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From: Commandant of the Marine Corps

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Subj: KC-130J TRAINING AND READINESS MANUAL

Ref: (a) NAVMC 3500.14D

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

1. Purpose. In accordance with reference (a), enclosure (1) contains revised standards and regulations regarding the training of KC-130J aircrew.

2. Cancellation. NAVMC 3500.53C

3. Scope. Highlights of major Training and Readiness (T&R) planning considerations included in this KC-130J T&R Manual are as follows:

a. Reformatted the T&R Manual to reflect the terminology changes made per the reference.

b. Added Assault Landing Zone Instructor to the Instructor Designations table.

c. Expanded tables in Chapter 1 to reflect number of aircraft in detachment increments of 1 through 15.

d. The proficiency period for Close Air Support for the Fire Control Officer was changed from 30 to 180 days to align with other aircraft community proficiency period standards.

e. A Weapons Tactics Instructor Military Occupational Specialty designation has been added for the Crewmaster in Chapter 3.

DISTRIBUTION STATEMENT A: Approved for public release;  
distribution is unlimited.

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 466), 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.

  
J. W. LUKEMAN  
By direction

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CHAPTER 1

VMGR KC-130J TRAINING AND READINESS UNIT REQUIREMENTS

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CHAPTER 1

KC-130J TRAINING AND READINESS UNIT REQUIREMENTS

1.0 TRAINING AND READINESS REQUIREMENTS. The goal of Marine Aviation is to attain and maintain combat readiness to support Expeditionary Maneuver Warfare while conserving resources. The standards established in this program are validated by subject matter experts to maximize combat capabilities for assigned METs. These standards describe and define unit capabilities and requirements necessary to maintain proficiency in mission skills and combat leadership. Training Events are based on specific requirements and performance standards to ensure a common base of training and depth of combat capability.

1.1 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 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:

VMGR KC-130J																
Table of Organization																
CREW POSITION	NUMBER OF AIRCRAFT															FRD
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	TABLE OF ORGANIZATION PER NUMBER OF AIRCRAFT															
PILOTS	49	45	42	38	35	32	27	24	21	18	16	13	11	7	5	5
TPC	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	5
CP (T2P/T3P)	19	17	16	14	13	12	9	8	7	6	6	5	5	3	3	0
CREWMASTER	83	77	71	66	60	55	50	44	32	27	23	18	14	9	6	17
FCO*	4	4	4	4	4	4	2	2	2	2	2	2	2	2	1	0

NOTE 1: FCO numbers are only applicable to VMGR-252 and VMGR-352, and are also counted as Pilots. Numbers in the table do not reflect requirements when Harvest HAWK is part of a detachment.

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

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	CAT	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

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

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	CAT		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

1.5 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				
	LSF	NS (H)	LRN	TN	LAT	FORM	TR	ALZ	CAT	AAR	ADGR	AD	TN	NS(L)	TR	DT	HH	BAS	AD	BI	CAS	MIR
1.3.3.3.2 EXP	X	X					X	X							X	X						
1.3.4.1 CAT	X	X	X	X	X	X	X	X						X	X	X						
1.3.4.2 AAR	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			
MISSION 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

1.6 **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																															
MET OUTPUT STANDARDS MARTIX																															
CORE																															
MET	ABBREVIATION	MAXIMUM SORTIES PER MET												MAXIMUM DAILY SORTIES																	
		NUMBER OF AIRCRAFT												NUMBER OF AIRCRAFT																	
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
		SORTIES PER AIRCRAFT												SORTIES PER AIRCRAFT																	
MCT 1.3.3.3.2	EXP	13	12	11	10	9	8	7	6	5	4	3	3	2	2	1															
MCT 1.3.4.1	CAT	20	19	17	16	15	13	12	11	9	8	7	5	4	3	1															
MCT 1.3.4.2	AAR	20	19	17	16	15	13	12	11	9	8	7	5	4	3	1															
MCT 1.3.4.2.1	ADGR*	8	7	7	6	6	5	4	4	4	3	3	2	2	1	1															
MCT 4.3.4	AD	9	8	8	7	7	6	6	5	5	4	4	3	3	2	1															
MISSION PLUS																															
MET	ABBREVIATION	MAXIMUM SORTIES PER MET												MAXIMUM DAILY SORTIES																	
		NUMBER OF AIRCRAFT												NUMBER OF AIRCRAFT																	
		15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	20	19	17	16	15	13	12	11	9	8	7	5	4	3	1
		SORTIES PER AIRCRAFT												SORTIES PER AIRCRAFT																	
MCT 1.3.4.3	BI	8	8	7	7	6	6	5	5	4	4	3	3	2	1	1															
MCT 3.2.3.1.1	CAS**	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1															
MCT 2.2.5.2.2	MIR	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1															

\* Aviation-Delivered Ground Refueling stated in number of crews for a two point setup.

\*\* The number of sorties for Harvest HAWK is calculated using a six hour average sortie time.

1.7 CORE MODEL MINIMUM REQUIREMENTS (CMMR) TRAINING STANDARDS FOR READINESS REPORTING (DRRS-MC). The paragraphs and tables below delineate the minimum aircrew qualifications and designations required to execute the MET training standards and MET observed standards of para 1.7. MCO 3000.13 Readiness Reporting provides additional guidance and a detailed description of readiness reporting using DRRS-MC.

1.7.1 The CMMR Readiness Reporting Matrix depicts the minimum crew composition (defined as a combination of qualifications and designations) reflecting 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 sortie.

VMGR KC-130J																			
CMMR READINESS REPORTING MATRIX																			
KC-130J MINIMUM CREW QUALIFICATIONS / DESIGNATIONS REQUIRED FOR MET CAPABILITY																			
MISSION																			
MET	CREW POSITION				NUMBER OF AIRCRAFT														
	PILOT TPC	CP	FCO	CM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CREWS REQUIRED PER MET AND NUMBER OF AIRCRAFT																			
1.3.3.3.2 EXP	MSP	MSP	N/A	2 X MSP	8	7	7	6	6	5	4	4	3	3	2	2	2	2	1
1.3.4.1 CAT	N/A	N/A	N/A	1 X MSP	21	20	18	16	15	13	11	11	11	10	8	6	5	3	1
1.3.4.2 AAR	MSP	MSP	N/A	2 X MSP	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1.3.4.2.1 ADGR	MSP	MSP	N/A	3 X MSP*	8	7	7	6	6	5	4	4	4	3	3	2	2	1	1
4.3.4 AD	MSP	MSP	N/A	2 X MSP	5	5	5	4	4	3	3	3	3	2	2	1	1	1	1
MISSION PLUS																			
MET	CREW POSITION				NUMBER OF AIRCRAFT														
	PILOT TPC	CP	FCO	CM	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CREWS REQUIRED PER MET AND NUMBER OF AIRCRAFT																			
1.3.4.3 BI	CPMP	CPMP	N/A	3 X CPMP**	5	5	4	4	4	3	3	2	2	2	1	1	1	1	1
3.2.3.1.1 CAS	CPMP FCO	CPMP	CPMP	CPMP	4	4	4	4	4	4	2	2	2	2	2	2	2	2	1
2.2.5.2.2 MIR	CPMP FCO	CPMP	CPMP	N/A	4	4	4	4	4	4	2	2	2	2	2	2	2	2	1
* One Crewmaster shall be a Refueling Supervisor (RS).																			
** One Crewmaster shall be a Quality Assurance Safety Officer (QASO).																			
COMBAT LEADERSHIP																			
DESIGNATION	NUMBER OF AIRCRAFT																		
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
DESIGNATIONS REQUIRED PER NUMBER OF AIRCRAFT																			
Transport Plane Commander (TPC)	23	21	20	18	17	15	13	12	10	9	7	6	5	2	1				
Section Leader (SL)	10	9	9	8	8	7	6	6	5	4	3	2	2	1	1				
Division Leader (DL)	5	5	5	4	4	3	3	3	2	2	1	1	1	1	1				
TACRAC	7	7	6	6	5	5	5	4	4	3	2	2	1	1	1				
STRATRAC	4	3	3	3	2	2	2	2	2	2	1	1	1	1	1				
Quality Assurance Safety Officer (QASO) [Crewmaster Only]	5	5	5	4	4	3	3	3	2	2	1	1	1	1	1				
Refueling Supervisor (RS) [Crewmaster Only]	8	7	7	6	6	5	4	4	3	3	2	2	2	1	1				
Crewmaster 1 [Crewmaster Only]	24	22	21	19	17	16	14	13	11	9	7	6	4	4	3				

1.8 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.

VMGR KC-130J																														
CORE MODEL TRAINING STANDARD (CMTS)																														
CORE SKILLS (2000 Phase)																														
SKILL	PILOT														CREWMASTER															
	NUMBER OF AIRCRAFT														NUMBER OF AIRCRAFT															
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
PILOTS REQUIRED PER SKILL AND NUMBER OF AIRCRAFT														CREWMASERS REQUIRED PER SKILL AND NUMBER OF AIRCRAFT																
LSF	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	N/A														
NS(H)	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2
LRN	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2
TN	22	20	18	16	14	12	10	8	8	6	6	6	6	4	2	22	20	18	16	14	12	10	8	8	6	6	6	6	4	2
LAT	10	8	8	8	8	6	6	6	4	4	4	2	2	2	N/A															
FORM	22	20	18	16	14	12	10	8	8	6	6	6	6	4	2	N/A														
TR	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2
MISSION SKILLS (3000 Phase)																														
ALZ	16	14	14	12	12	10	8	8	6	6	4	4	4	4	2	16	14	14	12	12	10	8	8	6	6	4	4	4	4	2
CAT	N/A														21	20	18	16	15	13	11	11	11	10	8	6	5	3	1	
AAR	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2
ADGR	16	14	14	12	12	10	8	8	6	6	4	4	4	4	2	24	21	21	18	18	15	12	12	12	9	9	6	6	3	3
AD	10	10	10	8	8	6	6	6	4	4	2	2	2	2	10	10	10	8	8	6	6	6	4	4	2	2	2	2	2	
CORE PLUS SKILLS (4000 Phase)																														
NS(L)	8	8	6	6	6	6	4	4	4	4	4	2	2	2	2	N/A														
TN	8	8	6	6	6	6	4	4	4	4	4	4	0	0	0	N/A														
TR	8	8	6	6	6	6	4	4	4	4	4	2	2	2	2	N/A														
DT	6	4	4	4	4	2	2	2	2	2	2	2	2	2	2	6	4	4	4	4	2	2	2	2	2	2	2	2	2	2
HH	8	8	8	8	8	8	8	4	4	4	4	4	4	4	2	8	8	8	8	8	8	4	4	4	4	4	4	4	4	2
BAS	8	8	8	8	8	8	8	4	4	4	4	4	4	4	2	N/A														
AD	6	6	4	4	4	2	2	2	2	2	2	2	2	2	2	6	6	4	4	4	2	2	2	2	2	2	2	2	2	2
MISSION PLUS																														
BI	10	10	8	8	8	6	6	6	4	4	2	2	2	2	2	15	15	12	12	12	9	9	9	9	6	6	3	3	3	3
CAS	8	8	8	8	8	8	4	4	4	4	4	4	4	4	2	8	8	8	8	8	8	8	4	4	4	4	4	4	4	2
MIR	8	8	8	8	8	8	4	4	4	4	4	4	4	4	2	N/A														
FIRE CONTROL OFFICER (FCO)																														
CORE PLUS SKILLS (4000 Phase)																														
SKILL	NUMBER OF AIRCRAFT														The Fire Control Officer (FCO) is only required on Skills listed. There is no requirement for a FCO on 2000 and 3000 Phase events.															
	15	14	13	12	11	10	9	8	7	6	5	4	3	2														1		
	FCO's REQUIRED PER SKILL AND NUMBER OF AIRCRAFT																													
HH	4	4	4	4	4	4	2	2	2	2	2	2	2	2	1															
BAS	4	4	4	4	4	4	2	2	2	2	2	2	2	2	1															
MISSION PLUS (4000 Phase)																														
CAS	4	4	4	4	4	4	2	2	2	2	2	2	2	2	1															
MIR	4	4	4	4	4	4	2	2	2	2	2	2	2	2	1															

1.9 INSTRUCTOR DESIGNATIONS (5000 Phase)

VMGR KC-130J																
INSTRUCTOR DESIGNATIONS (5000 Phase)																
DESIGNATION	PILOT															FRD
	NUMBER OF AIRCRAFT															
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
PILOT DESIGNATIONS REQUIRED PER NUMBER OF AIRCRAFT																
ANI	5	5	4	4	3	3	3	3	2	2	1	1	1	0	5	
BIP	10	10	8	8	5	5	5	4	3	2	2	2	2	0	5	
FRSI	3	3	3	3	2	1	0	0	0	0	0	0	0	0	5	
NSI	5	5	4	4	3	3	3	3	2	2	1	1	1	0	2	
LATI	5	5	4	4	3	3	3	3	2	2	1	1	1	0	2	
NSLATI	3	3	2	2	2	2	1	1	1	1	1	1	1	0	0	
FLSE	3	2	2	2	2	1	1	1	1	1	1	1	1	0	2	
WTI	3	3	2	2	2	1	1	1	1	1	1	1	1	0	0	
ADI	3	3	2	2	2	2	1	1	1	1	1	1	1	0	0	
HHI	2	2	2	2	2	2	1	1	1	1	1	1	1	0	0	
ALZI	3	3	2	2	2	2	1	1	1	1	1	1	1	0	0	
DTI	3	2	2	2	2	1	1	0	0	0	0	0	0	0	0	
CREWMASTER*																
DESIGNATION	NUMBER OF AIRCRAFT															FRD
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	CREWMASTER DESIGNATIONS REQUIRED PER NUMBER OF AIRCRAFT															
NSI	7	5	4	4	3	3	3	3	2	2	1	1	1	0	2	
WTI	5	5	4	4	3	3	3	3	3	3	1	1	1	0	0	
NI	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANI	6	6	5	5	4	4	3	3	2	2	1	1	1	0	6	
CPLI	5	5	4	4	3	3	3	3	2	2	1	1	1	0	12	
MI	12	12	10	10	8	8	8	8	4	2	1	1	1	0	12	
SI	12	10	10	10	8	8	8	8	4	3	1	1	1	0	12	
ADI	12	10	10	10	8	8	8	8	4	3	1	1	1	0	12	

\*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].

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

1.10.1 Tactical squadron

VMGR KC-130J																
RCQD																
QUALIFICATIONS	NUMBER OF AIRCRAFT															
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	QUALIFICATIONS PER CREW POSITION PER NUMBER OF AIRCRAFT															
FCF (Pilot)	5	5	4	3	3	3	2	2	2	1	1	1	1	1	1	
FCF (Crewmaster)	5	5	4	3	3	3	2	2	2	1	1	1	1	1	1	

1.10.2 FRD

VMGR KC-130J FRD	
FLIGHT LEADERSHIP (6000 PHASE)	
DESIGNATIONS	PILOTS
TPC	5
SEC LDR	3
DIV LDR	2

CHAPTER 2

KC-130J PILOT (MOS 7556/7557)

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2.2.3 Series Conversion (S) POI

WEEKS	COURSE	PERFORMING ACTIVITY
1-16	Core Introduction Training	KC-130J FRD
17	Core Introduction Training	Tactical Squadron
18-57	Core Training	Tactical Squadron
35-82	Mission Training	Tactical Squadron
60-107	Core Plus / Mission Plus Training	Tactical Squadron

2.2.4 Modified Refresher/Refresher (MR/R) POI. The Modified Refresher POI resides within the Core Introduction Phase at the KC-130J FRD, then continues as the Refresher POI in the Core Phase through the Requirements, Certifications, Qualifications, and Designations Phase. The Modified Refresher/Refresher Pilot shall execute those Events annotated with an MR or R. Commanding Officers will review the qualifications, previous experience, currency, and demonstrated ability of the individual pilot with a view towards combining required flights.

WEEKS	COURSE	PERFORMING ACTIVITY
1-3	Core Introduction Training	KC-130J FRD
4	Core Introduction Training	Tactical Squadron
5-34	Core Training	Tactical Squadron
13-39	Mission Training	Tactical Squadron
40-50	Core Plus / Mission Plus Training	Tactical Squadron

2.2.5 NATOPS/Assistant NATOPS Instructor and Fleet Replacement Squadron Instruction POI

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

2.2.6 Basic Instructor Pilot and Stage Instructor POI

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

2.2.7 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
7	Weapons and Tactics Instructor	MAWTS-1

2.2.8 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	Wing FLSE PC

2.3 PROFICIENCY & CURRENCY

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

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

Maintaining Skill Proficiency. Once attained, skill proficiency is maintained by executing those events which have a Proficiency Period (Maintain events). Proficiency Periods establish the maximum time between Event demonstration. Should proficiency be lost in any maintain event, for a specific skill, that skill proficiency is temporarily lost. Skill proficiency can be re-attained by again demonstrating proficiency in the Event(s) that are not proficient. For flying communities, an individual shall complete delinquent events with a proficient instructor, crewman/flight lead as delineated by the T/M/S Syllabus Sponsor (see Chapter 3 of NAVMC 3500.14 on specific instructor requirements for Low Altitude Flight, Night Systems, ACM, DM, DACM, DCM, FAC(A)).

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

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

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

2.3.3 Skill Currency. Currency is a control measure used to provide an additional margin of safety based on exposure frequency to a particular skill and applies to all MOS’s that must comply with NATOPS and OPNAV requirements. It is a measure of time since the last event demanding that specific skill. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for aircrew individual type mission profiles can be found in Chapter 3 of NAVMC 3500.14.

2.4 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCOD) TABLES.

The table below delineates T&R Events required to be proficient or waived to attain Requirements, Certifications, Qualifications, and Designations. Waiving of all Required Events leading to a Requirement, Certification, Qualification, or Designation is not allowed.

<b>REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS (RCQD) PILOT</b>	
<b>Qualification</b>	<b>Event Requirements</b>
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, LAT-2261, and TR-2400.
FCO	HH-4800,HH-4801,HH-4802,HH-4803,HH-4804,BAS-4810,BAS-4911,BAS-4812,MIR-4820,CAS-4830,CAS-4840
DTQ	LATQ, DT-4410, and DT-4411.
<b>Designation</b>	
T3P	Core Introduction Phase complete and NTPS-6110.
T2P	Core Phase complete, ACPM-82XX complete, and NTPS-6111.
TPC	Core and Mission Phases complete, ACPM-83XX complete, NTPS-6116, NTPS-6117, NTPS-6118, 700 total hours, and command specific directives.
Standard Inst	INST-6130 and in accordance with OPNAVINST 3710.7.
Special Inst	INST-6131 and in accordance with OPNAVINST 3710.7.
PARTIAL FCP	NTPS-6118 and FCP-6105.
FCP	150 TPC hours, a minimum 3 FCFs (2 "A" Profiles), and FCP-6106.
BIP	LATQ, NSQ(H), TN skill proficient, AAR/ADGR skill proficient, 100 TPC hours, and BIP-5101.
ANI	100 TPC hours, NI-5141, certification by NI/NE/NATOPS MM.
NI	100 TPC hours, NI-5141, certification NE/NATOPS MM.
NE	100 TPC hours, NI-5141, certification and designation by NATOPS MM.
FRSI	NI-5141 and FRSI-5147.
NSI	100 hours total NVD time (minimum 50 hours LLL), BIP, NS(H)-5152. 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	LATQ, NSQ(H), BIP, TN-4200, TR-4401, and LAT-5212. Refer to MAWTS-1 KC-130J Course Catalog.
NSLATI	30 hours post-NSI certification, NSQ(L) 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.
FLSE	WTI or Division Lead, ADI, NSI, TACRAC, and LATI, FLSE-5321, and a designation letter signed by the group commanding officer. FLSE requires certification by the FLSE program coordinator or FLSE model manager.
DTI	DTQ, LATI, 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 Mission Phase complete, ANI or NSI, and ALZ-5500.
ADI	BIP, AD Mission Phase complete, AD-4701, BI-4710, and AD-5701.
HHI	HH-4800,HH-4801,HH-4802,HH-4803,HH-4804,BAS-4810,BAS-4911,BAS-4812,MIR-4820,CAS-4830,CAS-4840,4862,4870,4890, BIP, and 5 MIR-4870 and 10 CAS-4880 sorties as FCO. Refer to MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the IUT will be designated a HHI 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 commanding officer.
Sec Lead	BIP, minimum 2 flights as TPC wingman, ACPM-8630, ACPM-8660, and SL-6301.
Div Lead	200 TPC hours, 2 flights as a designated SL, ACPM-8620, ACPM-8640, ACPM-8641, and DL-6304.
TACRAC	SL-6302 and RAC-6311.
STRATRAC	Division Lead, TACRAC, and RAC-6313.

## 2.5 SYLLABUS NOTES.

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

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

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

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

Code	Description (Environmental Condition)
<b>D</b>	Shall be conducted during day.
<b>N</b>	Shall be conducted at night, aided or unaided, at least 30 minutes after official sunset.
<b>(N)</b>	May be conducted day or night. If at night, aided or unaided.
<b>NS</b>	Shall be conducted at night aided under High Light Level or Low Light Level at least 30 minutes after official sunset.
<b>HLL</b>	Shall be conducted at night aided under High Light Level conditions.
<b>LLL</b>	Shall be conducted at night aided under Low Light Level conditions.
<b>(NS)</b>	May be conducted day or night. If at night, shall be aided under High Light Level or Low Light Level at least 30 minutes after official sunset.
<b>(HLL)</b>	May be conducted day or night. If at night, shall be aided and under High Light Level conditions.
<b>(LLL)</b>	May be conducted day or night. If at night, shall be aided and under Low Light Level conditions.
<b>N*</b>	Shall be conducted at night unaided, at least 30 minutes after official sunset.
<b>(N*)</b>	May be conducted day or night. If at night, shall be unaided.
<b>D/NS</b>	Shall be conducted in the simulator during day and night aided.

2.5.5 Device Matrix

Symbol	Meaning
<b>A</b>	Conducted in Aircraft.
<b>A/S</b>	Aircraft Preferred / Simulator Optional.
<b>S</b>	Conducted in Simulator.
<b>S/A</b>	Simulator Preferred / Aircraft Optional.
<b>G</b>	Ground / Academic Training. May included CBT, lectures, self-paced.

2.5.6 Program of Instruction Matrix

Program of Instruction (POI)	Symbol	Aviation Flying
Basic	<b>B</b>	Initial MOS / Skill Training.
Transition*	<b>T</b>	Moving from one Type to another (Rotary Wing to Fixed Wing).
Conversion*	<b>C</b>	Moving from Model to another (UH-1Y to CH-53E).
Series Conversion	<b>S</b>	Moving from one Series to another (KC-130T to KC-130J).
Refresher	<b>R</b>	DIFDEN to DIFOPS in same T/M/S.
Maintain	<b>M</b>	All individuals who have attained CSP/MSP/PPP by initial POI assignment are re-assigned to the M POI to maintain proficiency.
Modified Refresher	<b>MR</b>	FRS only – See NAVMC 3500.14 Chapter 4 for specific assignment.
Contract Instructor	<b>CI</b>	Contract Instructor.

\*For the KC-130J the **T** and **C** POIs mirror the **B** POI.

2.5.7 Event Terms

Term	Description
<b>Discuss</b>	An explanation of systems, procedures, or maneuvers during the brief, in flight, or post flight. Student is responsible for knowledge of procedures.
<b>Demonstrate</b>	The description and performance of a particular maneuver/event by the instructor, observed by the student. The student is responsible for knowledge of the procedures prior to the demonstration of a required maneuver.
<b>Introduce</b>	The instructor may demonstrate a procedure or maneuver to a student, or may coach the student through the maneuver without demonstration. The student performs the procedures or maneuver with coaching as necessary. The student is responsible for knowledge of the procedures.
<b>Practice</b>	The performance of a maneuver or procedure by the student that may have been previously introduced in order to attain a specified level of performance.
<b>Review</b>	Demonstrated proficiency of a maneuver by the student.
<b>Evaluate</b>	Any flight designed to evaluate aircrew standardization that does not fit into another category.

2.6 CORE INTRODUCTION PHASE (1000)

Purpose. The purpose of this phase of training is to instruct the pilot in KC-130J fundamentals and introduce tactical missions assigned to a VMGR. At the completion of this phase, the pilot will be ready to progress to the VMGR squadron to complete a T3P NATOPS checkride. 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.

General. The following Stages are included in the Core Introduction Phase of training.

Phase Overview

CORE INTRODUCTION PHASE		
STAGE	PARAGRAPH	PAGE NUMBER
CPT	2.7.1	2-9
FAM	2.7.2	2-12
NS(H)	2.7.3	2-19
LRN	2.7.4	2-19
TN	2.7.5	2-20
FORM	2.7.6	2-21
TR	2.7.7	2-21
ALZ	2.7.8	2-22
AAR	2.7.9	2-23
AD	2.7.10	2-24
FCRM	2.7.11	2-24

Instructor. 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 Fleet Replacement Detachment (FRD) Commanding Officer shall be responsible for Core Introduction Phase standardization. VMGR 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 chapter prior to instructing the Core Introduction Phase.

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. 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.

Admin Notes. Academic requirements, including computer based training (CBT) and lectures, are in accordance with the FRD-approved ground training curriculum.

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

## 2.7 CORE INTRODUCTION STAGES

### 2.7.1 Cockpit Procedures Training (CPT)

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

#### CPT Overview

COCKPIT PROCEDURES TRAINING (CPT) STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
CPT-1100	2.0	*	B,S	D	S	CHECKLIST INTRO
CPT-1101	2.0	*	B,S	D	S	CNI-MS/CNBP INTRO
CPT-1102	2.0	*	B,S	D	S	COMM/NAV OPS
CPT-1103	2.0	*	B,S	D	S	AMU/HDD OPS
CPT-1104	2.0	*	B,S	D	S	HUD OPERATION
CPT-1105	2.0	*	B,S	D	S/A	FLIGHT PROGRAMMING 1
CPT-1106	2.0	*	B,S	D	S	FLIGHT PROGRAMMING 2
CPT-1107	2.0	*	B,S,MR	D	S/A	APU/ENGINE OPS
CPT-1108	2.0	*	B,S,MR	D	S/A	PROP/HYD OPS
CPT-1109	2.0	*	B,S,MR	D	S	ELEC/BIU BACKUP OPS
CPT-1110	2.0	*	B,S,MR	D	S/A	BLEED AIR
CPT-1111	2.0	*	B,S,MR	D	S/A	FUEL MANAGEMENT OPS

**CPT-1100      2.0      \*      B,S      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 brake, lighting, oxygen system, and normal checklist procedures.

#### Performance Standard

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

Using Chapter 7 of NAVAIR 01-75GAJ-1 as a reference, be able to follow the instructor through an overview demonstration of each of the basic cockpit triggers, flows, checklists, and procedures.

Demonstrate the ability to identify basic facts, terms, and procedures associated with performing cockpit flows and checklists.

Prerequisite. FRD-approved ground training curriculum.

**CPT-1101      2.0      \*      B,S      D      S      1 WST**

Goal. Introduce the pilot to cockpit systems and instrument panels, CNI-MU and CNBP, and basic data entry.

Requirement. The flight will introduce basic Communication/Navigation/Identification-Management System (CNI-MS) and Communication Navigation Breaker Panel (CNBP) operations. The instructor will discuss and introduce CNI-MS and CNBP operations. The student will practice normal checklist procedures.

#### Performance Standard

Demonstrate the ability to follow the instructor through an introduction of basic CNI-MU and CNBP operations.

Identify basic facts, terms, and procedures associated with the CNI-MU and the CNBP.

With assistance from the instructor and reference to NAVAIR 01-75GAJ-1, perform basic cockpit flows and checklist procedures.

Prerequisite. CPT-1100.

**CPT-1102      2.0      \*      B,S                      D      S      1 WST**

Goal. Introduce the pilot to radio tuning and navigation alignment procedures.

Requirement. The flight will introduce radio tuning and navigation alignment procedures. The instructor will discuss and introduce aircraft communication and navigation radio systems. The student will practice normal checklist procedures. Review CNI-MS initialization and CNBP operations.

Performance Standard

Demonstrate the ability to follow the instructor through an introduction of radio tuning and navigation alignment procedures using the CNI-MU and CNBP.

Identify basic facts, terms and procedures associated with radio and NAVAID tuning.

Demonstrate the ability to perform basic cockpit flows and checklist procedures with assistance from the instructor and reference to NAVAIR 01-75GAJ-1.

Prerequisite. CPT-1101.

**CPT-1103      2.0      \*      B,S                      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 and review CNBP operations.

Performance Standard

Demonstrate the ability to follow the instructor through an introduction to the AMU and HDD 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 NAVAIR 01-75GAJ-1.

Prerequisite. CPT-1102.

**CPT-1104      2.0      \*      B,S                      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 use of the HUD. The student will practice normal checklist procedures and CNI-MS operations and review AMU, HDD, aircraft soft panels, and previously discussed avionics systems.

Performance Standard

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 NAVAIR 01-75GAJ-1.

Prerequisite. CPT-1103.

**CPT-1105      2.0      \*      B,S                      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 and review HUD operations.

Performance Standard

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



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 Standard

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 NAVAIR 01-75GAJ-1.

Prerequisite. CPT-1108.

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

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

Requirement. The instructor will discuss and introduce bleed air, environmental, and ice protection systems operation and emergencies. A minimum of one wing bleed air leak, one cross-ship bleed air leak, one underfloor bleed air leak, and one nacelle bleed air leak will be performed. The student will practice normal checklist and touch and go procedures.

Performance Standard

Demonstrate a basic level of familiarity with the bleed air, environmental control, 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 NAVAIR 01-75GAJ-1.

Prerequisite. CPT-1109.

**CPT-1111      2.0      \*      B,S,MR      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 Standard

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 NAVAIR 01-75GAJ-1.

Prerequisite. CPT-1110.

2.7.2 Familiarization (FAM)

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.

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.

FAM Overview

FAMILIARIZATION STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
FAM-1112	2.0	*	B,S	D	S/A	VISUAL FLIGHT 1
FAM-1113	2.0	*	B	D	S/A	VISUAL FLIGHT 2
FAM-1114	2.0	*	B,MR	D	S/A	VISUAL FLIGHT 3
FAM-1115	2.0	*	B,S	N*	S/A	NIGHT VISUAL FLIGHT
FAM-1116	2.0	*	B,S,MR	D	S/A	INST FL – ILS/NDB
FAM-1117	2.0	*	B,S	N*	S/A	INST FL – TACAN/LOC
FAM-1118	2.0	*	B	D	S/A	RADAR APPROACHES
FAM-1119	2.0	*	B	D	S/A	EN ROUTE OPS 1
FAM-1120	2.0	*	B,S,MR	N*	S/A	EN ROUTE OPS 2
FAM-1121	2.0	*	B,S	D	S/A	ASYMMETRIC OPS 1
FAM-1122	2.0	*	B,S,MR	D	S	ASYMMETRIC OPS 2
FAM-1123	2.0	*	B	D	S	ASYMMETRIC OPS 3
FAM-1124	2.0	*	B,S	D	S	SPECIAL PROCEDURES
FAM-1125	2.0	*	B,S	D	S	ELEC/FLAP/PROP EPS
FAM-1126	2.0	*	B	D	S/A	HYD/FLT CONTROL EPS
FAM-1127	2.0	*	B	D	S/A	LANDING GEAR EPS
FAM-1128	2.0	*	B,S	D	S/A	AUTOFLIGHT 1
FAM-1129	2.0	*	B	N*	S/A	AUTOFLIGHT 2
FAM-1130	2.0	*	B,S	D	S/A	REVIEW FLIGHT
FAM-1131	2.0	*	B,S,MR	D	S/A	FRD EVALUATION
FAM-1132	3.0	*	B,S	D	A	PREFLIGHT/EMER EQPMT

**FAM-1112 2.0 \* B,S 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 Standard

Demonstrate a basic level of familiarity with the normal takeoff, climb out, stall recovery, unusual attitude recovery, visual approach, full stop landing, and touch and go procedures in accordance with NAVAIR 01-75GAJ-1.

Basic air work standards include +/- 10 KIAS, 200 feet 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 NAVAIR 01-75GAJ-1.

Prerequisite. CPT-1111.

**FAM-1113 2.0 \* B D S/A 1 WST/KC-130J**

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

Requirement. The flight will emphasize basic KC-130J visual flight operations. The instructor will discuss performance data and designated emergency procedures. The student will practice basic flight maneuvers to include

takeoffs, airwork, visual approaches, landings, fuel management, and designated emergency procedures.

Performance Standard

In addition to the standards established for FAM-1112, demonstrate a working knowledge of and perform Takeoff Abort and Four Engine Flameout Emergency Procedures in accordance with NAVAIR 01-75GAJ-1.

Demonstrate the ability to conduct fuel management procedures with limited instructor intervention.

Prerequisite. FAM-1112.

**FAM-1114      2.0      \*      B,MR      D      S/A      1 WST/KC-130J**

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

Requirement. The flight will emphasize KC-130J visual flight operations. The instructor will discuss and introduce crosswind procedures, flaps up landings, and designated emergency procedures. The student will practice basic flight maneuvers to include takeoffs, visual approaches, landings, fuel management, and designated emergency procedures.

Performance Standard. In addition to the standards established for FAM-1112 and FAM-1113, demonstrate a working knowledge of and perform crosswind takeoff and landing procedures, flaps up landings, high speed landings, and selected emergency procedures in accordance with NAVAIR 01-75GAJ-1.

Prerequisite. FAM-1113.

**FAM-1115      2.0      \*      B,S      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 and review touch and go procedures.

Performance Standard

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

Demonstrate competence with touch and go procedures in accordance with NAVAIR 01-75GAJ-1 and without instructor intervention.

Prerequisite. FAM-1114.

**FAM-1116      2.0      \*      B,S,MR      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 and missed approaches, and designated emergencies and review landing procedures.

Performance Standard

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

Demonstrate a working knowledge of and perform an instrument takeoff, holding procedures, ILS and NDB approach programming, and perform designated emergencies in accordance with NAVAIR 01-75GAJ-1.

Demonstrate competence with landing procedures in accordance with NAVAIR 01-75GAJ-1.

Prerequisite. FAM-1115.

**FAM-1117      2.0      \*      B,S      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 and introduce localizer back course (LOC-BC) procedures, holding in lieu of procedure turn procedures, and procedure turn procedures. The student will practice basic IFR procedures to include takeoffs, holding, instrument and missed approaches, and designated emergencies. and review landing procedures.

Performance Standard

In addition to the basic air work standards established in FAM-1116, 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 in accordance with NAVAIR 01-75GAJ-1.

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

Prerequisite. FAM-1116.

**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 and review landing procedures.

Performance Standard

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

Does not descend below minimums without the runway in sight during instrument approaches.

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

Prerequisite. FAM-1117.

**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.

Requirement. The flight will introduce KC-130J instrument flight en route operations. The instructor will discuss cold weather operating procedures and discuss and 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 and review airway navigation and landing procedures.

Performance Standard

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

Does not descend below minimums without the runway in sight during instrument approaches.

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

Prerequisite. FAM-1118.

**FAM-1120      2.0      \*      B,S,MR      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, CNI-MS programming, and instrument and missed approaches and review airway navigation and landing procedures.

Performance Standard

In addition to the basic air work standards established in FAM-1119, 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.

**FAM-1121      2.0      \*      B,S      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) approach, landing, and go-around procedures, airstarts, and designated emergency procedures and review fuel management procedures and instrument takeoffs.

Performance Standard

Demonstrate a working knowledge of OEI air minimum control speeds, engine failure after refusal speed, astart procedures, and approach, landing and go-around procedures with OEI.

Demonstrate competence with basic instrument approach and fuel management procedures.

Prerequisite. FAM-1120.

**FAM-1122      2.0      \*      B,S,MR      D      S      1 WST**

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

Requirement. The flight will emphasize KC-130J asymmetric engine configuration operations. The student will practice instrument approaches, OEI procedures, and designated emergency procedures and review fuel management procedures and instrument takeoffs.

Performance Standard

Demonstrate a working knowledge of OEI air minimum control speeds, fuel dumping, and approach, landing and go-around procedures with OEI.

Demonstrate competence in instrument takeoffs, basic instrument approaches, and fuel management procedures.

Prerequisite. FAM-1121.

**FAM-1123      2.0      \*      B      D      S      1 WST**

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

Requirement. The flight will emphasize KC-130J asymmetric engine configuration operations. The instructor will discuss and introduce two engines inoperative approach, landing, and go-around procedures. The student will practice instrument approaches, OEI procedures, two engines inoperative procedures, and designated emergency procedures and review the takeoff abort procedure

Performance Standard

Demonstrate a basic level of competence with the takeoff abort procedure, OEI procedures in IFR conditions, and two engine inoperative procedures in VFR conditions.

Demonstrate CRM in accordance with NAVAIR 01-75GAJ-1.





Performance Standard

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

Demonstrate competence in IFR clearance execution, crew briefing, instrument takeoffs, emergency return, airwork in accordance with NAVAIR 01-75GAJ-1 copilot checkride parameters, OEI instrument and missed approaches, no-HUD approaches, and circling approaches.

Demonstrate CRM in accordance with NAVAIR 01-75GAJ-1.

Prerequisite. FAM-1130.

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

Goal. Introduce aircraft emergency and miscellaneous equipment.

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

Performance Standard

Demonstrate knowledge of emergency equipment and preflight inspection procedures.

Prerequisite. CPT-1111.

External Syllabus Support. KC-130J.

2.7.3 Night Systems High (NS(H))

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

NS(H) Overview

NIGHT SYSTEMS (HIGH) STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
NITE LAB	8.0	*	B,S	G	G	NITE LAB PER LOCAL MAG
NS(H)-1150	2.0	*	B,S	NS	S/A	NVD INTRO

Admin Notes. The student will attend NITE Lab and complete the FRD-approved NS(H) ground training curriculum prior to this Stage. The student will be familiar with Air NTTP 3-22.3-KC130 and MAWTS-1 NVD Manual.

Instructor. FRSI NSI or CI NSI.

**NS(H)-1150 2.0 \* B,S 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) and Low Light Level (LLL) conditions. The instructor will discuss NVG operations, to include the use of oxygen mask with helmets and NVGs, aircraft lighting considerations, and introduce designated visual maneuvers with NVGs donned. The effects of shadowing, cultural lighting, and weather on NVG 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 Standard

Demonstrate competence with 100% and 50% landings and touch and go procedures while donning NVGs.

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

Prerequisite. FAM-1126 and NITE Lab.

External Syllabus Support. NITE Lab.

2.7.4 Long Range Navigation (LRN)







**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 and introduce maximum effort takeoffs, climb outs, and 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 lbs and two at a gross weight of 125,000 lbs. The student will review the takeoff abort procedure and engine failure after refusal speed.

Performance Standard

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

Prerequisite. FAM-1126.

**ALZ-1501 2.0 \* B,S 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 and introduce random high, random low/shallow, and IR-cooled approaches. The student will practice maximum and adjusted maximum effort takeoffs, climb outs, and landings. A minimum of two adjusted maximum effort takeoffs will be performed. A minimum of four maximum effort landings, with at least two to a full stop, will be performed. The student will review brake systems failure and ground evacuation.

Performance Standard

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. FAM-1126 and ALZ-1500.

2.7.9 Air-to-Air Refueling (AAR)

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

AAR Overview

AIR-TO-AIR REFUELING STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
AAR-1600	2.0	*	B	D	S/A	INTRO TO FWAAR/TAAR
AAR-1601	2.0	*	B	D	S/A	INTRO TO HAAR

Admin Notes. The student will complete the FRD-approved AAR ground training curriculum prior to this Stage. The student should be familiar with Air NTTP 3-22.3-KC130 and ATP-3.3.4.2.

Instructor. FRSI or CI AARI.

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

Goal. Introduce FWAAR and 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, FWAAR and TAAR rendezvous procedures, join-up procedures, AAR procedures, breakaway procedures, post-AAR procedures, and designated emergencies.

Performance Standard

Demonstrate competence in mission planning software in generating a 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-1126.

**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 and introduce 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 Standard

Demonstrate competence established in AAR-1600.

Demonstrate competence in HAAR procedures and voice communication.

Prerequisite. AAR-1600.

2.7.10 Air Delivery (AD)

Purpose. Introduce the pilot to air delivery operations.

AD Overview

AIR DELIVERY STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
ALZ-1700	2.0	*	B,S	D	S/A	INTRO TO AD PROC

Admin Notes. The student will complete the FRD-approved AD ground training curriculum prior to this Stage. The student should be familiar with Air NTTP 3-22.3-KC130 and AFI 11-231.

Instructor. FRSI ADI or CI ADI.

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

Goal. Introduce AD procedures.

Requirement. The flight will introduce KC-130J AD operations. The instructor will discuss and introduce low level static line 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 low level static line airdrop. The initial ingress will be via low level.

Performance Standard

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

Demonstrate competence in using mission planning software to generate a 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. TN-1202.

2.7.11 Familiarization (FCRM)

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 standard instrument checkride.

FCRM Overview

FAMILIARIZATION STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
FCRM-1800	2.0	*	B,S,R	D	A	FAM
FCRM-1801	2.0	*	B,S	(N*)	A	FAM
FCRM-1802	2.0	*	B,S,R	(N*)	A	FAM
FCRM-1803	2.0	*	B,S	D	A	FAM
FCRM-1804	2.0	*	B,S,R	(N*)	A	FAM

Instructor. FRSI.

**FCRM-1800 2.0 \* B,S,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, and 50% and 100% landings. Discuss the fuel system and fuel management procedures. Apply skill-based CRM principles during all mission phases.

Performance Standard

Demonstrate competence in normal takeoff, climb out, stall recovery, visual approach, full stop landing, and touch and go procedures.

Basic air work standards include +/- 10 KIAS, 200 feet 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 NAVAIR 01-75GAJ-1.

Prerequisite. FAM-1131 and FAM-1132.

External Syllabus Support. SUAS coordination.

**FCRM-1801 2.0 \* B,S (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 nonprecision instrument approaches using all available NAVAIDS and aircraft automation. Practice four engine missed approach, visual traffic patterns, and 50% and 100% landings. Practice performance data manipulation and associated impacts on TOLD, trip fuel, and en route time. Apply skill-based CRM principles during all mission phases.

Performance Standard

Refine basic air work standards.

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

Demonstrate competence flying instrument approaches using automation within airwork standards.

Prerequisite. FAM-1800.

**FCRM-1802 2.0 \* B,S,R (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 nonprecision instrument approaches emphasizing execution of procedure turns, holding, arcing, and circling. If available, practice LOC BC, DPs, and STARs. Practice four engine missed approach, visual traffic patterns, and 50% and 100% landings. Operate the digimap and radar systems to practice weather avoidance and windshear procedures. Apply skill-based CRM principles during all mission phases.

Performance Standard

- 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,S D A 1 KC-130J**

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

Requirement. Practice instrument approaches and visual traffic patterns through one engine inoperative (OEI) scenarios, and go-around with OEI procedures. Practice flight using oxygen mask and smoke goggles. Discuss hydraulic system failures. Apply skill-based CRM principles during all mission phases.

Performance Standard

- Demonstrate competencies established in FAM-1802.
- Demonstrate competence in OEI air minimum control speeds, engine failure after refusal speed procedures, airstart procedures, and approach, landing, and go-around procedures with OEI.
- Demonstrate competence in no-HUD and smoke mask approach procedures.

Prerequisite. FAM-1802.

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

Goal. Review aircraft handling through OEI 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 OEI scenarios, go-around with OEI procedures, and the takeoff abort procedure. Review the interpretation and management of multiple ACAWS messages, flight using the PFD, and use of oxygen mask and 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 Standard

- 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 PHASE (2000)

Purpose. This Phase provides the pilot with the fundamental, environmental, and conditional capabilities required to perform basic functions to serve as tactical enablers to allow progression to more complex Mission Skills.

General. The following Stages are included in the Core Phase of training.









aided. 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 NAVMC 3500.14 non-LAT minimums but not lower than comfort level.

Performance Standard

Create appropriate mission planning products.

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. TN-2201.

Range Requirement. Appropriate SUAS or MTR scheduled.

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

Goal. LLL tactical navigation procedures as 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 NAVMC 3500.14 minimums but not lower than comfort level.

Performance Standard

Create appropriate mission planning products.

Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. TN-2201.

Range Requirement. Appropriate SUAS or MTR scheduled.

2.9.5 Low Altitude Tactics (LAT)

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.

LAT Overview

LOW ALTITUDE TACTICS STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
LAT-2260	2.0	*	B,S	D	S/A	INTRO TO LAT PROC
LAT-2261	2.0	180	B,S,R,M	D	A	LAT PROC

Instructor. Shall be instructed by a LATI or CI LATI.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review Air NTTP 3-22.3-KC130.

General LAT rules of conduct (ROC) are contained in NAVMC 3500.14. All LAT sorties require all pilots 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, as well as initial event completion of TR-2400.

Upon completion of LAT qualification requirements, pilots shall be issued a LAT qualification letter from the commanding officer.

**LAT-2260      2.0      \*      B,S      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

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require a LAT profile. Review principles of energy management and masking techniques. Practice ridgeline crossings, terrain clearance turns, and conduct a MAC demonstration (simulator only). Minimum altitude is per NAVMC 3500.14 but not lower than comfort level.

Performance Standard

Create appropriate mission planning products.  
Minimal GCAS and TAWS alerts.  
Satisfactory completion of the maneuvers and procedures per Air NTTP 3-22.3-KC130.

Prerequisite. TN-2201.

Range Requirement. Scheduled appropriate LAT-approved SUAS if conducted in the aircraft.

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

Goal. LAT procedures.

Requirement. Review mission planning procedures for low altitude threat avoidance.. Review principles of energy management and masking techniques. Practice ridgeline crossings and terrain clearance turns. Minimum altitude per NAVMC 3500.14 minimums but not lower than comfort level.

Performance Standard

Create appropriate mission planning products.  
Minimal GCAS and TAWS alerts.  
Satisfactory completion of the maneuvers and procedures per Air NTTP 3-22.3-KC130.

Prerequisite. LAT-2260.

Range Requirement. Scheduled appropriate LAT-approved SUAS.

2.9.6 Formation (FORM)

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.

FORM Overview

FORMATION STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
FORM-2300	3.0	365	B,S,R,M	D	A/S	SEC FORM PROC
FORM-2301	3.0	365	B,S,R,M	(NS)	A	DIV FORM PROC
FORM-2350	2.0	180	B,S,R,M	NS	A/S	NIGHT FORM PROC

Instructor. Shall be instructed by a section leader.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review Air NTTP 3-22.3-KC130.

**FORM-2300      3.0      365      B,S,R,M                      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, takeoff, join/rendezvous, tanker formations, tactical formations (AAR and TN), concepts of mutual support, lead changes, underruns, overruns, 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 Standard

Attain and maintain the proper bearing line while in the cruise echelon 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 A/A TACAN.  
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 Air NTTP 3-22.3-KC130.

Range Requirement. Appropriate SUAS scheduled.

**FORM-2301 3.0 365 B,S,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 three 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. Initial event should be conducted during day.

Performance Standard

Attain and maintain proper cruise formation positions.  
Recognize excessive closure and safely execute the underrun procedure if required.  
Perform planned weather penetration procedures and reference position from lead via the LPCR, TCAS, or A/A TACAN.  
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 Air NTTP 3-22.3-KC130.

Prerequisite. FORM-2300 and FORM-2350, NSQ(H) or flown with NSI and SL if at night.

Range Requirement. Appropriate SUAS scheduled.

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

Goal. Night formation procedures.

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

Performance Standard

Attain and maintain the 45 degree bearing line while in the cruise echelon 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 A/A TACAN.  
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 Air NTTP 3-22.3-KC130.

Prerequisite. FORM-2300 and NSQ(H) or flown with a NSI and SL if at night. If division, FORM-2301.

Range Requirement. Appropriate SUAS scheduled.

### 2.9.7 Threat Reaction (TR)

Purpose. To attain and maintain the Threat Reaction Core Skill 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.

TR Overview

THREAT REACTION STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
TR-2400	2.0	180	B,S,R,M	(NS)	A/S	GROUND IR TR

Instructor. Shall be instructed by a LATI.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review Air NTTP 3-22.3-KC130, Air NTTP 3-22.1 (S), NAVAIR 01-75GAJ-1 ASE descriptions, and NTRP 3-22.4.

Aircraft must have an operational ASE suite that supports infrared(IR) threat reaction.  
Appropriate flares or sim bucket mirroring planned loadout shall be loaded prior to flight.  
Appropriate ground threat emitters shall be available.

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

Goal. Ground IR threat reaction.

Requirement. Introduce the ALE-47, AAR-47, ALQ-157, HUD/HDD symbology, and threat reaction. Discuss IR seeker head capabilities and limitations, threat reaction calls, AAR-47 limitations and flare “cocktail.” Review aircraft maneuvering that could produce high load factors. Practice bunts, jinks, hard turns, break turns, zoom climbs, and dive recoveries. 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 considerations should include the takeoff, cruise, and approach phases of flight. Initial code shall be accomplished in the aircraft during the day.

Performance Standard

Correct threat calls.  
Demonstrate proficiency and use of the ASE systems on both the defensive systems hard panel and CNI-MU.  
Execute the correct maneuvers.  
Satisfactory completion of the maneuvers and procedures per Air NTTP 3-22.3-KC130 3-22.3 and (S) Air NTTP 3-22.1-KC-130.

Prerequisite. LAT-2260.

Ordinance. 30 overt and 90 covert flares. 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 SAMs).

**2.10 MISSION PHASE (3000)**

Purpose. Upon completion of this Phase of training, the pilot will be qualified to operate day or night in the Mission Phase. This includes assault landing zone, air-to-air refueling, aviation-delivered ground refueling, and air delivery of cargo and personnel. Individuals and crews proficient in this Phase of training should be capable of planning, managing, and conducting mission essential tasks in contingency operations.

General. The following Stages are included in the Mission Phase of training.

Phase Overview.

MISSION PHASE		
STAGE	PARAGRAPH	PAGE NUMBER
ALZ	2.11.1	2-35
AAR	2.11.2	2-36
ADGR	2.11.3	2-38
AD	2.11.4	2-39

Admin Notes. 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.

Initial events flown in the simulator 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 may be conducted in the aircraft. Appropriate ORM policies should be used to reduce risk associated with not using a WST.

## 2.11 MISSION STAGES

### 2.11.1 Assault Landing Zone (ALZ)

**Purpose.** To attain and maintain the Assault Landing Zone Mission Skill. 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.

#### ALZ Overview

ASSAULT LANDING ZONE STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
ALZ-3500	2.0	180	B,S,R,M	D	A/S	ALZ PROCEDURES
ALZ-3501	2.0	365	B,S,R,M	(NS)	A/S	TACTICAL ARRIVALS
ALZ-3502	0.5	*	B,S	(N)	A	COMBAT OFFLOAD
ALZ-3503	0.5	730	B,S,R,M	(NS)	A	UNIMPROVED GROUND OPS
ALZ-3500	2.0	180	B,S,R,M	D	A	ALZ PROCEDURES

**Instructor.** Shall be instructed by an ALZI or WTI.

**Admin Notes.** Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review Air NTTP 3-22.3-KC130, NAVAIR 01-GAJ-1, and NAVAIR 01-GAJ-1.1.

**ALZ-3500      2.0      180      B,S,R,M                      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 adjusted maximum effort takeoffs, landings and obstacle clearance criteria with respect to TOLD. Perform a minimum of five touch and go landings, plus at least one maximum effort full stop landing and one adjusted maximum effort takeoff. Initial event shall be conducted in the aircraft.

#### Performance Standard

For initial event, complete manual TOLD calculations utilizing appropriate charts from NAVAIR 01-GAJ-1.1.

Consistent landings within the touchdown zone.

Consistent speed, centerline, and glideslope control.

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

**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,S,R,M                      (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 and egress of the terminal area and method of arrival based on threat. Discuss energy management. At least one 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.



AAR Overview.

AIR-TO-AIR REFUELING STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
AAR-3600	2.0	365	B,S,R,M	(NS)	A/S	FWAAR/TAAR PROC
AAR-3601	2.0	365	B,S,R,M	D	A/S	DAY HAAR PROC
AAR-3602	2.0	180	B,S,R,M	(NS)	S/A	AAR PANEL PROC
AAR-3600	2.0	180	B,S,R,M	NS	A/S	NIGHT HAAR PROC

Instructor. Shall be instructed by a BIP.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review Air NTTP 3-22.3-KC130 and ATP-3.3.4.2.

**AAR-3600 2.0 365 B,S,R,M (NS) A/S 1 KC-130J/WST**

Goal. FWAAR/TAAR procedures.

Requirement. Conduct single tanker FWAAR or TAAR. Emphasize detailed planning using mission planning software 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 Standard

Produce AAR briefing card, CFPS-generated route with orbit and appropriate fuel offload, and an appropriate refueling track using either FalconView or a paper chart.

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

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. NSQ(H) or flown with an NSI if NS.

External Syllabus Support. Fixed wing or tiltrotor receiver aircraft.

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

Goal. Day Helicopter AAR (HAAR) procedures.

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

Performance Standard

Produce AAR briefing card; mission planning software generated route with orbit and appropriate fuel offload, and an appropriate refueling track using either FalconView or a paper chart.

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

Arrive over the ARCP at planned ARCT.

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. LSF-2100

External Syllabus Support. Helicopter receiver aircraft.

**AAR-3602 2.0 180 B,S,R,M (NS) 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 Standard

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

Maintain lateral fuel balance in accordance with NAVAIR 01-75GAJ-1.

Observe NAVAIR 01-75GAJ-1 AR system limitations.

Satisfactory completion of the procedures per NAVAIR 01-75GAJ-1.

Prerequisite. AAR-3600 and AAR-3601.

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

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

Goal. Night HAAR procedures.

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

Performance Standard

Produce AAR briefing card, CFPS-generated route with orbit and appropriate fuel offload, and an appropriate refueling track using either FalconView or a paper chart.

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

Arrive over the ARCP at planned ARCT.

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. LSF-2100, AAR-3601, NSQ(H) or flown with an NSI.

External Syllabus Support. Helicopter receiver aircraft.

2.11.3 Aviation-Delivered Ground Refueling (ADGR)

Purpose. To attain and maintain the Aviation-Delivered 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 austere locations.

ADGR Overview

AVIATION-DELIVERED GROUND REFUELING STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
ADGR-3660	1.0	730	B,S,R,M	(NS)	A	ADGR PROCEDURES

Instructor. Shall be instructed by a BIP.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review Air NTTP 3-22.3-KC130.

**ADGR-3660    1.0    730    B,S,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 and post-stage areas, standard signals, and emergencies.

Performance Standard





Performance Standard

Produce a route consisting of proper ingress and egress routing using mission planning software and perform appropriate CARP calculations.

Correctly identify AD HUD symbology.

Efficient and correct execution of all checklist items.

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. AD-3700, NSQ(H) or flown with a NSI and ADI.

External Support. Unit jumpmaster and DZ control.

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

Goal. PM personnel low level static line AD.

Requirement. Plan and execute a personnel low level static line AD mission below 3,000 feet AGL. 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 and PROG pages. Initial code shall be conducted in the aircraft with actual personnel and should be conducted during the day.

Performance Standard

Produce a route consisting of proper ingress and egress routing using mission planning software and perform appropriate CARP calculations.

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

Manage all necessary CNI updates resulting in a successful drop.

Satisfactory completion of the procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. AD-3701, NSQ(H) or flown with a NSI and ADI.

External Support. Unit jumpmaster and DZ control.

2.12 CORE PLUS PHASE (4000-4499)

Purpose. Upon completion of this Phase of training, the pilot will be qualified to plan and execute low level formation operations, night systems (low) operations, and defensive tactics in a radar threat environment.

General. The following Stages are included in the Core Plus Phase of training.

Phase Overview

CORE PLUS PHASE		
STAGE	PARAGRAPH	PAGE NUMBER
TN	2.13.1	2-41
NS(L)	2.13.2	2-42
TR	2.13.3	2-43
DT	2.13.4	2-44

Admin Notes. Pilots receiving initial training as the PF or PM shall be instructed by a BIP, LATI, NSLATI, WTI, or DTI as specified in the Stage or event. Once a pilot has completed the initial event, subsequent events may be flown with another proficient pilot for that event unless a loss of proficiency in the event results in a loss of qualification. In that case, the pilot must fly with the appropriate Stage instructor.

Initial simulator events shall be conducted with an appropriate squadron instructor.

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

2.13 CORE PLUS STAGES

2.13.1 Formation Tactical Navigation (TN)

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 wingman in a formation in the low level environment.

TN Overview

FORMATION TACTICAL NAVIGATION STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
TN-4200	3.0	365	B,S,R,M	(NS)	A	FORM TN PROC

Instructor. 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 and NSI or WTI if conducted at night and shall be instructed by NSLATI if conducted at night in the LAT environment.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review MAWTS-1 ASPs and Air NTTP 3-22.3-KC130.

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

Goal. Formation TN procedures.

Requirement. Introduce en route tactical formations, tactical turns, and concepts of mutual support on a low level route of at least six waypoints. Event should be conducted from the wingman position. Practice normal and emergency procedures for formation flights, communication procedures, ground operations, takeoff, join and rendezvous, formation recoveries, lost sight, and inadvertent weather penetration procedures.

Performance Standard

- Create appropriate mission planning products to support the formation leader.
- Execute a formation TN profile including tactical turns into and away, dig and pinch, various tactical formations, lead changes, and defensive maneuvering with a scatter plan.
- Minimal GCAS and TAWS alerts while maintaining sight of preceding aircraft.
- Satisfactory completion of the maneuvers and procedures per the Air NTTP 3-22.3-KC130.

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

Range Requirement. Appropriate SUAS or MTR scheduled.

2.13.2 Night Systems (Low) (NS(L)).

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.

NS(L) Overview

NIGHT SYSTEMS (LOW) STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
NS(L)-4250	2.0	*	B,S	HLL	S/A	INTRO TO NSLAT
NS(L)-4251	2.0	180	B,S,R,M	HLL	A	NSLAT PROCEDURES

Instructor. Shall be instructed by a NSLATI.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review MAWTS-1 ASPs, NAVAIR 01-75GAJ-1, and Air NTTP 3-22.3-KC130.

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 commanding officer.

**NS(L)-4250      2.0      \*      B,S                      HLL      S/A      1 WST/ 1 KC-130J**

Goal. Introduce NSLAT procedures.

Requirement. Review principles of energy management, terrain masking techniques, and environmental impacts on NVDs. Practice ridgeline crossings, terrain clearance turns, and terrain masking while using NVDs. Minimum altitude per NAVMC 3500.14 minimums but not lower than comfort level.

Performance Standard

Create appropriate mission planning products  
Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. NSQ(H) and LATQ.

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

Goal. HLL LAT procedures.

Requirement. Review principles of energy management, terrain masking techniques, and environmental impacts on NVDs. Practice ridgeline crossings, terrain clearance turns, and terrain masking while using NVDs. Minimum altitude per NAVMC 3500.14 minimums but not lower than comfort level.

Performance Standard

Create appropriate mission planning products.  
Minimal GCAS and TAWS alerts.

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. NS(L)-4250.

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

### 2.13.3 Radar Threat Reaction (TR)

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.

TR Overview

RADAR THREAT REACTION STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
TR-4400	2.0	*	B,S	(NS)	A/S	INTRO TO GRND RADAR TR
TR-4401	2.0	180	B,S,R,M	(NS)	A	GROUND RADAR TR

Instructor. Shall be instructed by a WTI.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review MAWTS-1 ASPs, NAVAIR 01-75GAJ-1, Air NTTP 3-22.3-KC130, and (S) Air NTTP 3-22.1-KC-130.

Aircraft/WST must have an operational ASE suite that supports radar threat reaction.

Appropriate ground threat emitters shall be available.

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

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 NAVAIR 01-75GAJ-1, Air NTTP 3-22.3-KC130 and (S) Air NTTP 3-22.1-KC-130.

Prerequisite. LATQ

Ordnance. 300 chaff should be used if conducted in the aircraft.

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

External Syllabus Support. Radar threat emitters if conducted in the aircraft.

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**TR-4401      2.0      180      B,S,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 NAVAIR 01-75GAJ-1, Air NTTP 3-22.3-KC130, and (S) Air NTTP 3-22.1-KC-130.

Prerequisite. TR-4400.

Ordnance. 300 chaff.

Range Requirement. SUAS authorized for expendables.

External Syllabus Support. Appropriate RF threat emitters.

#### 2.13.4 Defensive Tactics (DT)

Purpose. To attain and maintain the Core Plus Skill of 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.

#### DT Overview

DEFENSIVE TACTICS STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
DT-4410	2.0	365	B,S,R,M	D	A	1 VS. 1 DEFTAC
DT-4411	2.0	365	B,S,R,M	D	A	1 VS. 2 DEFTAC

Instructor. Shall be instructed by a DTI.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review MAWTS-1 ASPs, NTRP 3-22.4, Air NTTP 3-22.3-KC130, and (S) Air NTTP 3-22.1-KC-130.

Aircraft must have fully operational ASE suite.

Appropriate expendables should 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 commanding officer. If a PF or PM is not proficient in DT, then the other pilot seat shall be occupied by a DTI.

**DT-4410      2.0      365      B,S,R,M      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 Standard

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

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. LATQ.

Ordnance. 120 flares should be used.

Range Requirement. SUAS authorized for expendables.

External Support. Appropriate single adversary aircraft.

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

Goal. Defensive tactics versus two 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 Standard

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

Satisfactory completion of the maneuvers and procedures per NAVAIR 01-75GAJ-1 and Air NTTP 3-22.3-KC130.

Prerequisite. DT-4410.

Ordinance. 120 flares should be used.

Range Requirement. SUAS authorized for expendables.

External Support. Appropriate section of adversary aircraft.

2.14 MISSION PLUS PHASE (4500-4999)

Purpose. Upon completion of this Phase of training, the pilot will be qualified to plan and execute advanced air delivery missions, battlefield illumination, and Harvest HAWK basic air support, multi-sensor imagery reconnaissance, and close air support as fire control officer (FCO) and pilot.

General. The following Stages are included in the Mission Plus Phase of training.

Phase Overview

MISSION PLUS PHASE		
STAGE	PARAGRAPH	PAGE NUMBER
AD	2.15.1	2-45
BI	2.15.2	2-46
HH	2.15.4	2-49
FCO BAS	2.15.5	2-51
FCO MIR	2.15.6	2-53
FCO CAS	2.15.7	2-53
PILOT BAS	2.15.8	2-55
PILOT MIR	2.15.9	2-56
PILOT CAS	2.15.10	2-57

Admin Notes. Pilots receiving initial training as the PF or PM shall be instructed by an ADI or HHI as specified in the Stage. Once a pilot has completed the initial event, subsequent events may be flown with another proficient pilot for that event.

Initial simulator events shall be conducted with an appropriate squadron instructor.

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

2.15 MISSION PLUS STAGES

2.15.1 Air Delivery (AD)

Purpose. To attain and maintain the Mission Plus Skill of Air Delivery (AD). Upon completion of this stage, the pilot will be capable of planning and executing combination, Military Freefall, and JPADS AD.

AD Overview

AIR DELIVERY STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
AD-4700	2.0	365	B,S,R,M	(NS)	A	COMBINATION AD
AD-4701	2.0	365	B,S,R,M	(NS)	A	MFF AD
AD-4702	2.0	365	B,S,R,M	(NS)	A	JPADS AD

Instructor. Shall be instructed by an ADI.



phase, the pilot will be capable of planning and executing BI.

BI Overview

BATTLEFIELD ILLUMINATION STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
BI-4710	2.0	365	B,S,R,M	N	A	BATTLEFIELD ILLUM

Instructor. Shall be instructed by an ADI.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review MAWTS-1 ASPs, NTRP 3-22.4, and Air NTTP 3-22.3-KC130.

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

Goal. Battlefield illumination.

Requirement. Provide overt or covert battlefield illumination with aircraft parachute flares (APFs) using Air NTTP 3-22.3-KC130 procedures. Emphasize planning in support of the ground scheme of maneuver, mission planning procedures, integration and deconfliction with other air assets, and emergency procedures.

Performance Standard

- Correctly account for illumination levels.
- Account for flare drift and burnout location.
- Satisfactory completion of the procedures per Air NTTP 3-22.3-KC130.

Prerequisite. AD-3701, NSQ(H) or conducted with an ADI and NSI if at night.

Ordinance. 14 aircraft parachute flares.

Range Requirement. SUAS authorized for aircraft parachute flares.

2.15.3 Harvest HAWK (HH)/Basic Air Support (BAS)/Multi-Sensor Imagery Reconnaissance (MIR)/Close Air Support (CAS)

Purpose. To attain and maintain the Mission Plus Skills necessary for conducting close air support and multi-sensor imagery reconnaissance for HH Fire Control Officers (FCOs), aircraft commanders, and copilots.

HH Overview. The following table provides an overview of the entire Harvest HAWK syllabus.

Event	Description	AC	FCO	CP	CM	Flt Hours	Refly	Live Ord
HH-4800	HH Ground FAM (PTT)		X					
HH-4801	HH PTT FAM		X				180	
HH-4802	HH FCC Intro		X					
HH-4803	HH Ground FAM	X	X	X	X			
HH-4804	HH Flight FAM	X	X	X		2.5		
BAS-4860/10	Intro to day weapons employment	X	X	X		2.5		
BAS-4861/11	Day weapons employment	X	X	X		2.5		
BAS-4862/12	Live weapons employment	X <sup>(3)</sup>	X <sup>(1)</sup>			2.5		X <sup>(1)</sup>
MIR-4870/20	MIR	X	X			2.5	FCO/AC-365	
CAS-4880/30	CAS <sup>(2)</sup>	X	X	X	X	2.5	FCO/AC/CM-180	
CAS-4890/40	Urban CAS	X	X			2.5		
	Total Flight Hours (minimum)	17.5	17.5	10.0	2.5			

Notes:

(1) One live SOPGM and one live Hellfire.

(2) In order to carry ordnance, the AC and FCO must both be proficient in CAS-4880 and CAS-4830, respectively. This event may be updated by conducting actual or simulated engagements, under CAS conditions, day or night.

(3) BAS-4862 does not require live ordnance for aircraft commander qualification.

Instructor. Shall be in instructed by a HHI

Admin Notes. Pilots and FCOs for Harvest HAWK will train based on the recommendation of the Aircrew Performance Review Board (APRB).

Commanding officers shall ensure that prospective Harvest HAWK pilots and FCOs complete the following MarineNet Courses prior to the start of HH ground school:

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

All pilots and FCOs shall receive the following classes, comprising Harvest HAWK ground school (instructed by a HHI) prior to commencing HH Mission Plus training:

- Harvest HAWK Introduction/Equipment Overview
- TCDL Operation
- TACVIEW Operation
- Digital Video Recorder
- Target Sight Sensor
- Tracker Operation
- FalconView integration



tactical LASER operation, coordinate generation, use of “GO-TO” and reference position and operation of FalconView (as integrated on Harvest HAWK).

Discuss Harvest HAWK power up considerations, FCC/BMS/TSS troubleshooting procedures, and shutdown procedures.

Perform boresight of TSS.

Performance Standard

Properly operate the FCC and associated hardware in accordance with applicable publications.

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

Prerequisite. HH-4800.

**HH-4802      1.0      \*      B,S      D      A,G      1 KC-130J HH**

Goal. Introduce FCC operation (ground familiarization).

Requirement

Using a static Harvest HAWK aircraft, introduce all control panels, menus, and displays of the FCC, joystick functionality, GUI operation, use of the BMS laptop, operation of the TSS (using both EO and IR cameras (both polarities) in all FOVs, emphasizing level, gain, and focus adjustments, use of AG and UR tracker modes, manual tracking considerations, LASER ranger-finder and tactical LASER operation, and coordinate generation.

Performance Standard. Correctly operate all functions of the FCC.

Prerequisite. HH-4801.

**HH-4803      2.0      \*      B,S      D      S/A      1KC-130J HH PTT/KC-130J HH**

Goal. Develop proficiency in FCC operation.

Requirement

Discuss Harvest HAWK system preflight, day MIR considerations, night MIR considerations, weapons malfunctions, emergency procedures, scan techniques (route, convoy, and pattern of life), and external communication.

Introduce use of the digital video recorder.

Review use of the BMS laptop, operation of the 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, LASER range-finder and tactical LASER operation, coordinate generation, use of “GO-TO” and reference position, operation of mission planning software (as integrated on Harvest HAWK) and TCDL application.

Perform boresight of TSS.

Performance Standard

Properly preflight, power up, operate, and shutdown the FCC and associated hardware in accordance with applicable publications.

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

Prerequisite. HH-4802.

**HH-4804      2.5      \*      B,S      D      A      1 KC-130J HH**

Goal. Develop proficiency in FCC operation in flight.

Requirement

Discuss day MIR considerations, night MIR consideration, weapons malfunctions and emergency procedures, scan techniques (route, convoy, and pattern of life), and external communications.

In flight, practice use of the BMS laptop, operation of the 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, LASER range-finder and tactical LASER operation, coordinate

generation, use of “GO-TO” and reference position, operation of mission planning software (as integrated on Harvest HAWK) and TCDL application.

Perform boresight of TSS.

Performance Standard

Properly preflight, power up, operate, and shutdown the entire FCC and associated hardware in accordance with applicable publications.

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

Prerequisite. HH-4803.

Range Requirement. LASER-approved range desired.

2.15.5 FCO Basic Air to Surface (FCO BAS)

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.

FCO BAS Overview

FCO BASIC AIR SUPPORT STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
BAS-4810	2.5	*	B,S	D	S/A	INTRO TO DAY WEAPONS
BAS-4811	2.5	*	B,S	D	A	DAY WEAPONS EMPL
BAS-4812	2.5	*	B,S	(N)	A	LIVE WEAPONS EMPL

Instructor. Shall be instructed by a HHI.

Admin Notes. 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 (in accordance with 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 or simulated TACP, coordinates generated on the aircraft using PSS-SOF, or simulated or 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.

**BAS-4810                      2.5                      \*                      B,S                      D                      S/A                      1KC-130J HH PTT/KC-130J HH**

Goal. Introduce weapons employment.

Requirement

Discuss Harvest HAWK capabilities and components, target correlation, Hellfire employment, SOPGM employment, MIR considerations, and Hellfire emergency procedures.

Introduce DASC check in procedures, Hellfire BOT attack profiles, Hellfire BOC profiles, SOPGM BOT attack profiles, SOPGM BOC attack profiles, and target correlation with the aircraft commander.

Three simulated Hellfire engagements shall be conducted using BOT techniques. One of these engagements shall use manual tracking of the target through impact.

One simulated Hellfire attack shall be conducted using BOC techniques.

Three simulated SOPGM engagements shall be conducted using BOT techniques. One of these engagements shall use manual tracking of the target through impact.

One simulated SOPGM attack shall be conducted using BOC techniques.

Performance Standard

Operate system in accordance with applicable publications and demonstrate knowledge of sensor system capabilities.



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-4810.

Ordnance. 1 AGM-114P and 1 SOPGM.

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

#### 2.15.6 FCO Multi-Sensor Imagery Reconnaissance (FCO MIR)

Purpose. The purpose of this Stage is to develop FCO proficiency in conducting MIR.

##### FCO MIR Overview

FCO MULTI-SENSOR IMAGERY RECONNAISSANCE STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
MIR-4820	2.5	180	B,S,R,M	(N)	A	MIR PROFICIENCY

Instructor. Shall be instructed by a HHI.

Admin Notes. Upon completion of this the FCO MIR and CAS Stages, 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 FCO's NATOPS jacket.

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

After initial MIR-4820 event completion, this event may be logged on any sortie in which the FCO operates the TSS.

**MIR-4820      2.5      180      B,S, R,M                      (N)      A      1 KC-130J HH**

Goal. Develop proficiency in MIR.

##### Requirement

Initial event shall be conducted at night.

Discuss friendly marking techniques and sensor capabilities, ground convoy escort techniques, and counter-IED operations and route scans.

Review talk-on technique, use of GRG and KILSWITCH, communication brevity terms applicable to MIR and CAS, detection of enemy and friendly positions, friendly battle tracking, JTAC updates, and point, area, and route scanning.

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

##### Performance Standard

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. HH-4804.

Ordnance. 1 AGM-114P CATM and 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

#### 2.15.7 FCO Close Air Support (FCO CAS)

Purpose. The purpose of this Stage is to develop FCO proficiency in conducting CAS.

FCO CAS Overview

FCO CLOSE AIR SUPPORT STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
CAS-4830	2.5	180	B,S,R,M	(N)	A	CAS
CAS-4840	2.5	*	B,S	(N)	A	URBAN CAS

Instructor. Shall be instructed by a HHI.

Admin Notes. Upon completion of this the FCO MIR and CAS Stages, the FCO shall be considered qualified to conduct MIR and CAS using the Harvest HAWK system. A qualification letter by the commanding officer shall be placed in the FCO's NATOPS jacket.

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

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).

**CAS-4830      2.5      180      B,S, R,M                      (N)      A              1 KC-130J HH**

Goal. Refine CAS procedures.

Requirement

Discuss TC DL uplinks and downlinks, CAS stack management, battle damage assessment versus bomb high analysis, sensor nadir, and uncontrolled sensor slew.

Conduct CAS check in.

Three simulated Hellfire engagements shall be conducted using BOT techniques.

Three simulated SOPGM engagements shall be conducted using BOT techniques.

One engagement shall use manual target tracking through impact.

One engagement shall be conducted under type 3 control.

Review CAS and LASER terminology.

Performance Standard

Execute standard CAS procedures and CAS communications under the control of a JTAC/FAC(A) in accordance with JP 3-09.3.

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).

LASER aimpoint is established on the target prior to launch and maintained on track 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 and 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

**CAS-4840      2.5      \*      B,S                                      (N)      A              1 KC-130J HH**

Goal. Introduce Urban CAS.

Requirement

Discuss urban CAS procedures, CAS and LASER terminology, MIR to CAS considerations, CDE considerations in the urban environment, CASEVAC procedures, and aural signature.

MIR to CAS operations shall be conducted in an urban operation.

Two simulated Hellfire engagements shall be conducted using BOT techniques.

Two simulated SOPGM engagements shall be conducted using BOT techniques.

Performance Standard





MIR Overview

MULTI-SENSOR IMAGERY RECONNAISSANCE STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
MIR-4870	2.5	180	B,S,R,M	(N)	A	MIR PROFICIENCY

Instructor. Shall be instructed by a HHI.

Admin Notes. Upon completion of this Stage, aircraft commanders shall be considered qualified to conduct MIR using the Harvest HAWK system.

The MIR-4870 event should be completed using support from a ground JTAC.

**MIR-4870 2.5 365 B,S,R,M (N) A 1 KC-130J HH**

Goal. Develop proficiency in MIR.

Requirement

Initial event shall be conducted at night.

Discuss friendly marking techniques and sensor capabilities, ground convoy/patrol escort techniques, and counter-IED operations and route scans.

Practice detection and recognition of friendly and enemy positions as directed by a JTAC and maneuvering the aircraft to minimize sensor and LASER mask conditions (CP).

Performance Standard

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. HH-4804.

Ordnance. 1 AGM-114P CATM and 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

2.15.10 Pilot Close Air Support (CAS)

Purpose. The purpose of this Stage is to develop pilot proficiency in conducting CAS.

CAS Overview

CLOSE AIR SUPPORT STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
CAS-4880	2.5	180	B,S,R,M	(N)	A	CAS
CAS-4890	2.5	*	B,S	(N)	A	URBAN CAS

Instructor. Shall be instructed by a HHI.

Admin Notes. Upon completion of this Stage, aircraft commanders shall be considered qualified in MIR and CAS. A qualification letter from the commanding officer shall be placed in the pilot's NATOPS jacket.

Copilots that upgrade to aircraft commander must complete BAS-4862, MIR-4870, CAS-4890 as an aircraft commander prior to receiving qualification in CAS and MIR.

CAS-4880 should be completed using support from a ground JTAC.

CAS-4890 shall be completed using support from either a ground JTAC, an instructor on board the aircraft playing the role of the JTAC, or in support of a FAC(A).

**CAS-4880 2.5 180 B,S,R,M (N) A 1 KC-130J HH**

Goal. Refine CAS procedures.

Requirement

NAVMC 3500.53D  
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Discuss weaponeering, danger close considerations, buddy-lase considerations, CAS procedures, CAS and LASER terminology.

Monitor CAS check in from the FCO and copy SITREP.

Three simulated Hellfire engagements shall be conducted using BOT techniques.

Three simulated SOPGM engagements shall be conducted using BOT techniques.

One simulated engagement shall be conducted under type 3 control.

Practice CNI-MU entries to support attack geometry and maneuvering the aircraft into appropriate attack geometry.

Performance Standard

Execute standardized CAS procedures and CAS communications under the control of a JTAC in accordance with JP 3-09.3.

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. BAS-4861.

Ordnance. 1 AGM-114P CATM and 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

**CAS-4890      2.5      \*      B,S      (N)      A      1 KC-130J HH**

Goal. Introduce Urban CAS.

Requirement

Discuss CDE considerations, urban CAS procedures, CAS and LASER terminology, CDE considerations, and CASEVAC procedures.

Assist the FCO in target correlation (AC).

Two simulated Hellfire engagements shall be conducted using BOT techniques.

Two simulated SOPGM engagements shall be conducted using BOT techniques.

Practice maneuvering aircraft into appropriate attack geometry.

Demonstrate use of KILSWITCH/GRG.

Performance Standard

Execute standardized CAS procedures and CAS communications under the control of a JTAC in accordance with JP 3-09.3.

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-4880.

Ordnance. 1 AGM-114P CATM and 1 SOPGM CATM.

Range Requirement. Suitable SUAS.

External Syllabus Support. TACP.

**2.16 INSTRUCTOR TRAINING PHASE (5000)**

Purpose. The purpose of this Phase is to train qualified pilots to instruct various levels of instruction.

General. The following Stages are included in the Instructor Training Phase of training.







Purpose. Certify and designate the pilot as an NSI.

NSI Overview

<b>NIGHT SYSTEMS INSTRUCTOR STAGE</b>						
<b>EVENT</b>	<b>TIME</b>	<b>PROFICIENCY PERIOD</b>	<b>POI</b>	<b>COND</b>	<b>DEVICE</b>	<b>DESCRIPTION</b>
NSI-5150	2.0	*	B,S,R	NS	A	NS(H) FAM IUT
NSI-5151	2.0	*	B,S,R	NS	A	NS(H) TN IUT
NSI-5152	2.0	*	B,S,R	NS	A	NSI CERTIFICATION

Instructor. Refer to the MAWTS-1 KC-130J Course Catalog.

Admin Notes. Refer to NAVMC 3500.14 and the MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the NSI shall be designated in writing by the commanding officer.

**NS(H)-5150 2.0 \* B,S,R NS A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**NS(H)-5151 2.0 \* B,S,R NS A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**NS(H)-5152 2.0 \* B,S,R NS A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

2.17.5 Low Altitude Tactics Instructor (LATI)

Purpose. Certify and designate the pilot as a LATI.

LATI Overview

<b>LOW ALTITUDE TACTICS INSTRUCTOR STAGE</b>						
<b>EVENT</b>	<b>TIME</b>	<b>PROFICIENCY PERIOD</b>	<b>POI</b>	<b>COND</b>	<b>DEVICE</b>	<b>DESCRIPTION</b>
LAT-5210	2.0	*	B,S,R	D	A	LAT IUT
LAT-5211	2.0	*	B,S,R	D	A	LAT IUT
LAT-5212	2.0	*	B,S,R	D	A	LATI CERTIFICATION

Instructor. Refer to the MAWTS-1 KC-130J Course Catalog.

Admin Notes. Refer to NAVMC 3500.14 and the MAWTS-1 KC-130J Course Catalog. Upon certification, the LATI shall be designated in writing by the commanding officer.

**LAT-5210 2.0 \* B,S,R D A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**LAT-5211 2.0 \* B,S,R D A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**LAT-5212 2.0 \* B,S,R D A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

2.17.6 Night Systems LAT Instructor (NSLATI)

Purpose. Certify and designate the pilot as an NSLATI.

NSLATI Overview

NIGHT SYSTEMS LOW ALTITUDE TACTICS INSTRUCTOR STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
NS(L)-5250	2.0	*	B,S,R	HLL	A	NSLAT IUT
NS(L)-5251	2.0	*	B,S,R	HLL	A	NSLATI CERTIFICATION

Instructor. Refer to the MAWTS-1 KC-130J Course Catalog.

Admin Notes. Refer to NAVMC 3500.14 and the MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the NSLATI shall be designated in writing by the commanding officer.

**NS(L)-5250 2.0 \* B,S,R HLL A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**NS(L)-5250 2.0 \* B,S,R HLL A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

2.17.7 Harvest HAWK Instructor (HHI)

Purpose. Certify and designate the pilot as a HHI.

HHI Overview

HARVEST HAWK INSTRUCTOR STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
HH-5310	3.0	*	B,S,R	(N)	A	HH IUT
HH-5311	3.0	*	B,S,R	(N)	A	HHI CERTIFICATION

Instructor. Refer to the MAWTS-1 KC-130J Course Catalog.

Admin Notes. Refer to NAVMC 3500.14 and the MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the HHI shall be designated in writing by the commanding officer.

**HH-5310 3.0 \* B,S,R (N) A 1 KC-130J HH**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**HH-5311 3.0 \* B,S,R (N) A 1 KC-130J HH**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

2.17.8 Flight Leadership Standardization Evaluator (FLSE)

Purpose. Certify and designate the pilot as a FLSE.

FLSE Overview

FLIGHT LEADERSHIP STANDARDIZATION EVALUATOR STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
FLSE-5320	3.0	*	B,S,R	(NS)	G	FLSE IUT
FLSE-5321	3.0	*	B,S,R	(NS)	A	FLSE CERTIFICATION
FLSE-5322	2.0	90	B,S,R,M		G	FLSE QUARTERLY TRNG

Instructor. Refer to the MAWTS-1 KC-130J Course Catalog.

Admin Notes. Refer to NAVMC 3500.14 and the MAWTS-1 KC-130J Course Catalog. Upon certification by the FLSE PC or MM, the FLSE shall be designated in writing by the group commanding officer.

**FLSE-5320 3.0 \* B,S,R (NS) G 2+ KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**FLSE-5321 3.0 \* B,S,R (NS) A 2+ KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**FLSE-5322 2.0 90 B,S,R,M G**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

### 2.17.9 Defensive Tactics Instructor (DTI)

Purpose. Certify and designate the pilot as a DTI.

#### DTI Overview

DEFENSIVE TACTICS INSTRUCTOR STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
DT-5410	1.0	*	B,S,R	D	A	DT IUT
DT-5411	1.0	*	B,S,R	D	A	DT IUT
DT-5412	2.0	*	B,S,R	D	A	DTI CERTIFICATION

Instructor. Refer to the MAWTS-1 KC-130J Course Catalog.

Admin Notes. Refer to NAVMC 3500.14 and the MAWTS-1 KC-130J Course Catalog. Upon certification by MAWTS-1, the DTI shall be designated in writing by the commanding officer.

**DT-5410 1.0 \* B,S,R D A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**DT-5411 1.0 \* B,S,R D A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

**DT-5412 2.0 \* B,S,R D A 1 KC-130J**

Refer to the MAWTS-1 KC-130J Course Catalog for specific event information.

### 2.17.10 Stage Instructor (SI)

Purpose. Designate the pilot as an Assault Landing Zone or Air Delivery Stage Instructor pilot (ALZI or ADI). Stage instructors may instruct in specifically-designated Mission Skill and Mission Plus Skill areas.

#### SI Overview

STAGE INSTRUCTOR STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
ALZ-5500	2.0	*	B	NS	A	ALZI CHECK
AD-5700	2.0	*	B,S	(NS)	S/A	ADI IUT
AD-5701	2.0	*	B,S	(NS)	A	ADI CHECK

Instructor. Shall be instructed an ALZI and NSI, ALZI and ANI, or WTI or an ADI, as depicted for events.

Admin Notes. Utilize academic courseware as outlined in the MAWTS-1 KC-130J Course Catalog and review MAWTS-1 ASPs, NAVAIR 01-75GAJ-1, NAVAIR 01-75GAJ-1.1, and Air NTTP 3-22.3-KC130.

IUTs shall satisfactorily instruct an appropriate stage ASP or ground training syllabus which shall be observed by either a current SI or WTI.

Instructors may only instruct the Stage in which they are designated and for events in which they are proficient.

ALZIs and ADIs shall be designated in writing by the commanding officer.

**ALZ-5500 2.0 \* B NS 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









2.18 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, DESIGNATIONS (RCQD) PHASE(6000)

Purpose. The purpose of this Phase is to provide a vehicle for tracking events associated with certifications, qualifications, and designations.

General. The following Stages are included in the Requirements, Certifications, Qualifications, Designations Phase of training.

Phase Overview

<b>REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATIONS PHASE</b>		
<b>STAGE</b>	<b>PARAGRAPH</b>	<b>PAGE NUMBER</b>
FCP	2.19.1	2-69
NTPS	2.19.2	2-70
INST	2.19.3	2-72
SL	2.19.4	2-73
DL	2.19.5	2-75
RAC	2.19.6	2-76

Admin Notes. Once the flight to attain the qualification or designation is complete, a letter from the commanding officer shall be placed in the individual's NATOPS jacket before that qualification/designation can be utilized.

2.19 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, DESIGNATIONS STAGES

2.19.1 Functional Check Pilot (FCP)

Purpose. Designate the TPC as a FCP.

FCP Overview

<b>FCP STAGE</b>						
<b>EVENT</b>	<b>TIME</b>	<b>PROFICIENCY PERIOD</b>	<b>POI</b>	<b>COND</b>	<b>DEVICE</b>	<b>DESCRIPTION</b>
FCP-6105	4.0	365	B,S,R,M	D	A/S	PARTIAL FCP CERT/PROF
FCP-6106	4.0	*	B,S	D	A	FCP CERT

Instructor. Shall be instructed by a FCP or CI.

Admin Notes. FCPs shall be designated in writing by the commanding officer.

FCP-6105 shall be logged as the Maintain code tracking all Functional Check Flight (FCF) events, full or partial.

TPCs must have 150 TPC hours in series and a minimum of three FCFs (two "A" Profiles) to be eligible for FCP. There is no minimum hour requirement for a TPC to be designated a partial FCP.

**FCP-6105      4.0      365      B,S,R,M                      D      A/S      1 KC-130J/WST**

Goal. Partial FCP evaluation and FCP proficiency.

Requirement. The flight shall consist of a "B" profile FCF and be instructed by a FCP or CI. Upon completion of this code, the pilot will be qualified to conduct B-D card FCFs.

Performance Standard. Satisfactorily execute procedures per NAVAIR 01-75GAJ-1, OPNAVINST 3710.7, and OPNAVINST 4790.2.

Prerequisite. FCP exam, 6118, and APRB recommendation.

**FCP-6106      4.0      \*      B,S                      D      A      1 KC-130J**

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-D card FCFs.

Performance Standard. Satisfactorily execute procedures per NAVAIR 01-75GAJ-1, OPNAVINST 3710.7, and

OPNAVINST 4790.2.

Prerequisite. FCP-6105, three total FCFs (with two “A” profiles, one in the aircraft), 150 KC-130J TPC hours, and APRB recommendation.

2.19.2 KC-130J NATOPS Evaluation (NTPS)

Purpose. The purpose of this Stage is to evaluate the pilot’s knowledge of aircraft systems, performance limitations, emergency procedures, and flight and ground operations for NATOPS qualification.

NTPS Overview

NATOPS STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
NTPS-6110	2.0	365	B,S,R,M	(N)	A/S	T3P NATOPS QUAL
NTPS-6111	2.0	365	B,S,R,M	(N)	S/A	T2P NATOPS QUAL
NTPS-6112	3.0	*	B,S	(N)	S	TPC UPGRADE SIM
NTPS-6113	3.0	*	B,S	(N)	S	TPC UPGRADE SIM
NTPS-6114	3.0	*	B,S	(N)	S	TPC UPGRADE SIM
NTPS-6115	3.0	*	B,S	(N)	S	TPC UPGRADE SIM
NTPS-6116	3.0	*	B,S	(N)	S	TPC UPGRADE SIM
NTPS-6117	18.0	*	B,S	(N)	A	TPC ROUTE CHECK
NTPS-6118	2.0	365	B,S,R,M	(N)	A/S	TPC NATOPS QUAL
NTPS-6120	1.0	90	B,S,R,M	(N)	S/A	EP REVIEW

Instructor. Shall be instructed by an ANI or CI NI or CI (NTPS-6112-6116,6120). Initial T3P checkrides shall be completed by a FRSI. Subsequent T3P checkrides may be instructed by an ANI (simulator: CI NI).

Admin Notes. The NATOPS Evaluator/Instructor shall utilize the NATOPS Model Manager-generated NATOPS evaluation form and the NATOPS evaluation metrics required for the accomplishment and performance of the standardized criteria to determine whether the pilot is considered “Qualified.” Prior to the oral examination, the NATOPS Evaluator/Instructor shall review the evaluatee’s NATOPS monthly emergency procedures examinations and quarterly simulator/cockpit drills located in the APR for the previous twelve months and previous NATOPS evaluations. 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.

At the discretion of the commanding officer, a letter designating the pilot as NATOPS qualified shall be placed in the individual’s NATOPS jacket.

NATOPS evaluatees without a current NATOPS check shall fly as an unqualified pilot with a FRSI.

**NTPS-6110 2.0 365 B,S,R,M (N) A/S 1 KC-130J/WST**

Goal. Complete Transport Third Pilot (T3P) NATOPS flight evaluation. Conduct an objective evaluation of the pilot’s knowledge of mission planning, normal operating procedures (flight and ground), crew resource management, aircraft systems, performance criteria, emergency procedures, and debriefing. The focus is on normal and emergency procedures, 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 pilot’s efficiency in the execution of normal operating procedures and reaction to emergencies and malfunctions. The NATOPS evaluation process should be as much a learning tool and/or experience as it is an evaluation.

Requirement. Conduct NTPS-6110 evaluation flight. Demonstrate comprehensive knowledge and understanding of NATOPS, squadron SOP, and local course rules. Initial T3P qualification shall be conducted in the aircraft with a FRSI.

Performance Standard. Executes flight and ground operations safely and in accordance with NAVAIR 01-75GAJ-1 standards.

Prerequisite. FCRM-1804.

**NTPS-6111    2.0    365    B,S,R,M    (N)    S/A    1 WST/KC-130J**

Goal. Complete Transport Second Pilot (T2P) NATOPS flight evaluation. Conduct an objective evaluation of the pilot's knowledge of mission planning, normal operating procedures (flight and ground), crew resource management, aircraft systems, performance criteria, emergency procedures, and debriefing. The focus is on normal and emergency procedures, 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 pilot's efficiency in the execution of normal operating procedures and reaction to emergencies and malfunctions. The NATOPS evaluation process should be as much a learning tool and/or experience as it is an evaluation.

Requirement. Conduct NTPS-6111 evaluation flight. Demonstrate comprehensive knowledge and understanding of NATOPS, squadron SOP, and local course rules.

Performance Standard. Executes flight and ground operations safely and in accordance with NAVAIR 01-75GAJ-1 standards.

Prerequisite. Shall be Core Skill Phase complete, should be Mission Skill Phase Complete, ACPM-82XX Phase complete, APRB recommendation, NTPS-6110, T2P Open Book Tactics Examination (not required for subsequent evaluations).

**NTPS-6112    3.0    \*    B,S    (N)    S    1 WST**

Goal. Prepare T2P for upgrade to Transport Plane Commander (TPC).

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per NAVAIR 01-75GAJ-1 and NAVAIR 00-80T-112.

Prerequisite. NTPS-6111 and APRB recommendation.

**NTPS-6113    3.0    \*    B,S    (N)    S    1 WST**

Goal. Prepare T2P for upgrade to TPC.

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per NAVAIR 01-75GAJ-1 and NAVAIR 00-80T-112.

Prerequisite. NTPS-6112.

**NTPS-6114    3.0    \*    B,S    (N)    S    1 WST**

Goal. Prepare T2P for upgrade to TPC.

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per NAVAIR 01-75GAJ-1 and NAVAIR 00-80T-112.

Prerequisite. NTPS-6113.

**NTPS-6115    3.0    \*    B,S    (N)    S    1 WST**

Goal. Prepare T2P for upgrade to TPC.

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per NAVAIR 01-75GAJ-1 and NAVAIR 00-80T-112.

Prerequisite. NTPS-6114.

**NTPS-6116    3.0    \*    B,S    (N)    S    1 WST**

Goal. Prepare T2P for upgrade to TPC.

Requirement. Review NATOPS normal, emergency, and instrument procedures.

Performance Standard. Per NAVAIR 01-75GAJ-1 and NAVAIR 00-80T-112.

Prerequisite. NTPS-6115.

**NTPS-6117    18.0    \*    B,S    (N)    A    1 KC-130J**

Goal. TPC route check.

Requirement. The pilot will demonstrate the ability to manage all aspects of an extended mission. Evaluation should be a long range mission involving cargo handling, international flight procedures, route planning, and aircrew management. This flight should involve multiple legs with RON.

Performance Standard. Per NAVAIR 01-75GAJ-1, FLIP, FCG and published SOPs.

Prerequisite. NTPS-6111 and should be completed following NTPS-6116.

External Syllabus Support. RON airfields.

**NTPS-6118    2.0    365    B,S,R,M    (N)    A/S    1 KC-130J/WST**

Goal. Complete TPC NATOPS flight evaluation. Conduct an objective evaluation of the pilot's knowledge of mission planning, normal operating procedures (flight and ground), crew resource management, aircraft systems, performance criteria, emergency procedures, and debriefing. The focus is on normal and emergency procedures, 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 pilot's efficiency in the execution of normal operating procedures and reaction to emergencies and malfunctions. The NATOPS evaluation process should be as much a learning tool and/or experience as it is an evaluation. 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 and in accordance with NAVAIR 01-75GAJ-1 standards.

Executes flight leadership expected of a Transport Plane Commander.

Prerequisite. NSQ(H), currency/flight time per NAVAIR 01-75GAJ-1, and the specific requirements for TPC designation per OPNAVINST 3710.7. Core Skill Phase and Mission Skill Phase complete, ACPM-83XX Phase complete, NTPS-6116, and NTPS-6117. NTPS-6116 or NTPS-6120 should be completed within the 30 days prior to NTPS-6118.

**NTPS-6120    1.0    90    B,S,R,M    (N)    S/A    1 WST/KC-130J**

Goal. Conduct emergency procedures review in accordance with NAVMC 3500.14.

Requirement. This event will review KC-130J emergency procedures and fulfills the requirement of quarterly EP simulator training. In the event the simulator is unavailable, the EP review may be conducted in the aircraft as a static event. The event shall be instructed by a CI or ANI.

Performance Standard. Comply with NAVAIR 01-75GAJ-1.

2.19.3 Instrument Evaluation (INST)

Purpose. Evaluate the pilot's knowledge and application of instrument procedures and techniques in order to qualify for an instrument rating.

INST Overview

INSTRUMENT STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
NTPS-6130	2.0	365	B,S,R,M	(N)	S/A	STANDARD INST CHECK
NTPS-6131	2.0	365	B,S,R,M	(N)	S/A	SPECIAL INST CHECK

Instructor. Shall be instructed by an ANI Instrument Flight Board member (simulator: CI NI).

Admin Notes. General policy, requirements, and prerequisites concerning instrument evaluations are contained in OPNAVINST 3710.7.





Prerequisite. SL-6300, ACPM-8630, and ACPM-8660.

Range Requirement. Appropriate SUAS scheduled.

**SL-6302      2.0      365      B,S,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 standard for that event.

Prerequisite. SL-6301.

2.19.5 Division Leader (DL)

Purpose. Certify the pilot for designation as a division lead.

DL Overview

DIVISION LEADER STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
DL-6303	3.0	*	B	(NS)	A	DL PRACTICE
DL-6304	3.0	*	B,S	(NS)	A	DL CERT
DL-6305	2.0	365	B,S,R,M	(NS)	A	DL PROFICIENCY

Instructor. Shall be instructed by a division lead and certified by a FLSE.

Admin Notes. All requirements delineated in the matrix below shall be completed prior to the DL certification event.

For prospective DLs, 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.

Upon completion of the certification flight, pilots shall also log the proficiency code in order to track event proficiency.

Upon certification, the DL shall be designated in writing by the commanding officer.

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 FWAAR Formation		
ANTTP 3-22.3-KC-130 CH 2 HAAR Formation		
ANTTP 3-22.3-KC-130 CH 3 Formation		
ANTTP 3-22.3-KC-130 CH 8 Formation Air Delivery		
ATP-3.3.4.2 Safety Procedures		
ATP-3.3.4.2 CH 2 FWAAR Procedures		
ATP-3.3.4.2 CH 3 HAAR Procedures		
ATP-3.3.4.2 CH 4 TAAR 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		



A TACRAC is capable of planning and conducting multi-tanker air-to-air refueling missions, either on a static orbit or involving the long range ferry of receiver aircraft with viable receiver divers. A viable divert is considered less than one hour for receiver aircraft from the planned route, but can be waived to two hours at the commanding officer's discretion.

A STRATRAC is capable of planning and leading a long range ferry of tactical aircraft involving air-to-air refueling from a single or multiple KC-130s without viable divers. A viable divert is considered less than one hour for receiver aircraft from the planned route, but can be waived to two hours at the commanding officer's discretion. A detailed knowledge of both tanker and receiver fuel management, altitude reservations (ALTRV) scheduling facilities coordination, long-range navigation techniques, weather avoidance, and international flight operations is required. Commanders should select only the most skilled and experienced aircraft commanders for this designation.

RAC Overview

REFUELING AREA COMMANDER STAGE						
EVENT	TIME	PROFICIENCY PERIOD	POI	COND	DEVICE	DESCRIPTION
RAC-6310	3.0	*	B,S	(NS)	A	INTRO TO TACRAC
RAC-6311	3.0	*	B,S	(NS)	A	TACRAC CERT
RAC-6312	2.0	365	B,S,R,M	(NS)	A	TACRAC PROFICIENCY
RAC-6313	6.0	*	B,S	(NS)	A	STRATRAC CERT
RAC-6314	6.0	540	B,S,R,M	(NS)	A	STRATRAC PROFICIENCY

Instructor. Shall be instructed by a TACRAC and certified by a TACRAC FLSE (TACRAC) and instructed by a STRATRAC FLSE (STRATRAC).

Admin Notes. All requirements delineated in the respective matrices below shall be completed prior to the TACRAC and STRATRAC certification events.

TACRAC training should be conducted in coordination with, or shortly after SL training.

One initial TACRAC event should be completed as part of an en route AAR evolution.

Upon completion of the evaluation flight pilots shall also log the proficiency code in order to track event proficiency.

Upon certification, the TACRAC and STRATRAC shall be designated in writing by the commanding officer.

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 FWAAR/TAAR Formation		
ANTTP 3-22.3-KC-130 CH 2 HAAR Formation		
ANTTP 3-22.3-KC-130 CH 3 Formation		
ATP-3.3.4.2 Safety Procedures		
ATP-3.3.4.2 CH 2 FWAAR Procedures		
ATP-3.3.4.2 CH 3 HAAR Procedures		
ATP-3.3.4.2 CH 4 TAAR Procedures		
BRIEFING/CHALK TALK REQUIREMENTS	DATE COMP	INSTRUCTOR
Air-to-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: Tanker Aborts/Tanker RIP		

Emergency AAR Procedures		
<b>ADMINISTRATIVE FLIGHT REQUIREMENTS</b>	<b>DATE COMP</b>	<b>INSTRUCTOR</b>
OPARS		
ALTRV Procedures		
Radio Management/Voice Procedures		

**RAC-6310 3.0 \* B,S (NS) A 2+ KC-130J**

Goal. Intro to TACRAC.

Requirement. Conduct FWAAR, TAAR, or HAAR mission planning requirements using mission planning software and receiver aircraft considerations. Discuss and introduce refueling formation options, rendezvous procedures, radio procedures, EMCON, NAVAID/radar/TCAS procedures, tanker and receiver management, and emergency procedures related to AAR. The event should be conducted from the last tanker position on a static or en route multi-tanker AAR mission. The event should be conducted during the day and is intended to serve as TACRAC work-up; however, it may be completed by a T2P and without APRB recommendation. A TACRAC shall instruct the event.

Performance Standard

- Produce a multi-tanker AAR briefing card, CFPS-generated route with orbit and appropriate fuel offload for the tanker formation, and an appropriate refueling track using either FalconView or a paper chart.
- Coordinate and schedule AAR airspace.
- Perform all radio communications between tanker and receiver formations.
- Determine the receiver's location prior to the ARCT with either the LPCR, TCAS, or A/A TACAN.
- 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 ATP-3.3.4.2 and Air NTTP 3-22.3-KC130.

Prerequisite. AAR-3600, AAR-3650, and NTPS-6111.

Range Requirement. Appropriate SUAS scheduled.

External Support. Receiver aircraft.

**RAC-6311 3.0 \* B,S (NS) A 2+ KC-130J**

Goal. TACRAC evaluation/certification.

Requirement. Brief, conduct, and control on a static or an en route multi-tanker AAR mission (with viable receiver divers). Discuss responsibilities of a TACRAC, with focus on refueling formation integrity, receiver management, and fuel management for the entire flight. This flight shall be evaluated by a TACRAC FLSE.

Performance Standard

- Produce a multi-tanker AAR briefing card, CFPS-generated route with orbit and appropriate fuel offload for the tanker formation, and an appropriate refueling track using either mission planning software or a paper chart.
- Coordinate and schedule AAR airspace.
- Conduct a RAC brief with all tanker formation aircrew.
- Determine the receiver's location and establish tankers in the proper/briefed formation at the ARCP at the ARCT.
- Perform all radio communications between tanker and receiver formations.
- 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 ATP-3.3.4.2 and Air NTTP 3-22.3-KC130.

Prerequisite. RAC-6310, 6118, Designated SL (may be conducted in conjunction with SL-6301), APRB recommendation.

Range Requirement. Appropriate SUAS scheduled.

External Support. Receiver aircraft.

**RAC-6312 2.0 365 B,S,R,M (NS) A 2+ KC-130J**

Goal. TACRAC proficiency.

Requirement. To maintain proficiency as a TACRAC the pilot shall plan and execute an AAR mission requiring the flight leadership of a TACRAC.

Prerequisite. RAC-6311.

STRATEGIC REFUELING AREA COMMANDER MATRIX

SELF PACED READINGS	DATE COMP	
ANTTP 3-22.3-KC-130 CH 2 FWAAR/TAAR Formation		
ANTTP 3-22.3-KC-130 CH 2 HAAR Formation		
ANTTP 3-22.3-KC-130 CH 3 Formation		
ATP-3.3.4.2 Safety Procedures		
ATP-3.3.4.2 CH 2 FWAAR Procedures		
ATP-3.3.4.2 CH 3 HAAR Procedures		
ATP-3.3.4.2 CH 4 TAAR Procedures		
BRIEFING/CHALK TALK REQUIREMENTS	DATE COMP	INSTRUCTOR
Air-to-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 AAR Procedures		
ADMINISTRATIVE FLIGHT REQUIREMENTS	DATE COMP	INSTRUCTOR
OPARS		
ALTRV Procedures		
Radio Management/Voice Procedures		
International Flight Operations		

**RAC-6313 6.0 \* B,S (NS) A 1+ KC-130J**

Goal. STRATRAC certification.

Requirement. Conduct long range FWAAR, TAAR, or HAAR mission planning requirements using mission planning software and receiver aircraft considerations. Discuss and introduce coordination of long range movements, movement control, ALTRVs, hose factor, contingency planning, RAC functions, and rendezvous control. Review radio procedures, NAVAID/radar/TCAS procedures, tanker and receiver management, weather avoidance, and emergency procedures related to AAR. Demonstrate FWAAR, TAAR, and HAAR rendezvous planning knowledge. The student will be expected to be a subject matter expert on long range AAR planning upon attainment of this training evolution. This event may be completed utilizing a simulated “no divert” scenario.

Performance Standard

Coordinate overall movement control planning effort to include ORM analysis, ALTRV scheduling facilities and requirements, routing, tanker plan, logistics, and divert contingencies.

Prepare and distribute flight planning products to all applicable tanker and receiver formation participants, including tanker plan, flight/route planning data, and IMC penetration plan.

Conduct a formal movement briefing for all tanker and receiver formation participants. Include: route, go/no go criteria, tanker and receiver rendezvous, refueling area, tanker plan, abort/bingo/ETP locations and criteria, communication, IMC penetration plan, bump plan, divert contingencies, and logistics.

Rendezvous tanker(s) with receiver formation as planned and 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 briefed abort points; otherwise, direct receiver(s) to divert as applicable.

Ensure all AAR is conducted within appropriate airspace.

Perform all radio communications between tankers and receivers 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. Designated DL, TACRAC, APRB recommendation, and STRATRAC Academics complete.

Range Requirement. Appropriate SUAS/ALTRV scheduled.

External Support. Receiver aircraft.

**RAC-6314    6.0    540    B,S,R,M                      (NS)    A            1+ KC-130J**

Goal. STRATRAC proficiency.

Requirement. To maintain proficiency as a STRATRAC the pilot shall plan and execute an AAR mission requiring the flight leadership of a STRATRAC.

Prerequisite. RAC-6313.

2.20 MET ASSESSMENT PHASE (7000)

Purpose. To assess CMMR representative crews during the execution of the unit's specified METs in order to ensure standardization and combat readiness and to fulfill the requirements of a Marine Corps Combat Readiness Evaluation (MCCRE) as specified in MCO 3501.1, Marine Corps Combat Readiness Evaluation.

Prerequisite. Aircrew assessed during this Phase shall be crews meeting the requirements of a Force Generating Order. The crews should be comprised of deploying personnel to the maximum extent practical.

Admin Notes. The Proficiency period for conducting elements of the 7000 Phase are: Active component units – no less than once every 2 years; for Reserve component units – no less than once every 5 years.

Units not scheduled to be assessed at a service level training venue (i.e. ITX, MTNEX) shall conduct elements of the 7000 Phase as the minimum requirement for a unit to deploy.

The MAW Flight Leadership Standardization and Evaluation (FLSE) cadre is the resource used to assess Type/Model/Series units for MET capability in accordance with the MCCRE Order (for Aviation Ground Units, Weapons Tactics Instructors are the resource used). The unit assessor will be designated at the Wing level of the unit to be assessed.

Events in this Phase normally require a Force Generation Order prior to commencing the 7000 Stage. Once a unit deploys, is removed from the Force Generation Order, or completes the required 7000-Stage, 7000 Phase currency no longer needs to be maintained.

Multiple Events may be accomplished during the same sortie.

The example template for this Phase is based on an a VMGR Harvest HAWK detachment configuration.

Results of the MCCRE assessment shall be formatted per Appendix D of NAVMC 3500.14 and submitted to CG, MCCDC (via AMHS message attachment to CG TECOM MTESD) no later than 45 days after MCCRE completion.

Stages. The following Stages are included in the Mission Essential Task (MET) Phase of training. Only METs required per the Force Generation Order shall be evaluated.

<b>STAGE NAME</b>	<b>EVENT</b>
CONDUCT AVIATION OPERATIONS FROM EXPEDITIONARY SHORE-BASED SITES	MET-7001
CONDUCT COMBAT ASSAULT TRANSPORT	MET-7002
CONDUCT AIR-TO-AIR REFUELING	MET-7003
PROVIDE AVIATION-DELIVERED GROUND REFUELING	MET-7004
CONDUCT AIR DELIVERY	MET-7005
PROVIDE AVIATION-DELIVERED BATTLEFIELD ILLUMINATION	MET-7006
CONDUCT CLOSE AIR SUPPORT	MET-7007
CONDUCT MULTI-SENSORY IMAGERY RECONAISSANCE	MET-7008

### 2.20.1 MISSION ESSENTIAL TASK STAGE

Purpose. To assess squadrons or detachments executing community specific MET(s) or MET preparatory Events.

Prerequisite. If an event requires prerequisites in addition to those listed for the MET Phase, they will be covered in the individual event.

Crew Requirements. The participants required for the 7000 Phase are the evaluated unit and the assessor. The crew requirement is based on the specific event. The assessment shall be conducted from a crew position of the assessor's T/M/S. At the discretion of the assessor, observation of mission planning, briefing/debriefing, and execution from an OP may satisfy a portion of the assessment.

Respectively, the primary, alternate, and tertiary assessors shall be a MATSS representative, WTI (FLSE) from within the parent command designated by the owning Wing, or A MAWTS-1 representative. The number of crews evaluated will be based on a percentage required to deploy per the Force Generation Order.

#### **MET-7001** (NS) **2 KC-130J**

Goal. Conduct aviation operations from expeditionary shore-based sites.

Requirement. Demonstrate the ability to conduct aviation operations from expeditionary shore-based sites.

Performance Standard. Conduct aviation operations from expeditionary shore-based sites per MCT 1.3.3.3.2 and the KC-130J T&R.

Prerequisite. Per applicable KC-130J T&R event.

Instructor. Unit assessor designated by the responsible Wing of the assessed unit.

Ordnance Requirement. Per applicable KC-130J T&R event.

Range/Target Requirement. Per applicable KC-130J T&R event.

External Syllabus Support. Airfield support.

Crew. Per applicable KC-130J T&R event.

Reference. Per applicable KC-130J T&R event.

#### **MET-7002** (NS) **2 KC-130J**

Goal. Conduct combat assault transport.

Requirement. Demonstrate the ability to conduct combat assault transport.

Performance Standard. Conduct combat assault transport per MCT 1.3.4.1 and KC-130J T&R.

Prerequisite. Per applicable KC-130J T&R event.

Instructor. Unit assessor designated by the responsible Wing of the assessed unit.

Ordnance Requirement. None.

Range/Target Requirement. None.

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External Syllabus Support. Actual or notional passengers or cargo.

Crew. Per applicable KC-130J T&R event.

Reference. Per applicable KC-130J T&R event.

**MET-7003** (NS) **2 KC-130J**

Goal. Conduct air-to-air refueling.

Requirement. Demonstrate the ability to conduct air-to-air refueling.

Performance Standard Conduct air-to-air refueling per MCT 1.3.4.2 and the KC-130J T&R.

Prerequisite. Per applicable KC-130J T&R event.

Instructor. Unit assessor designated by the responsible Wing of the assessed unit.

Ordnance Requirement None.

Range/Target Requirement. Per applicable KC-130J T&R event.

External Syllabus Support. Per applicable KC-130J T&R event.

Crew. Per applicable KC-130J T&R event.

Reference. Per applicable KC-130J T&R event.

**MET-7004** (NS) **2 KC-130J**

Goal. Provide aviation-delivered ground refueling

Requirement. Demonstrate the ability to provide aviation-delivered ground refueling.

Performance Standard. Provide aviation-delivered ground refueling per MCT 1.3.4.2.1 and the KC-130J T&R.

Prerequisite. Per applicable KC-130J T&R event.

Instructor. Unit assessor designated by the responsible Wing of the assessed unit.

Ordnance Requirement. Per applicable KC-130J T&R event.

Range/Target Requirement. Per applicable KC-130J T&R event.

External Syllabus Support. Per applicable KC-130J T&R event.

Crew. Per applicable KC-130J T&R event.

Reference. Per applicable KC-130J T&R event.

**MET-7005** (NS) **2 KC-130J**

Goal. Conduct air delivery.

Requirement. Demonstrate the ability to conduct air delivery.

Performance Standard. Conduct air delivery per MCT 4.3.4 and the KC-130J T&R.

Prerequisite. Per applicable KC-130J T&R event.

Instructor. Unit assessor designated by the responsible Wing of the assessed unit.

Ordnance Requirement. Per applicable KC-130J T&R event.

Range/Target Requirement. Per applicable KC-130J T&R event.

External Syllabus Support. Per applicable KC-130J T&R event.

Crew. Per applicable KC-130J T&R event.

Reference. Per applicable KC-130J T&R event.

**MET-7006** (NS) **2 KC-130J**

Goal. Provide aviation-delivered battlefield illumination.

Requirement. Demonstrate the ability to conduct battlefield illumination.

Performance Standard. Conduct battlefield illumination per MCT 1.3.4.3 and the KC-130J T&R.

Prerequisite. Per applicable KC-130J T&R event.

Instructor. Unit assessor designated by the responsible Wing of the assessed unit.

Ordnance Requirement. Per applicable KC-130J T&R event.

Range/Target Requirement. Per applicable KC-130J T&R event.

External Syllabus Support. Per applicable KC-130J T&R event.

Crew. Per applicable KC-130J T&R event.

Reference. Per applicable KC-130J T&R event.

**MET-7007** (NS) **2 KC-130J**

Goal. Conduct close air support.

Requirement. Demonstrate the ability to conduct close air support.

Performance Standard. Conduct close air support per MCT 3.2.3.1.1 and the KC-130J T&R.

Prerequisite. Per applicable KC-130J T&R event.

Instructor. Unit assessor designated by the responsible Wing of the assessed unit.

Ordnance Requirement. Per applicable KC-130J T&R event.

Range/Target Requirement. Per applicable KC-130J T&R event.

External Syllabus Support. Per applicable KC-130J T&R event.

Crew. Per applicable KC-130J T&R event.

Reference. Per applicable KC-130J T&R event.

**MET-7008** (NS) **2 KC-130J**

Goal. Conduct multi-sensory imagery reconnaissance.

Requirement. Demonstrate the ability to conduct multi-sensory imagery reconnaissance.

Performance Standard. Conduct multi-sensory imagery reconnaissance per MCT 2.2.5.2.2 and the KC-130J T&R.

Prerequisite. Per applicable KC-130J T&R event.

Instructor. Unit assessor designated by the responsible Wing of the assessed unit.

Ordnance Requirement. Per applicable KC-130J T&R event.

Range/Target Requirement. Per applicable KC-130J T&R event.

External Syllabus Support. Per applicable KC-130J T&R event.

Crew. Per applicable KC-130J T&R event.

Reference. Per applicable KC-130J T&R event.

**2.21 AVIATION CAREER PROGRESSION MODEL (8000 PHASE)**

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. Commanding officers shall ensure the requisite ACPM training requirements have been met prior to designating individuals.

The focus of training in the Aviation Career Progression Model (ACPM) is on academic Events in the following areas:

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

General. The ACPM is intended to be an integrated series of academic Events contained within each Phase of training. Accordingly, ACPM academic Events are like any other academic event in that they serve as prerequisites to selected flight Events or Stages. Additionally, several ACPM academic Events are integrated as prerequisites for flight leadership syllabi. ACPM academic Events, along with their identifying prerequisite association with other training Phases/Stages/Events are listed below.

ACPM TO KC-130J T&R MATRIX			
STAGE	EVENT NUMBER	ACPM DESCRIPTION	PREREQUISITE TO (PHASE/STAGE/EVENT)
ACPM	8200	MACCS AGENCIES, FUNCTIONS, AND CONTROL OF AIRCRAFT AND MISSILES	NTPS-6111
ACPM	8201	MWCS BRIEF	NTPS-6111
ACPM	8202	ACA AND AIRSPACE	NTPS-6111
ACPM	8210	AVIATION GROUND SUPPORT	NTPS-6111
ACPM	8230	ACE BATTLE STAFF	NTPS-6111
ACPM	8231	BATTLE COMMAND DISPLAY	NTPS-6111
ACPM	8240	SIX FUNCTIONS OF MARINE AVIATION	NTPS-6111
ACPM	8241	JTAR-ASR INTRODUCTION AND PRACTICAL APPLICATION CLASS	NTPS-6111
ACPM	8242	SITE COMMAND PRIMER	NTPS-6111
ACPM	8250	THEATER AIR GROUND SYSTEM (TAGS)	NTPS-6111
ACPM	8300	AIR DEFENSE	NTPS-6118
ACPM	8310	FORWARD AMRNING AND REFUELING POINT (FARP) OPERATIONS	NTPS-6118
ACPM	8311	MARINE CORPS TACTICAL FUEL SYSTEMS	NTPS-6118
ACPM	8320	JOINT STRUCTURE & JOINT AIR OPERATIONS	NTPS-6118
ACPM	8321	JOINT AIR TASKING CYCLE PHASE 1: STRATEGY DEVELOPMENT	NTPS-6118
ACPM	8322	JOINT AIR TASKING CYCLE PHASE 2: TARGET DEVELOPMENT	NTPS-6118
ACPM	8323	JOINT AIR TASKING CYCLE PHASE 3: WEAPONNEERING AND ALLOCATION	NTPS-6118
ACPM	8324	JOINT AIR TASKING CYCLE PHASE 4: JOINT ATO PRODUCTION	NTPS-6118
ACPM	8325	JOING AIR TASKING CYCLE PHASE 5: FORCE EXECUTION	NTPS-6118
ACPM	8326	JOINT AIR TASKING CYCLE PHASE 6: COMBAT ASSESSMENT	NTPS-6118
ACPM	8340	INTEGRATING FIRES AND AIRSPACE WITHIN THE MAGTF	NTPS-6118
ACPM	8350	PHASING CONTROL ASHORE	NTPS-6118

ACPM	8351	TACRON ORGANIZATIONS AND FUNCTIONS	NTPS-6118
ACPM	8620	ESG/CSG INTEGRATION	DL-6304
ACPM	8630	TACTICAL AIR COMMAND CENTER (TACC)	SL-6301
ACPM	8640	JOINT DATA NETWORK	DL-6304
ACPM	8641	MAGTF THEATER	DL-6304
ACPM	8660	JOINT OPS INTRO	SL-6301

### 2.21.1 ACPM CORE SKILL TRAINING PHASE

Purpose. To provide and introduce basic integration of the ACE within the MAGTF and ACE Battle Staff planning.

Admin Notes. 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

- Introduce and explain the intel capabilities/products available to the ACE/MAGTF.

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 Objectives

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.

2.21.2 ACPM MISSION SKILL TRAINING EVENTS

Purpose. To provide and introduce basic integration of the ACE within the MAGTF and Joint environment.

Admin Notes. The PUI must be qualified as an T3P prior to beginning this stage of training.

**ACPM-8300 0.8 \* Air Defense**

Learning 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) Operations**

Learning 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 Systems**

Learning 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-8620 1.0 \* ESG/CSG Integration**

Learning Objectives

TBD

**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-8640 0.8 \* Joint Data Network**

Learning 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 Employment**

Learning 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.

**ACPM-8660 0.4 \* Joint Ops Introduction**

Learning Objectives

- Understand Joint Operation Command relationships.
- Understand the main responsibilities for each Functional Component Commander.

2.22 KC-130J PILOT T&R SYLLABUS MATRIX (1000 Phase)

KC-130J PILOT T&R SYLLABUS MATRIX (1000 Phase)																				
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	POI			ACAD		SIM		FLIGHT		CONDITION	TYPE	# A/C or SIM	REFLY	PREREQ	INSTRUCTOR	EOM	EVENT CONV
				B	SC	MR & R	#	TIME	#	TIME	#	TIME								
<b>1000 PHASE (CORE INTRODUCTION)</b>																				
<b>COCKPIT PROCEDURE TRAINER (CPT)</b>																				
CPT	CPT	CHECKLIST INTRO	1100	X	X					2.0			D	S	1	*		CI/FRSI	1100	
	CPT	CNI-MS/CNBP INTRO	1101	X	X					2.0			D	S	1	*	1100	CI/FRSI	1101	
	CPT	COMM/NAV OPERATIONS	1102	X	X					2.0			D	S	1	*	1101	CI/FRSI	1102	
	CPT	AMU/HDD OPERATION	1103	X	X					2.0			D	S	1	*	1102	CI/FRSI	1103	
	CPT	HUD OPERATION	1104	X	X					2.0			D	S	1	*	1103	CI/FRSI	1104	
	CPT	FLIGHT PROGRAMMING 1	1105	X	X					2.0			D	S/A	1	*	1104	CI/FRSI	1105	
	CPT	FLIGHT PROGRAM 2	1106	X	X					2.0			D	S	1	*	1105	CI/FRSI	1106	
	CPT	APU/ENGINE OPERATION	1107	X	X	X				2.0			D	S/A	1	*	1106	CI/FRSI	1107	
	CPT	PROP/HYD OPERATION	1108	X	X	X				2.0			D	S/A	1	*	1107	CI/FRSI	1108	
	CPT	ELEC/BIU BACKUP OPS	1109	X	X	X				2.0			D	S	1	*	1108	CI/FRSI	1109	
	CPT	BLEED AIR	1110	X	X	X				2.0			D	S/A	1	*	1109	CI/FRSI	1110	
CPT	FUEL MANAGEMENT	1111	X	X	X				2.0			D	S/A	1	*	1110	CI/FRSI	1111		
FAM SKILL TOTAL							0	0.0	12	24.0	0	0.0								
<b>FAMILIARIZATION (FAM)</b>																				
FAM	FAM	VISUAL FLIGHT I	1112	X	X					2.0			D	S/A	1	*	1111	CI/FRSI	1112	
	FAM	VISUAL FLIGHT II	1113	X						2.0			D	S/A	1	*	1112	CI/FRSI	1113	
	FAM	VISUAL FLIGHT III	1114	X		X				2.0			D	S/A	1	*	1113	CI/FRSI	1114	
	FAM	NIGHT VISUAL FLIGHT	1115	X	X					2.0			N*	S/A	1	*	1114	CI/FRSI	1115	
	FAM	INST FL - ILS/NDB	1116	X	X	X				2.0			D	S/A	1	*	1115	CI/FRSI	1116	
	FAM	INST FL - TACAN/LOC	1117	X	X					2.0			N*	S/A	1	*	1116	CI/FRSI	1117	
	FAM	RADAR APPROACHES	1118	X						2.0			D	S/A	1	*	1117	CI/FRSI	1118	
	FAM	EN ROUTE OPS 1	1119	X						2.0			D	S/A	1	*	1118	CI/FRSI	1119	
	FAM	EN ROUTE OPS 2	1120	X	X	X				2.0			N*	S/A	1	*	1119	CI/FRSI	1120	
	FAM	ASYMMETRIC OPS 1	1121	X	X					2.0			D	S/A	1	*	1120	CI/FRSI	1121	
	FAM	ASYMMETRIC OPS 2	1122	X	X	X				2.0			D	S	1	*	1121	CI/FRSI	1122	
	FAM	ASYMMETRIC OPS 3	1123	X						2.0			D	S	1	*	1122	CI/FRSI	1123	
	FAM	SPECIAL PROCEDURES	1124	X	X					2.0			D	S	1	*	1123	CI/FRSI	1124	
	FAM	ELEC/FLAP/PROP EPS	1125	X	X					2.0			D	S	1	*	1124	CI/FRSI	1125	
	FAM	HYD/FLIGHT CNT EPS	1126	X						2.0			D	S/A	1	*	1125	CI/FRSI	1126	
	FAM	LANDING GEAR EPS	1127	X						2.0			D	S/A	1	*	1126	CI/FRSI	1127	
	FAM	AUTOFLIGHT 1	1128	X	X					2.0			D	S/A	1	*	1127	CI/FRSI	1128	
	FAM	AUTOFLIGHT 2	1129	X						2.0			N*	S/A	1	*	1128	CI/FRSI	1129	
FAM	REVIEW FLIGHT	1130	X	X					2.0			D	S/A	1	*	1129	CI/FRSI	1130		
FAM	FRD EVALUATION	1131	X	X	X				2.0			D	S/A	1	*	1130	CI/FRSI	1131		
FAM	PREFLIGHT/EMER/EQUIP	1132	X	X					3.0			D	A	1	*	1111	CI/FRSI	1132		
FAM SKILL TOTAL							1	3.0	20	40.0	0	0.0								

KC-130J PILOT T&R SYLLABUS MATRIX (1000 Phase)																				
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	POI			ACAD		SIM		FLIGHT		CONDITION	TYPE	# A/C or SIM	REFLY	PREREQ	INSTRUCTOR	EOM	EVENT CONV
				B	SC	MR & R	#	TIME	#	TIME	#	TIME								
<b>NIGHT SYSTEMS HIGH (NS(H))</b>																				
NS(H)	NS(H)	INTRO TO NVD PROC	1150	X	X					2.0			NS	S/A	1	*	1126	CI NSI/FRSI NSI		1150
NS(H) SKILL TOTAL							0	0.0	1	2.0	0	0.0								
<b>LONG RANGE NAVIGATION (LRN)</b>																				
LRN	LRN	INTRO TO LRN PROC	1160	X	X					2.0			D	S/A	1	*	1126	CI LRNI/FRSI		1160
LRN SKILL TOTAL							0	0.0	1	2.0	0	0.0								
<b>TACTICAL NAVIGATION (TN)</b>																				
TN	TN	INTRO TO TN PROC	1200	X	X					2.0			D	S/A	1	*	1126	CI TNI/FRSI		1200
	TN	ADVANCED TN PROC	1201	X	X					2.0			D	S/A	1	*	1200	CI TNI/FRSI		1201
	TN	INTRO TO TAC MAN	1202	X	X					2.0			D	S/A	1	*	1201	CI TNI/FRSI		1202
TN SKILL TOTAL							0	0.0	3	6.0	0	0.0								
<b>FORMATION (FORM)</b>																				
FORM	FORM	INTRO SEC FORM PROC	1300	X	X					2.0			D	S/A	2	*	1126	CI FORMI/FRSI SL		1300
FORM SKILL TOTAL							0	0.0	1	2.0	0	0.0								
<b>THREAT REACTION (TR)</b>																				
TR	TR	INTRO TO IR TR	1400	X	X					2.0			D	S/A	1	*	1202	CI IR TRI/FRSI LATI		1400
TR SKILL TOTAL							0	0.0	1	2.0	0	0.0								
<b>ASSUALT LANDING ZONE (ALZ)</b>																				
ALZ	ALZ	INTRO TO ALZ PROC	1500	X						2.0			D	S/A	1	*	1126	CI ALZI/FRSI ALZI		1500
	ALZ	INTRO TO TAC ARRIVALS	1501	X	X					2.0			D	S/A	1	*	1126,1500	CI ALZI/FRSI ALZI		1501
ALZ SKILL TOTAL							0	0.0	2	4.0	0	0.0								
<b>ASSUALT LANDING ZONE (ALZ)</b>																				
AAR	AAR	INTRO TO FWAAR/TAAR PROC	1600	X						2.0			D	S/A	1	*	1126	CI AARI/FRSI		1600
	AAR	INTRO TO HAAR PROC	1601	X						2.0			D	S/A	1	*	1600	CI AARI/FRSI		1601
AAR SKILL TOTAL							0	0.0	2	4.0	0	0.0								
<b>AIR DELIVERY (AD)</b>																				
AD	AD	INTRO TO AD PROC	1700	X	X					2.0			D	S/A	1	*	1202	CI ADI/FRSI ADI		1700
AD SKILL TOTAL							0	0.0	1	2.0	0	0.0								
<b>FAMILIARIZATION (FLIGHT PHASE CONDUCTED AT FLEET SQUADRON)</b>																				
FCRM	FCRM	FAM	1800	X	X	X					2.0		D	A	1	*	1131,1132	FRSI		1800
	FCRM	FAM	1801	X	X						2.0		(N*)	A	1	*	1800	FRSI		1801
	FCRM	FAM	1802	X	X	X					2.0		(N*)	A	1	*	1801	FRSI		1802
	FCRM	FAM	1803	X	X						2.0		D	A	1	*	1802	FRSI		1803
	FCRM	FAM	1804	X	X	X					2.0		(N*)	A	1	*	1803	FRSI		1804
FCRM SKILL TOTAL							0	0.0	0	0.0	5	10.0								
1000 PHASE TOTAL							1	3.0	44	88.0	0	10.0								

2.23 KC-130J PILOT T&R SYLLABUS MATRIX (2000-6000 Phase)

KC-130J PILOT T&R SYLLABUS MATRIX (2000-6000 Phase)																		
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	SIM		FLIGHT		CONDITION	TYPE	# A/C or SIM	REFLY	INSTRUCTOR	EOM	EVENT CONV
				B	SC	R		#	TIME	#	TIME							
<b>2000 PHASE (CORE)</b>																		
<b>LEFT SEAT FAM (LSF)</b>																		
LSF	LSF	LEFT SEAT FAM	2100	X	X	X				2.0	(N)	A	1	*	ANI		2100	
LSF SKILL TOTAL								0	0.0	1	2.0							
<b>NIGHT SYSTEMS (NS)</b>																		
NS(H)	NS(H)	HLL NVD PROCEDURES	2150	X	X	X	X			2.0	HLL	A/S	1	90	NSI		2150	
	NS(H)	LLL NVD PROCEDURES	2151	X	X	X	X			2.0	LLL	A/S	1	90	NSI		2151	
NS SKILL TOTAL								0	0.0	2	4.0							
<b>LONG RANGE NAVIGATION (LRN)</b>																		
LRN	LRN	CONSTANT TAS LRN	2160	X	X					6.0	(N)	A	1	*	TPC		2160	
	LRN	LR CRUISE LRN	2161	X	X					6.0	(N)	A	1	*	TPC		2161	
	LRN	LRN	2162	X	X	X	X			6.0	(N)	A	1	365	TPC		2162	
LRN SKILL TOTAL								0	0.0	3	18.0							
<b>TACTICAL NAVIGATION (TN)</b>																		
TN	TN	TN TIME NAV (PM)	2200	X	X	X				2.0	D	A/S	1	*	BIP		2200	
	TN	TN PROCEDURES (PF)	2201	X	X	X	X			2.0	D	A/S	1	365	BIP		2201	
	TN	HLL TN PROC (PF)	2250	X	X	X	X			2.0	HLL	A/S	1	180	NSI		2250	
	TN	LLL TN PROC (PF)	2251	X	X	X	X			2.0	LLL	A/S	1	180	NSI		2251	
TN SKILL TOTAL								0	0.0	4	8.0							
<b>LOW ALTITUDE TACTICS (LAT)</b>																		
LAT	LAT	INTRO TO LAT PROC	2260	X	X				2.0		D	S/A	1	*	LATI		2260	
	LAT	LAT PROCEDURES	2261	X	X	X	X			2.0	D	A	1	180	LATI		2261	
LAT SKILL TOTAL								1	2.0	1	2.0							
<b>FORMATION (FORM)</b>																		
FORM	FORM	SEC FORM PROC	2300	X	X	X	X			3.0	D	A/S	2	365	SEC LD		2300	
	FORM	DIV FORM PROC	2301	X	X	X	X			3.0	(NS)	A	3+	365	SEC LD		2301	
	FORM	NIGHT FORM PROC	2350	X	X	X	X			2.0	NS	A/S	2+	180	SEC LD,(NSI)		2350	
FORM SKILL TOTAL								0	0.0	3	8.0							
<b>THREAT REACTION (TR)</b>																		
TR	TR	GROUND IR TR	2400	X	X	X	X			2.0	(NS)	A/S	1	180	LATI		2400	
TR SKILL TOTAL								0	0.0	1	2.0							
<b>2000 PHASE TOTAL</b>								<b>1</b>	<b>2.0</b>	<b>15</b>	<b>44.0</b>							

KC-130J PILOT T&R SYLLABUS MATRIX (2000-6000 Phase)																		
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	SIM		FLIGHT		CONDITION	TYPE	# A/C or SIM	REFLY	INSTRUCTOR	EOM	EVENT CONV
				B	SC	R		#	TIME	#	TIME							
<b>3000 PHASE (MISSION)</b>																		
<b>ASSAULT LANDING ZONE (ALZ)</b>																		
ALZ	ALZ	ALZ PROCEDURES	3500	X	X	X	X			2.0	D	A/S	1	180	ALZI,WTI		3500	
	ALZ	TACTICAL ARRIVALS	3501	X	X	X	X			2.0	(NS)	A/S	1	365	ALZI,WTI		3501	
	ALZ	COMBAT OFFLOAD	3502	X	X					0.5	(N)	A	1	*	ALZI,WTI		3502	
	ALZ	UNIMPROVED GRND OPS	3503	X	X	X	X			0.5	(NS)	A	1	730	ALZI,WTI		3503	
	ALZ	NIGHT ALZ PROC	3550	X	X	X	X			2.0	NS	A/S	1	180	ALZI,(NSI)		3550	
ALZ SKILL TOTAL								0	0.0	5	7.0							
<b>AIR-TO-AIR REFUELING</b>																		
AAR	AAR	FWAAR/TAAR PROC	3600	X	X	X	X			2.0	(NS)	A/S	1	365	BIP		3600	
	AAR	DAY HAAR PROC	3601	X	X	X	X			2.0	D	A/S	1	365	BIP		3601	
	AAR	AAR PANEL PROC	3602	X	X	X	X	2.0			(NS)	S/A	1	180	BIP		3602	
	AAR	NIGHT HAAR PROC	3650	X	X	X	X			2.0	NS	A/S	1	180	BIP,(NSI)		3650	
AAR SKILL TOTAL								1	2.0	3	6.0							
<b>AVIATION DELIVERED GROUND REFUELING (ADGR)</b>																		
ADGR	ADGR	ADGR PROCEDURES	3660	X	X	X	X			1.0	(NS)	A	1	730	BIP			
ADGR SKILL TOTAL								0	0.0	1	1.0							
<b>AIR DELIVERY (AD)</b>																		
AD	AD	INTRO TO PF AD	3700	X	X			2.0			(NS)	S/A	1	*	CI ADI,ADI		3700	
	AD	INTRO TO PM AD	3701	X	X			2.0			(NS)	S/A	1	*	CI ADI,ADI		3701	
	AD	PF CARGO AD	3702	X	X	X	X			2.0	(NS)	A/S	1	90	ADI		3702	
	AD	PM CARGO AD	3703	X	X	X	X			2.0	(NS)	A/S	1	90	ADI		3703	
	AD	PF PERSONNEL AD	3704	X	X	X	X			2.0	(NS)	A/S	1	90	ADI		3704	
	AD	PM PERSONNEL AD	3705	X	X	X	X			2.0	(NS)	A/S	1	90	ADI		3705	
AD SKILL TOTAL								2	4.0	4	8.0							
3000 PHASE TOTAL								3	6.0	13	22.0							
<b>4000 PHASE (CORE PLUS)</b>																		
<b>TACTICAL NAVIGATION (TN)</b>																		
TN	TN	FORM TN PROCEDURES	4200	X	X	X	X			3.0	(NS)	A	2+	365	SEC LD		4200	
TN TOTAL								0	0.0	1	3.0							
<b>NIGHT SYSTEMS LOW (NS(L))</b>																		
NS(L)	NS(L)	INTRO NSLAT PROC	4250	X	X			2.0			HLL	S/A	1	*	NS LATI		4250	
	NS(L)	NSLAT PROCEDURES	4251	X	X	X	X			2.0	HLL	A	1	180	NS LATI		4251	
NS(L) SKILL TOTAL								1	2.0	1	2.0							
<b>THREAT REACTION (TR)</b>																		
TR	TR	INTRO GRND RADAR TR	4400	X	X					2.0	(NS)	A/S	1	*	WTI		4400	
	TR	GROUND RADAR TR	4401	X	X	X	X			2.0	(NS)	A	1	180	WTI		4401	
TR TOTAL								0	0.0	2	4.0							

KC-130J PILOT T&R SYLLABUS MATRIX (2000-6000 Phase)																		
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	SIM		FLIGHT		CONDITION	TYPE	# A/C or SIM	REFLY	INSTRUCTOR	EOM	EVENT CONV
				B	SC	R		#	TIME	#	TIME							
<b>DEFENSIVE TACTICS (DT)</b>																		
DT	DT	1 VS. 1 DEFTAC	4410	X	X	X	X			2.0	D	A	1	365	DTI		4410	
	DT	1 VS. 2 DEFTAC	4411	X	X	X	X			2.0	D	A	1	365	DTI		4411	
DT TOTAL								0	0.0	2	4.0							
<b>AIR DELIVERY (AD)</b>																		
AD	AD	COMBINATION AD	4700	X	X	X	X			2.0	(NS)	A	1	365	ADI		4700	
	AD	MFF AD	4701	X	X	X	X			2.0	(NS)	A	1	365	ADI		4701	
	AD	JPADS AD	4702	X	X	X	X			2.0	(NS)	A	1	365	ADI		4702	
AD TOTAL								0	0.0	3	6.0							
<b>BATTLEFIELD ILLUMINATION (BI)</b>																		
BI	BI	BATTLEFIELD ILLUM	4710	X	X	X	X			2.0	N	A	1	365	ADI		4710	
BI SKILL TOTAL								0	0.0	1	2.0							
<b>PILOT HARVEST HAWK (HH)</b>																		
HH	HH	HH GROUND FAM	4803	X	X				2.0		D	S/A	1	*	HHI			
	HH	HH FLIGHT FAM	4804	X	X				2.5		D	A	1	*	HHI		4803	
HH TOTAL								2	6.0	0	2.5							
<b>PILOT BASIC AIR TO SURFACE (BAS)</b>																		
BAS	BAS	INTRO TO DAY WEAPONS EMPL	4860	X	X				2.5	D	A	1	*	HHI		4810		
	BAS	DAY WEAPONS EMPL	4861	X	X				2.5	D	A	1	*	HHI		4811		
	BAS	WEAPONS EMPLOYMENT	4862	X	X				2.5	(N)	A	1	*	HHI		4812		
BAS TOTAL								0	0.0	3	7.5							
<b>PILOT MULTI-SENSOR IMAGERY RECONNAISSANCE (MIR)</b>																		
MIR	MIR	MIR PROFICIENCY	4870	X	X	X	X			2.5	(N)	A	1	365	HHI		4820	
MIR SKILL TOTAL								0	0.0	1	2.5							
<b>PILOT CLOSE AIR SUPPORT (CAS)</b>																		
CAS	CAS	CAS	4880	X	X	X	X			2.5	(N)	A	1	180	HHI		4830	
	CAS	URBAN CAS	4890	X	X				2.5	(N)	A	1	*	HHI		4840		
CAS SKILL TOTAL								0	0.0	2	5.0							
4000 PHASE TOTAL								4	10.5	21	51.0							
<b>5000 PHASE (INSTRUCTOR TRAINING)</b>																		
<b>BASIC INSTRUCTOR PILOT (BIP)</b>																		
BIP	BIP	BIP TRAINING	5100	X	X				2.0	D	A/S	1	*	LAT,NSI,WTI		5100		
	BIP	BIP CHECK	5101	X	X				2.0	NS	A/S	1	*	LAT,NSI,WTI		5101		
BIP TOTAL								0	0.0	2	4.0							
<b>ASSISTANT NATOPS INSTRUCTOR (ANI)</b>																		
ANI	NI	ANI TRAINING	5140	X	X				2.0	(N)	S/A	1	*	ANI,NE,NM		5140		
	NI	ANI CHECK	5141	X	X	X	X		2.0	(N)	S/A	1	365	NI,NE,NM	X	5141		
ANI SKILL TOTAL								2	4.0	0	0.0							

KC-130J PILOT T&R SYLLABUS MATRIX (2000-6000 Phase)																		
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	SIM		FLIGHT		CONDITION	TYPE	# A/C or SIM	REFLY	INSTRUCTOR	EOM	EVENT CONV
				B	SC	R		#	TIME	#	TIME							
<b>FLEET REPLACEMENT SQUADRON INTRODUCTION (FRSI)</b>																		
FRSI	FRSI	FRSI TRAINING	5145	X	X			2.0			(N)	S/A	1	*	FRSI		5145	
	FRSI	FRSI TRAINING	5146	X	X			2.0			(N)	S/A	1	*	FRSI		5146	
	FRSI	FRSI CHECK	5147	X	X	X			2.0		(N)	A	1	*	FRSI		5147	
FRSI TOTAL							2	4.0	1	2.0								
<b>FLIGHT LEADERSHIP STANDARDIZATION EVALUATOR (FLSE)</b>																		
FLSE	FLSE	FLSE IUT	5320	X	X	X								*	FLSE MM/PC		5320	
	FLSE	FLSE CERTIFICATION	5321	X	X	X			3.0		(NS)	A	2+	*	FLSE MM/PC		5321	
	FLSE	FLSE QUARTERLY TRNG	5322	X	X	X	X							90	FLSE MM/PC		5322	
FLSE TOTAL							0	0.0	1	3.0								
<b>STAGE INSTRUCTOR (SI)</b>																		
SI	ALZ	ALZ STAGE INST CHK	5500	X					2.0		NS	A	1	*	ALZI/NSI,ALZI/ANI,WTI		5501	
	AD	AD STAGE INST TRNG	5700	X	X			2.0			(NS)	S/A	1	*	ADI			
	AD	AD STAGE INST CHK	5701	X	X				2.0		(NS)	A	1	*	ADI		5701	
SI TOTAL							1	2.0	2	4.0								
<b>NIGHT SYSTEMS INSTRUCTOR (NSI)</b>																		
NSI	NS(H)	NS(H) FAM IUT	5150	X	X	X			2.0		NS	A	1	*	NSI		5150	
	NS(H)	NS (H) TN IUT	5151	X	X	X			2.0		NS	A	1	*	NSI		5151	
	NS(H)	NSI CERTIFICATION	5152	X	X	X			2.0		NS	A	1	*	MAWTS IP		5152	
NSI TOTAL							0	0.0	3	6.0								
<b>LOW INSTRUCTOR (LATI)</b>																		
LATI	LAT	LAT IUT	5210	X	X	X			2.0		D	A	1	*	LATI		5210	
	LAT	LAT IUT	5211	X	X	X			2.0		D	A	1	*	LATI		5211	
	LAT	LATI CERTIFICATION	5212	X	X	X			2.0		D	A	1	*	WTI		5212	
LATI TOTAL							0	0.0	3	6.0								
<b>NS LAT INSTRUCTOR (NSLATI)</b>																		
NSLATI	NS(L)	NSLAT IUT	5250	X	X	X			2.0		HLL	A	1	*	NSLATI		5250	
	NS(L)	NSLATI CERTIFICATION	5251	X	X	X			2.0		HLL	A	1	*	MAWTS IP		5251	
NSLATI SKILL TOTAL							0	0.0	2	4.0								
<b>HARVEST HAWK INSTRUCTOR (HHI)</b>																		
HHI	HH	HH IUT	5310	X	X	X			3.0		(N)	A	1	*	HHI		5310	
	HH	HHI CERTIFICATION	5311	X	X	X			3.0		(N)	A	1	*	MAWTS IP		5311	
HHI SKILL TOTAL							0	0.0	2	6.0								
<b>DEFENSIVE TACTICS INSTRUCTOR (DTI)</b>																		
DTI	DT	DT IUT	5410	X	X	X			1.0		D	A	1	*	DTI		5410	
	DT	DT IUT	5411	X	X	X			1.0		D	A	1	*	DTI		5411	
	DT	DTI CERTIFICATION	5412	X	X	X			2.0		D	A	1	*	MAWTS IP		5412	
LATI TOTAL							0	0.0	3	4.0								

KC-130J PILOT T&R SYLLABUS MATRIX (2000-6000 Phase)																		
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	SIM		FLIGHT		CONDITION	TYPE	# A/C or SIM	REFLY	INSTRUCTOR	EOM	EVENT CONV
				B	SC	R		#	TIME	#	TIME							
<b>6000 PHASE (REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS (R,C,Q,D))</b>																		
<b>NATOPS (NTPS)</b>																		
NTPS	NTPS	T3P NATOPS QUAL	6110	X	X	X	X			2.0	(N)	A/S	1	365	FRSI, CI NI	X	6110	
	NTPS	T2P NATOPS QUAL	6111	X	X	X	X		2.0		(N)	S/A	1	365	ANI, CI NI	X	6111	
	NTPS	TPC UPGRADE SIM	6112	X	X				3.0		(N)	S	1	*	CI, ANI		6112	
	NTPS	TPC UPGRADE SIM	6113	X	X				3.0		(N)	S	1	*	CI, ANI		6113	
	NTPS	TPC UPGRADE SIM	6114	X	X				3.0		(N)	S	1	*	CI, ANI		6114	
	NTPS	TPC UPGRADE SIM	6115	X	X				3.0		(N)	S	1	*	CI, ANI		6115	
	NTPS	TPC UPGRADE SIM	6116	X	X				3.0		(N)	S	1	*	CI, ANI		6116	
	NTPS	TPC ROUTE CHECK	6117	X	X					18.0	(N)	A	1	*	ANI		6117	
	NTPS	TPC NATOPS QUAL	6118	X	X	X	X			2.0	(N)	A/S	1	365	ANI, CI NI	X	6118	
NTPS	EP REVIEW	6120	X	X	X	X		1.0		(N)	S/A	1	90	ANI, CI	X	6120		
NTPS TOTAL								7	18.0	3	22.0							
<b>INSTRUMENTS (INST)</b>																		
INST	INST	STANDARD INST CHECK	6130	X	X	X	X		2.0		(N)	S/A	1	365	ANI, CI NI	X	6130	
	INST	SPECIAL INST CHECK	6131	X	X	X	X		2.0		(N)	S/A	1	365	ANI, CI NI	X	6131	
INST TOTAL								2	4.0	0	0.0							
<b>SECTION LEAD (SL)</b>																		
SL	SL	SL PRACTICE	6300	X						3.0	(NS)	A	2	*	SL		6300	
	SL	SL CERT	6301	X	X					3.0	(NS)	A	2	*	FLSE		6301	
	SL	SL PROFICIENCY	6302	X	X	X	X			2.0	(NS)	A	2	365			6302	
SL TOTAL								0	0.0	3	8.0							
<b>DIVISION LEAD (DL)</b>																		
DL	DL	DL PRACTICE	6303	X						3.0	(NS)	A	3+	*	DL		6303	
	DL	DL CERT	6304	X	X					3.0	(NS)	A	3+	*	FLSE		6304	
	DL	DL PROFICIENCY	6305	X	X	X	X			2.0	(NS)	A	3+	365			6305	
DL TOTAL								0	0.0	3	8.0							
<b>RAC</b>																		
RAC	RAC	INTRO TO TACRAC	6310	X	X					3.0	(NS)	A	2+	*	TACRAC		6310	
	RAC	TACRAC CERT	6311	X	X					3.0	(NS)	A	2+	*	TACRAC FLSE		6311	
	RAC	TACRAC PROF	6312	X	X	X	X			2.0	(NS)	A	2+	365			6312	
	RAC	STRATRAC CERT	6313	X	X					6.0	(NS)	A	1+	*	STRATRAC FLSE		6313	
	RAC	STRATRAC PROF	6314	X	X	X	X			6.0	(NS)	A	1+	540				
RAC TOTAL								0	0.0	5	20.0							
<b>FUCTIONAL CHECK PILOT (FCP)</b>																		
FCP	FCP	PART FCP CERT/PROF	6105	X	X	X	X			4.0	D	A/S	1	365	FCP, CI		6105	
	FCP	FCP CERTIFICATION	6106	X	X					4.0	D	A	1	*	FCP		6106	
FCP TOTAL								0	0.0	2	8.0							

KC-130J PILOT T&R SYLLABUS MATRIX (2000-6000 Phase)																		
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	SIM		FLIGHT		CONDITION	TYPE	# A/C or SIM	REFLY	INSTRUCTOR	EOM	EVENT CONV
				B	SC	R		#	TIME	#	TIME							
<b>FIRE CONTROL OFFICER (FCO)</b>																		
<b>FCO HARVEST HAWK (HH)</b>																		
HH	HH	HH GROUND FAM (PTT)	4800	X	X			2.0			D	S/A	1	*	HHI		4850	
	HH	HH PTT FAM	4801	X	X	X	X	2.0			D	S/A	1	180	HHI		4851	
	HH	HH FCC INTRO	4802	X	X						D	A	1	*	HHI		4802	
	HH	HH GROUND FAM	4803	X	X			2.0			D	S/A	1	*	HHI			
	HH	HH FLIGHT FAM	4804	X	X					2.5	D	A	1	*	HHI		4803	
HH TOTAL								2	6.0	0	2.5							
<b>FCO BASIC AIR TO SURFACE (BAS)</b>																		
BAS	BAS	INTRO TO DAY WEAPONS EMPL	4810	X	X			2.5			D	S/A	1	*	HHI		4860	
	BAS	DAY WEAPONS EMPL	4811	X	X				2.5	D	A	1	*	HHI		4861		
	BAS	LIVE WEAPONS EMPL	4812	X	X				2.5	(N)	A	1	*	HHI		4862		
BAS TOTAL								1	2.5	2	5.0							
<b>FCO MULTI-SENSOR IMAGERY RECONNAISSANCE (MIR)</b>																		
MIR	MIR	MIR PROFICIENCY	4820	X	X	X	X			2.5	(N)	A	1	180	HHI		4870	
MIR SKILL TOTAL								0	0.0	1	2.5							
<b>FCO CLOSE AIR SUPPORT (CAS)</b>																		
CAS	CAS	CAS	4830	X	X	X	X			2.5	(N)	A	1	180	HHI		4880	
	CAS	URBAN CAS	4840	X	X				2.5	(N)	A	1	*	HHI		4890		
CAS SKILL TOTAL								0	0.0	2	5.0							

2.24 KC-130J PILOT ATTAIN & MAINTAIN MATRIX (2000-4000 Phase)

KC-130J PILOT ATTAIN / MAINTAIN MATRIX												
SKILL	PREFIX	T&R DESCRIPTION	BASIC POI	SER CONV POI	REFRESHER POI	MAINTAIN POI	COND	TYPE	# A/C or SIM	REFLY	PREREQUISITE	CHAINING
<b>2000 PHASE (CORE)</b>												
<b>LEFT SEAT FAM (LSF)</b>												
LSF	LSF	LEFT SEAT FAM	2100	2100	2100		(N)	A	1	*	2200,3600,6110	
<b>NIGHT SYSTEMS (NS)</b>												
NS(H)	NS(H)	HLL NVD PROCEDURES	2150	2150	2150	2150	HLL	A/S	1	90		
	NS(H)	LLL NVD PROCEDURES	2151	2151	2151	2151	LLL	A/S	1	90		2150
<b>LONG RANGE NAVIGATION (LRN)</b>												
LRN	LRN	CONSTANT TAS LRN	2160	2160			(N)	A	1	*		
	LRN	LR CRUISE LRN	2161	2161			(N)	A	1	*		
	LRN	LRN	2162	2162	2162	2162	(N)	A	1	365	2160,2161	
<b>TACTICAL NAVIGATION (TN)</b>												
TN	TN	TN TIME NAV (PM)	2200	2200	2200		D	A/S	1	*		
	TN	TN PROCEDURES (PF)	2201	2201	2201	2201	D	A/S	1	365	2200	
	TN	HLL TN PROC (PF)	2250	2250	2250	2250	HLL	A/S	1	180	2201	2201,2150
	TN	LLL TN PROC (PF)	2251	2251	2251	2251	LLL	A/S	1	180	2201	2250,2201,2151,2150
<b>LOW ALTITUDE TACTICS (LAT)</b>												
LAT	LAT	INTRO TO LAT PROC	2260	2260			D	S/A	1	*	2201	2201
	LAT	LAT PROCEDURES	2261	2261	2261	2261	D	A	1	180	2260	2201
<b>FORMATION (FORM)</b>												
FORM	FORM	SEC FORM PROC	2300	2300	2300	2300	D	A/S	2	365		
	FORM	DIV FORM PROC	2301	2301	2301	2301	(NS)	A	3+	365	2300	2350~NS,2300,2151~LLL,2150~NS
	FORM	NIGHT FORM PROC	2350	2350	2350	2350	NS	A/S	2+	180	2300	2300,2151~LLL,2150~NS
<b>THREAT REACTION (TR)</b>												
TR	TR	GROUND IR TR	2400	2400	2400	2400	(NS)	A/S	1	180	2260	2151~LLL,2150~NS
<b>3000 PHASE (MISSION)</b>												
<b>ASSAULT LANDING ZONE (ALZ)</b>												
ALZ	ALZ	ALZ PROCEDURES	3500	3500	3500	3500	D	A/S	1	180	2100	
	ALZ	TACTICAL ARRIVALS	3501	3501	3501	3501	(NS)	A/S	1	365	2100	2151~LLL,2150~NS
	ALZ	COMBAT OFFLOAD	3502	3502			(N)	A	1	*	2100	
	ALZ	UNIMPROVED GRND OPS	3503	3503	3503	3503	(NS)	A	1	730	2100	2151~LLL,2150~NS
	ALZ	NIGHT ALZ PROC	3550	3550	3550	3550	NS	A/S	1	180	3500,2150,2151	3500, 2151~LLL,2150~NS
<b>AIR-TO-AIR REFUELING</b>												
AAR	AAR	FWAAR/TAAR PROC	3600	3600	3600	3600	(NS)	A/S	1	365		2151~LLL,2150~NS
	AAR	DAY HAAR PROC	3601	3601	3601	3601	D	A/S	1	365	2100	
	AAR	AAR PANEL PROC	3602	3602	3602	3602	(NS)	S/A	1	180	3600,3601	2151~LLL,2150~NS
	AAR	NIGHT HAAR PROC	3650	3650	3650	3650	NS	A/S	1	180	2100,3601	3601, 2151~LLL,2150~NS

KC-130J PILOT ATTAIN / MAINTAIN MATRIX												
SKILL	PREFIX	T&R DESCRIPTION	BASIC POI	SER CONV POI	REFRESHER POI	MAINTAIN POI	COND	TYPE	# A/C or SIM	REPLY	PREREQUISITE	CHAINING
<b>AVIATION DELIVERED GROUND REFUELING (ADGR)</b>												
ADGR	ADGR	ADGR PROCEDURES	3660	3660	3660	3660	(NS)	A	1	730		
<b>AIR DELIVERY (AD)</b>												
AD	AD	INTRO TO PF AD	3700	3700			(NS)	S/A	1	*	2201	2151~LLL,2150~NS
	AD	INTRO TO PM AD	3701	3701			(NS)	S/A	1	*	3700	2151~LLL,2150~NS
	AD	PF CARGO AD	3702	3702	3702	3702	(NS)	A/S	1	90	3700	3703,3704,3705, 2151~LLL,2150~NS
	AD	PM CARGO AD	3703	3703	3703	3703	(NS)	A/S	1	90	3701	3702,3704,3705, 2151~LLL,2150~NS
	AD	PF PERSONNEL AD	3704	3704	3704	3704	(NS)	A/S	1	90	3700	3702,3703,3705, 2151~LLL,2150~NS
	AD	PM PERSONNEL AD	3705	3705	3705	3705	(NS)	A/S	1	90	3701	3702,3703,3704, 2151~LLL,2150~NS
<b>4000 PHASE (CORE PLUS)</b>												
<b>TACTICAL NAVIGATION (TN)</b>												
TN	TN	FORM TN PROCEDURES	4200	4200	4200	4200	(NS)	A	2+	365	2201,2300	2350~NS,2300,2201, 2151~LLL,2150~NS
<b>NIGHT SYSTEMS LOW (NS(L))</b>												
NS(L)	NS(L)	INTRO NSLAT PROC	4250	4250			HLL	S/A	1	*	NSQ(H),LATQ	2250
	NS(L)	NSLAT PROCEDURES	4251	4251	4251	4251	HLL	A	1	180	4250	2250,2261
<b>THREAT REACTION (TR)</b>												
TR	TR	INTRO GRND RADAR TR	4400	4400			(NS)	A/S	1	*	2400,2261,LATQ	2151~LLL,2150~NS
	TR	GROUND RADAR TR	4401	4401	4401	4401	(NS)	A	1	180	4400	2151~LLL,2150~NS
<b>DEFENSIVE TACTICS (DT)</b>												
DT	DT	1 VS. 1 DEFTAC	4410	4410	4410	4410	D	A	1	365	2261,2400,LATQ	
	DT	1 VS. 2 DEFTAC	4411	4411	4411	4411	D	A	1	365	4410	4410
<b>AIR DELIVERY (AD)</b>												
AD	AD	COMBINATION AD	4700	4700	4700	4700	(NS)	A	1	365	3702,3703,3704,3705	3702,3703,3704,3705, 2151~LLL,2150~NS
	AD	MFF AD	4701	4701	4701	4701	(NS)	A	1	365	3704,3705	2151~LLL,2150~NS
	AD	JPADS AD	4702	4702	4702	4702	(NS)	A	1	365	3702,3703	2151~LLL,2150~NS
<b>BATTLEFIELD ILLUMINATION (BI)</b>												
BI	BI	BATTLEFIELD ILLUM	4710	4710	4710	4710	N	A	1	365	3701	2151~LLL,2150~NS

KC-130J PILOT ATTAIN / MAINTAIN MATRIX												
SKILL	PREFIX	T&R DESCRIPTION	BASIC POI	SER CONV POI	REFRESHER POI	MAINTAIN POI	COND	TYPE	# A/C or SIM	REFLY	PREREQUISITE	CHAINING
<b>PILOT HARVEST HAWK (HH)</b>												
HH	HH	HH GROUND FAM	4803	4803			D	S/A	1	*	4802	
	HH	HH FLIGHT FAM	4804	4804			D	A	1	*	4803	
<b>PILOT BASIC AIR TO SURFACE (BAS)</b>												
BAS	BAS	INTRO TO DAY WEAPONS EMPL	4860	4860			D	A	1	*	4804	
	BAS	DAY WEAPONS EMPL	4861	4861			D	A	1	*	4860	
	BAS	WEAPONS EMPLOYMENT	4862	4862			(N)	A	1	*	4860	
<b>PILOT MULTI-SENSOR IMAGERY RECONNAISSANCE (MIR)</b>												
MIR	MIR	MIR PROFICIENCY	4870	4870	4870	4870	(N)	A	1	365	4804	
<b>PILOT CLOSE AIR SUPPORT (CAS)</b>												
CAS	CAS	CAS	4880	4880	4880	4880	(N)	A	1	180	4861	
	CAS	URBAN CAS	4890	4890			(N)	A	1	*	4880	4880
<b>FIRE CONTROL OFFICER (FCO)</b>												
<b>FCO HARVEST HAWK (HH)</b>												
HH	HH	HH GROUND FAM (PTT)	4800	4800			D	S/A	1	*	APRB	
	HH	HH PTT FAM	4801	4801	4801	4801	D	S/A	1	180	4800	
	HH	HH FCC INTRO	4802	4802			D	A	1	*	4801	
	HH	HH GROUND FAM	4803	4803			D	S/A	1	*	4802	
	HH	HH FLIGHT FAM	4804	4804			D	A	1	*	4803	
<b>FCO BASIC AIR TO SURFACE (BAS)</b>												
BAS	BAS	INTRO TO DAY WEAPONS EMPL	4810	4810			D	S/A	1	*	4804	4801
	BAS	DAY WEAPONS EMPL	4811	4811			D	A	1	*	4810	4801
	BAS	LIVE WEAPONS EMPL	4812	4812			(N)	A	1	*	4810	4801
<b>FCO MULTI-SENSOR IMAGERY RECONNAISSANCE (MIR)</b>												
MIR	MIR	MIR PROFICIENCY	4820	4820	4820	4820	(N)	A	1	180	4804	4801
<b>FCO CLOSE AIR SUPPORT (CAS)</b>												
CAS	CAS	CAS	4830	4830	4830	4830	(N)	A	1	180	4811	4801
	CAS	URBAN CAS	4840	4840			(N)	A	1	*	4830	4801, 4830

2.25 KC-130J PILOT RANGE AND ORDNANCE MATRIX

KC-130J PILOT RANGE AND ORDNANCE MATRIX									
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	FLIGHT TIME	COND	TYPE	# A/C or SIM	REFLY	ORDNANCE
<b>2000 PHASE (CORE)</b>									
<b>THREAT REACTION (TR)</b>									
TR	TR	GROUND IR TR	2400	2.0	(NS)	A/S	1	180	30 OVERT/90 COVERT FLARES/SIM BUCKETS
<b>4000 PHASE (CORE PLUS)</b>									
<b>THREAT REACTION (TR)</b>									
TR	TR	INTRO GRND RADAR TR	4400	2.0	(NS)	A/S	1	*	300 CHAFF
	TR	GROUND RADAR TR	4401	2.0	(NS)	A	1	180	300 CHAFF
<b>DEFENSIVE TACTICS (DT)</b>									
DT	DT	1 VS. 1 DEFTAC	4410	2.0	D	A	1	365	120 FLARES SHOULD BE USED
	DT	1 VS. 2 DEFTAC	4411	2.0	D	A	1	365	120 FLARES SHOULD BE USED
<b>BATTLEFIELD ILLUMINATION (BI)</b>									
BI	BI	BATTLEFIELD ILLUM	4710	2.0	N	A	1	365	14(LUU-2/LUU-19)
<b>FCO BASIC AIR TO SURFACE (BAS)</b>									
BAS	BAS	DAY WEAPONS EMPL	4811	2.5	D	A	1	*	1 HELLFIRE CATM, 1 SOPGM CATM
	BAS	LIVE WEAPONS EMPL	4812	2.5	(N)	A	1	*	1 HELLFIRE, 1 SOPGM
<b>FCO MULTI-SENSOR IMAGERY RECONNAISSANCE (MIR)</b>									
MIR	MIR	MIR PROFICIENCY	4820	2.5	(N)	A	1	180	1 HELLFIRE CATM, 1 SOPGM CATM
<b>FCO CLOSE AIR SUPPORT (CAS)</b>									
CAS	CAS	CAS	4830	2.5	(N)	A	1	180	1 HELLFIRE CATM, 1 SOPGM CATM
	CAS	URBAN CAS	4840	2.5	(N)	A	1	*	1 HELLFIRE CATM, 1 SOPGM CATM
<b>PILOT BASIC AIR TO SURFACE (BAS)</b>									
BI	BAS	DAY WEAPONS EMPL	4861	2.5	D	A	1	*	1 HELLFIRE CATM, 1 SOPGM CATM
	BAS	WEAPONS EMPLOYMENT	4862	2.5	(N)	A	1	*	1 HELLFIRE, 1 SOPGM OR ASSOCIATED CATMS
<b>PILOT MULTI-SENSOR IMAGERY RECONNAISSANCE (MIR)</b>									
MIR	MIR	MIR PROFICIENCY	4870	2.5	(N)	A	1	365	1 HELLFIRE CATM, 1 SOPGM CATM
<b>PILOT CLOSE AIR SUPPORT (CAS)</b>									
CAS	CAS	CAS	4880	2.5	(N)	A	1	180	1 HELLFIRE CATM, 1 SOPGM CATM
	CAS	URBAN CAS	4890	2.5	(N)	A	1	*	1 HELLFIRE CATM, 1 SOPGM CATM
<b>5000 PHASE (INSTRUCTOR TRAINING)</b>									
<b>HARVEST HAWK INSTRUCTOR (HHI)</b>									
HHI	HH	HH IUT	5310	3.0	(N)	A	1	*	HELLFIRE CATM, SOPGM CATM
	HH	HHI CERTIFICATION	5311	3.0	(N)	A	1	*	HELLFIRE CATM, SOPGM CATM

2.26 KC-13J PILOT PREREQUISITE AND CHAINING (5000-6000 Phase)

KC-130J PILOT PREREQUISITE AND CHAINING (5000 - 6000 Phase)					
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	PREREQUISITE	CHAINING
<b>5000 PHASE (INSTRUCTOR TRAINING)</b>					
<b>BASIC INSTRUCTOR PILOT (BIP)</b>					
BIP	BIP	BIP TRAINING	5100	2200,2201,2250,2251,3600,3601,3602,3650,3600	2201
	BIP	BIP CHECK	5101	5100	3650, 2151~LLL,2150~NS
<b>ASSISTANT NATOPS INSTRUCTOR (ANI)</b>					
ANI	NI	ANI TRAINING	5140	5101,APRB	
	NI	ANI CHECK	5141	5140	
<b>FLEET REPLACEMENT SQUADRON INTRODUCTION (FRSI)</b>					
FRSI	FRSI	FRSI TRAINING	5145	5141,APRB	
	FRSI	FRSI TRAINING	5146	5145	
	FRSI	FRSI CHECK	5147	5146	
<b>FLIGHT LEADERSHIP STANDARDIZATION EVALUATOR (FLSE)</b>					
FLSE	FLSE	FLSE IUT	5320	IAW COURSE CATALOG	
	FLSE	FLSE CERTIFICATION	5321	IAW COURSE CATALOG	2151~LLL,2150~NS
	FLSE	FLSE QUARTERLY TRNG	5322	IAW COURSE CATALOG	
	FLSE	FLSE QUARTERLY TRNG	5322	IAW COURSE CATALOG	
<b>STAGE INSTRUCTOR (SI)</b>					
SI	ALZ	ALZ STAGE INST CHK	5500	3500,3501,3502,3503,3550,5101,5152 OR 5141,APRB	3550, 2151~LLL,2150~NS
	AD	AD STAGE INST TRNG	5700	3700,3701,3702,3703,3704,3705,4701,4710,5101,APRB	2151~LLL,2150~NS
	AD	AD STAGE INST CHK	5701	5700	2151~LLL,2150~NS
	AD	AD STAGE INST CHK	5701	5700	2151~LLL,2150~NS
<b>NIGHT SYSTEMS INSTRUCTOR (NSI)</b>					
NSI	NS(H)	NS(H) FAM IUT	5150	IAW COURSE CATALOG	2151~LLL,2150~NS
	NS(H)	NS (H) TN IUT	5151	IAW COURSE CATALOG	2251~LLL,2250~NS
	NS(H)	NSI CERTIFICATION	5152	IAW COURSE CATALOG	3550, 2251~LLL,2250~NS
<b>LOW INSTRUCTOR (LATI)</b>					
LATI	LAT	LAT IUT	5210	IAW COURSE CATALOG	2261
	LAT	LAT IUT	5211	IAW COURSE CATALOG	2400
	LAT	LATI CERTIFICATION	5212	IAW COURSE CATALOG	2261
	LAT	LATI CERTIFICATION	5212	IAW COURSE CATALOG	2261
<b>NS LAT INSTRUCTOR (NSLATI)</b>					
NSLATI	NS(L)	NSLAT IUT	5250	IAW COURSE CATALOG	2250,2261
	NS(L)	NSLATI CERTIFICATION	5251	IAW COURSE CATALOG	2250,2261
	NS(L)	NSLATI CERTIFICATION	5251	IAW COURSE CATALOG	2250,2261
<b>HARVEST HAWK INSTRUCTOR (HHI)</b>					
HHI	HH	HH IUT	5310	IAW COURSE CATALOG	
	HH	HHI CERTIFICATION	5311	IAW COURSE CATALOG	
<b>DEFENSIVE TACTICS INSTRUCTOR (DTI)</b>					
DTI	DT	DT IUT	5410	IAW COURSE CATALOG	4410
	DT	DT IUT	5411	IAW COURSE CATALOG	4411
	DT	DTI CERTIFICATION	5412	IAW COURSE CATALOG	4410

KC-130J PILOT PREREQUISITE AND CHAINING (5000 - 6000 Phase)					
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	PREREQUISITE	CHAINING
<b>6000 PHASE (REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS (R,C,Q,D))</b>					
<b>NATOPS (NTPS)</b>					
NTPS	NTPS	T3P NATOPS QUAL	6110	FCRM 1804	6120
	NTPS	T2P NATOPS QUAL	6111	6110,CSP COMPLETE, APRB,ACPM 82XX COMPLETE	6120
	NTPS	TPC UPGRADE SIM	6112	6111,APRB	6120
	NTPS	TPC UPGRADE SIM	6113	6112	6120
	NTPS	TPC UPGRADE SIM	6114	6113	6120
	NTPS	TPC UPGRADE SIM	6115	6114	6120
	NTPS	TPC UPGRADE SIM	6116	6115	6120
	NTPS	TPC ROUTE CHECK	6117	6111	2162
	NTPS	TPC NATOPS QUAL	6118	6116,6117,CSP/MSP COMPLETE, ACPM 83XX COMPLETE	6120
NTPS	EP REVIEW	6120			
<b>INSTRUMENTS (INST)</b>					
INST	INST	STANDARD INST CHECK	6130		
	INST	SPECIAL INST CHECK	6131	6130	
<b>SECTION LEAD (SL)</b>					
SL	SL	SL PRACTICE	6300	2301,2350,4200,6118,5101,APRB, 2 WINGMAN FLIGHTS AS TPC	2350~NS,2300,2151~LLL,2150~NS
	SL	SL CERT	6301	6300,8630,8660	2350~NS,2300,2151~LLL,2150~NS
	SL	SL PROFICIENCY	6302	6301	2350~NS,2300,2151~LLL,2150~NS
<b>DIVISION LEAD (DL)</b>					
DL	DL	DL PRACTICE	6303	6302,8620,8640,8641,200 TPC HOURS,APRB, 2 FLIGHTS AS A SECTION LEAD	2350~NS,2301,2151~LLL,2150~NS
	DL	DL CERT	6304	6303,8620,8640,8641	2350~NS,2301,2151~LLL,2150~NS
	DL	DL PROFICIENCY	6305	6304	2350~NS,2301,2151~LLL,2150~NS
<b>RAC</b>					
RAC	RAC	INTRO TO TACRAC	6310	3600,3650,6111	2151~LLL,2150~NS
	RAC	TACRAC CERT	6311	6310,6118,APRB	2151~LLL,2150~NS
	RAC	TACRAC PROF	6312	6311	2151~LLL,2150~NS
	RAC	STRATRAC CERT	6313	6304,6311,APRB	6312,2151~LLL,2150~NS
	RAC	STRATRAC PROF	6314	6313	6312,2151~LLL,2150~NS
<b>FUNCTIONAL CHECK PILOT (FCP)</b>					
FCP	FCP	PART FCP CERT/PROF	6105	6118,APRB	
	FCP	FCP CERTIFICATION	6106	6105,150 TPC HOURS, 3 FCFS, APRB	6105

2.27 KC-130J PILOT T&R MATRIX (7000 Phase)

KC-130J PILOT T&R SYLLABUS MATRIX (7000 Phase)								
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	BASIC POI	CONDITION	TYPE	NUMBER	EVENT CONV
<b>7000 PHASE MET ASSESSMENT</b>								
MET	MET	CONDUCT AVIATION OPERATIONS FROM EXPEDITIONARY SHORE-BASED SITES	7001	X	(NS)	A	2	NEW
	MET	CONDUCT COMBAT ASSAULT TRANSPORT	7002	X	(NS)	A	2	NEW
	MET	CONDUCT AIR-TO-AIR REFUELING	7003	X	(NS)	A	2	NEW
	MET	PROVIDE AVIATION-DELIVERED GROUND REFUELING	7004	X	(NS)	A	2	NEW
	MET	CONDUCT AIR DELIVERY	7005	X	(NS)	A	2	NEW
	MET	PROVIDE AVIATION-DELIVERED BATTLEFIELD ILLUMINATION	7006	X	(NS)	A	2	NEW
	MET	CONDUCT CLOSE AIR SUPPORT	7007	X	(NS)	A	2	NEW
	MET	CONDUCT MULTI-SENSORY IMAGERY RECONNAISSANCE	7008	X	(NS)	A	2	NEW

2.28 KC-130J PILOT T&R MATRIX (8000 Phase)

KC-130J PILOT T&R SYLLABUS MATRIX (8000 Phase)								
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	BASIC POI	ACAD		TYPE	EVENT CONV
					#	TIME		
<b>8000 PHASE AVIATION CAREER PROGRESSION MODEL</b>								
<b>ACPM CORE SKILL</b>								
ACPM	ACPM	MACCS AGENCIES	8200	X		0.5	G	8200
	ACPM	MWCS BRIEF	8201	X		0.5	G	8201
	ACPM	ACA AND AIRSPACE	8202	X		0.8	G	8202
	ACPM	AVIATION GRND SPRT	8210	X		0.7	G	8210
	ACPM	ACE BATTLE STAFF	8230	X		1.0	G	8230
	ACPM	BATTLE COMMAND DISPLAY	8231	X		1.0	G	8231
	ACPM	SIX FUNCTIONS	8240	X		1.7	G	8240
	ACPM	JTAR/ASR INTRO	8241	X		1.3	G	8241
	ACPM	SITE COMMANDER PRIMER	8242	X		1.0	G	8242
ACPM	THEATRE AIR GRD SYS (TAGS)	8250	X		0.8	G	8250	
<b>ACPM MISSION SKILL</b>								
ACPM	ACPM	AIR DEFENSE	8300	X		0.8	G	8300
	ACPM	FARP OPS	8310	X		0.8	G	8310
	ACPM	MC TACTICAL FUEL SYSTEM	8311	X		0.8	G	8311
	ACPM	JOINT STRUC & JOINT AIR OPS	8320	X		1.0	G	8320
	ACPM	JOINT AIR TASKING PHASE 1	8321	X		0.3	G	8321
	ACPM	JOINT AIR TASKING PHASE 2	8322	X		0.3	G	8322
	ACPM	JOINT AIR TASKING PHASE 3	8323	X		0.3	G	8323
	ACPM	JOINT AIR TASKING PHASE 4	8324	X		0.3	G	8324
	ACPM	JOINT AIR TASKING PHASE 5	8325	X		0.3	G	8325
	ACPM	JOINT AIR TASKING PHASE 6	8326	X		0.3	G	8326
	ACPM	INTEGRATING FIRES	8340	X		0.5	G	8340
	ACPM	ESTABLISHING CONTROL ASHORE	8350	X		0.8	G	8350
	ACPM	TACRON	8351	X		1.0	G	8351
<b>ACPM FLIGHT LEADERSHIP (SECTION LEADER)</b>								
	ACPM	TACC	8630	X		1.0	G	8630
	ACPM	JOINT OPS INTRO	8660	X		0.4	G	8660
<b>ACPM FLIGHT LEADERSHIP (DIVISION LEADER)</b>								
	ACPM	JOINT DATA NETWORK	8640	X		0.8	G	8640
	ACPM	ISR EMPLOYMENT	8641	X		0.3	G	8641
	ACPM	ESG/CSG INTEGRATION	8620	X		1.0	G	8620
<b>ACPM TOTAL</b>						28	20.3	

2.29 TRAINING DEVICE EVENT ESSENTIAL SUBSYSTEM MATRIX (MESM). This EESM applies to the FRD for all Basic, Series Conversion, and Modified Refresher students. Fleet squadrons have the authority to deviate from the matrix at the squadron commanding officer's discretion.

<b>KC-130J SIMULATOR MISSION ESSENTIAL SUBSYSTEM MATRIX (MESM) (2F199)</b>		
<b>Failed Sub-System</b>	<b>PMC For:</b>	<b>NMC For:</b>
Hydraulics	Any CPT	Any non-CPT event
Aural	Any CPT	
Visual	Any CPT	Any non-CPT event
NVG Visual		Any NS event
NVIS Lighting		Any NS event
TEN		Any TR event
Lead-ship		Any FORM or AAR event
RadAlts (2)	1 failed RadAlt: Any event	2 RadAlts failed: Any TN, LAT, AD, ALZ, NS, TR, or FAM event
Digimap	TN-1201/1202 and AD	LAT or TN-1200
HUD (2)	1 failed HUD: CPT 1100-1103 and 1106-1110, any FAM event, and any tactical event	2 HUDs failed: CPT-1104/1105/1111, any FAM event, and any tactical event
Flight Director (2)	1 failed FD: Any event	2 failed FD: FAM 1116-1131, AD, ALZ, NS, TN, and LAT events
Normal Trim	1 failed yoke trim switch: Any event	2 yoke trim switches failed: Any event
AMU (2)	1 failed AMU: Any event	2 AMUs failed: Any event
CNBP	Any FAM or tactical event	CPT-1109
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
Standby Attitude	Any event	
Standby Airspeed, Altimeter	Any event	

2.30 SYLLABUS EVALUATION FORMS

Admin Notes. Aviation Training Forms are maintained by MAWTS-1 on the KC-130 Division TECOM website

CHAPTER 3 - CREWMASTER (MOS 6276) SYLLABUS

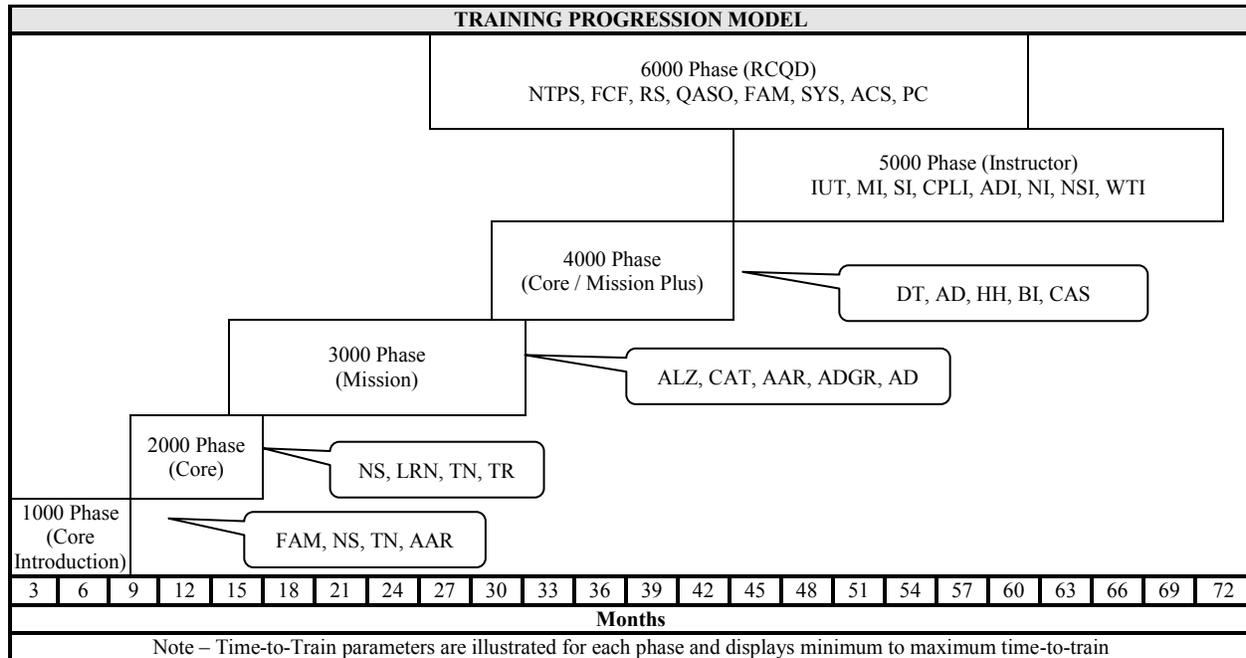
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CHAPTER 3 - CREWMASTER (MOS 6276) SYLLABUS

3.0 CREWMASTER SYLLABUS T&R REQUIREMENTS. This T&R syllabus is based on specific goals and performance standards designed to ensure individual proficiency in Core, Mission, Core Plus, and Mission Plus Skills. The goal of this chapter is to develop individual and unit war fighting capabilities.

3.1 TRAINING PROGRESSION MODEL. Represents the recommended training progression for the KC-130J Crewmaster. This model represents minimum to maximum time to train.



3.2 PROGRAMS OF ISNTRUCTION (POI)

3.2.1 General. Represents the average POI time-to-train by Phase.

3.2.2 Basic (B) POI. The Basic Crewmaster shall execute those events annotated with a B.

WEEKS	PHASE	PERFORMING ACTIVITY
16	Core Introduction	FRD East / FRD West / Tactical Squadron
12	Core	Tactical Squadron
20	Mission	Tactical Squadron
2	Core Plus	Tactical Squadron
8	Mission Plus	Tactical Squadron

3.2.3 Series Conversion (S) POI. The series conversion Crewmaster shall execute those events annotated with an S. Commanding officers will review the qualifications, previous experience, currency, and demonstrated ability of series conversion Crewmasters with a view toward combining required flights.

WEEKS	PHASE	PERFORMING ACTIVITY
8	Core Introduction	FRD East / FRD West / Tactical Squadron
2	Core	Tactical Squadron
0	Mission	Tactical Squadron
0	Core Plus	Tactical Squadron
2	Mission Plus	Tactical Squadron

3.2.4 Refresher (R) POI. The refresher Crewmaster shall execute those events annotated with an R. Commanding officers will review the qualifications, previous experience, currency, and demonstrated ability of refresher Crewmasters with a view toward combining required flights.

WEEKS	PHASE	PERFORMING ACTIVITY
2	Core Introduction	Tactical Squadron
8	Core	Tactical Squadron
12	Mission	Tactical Squadron
0	Core Plus	Tactical Squadron
6	Mission Plus	Tactical Squadron

### 3.3 PROFICIENCY & CURRENCY

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

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

Maintaining Skill Proficiency. Once attained, skill proficiency is maintained by executing those events which have a proficiency period (Maintain events). Proficiency periods establish the maximum time between event demonstrations. Should proficiency be lost in any maintain event, for a specific skill, that skill proficiency is temporarily lost. Skill proficiency can be re-attained by again demonstrating proficiency in the event(s) that are not proficient. An individual shall complete delinquent events with a proficient Crewmaster.

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

Loss of Unit Skill Proficiency. If an entire unit loses proficiency in an event, unit instructors shall regain proficiency by completing the event with an instructor for a like unit. If not feasible, the instructor shall regain proficiency by completing the event with another instructor. If a unit has only one instructor and cannot complete the event an instructor from another unit, the instructor shall regain proficiency as designated by the commanding officer.

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

3.3.3 Skill Currency. Currency is a control measure used to provide an additional margin of safety based on exposure frequency to a particular skill applies to all MOSs that must comply with NATOPS and OPNAV requirements. It is a measure of time since the last event demanding that specific skill.

3.4 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, AND DESIGNATION (RCOD) TABLES. The table below delineates T&R events required to be proficient or waived to attain Requirements, Certifications, Qualifications, and Designations. Waiving of all required events leading to a Requirements, Certification, Qualification, or Designation is not allowed.

Requirements	Requirements and Prerequisites
QTREP	6120R
Qualifications	Qualifications and Prerequisites
NSQ	2150R
FCF(P)	6105R
FCF(F)	6107R
RS	6660R
QASO	6710R
* CM1 includes PC designation in ASM.	
Designations	Designations and Prerequisites
CM3	6110R
CM2	6111R
CM1	6118R *
CMCC	6112R
CMLM	6113R
MI	5102R
SI	5103R
CPLI	5510R
ADI	5701R
CM NI/ANI	5141R
CMCC NI/ANI	5142R
CMLM NI/ANI	5143R
NSI	5152R, MAWTS-1 KC-130J Course Catalog Requirements
WTI	MAWTS-1 KC-130J Course Catalog Requirements
* CM1 includes PC designation in ASM.	

### 3.5 SYLLABUS NOTES

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

3.5.2 All events, to include simulators, shall terminate with a comprehensive debrief with emphasis on performance, knowledge, and CRM.

3.5.3 An ATF is required for any initial event completed unless a specific event states an ATF is not required. If the commanding officer has waived/deferred an event, the waiver/deferral letter shall be placed in section 3 of the APR.

3.5.4 Pre-event training is sponsored, developed, maintained, and published by both the KC-130J FRD and MAWTS-1 KC-130J Course Catalogs. The KC-130J FRD and MAWTS-1 KC-130J Course Catalogs will list the required pre-event requirements by phase, stage, and/or event in the admin notes or prerequisites. Any pre-event requirements shall also be stated on all ATFs.

3.5.5 The series conversion POI applies to all crew positions (FE, FM, and CM) converting from the KC-130T to the KC-130J aircraft. Aircrew Performance Records should be reviewed to evaluate previous experience for waiver of any series conversion events and to determine if any basic POI events should be required.

3.5.6 The refresher POI applies to all CM3, CM2, and CM1 Crewmasters returning to the KC-130J after an absence of more than 540 days out of the aircraft.

3.5.7 The refresher POI also applies to all CMCC and CMLM Crewmaster returning to the KC-130J after an absence of more than 540 days out of the aircraft. However, CMCC and CMLM shall not re-qualify as CMCC and CMLM. They will complete the additional requirements established in the KC-130J FRD Course Catalog as well as any refresher POI events for CM3 qualification.

3.5.8 Current CMCC Crewmasters must complete the additional requirements established in the KC-130J FRD Course Catalog for either CM3, CM2, or CM1 qualification. These requirements must be complete within one year of the date of this manual.

3.5.9 Current CMLM Crewmasters must complete the additional requirements established in the KC-130J FRD Course Catalog for CM3 qualification. These requirements must be complete within one year of the date of this manual.

3.5.10 The initial qualification after the Core Skill Introduction Phase (1000) completion and successful NATOPS

evaluation is the CM3. A CM3 qualification is the foundation of further training toward duties at the ACS and qualification as a PC. A CM3 is qualified to conduct exterior and interior preflight, weight and balance calculations, exterior engine start monitoring, cargo compartment monitoring, and normal and emergency procedures. A CM3 will be capable of conducting observer duties, cargo and passenger loading/offloading, air delivery, aviation delivered ground refueling, battlefield illumination, and harvest HAWK missions once complete with the required events in the Core Phase and above training. A CM3 shall not be assigned to a crew unless accompanied by a CM2, CM1, or CMCC.

3.5.11 The next qualification level of the Crewmaster is the CM2. The CM3 after recommendation at the squadron APRB will complete the FAM and SYS stages as required in the Requirements, Certifications, Qualifications, and Designations Phase (6000). After completion of FAM and SYS stages, and successful NATOPS evaluation the CM3 will be qualified and re-designated a CM2. A CM2 is qualified to conduct all duties of a CM3 with the addition of flight station preflight and all normal ACS duties. A CM2 is the minimum required for a crew in addition to a pilot and copilot.

3.5.12 The last qualification level of the Crewmaster is CM1. The CM2 after recommendation at the squadron APRB will complete PC events as required in the Requirements, Certifications, Qualifications, and Designations Phase (6000). After completion of PC events and successful NATOPS evaluation the CM2 will be qualified and re-designated a CM1. A CM1 is qualified to conduct all duties of a CM2 with addition to PC duties as required by COMNAVAIRFORINST 4790.2, and squadron SOP. These duties will include inspections, servicing, and minor expeditionary maintenance Requirements.

3.5.13 COMNAVAIRFORINST 4790.2 authorizes “commands where Naval Aircrew perform the functions of a plane captain, completion of the training curriculum and the designation as a Naval Aircrew by the Commanding Officer per the NATOPS Evaluation Report (OPNAV 3710/7) shall qualify the aircrew for plane captain duties. In such cases, the Naval Aircrew training syllabus must include all plane captain qualifications and requirements. Naval Aircrew qualified as plane captains per this paragraph, are not required to take a separate plane captain examination, appear before a Plane Captain Selection board, or be designated via the Plane Captain Designation (CNAF 4790/158)”. After completion of the required embedded PC events in the Requirements, Certifications, Qualifications, and Designations Phase (6000) and successful NATOPS evaluation, a signed copy of the designation letter and OPNAV 3710/7 form shall be scanned into ASM under Plane Captain Designation and routed for signature by the Commanding Officer or designee. Crewmasters qualified as Plane Captains prior to this syllabus utilized the ASM Plane Captain Syllabus tasks list therefor the directions given above do not apply. Plane Captain Periodicals will also be conducted in accordance with COMNAVAIRFORINST 4790.2.

3.5.14 Event Conditions

Code	Description
D	Shall be conducted during hours of daylight.
N	Shall be conducted during hours of darkness, may be aided or unaided.
(N)	May be conducted during darkness. If flown during hours of darkness it may be flown aided or unaided.
NS	Shall be conducted during hours of darkness and mandatory use of night vision devices.
HLL	Shall be conducted at night aided under high light level conditions.
LLL	Shall be conducted at night aided under low light level conditions.

3.5.15 Device Matrix

Code	Description
A	Conducted in aircraft
S	Conducted in simulator
G	Ground
A/S	Conducted in aircraft preferred but may be conducted in simulator
S/A	Conducted in simulator preferred but may be conducted in aircraft
G/S	Conducted on the ground preferred but may be conducted in simulator
S/G	Conducted in simulator preferred but may be conducted on the ground

### 3.5.16 Program of Instruction Matrix

POI	Code	Description
Basic	B	Initial MOS and Skill Training (Conversions and Transitions will be assigned Basic POI)
Series Conversion	S	Moving from one T/M/S to another (KC-130T to KC-130J)
Refresher	R	Return to same T/M/S from non-flying tour
Maintain	M	All individuals who have attained CSP/MSP/CPSP/MPSP by initial POI assignment are re-assigned to the M POI to maintain proficiency

### 3.5.17 Event Terms

Term	Description
Discuss	An explanation of systems, procedures, or maneuvers during the brief, in flight, or post flight. Trainee is responsible for knowledge of procedures.
Demonstrate	The description and performance of a particular maneuver/event by the instructor, observed by the trainee. The trainee is responsible for knowledge of the procedures prior to the demonstration of a required maneuver.
Introduce	The instructor may demonstrate a procedure or maneuver to a trainee, or may coach the trainee through the maneuver without demonstration. The trainee performs the procedures or maneuver with coaching as necessary. The trainee is responsible for knowledge of the procedures.
Practice	The performance of a maneuver or procedure by the trainee that may have been previously introduced in order to attain a specified level of performance.
Review	Demonstrated proficiency of a maneuver by the trainee.
Evaluate	Any flight designed to evaluate aircrew standardization that does not fit another category such as SARCK, HACCK, T2PCK, etc.

### 3.5.18 Additional Training Courses Available

Course	Unit
Aircraft Weight and Balance Course	CNATT
Hazardous Materials Preparer Course	Newport, RI or Ft. Lee, VA
Forklift Operators Course	MWSS or Base Motor Transport
Joint Airdrop Inspector Course	Ft. Lee, VA
Advanced Airlift Tactical Training Course (AATTC)	St. Joseph, MO
Basic Instructor Training Course	MCB Lejeune, NC or MCB Camp Pendleton, CA
Crew Resource Management Instructor	NAS Pensacola, FL or Mobile Training Team

### 3.5.19 Syllabus References

References
Aviation T&R Program Manual (NAVMC 3500.14)
NATOPS General Flight and Operations Instruction (OPNAVINST 3710.7)
NATOPS General Flight and Operations Instruction (MCO 3710.8)
Crew Resource Management Program (OPNAVINST 1542.7)
Navy and Marine Corps Crew Resource Management Program (COMNAVAIRFORINST 1542.7)
Marine Corps Safety Program (MCO 5100.29)
Naval Aviation Maintenance Program (COMNAVAIRFORINST 4790.2)
Organization Maintenance Publications (General Vehicle, General Systems, Job Guides, Fault Isolations, Individual Parts Breakdown, and Wiring Diagrams for the KC-130J)
KC-130J NATOPS Flight Manual (NAVAIR 01-75GAJ-1)
KC-130J NATOPS Flight crew Quick Reference Handbook (NAVAIR 01-75GAJ-1.5)
KC-130J NATOPS Functional Flight Check (FCF) Checklist (NAVAIR 01-75GAJ-1F)
KC-130J Naval Aviation Technical Information Product (NTRP 3-22.4-KC130J)
Combat Aircraft Fundamentals KC-130 (Air NTTP 3-22.3-KC130)
Tactical Pocket Guide KC-130 (Air NTTP 3-22.5-KC130)
Air-to-Air Refueling Manual (ATP-3.3.4.2)
Cargo Loading Manual (NAVAIR 01-75GAA-9)
Air Delivery Rigging Manuals (MCRP 4-11.3 Series)
MAWTS-1 WTI Course Catalog
MAWTS-1 KC-130J Course Catalog
KC-130J FRD Course Catalog

## 3.6 CORE INTRODUCTION PHASE

**Purpose.** The purpose of this phase is to instruct the CMT in basic KC-130J fundamentals, and introduce mission elements.

General. At the completion of this phase the CMT will be a NATOPS qualified CM3, MOS 6276 designated, and receive Aircrew insignia. A CM3 is qualified to conduct exterior and interior preflight, weight and balance calculations, exterior engine start monitoring, cargo compartment monitoring, and normal and emergency procedures. A CM3 will be capable of conducting observer duties, cargo and passenger loading/offloading, air delivery, aviation delivered ground refueling, battlefield illumination, and harvest HAWK missions once complete with the required events in the Core Phase and above training. A CM3 shall not be assigned to a crew unless accompanied by a CM2, CM1, or CMCC.

Phase Overview. The following stages are included in the Core Introduction Phase of training.

Stage	Paragraph	Page Number
FAM	3.7.1	3-8
NS	3.7.2	3-15
TN	3.7.3	3-16
AAR	3.7.4	3-16

Admin Notes. FRD East, FRD West, or operational squadrons may conduct this phase of training. Pre-event requirements in accordance with the KC-130J FRD Course Catalog.

Prerequisites. NACCS, SERE, BLM, LIQ, LMQ, and CMIAMC. Alternate prerequisites for BLM/LIQ/LMQ/CMIAMC may also be authorized by the KC-130J FRD in accordance with the KC-130J Course Catalog. The alternates are only available for CMCC, CMLM, and series conversions.

### 3.7 CORE INTRODUCTION STAGES

#### 3.7.1 Familiarization (FAM)

Purpose. The purpose of this stage is to provide the CMT practice and review in performing Electrical Power application, Aircraft Servicing, and Inflight and Emergency Procedures.

General. This stage is the performance of basic KC-130J fundamentals on actual flights building upon the academics and labs conducted at the KC-130J FRD. At the completion of this stage the CMT is ready for initial NATOPS CM3 evaluation provided the remaining Core Introduction stages have been completed.

FAM Overview. The following events are included in the FAM stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
FAM-1000	3.0	*	B,S	(N)	G	1	Electrical Power Application
FAM-1001	3.0	*	B,S	(N)	G	1	Aircraft Servicing
FAM-1100	3.0	*	B,S	(N)	A	1	Inflight and Emergency Procedures
FAM-1101	3.0	*	B,S	(N)	A	1	Inflight and Emergency Procedures
FAM-1102	3.0	*	B,S	(N)	A	1	Inflight and Emergency Procedures
FAM-1103	5.0	*	B,S,R	(N)	A	1	Inflight and Emergency Procedures

**FAM-1000 3.0 \* B,S (N) G 1 KC-130J**

Goal. Review electrical power application.

#### Requirements

##### Review

- Connecting and disconnecting external electrical power
  - Equipment Conditions
  - Preparation for connecting external electrical power
  - Connecting external electrical power
  - Disconnecting external electrical power
- Operation of APU
  - Equipment conditions
  - Preparation for starting APU
  - Starting APU
  - Pressurize bleed air manifold
  - Operation of air conditioning system with APU
  - Normal shutdown of APU



- NLG pin and chocks
- Engine start procedure
  - Engine start monitoring
  - Removing external GSE
- Before taxi checklist
  - Crew and door
  - Hydraulic quantities
  - Passengers and cargo
  - Belts and harnesses
  - Cargo compartment general condition
- Taxi clearance observation and reverse taxi directing
- After takeoff checklist
  - Wings, engines, hydraulics
  - Cargo compartment general condition
- In-flight
  - Passenger and cargo monitoring
  - Cargo compartment monitoring
- In-range checklist
  - Passenger and cargo security
- After landing checklist
  - CMDS safety pins
- Shutdown checklist
  - Crew entrance door
  - Chocks and NLG pin
- Emergency procedures
  - Ground evacuation
  - APU fire (ground/In-flight)
  - Engine fire
  - Wing fire
  - Pod fire
  - Brake fire
  - Fire/Smoke/Fumes elimination
  - Electrical fire
  - Restoring pressurization procedure
  - Rapid decompression
  - EPOS
  - Cargo compartment window failure
- Practice
  - Aircraft discrepancies screening
  - Cranial and toolbox keys checkout
  - RMM, DTADS, maintenance publications, and tire pressure gauge checkout
  - Toolbox ATAF
  - External preflight
  - Interior preflight
  - APU Operation (FAM-1000)
  - Weight and balance
  - Post flight

Performance Standard. NFM and 01-75GAJ-1.5.

Instructor. SI.

**FAM-1101 3.0 \* B,S (N) A 1 KC-130J**

Goal. Practice In-flight Procedures.

Requirements

Introduce

Emergency procedures  
Engine shutdown (In-flight) for Propeller fails to feather  
Visible fluid leaks  
Fuel dumping  
Electrical systems failures  
Battery power only considerations  
BIU backup mode  
Hydraulic system pressure lo/loss/leak  
Excessive hydraulic system pressure  
Loss of utility, booster, or auxiliary hydraulic system considerations  
Landing gear failure procedures  
Flaps failure procedures  
Flight control systems failure procedures  
In-flight crew door and ramp warning procedures  
Landing emergency procedures  
Bailout procedures

Practice

Acquiring aircraft provisions  
Coffee and water  
Galley supplies  
Publications library and forms  
Aircraft discrepancies screening  
Cranial and toolbox keys checkout  
RMM, DTADS, maintenance publications, and tire pressure gauge checkout  
Toolbox ATAF  
External preflight  
Interior preflight  
APU Operation (FAM-1000)  
Weight and balance  
Aircraft communications  
Get home control  
CNI-MU and CNBP communication control  
ICS and radio control panels  
Before start checklist  
Ramp and door controls  
NLG pin and chocks  
Engine start procedure  
Engine start monitoring  
Removing external GSE  
Before taxi checklist  
Crew and door  
Hydraulic quantities  
Passengers and cargo  
Belts and harnesses  
Cargo compartment general condition  
Taxi clearance observation and reverse taxi directing  
After takeoff checklist  
Wings, engines, hydraulics  
Cargo compartment general condition  
In-flight  
Passenger and cargo monitoring  
Cargo compartment monitoring  
In-range checklist  
Passenger and cargo security  
After landing checklist  
CMDS safety pins



- Aircraft communications
  - Get home control
  - CNI-MU and CNBP communication control
  - ICS and radio control panels
- Before start checklist
  - Ramp and door controls
  - NLG pin and chocks
- Engine start procedure
  - Engine start monitoring
  - Removing external GSE
- Before taxi checklist
  - Crew and door
  - Hydraulic quantities
  - Passengers and cargo
  - Belts and harnesses
  - Cargo compartment general condition
- Taxi clearance observation and reverse taxi directing
- After takeoff checklist
  - Wings, engines, hydraulics
  - Cargo compartment general condition
- In-flight
  - Passenger and cargo monitoring
  - Cargo compartment monitoring
- In-range checklist
  - Passenger and cargo security
- After landing checklist
  - CMDS safety pins
- Shutdown checklist
  - Crew entrance door
  - Chocks and NLG pin
- Post flight
- Emergency procedures
  - Ground evacuation
  - APU fire (Ground/In-flight)
  - Engine fire
  - Wing fire
  - Pod fire
  - Brake fire
  - Fire/Smoke/Fumes elimination
  - Electrical fire
  - Restoring pressurization procedure
  - Rapid decompression
  - EPOS
  - Cargo compartment window failure

Performance Standard. NFM and 01-75GAJ-1.5.

Instructor. SI.

Prerequisite. FAM-1101.

**FAM-1103    5.0    \*    B,S,R    (N)    A    1 KC-130J**

Goal. Review in-flight procedures

Requirements

- Introduce
  - Reverse taxi procedures

Review

- Acquiring aircraft provisions
  - Coffee and water
  - Galley supplies
- Publications library and forms
- Aircraft discrepancies screening
- Cranial and toolbox keys checkout
- RMM, DTADS, maintenance publications, and tire pressure gauge checkout
- Toolbox ATAF
- External preflight
- Interior preflight
- Weight and balance
- Aircraft communications
  - Get home control
  - CNI-MU and CNBP communication control
  - ICS and radio control panels
- Before start checklist
  - Ramp and door controls
  - NLG pin and chocks
- Engine start procedure
  - Engine start monitoring
  - Removing external GSE
- Before taxi checklist
  - Crew and door
  - Hydraulic quantities
  - Passengers and cargo
  - Belts and harnesses
  - Cargo compartment general condition
- Taxi clearance observation and reverse taxi directing
- After takeoff checklist
  - Wings, engines, hydraulics
  - Cargo compartment general condition
- In-flight
  - Passenger and cargo monitoring
  - Cargo compartment monitoring
- In-range checklist
  - Passenger and cargo security
- After landing checklist
  - CMDS safety pins
- Shutdown checklist
  - Crew entrance door
  - Chocks and NLG pin
- Post flight
- Emergency procedures
  - Ground evacuation
  - APU fire (Ground/In-flight)
  - Engine fire
  - Wing fire
  - Pod fire
  - Brake fire
  - Fire/Smoke/Fumes elimination
  - Electrical fire
  - Restoring pressurization procedure
  - Rapid decompression
  - EPOS
  - Cargo compartment window failure







- Hose fails to extend or retract
- Improper coupling action
- Fuel spray
- Inadvertent disconnect
- Hose extends beyond full trail
- Emergency procedures (BREAKAWAY)
  - Excessive closure
  - Dead hose
  - Broken hose
  - Fast trailing hose
- In-flight Issue Log (DD-791)

Performance Standard. NFM, Air NTTP, and ATP.

Instructor. MI.

Prerequisite. FAM-1103.

### 3.8 CORE PHASE

Purpose. The purpose of this phase is to attain and maintain proficiency in Core Skills. These Core Skills provide the basic functions and enablers of our assigned mission essential task list.

Phase Overview. The following stages are included in the Core Phase of training.

Stage	Paragraph	Page Number
NS	3.9.1	3-18
LRN	3.9.2	3-19
TN	3.9.3	3-19
TR	3.9.4	3-20

### 3.9 CORE STAGES

#### 3.9.1 Night Systems (NS)

Purpose. The purpose of this stage is to attain and maintain proficiency in the use of NVDs in the night environment.

General. At the completion of this stage the Crewmaster has attained proficiency in the use of NVDs and is NSQ.

NS Overview. The following events are included in the NS stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
NS-2150	2.0	365	B,R,M	NS	A	1	Night Systems Qualification

#### Admin Notes

- (1) NSQ letter shall be placed in the APR.
- (2) See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**NS-2150      2.0      365      B,R,M                      NS      A      1 KC-130J**

Goal. Attain and maintain proficiency utilizing NVDs.

#### Requirements

Evaluate

- NVD checkout, inspection, alignment, and adjustment
- NVD features
- NVD failures
- Astronomical data
- Donning and doffing procedures
- Exterior lighting in Normal, NVIS, and covert in the night environment
- Interior lighting in Normal, NVIS, and covert in the night environment

Terrain, Water, Cultural lighting, and visual illusions in night environment  
Effects of weather on NVDs  
Scanning, field of view, and field of regard  
Effects on individuals using NVDs (C3I2)

Performance Standard. Air NTTP and MAWTS-1 NVD Manual.

Instructor. NSI.

Prerequisite. NS(H)-1151, and minimum NVD hours as stated in the MAWTS-1 KC-130J Course Catalog.

### 3.9.2 Long Range Navigation (LRN)

Purpose. The purpose of this stage is to attain proficiency in long range flight planning and outside continental U.S. (OCONUS) operations.

LRN Overview. The following events are included in the LRN stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
LRN-2162	6.0	*	B,S	(N)	A	1	Long Range Navigation

#### Admin Notes

- (1) Mission profile should include OCONUS requiring customs and/or agriculture in a foreign country.
- (2) It is preferred that manifested cargo and/or passengers be onboard.
- (3) See courseware as outlined in the KC-130J FRD Course Catalog for any pre-event requirements.

**LRN-2162      6.0      \*      B,S      (N)      A      1 KC-130J**

Goal. Attain proficiency in long range flight planning and outside continental U.S. (OCONUS) operations.

#### Requirements

##### Review

Overwater equipment requirements  
Foreign clearance guide requirements  
Ditching procedures  
Overwater bailout procedures

Performance Standard. NFM and Foreign Clearance Guide.

Instructor. MI.

Prerequisite. FAM-1103.

### 3.9.3 Tactical Navigation (TN)

Purpose. The purpose of this stage is to attain and maintain proficiency in aft observer duties in a tactical navigation environment.

TN Overview. The following events are included in the TN stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
TN-2201	2.0	365	B	D	A	1	Day Tactical Navigation
TN-2250	2.0	365	B,R,M	NS	A	1	Night Systems Tactical Navigation

Admin Notes. See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**TN-2201      2.0      365      B      D      A      1 KC-130J**

Goal. Attain and maintain proficiency in aft observer duties in a day tactical navigation environment.

#### Requirements

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Review

Lookout doctrine  
Scanning for threats  
Scanning for terrain clearance  
FENCE checklist  
Maneuvering and low altitude environment terminology

Performance Standard. Air NTTP.

Instructor. MI.

Prerequisite. TN-1200.

**TN-2250 2.0 365 B,R,M NS A 1 KC-130J**

Goal. Attain and maintain proficiency in aft observer duties in a night tactical navigation environment.

Requirements

Review

Lookout doctrine  
Scanning for threats  
Scanning for terrain clearance  
FENCE checklist  
Maneuvering and low altitude environment terminology  
NVD use and night environment specifics

Performance Standard. Air NTTP and MAWTS-1 NVD Manual.

Instructor. MI or NSI if Crewmaster under instruction is not NSQ.

Prerequisite. NS(H)-1151 and TN-2201.

3.9.4 Threat Reaction (TR)

Purpose. The purpose of this stage is to attain and maintain proficiency in aft observer duties in a surface to air threat environment.

TR Overview. The following events are included in the TR stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
TR-2400	2.0	365	B,R,M	(N)	A	1	Threat Reaction

Admin Notes

- (1) Initial event shall utilize surface to air threat range with simulated (smoky) surface to air missiles and emitters.
- (2) See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**TR-2400 2.0 365 B,R,M (N) A 1 KC-130J**

Goal. Attain and maintain proficiency in aft observer duties in a surface to air threat environment.

Requirements

Review

Ordnance installation preflight considerations  
Defensive systems components and controls  
Threat recognition and terminology  
Lookout doctrine  
Scanning for threats  
Scanning for terrain clearance  
FENCE checklist  
Maneuvering and low altitude environment terminology

Performance Standard. Air NTTP.





Cargo jettison procedures  
Weight and balance  
CNI-MU input  
Post flight

Performance Standard. NFM, Air NTTP, and NAVAIR 01-75GAA-9.

Instructor. CPLI.

Prerequisite. FAM-1103.

**CAT-3512 3.0 365 B,R,M (N) A 1 KC-130J**

Goal. Attain and maintain proficiency in loading and unloading palletized cargo.

Requirements

Review

Cargo compartment preflight  
Dual rail preflight and limitations  
Pallet position limitations  
Cargo compartment configuration and load planning  
Cargo inspection  
Load plan and cargo manifest documentation  
Palletized loading and offloading procedures  
Loading and offloading safety considerations  
After takeoff, inflight, and before landing cargo secured checks  
Engine running on-load/offload procedures and safety  
Ground evacuation procedures  
Ditching procedures  
Cargo jettison procedures  
Weight and balance  
CNI-MU input  
Post flight

Performance Standard. NFM, Air NTTP, and NAVAIR 01-75GAA-9.

Instructor. CPLI.

Prerequisite. FAM-1103.

**CAT-3513 3.0 365 B,R,M (N) A 1 KC-130J**

Goal. Attain and maintain proficiency in loading and unloading hazardous cargo.

Requirements

Review

Compatibility considerations  
Segregation and positioning considerations  
Passenger waivers  
Aircraft Commander hazardous material briefing  
Cargo compartment configuration and load planning  
Cargo inspection and hazardous material properly packaged  
Load plan and cargo manifest documentation  
Hazardous materials Shipper's Declaration forms  
Loading and offloading safety considerations  
Cargo jettison procedures for hazardous materials  
Weight and balance  
CNI-MU input  
Post flight

Performance Standard. NFM, NAVAIR 01-75GAA-9, and MCO P4030.19.





ADGR Overview. The following events are included in the ADGR stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
ADGR-3660	2.0	365	B,R,M	(N)	A	1	ADGR RPO

Admin Notes

- (1) Actual transfer of fuel required to receiver aircraft or TGVs.
- (2) ADGR RPO will assist in the planning, preflight, setup, execution, and breakdown of the ADGR site as supervised by the ADGR refueling supervisor.
- (3) See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**ADGR-3660 2.0 365 B,R,M (N) A 1 KC-130J**

Goal. Attain and maintain proficiency in ADGR RPO duties.

Requirements

Review

- Planning
  - Equipment preflight
  - Personal equipment
  - Site setup
- Execution
  - Fuel delivery
  - Fuel spill and hose overpressure
  - Fire and rescue
  - Emergency breakdown and evacuation
- Site breakdown
- Safety considerations and emergency equipment
- Post flight of ADGR equipment
- In-flight Issue Log (DD-791)

Performance Standard. NFM and Air NTPP.

Instructor. MI qualified as an ADGR RS.

Prerequisite. FAM-1103.

3.11.5 Air Delivery (AD)

Purpose. The purpose of this stage is to attain and maintain proficiency in CDS and static line personnel air delivery.

AD Overview. The following events are included in the AD stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
AD-3703	4.0	365	B,R,M	(N)	A	1	CDS
AD-3705	4.0	365	B,R,M	(N)	A	1	Static Line

Admin Notes.

- (1) AD-3703 is not mirrored from the KC-130T T&R therefore shall be conducted.
- (2) AD-3703 shall use CDS pulley and guillotine knife for initial event.
- (3) All Crewmasters shall not attempt this stage until completion of LMQ or the alternate prerequisites for LMQ authorized by the KC-130J FRD in accordance with the KC-130J FRD Course Catalog.
- (4) See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**AD-3703      4.0      365      B,R,M      (N)      A      1 KC-130J**

Goal. Attain and maintain proficiency in CDS air delivery.

Requirements

Review

- CDS types and configurations
  - Single stick
  - Double stick
  - RAMZ/Container ramp load
  - CRRC
- CDS limitations
- CDS pulley locations
- BSA/CVR requirements and operation
- General aircraft preparation for ramp and door
- Aircraft preparation for CDS
- Weight and balance and CNI-MU input
- Crew brief/checklist rehearsal
- Emergency procedures and review
  - CDS/CRRC checklist
- FENCE checklist
- Execution and conduct of air delivery checklist
  - Primary/secondary execution checklist duties
  - Primary/secondary emergency procedures duties
  - Verbal/visual signals
  - ICS chord routing
  - Restraint harness requirements
  - Primary/secondary positioning during air delivery
  - Static line retrieval
  - Inflight rigging procedures

Performance Standard. NFM, Air NTTP, and NAVAIR 01-75GAA-9.

Instructor. ADI.

Prerequisite. FAM-1103.

**AD-3705      4.0      365      B,R,M      (N)      A      1 KC-130J**

Goal. Attain and maintain proficiency in static line personnel air delivery.

Requirements

Review

- Ramp and paratroop door considerations
- Ramp and paratroop door limitations
- Door bundles
- Overwater safety considerations
- General aircraft preparation for ramp and door
- Aircraft preparation for paratroop airdrop
- Joint inspection for airborne operations checklist
- Weight and balance and CNI-MU input
- Jumpmaster brief
- Crew brief/checklist rehearsal
- Emergency procedures and review
  - Static line personnel ramp checklist
  - Static line paratroop door checklist
  - Towed parachutist retrieval system usage
- Passenger brief
- FENCE checklist



Instructor. Crewmaster WTI or Pilot DTI.

Prerequisite. FAM-1103.

**DT-4411 1.0 \* B D A 1 KC-130J**

Goal. Attain proficiency in air-to-air defensive tactics versus two adversaries.

Requirements

Review

- CMDS
- RVD installation
- Defensive maneuvers
  - Hard turns
  - Break turns
  - Maneuvering velocity
  - One-circle/two-circle
  - Negative tracking solutions
- Lookout doctrine
- Scan sectors
- Threat call template
- FENCE checks
- CRM

Performance Standard. Air NTTP.

Instructor. Crewmaster WTI or Pilot DTI .

Prerequisite. DT-4410.

3.14 MISSION PLUS PHASE

Purpose. The purpose of this phase is to attain and maintain proficiency in Mission Plus Skills. These Mission Plus Skills provide advanced mission skills to enable advanced mission capabilities.

Phase Overview. The following stages are included in the Mission Plus Phase of training.

Stage	Paragraph	Page Number
AD	3.15.1	3-29
BI	3.15.2	3-31
HH	3.15.3	3-33
CAS	3.15.4	3-34

3.15 MISSION PLUS STAGES

3.15.1 Air Delivery (AD)

Purpose. The purpose of this stage is to attain and maintain proficiency in combination, high altitude, and heavy equipment air delivery.

AD Overview. The following events are included in the AD stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
AD-4700	4.0	*	B	(N)	A	1	Combination Air Delivery
AD-4701	2.0	365	B,R,M	(N)	A	1	High Altitude Air Delivery
AD-4703	4.0	365	B,R,M	(N)	A	1	Heavy Equipment Air Delivery

Admin Notes.

(1) All Crewmasters shall not attempt this stage until completion of LMQ or the alternate prerequisites for LMQ authorized by the KC-130J FRD in accordance with the KC-130J FRD Course Catalog.

(2) See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**AD-4700 4.0 \* B (N) A 1 KC-130J**

Goal. Attain proficiency in personnel and cargo combination air delivery.

Requirements

Review

- General aircraft preparation for ramp and door
- Aircraft preparation for CDS/HE
- Aircraft preparation for paratroop airdrop
- Joint inspection for airborne operations checklist
- Weight and balance and CNI-MU input
- Jumpmaster brief
- Crew brief/checklist rehearsal
- Emergency procedures and review
  - Static line personnel ramp checklist
  - CDS/CRRC and HE checklist
- Passenger brief
- FENCE checklist
- Execution and conduct of air delivery checklist
  - Primary/secondary execution checklist duties
  - Primary/secondary emergency procedures duties
  - Verbal/visual signals
  - ICS chord routing
  - Restraint harness requirements
  - Primary/secondary positioning during air delivery
  - Static line retrieval
  - Inflight rigging procedures

Performance Standard. NFM, Air NTTP, and NAVAIR 01-75GAA-9.

Instructor. ADI.

Prerequisite. [AD-3705 or AD-4701] and [AD-3703 or AD-4703].

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

Goal. Attain and maintain proficiency in high altitude air delivery.

Requirements

Review

- Pre-breathing requirements
- Physiology observer requirements
- Decompression illness
- High altitude temperatures (clothing)
- General aircraft preparation for ramp and door
- Aircraft preparation for paratroop airdrop
- Joint inspection for airborne operations checklist
- Weight and balance and CNI-MU input
- Jumpmaster brief
- Crew brief/checklist rehearsal
- Emergency procedures and review
  - Static line personnel ramp checklist
  - Static line paratroop door checklist
- Passenger brief
- FENCE checklist
- Execution and conduct of air delivery checklist
  - Primary/secondary execution checklist duties
  - Primary/secondary emergency procedures duties
  - Verbal/visual signals

ICS chord routing  
Oxygen hose routing  
Restraint harness requirements  
Primary/secondary positioning during air delivery  
Static line retrieval  
Inflight rigging procedures

Performance Standard. NFM, Air NTTP, and NAVAIR 01-75GAA-9.

Instructor. ADI.

Prerequisite. CAT-3510.

**AD-4703 4.0 365 B,R,M (N) A 1 KC-130J**

Goal. Attain and maintain proficiency in heavy equipment air delivery.

Requirements

Review

HE types and configurations  
HE limitations  
HE extraction chute requirements  
General aircraft preparation for ramp and door  
Aircraft preparation for HE  
Weight and balance and CNI-MU input  
Crew brief/checklist rehearsal  
Emergency procedures and review  
    Loose platform  
    Load fails to release mechanically, falls on the ramp, or fails to extract with single extraction parachute outside of aircraft  
    Multiple 28-foot extraction parachute fails to release mechanically or falls on ramp  
    Load fails to extract with multiple 28-foot extraction parachutes outside of aircraft  
FENCE checklist  
Execution and conduct of air delivery checklist  
    Primary/secondary execution checklist duties  
    Primary/secondary emergency procedures duties  
    Verbal/visual signals  
    ICS chord routing  
    Restraint harness requirements  
    Primary/secondary positioning during air delivery  
    Inflight rigging procedures

Performance Standard. NFM, Air NTTP, and NAVAIR 01-75GAA-9.

Instructor. ADI.

Prerequisite. CAT-3512.

3.15.2 Battlefield Illumination (BI)

Purpose. The purpose of this stage is to attain and maintain proficiency in battlefield illumination operations.

BI Overview. The following events are included in the BI stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
BI-4710	3.0	*	B	(N)	A	1	Team Member
BI-4711	3.0	365	B,R,M	(N)	A	1	Team Leader

Admin Notes. See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**BI-4710      3.0      \*      B      (N)      A      1 KC-130J**

Goal. Attain proficiency in battlefield illumination as a team member.

Requirements

Review

- Crew requirements
- High altitude requirements
- BI equipment requirements and preflight
- Extra survival equipment requirements
- General aircraft preparation for ramp and door
- APF acceptance inspection and storage loading (type flare differences)
- Weight and balance and CNI-MU input
- FENCE checklist
- Execution and conduct of battlefield illumination checklist
  - Team member duties
  - Flare dispenser installation
  - APF timer settings
  - Flare dispenser loading
  - Flare delivery (flare dispenser shall be used; hand launch may be discussed or performed)
- Emergencies
  - Hot flare
  - APF timer separation
  - Fire/Smoke/Fumes elimination

Performance Standard. NFM, Air NTTP, NTRP, and NAVAIR 01-75GAA-9.

Instructor. ADI and QASO qualified.

Prerequisite. FAM-1103 and CAT-3512.

Ordinance. LUU-2 and/or LUU-19 series APFs.

**BI-4711      3.0      365      B,R,M      (N)      A      1 KC-130J**

Goal. Attain and maintain proficiency in battlefield illumination as a team leader.

Requirements

Review

- Crew requirements
- High altitude requirements
- BI equipment requirements and preflight
- Extra survival equipment requirements
- General aircraft preparation for ramp and door
- APF acceptance inspection and storage loading (type flare differences)
- Weight and balance and CNI-MU input
- FENCE checklist
- Execution and conduct of battlefield illumination checklist
  - Team leader duties
  - Flare dispenser installation
  - APF timer settings
  - Flare dispenser loading
  - Flare delivery (flare dispenser shall be used; hand launch may be discussed or performed)
- Emergencies
  - Hot flare
  - APF timer separation
  - Fire/Smoke/Fumes elimination

Performance Standard. NFM, Air NTTP, NTRP, and NAVAIR 01-75GAA-9.

Instructor. ADI qualified a BI QASO.

Prerequisite. BI-4710.

Ordinance. LUU-2 and/or LUU-19 series APFs.

### 3.15.3 Harvest Hawk (HH)

Purpose. The purpose of this stage is conduct ground familiarization with the Harvest HAWK aircraft and its operation.

HH Overview. The following events are included in the HH stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
HH-4803	3.0	*	B,S	(N)	G	1	Harvest HAWK Familiarization

Admin Notes. See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**HH-4803      3.0      \*      B,S      (N)      G      1 KC-130J HH**

Goal. Discuss and introduce Harvest HAWK aircraft operations.

#### Requirements

##### Discuss

- CAS introduction
- HH CRM
- Safety
- Ordinance area
- BMS and KARNAC operations
- Flight station differences
- APU operation differences
- Ground refueling differences
- All weather procedures

##### Introduce

- Exterior preflight differences
  - Sensor Pod/TSS
  - Hellfire launcher
  - Derringer door
- Interior preflight differences
  - Additional MCBs for Hellfire on FS 245
  - FCO station with BMS
  - KARNAC location and operation
  - Derringer door
  - Minimal operation of dual rails
- Normal procedures
  - Inflight duties
  - Griffin/SOPGM munitions loading checklist
  - KARNAC power on
  - Hellfire arming and de-arming procedures
- Emergency procedures for hellfire missile
  - Missile unlatched
  - Miss fire
  - Hang fire
  - Temp out of range
  - Emergency jettison
  - Electrical fire
  - Electrical malfunction
  - Abandon aircraft

Emergency procedures for Griffin/SOPGM

- Miss fire
- Hung safe
- Hung unsafe

Performance Standard. NFM, Air NTTP, NAVAIR 01-75GAJ-1.3, NAVAIR 01-75GAJ-1.3-S1, NAVAIR 01-75GAJ-1.3-S2, and NAVAIR 01-75GAJ-1D.

Instructor. MI and CAS-4830 complete.

Prerequisite. FAM-1103.

Ordnance. Griffin/SOPGM CATM with operable derringer door.

3.15.4 Close Air Support (CAS) Stage

Purpose. The purpose of this stage is to attain and maintain proficiency in Harvest HAWK aircraft operations.

CAS Overview. The following events are included in the CAS stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
CAS-4830	2.5	730	B,S,R,M	(N)	A	1	Close Air Support

Admin Notes. See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**CAS-4830      2.5      730      B,S,R,M                      (N)      A      1 KC-130J HH**

Goal. Attain and maintain proficiency in Harvest HAWK aircraft operations.

Requirements

Review

- Safety
- Ordnance area
- BMS and KARNAC operations
- All weather procedures
- APU operation differences
- Ground refueling differences
- Exterior preflight differences
  - Sensor Pod/TSS
  - Hellfire launcher (pin and lever direction)
  - Derringer door
  - Interior preflight differences
  - Additional MCBs for Hellfire on FS 245
  - FCO station with BMS
  - KARNAC location and operation
  - Derringer door
  - Minimal operation of dual rails
- Normal procedures
  - Inflight duties
  - Griffin/SOPGM munitions loading checklist
  - KARNAC power on
  - Hellfire arming and de-arming procedures
- Emergency procedures for hellfire missile
  - Missile unlatched
  - Miss fire
  - Hang fire
  - Temp out of range
  - Emergency jettison
  - Electrical fire





Movements, gestures, and eye contact  
 Ability to establish instructor and trainee rapport  
 Encouraging trainee participation  
 Ability to answer trainee questions  
 Subject matter knowledge (publications and experience)  
 NATOPS adherence  
 Avoids non-standard terminology  
 Uses examples and analogies to enforce learning  
 Situational awareness

Performance Standard. Applicable publications for the event being instructed and effective instructor qualities.

Instructor. Any NI or ANI.

Prerequisite. IUT-5100.

### 3.17.2 Mission Instructor (MI)

Purpose. The purpose of this stage is to designate Mission Instructors.

MI Overview. The following events are included in the MI stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
MI-5102	3.0	*	B,R	(N)	A	1	Mission Instructor

#### Admin Notes.

- (1) APRB recommendation is required prior to commencing this stage.
- (2) Designation letter shall be placed in the APR.
- (3) See courseware as outlined in the MAWTS-1 KC-130J and KC-130J FRD Course Catalogs for any pre-event requirements.

**MI-5102      3.0      \*      B,R      (N)      A      1 KC-130J**

Goal. Designate as a Mission Instructor.

#### Requirements

##### Review

LRN-2162, TN-2201, TN-2250, TR-2400, AAR-3600, AAR-3601, and AAR-3650 requirements

##### Evaluate

Instructor preparation  
 Briefing trainee  
 Instructing trainee  
 Debriefing trainee  
 Completion of ATF  
 Instructor qualities  
     Appearance  
     Motivation and attitude  
     Voice, tone, and inflection  
     Grammar, vocabulary, and speech habits  
     Movements, gestures, and eye contact  
     Ability to establish instructor and trainee rapport  
     Encouraging trainee participation  
     Ability to answer trainee questions  
     Subject matter knowledge (publications and experience)  
     NATOPS adherence  
     Avoids non-standard terminology  
     Uses examples and analogies to enforce learning  
     Situational awareness





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NATOPS evaluation worksheet  
Flight evaluation grade determination  
Final grade determination

Evaluee brief  
Evaluee debrief  
Standardization of normal procedures  
Standardization of simulated or actual emergency procedures  
Bold face or asterisk items  
NATOPS knowledge and terminology

Performance Standard. NFM.

Instructor. CM NI, or CMCC NI and CMLM NI.

Prerequisite. SI-5103, NI-5140, CPLI-5510, and NTPS-6118.

**NI-5142      2.0      365      B,R,M                      (N)      A      1 KC-130J**

Goal. Designate as a Crewmaster Crew Chief NI or ANI.

Requirements

Evaluate

Chapter 17 NATOPS evaluation  
Definitions  
Ground evaluation requirements  
    Open book exam  
    Close book exam  
    Oral exam  
Flight evaluation requirements  
NATOPS evaluation worksheet  
    Flight evaluation grade determination  
    Final grade determination  
  
Evaluee brief  
Evaluee debrief  
Standardization of normal procedures  
Standardization of simulated or actual emergency procedures  
Bold face or asterisk items  
NATOPS knowledge and terminology

Performance Standard. NFM.

Instructor. CMCC NI or CM NI.

Prerequisite. SI-5103, NI-5140, and NTPS-6112.

**NI-5143      2.0      365      B,R,M                      (N)      A      1 KC-130J**

Goal. Designate as a Crewmaster Loadmaster NI or ANI.

Requirements

Evaluate

Chapter 17 NATOPS evaluation  
Definitions  
Ground evaluation requirements  
    Open book exam  
    Close book exam  
    Oral exam  
Flight evaluation requirements  
NATOPS evaluation worksheet  
    Flight Evaluation grade determination  
    Final grade determination



3.17.6 Cargo Passenger Loading Instructor (CPLI)

Purpose. The purpose of this stage is to designate Cargo Passenger Loading Instructors.

CPLI Overview. The following events are included in the CPLI stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
CPLI-5510	3.0	*	B,R	(N)	A	1	Cargo Passenger Loading Instructor

Admin Notes

- (1) APRB recommendation is required prior to commencing this stage.
- (2) Designation letter shall be placed in the APR.
- (3) See courseware as outlined in the MAWTS-1 KC-130J and KC-130J FRD Course Catalogs for any pre-event requirements.

**CPLI-5510    3.0    \*    B,R    (N)    A    1 KC-130J**

Goal. Designate as a Cargo Passenger Loading Instructor.

Requirements

- Review
  - ALZ-3502, and CAT-3510 to 3513 requirements
- Evaluate
  - Instructor preparation
  - Briefing trainee
  - Instructing trainee
  - Debriefing trainee
  - Completion of ATF
  - Instructor qualities
    - Appearance
    - Motivation and attitude
    - Voice, tone, and inflection
    - Grammar, vocabulary, and speech habits
    - Movements, gestures, and eye contact
    - Ability to establish instructor and trainee rapport
    - Encouraging trainee participation
    - Ability to answer trainee questions
    - Subject matter knowledge (publications and experience)
    - NATOPS adherence
    - Avoids non-standard terminology
    - Uses examples and analogies to enforce learning
    - Situational awareness

Performance Standard. NFM, NAVAIR 01-75GAA-9, and effective instructor qualities.

Instructor. CMLM NI or ANI, or CM NI or ANI.

Prerequisite. ALZ-3502, CAT-3510, CAT-3511, CAT-3512, CAT-3513, and IUT-5101.

3.17.7 Air Delivery Instructor (ADI)

Purpose. The purpose of this stage is to designate Air Delivery Instructors.

ADI Overview. The following events are included in the ADI stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
ADI-5701	3.0	*	B,R	(N)	A	1	Air Delivery Instructor

Admin Notes.

- (1) APRB recommendation is required prior to commencing this stage.
- (2) Designation letter shall be placed in the APR.
- (3) See courseware as outlined in the MAWTS-1 KC-130J and KC-130J FRD Course Catalogs for any pre-event requirements.

**ADI-5701      3.0      \*      B,R      (N)      A      1 KC-130J**

Goal. Designate as an Air Delivery Instructor.

Requirements

Review

AD-3703 to 3705, AD-4700 to 4703, and BI-4710 to 4711 requirements

Evaluate

Instructor preparation

Publications Review (-9 and MCRPs)

Briefing trainee

Instructing trainee

Debriefing trainee

Completion of ATF

Instructor qualities

Appearance

Motivation and attitude

Voice, tone, and inflection

Grammar, vocabulary, and speech habits

Movements, gestures, and eye contact

Ability to establish instructor and trainee rapport

Encouraging trainee participation

Ability to answer trainee questions

Subject matter knowledge (publications and experience)

NATOPS adherence

Avoids non-standard terminology

Uses examples and analogies to enforce learning

Situational awareness

Performance Standard. NFM, Air NTTP, NTRP, NAVAIR 01-75GAA-9, and effective instructor qualities.

Instructor. WTI.

Prerequisite. AD-3703, AD-3705, AD-4700, AD-4701, AD-4703, BI-4711, and IUT-5101.

3.17.8 Weapons Tactics Instructor (WTI)

Purpose. Certify the KC-130 Crewmaster as a WTI. The Crewmaster WTI will assist in planning missions, and conduct tactical ground and flight instruction for KC-130 crewmembers as outlined in MCO 3500.19 and the MAWTS-1 WTI Course Catalog.

Admin Notes

- (1) APRB recommendation is required prior to commencing this stage.
- (2) The WTI syllabus is developed by MAWTS-1 and conducted at the WTI Course. Upon graduation, the candidate will be certified by MAWTS-1 as a WTI (NMOS 6177) and designated at the discretion of the squadron commanding officer.
- (3) ATF is not required. Completion certificate and designation letter shall be placed in APR, and appropriate WTI MOS assigned.
- (4) See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

3.18 REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS, DESIGNATIONS PHASE

Purpose. This phase consists of stages and events to support the requirements of NATOPS evaluations and other areas of this training and readiness chapter that do not result in a change of CSP, MSP, CPSP, or MPSP. This phase consists of specific requirements, qualifications, and designations required to support the operation of the aircraft and provide flight leadership requirements.

Phase Overview. The following stages are included in the Requirements, Certification, Qualifications, and Designations Phase of training.

Stage	Paragraph	Page Number
FCF	3.19.1	3-44
NTPS	3.19.2	3-45
RS	3.19.3	3-47
QASO	3.19.4	3-48
FAM	3.19.5	3-49
SYS	3.19.6	3-51
ACS	3.19.7	3-55
PC	3.19.8	3-60
ER	3.19.9	3-62

Admin Notes. See courseware as outlined in the MAWTS-1 KC-130J and KC-130J FRD Course Catalogs for any pre-event requirements.

3.19 RCQD STAGES

3.19.1 Functional Check Flight (FCF)

Purpose. The purpose of this stage is to attain and maintain proficiency in FCFs.

FCF Overview. The following events are included in the FCF stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
FCF-6104	4.0	*	B,S	D	S/A	1	Partial FCF Intro
FCF-6105	2.0	365	B,S,R,M	D	A/S	1	Partial FCF
FCF-6106	4.0	*	B,S	D	S/A	1	Full FCF Intro
FCF-6107	4.0	365	B,S,R,M	D	A/S	1	Full FCF

Admin Notes.

- (1) If WST is not available for FCF-6104 it may be accomplished in aircraft or waived if all partial FCF flight profiles of “B”, “C”, and “D” are accomplished on FCF-6105. If waived see paragraph 3.7.8.
- (2) FCF-6105 initial event shall be flown in aircraft for partial FCF profile “B”, “C”, or “D”. Subsequent proficiency updates may be flown in simulator.
- (3) FCF-6107 initial event shall be flown in aircraft for full FCF profile “A”. Subsequent proficiency updates may be flown in simulator for either full FCF profile “A” or partial FCF profile “D” as long as FCF-6105 is proficient. Partial FCF profile “D” may be used after initial due to the fact the differences are minor.
- (4) FCF-6105 completion results in FCF(P) qualification. FCF(P) letter shall be placed in APR.
- (5) FCF-6107 completion results in FCF(F) qualification. FCF(F) letter shall be placed in APR.

**FCF-6104      4.0      \*      B,S      D      S/A      1 WST / 1 KC-130J**

Goal. Introduce partial FCF flight profiles “B”, “C”, and “D”.

Requirements

- Introduce
  - FCF profiles “B”, “C”, and “D” checklists
  - Review systems
  - FCF documentation
  - QA brief
  - QA debrief

Performance Standard. NFM, COMNAVAIRFORINST 4790.2, and OPNAVINST 3710.7, and local SOP.

Instructor. SI.

Prerequisite. NTPS-6112 or NTPS-6118.

**FCF-6105      2.0      365      B,S,R,M                      D      A/S      1 KC-130J / 1 WST**

Goal. Attain and maintain proficiency in partial FCF flight profiles B, C, or D.

Requirements

Evaluate

- FCF profiles “B”, “C”, or “D” checklists
- Systems knowledge
- FCF documentation
- QA brief
- QA debrief

Performance Standard. NFM, COMNAVAIRFORINST 4790.2, and OPNAVINST 3710.7, and local SOP.

Instructor. SI.

Prerequisite. FCF-6104.

**FCF-6106      4.0      \*      B,S                      D      S/A      1 WST / 1 KC-130J**

Goal. Introduce full FCF flight profile “A”.

Requirements

Introduce

- FCF profile “A” checklist
- Review systems
- FCF documentation
- QA brief
- QA debrief

Performance Standard. NFM, COMNAVAIRFORINST 4790.2, and OPNAVINST 3710.7, and local SOP.

Instructor. SI.

Prerequisite. NTPS-6112 or NTPS-6118.

**FCF-6107      4.0      365      B,S,R,M                      D      A/S      1 KC-130J / 1 WST**

Goal. Attain and maintain proficiency in full FCF flight profile “A”.

Requirements

Evaluate

- FCF profile “A” checklist
- Systems knowledge
- FCF documentation
- QA brief
- QA debrief

Performance Standard. NFM, COMNAVAIRFORINST 4790.2, and OPNAVINST 3710.7, and local SOP.

Instructor. SI.

Prerequisite. FCF-6106.

### 3.19.2 NATOPS (NTPS)

Purpose. The purpose of this stage is to attain and maintain proficiency in qualifications as a Crewmaster, Crewmaster Crew Chief, or Crewmaster Loadmaster per NATOPS. This stage also includes the requirements of quarterly emergency procedures review.





- Fuel planning
- Fuel spill and hose overpressures
- Emergency breakdown and evacuation
- Emergencies
- Safety considerations
- ADGR equipment preflight and loading (pre-stage of equipment)
- Crew brief
- RPO brief (setup and breakdown choreography)
- Site setup
- Execution
- Site breakdown

Performance Standard. NFM and Air NTTP.

Instructor. WTI.

Prerequisite. ADGR-3660.

### 3.19.4 Quality Assurance Safety Observer (QASO)

Purpose. The purpose of this stage is to attain and maintain proficiency as QASO on BI missions.

QASO Overview. The following events are included in the QASO stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
QASO-6710	3.0	365	B,R,M	(N)	A	1	QASO

#### Admin Notes

- (1) APRB recommendation is required prior to commencing this stage.
- (2) Initial event shall include use of flare dispenser and subsequent proficiency updates may use hand-launching procedures.
- (3) QASO letter shall be placed in APR.
- (4) See courseware as outlined in the MAWTS-1 KC-130J Course Catalog for any pre-event requirements.

**QASO-6710    3.0    365    B,R,M    (N)    A    1 KC-130J**

Goal. Attain and maintain proficiency as a QASO on BI missions.

#### Requirements

##### Evaluate

- Crew requirements
- Pilot and QASO planning
- BI equipment requirements and preflight
- Extra survival equipment requirements
- General aircraft preparation for ramp and door
- APF acceptance inspection and storage loading
- Weight and balance and CNI-MU input (as required)
- Brief team leader and team member duties
- FENCE checklist
- Execution and conduct of battlefield illumination checklist
  - QASO duties
  - Flare dispenser installation
  - APF timer settings
  - Flare dispenser loading
  - Flare delivery (flare dispenser shall be used; hand launch may be discussed or performed)
- Emergencies
  - Hot flare
  - APF timer separation

Fire/Smoke/Fumes elimination

Performance Standard. NFM, Air NTTP, and NAVAIR 01-75GAA-9.

Instructor. WTI.

Prerequisite. 4711.

Ordinance. LUU-2 and/or LUU-19 series APFs.

3.19.5 Familiarization (FAM)

Purpose. The purpose of this stage is to provide training on flight station preflight and normal ACS duties. This stage provides the foundation to further training of advanced systems.

FAM Overview. The following events are included in the FAM stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
FAM-6900	2.0	*	B,S	(N)	S/G	1	Flight Station Preflight Intro
FAM-6901	2.0	*	B,S	(N)	S/G	1	Flight Station Preflight Practice
FAM-6902	2.0	*	B,S	(N)	S/A	1	Normal ACS Duties Intro
FAM-6903	2.0	*	B,S,R	(N)	A/S	1	Normal ACS Duties Review

Admin Notes

(1) FAM-6903 initial event shall be conducted in aircraft but subsequent refreshers may be conducted in simulator.

(2) See courseware as outlined in the KC-130J FRD Course Catalog for any pre-event requirements.

**FAM-6900 2.0 \* B,S (N) S/G 1 WST / 1 KC-130J**

Goal. Introduce flight station preflight.

Requirements

Introduce

- RMM preflight
- Flight station preflight
- Flight station preflight limitations
- AMU operations
- CNBP operations
- CNI-MU operations
- QRH ACAWS and emergency procedures checklists

Performance Standard. NFM.

Instructor. SI.

Prerequisite. NSQ-2150, TN-2250, CAT-3510, CAT-3511, CAT-3512, CAT-3513, and NTPS-6110.

**FAM-6901 2.0 \* B,S (N) S/G 1 WST / 1 KC-130J**

Goal. Practice flight station preflight.

Requirements

Review

- RMM preflight
- Flight station preflight
- Flight station preflight limitations
- AMU operations
- CNBP operations
- CNI-MU operations
- QRH ACAWS and emergency procedures checklists

Performance Standard. NFM.

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Instructor. SI.

Prerequisite. FAM-6900.

**FAM-6902    2.0    \*    B,S    (N)    S/A    1 WST / 1 KC-130J**

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Goal. Introduce normal ACS duties.

Requirements

Introduce

- Power up procedure
- ATIS and TOLD input
- Before start flows and checklist
- Engine start procedure
- Before taxi flows and checklist
- Taxi
- Before takeoff flows and checklists
  - Before takeoff (above the line)
  - Before takeoff (below the line)
- Takeoff and calling an "Abort"
- After takeoff flows and checklist
- Fuel dumping procedures and precautions
- Inflight duties
  - Fuel management
  - Primary and secondary fuel management
  - Systems monitoring
- In-range flows and checklist
- Approach checklist
- Landing fuel sink rate limitations
- Low fuel procedures
- Before landing flows and checklist
- Landing
  - RADALT calls
  - Calling a "Go around"
- After landing flows and checklist
- Shutdown checklist
- Leaving the aircraft checklist
- RMM debrief and maintenance action forms (MAFS)

Review

- RMM preflight
- Flight station preflight
- Flight station preflight limitations
- AMU operations
- CNBP operations
- CNI-MU operations
- QRH ACAWS and emergency procedures checklists

Performance Standard. NFM.

Instructor. SI.

Prerequisite. FAM-6901.

**FAM-6903    2.0    \*    B,S,R    (N)    A/S    1 KC-130J / 1 WST**

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Goal. Review normal ACS duties and flight station preflight.

Requirements

Review

- RMM preflight

Flight station preflight  
 Flight station preflight limitations  
 AMU operations  
 CNBP operations  
 CNI-MU operations  
 QRH ACAWS and emergency procedures checklists  
 Power up procedure  
 ATIS and TOLD input  
 Before start flows and checklist  
 Engine start procedure  
 Before taxi flows and checklist  
 Taxi  
 Before takeoff flows and checklists  
     Before takeoff (above the line)  
     Before takeoff (below the line)  
 Takeoff and calling an “Abort”  
 After takeoff flows and checklist  
 Fuel dumping procedures and precautions  
 Inflight duties  
     Fuel management  
     Primary and secondary fuel management  
     Systems monitoring  
 In-range flows and checklist  
 Approach checklist  
 Landing fuel sink rate limitations  
 Low fuel procedures  
 Before landing flows and checklist  
 Landing  
     RADALT calls  
     Calling a “Go around”  
 After landing flows and checklist  
 Shutdown checklist

Performance Standard. NFM.

Instructor. SI.

Prerequisite. FAM-6902.

### 3.19.6 Systems (SYS)

Purpose. The purpose of this stage is to provide training on advanced systems training to facilitate trouble shooting and in-depth understanding of the systems. This stage augments training of normal duties at the ACS.

SYS Overview. The following events are included in the SYS stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
SYS-6910	4.0	*	B,S	(N)	G	1	APU System
SYS-6911	6.0	*	B,S	(N)	S/A	1	Engine System
SYS-6912	6.0	*	B,S	(N)	S/A	1	Propeller System
SYS-6913	6.0	*	B,S	(N)	S/A	1	Fuel System
SYS-6914	6.0	*	B,S	(N)	S/A	1	Electrical System
SYS-6915	6.0	*	B,S	(N)	S/A	1	Hydraulic System
SYS-6916	6.0	*	B,S	(N)	S/A	1	Bleed Air & Ice Prot. System
SYS-6917	6.0	*	B,S	(N)	S/A	1	Air Conditioning & Press. System
SYS-6918	6.0	*	B,S	(N)	S/A	1	Communication/Navigation System
SYS-6919	4.0	*	B,S,R	(N)	S	1	Emergency Procedures System

#### Admin Notes

(1) SYS-6910 is conducted entirely on the ground using an actual aircraft.

(2) SYS-6911 through 6918 is conducted on the WST and ground training using an actual aircraft. If the WST is not available then an actual aircraft in flight with a combination of ground training on an actual aircraft shall be used. The ground training consists of component location identification and dedicated systems discussion designed at a minimum of 2 hours required.

(3) See courseware as outlined in the KC-130J FRD Course Catalog for any pre-event requirements.

**SYS-6910      4.0      \*      B,S      (N)      G      1 KC-130J**

Goal. Review APU system knowledge and troubleshooting.

Requirements

Review

- Malfunctions and emergencies
- APU maintenance publication
- APU components, location, and general operation
- APU fuel
- APU starting and ignition
- APU bleed air
- APU controls
- APU indicating
- APU oil system
- APU generator

Performance Standard. NFM and applicable maintenance publications.

Instructor. SI.

Prerequisite. FAM-6903.

**SYS-6911      6.0      \*      B,S      (N)      S/A      1 WST / 1 KC-130J**

Goal. Review engine system knowledge and troubleshooting.

Requirements

Review

- Malfunctions and emergencies
- Engine maintenance publications
- Engine components, locations, and general operation
- Engine fuel
- Engine ignition
- Engine bleed air
- Engine control
- Engine indicating
- Engine oil
- Engine starting system

Performance Standard. NFM, and applicable maintenance publications.

Instructor. SI.

Prerequisite. SYS-6910.

**SYS-6912      6.0      \*      B,S      (N)      S/A      1 WST / 1 KC-130J**

Goal. Review propeller system knowledge and troubleshooting.

Requirements

Review

- Malfunctions and emergencies
- Propeller maintenance publications

Propeller components, locations, and general operation  
Propeller control unit  
Propeller over-speed governor  
Propeller high pressure pump  
Propeller ground beta enable valve (GBEV)  
Propeller beta tube  
Propeller damage limitations  
Propeller grease leak limitations

Performance Standard. NFM and applicable maintenance publications.

Instructor. SI.

Prerequisite. SYS-6911.

**SYS-6913      6.0      \*      B,S      (N)      S/A      1 WST / 1 KC-130J**

Goal. Review fuel system knowledge and troubleshooting.

Requirements

Review

Malfunctions and emergencies  
Fuel maintenance publications  
Fuel system components, locations, and general operation  
Fuel indicating system  
Fuel distribution system  
Fuel tank vent system  
Fuel tank construction  
Fuel manifolds  
Fuel pumps and valves  
Fuel management controller

Performance Standard. NFM and applicable maintenance publications.

Instructor. SI.

Prerequisite. SYS-6912.

**SYS-6914      6.0      \*      B,S      (N)      S/A      1 WST / 1 KC-130J**

Goal. Review electrical system knowledge and troubleshooting.

Requirements

Review

Malfunctions and emergencies  
Electrical maintenance publications  
Primary and secondary AC electrical components, locations, and general operation  
DC electrical system components, locations, and general operation  
AC and DC electrical system distribution  
ECBU system and locations  
External power  
Low voltage power supply (LVPS) and power panel distribution unit (PPDU) system and locations  
1553 data bus system integration

Performance Standard. NFM and applicable maintenance publications.

Instructor. SI.

Prerequisite. SYS-6913.



Instructor. SI.

Prerequisite. SYS-6916.

**SYS-6918      6.0      \*      B,S      (N)      S/A      1 WST / 1 KC-130J**

Goal. Review communication and navigation system knowledge and troubleshooting.

Requirements

Review

- Malfunctions and emergencies
- Communication and navigation publications
- Pitot static/distributed air data system
- Stall warning system
- Embedded GPS/inertial navigation system
- AN/APX-100 (V) IFF system
- HG-9550 radar altimeter system
- AN/ARN-149 automatic direction finder
- AN/ARN-147 VOR/ILS/MB system
- AN/ARN-153 TACAN
- AN/ARN-139 (V) TACAN
- LPCR-130J low power color radar system
- Digital Map
- TCAS system
- GCAS system
- Get home control radio system
- AN/ARC-190 HF radio system
- AN/ARC-222 VHF radio system
- AN/ARC-164 (V) UHF radio system
- DF-301 E UHF direction finder
- AN/ARC-210 SATCOM system
- AN/AIC-13 public address system
- AN/AIC-18 intercommunication system
- KY-58 secure voice speech encryption system

Performance Standard. NFM and applicable maintenance publications.

Instructor. SI.

Prerequisite. SYS-6917.

**SYS-6919      4.0      \*      B,S,R      (N)      S      1 WST**

Goal. Review emergency procedure duties at the ACS.

Requirements. Review all emergency procedures reviewed on SYS-6910 to 6918 while performing duties at the ACS.

Performance Standard. NFM.

Instructor. SI.

Prerequisite. SYS-6918.

3.19.7 Augment Crew Station (ACS)

Purpose. The purpose of this stage is to provide training on inflight duties at the ACS for specific missions.



Prerequisite. LRN-2162 and FAM-6903.

**ACS-6922      2.0      365      B,S,R,M                      (N)      S/A      1 WST / 1 KC-130J**

Goal. Attain and maintain proficiency in duties at the ACS during a low altitude tactics or tactical navigation mission.

Requirements

Review

Flight station equipment security for TN/LAT  
CMI-MU TACPLOT input  
FENCE checklist  
Aircraft systems monitoring  
Lookout duties

Performance Standard. NFM and Air NTTP.

Instructor. SI.

Prerequisite. TN-2250 and FAM-6903.

**ACS-6923      2.0      365      B,S,R,M                      (N)      S/A      1 WST / 1 KC-130J**

Goal. Attain and maintain proficiency in duties at the ACS during a threat reaction mission.

Requirements

Review

Defensive systems  
Defensive controls and operation  
FENCE checklist  
Aircraft systems monitoring  
Lookout duties

Performance Standard. NFM and Air NTTP.

Instructor. SI.

Prerequisite. TR-2400 and FAM-6903.

**ACS-6924      2.0      730      B,S,R,M                      (N)      A      1 KC-130J**

Goal. Attain and maintain proficiency in duties at the ACS during an assault landing zone mission.

Requirements

Review

Aircraft exterior preparation verification  
Tire inflation/deflation  
Ground flotation/California Bearing Ration (CBR)/Pavement Classification Number (PCN)  
Performance data  
Brief observers on "brown-out"  
Pressurization and air-conditioning panel operation  
Aircraft systems monitoring

Performance Standard. NFM and Air NTTP.

Instructor. SI.

Prerequisite. FAM-6903.

**ACS-6925      4.0      \*      B,S                      (N)      G**

Goal. Discuss the aerial refueling system in the classroom environment providing in-depth knowledge of the system.



**ACS-6927      3.0      \*      B,S      (N)      S/A      1 WST / 1 KC-130J**

Goal. Practice operation of the aerial refueling system at the ACS.

Requirements

Practice

- AAR system preflight
- AAR Fuel/Hydraulic System components
- Drogue change operation
- CNI-MU controls and operation
- Refuel control panel controls and operation
- Refuel control panel soft-panel controls and operation
- Fuel management panel controls and operation
- Fuel management panel soft-panel controls and operation
- Airspeed limitations – high/low speed drogues
- Fuel system limitations
- AAR terminology
- EMCON procedures
- Normal refueling operations
  - Before AAR hose deployment
  - AAR hose deployment
  - Reel response test
  - Alternate reel response test
  - Fuel delivery (fuselage tank installed)
    - Fuel transfer from wing tanks to fuselage tank
    - Alternate refueling pump operation
  - Fuel delivery (fuselage tank removed)
  - AAR hose retraction
    - No stowed and lock indication
  - After AAR hose retraction
- Malfunctions/Emergencies
  - Aerial refueling pod fuel leak
  - Hose deployment failure
  - Drogue/hose damage
  - Unstable hose
  - Emergency reel operation and refueling
  - Hose guillotine
  - Landing with trailing hose
  - Hose extends beyond full trail
  - Fast trailing hose
  - Emergency signals
  - Aircraft fuel system emergencies associated with AAR
  - Aircraft hydraulic system emergencies associated with AAR

Performance Standard. NFM, ATP, Air NTTP, and applicable maintenance publications.

Instructor. SI.

Prerequisite. ACS-6926.

**ACS-6928      3.0      180      B,S,R,M      (N)      S/A      1 WST / 1 KC-130J**

Goal. Attain and maintain proficiency operating the aerial refueling system at the ACS.

Requirements

Review

- AAR system preflight
- AAR fuel/hydraulic system components

- Drogue change operation
- CNI-MU controls and operation
- Refuel control panel controls and operation
- Refuel control panel soft-panel controls and operation
- Fuel management panel controls and operation
- Fuel management panel soft-panel controls and operation
- Airspeed limitations – high/low speed drogues
- Fuel system limitations
- AAR terminology
- EMCON procedures
- Normal refueling operations
  - Before AAR hose deployment
  - AAR hose deployment
  - Reel response test
  - Alternate reel response test
  - Fuel delivery (fuselage tank installed)
    - Fuel transfer from wing tanks to fuselage tank
    - Alternate refueling pump operation
  - Fuel delivery (fuselage tank removed)
  - AAR hose retraction
    - No stowed and lock indication
  - After AAR hose retraction
- Malfunctions/Emergencies
  - Aerial refueling pod fuel leak
  - Hose deployment failure
  - Drogue/hose damage
  - Unstable hose
  - Emergency reel operation and refueling
  - Hose guillotine
  - Landing with trailing hose
  - Hose extends beyond full trail
  - Fast trailing hose
  - Emergency signals
  - Aircraft fuel system emergencies associated with AAR
  - Aircraft hydraulic system emergencies associated with AAR

Performance Standard. NFM, ATP, Air NTTP, and appropriate maintenance publications.

Instructor. SI.

Prerequisite. SYS-6919 and ACS-6927.

### 3.19.8 Plane Captain (PC)

Purpose. The purpose of this stage is to provide training on plane captain duties toward CM1 qualification.

RS Overview. The following events are included in the RS stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
PC-6930	40.0	*	B,S	(N)	G		GSE Requirements
PC-6931	6.0	*	B,S	(N)	G	1	Daily Inspection
PC-6932	2.0	*	B,S,R	(N)	G	1	Turn Around Inspection
PC-6933	40.0	*	B,S,R	(N)	G		NAMP Lesson Requirements
PC-6934	40.0	*	B,S	(N)	G	1	Expeditionary Maintenance

### Admin Notes

(1) COMNAVAIRFORINST 4790.2 authorizes “commands where Naval Aircrew perform the functions of a plane captain, completion of the training curriculum and the designation as a Naval Aircrew by the Commanding Officer per the NATOPS Evaluation Report (OPNAV 3710/7) shall qualify the aircrew for plane captain duties. In such



- Tool Control Program
- Fuel Surveillance Program
- Navy Oil Analysis Program
- Oil Consumption Program
- Hydraulic Contamination Control Program
- Hazardous Material Control and Management Program
- Technical Publications
- 3M Documentation
- Support Equipment Operator Training and Licensing Program
- Fire Fighting Procedures and Responsibilities
- Moving or Towing Aircraft
- Brake Riding
- Cleaning Aircraft
- Aircraft Preservation
- Duct Diving
- Aircraft Fastener Integrity Inspection
- Daily and Turnaround Inspections
- Special Inspections
- Conditional Inspections
- Fueling and Defueling
- Nitrogen System Servicing
- Hydraulic System Servicing
- Engine/Transmission Oil System Servicing
- Liquid Oxygen Converter Handling Safety
- Aircraft Ordnance and CADS
- T/M/S NATOPS Procedures and Emergency Procedures
- Hand Signals and Launch/Recovery Procedures
- Hot Brake Procedures
- Support Equipment Misuse
- Aircraft security, tie-down, and heavy weather procedures
- Aircraft ordnance and armament equipment

Performance Standard. COMNAVAIRFORINST 4790.2 and applicable maintenance publications.

Instructor. SI.

Prerequisite. NTPS-6111.

**PC-6934      40.0      \*      B,S      (N)      G      1 KC-130J**

Goal. Review expeditionary maintenance requirements.

Requirements

Review

- Use of DTADS diagnostics and software reloading
- Removal and replacement of engine vibration Sensors
- Removal, inspection, and replacement of magnetic indication plugs
- Removal, inspection, and replacement of engine oil filters
- Inoperable brake capping
- Inoperable generator capping

Performance Standard. Applicable maintenance publications.

Instructor. SI.

Prerequisite. NTPS-6111.

3.19.9 Engine Run (ER)

Purpose. The purpose of this stage is to attain and maintain proficiency performing engine runs.

ER Overview. The following events are included in the ER stage of training.

Event	Time	Proficiency Period	POI	Condition	Device	Number	Description
ER-6940	4.0	*	B,S	(N)	S/G	1	Engine Run Classroom and Intro
ER-6941	2.0	*	B,S	(N)	S/G	1	Engine Run Practice
ER-6942	2.0	*	B,S	(N)	S/G	1	Engine Run Review
ER-6943	2.0	365	B,S,R,M	(N)	G/S	1	Engine Run Practical Application

Admin Notes

- (1) APRB recommendation is required prior to commencing this stage.
- (2) ER-6140 shall complete 2.0 hours receiving classroom instruction and 2.0 hours in the simulator or aircraft receiving introduction.
- (3) ER-6143 ATF shall be scanned into ASM and routed.

**ER-6940      4.0      \*      B,S      (N)      S/G      1 WST / 1 KC-130J**

Goal. Introduce and discuss the ground engine run procedures in the classroom environment providing in-depth knowledge of the aircraft systems. Completion of first engine run OJT toward Taxi/Turn qualification shall be accomplished after class.

Requirements

Introduce/Discuss

- Screen aircraft discrepancies book (ADB)
- Coordinate with maintenance control and work centers
- Maintenance engine run crew brief
- Exterior inspection
- Interior inspection
- Flight station inspection
- UHF or VHF radio operation
- Communications established
- Before engine start checklist
- Engine starting procedures
- Special consideration for engine run with mechanic on work stand
- Engine monitoring
- Engine stop/start shutdown conditions
- Engine fire handle shutdown conditions
- Leakage rates for components
- Operating limits for engine ground operation
- Wind direction and speed limitations
- Aircraft positioning and power settings
- Normal engine shutdown
- Maintenance engine runs
  - Engine and propeller run-up checks
  - Engine dry motoring check
  - Engine wet motoring check
  - Operational checkout of engine
  - Engine ground run to capture takeoff record
  - Performance check of engine
  - Operational checkout of Automatic Thrust Control Systems (ATCS)
- Emergency procedures
  - Engine Fire
  - APU Fire
  - Ground Evacuation

Performance Standard. NFM and applicable maintenance publications.

Instructor. CM NI/ANI or CMCC NI/ANI.



- Flight station inspection
- UHF or VHF radio operation
- Communications established
- Before engine start checklist
- Engine starting procedures
- Special consideration for engine run with mechanic on work stand
- Engine monitoring
- Engine stop/start shutdown conditions
- Engine fire handle shutdown conditions
- Leakage rates for components
- Operating limits for engine ground operation
- Wind direction and speed limitations
- Aircraft positioning and power settings
- Normal engine shutdown
- Maintenance engine runs
  - Engine and propeller run-up checks
  - Engine dry motoring check
  - Engine wet motoring check
  - Operational checkout of engine
  - Engine ground run to capture takeoff record
  - Performance check of engine
  - Operational checkout of Automatic Thrust Control Systems (ATCS)
- Emergency procedures
  - Engine Fire
  - APU Fire
  - Ground Evacuation

Performance Standard. NFM and applicable maintenance publications.

Instructor. CM NI/ANI or CMCC NI/ANI.

Prerequisite. ER-6941

**ER-6943      2.0      365      B,S,R,M      (N)      G/S      1 KC-130J / 1 WST**

Goal. Attain and maintain proficiency in ground engine run procedures. Completion of practical application will qualify as Taxi/Turn qualification upon designation in ASM.

Requirements

Evaluate

- Screen aircraft discrepancies book (ADB)
- Coordinate with maintenance control and work centers
- Maintenance engine run crew brief
- Exterior inspection
- Interior inspection
- Flight station inspection
- UHF or VHF radio operation
- Communications established
- Before engine start checklist
- Engine starting procedures
- Special consideration for engine run with mechanic on work stand
- Engine monitoring
- Engine stop/start shutdown conditions
- Engine fire handle shutdown conditions
- Leakage rates for components
- Operating limits for engine ground operation
- Wind direction and speed limitations
- Aircraft positioning and power settings

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- Normal engine shutdown
- Maintenance engine runs
  - Engine and propeller run-up checks
  - Engine dry motoring check
  - Engine wet motoring check
  - Operational checkout of engine
  - Engine ground run to capture takeoff record
  - Performance check of engine
  - Operational checkout of Automatic Thrust Control Systems (ATCS)
- Emergency procedures
  - Engine Fire
  - APU Fire
  - Ground Evacuation

Performance Standard. NFM and applicable maintenance publications.

Instructor. CM NI/ANI or CMCC NI/ANI.

Prerequisite. ER-6942.

3.20 KC-130J CREWMASTER T&R MATRIX (1000 Phase)

KC-130J CREWMASTER T&R SYLLABUS MATRIX (1000 Phase)																						
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	ACAD/GRND		SIM		FLIGHT/LIVE		CONDITION	TYPE	# A/C	REFLY INTERVAL	PREREQUISITE	INSTRUCTOR	EOM	Mirror From	EVENT CONV
				B	S	R		#	TIME	#	TIME	#	TIME									
<b>1000 PHASE (CORE INTRODUCTION)</b>																						
<b>FAMILIARIZATION (FAM)</b>																						
FAM	FAM	ELEC.PWR. APPLICATION	1000	X	X			3.0					(N)	G		*		SI			1000	
	FAM	AIRCRAFT SERVICING	1001	X	X			3.0					(N)	G		*		SI			1001	
	FAM	INFLIGHT PROCEDURES	1100	X	X						3.0		(N)	A	1	*		SI			1100	
	FAM	INFLIGHT PROCEDURES	1101	X	X						3.0		(N)	A	1	*	1100	SI			1101	
	FAM	INFLIGHT PROCEDURES	1102	X	X						3.0		(N)	A	1	*	1101	SI			1102	
	FAM	INFLIGHT PROCEDURES	1103	X	X	X					5.0		(N)	A	1	*	1102	SI			1103	
FAM SKILL TOTAL								2	6.0	0	0.0	4	14.0									
<b>NIGHT SYSTEMS HIGH STAGE (NS(H))</b>																						
NS (H)	NS (H)	HLL	1150	X								3.0	HLL	A	1	*	1103	NSI		1150	1150	
	NS (H)	LLL	1151	X								3.0	LLL	A	1	*	1150	NSI		1151	1151	
NS (H) SKILL TOTAL								0	0.0	0	0.0	2	6.0									
<b>TACTICAL NAVIGATION (TN)</b>																						
TN	TN	AFT OBSERVER	1200	X								2.0	D	A	1	*	1103	MI		1200	1200	
TN SKILL TOTAL								0	0.0	0	0.0	1	2.0									
<b>AIR-TO-AIR REFUELING</b>																						
AAR	AAR	FWAAR/TAAR OBSERVER	1600	X								2.0	D	A	1	*	1103	MI		1600	1600	
	AAR	HAAR OBSERVER	1601	X								2.0	D	A	1	*	1103	MI		1601	1601	
AAR SKILL TOTAL								0	0.0	0	0.0	2	4.0									
1000 PHASE TOTAL								2	6.0	0	0.0	9	26.0									

3.21 KC-130J CREWMASTER T&R MATRIX (2000-6000 Phase)

KC-130J CREWMASTER T&R SYLLABUS MATRIX (2000-6000 Phase)																							
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	GRND		SIM		FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY INTERVAL	ORDNANCE	INSTRUCTOR	EOM	Mirror From	EVENT CONV	
				B	S	R		#	TIME	#	TIME	#	TIME										
<b>2000 PHASE (CORE)</b>																							
<b>NIGHT SYSTEMS (NS)</b>																							
NS	NS	NIGHT SYSTEMS QUAL	2150	X	X	X							2.0	NS	A	1	365		NSI		2150	2150	
NS SKILL TOTAL								0	0.0	0	0.0	1	2.0										
<b>LONG RANGE NAVIGATION (LRN)</b>																							
LRN	LRN	LONG RANGE NAV	2162	X	X							6.0	(N)	A	1	*			MI			2162	
LRN SKILL TOTAL								0	0.0	0	0.0	1	6.0										
<b>TACTICAL NAVIGATION (TN)</b>																							
TN	TN	AFT OBSERVER DAY	2201	X								2.0	D	A	1	365			MI		2201	2201	
	TN	AFT OBSERVER W/ NVD	2250	X	X	X						2.0	NS	A	1	365			MI		2250	2250	
TN SKILL TOTAL								0	0.0	0	0.0	2	4.0										
<b>THREAT REACTION (TR)</b>																							
TR	TR	GROUND IR TR	2400	X	X	X						2.0	(N)	A	1	365			MI		2400	2400	
TR SKILL TOTAL								0	0.0	0	0.0	1	2.0										
2000 PHASE TOTAL								0	0.0	0	0.0	5	14.0										
<b>3000 PHASE (MISSION)</b>																							
<b>ASSAULT LANDING ZONE (ALZ)</b>																							
ALZ	ALZ	COMBAT OFFLOAD	3502	X	X	X						1.0	(N)	A	1	365			CPLI		3502	3502	
ALZ SKILL TOTAL								0	0.0	0	0.0	1	1.0										
<b>ASSAULT TRANSPORT STAGE (AT)</b>																							
CAT	CAT	PAX AND BAGS	3510	X	X	X						3.0	(N)	A	1	365			CPLI		3510	3510	
	CAT	ROLLING STOCK	3511	X	X	X						3.0	(N)	A	1	365			CPLI		3511	3511	
	CAT	PALLETIZED	3512	X	X	X						3.0	(N)	A	1	365			CPLI		3512	3512	
	CAT	HAZMAT	3513	X	X	X						3.0	(N)	A	1	365			CPLI		3513	3513	
CAT SKILL TOTAL								0	0.0	0	0.0	4	12.0										
<b>AIR-TO-AIR REFUELING</b>																							
AAR	AAR	FWAAR/TAAR OBSERVER	3600	X	X	X						2.0	D	A	1	365			MI		3600	3600	
	AAR	HAAR OBSERVER	3601	X	X	X						2.0	D	A	1	365			MI		3601	3601	
	AAR	AAR OBSERVER W/ NVD	3650	X	X	X						2.0	NS	A	1	365			MI		3650	3650	
AAR SKILL TOTAL								0	0.0	0	0.0	3	6.0										
<b>AVIATION DELIVERED GROUND REFUELING (ADGR)</b>																							
ADGR	ADGR	RPO	3660	X	X	X						2.0	(N)	A	1	365			MI		3660	3660	
ADGR SKILL TOTAL								0	0.0	0	0.0	1	2.0										

KC-130J CREWMASTER T&R SYLLABUS MATRIX (2000-6000 Phase)																						
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	GRND		SIM		FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY INTERVAL	ORDNANCE	INSTRUCTOR	EOM	Mirror From	EVENT CONV
				B	S	R		#	TIME	#	TIME	#	TIME									
<b>AIR DELIVERY (AD)</b>																						
AD	AD	CDS	3703	X	X	X						4.0	(N)	A	1	365		ADI		3703		
	AD	SL PERSONNEL	3705	X	X	X						4.0	(N)	A	1	365		ADI		3705 3705		
AD SKILL TOTAL							0	0.0	0	0.0	2	8.0										
3000 PHASE TOTAL							0	0.0	0	0.0	11	29.0										
<b>4000 PHASE (CORE PLUS)</b>																						
<b>DEFENSIVE TACTICS (DT)</b>																						
DT	DT	1 VS. 1	4410	X								1.0	D	A	1	*		WTI		4410		
	DT	1 VS. 2	4411	X								1.0	D	A	1	*		WTI		4411		
DT SKILL TOTAL							0	0.0	0	0.0	2	2.0										
<b>4000 PHASE (MISSION PLUS)</b>																						
<b>AIR DELIVERY (AD)</b>																						
AD	AD	COMBINATION AD	4700	X								4.0	(N)	A	1	*		ADI		4700 4700		
	AD	MIL FREE FALL AD	4701	X	X	X						2.0	(N)	A	1	365		ADI		4701 4701		
	AD	HE	4703	X	X	X						4.0	(N)	A	1	365		ADI		4703 4703		
AD TOTAL							0	0.0	0	0.0	3	10.0										
<b>BATTLEFIELD ILLUMINATION (BI)</b>																						
BI	BI	TEAM MEMBER	4710	X								3.0	(N)	A	1	*	LUU Series APFs	ADI		4710 4710		
	BI	TEAM LEADER	4711	X	X	X						3.0	(N)	A	1	365	LUU Series APFs	ADI		4711 4711		
BI SKILL TOTAL							0	0.0	0	0.0	2	6.0										
<b>HARVEST HAWK (HH)</b>																						
HH	HH	HH GROUND	4803	X	X			3.0					(N)	G	1	*	Griffen CATM & Derringer	MI		4802		
HH TOTAL							1	3.0	0	0.0	0	0.0										
<b>CLOSE AIR SUPPORT (CAS)</b>																						
CAS	CAS	CAS	4830	X	X	X	X					2.5	(N)	A	1	730	Griffen CATM & Derringer	MI		4830		
CAS SKILL TOTAL							0	0.0	0	0.0	1	2.5										
<b>5000 PHASE (INSTRUCTOR TRAINING)</b>																						
<b>INSTRUCTOR UNDER TRAINING (IUT)</b>																						
IUT	IUT	IUT	5000	X				3.0					(N)	G		*		ANI		5000 5000		
	IUT	IUT	5100	X								3.0	(N)	A	1	*		ANI		5100 5100		
	IUT	IUT	5101	X								3.0	(N)	A	1	*		ANI		5101 5101		
IUT TOTAL							1	3.0	0	0.0	2	6.0										
<b>MISSIONS INSTRUCTOR (MI)</b>																						
MI	MI	MISSIONS INSTRUCTOR	5102	X	X							3.0	(N)	A	1	*		ANI		5102 5102		
MI SKILL TOTAL							0	0.0	0	0.0	1	3.0										

KC-130J CREWMASTER T&R SYLLABUS MATRIX (2000-6000 Phase)																									
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	GRND		SIM		FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY INTERVAL	ORDNANCE	INSTRUCTOR	EOM	Mirror From	EVENT CONV			
				B	S	R		#	TIME	#	TIME	#	TIME												
<b>SYSTEMS INSTRUCTOR (SI)</b>																									
SI	SI	SYSTEMS INSTRUCTOR	5103	X		X							3.0	(N)	A	1	*		ANI			5103			
SI TOTAL								0	0.0	0	0.0	1	3.0												
<b>NATOPS INSTRUCTOR (NI)</b>																									
NI	NI	NI/ANI IUT	5140	X									2.0	(N)	A	1	*		ANI		5140	5140			
	NI	CM NI/ANI	5141	X	X	X							2.0	(N)	A	1	365		NI	X		5141			
	NI	CMCC NI/ANI	5142	X	X	X							2.0	(N)	A	1	365		NI	X		5142			
	NI	CMLM NI/ANI	5143	X	X	X							2.0	(N)	A	1	365		NI	X		5143			
NI TOTAL								0	0.0	0	0.0	4	8.0												
<b>NIGHT SYSTEMS INSTRUCTOR (NSI)</b>																									
NSI	NSI	NSI IUT	5150	X									2.0	NS	A	1	*		NSI		5150	5150			
	NSI	NSI IUT	5151	X									2.0	NS	A	1	*		NSI		5151	5151			
	NSI	NSI	5152	X		X							2.0	NS	A	1	*		NSI		5152	5152			
LATI TOTAL								0	0.0	0	0.0	3	6.0												
<b>CARGO PASSENGER LOADING INSTRUCTOR (CPLI)</b>																									
CPLI	CPLI	CARGO PASSENGER LOADING INST	5510	X		X							3.0	(N)	A	1	*		ANI		5510	5510			
CPLI TOTAL								0	0.0	0	0.0	1	3.0												
<b>AIR DELIVERY INSTRUCTOR (ADI)</b>																									
ADI	ADI	AIR DELIVERY INSTRUCTOR	5701	X		X							3.0	(N)	A	1	*		WTI		5701	5701			
ADI TOTAL								0	0.0	0	0.0	1	3.0												
<b>6000 PHASE (REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS (R,C,Q,D))</b>																									
<b>FUNCTIONAL CHECK FLIGHT (FCF)</b>																									
FCF	FCF	PARTIAL FCF	6104	X	X							4.0		D	S/A	1	*		SI			6104			
	FCF	PARTIAL FCF	6105	X	X	X	X						2.0	D	A/S	1	365		SI			6105			
	FCF	FULL FCF	6106	X	X								4.0	D	S/A	1	*		SI			6106			
	FCF	FULL FCF	6107	X	X	X	X						4.0	D	A/S	1	365		SI			6107			
FCF TOTAL								0	0.0	2	8.0	2	6.0												
<b>NATOPS (NTPS)</b>																									
NTPS	NTPS	CM3	6110	X	X	X	X						3.0	(N)	A	1	365		ANI	X		6110			
	NTPS	CM2	6111	X	X	X	X						3.0	(N)	A	1	365		ANI	X		6111			
	NTPS	CMCC	6112	X		X	X						3.0	(N)	A	1	365		ANI	X		6112			
	NTPS	CMLM	6113	X		X	X						3.0	(N)	A	1	365		ANI	X		6113			
	NTPS	CM1	6118	X	X	X	X						3.0	(N)	A	1	365		ANI	X		6118			
	NTPS	QUARTERLY EP REVIEW	6120	X	X	X	X						1.0	(N)	S/A	1	90		ANI	X					
NTPS TOTAL								0	0.0	1	1.0	5	15.0												

KC-130J CREWMaster T&R SYLLABUS MATRIX (2000-6000 Phase)																											
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	GRND		SIM		FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY INTERVAL	ORDNANCE	INSTRUCTOR	EOM	Mirror From	EVENT CONV					
				B	S	R		#	TIME	#	TIME	#	TIME														
<b>REFUELING SUPERVISOR (RS)</b>																											
RS	RS	ADGR RS	6660	X	X	X							3.0	(N)	A	1	365		WTI		6660	6662					
RS TOTAL								0	0.0	0	0.0	1	3.0														
<b>QUALITY ASSURANCE SAFETY OBSERVER (QASO)</b>																											
QASO	QASO	BI QASO	6710	X	X	X							3.0	(N)	A	1	365	LUU Series APFs	WTI		6710	6710					
QASO TOTAL								0	0.0	0	0.0	1	3.0														
<b>FAMILIARIZATION (FAM)</b>																											
FAM	FAM	FS PREFLIGHT	6900	X	X								2.0	(N)	S/G	1	*		SI			6900					
	FAM	FS PREFLIGHT	6901	X	X								2.0	(N)	S/G	1	*		SI			6901					
	FAM	ACS DUTIES	6902	X	X								2.0	(N)	S/A	1	*		SI			6902					
	FAM	ACS DUTIES	6903	X	X	X							2.0	(N)	A/S	1	*		SI			6903					
FAM TOTAL								0	0.0	3	6.0	1	2.0														
<b>SYSTEMS (SYS)</b>																											
SYS	SYS	APU	6910	X	X								4.0	(N)	G		*		SI			6910					
	SYS	ENGINES	6911	X	X								2.0	(N)	S/A	1	*		SI			6911					
	SYS	PROPS	6912	X	X								2.0	(N)	S/A	1	*		SI			6912					
	SYS	FUEL	6913	X	X								2.0	(N)	S/A	1	*		SI			6913					
	SYS	ELECTRICAL	6914	X	X								2.0	(N)	S/A	1	*		SI			6914					
	SYS	HYDRAULICS	6915	X	X								2.0	(N)	S/A	1	*		SI			6915					
	SYS	BLEED AIR & ICE PROT	6916	X	X								2.0	(N)	S/A	1	*		SI			6916					
	SYS	AC/PRESSURIZATION	6917	X	X								2.0	(N)	S/A	1	*		SI			6917					
	SYS	COMNAV	6918	X	X								2.0	(N)	S/A	1	*		SI			6918					
SYS	EMERGENCY PROCEDURES	6919	X	X	X							4.0	(N)	S	1	*		SI			6919						
SYS TOTAL								9	20.0	9	36.0	0	0.0														
<b>AUGMENT CREW STATION (ACS)</b>																											
ACS	ACS	NTTP CHECKLIST	6920	X	X	X	X						2.0	(N)	S/A	1	365		SI			6920					
	ACS	LRN	6921	X	X	X	X							6.0	(N)	A	1	365		SI		6921					
	ACS	TN/LAT	6922	X	X	X	X						2.0	(N)	S/A	1	365		SI			6922					
	ACS	TR	6923	X	X	X	X						2.0	(N)	S/A	1	365		SI			6923					
	ACS	ALZ	6924	X	X	X	X						2.0	(N)	A	1	730		SI			6924					
	ACS	ARO PANEL AND SYS	6925	X	X								4.0	(N)	G	1	*		SI			6925					
	ACS	ARO PANEL AND SYS	6926	X	X								1.0	(N)	D	S/A	1	*		SI			6926				
	ACS	ARO PANEL	6927	X	X								1.0	(N)	S/A	1	*		SI			6927					
	ACS	ARO PANEL	6928	X	X	X	X							3.0	(N)	S/A	1	180		SI			6928				
ACS TOTAL								3	6.0	5	10.0	3	11.0														

KC-130J CREWMaster T&R SYLLABUS MATRIX (2000-6000 Phase)																							
SKILL	PREFIX	T&R DESCRIPTION	EVENT NUMBER	ATTAIN			MAINTAIN	GRND		SIM		FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY INTERVAL	ORDNANCE	INSTRUCTOR	EOM	Mirror From	EVENT CONV	
				B	S	R		#	TIME	#	TIME	#	TIME										
<b>PLANE CAPTAIN (PC)</b>																							
PC	PC	GSE REQUIREMENTS	6930	X	X			40.0						G			*		SI			6930	
	PC	DAILY INSPECTION	6931	X	X			6.0						G			*		SI			6931	
	PC	TURN AROUND INSPECTION	6932	X	X	X		2.0						G			*		SI			6932	
	PC	4790.2 PC REQUIREMENTS	6933	X	X	X		40.0						G			*		SI			6933	
	PC	EXPEDITIONARY MAINTENANCE	6934	X	X			40.0						G			*		SI			6934	
<b>PC TOTAL</b>								5	128.0	0	0.0	0	0.0										
<b>ENGINE RUN (ER)</b>																							
ER	ER	ENGINE RUN INTRO	6940	X	X			2.0		2.0				S/G	1		*		ANI				
	ER	ENGINE RUN PRACTICE	6941	X	X					2.0				S/G	1		*		ANI				
	ER	ENGINE RUN REVIEW	6942	X	X					2.0				S/G	1		*		ANI				
	ER	ENGINE PRAC APP	6943	X	X	X	X		2.0					G/S			365		ANI	X			
<b>ER TOTAL</b>								2	4.0	3	6.0	0	0.0										

3.22 KC-130J CREWMASTER ATTAIN / MAINTAIN MATRX

KC-130J CREWMASTER ATTAIN / MAINTAIN MATRIX (2000-6000 Phase)															
SKILL	PREFIX	T&R DESCRIPTION	BASIC POI	SERIES CONV POI	REFRESHER POI	MAINTAIN POI	FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY	PREREQUISITE	PREREQUISITE NOTES	CHAINING
							#	TIME							
<b>2000 PHASE (CORE)</b>															
<b>NIGHT SYSTEMS (NS)</b>															
NS	NS	NIGHT SYSTEMS QUAL	2150		2150	2150		2.0	NS	A	1	365	1151	Minimum 10 Hrs NVD (5 Hrs LLL)	
NS SKILL TOTAL							1	2.0							
<b>LONG RANGE NAVIGATION (LRN)</b>															
LRN	LRN	LONG RANGE NAV	2162	2162				6.0	(N)	A	1	*	1103		
LRN SKILL TOTAL							1	6.0							
<b>TACTICAL NAVIGATION (TN)</b>															
TN	TN	AFT OBSERVER DAY	2201					2.0	D	A	1	365	1200		
	TN	AFT OBSERVER W/ NVD	2250		2250	2250		2.0	NS	A	1	365	1151,2201		2201,2150
TN SKILL TOTAL							2	4.0							
<b>THREAT REACTION (TR)</b>															
TR	TR	GROUND IR TR	2400		2400	2400		2.0	(N)	A	1	365	1103		
TR SKILL TOTAL							1	2.0							
2000 PHASE TOTAL							5	14.0							
<b>3000 PHASE (MISSION)</b>															
<b>ASSAULT LANDING ZONE (ALZ)</b>															
ALZ	ALZ	COMBAT OFFLOAD	3502		3502	3502		1.0	(N)	A	1	365	3512		3512
ALZ SKILL TOTAL							1	1.0							
<b>ASSAULT TRANSPORT STAGE (AT)</b>															
CAT	CAT	PAX AND BAGS	3510		3510	3510		3.0	(N)	A	1	365	1103		
	CAT	ROLLING STOCK	3511		3511	3511		3.0	(N)	A	1	365	1103		
	CAT	PALLETIZED	3512		3512	3512		3.0	(N)	A	1	365	1103		
	CAT	HAZMAT	3513		3513	3513		3.0	(N)	A	1	365	1103		
CAT SKILL TOTAL							4	12.0							

KC-130J CREWMASTER ATTAIN / MAINTAIN MATRIX (2000-6000 Phase)																
SKILL	PREFIX	T&R DESCRIPTION	BASIC POI	SERIES CONV POI	REFRESHER POI	MAINTAIN POI	FLIGHT		CONDITION	TYPE	# AIRCRAFT	or SIM	REFLY	PREREQUISITE	PREREQUISITE NOTES	CHAINING
							#	TIME								
<b>AIR-TO-AIR REFUELING</b>																
AAR	AAR	FWAAR/TAAR OBSERVER	3600		3600	3600		2.0	D	A	1	365	1600			
	AAR	HAAR OBSERVER	3601		3601	3601		2.0	D	A	1	365	1601			
	AAR	AAR OBSERVER W/ NVD	3650		3650	3650		2.0	NS	A	1	365	3600 OR 3601		2150	
AAR SKILL TOTAL							3	6.0								
<b>AVIATION DELIVERED GROUND REFUELING (ADGR)</b>																
ADGR	ADGR	RPO	3660		3660	3660		2.0	(N)	A	1	365	1103			
ADGR SKILL TOTAL							1	2.0								
<b>AIR DELIVERY (AD)</b>																
AD	AD	CDS	3703		3703	3703		4.0	(N)	A	1	365	1103			
	AD	SL PERSONNEL	3705		3705	3705		4.0	(N)	A	1	365	3510		3510	
AD SKILL TOTAL							2	8.0								
3000 PHASE TOTAL							11	29.0								
<b>4000 PHASE (CORE PLUS)</b>																
<b>DEFENSIVE TACTICS (DT)</b>																
DT	DT	1 VS. 1	4410					1.0	D	A	1	*	1103			
	DT	1 VS. 2	4411					1.0	D	A	1	*	4410		4410	
DT SKILL TOTAL							2	2.0								
<b>4000 PHASE (MISSION PLUS)</b>																
<b>AIR DELIVERY (AD)</b>																
AD	AD	COMBINATION AD	4700					4.0	(N)	A	1	*	[3705 OR 4701], [3703 OR 4703]			
	AD	MIL FREE FALL AD	4701		4701	4701		2.0	(N)	A	1	365	3510		3510	
	AD	HE	4703		4703	4703		4.0	(N)	A	1	365	3512		3512	
AD TOTAL							3	10.0								
<b>BATTLEFIELD ILLUMINATION (BI)</b>																
BI	BI	TEAM MEMBER	4710					3.0	(N)	A	1	*	1103,3512			
	BI	TEAM LEADER	4711		4711	4711		3.0	(N)	A	1	365	4710		4710	
BI SKILL TOTAL							2	6.0								
<b>HARVEST HAWK (HH)</b>																
HH	HH	HH GROUND	4803						(N)	G	1	*	1103			
HH TOTAL							0	0.0								
<b>CLOSE AIR SUPPORT (CAS)</b>																
CAS	CAS	CAS	4830		4830	4830		2.5	(N)	A	1	730	4803			
CAS SKILL TOTAL							1	2.5								
4000 PHASE TOTAL							6	18.5								

KC-130J CREWMASTER ATTAIN / MAINTAIN MATRIX (2000-6000 Phase)															
SKILL	PREFIX	T&R DESCRIPTION	BASIC POI	SERIES CONV POI	REFRESHER POI	MAINTAIN POI	FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY	PREREQUISITE	PREREQUISITE NOTES	CHAINING
							#	TIME							
<b>5000 PHASE (INSTRUCTOR TRAINING)</b>															
<b>INSTRUCTOR UNDER TRAINING (IUT)</b>															
IUT	IUT	IUT	5000						(N)	G	1	*		APRB recommendation	
	IUT	IUT	5100				3.0		(N)	A	1	*	5000		
	IUT	IUT	5101				3.0		(N)	A	1	*	5100		
IUT TOTAL							2	6.0							
<b>MISSIONS INSTRUCTOR (MI)</b>															
MI	MI	MISSIONS INSTRUCTOR	5102		5102		3.0		(N)	A	1	*	2162,2250,2400,3600,3601,3650, 5101	APRB recommendation	
MI SKILL TOTAL							1	3.0							
<b>SYSTEMS INSTRUCTOR (SI)</b>															
SI	SI	SYSTEMS INSTRUCTOR	5103		5103		3.0		(N)	A	1	*	6920,6921,6922,6923,6924,6928,6930,6932,6933,6934,5101, 6118	APRB recommendation	
SI TOTAL							1	3.0							
<b>NATOPS INSTRUCTOR (NI)</b>															
NI	NI	NI/ANI IUT	5140				2.0		(N)	A	1	*	5102,[6112,6113, OR 6118]	APRB recommendation	
	NI	CM NI/ANI	5141		5141	5141	2.0		(N)	A	1	365	5103,5140,5510,6118	APRB recommendation	
	NI	CMCC NI/ANI	5142		5142	5142	2.0		(N)	A	1	365	5103,5140,6112		
	NI	CMLM NI/ANI	5143		5143	5143	2.0		(N)	A	1	365	5140,5510,6113		
NI TOTAL							4	8.0							
<b>NIGHT SYSTEMS INSTRUCTOR (NSI)</b>															
NSI	NSI	NSI IUT	5150				2.0	NS	A	1	*	5102	APRB recommendation	2150	
	NSI	NSI IUT	5151				2.0	NS	A	1	*	5150		2150	
	NSI	NSI	5152		5152		2.0	NS	A	1	*	5151		2150	
LATI TOTAL							3	6.0							
<b>CARGO PASSENGER LOADING INSTRUCTOR (CPLI)</b>															
CPLI	CPLI	CARGO PASSENGER LOADING INSTRUCTOR	5510		5510		3.0		(N)	A	1	*	3502,3510,3511,3512,3513,5101	APRB recommendation	
CPLI TOTAL							1	3.0							
<b>AIR DELIVERY INSTRUCTOR (ADI)</b>															
ADI	ADI	AIR DELIVERY INSTRUCTOR	5701		5701		3.0		(N)	A	1	*	3703,3705,4700,4701,4703,4711,5101	APRB recommendation	
ADI TOTAL							1	3.0							

KC-130J CREWMASTER ATTAIN / MAINTAIN MATRIX (2000-6000 Phase)															
SKILL	PREFIX	T&R DESCRIPTION	BASIC POI	SERIES CONV POI	REFRESHER POI	MAINTAIN POI	FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY	PREREQUISITE	PREREQUISITE NOTES	CHAINING
							#	TIME							
5000 PHASE TOTAL							13	32.0							
6000 PHASE (REQUIREMENTS, CERTIFICATIONS, QUALIFICATIONS AND DESIGNATIONS (R,C,Q,D))															
FUNCTIONAL CHECK FLIGHT (FCF)															
FCF	FCF	PARTIAL FCF	6104	6104					D	S/A	1	*	6112 OR 6118	APRB recommendation	
	FCF	PARTIAL FCF	6105	6105	6105	6105		2.0	D	A/S	1	365	6104		
	FCF	FULL FCF	6106	6106					D	S/A	1	*	6112 OR 6118	APRB recommendation	
	FCF	FULL FCF	6107	6107	6107	6107		4.0	D	A/S	1	365	6106		6105
FCF TOTAL							2	6.0							
NATOPS (NTPS)															
NTPS	NTPS	CM3	6110	6110	6110	6110		3.0	(N)	A	1	365	1000,1001,1103,1151,1200,1600,1601		
	NTPS	CM2	6111	6111	6111	6111		3.0	(N)	A	1	365	6110,6903,6919	APRB recommendation	
	NTPS	CMCC	6112		6112	6112		3.0	(N)	A	1	365			
	NTPS	CMLM	6113		6113	6113		3.0	(N)	A	1	365			
	NTPS	CM1	6118	6118	6118	6118		3.0	(N)	A	1	365	6111,6928,6930,6932,6933,6934	APRB recommendation	
	NTPS	QUARTERLY EP REVIEW	6120	6120	6120	6120			(N)	S/A	1	90			
NTPS TOTAL							5	15.0							
REFUELING SUPERVISOR (RS)															
RS	RS	ADGR RS	6660		6660	6660		3.0	(N)	A	1	365	3660	APRB recommendation	3660
RS TOTAL							1	3.0							
QUALITY ASSURANCE SAFETY OBSERVER (QASO)															
QASO	QASO	BI QASO	6710		6710	6710		3.0	(N)	A	1	365	4711	APRB recommendation	4711
QASO TOTAL							1	3.0							
FAMILIARIZATION (FAM)															
FAM	FAM	FS PREFLIGHT	6900	6900					(N)	S/G	1	*	2150,2250,3510,3511,3512,3513,6110		
	FAM	FS PREFLIGHT	6901	6901					(N)	S/G	1	*	6900		
	FAM	ACS DUTIES	6902	6902					(N)	S/A	1	*	6901		
	FAM	ACS DUTIES	6903	6903	6903			2.0	(N)	A/S	1	*	6902		
FAM TOTAL							1	2.0							
SYSTEMS (SYS)															
SYS	SYS	APU	6910	6910					(N)	G	1	*	6903		

KC-130J CREWMASTER ATTAIN / MAINTAIN MATRIX (2000-6000 Phase)															
SKILL	PREFIX	T&R DESCRIPTION	BASIC POI	SERIES CONV POI	REFRESHER POI	MAINTAIN POI	FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY	PREREQUISITE	PREREQUISITE NOTES	CHAINING
							#	TIME							
SYS		ENGINES	6911	6911					(N)	S/A	1	*	6910		
		PROPS	6912	6912					(N)	S/A	1	*	6911		
		FUEL	6913	6913					(N)	S/A	1	*	6912		
		ELECTRICAL	6914	6914					(N)	S/A	1	*	6913		
		HYDRAULICS	6915	6915					(N)	S/A	1	*	6914		
		BLEED AIR & ICE PROTECTION	6916	6916					(N)	S/A	1	*	6915		
		AC/PRESSURIZATION	6917	6917					(N)	S/A	1	*	6916		
		COMNAV	6918	6918					(N)	S/A	1	*	6917		
SYS		EMERGENCY PROCEDURES	6919	6919	6919				(N)	S	1	*	6918		
SYS TOTAL							0	0.0							
AUGMENT CREW STATION (ACS)															
ACS	ACS	NTTP CHECKLIST	6920	6920	6920	6920			(N)	S/A	1	365	6903		
	ACS	LRN	6921	6921	6921	6921		6.0	(N)	A	1	365	2162,6903		2162
	ACS	TN/LAT	6922	6922	6922	6922			(N)	S/A	1	365	2250,6903		2201, 2250~NS
	ACS	TR	6923	6923	6923	6923			(N)	S/A	1	365	2400,6903		2400
	ACS	ALZ	6924	6924	6924	6924		2.0	(N)	A	1	730	6903		
	ACS	ARO PANEL AND SYS	6925	6925					(N)	G	1	*	6915		
	ACS	ARO PANEL AND SYS	6926	6926					D	S/A	1	*	3600,3601,3650,6925		
	ACS	ARO PANEL	6927	6927					(N)	S/A	1	*	6926		
ACS	ARO PANEL	6928	6928	6928	6928		3.0	(N)	S/A	1	180	6919,6927			
ACS TOTAL							3	11.0							
PLANE CAPTAIN (PC)															
PC	PC	GSE REQUIREMENTS	6930	6930						G		*			
	PC	DAILY INSPECTION	6931	6931						G	1	*			
	PC	TURN AROUND INSPECTION	6932	6932	6932					G	1	*			
	PC	4790.2 PC REQUIREMENTS	6933	6933	6933					G		*	6111		
	PC	EXPEDITIONARY MAINTENANCE	6934	6934						G	1	*	6111		
PC TOTAL							0	0.0							
ENGINE RUN (ER)															
ER	ER	ENGINE RUN INTRO	6940	6940						S/G	1	*	6112 OR 6118	APRB recommendation	
	ER	ENGINE RUN	6941	6941						S/G	1	*	6940		

KC-130J CREWMASTER ATTAIN / MAINTAIN MATRIX (2000-6000 Phase)																
SKILL	PREFIX	T&R DESCRIPTION	BASIC POI	SERIES CONV POI	REFRESHER POI	MAINTAIN POI	FLIGHT		CONDITION	TYPE	# AIRCRAFT or SIM	REFLY	PREREQUISITE	PREREQUISITE NOTES	CHAINING	
							#	TIME								
		PRACTICE														
	ER	ENGINE RUN REVIEW	6942	6942						S/G	1	*	6941			
	ER	ENGINE PRAC APP	6943	6943	6943	6943				G/S	1	365	6942			
ER TOTAL							0	0.0								

3.23 SYLLABUS EVALUATION FORMS. All aircrew training forms are maintained by MAWTS-1 and can be located on the MAWTS-1 website. Common Access Card is required for access.

APPENDIX A

**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 1.3.3.2**                    **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 (KC-130).

**Standards:**

**KC-130J [15/12/9/6/3 aircraft]**

**Personnel**

- 22/17/12/4/2 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
    - 10/8/6/4/2 aircraft (KC-130J)
- OR
- Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.
- Operational support equipment fully supports MCT

**Training**

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

**Output Standards**

- 13/10/7/4/2 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 [15/12/9/6/3 aircraft]**

**Personnel**

- 22/17/12/8/4 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
  - 10/8/6/4/2 aircraft (KC-130J)

OR

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

- Operational support equipment fully supports MCT

**Training**

- 21/16/11/10/5 crews CAT Mission Skill proficient IAW T&R requirements

**Output Standards**

- 20/16/12/8/4 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 [KC-130J [15/12/9/6/3 aircraft]**

**Personnel**

- 22/17/12/8/4 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
  - 10/8/6/4/2 aircraft (KC-130J)

OR

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

- Operational support equipment fully supports MCT

**Training**

- 15/12/9/6/3 crews AAR Mission Skill proficient IAW T&R requirements

**Output Standards**

- 20/16/12/8/4 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 [KC-130J [15/12/9/6/3 aircraft]**

**Personnel**

- 22/17/12/8/4 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
  - 10/8/6/4/2 aircraft (KC-130J)

OR

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

- Operational support equipment fully supports MCT

**Training**

- 8/6/4/3/2 crews ADGR Mission Core Skill proficient IAW T&R requirements

**Output Standards**

- 8/6/4/3/2 crew that provide (2) refueling points

**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 [KC-130J [15/12/9/6/3 aircraft]**

**Personnel**

- 22/17/12/8/4 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
  - 10/8/6/4/2 aircraft (KC-130J)

OR

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

- Operational support equipment fully supports MCT

**Training**

- 5/4/3/2/1 crews AD Mission Skill proficient IAW T&R requirements

**Output Standards**

- 9/7/6/4/3 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 [KC-130J [15/12/9/6/3 aircraft]**

**Personnel**

- 22/17/12/8/4 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
  - 10/8/6/4/2 aircraft (KC-130J)

OR

Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.  
Operational support equipment fully supports MCT

**Training**

- 5/4/3/2/1 crews BI Core Plus proficient IAW T&R requirements

**Output Standards**

- 8/7/5/4/2 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 [KC-130J [15/12/9/6/3 aircraft]**

**Personnel**

- 22/17/12/8/4 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
  - 10/8/6/4/2 aircraft (KC-130J)

OR

Upon establishment, 100 percent RFT entitlement IAW T/M/S standard.  
Operational support equipment fully supports MCT

**Training**

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

**Output Standards**

- 3/3/2/2/1 sortie daily sustained during contingency/combat operations based on a six hour average sortie time

## **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 [KC-130J [15/12/9/6/3 aircraft]**

#### **Personnel**

- 22/17/12/8/4 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
  - 10/8/6/4/2 aircraft (KC-130J)

OR

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

Operational support equipment fully supports MCT

#### **Training**

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

#### **Output Standards**

- 3/3/2/2/1 sortie daily sustained during contingency/combat operations based on a six hour average sortie time



APPENDIX B REFERENCE SOURCES

KC-130J ABBREVIATIONS	
ALZ	ASSAULT LANDING ZONE
TN	TACTICAL NAVIGATION
TR	THREAT REACTION
CAT	COMBAT ASSAULT SUPPORT
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
BAS	BASIC AIR TO SURFACE
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	DEFENSIVE TACTICS INSTRUCTOR
FLSE	FLIGHT LEADERSHIP STANDARDIZATION EVALUATOR
WTI	WEAPONS AND TACTICS INSTRUCTOR
CPLI	CARGO PASSENGER LOADING INSTRUCTOR
MI	MISSION INSTRUCTOR
SI	SYSTEMS INSTRUCTOR
ADI	AIR DELIVERY INSTRUCTOR
HHI	HARVEST HAWK INSTRUCTOR
BIP	BASIC INSTRUCTOR PILOT
ALZI	ASSAULT LANDING ZONE INSTRUCTOR
PC	PLANE CAPTAIN
RPO	REFUELING POINT OPERATOR

EXTERNAL SYLLABUS SUPPORT  
RANGE REQUIREMENTS

Category	Abbreviation	Name	Description	Notes
CAT I	MOA	Military Operating Area	Per Flight Information Publications	
CAT I	RSTD	Restricted/Warning Area	Per Flight Information Publications	
CAT I	MTR	Military Training Route	Per Flight Information Publications	
CAT I	LAT	LAT Course	Approved LAT course. Normally preferred over an MTR for dedicated LAT sorties.	
CAT I	AAR	Air-to-Air Refueling	Any airspace that can support AAR.	
CAT II	EW	Electronic Warfare	Threat Emitters providing a dynamic red/or gray force threat environment to enhance threat recognition, self-protection, and defense-suppression techniques.	
CAT II	Hi Fi EW	High Fidelity EW	Hi Fidelity (live) Emitters. Live actual SAM systems with operators. Can provide feedback via tape debrief.	Often a desired substitute for EW, may be cost prohibitive.
CAT II	URBN WPNS	Urban Weapons Impact Range	Urban CAS range capable of JCAS, LT INERT, and LSR.	
CAT II	URBN TRG	Urban Training	Urban area with overlying Restricted or MOA training airspace. Does not imply authorized weapons release or LASER use.	Example is a town, such as Yuma, under the Dome MOA.
CAT II	LSR	LASER Safe Range	Supports airborne LASER firing.	
CAT II	RLSR	Remote LASER Capable	A remote-operated ground LASER may designate a target.	Should be standard on a RKD RNG
CAT II	TGT	Target	Any point- target that is authorized for releasing INERT weapons on.	May include an unscored Raked Range
CAT II	IR TGT	IR-Significant Target	IR-Significant target.	
CAT III	HE	High Explosive Impact Area	Supports live HE ordnance. Implies EXP.	
CAT III	JCAS	JCAS TTPs	Supports all three types of CAS in the range. Allows JTAC personnel on range. Implies LSR and either INERT or HE.	
CAT III	AS MISSILE	A/S Missile Firing Range	Supports AS missile firing.	Hellfire/SOPGM
CAT III	EXP	Expendables Authorized	Supports use of Chaff & Flares.	
CAT IV	IMC	Instrumented Multi-Spectral Cues	Full size replicas of actual ADA and SAM systems, IR-significant and normally linked to LSTSS and NDBS/WISS.	
CAT IV	MOCK	Mock-Up Targets	Full size replicas of Mechanized or Threat vehicles. IR-significant desired. Weapons release not implied.	
CAT IV	GWVS	Ground Warfare Visual Simulator	Provides enhanced battlefield realism via simulation of muzzle flashes for ADA and launch of SAMs.	

Category	Abbreviation	Name	Description	Notes
CAT IV	SST	Smokey SAM Team	Smoke Rockets to simulate MANPADs or RF SAMs.	
CAT IV	TGT-DISP	Tactical Targets Dispersed	Full size actual or replicas of Mechanized or Threat vehicles. IR-significant desired. Implies INERT and LSR. WISS desired.	
CAT IV	TGT-MOVE	Tactical Targets Moving	Full size actual or replicas of Mechanized or Threat vehicles. IR-significant desired. Implies LT INERT and LSR. WISS & LSTSS desired.	
CAT IV	RECCE ARRAY	Actual Tactical Targets in an Array for PID	Full size actual Mechanized or Threat vehicles. Organized in an array in order to allow PID. Weapons release not implied.	
CAT IV	STRUCTR	Structures	May include a building, bunker, or revetment. IR-significant desired. Inert weapons release authorized. LSR capable. WISS desired.	