QUAL	B, SC, R, M		A	1		NS	365					2.0	NS(H)-2150
TOTAL NS(H) STAGE													1	2.0	
LONG RANGE NAVIGATION (LRN)															
LRN	2160	LONG RANGE NAV	B, SC, R, M		A	1		(N)	*					6.0	LRN-2160
TOTAL LRN STAGE													1	6.0	
TACTICAL NAVIGATION (TN)															
TN	2201	LOOKOUT DUTIES	B		A	1		D	365					2.0	TN-2201
TN	2250	LOOKOUT DUTIES	B, R, M		A	1		NS	365					2.0	TN-2250
TOTAL TN STAGE													2	4.0	
THREAT REACTION (TR)															
TR	2400	THREAT OBSERVER	B, SC, R, M		A	1		(N)	365					2.0	TR-2400
TOTAL TR STAGE													1	2.0	
AIR-TO-AIR REFUELING															
AAR	2600	FW/TR AFT OBSERVER	B		A	1		D	365					2.0	AAR-3600
AAR	2601	HAAR AFT OBSERVER	B		A	1		D	365					2.0	AAR-3601
AAR	2650	AFT OBSERVER W/ NVD	B, R, M		A	1		NS	365					2.0	AAR-3650
TOTAL AAR STAGE													3	6.0	
TOTAL CORE SKILL PHASE													8	20.0	
MISSION SKILL TRAINING (3000 Phase)															
ASSAULT LANDING ZONE (ALZ)															
ALZ	3500	ALZ OPERATIONS	B, SC		A	1		(N)	*					1.0	ALZ-3503
ALZ	3502	COMBAT OFFLOAD	B, SC, R, M		A	1		(N)	365					1.0	ALZ-3502
TOTAL ALZ STAGE													2	2.0	
ASSAULT TRANSPORT (AT) // CARGO AND PASSENGER LOADING (CPL)															
AT	3510	PAX AND BAGS	B, SC, R, M		A	1		(N)	365					3.0	CPL-3510
AT	3511	ROLLING STOCK	B, SC, R, M		A	1		(N)	365					3.0	CPL-3511
AT	3512	PALLETIZED	B, SC, R, M		A	1		(N)	365					3.0	CPL-3512
AT	3513	HAZMAT	B, SC, R, M		A	1		(N)	365					3.0	CPL-3515
TOTAL CPL STAGE													4	12.0	
AIR-TO-AIR REFUELING (AAR)															
AAR	3610	ARO SYSTEM INTRO	B, SC						*		4.0				AAR-3612
AAR	3611	INTRO ARO PROC	B, SC		S	1		(N)	*			4.0			AAR-3610
AAR	3612	REFINE ARO PROC	B, SC		S	1		(N)	*			4.0			AAR-3611
AAR	3613	QUAL ARO PROC	B, SC, R, M		A/S	1		(N)	180					4.0	AAR-3612
TOTAL ARO STAGE										1	4.0	2	8.0	4	4.0
AVIATION DELIVERED GROUND REFUELING (ADGR)															
ADGR	3661	POINTMAN DUTIES	B, R, M		A	1		(N)	365					2.0	RGR-3661, 3651
TOTAL ADGR STAGE													1	2.0	

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KC-130J CREWMASTER SYLLABUS MATRIX																
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	ACAD EVENTS		SIM EVENTS		FLIGHT EVENTS		EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME	
AIR DELIVERY (AD)																
AD	3703	CDS	B, SC, R, M		A	1		(N)	365					4.0	AD-3702	
AD	3705	STATIC LINE PERS	B, SC, R, M		A	1		(N)	365					4.0	AD-3704	
TOTAL AD STAGE													2	8.0		
TOTAL MISSION SKILL PHASE										1	4.0	2	8.0	13	28.0	
CORE SKILL PLUS TRAINING (4000 Phase)																
AIR DELIVERY (AD)																
AD	4700	COMBO AD	B, SC, R, M		A	1		(N)	365					2.0	AD-4700	
AD	4701	MILITARY FREE FALL	B, SC, R, M		A	1		(N)	365					2.0	AD-4701	
AD	4703	HEAVY EQUIPMENT	B, SC, R, M		A	1		(N)	365					4.0	AD-3703	
TOTAL AD STAGE													3	8.0		
BATTLEFIELD ILLUMINATION (BI)																
BI	4710	TEAM MEMBER	B		A	1		N	*					3.0	BI-4710	
BI	4711	TEAM LEADER	B, R, M		A	1		N	365					3.0	BI-4710	
TOTAL BI STAGE													2	6.0		
HARVEST HAWK (HH)																
CAS	4802	GROUND FAM	B, SC		A	1		D	*		1.0				-	
CAS	4811	DAY EMPLOYMENT	B, SC, R, M		A	1		D	365					2.5	-	
TOTAL CORE PLUS										1	1.0			1	2.5	
TOTAL CORE PLUS										1	1.0			9	16.5	
INSTRUCTOR TRAINING (5000 Phase)																
INSTRUCTOR UNDER TRAINING (IUT)																
IUT	5000	INSTRUCTOR UNDER TRAINING	B	E					*		3.0					
IUT	5100	INSTRUCTOR UNDER TRAINING	B	E	A	1		D	*					3.0		
IUT	5101R	INSTRUCTOR UNDER TRAINING	B, R	E	A	1		D	*					3.0		
TOTAL IUT STAGE										1	3.0			2	6.0	
CARGO AND PASSENGER LOADING INSTRUCTOR (CPLI)																
CPLI	5102	CARGO/PAX/LOAD INST	B, R	E	A	1		(N)	*					3.0	CPLI-5102	
TOTAL CPLI STAGE														1	3.0	
MISSION INSTRUCTOR (MI)																
MI	5103	MISSION INST	B, R	E	A	1		(N)	*					3.0	FAM-5103	
TOTAL MI STAGE														1	3.0	
SYSTEM INSTRUCTOR (SI)																
SI	5104	SYSTEMS INST	B, R	E	A	1		(N)	*					3.0	PCI-5104	
TOTAL SI STAGE														1	3.0	
AIR DELIVERY INSTRUCTOR (ADI)																
ADI	5700	AIR DELIVERY INST	B, R	E	A	1		(N)	*					3.0	ADI-5700	
TOTAL ADI STAGE														1	3.0	

KC-130J CREWMASTER SYLLABUS MATRIX																
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	ACAD EVENTS		SIM EVENTS		FLIGHT EVENTS		EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME	
NATOPS INSTRUCTOR (NI)																
NI	5140	INITIAL NI TRNG	B	E	A	1		(N)	*					2.0	NI-5140	
NI	5141	CM ANI	B, SC, R	E	A	1		(N)	*					2.0	NI-5141	
NI	5142	CMCC ANI	B, SC, R	E	A	1		(N)	*					2.0	-	
NI	5143	CMLM ANI	B, SC, R	E	A	1		(N)	*					2.0	-	
TOTAL NI STAGE													3	6.0		
NIGHT SYSTEMS INSTRUCTOR TRAINING (NSI)																
NS	5150	BEGIN NSI SYLLABUS	B		A	1		NS	*					3.0	NSI-5150	
NS	5151	CONT NSI SYLLABUS	B		A	1		NS	*					3.0	NSI-5151	
NS	5152	NSI EVAL	B, R	E	A	1		NS	*					2.0	NSI-5152	
TOTAL NSI STAGE													3	8.0		
TOTAL INSTRUCTOR TRAINING PHASE (5000 SERIES)													9	26.0		
REQUIREMENT, QUALIFICATION, AND DESIGNATIONS (6000 SERIES)																
NATOPS EVALUATION (NTPS)																
NTPS	6010	OPEN BOOK	B, SC, R, M	E					365		3.0				NTPS-6012	
NTPS	6011	CLOSED BOOK	B, SC, R, M	E					365		1.0				NTSP-6013	
NTPS	6012	ORAL EXAM	B, SC, R, M	E					365		3.0				NTPS-6014	
NTPS	6013	CM EVAL	B, SC, R, M	E	A	1		(N)	365					4.0	NTPS-6111, 6118	
NTPS	6014	CMCC EVAL	B, SC, R, M	E	A	1		(N)	365					4.0	-	
NTPS	6015	CMLM EVAL	B, SC, R, M	E	A	1		(N)	365					4.0	-	
NTPS	6016	PC	B, SC, R, M	E	A	1		(N)	365							
TOTAL NTPS STAGE										3	7.0			3	12.0	
FUNCTIONAL CHECK FLIGHT (FCF)																
FCF	6105	PARTIAL	B, SC		A	1		D	365					2.0	FCF-6105	
FCF	6106	INTRO FULL CARD	B, SC		S	1	A	D	*					4.0	FCF-6106	
FCF	6107	QUAL FULL CARD	B, SC, R, M		A	1		D	365					4.0	FCF-6107	
TOTAL FCF STAGE														3	10.0	
AVIATION DELIVERED GROUND REFUELING (ADGR)																
RS	6652	ADGR RS	B, R, M		A	1		(N)	365					2.0	RS-6662, 6652	
TOTAL ADGR STAGE														1	2.0	
BATTLEFIELD ILLUMINATION (BI)																
QASO	6710	QASO	B, R, M		A	1		N	365					3.0	QASO-6710	
TOTAL BI STAGE														1	3.0	
TOTAL RQD PHASE (6000 SERIES)										3	7.0			8	27.0	

3.17 EQUIVALENCY MATRIX

CREWMASTER EQUIVALENCY MATRIX				
KC-130J CREW CHIEF T&R EVENT		KC-130J CREWMASTER T&R EVENT		KC-130J LOADMASTER T&R EVENT
<b>1000 PHASE</b>				
FAM-1100	↔	FAM-1000	↔	-
FAM-1101	↔	SYS-1001	↔	-
FAM-1102	↔	SYS-1002	↔	-
FAM-1103	↔	SYS-1003	↔	-
FAM-1105	↔	SYS-1004	↔	-
FAM-1106	↔	SYS-1005	↔	-
FAM-1107	↔	SYS-1006	↔	-
FAM-1108	↔	SYS-1007	↔	-
FAM-1109	↔	SYS-1008	↔	-
-	↔	SIM-1009	↔	-
NS (H) -1150	↔	NS (H) -1150	↔	NS (H) 1150
NS (H) -1151	↔	NS (H) -1151	↔	NS (H) 1151
TN-1200	↔	TN-1200	↔	TN-1200
-	↔	TN-1201	↔	-
-	↔	CPL-1510	↔	CPL-1510, CPL-1513
-	↔	CPL-1511	↔	CPL-1512
-	↔	CPL-1512	↔	CPL-1514
AAR-1600, AAR-1601	↔	AR-1600	↔	AAR-1600, AAR-1601
AD-3702	↔	AD-1700	↔	-
<b>2000 PHASE</b>				
NS (H) -2150	↔	NS (H) -2150	↔	NS (H) -2150
LRN-2162	↔	LRN-2160	↔	-
TN-2201	↔	TN-2201	↔	TN-2201
TN-2250	↔	TN-2250	↔	TN-2250
TR-2400	↔	TR-2400	↔	TR-2400
AAR-3600	↔	AAR-2600	↔	AAR-3600
AAR-3601	↔	AAR-2601	↔	AAR-3601
AAR-3650	↔	AAR-2650	↔	AAR-3650
<b>3000 PHASE</b>				
ALZ-3503	↔	ALZ-3500	↔	-
-	↔	ALZ-3502	↔	ALZ-3503
-	↔	AT-3510	↔	CPL-3510
-	↔	AT-3511	↔	CPL-3511
-	↔	AT-3512	↔	CPL-3512
-	↔	AT-3513	↔	CPL-3513
AAR-3612	↔	ACAD-3610	↔	-
AAR-3610	↔	AAR-3611	↔	-
AAR-3611	↔	AAR-3612	↔	-
AAR-3612	↔	AAR-3613	↔	-
ADGR-3661, ADGR-3651	↔	ADGR-3661	↔	ADGR-3663, ADGR-3651
-	↔	AD-3703	↔	AD-3702
-	↔	AD-3705	↔	AD-3704
<b>4000 PHASE</b>				
-	↔	AD-4700	↔	AD-4700
-	↔	AD-4701	↔	AD-4701
-	↔	AD-4703	↔	AD-4703
BI-4710	↔	BI-4710	↔	BI-4710
BI-4710	↔	BI-4711	↔	BI-4710

CREWMASTER EQUIVALENCY MATRIX				
KC-130J CREW CHIEF T&R EVENT		KC-130J CREWMASTER T&R EVENT		KC-130J LOADMASTER T&R EVENT
4000 PHASE (CONT.)				
-	↔	CAS-4802	↔	-
-	↔	CAS-4811	↔	-
-	↔		↔	-
5000 PHASE				
CCI-5102	↔	ACAD-5000	↔	LMI-5102
CCI-5100	↔	IUT-5100	↔	LMI-5100
CCI-5101	↔	IUT-5101	↔	LMI-5101
-	↔	CPLI-5102	↔	LMI-5102*
CCI-5102*	↔	MI-5103	↔	LMI-5102*
CCI-5102*	↔	SI-5104	↔	-
-	↔	ADI-5700	↔	LMI-5102*
NI-5140	↔	NI-5140	↔	NI-5140
NI-5141	↔	NI-5141	↔	AD-4700
-	↔	NI-5142	↔	
		NI-5143	↔	NI-5141
NS-5150	↔	NS-5150	↔	NS-5150
NS-5151	↔	NS-5151	↔	NS-5151
NS-5152	↔	NS-5152	↔	NS-5152
6000 PHASE				
NTPS-6010	↔	NTPS-6010	↔	NTPS-6010
NTPS-6011	↔	NTPS-6011	↔	NTPS-6011
NTPS-6012	↔	NTPS-6012	↔	NTPS-6012
-	↔	NTPS-6013	↔	-
NTPS-6111*, NTPS-6118*	↔	NTPS-6014	↔	-
-	↔	NTPS-6015	↔	NTPS-6118*
FCF-6105	↔	FCF-6105	↔	-
FCF-6106	↔	FCF-6106	↔	-
FCF-6107	↔	FCF-6107	↔	-
-	↔	RS-6652	↔	RS-6662, RS-6652
-	↔	QASO-6710	↔	QASO-6710

\* These codes are equivalent as long as all other requirements, laid out in the appropriate POI are met.

3.18 SYLLABUS EVALUATION FORMS. These forms are maintained on the MAWTS-1 website and can be downloaded from that location.

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Performance Standard

CMUI is able to demonstrate an understanding of basic knowledge relating to each Department, Area, and Work Center at the Squadron.

Prerequisite. ACAD-0101

ACAD-0102 2.0 \* B,SC CLSRM

Exterior Preflight Inspection

Goal. The CMUI demonstrates understanding of the listed modules by successfully by successful completion of a computer-based test on the following modules.

Requirement. Modules.

Exterior Preflight Inspections C1-31-05  
Turn Around Inspections C1-31-02

Prerequisite. LAB-0101

ACAD-0103 6.0 \* B,SC CLSRM

Aircraft Weight and Balance 1

Goal. The CMUI demonstrates understanding KC-130J Weight and Balance Procedures by successfully completing a DD FORM 365-4 without a cargo load.

Review. Ensure CMUI is familiar with proper DD FORM 365-4 computational procedures.

Prerequisite. LAB-0200

LAB-0202 6.0 \* B,SC 1 KC-130J A (N)

External Preflight Introduction Lab

Goal. Familiarize CMUI with the KC-130J External Preflight Inspection.

Requirement

Introduce

Screening of the Aircraft Discrepancy Book  
Professional Equipment  
Cranial and Tool Control Procedures  
Maintenance Control Notification  
Prior to Entering Aircraft Checks  
Aircraft Tool Box ATAF

Demonstrate

Ladder Pre-Op Inspection  
External Preflight Procedure

Performance Standard

CMUI is able to complete Aircraft External Preflight Inspection with assistance from an instructor.

Prerequisite. ACAD-0103

ACAD-0104 6.0 \* B, SC CLSRM

Interior Preflight Inspection Introduction

Goal. The CMUI demonstrates understanding of the listed modules by successfully by successful completion of a computer-based test on the following modules.

Requirement. Modules.

Preflight Checks and Inspections	L1-16-02
Interior Preflight Inspections	C1-31-03
Auxiliary Power Unit	L1-06-01
Auxiliary Power Unit (APU) Fire	C1-26-01
Cargo Door and Ramp System	C1-03-04
Cargo Loading Equipment	C1-34-01

Prerequisite. LAB-0102

ACAD-0105 2.0 \* B, SC CLSRM

Aircraft Weight and Balance 2.

Goal. The CMUI demonstrates understanding of KC-130J Weight and Balance Procedures by successfully completing a DD FORM 365-4 with a cargo load.

Review. Ensure CMUI is familiar with proper DD FORM 365-4 computational procedures.

Prerequisite. ACAD-0103

LAB-0203 6.0 \* B, SC 1 KC-130J A (N)

Interior and Top of Aircraft Preflight Introduction Lab

Goal. Familiarize CMUI with KC-130J Interior and Top of Aircraft Preflight Inspections.

Requirement

Review

Screening of the Aircraft Discrepancy Book  
Professional Equipment



Goal. Familiarize CMUI with KC-130J Flight Station Power Up Procedure steps 1-27.

Requirement

Review

Screening of the Aircraft Discrepancy Book  
Professional Equipment  
Maintenance Control Notification  
Prior to Entering Aircraft Checks

Introduce

Flight Station Power Up Procedure Steps 1-26 (Power off).

Performance Standard

CMUI is able to complete Aircraft Power Up Procedure Steps 1-26 with assistance from an instructor.

Prerequisite. ACAD-0106, Required Reading for APU Operator.

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LAB-0205	6.0	*	B,SC	1 KC-130J	A	(N)
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Flight Station Preflight Introduction Lab 2

Goal. Familiarize CMUI with the complete Flight Station Power Up and shutdown procedures.

Requirement

Review

Screening of the Aircraft Discrepancy Book  
Professional Equipment  
Maintenance Control Notification  
Prior to Entering Aircraft Checks  
Power Up Procedure Steps 1-27

Introduce

Power Up Procedure Steps 27-47  
Aircraft Shutdown Procedure

Demonstrate

Demonstrate the Aircraft Power Up and Shutdown Procedure.

Performance Standard

CMUI is able to complete Aircraft Power Up and Shutdown Procedures with assistance from an instructor.

Prerequisite. LAB-0204

ACAD-0108 13.0 \* B,SC CLSRM

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Emergency Equipment and Procedures Introduction

Goal. The CMUI demonstrates understanding of the listed modules by successfully by successful completion of a computer-based test on the following modules.

Requirement. Modules.

Fire Detection and Suppression	C1-17-01
Oxygen System	C1-17-02
Emergency Equipment	C1-17-03
Emergency Exits (Air and Ground)	C1-17-04
Emergency Checklist Principles	L1-01-07
Ground Evacuation	C1-27-01
In-Flight Crew Door and Ramp Warning	C1-28-01
Rapid Decompression	C1-28-02
Electrical Fire	C1-28-08
Smoke and Fume Elimination	C1-28-09
Ditching	L1-24-04
Bailout	C1-29-02
Engine Failure In-flight	C1-37-03
Gear Up Landing	C1-38-01
Manual Gear Extension	C1-38-03
Main Landing Gear Tie Down	C1-38-04
Landing Gear System Failures	C1-29-03

Prerequisite. LAB-0205

ACAD-0109 6.0 \* B,SC CLSRM

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Aircraft Weight and Balance 4.

Goal. The CMUI demonstrates understanding KC-130J Weight and Balance Procedures by successfully completing a DD FORM 365-4 for each flight of a multiple destination mission with cargo and passengers.

Review. Ensure CMUI is familiar with proper DD FORM 365-4 computational procedures.

Prerequisite. ACAD-0107

LAB-0206 6.0 \* B,SC 1 KC-130J A (N)

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Emergency Equipment and Procedures Introduction Lab

Goal. Familiarize CMUI with KC-130J Emergency Equipment and Procedures.

Requirement

Introduce

Proper Donning and Utilization of Emergency Equipment  
In-Flight Crew Door and Ramp Warning

Rapid Decompression

- Fire/Smoke and Fume Elimination
- Ditching
- Bailout
- Flap System Malfunctions
- Landing Gear System Emergency Extension and Tie Down

Demonstrate

- Proper Donning and Utilization of Emergency Equipment
- Fire/Smoke and Fume Elimination
- Bailout
- In-Flight Crew Door and Ramp Warning

Performance Standard

The CMUI is able to properly don and utilize Emergency Equipment with minimal assistance from an instructor.

Prerequisite. ACAD-0108

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ACAD-0110	5.0	*	B, SC	CLSRM
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Aircraft Servicing Introduction

Goal. The CMUI demonstrates understanding of the listed modules by successfully by successful completion of a computer-based test on the following modules.

Requirement. Modules.

- |                                      |          |
|--------------------------------------|----------|
| Hydraulic Servicing                  | C1-32-01 |
| Oil Servicing                        | C1-32-02 |
| Oxygen Servicing                     | C1-32-03 |
| Auxiliary Power Unit (APU) Servicing | C1-32-04 |
| Ground Refueling                     | C1-07-04 |
| Tire Servicing                       | C1-32-05 |
| Passenger Facility Servicing         | C1-32-06 |

Prerequisite. LAB-0206

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ACAD-0111	6.0	*	B, SC	CLSRM
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Aircraft Weight and Balance 5.

Goal. The CMUI demonstrates understanding KC-130J Weight and Balance Procedures by successfully completing a DD FORM 365-4 for each flight of a multiple destination mission with cargo and passengers.

Review. Ensure CMUI is familiar with proper DD FORM 365-4 computational procedures.

Prerequisite. ACAD-0109



LAB-0207    6.0    \*                    B,SC            1 KC-130J            A            (N)

Aircraft Servicing Introduction Lab

Goal.    Familiarize CMUI with KC-130J Servicing Procedures.

Requirement

Introduce

Refueling and Defueling  
Engine/APU Oil Servicing  
Lavatory Servicing  
Hydraulic Servicing  
Fuel System Limitations

Demonstrate

SPR Panel Procedures  
Fuel Management Panel Procedures

Performance Standard

CMUI is able to Service the Aircraft with minimal assistance from an instructor.

Prerequisite.    ACAD-0110

LAB-0208    6.0    \*                    B,SC            1 KC-130J            A            (N)

Flight Station Preflight Review Lab

Goal.    Review the CMUI with KC-130J Flight Station Power Up Procedures.

Requirement

Review

Screening of the Aircraft Discrepancy Book  
Professional Equipment  
Maintenance Control Notification  
Prior to Entering Aircraft Checks  
Aircraft Power Up Procedure  
Aircraft Shut Down Procedure

Demonstrate

Demonstrate the Aircraft Power Up Procedure.

Performance Standard

CMUI is able to complete Aircraft Power Up and Shutdown Procedure with minimal assistance from an instructor.

Prerequisite.    LAB-0205

ACAD-0112 3.0 \* B,SC CLSRM

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Refine Preflight and Post-Flight Introduction

Goal. The CMUI demonstrates understanding of the listed modules by successfully by successful completion of a computer-based test on the following modules.

Requirement. Modules.

Communications Introduction	C1-18-01
Ground Maintenance System (GMS)	C1-21-01
Portable Maintenance Aid (PMA)	C1-21-02
Post-flight Inspections	C1-31-04
Post-flight Checks	C1-23-05
Navigation Systems Introduction	C1-19-01

Prerequisite. LAB-0208

ACAD-0113 6.0 \* B,SC CLSRM

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Aircraft Weight and Balance 6.

Goal. The CMUI demonstrates understanding KC-130J Weight and Balance Procedures by successfully completing a DD FORM 365-4 for each flight of a multiple destination mission with cargo and passengers.

Review. Ensure CMUI is familiar with proper DD FORM 365-4 computational procedures.

Prerequisite. ACAD-0111

LAB-0209 6.0 \* B,SC 1 KC-130J A (N)

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Preflight Refinement and Post-flight Introduction Lab

Goal. Review the CMUI with KC-130J Aircraft Preflight Procedure and Introduce Flight Station Post-flight.

Requirement

Review

- Screening of the Aircraft Discrepancy Book
- Professional Equipment
- Maintenance Control Notification
- Prior to Entering Aircraft Checks
- Aircraft Preflight Procedure

Introduce

- Ground Maintenance System
- Preparation of RMM for Flight
- Flight Station Post-flight Procedure



ACAD-0115    3.0    \*                    B, SC                    CLSRM

Cargo and Passenger Loading Introduction

Goal. The CMUI demonstrates understanding of the listed modules by successfully by successful completion of a computer-based test on the following modules.

Requirement. Modules.

Palletized Cargo Loading Equipment	L1-03-05
Passenger Preflight Configuration	L1-23-01
Personnel Passenger Onload/Offload	L1-23-02
Non-Palletized Preflight Configuration	L1-24-01
Non-Palletized Onload Offload Procedures	L1-24-02
Cargo Jettison	L1-24-03
Hazardous Material (HAZMAT) Operations	L1-25-01

Prerequisite. ACAD-0107

LAB-0211    3.0    \*                    B, SC                    1 KC-130J                    A                    (N)

Passengers and Bags

Goal. Discuss and demonstrate loading passengers and baggage.

Requirement

Discuss

Aircraft Configuration for Maximum Passengers and Baggage  
Passenger Brief  
Accurate Passenger Manifesting  
Tanker Frame Considerations

Demonstrate

Installation of Centerline and Sidewall Seats  
Seat Spacing Configurations  
Aero-medical Considerations  
Preparation of a Form F

Performance Standard

CMUI is able to demonstrate the proper configuration for maximum passengers/baggage, and proper preparation of a Form F with CNI-MU input.

Prerequisite. ACAD-0115

LAB-0212    3.0    \*                    B, SC                    1 KC-130J                    A                    (N)

Rolling Stock Cargo

Goal. Discuss and demonstrate proper procedures for rolling stock cargo.

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Requirement

## Discuss

Aircraft Configuration for transporting rolling stock.  
 Winching Procedures  
 Limitations  
 Loading Procedures  
 Tie Down Procedures  
 In-flight Cargo Jettison Procedures

## Demonstrate

Aircraft Configuration for rolling stock  
 Winching Procedures  
 Loading Procedures  
 Tie Down Procedures  
 Preparation of Form F with CNI-MU input

Performance Standard

CMUI is able to demonstrate the proper procedures applicable to rolling stock cargo.

Prerequisite. ACAD-0115

LAB-0213	3.0	*	B,SC	1 KC-130J	A	(N)
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## Palletized Cargo

Goal. Discuss and demonstrate proper procedures for palletized cargo.

Requirement

## Discuss

Aircraft Configuration for Transporting Palletized Cargo.  
 Tanker Considerations

## Demonstrate

Aircraft Configuration for Palletized Cargo  
 Preflight Dual Rail System  
 Post-flight Dual Rail System  
 Operation of the Dual Rail System  
 Preparation of Form F with CNI-MU input

Performance Standard

CMUI is able to demonstrate the proper procedures applicable to rolling palletized cargo.

Prerequisite. ACAD-0115

ACAD-0116	3.0	*	B,SC		CLSRM	
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Aircraft Weight and Balance 7.

Goal. The CMUI demonstrates understanding KC-130J Weight and Balance Procedures by successfully completing a question worksheet.

Review. Ensure CMUI is familiar with general weight and balance knowledge.

Prerequisite. ACAD-0113

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ACAD-0117 8.0 \* B,SC NITE LAB

Night Imaging and Threat Evaluation (NITE) Lab

Goal. The CMUI is introduced to the night environment, utilization of NVD's, and light discipline.

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ACAD-0118 5.0 \* B,SC CLSRM

Night Vision Devices

Goal. Familiarize CMUI with the components, operation, and considerations for the use of Night Vision Devices.

Requirement. Modules.

Night Vision Device (NVD) Introduction	C1-39-01
Nuclear, Biological and Chemical Equipment	C1-03-05
Use of Night Vision Device	C1-39-02
Night Vision Devices (NVD) 1	
Night Vision Devices (NVD) 2	

Prerequisite. ACAD-0117

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ACAD-0119 3.0 \* B,SC CLSRM

Initial Crew Resource Management Training

Goal. Acquaint CMUI with T/M-specific aircrew coordination requirements.

Requirement

Introduce

- CRM History
- Seven (7) Critical Skills
- OPNAVINST 1542.7C
- A T/M Specific Case Study or Scenario

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ACAD-0120 3.0 \* B,SC CLSRM

Operational Risk Management Training

Goal. Provide CMUI with initial or annual refresher training on the process of ORM.

Requirement

Introduce/Review

Concept  
Terms  
Process  
Process Levels  
Principles

ACAD-0121 3.0 \* B, SC CLSRM

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AIR Card User Course

Goal. The CMUI demonstrates understanding of the course by successful completion of the modules and a computer-based test.

Requirement. Modules.

Introduction and General Policy  
Program Structure and Personnel  
Card User Responsibilities  
Disciplinary Guidance  
Certification Test

ACAD-0122 3.0 \* B, SC CLSRM

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Lean Six Sigma White Belt Course

Goal. The CMUI demonstrates understanding of the course by successful completion of the Lean Six Sigma White Belt Course provided by Navy Knowledge Online.

LAB-0214 6.0 \* B, SC 1 KC-130J A (N)

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Preflight and Post-flight Lab

Goal. Review the CMUI with KC-130J Aircraft Preflight and Post-flight procedures.

Requirement

Review

Screening of the Aircraft Discrepancy Book  
Professional Equipment  
Maintenance Control Notification  
Prior to Entering Aircraft Checks  
Aircraft Preflight Procedure  
Aircraft Post-flight Procedure

Demonstrate

Preflight Procedure  
Post-flight Procedure

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Performance Standard

CMUI is able to complete Aircraft Preflight and Post-flight with minimal assistance.

Prerequisite. LAB-0210



KC-130J CREWMASTER CORE SKILL INTRODUCTION PHASE AVIATION TRAINING UNIT (ATU)																	
STAGE	EVENT		POI	E	DEVICE			COND	REFLY	GRND/ACAD EVENTS		SIM EVENTS		LIVE/FLT EVENTS		NO T E	EVENT CONV
	CODE	TITLE			TYPE	#	OPTION			#	TIME	#	TIME	#	TIME		
CORE SKILL INTRODUCTION PHASE TRAINING ATU(0000 PHASE)																	
ACAD	0100	GND SCL INTRO	B, SC		G				*		1.0						
ACAD	0101	ACFT/SQDN INTRO	B, SC		CBT				*		6.0						
LAB	0200	ACFT/SQDN LAB	B, SC		G		(N)		*		6.0						
ACAD	0102	EXT PREFLIGHT	B, SC		CBT				*		2.0						
ACAD	0103	WEIGHT & BALANCE	B, SC		G				*		6.0						
LAB	0202	EXT PREFLIGHT LAB	B, SC		A		(N)		*		6.0						
ACAD	0104	INT PREFLIGHT INTR	B, SC		CBT				*		6.0						
ACAD	0105	WEIGHT & BALANCE 2	B, SC		G				*		2.0						
LAB	0203	INT/TOP PREFLIGHT	B, SC		A		(N)		*		6.0						
ACAD	0106	FLIGHT STAT. PREFL	B, SC		CBT				*		7.0						
ACAD	0107	WEIGHT & BALANCE 3	B, SC		G				*		6.0						
LAB	0204	FLIGHT STAT. PREFL	B, SC		S	1	A	(N)	*						6.0		
LAB	0205	FLIGHT STAT. PREFL	B, SC		A	1		(N)	*						6.0		
ACAD	0108	EMERG EQUIP & PROC	B, SC		CBT				*		13.0						
ACAD	0109	WEIGHT & BALANCE 4	B, SC		G				*		6.0						
LAB	0206	EMERG. EQUIP PROC	B, SC		A	1		(N)	*						6.0		
ACAD	0110	AIRCRAFT SERVICE	B, SC		G				*		5.0						
ACAD	0111	WEIGHT & BALANCE 5	B, SC		G				*		6.0						
LAB	0207	AIRCRAFT SERVICE	B, SC		A	1		(N)	*						6.0		
LAB	0208	FLIGHT STAT. PREFL	B, SC		A	1		(N)	*						6.0		
ACAD	0112	PRE/POST-FLIGHT	B, SC		CBT				*		3.0						
ACAD	0113	WEIGHT & BALANCE 6	B, SC		G				*		6.0						
LAB	0209	PRE/POST-FLIGHT	B, SC		A	1		(N)	*						6.0		
ACAD	0114	PRE/POST-FLIGHT	B, SC		CBT				*		2.0						
LAB	0210	PRE/POST-FLIGHT	B, SC		A	1		(N)	*						6.0		
ACAD	0115	CPL INTRO	B, SC		CBT				*		3.0						
LAB	0211	PASSENGERS/BAGS	B, SC		A	1		(N)	*						3.0		
LAB	0212	ROLLING STOCK	B, SC		A	1		(N)	*						3.0		
LAB	0213	PALLETIZED CARGO	B, SC		A	1		(N)	*								
ACAD	0116	WEIGHT & BALANCE 7	B, SC		G				*		3.0						
ACAD	0117	NITE LAB	B, SC		G				*		8.0						
ACAD	0118	NVD	B, SC		G				*		5.0						
ACAD	0119	CRM	B, SC		G				*		3.0						

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ACAD	0120	ORM	B, SC		G			*						3.0	
ACAD	0121	AIR CARD	B, SC		CBT			*						3.0	
ACAD	0122	LEAN SIX SIGMA	B, SC		G			*						3.0	
LAB	0214	PREFLT/POSTFLT	B, SC		A	1	(N)	*						6.0	
TOTAL CORE SKILL INTRODUCTION PHASE AVIATION TRAINING UNIT (ATU)									27	117			10	63	