

Performance Standard. Arrive over the objective plus or minus 30 seconds and demonstrate ability to control ground track, as well as perform LAT and threat reaction maneuvers.

Prerequisite. TACNAV-321.

External Syllabus Support. LAT approved MTR or training area.

TACNAV-323 2.0 SC 1 KC-130 A NS

Goal. Introduce left seat, NVG low level navigation at night under HLL conditions.

Requirement. The initial event shall be instructed by a WTI or NSI. Plan and execute a VFR navigation route, consisting of at least 6 points, on a published MTR. Emphasize aircraft vector control, terrain clearance, CRM and tactical piloting while utilizing NVGs. This event should terminate with a TOT and actual or simulated actions in an objective area (AD, ALZ, ARCP).

Performance Standard. Arrive over the objective plus or minus 30 seconds properly configured, demonstrate an understanding of terrain masking, timing corrections and chart-to-ground interpretation, and NVG considerations/hazards.

Prerequisite. TACNAV-223, FAI-303, TACNAV-320.

External Syllabus Support. Approved MTR or training area.

TACNAV-324 2.0 SC,R 1 KC-130 A NS

Goal. Introduce the pilot to left seat, NVG low level navigation at night under LLL.

Requirement. The initial event shall be instructed by a WTI or NSI. Plan and execute a VFR navigation route, consisting of at least 6 points, on a published MTR. Emphasize aircraft vector control, terrain clearance, CRM and tactical pilotage while utilizing NVGs. This event should terminate with a TOT and actual or simulated actions in an objective area (AD, ALZ, ARCP).

Performance Standard. Arrive over the objective plus or minus 30 seconds properly configured. Demonstrate an understanding of terrain masking, timing corrections and chart-to-ground interpretation, and NVG considerations/hazards.

Prerequisite. TACNAV-224, FAI-303, TACNAV-320.

External Syllabus Support. Approved MTR or training area.

6. Formation

a. Purpose. To train the pilot in left seat (pilot-flying) KC-130 formation wingman flight techniques and procedures.

b. General. The Core Advanced formation syllabus is designed to introduce the pilot to formation tactics, techniques and procedures (TTPs) as a wingman in a flight of 2 or more KC-130s.

(1) Upon completion of this stage, the pilot will be capable of flying day or night formation in either the left or right seat.

(2) The focus of formation training should be on operational employment. This includes mission/fuel planning, inter-flight communications, departure and recovery procedures, and planned and inadvertent weather penetrations.

(3) For initial night systems formation training, a NSI is required if the pilot is not NSQ.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTPP is required for flight events.

d. Ground/Academic Training. The pilot shall review the ANTPP Formation chapter.

e. Flight and Simulator Training. (3 Events, 6.0 Hours).

FORM-330 2.0 SC 2+ KC-130 A

Goal. Train the pilot to fly proper KC-130 day formation positions and procedures.

Requirement. Initial event shall be instructed by T&R Instructor. The initial flight should be flown as a section. If flown as a division then the initial event shall begin in the dash 2 position. The instructor shall introduce proper start, taxi, run-up, takeoff, recovery, and landing procedures in a formation. Introduce day section formation positions and procedures. The pilot shall complete 3 break-up and rendezvous' and 1 lead change, and should conduct the formation mission brief.

Performance Standard. The pilot shall be capable of applying proper corrective control inputs to establish and maintain formation positions.

Prerequisite. FORM-231, FAI-301.

External Syllabus Support. MOA or appropriate training area.

FORM-331 2.0 SC,R 2+ KC-130 A NS

Goal. Train the pilot to fly proper KC-130 NVG formation positions and procedures.

Requirement. Initial event shall be instructed by T&R Instructor. The initial flight should be flown as a section. If flown as a division then the initial event shall begin in the dash 2 position. The pilot shall practice proper start, taxi, run-up, takeoff, recovery, and landing procedures in a formation. Introduce NVG section formation positions and

procedures. The pilot shall complete 3 break-up and rendezvous' and 1 lead change, and should conduct the formation mission brief.

Performance Standard. The pilot shall be capable of applying proper corrective control inputs to establish and maintain formation positions. The pilot shall demonstrate a knowledge of KC-130 formation TTPs and NVG considerations.

Prerequisite. FAI-303, FORM-330.

External Syllabus Support. MOA or approved training area.

FORM-332 2.0 SC,R 3+ KC-130 A (N)

Goal. To fly proper KC-130 division formation positions and procedures.

Requirement. Initial event shall be instructed by T&R Instructor. The pilot shall fly initial event in the left seat. This sortie may be flown in conjunction with FORM-331 or 332.

Performance Standard. The pilot shall be capable of applying proper corrective control inputs to establish and maintain dash 3 or 4 formation positions. The pilot shall demonstrate knowledge of KC-130 division formation considerations.

Prerequisite. FORM-330, FORM-331 (if NVG), FORM-430 (if unaided).

External Syllabus Support. MOA or approved training area.

7. Multi-plane Air to Air Refueling.

a. Purpose. To train the pilot in left seat (pilot-flying) KC-130 multi-plane AAR flight techniques and procedures.

b. General. The Core Advanced multi-plane AAR syllabus is designed to introduce the pilot to maintaining formation as part of a tanker cell. This includes mission/fuel planning, inter-flight communications, departure and recovery procedures, and planned and inadvertent weather penetrations. For initial night systems training, a NSI is required if the pilot is not NSQ.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTPP is required for flight events.

d. Ground/Academic Training. The pilot shall review the KC-130 ANTPP Formation chapter, and the KC-130 formation AAR procedures as defined in the NATOPS AAR Manual and the ATP-56B.

e. Flight and Simulator Training. (2 Events, 8.0 Hours).

FORMAR-333 4.0 SC,R 2+ KC-130 A (N)

Goal. Train the pilot in KC-130 multi-plane fixed wing air to air refueling procedures.

Requirement. Initial event shall be instructed by TACRAC. The TACRAC shall introduce the formation aerial refueling brief, tanker/receiver fuel planning considerations, receiver management and movement around the refueling formation, and proper formation aerial refueling communications procedures. If applicable, review proper NVG equipment use and procedures.

Performance Standard. The pilot shall be capable of applying proper corrective control inputs to establish and maintain formation positions. The pilot shall demonstrate knowledge of KC-130 multi-plane air to air refueling considerations.

Prerequisite. Day: AR-311, FORM-330 (FORM-332 if in division). NVG: FORM-331 (FORM-332 if in division). Unaided: FORM-430 (FORM-332 if in division).

External Syllabus Support. Receiver aircraft.

FORMAR-334 4.0 SC,R 2+ KC-130 A (N)

Goal. Train the pilot in KC-130 multi-plane rotary wing air to air refueling procedures.

Requirement. Initial event shall be instructed by a TACRAC. The TACRAC shall introduce the formation aerial refueling brief, tanker/receiver fuel planning considerations, receiver management and movement around the refueling formation, and proper formation aerial refueling communications procedures. If applicable, review proper NVG equipment use and procedures.

Performance Standard. The pilot shall be capable of applying proper corrective control inputs to establish and maintain formation positions. The pilot shall demonstrate knowledge of KC-130 multi-plane air to air refueling considerations.

Prerequisite. Day: AR-312, FORM-330 (FORM-332 if in division). NVG: AR-313, FORM-331 (FORM-332 if in division). Unaided: AR-413, FORM-430 (FORM-332 if in division).

External Syllabus Support. Receiver aircraft.

8. Aerial Delivery (AD)

a. Purpose. Introduce the pilot to left seat (pilot-flying) duties and procedures involved in KC-130 AD operations.

b. General

(1) The Core Advanced AD syllabus is designed to introduce pilot techniques in cargo or personnel AD operations.

(2) Upon completion of this stage the pilot shall be capable of flying in either the left or right seat when conducting Heavy Equipment (HE), Container Delivery System (CDS), personnel static line and combination airdrops.

(3) When conducting an AD in conjunction with a low level ingress, the pilot shall be qualified to fly that particular profile or must fly with the appropriate instructor for that event. Initial AD sorties flown in conjunction with initial TACNAV sorties are permitted, provided all instructor requirements are met.

(4) For initial night systems AD training, an NSI is required if the pilot is not NSQ.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTPP is required for flight events.

d. Ground/Academic Training. Review KC-130 ANTPP Air Delivery chapter and KC-130 TPG. Review MAWTS-1 AD courseware.

e. Flight and Simulator Training. (2 Events, 4.0 Hours).

AD-340 2.0 SC 1 KC-130 A

Goal. Train and evaluate the pilot in day left seat air delivery procedures.

Requirement. The initial event shall be flown from the left seat and instructed by a T&R instructor. Review personnel, CDS and HE aerial delivery procedures. The pilot shall display a sound working knowledge of administrative and logistical requirements associated with DZ coordination and aircraft rigging (load certification). The pilot shall demonstrate the ability to fly the ingress, objective area profile and manage checklists for AD procedures. Emphasis should be placed on CRM and AD procedures. An actual personnel or cargo AD is required for initial qualification.

Performance Standard. Safely perform AD that lands within the drop zone safety criteria.

Prerequisite. AD-241, FAI-301.

External Syllabus Support. AD unit of any service for cargo rigging and DZ control.

AD-341 2.0 SC,R 1 KC-130 A NS

Goal. Train and evaluate the pilot in left seat AD procedures utilizing NVGs.

Requirement. The initial event shall be flown from the left seat and instructed by a NSI or WTI. Review personnel and CDS AD procedures. Emphasize CRM and AD procedures. The pilot shall demonstrate the ability to fly the ingress, brief objective area profile and manage checklists for AD procedures while utilizing NVGs. The pilot should display a sound working knowledge of administrative and logistical requirements associated with DZ coordination and aircraft rigging (load certification). An actual personnel or cargo AD is required for initial qualification.

Performance Standard. Safely perform AD that lands within the drop zone safety criteria.

Prerequisite. AD-242, NS-303, AD-340.

External Syllabus Support. AD unit of any service for cargo rigging and DZ control.

9. Threat Reaction

a. Purpose. Train the pilot in the use of ASE and threat counter-tactics in a RADAR threat environment.

b. General

(1) Pilots shall review the KC-130FRT ASE suite and mission planning considerations for RADAR SAM defense. The sortie should focus on aircrew immediate action drills when confronted with RADAR threat systems. An aircraft with a functional ASE suite is required for the flight event.

(2) Upon completion of this phase, the pilot will be familiar with the mission planning and operational considerations associated with the ASE suite, chaff and flare requirements, and tactical CRM.

(3) The use of emitters for this stage is required. Aircrew training officers may need to be creative in gaining the best possible training due to the limited availability of expendables and ranges.

(4) Simulator events may be waived in the absence of a suitable device. Flight events may be conducted in the simulator if no suitable ranges or threat emitters are available.

c. Crew Requirements. Two pilots are required for simulator events. The minimum crew as defined by the NFM or ANTP is required for flight events.

d. Academic/Ground Training. Review the NFM, KC-130 ANTP, Classified ANTP, AFTTP 3-1 Threat Reference Guide. Review the KC-130 ASE, DEFTAC/ACCT, Stress and Performance Limitations and Threat Counter-tactics classes from the MAWTS-1 KC-130 Specific ASP.

e. Flight and Simulator Training. (2 Events, 5.0 Hours).

STHRX(R)-360 3.0 SC 1 WST S

Goal. Introduce surface RADAR threat.

Requirement. Introduce the ASE RADAR Warning Receiver (RWR), symbology, and CMDS programmer. Conduct multiple passes against simulated RADAR threat systems (from acquisition, through target tracking to launch) and initiate appropriate maneuvers and countermeasures. Threat reaction maneuvering should include low and medium altitude flight profiles. IR threat reaction shall also be reviewed during this event. In the event that a simulator is not available, this event is optional.

Performance Standard. The pilot shall demonstrate the ability to properly defend against RADAR acquisition, target tracking and launch sequences.

Prerequisite. STACNAV-222, THRX(I)-261, SFAI-300.

External Syllabus Support. CSI.

THRX(R)-361 2.0 SC,R 1 KC-130 A/S (N)

Goal. Introduce surface RADAR threat during a tactical mission profile.

Requirement. Initial event shall be instructed by a LATI. Practice maneuvering the aircraft against surface-based threat emitters utilizing the RWR, and CMDS in conjunction with a tactical mission profile. Conduct multiple passes against simulated RADAR threat systems (from acquisition, through target tracking to launch) and initiate appropriate maneuvers and countermeasures. Emphasis should be placed on configuration of the system for operations in a RADAR threat environment and CRM. IR threat reaction shall also be practiced during this event. This event may be conducted in a simulator if suitable emitter ranges or ASE equipped aircraft are not available.

Performance Standard. The pilot shall demonstrate the ability to properly configure the CMDS for operations in a RADAR threat environment, and defend against RADAR acquisition, target tracking and launch sequences.

Prerequisite. STHRX(R)-360, STACNAV-222, STHRX(I)-260.

Ordinance. 160 chaff, 140 flares.

External Syllabus Support. Approved emitter range or Restricted area with mobile emitters available.

10. Assault Landing Zone (ALZ) Operations

a. Purpose. Introduce the pilot to left seat (pilot-flying) duties associated with ALZ operations.

b. General

(1) The pilot shall be introduced to day and NVG ALZ operations with an emphasis on visual and self-contained approach procedures, precision landings to short fields and ground operating procedures in the improved and unimproved environment.

(2) Initial ALZ events shall be instructed by an ANI, WTI, or NSI.

(3) Dirt, grass, coral or any other unimproved surface requiring footprint loading analysis should be considered for unimproved ALZs.

(4) Emphasis in the unimproved environment is to introduce operating procedures designed to increase safety and reduce wear on the aircraft,

footprint loading techniques, and airfield suitability services within the Marine Corps and DOD.

(5) For the purposes of this training syllabus, ALZ operations are defined as terminal area operations from an airfield prepared with either day or night EAF markings as defined in the KC-130 ANTP. Ideally, MMT will be utilized for terminal control with tactical NAVAIDS available.

(6) Upon completion of this stage, the pilot will have an appreciation for KC-130 ALZ planning considerations and will be qualified to fly in the left or right seat during day or night, NVG ALZ operations.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTP is required for flight events.

d. Academic/Ground Training. Pilots should review the KC-130 ANTP ALZ and RGR chapters, maximum effort performance calculations in the KC-130 NFM, and the ALZ class in the MAWTS-1 KC-130 Specific ASP.

e. Flight and Simulator Training. (4 Events, 8.0 Hours).

ALZ-370 2.0 SC,R 1 KC-130 A

Goal. To fly day ALZ operations.

Requirement. The initial event shall be instructed by WTI or ANI and flown by the pilot from the left seat. The pilot shall conduct the ALZ mission brief and prepare a TOLD card for the mission per the NFM. The instructor shall introduce max effort takeoff and landing procedures, ALZ approaches (self-contained and random), and unimproved EAF ground operating and taxi procedures. A minimum of 1 max-effort take-off/full-stop and 4 touch and go's shall be completed. Tactical checklists should be practiced and CRM emphasized during this event. A simulated or actual COL shall be conducted.

Performance Standard. The pilot shall consistently land within the 500' touchdown zone and demonstrate the situational awareness to manage crew duties on approach to an ALZ and during departure.

Prerequisite. ALZ-271, FAI-301.

External Syllabus Support. Standard USMC ALZ day panel setup utilizing AMP-1, 2 or 3 markings. MMT or MWSS EAF personnel for terminal control, or USAF Special Tactics Team (SST).

ALZ-371 2.0 SC 1 KC-130 A NS

Goal. To fly NVG HLL ALZ operations.

Requirement. The initial event shall be instructed by ANI, WTI or NSI and flown by the pilot from the left seat. The pilot shall conduct the ALZ mission brief and prepare a TOLD card for the mission per the NFM. The instructor shall introduce HLL max effort takeoff and landing procedures, ALZ

approaches (self-contained and random), and practice unimproved EAF ground operating and taxi procedures. A minimum of 1 max-effort take-off/full-stop and 4 touch and go's shall be completed. NVG ALZ considerations/procedures and tactical checklists (max-effort, COL) should be reviewed. CRM shall be emphasized during this event. COL is optional.

Performance Standard. The pilot shall consistently land within the 500' touchdown zone and demonstrate the situational awareness to manage crew duties on approach to an ALZ and during departure.

Prerequisite. ALZ-272, NS-303, ALZ-370.

External Syllabus Support. Standard USMC ALZ IR lighting setup utilizing AMP-1 markings. MMT or MWSS EAF personnel for terminal control, or USAF Special Tactics Team (SST).

ALZ-372

2.0 SC,R 1 KC-130 A NS

Goal. To fly NVG LLL ALZ operations.

Requirement. The initial event shall be instructed by ANI, WTI or NSI and flown by the pilot from the left seat. The pilot shall conduct the ALZ mission brief and prepare a TOLD card for the mission per the NFM. The pilot shall practice LLL max effort takeoff and landing procedures, self-contained ALZ approaches, and practice unimproved EAF ground operating and taxi procedures. A minimum of 1 max-effort take-off/full-stop and 4 touch and go's shall be completed. NVG LLL ALZ considerations/procedures and tactical checklists should be reviewed. CRM shall be emphasized during this event. COL is optional.

Performance Standard. The pilot shall consistently land within the 500' touchdown zone and demonstrate the situational awareness to manage crew duties on approach to an ALZ and during departure.

Prerequisite. ALZ-371.

External Syllabus Support. Standard USMC ALZ IR lighting setup utilizing AMP-1 markings. MMT or MWSS EAF personnel for terminal control, or USAF Special Tactics Team (SST).

ALZ-373

2.0 SC,R 1 KC-130 A (NS)

Goal. Train the pilot to conduct flight operations at unimproved ALZ.

Requirement. The initial event shall be instructed by an ANI, WTI or NSI and flown by the pilot from the left seat. The instructor shall review airfield assessment services available from MWSS and DOD. Discuss footprint loading/ground flotation determination and impacts on KC-130 operations. The pilot shall conduct the ALZ mission brief and prepare a TOLD card for the mission per the NFM. The instructor shall introduce

austere airfield ground and taxi procedures, max effort takeoff and landing procedures from an unimproved surface, and review ALZ approaches. Tactical checklists should be practiced and CRM emphasized during this event. A simulated or actual COL should be conducted during this event.

Performance Standard. The pilot shall consistently land within the 500' touchdown zone, and demonstrate the situational awareness to manage crew duties on approach to an ALZ and during departure.

Prerequisite. ALZ-370, ALZ-272 and NS-303 if night.

External Syllabus Support. Standard USMC ALZ panel setup utilizing AMP-1, 2, or 3 markings. MMT, MWSS EAF personnel, or USAF Special Tactics Team (SST) for terminal control.

111. CORE PLUS TRAINING

1. General

a. The Core Plus phase contains advanced AD, long-range over water AAR, formation low level and Air-to-Air Defensive Tactics events. Additionally, Core Basic and Core Advanced non-NVG events are contained in this phase as they can generally be categorized as theater specific and low probability of execution.

b. Upon completion of this phase of training, the pilot will be qualified to plan and execute long range refueling operations, conduct high altitude freefall personnel AD, Battlefield Illumination (BI), and formation low level operations.

c. Depending on NVIS aircraft availability, pilots may complete a non-NVG core skill event (such as RWAR) prior to completing the NVG equivalent. In these cases, the day sortie is required to be completed first and the unaided event will not chain the uncompleted NVG event. The equivalent day event will be chained.

d. During night unaided operations, the use of NVGs in the hand-held mode by the pilot not flying and other crew members is recommended to increase situational awareness.

2. Air Refueling

a. Purpose. To gain and maintain the capability to execute RWAR missions using non-NVIS aircraft and long range aerial refueling.

b. General. Upon completion of this phase, the pilot will be qualified to fly unaided AAR missions and plan long range movements of receiver aircraft.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTP is required for flight events to include 1 observer per operated aerial refueling pod.

d. Ground/Academic Training. Review the MAWTS-1 Tactical AAR Courseware. Review NFM, NATOPS Air-to-Air Refueling Manual, ANTP, and the ATP-56B concerning long-range refueling operations.

e. Flight and Simulator Training. (2 Event, 9.0 Hours).

AR-413

3.0

SC,R 1 KC-130 A N*

Goal. Introduce the pilot to unaided single tanker, rotary-wing AAR procedures.

Requirement. The initial event shall be instructed by a T&R instructor and flown by the pilot in the left seat. The instructor shall introduce unaided rendezvous procedures and the pilot shall conduct a minimum of 3 rendezvous'. This sortie will focus on receiver management, communications, checklist execution from initial check-in through completion of AAR. Use of EMCON procedures is not recommended. Emphasize unaided considerations to include visual illusions, altitude separation requirements, use of TACAN A/A and heading calls, and aircraft lighting.

Performance Standard. Safely conduct a rendezvous with receiver aircraft, adhering to altitude separation requirements and closure rates. Satisfactorily demonstrate the ability to affect the rendezvous, maintain a stable platform, maintain fuel planning awareness and receiver management. Additionally, demonstrate knowledge of normal and emergency procedures outlined in the NFM, AAR Manual/ATP-56B and KC-130 ANTP.

Prerequisite. AR-312.

External Syllabus Support. Rotary-wing receiver aircraft.

AR-419

6.0

SC,R 1+ KC-130 A (N)

Goal. Introduce Long Range AAR operations.

Requirement. Conduct long range FW/TR/RW aerial refueling. Both tanker and receiver performance data and fuel requirements must be planned. PFPS should be used for mission planning. Discuss and introduce coordination of movement control, ALTRVs, abort criteria, hose factor, contingency planning, RAC functions, rendezvous control and pathfinding. Review radio procedures, NAVAID/RADAR/TCAS procedures, tanker/receiver management and emergency procedures related to AAR.

Performance Standard. Successfully complete the planning and execution phase of a LRAAR movement of receiver aircraft.

Prerequisite. AR-311 (FWAR), AR-312 (RWAR), AR-313 if aided, FORM-330 if section (FORM 331 if aided), FORM-332 if division.

External Syllabus Support. Receiver cell, Central Altitude Reservation Facility (CARF).

4. Tactical Navigation

- a. Purpose. To train in section TACNAV and section LAT.
- b. General. Upon completion of this stage, the pilot shall be capable of conducting day and NVG section low level and day section LAT. Emphasize low altitude formation techniques, formation control, tactical formations and mutual support in a low to medium threat environment.
- c. Crew Requirements. The minimum crew as defined by the NFM or ANTP is required for flight events.
- d. Ground/Academic Training. Review the Formation, Low Level Navigation and LAT Chapters of the KC-130 ANTP. Review LAT 1, LAT 2, LAT Maneuvering, and KC-130 Stress and Performance Limitations. These courses can be found in the MAWTS-1 KC-130 Specific Academic Support Package.
- e. Flight and Simulator Events Training. (3 Events, 6.0 Hours).

TACNAV-420 2.0 SC,R 2 KC-130 A

Goal. Introduce the pilot to formation low level procedures.

Requirement. The initial event shall be instructed by a T&R Instructor. This sortie shall be flown as a section. Plan and execute a VFR navigation route consisting of at least 6 points. The pilot shall fly as wingman. Emphasize terrain clearance and tactical formation positions and mutual support. The route should terminate in an actual or simulated objective area requiring actions from IP inbound (either to a simulated airdrop or self-contained approach). The pilot shall conduct this sortie from the left seat.

Performance Standard. Demonstrate ability to fly a tactical formation while maintaining terrain clearance in the low level environment.

Prerequisite. TACNAV-320, FORM-330.

External Syllabus Support. Approved MTR or training area.

TACNAV-421 2.0 SC,R 2 KC-130 A

Goal. Introduce formation LAT procedures.

Requirements. The initial event shall be instructed by a LAT I. This sortie shall be flown as dash 2 of a section. Introduce flying at comfort level, terrain masking, ridgeline crossing, lookout doctrine, hard turns, break turns, bunts, jinks and IR threat reaction maneuvers from the wingman position. The route flown should afford the opportunity to perform LAT maneuvering, e.g. ridges, valleys, open areas and easily identifiable terrain features. The pilot will conduct this sortie from the left seat.

Performance Standard. Demonstrate ability to fly a tactical formation while maintaining terrain clearance in the LAT environment.

Prerequisite. TACNAV-322, FORM-330, TACNAV-420.

External Syllabus Support. Approved MTR or training area.

TACNAV 423 2.0 SC,R 2 KC-130 A NS

Goal. Introduce NVG low altitude formation procedures.

Requirements. The initial event shall be instructed by a WTI or NSI. This sortie shall be flown as a section. Plan and execute a VFR navigation route consisting of at least 6 points. Emphasize terrain clearance, NVG external lighting considerations, CRM, aircraft and formation positioning, and tactical piloting. The route should terminate in an actual or simulated objective area requiring actions from IP inbound (either to a simulated airdrop, self-contained approach or RWAAR track). The TSO shall be the primary navigator. The pilot will conduct this sortie from the left seat.

Prerequisite. FORM-331, TACNAV-323 for HLL, TACNAV-324 for LLL, TACNAV-420

Performance Standard. Demonstrate ability to fly a tactical formation while maintaining terrain clearance in the NVG low level environment.

External Syllabus Support. Approved MTR or training area.

5. Formation

a. Purpose. To train in unaided KC-130 formation wingman flight techniques and procedures.

b. General. Upon completion of this phase, the pilot will be qualified to fly unaided formation missions in the appropriately designated crew position.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTPP is required for flight events.

d. Ground/Academic Training. Review the KC-130 ANTPP Formation chapter, and the KC-130 formation AAR procedures as defined in the NATOPS AAR Manual.

e. Flight and Simulator Training. (1 Event, 2.0 Hours).

FORM-430 2.0 R 2 KC-130 A N*

Goal. Train in night unaided formation procedures.

Requirement. Initial event shall be instructed by a T&R I. The pilot shall fly the initial event in the left seat. Flight should be flown as a section. If not flown as a section then the initial event shall begin in the dash 2

position. Introduce night unaided formation positions and procedures. The pilot shall conduct the formation mission brief and review proper start, taxi, run-up, takeoff, recovery, and landing procedures in a formation. Practice minimum of 3 break-up and rendezvous and 1 lead change. Review proper management of all comm/nav equipment as associated with formation flight and review proper formation communications procedures.

Performance Standards. The pilot should be capable of applying proper corrective control inputs to establish and maintain formation positions. The pilot shall demonstrate a knowledge of KC-130 formation TTPs and unaided considerations.

Prerequisite. FORM-330, (FORM-332 if in division).

External Syllabus Support. MOA.

6. Air Delivery (AD)

a. Purpose. The purpose of the Core Plus AD stage is to train the pilot in unaided AD, high altitude military freefall operations and battlefield illumination.

b. General

(1) Upon completion of this stage of instruction, the pilot shall be capable of conducting unaided cargo and personnel AD, high altitude military freefall and battlefield illumination missions.

(2) Prior to conducting AD-442 and AD-444, the pilot must be qualified in the equivalent Core Basic or Core Advanced AD event. For instance, if a pilot is going to conduct a night military freefall on NVGs from the left seat, then the AD-341 (left seat NS AD) must be complete.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTP is required for flight events.

d. Ground/Academic Training. Review KC-130 ANTP Air Delivery chapter and KC-130 TPG. Review MAWTS-1 AD courseware and OPNAV 3710 altitude requirements.

e. Flight and Simulator Training. (4 Events, 8.0 Hours).

AD-440 2.0 SC,R 1 KC-130 A N*

Goal. Train the pilot in unaided cargo/personnel AD procedures.

Requirement. The event may be flown from the left or right seat and shall be instructed by a NSI or WTI. Fly an air delivery mission consisting of CDS, heavy equipment, or personnel static line. If utilizing a low level navigation route, perform a modified slowdown tactic from IP inbound while emphasize low level navigation, checklist procedures, and CRM. Review personnel and CDS aerial delivery procedures.

An actual personnel/cargo AD is required for initial qualification.

Performance Standard. Correctly identify the zone and safely perform AD that lands within the drop zone.

Prerequisite. FAI-202, AD-241 (Right seat), FAI-302, AD-340 (left seat).

External Syllabus Support. AD unit of any service for cargo rigging and DZ control.

AD-441

2.0 R 1 KC-130 A (N)

Goal. Train and evaluate the pilot in Joint Precision Aerial Delivery System (JPADS) procedures.

Requirement. The event may be flown from the left or right seat and shall be instructed by a WTI. Review CDS and HE aerial delivery procedures. The pilot shall display a sound working knowledge of administrative and logistical requirements associated with DZ coordination and aircraft rigging (load certification). The pilot shall demonstrate the ability to fly the ingress, objective area profile and manage checklists for AD procedures. Emphasis should be placed on CRM and AD procedures.

Performance Standard. Safely perform AD that lands within the drop zone safety criteria.

Prerequisite. Right Seat: FAI-201, FAI-202 if night (NS-204,205 if aided). Left seat: FAI-301, FAI-302 if at night (NS-303 if aided).

External Syllabus Support. AD unit of any service for cargo rigging and DZ control.

AD-442

2.0 R 1 KC-130 A (N)

Goal. Train and evaluate the pilot in personnel high altitude AD procedures.

Requirement. The event may be flown from the left or right seat and shall be instructed by an NSI or WTI. Review personnel AD procedures and oxygen requirements for high altitude AD operations. Emphasize crew and jumpmaster coordination. An actual personnel AD is required for initial qualification.

Performance Standard. Correctly identify the zone and safely perform AD that lands within the drop zone safety criteria.

Prerequisite. Right Seat: FAI-201, FAI-202 if night (NS-204,205 if aided). Left seat: FAI-301, FAI-302 if night (NS-303 if aided).

External Support. AD unit of any service for cargo rigging and DZ control.

AD-444 2.0 1 KC-130 A N

Goal. Train the pilot in night Battlefield Illumination (BI) procedures.

Requirement. The event may be flown from the left or right seat and shall be instructed by a T&R I. Introduce BI procedures. Emphasize flare settings, illumination patterns, the conduct of a 9-Line brief, and emergency procedures. An actual expenditure of ordnance is required.

Performance Standard. Demonstrate knowledge of immediate action emergency procedures, and accurately fly the correct pattern for the type of illumination requested.

Prerequisite. Right Seat: FAI-202 (NS-204,205 if aided).
Left seat: FAI-302 (NS-303 if aided).

Ordnance. 15 LUU-2A/B,B/B or LUU-19 flares as required.

External Syllabus Support. Approved range for illumination.

7. Defensive Tactics

a. Purpose. To train the pilot in the Core Plus Skill of employing Defensive Tactics against an air threat by combining maneuver and use of the ASE suite.

b. General

(1) Upon completion of this phase the pilot will be capable of employing defensive counter-tactics against an air threat.

(2) Use of the Rear Vision Device (RVD) and ASE suite is recommended.

(3) A DEFTAC(I) is required to fly with any non-qualified or non-proficient pilot or copilot.

(4) The DEFTAC qualification requirements consist of DEFTAC-462, DEFTAC-463, DEFTAC-464. Upon successful completion of qualification requirements, pilots shall be issued a DEFTAC qualification letter from the squadron commander and log the RQD-661 tracking code.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTP is required for flight events. An additional member to utilize the RVD is recommended.

d. Academic/Ground Training. Review the KC-130 ANTP, Classified ANTP, and AFTTP 3-1 Threat Reference Guide concerning air-to-air threats. Review the KC-130 ASE, DEFTAC/ACCT, Stress & Performance Limitations and Threat Counter-tactics classes from the MAWTS-1 KC-130 Specific ASP.

e. Flight Training. (3 Events, 6.0 Hours).

DEFTAC-462 2.0 1 KC-130, 1 Adversary A

Goal. Train in defensive maneuvering in relation to an air-to-air threat. This sortie shall be flown as a 1 vs. 1.

Requirement. The DEFTAC I shall brief and introduce DEFTAC briefing requirements. Practice defensive maneuvers with emphasis on hard turns, break turns, maneuvering velocity, one-circle/two-circle fights and negating tracking solutions. The flight preparation for this event shall include threat analysis, ASE and expendable integration with regard to the threat, and a detailed aircrew brief on threat reaction throughout all phases of an attack. CRM shall be emphasized to include incorporation of the RVD, aircrew lookout doctrine/scan sectors and threat call template. An event debrief with the aggressor pilot is recommended.

Performance Standard. Pilot should demonstrate a knowledge of A/A RADAR, A/A gun and IR missile defense and one-circle/two-circle considerations.

Prerequisite. THRX-360, RQD-621.

Ordnance. 140 flares, 160 chaff.

External Syllabus Support. Single aggressor aircraft and approved airspace.

DEFTAC-463 2.0 1 KC-130, 2 Adversaries A

Goal. Train in defensive maneuvering in relation to an air-to-air threat. This sortie shall be flown as a 1 vs. 2.

Requirement. Practice defensive maneuvers with emphasis on hard turns, break turns, maneuvering velocity, one-circle/two-circle fights and negating tracking solutions. The flight preparation for this event shall include threat analysis, ASE and expendable integration with regard to the threat, and a detailed aircrew brief on threat reaction throughout all phases of an attack by a bogey section. CRM shall be emphasized to include incorporation of the RVD, aircrew lookout doctrine/scan sectors, threat call template and honoring the nearest threat. An event debrief with the aggressor flight lead is recommended.

Performance Standard. Pilot should demonstrate knowledge of A/A RADAR, A/A gun and IR missile defense, one-circle/two-circle considerations and honoring the nearest threat.

Prerequisite. DEFTAC-462.

Ordnance. 140 flares, 160 chaff.

External Syllabus Support. Two aggressor aircraft and approved airspace.

DEFTAC-464 2.0 SC,R 1 KC-130, 1 or 2 Adversaries A

Goal. Qualify in defensive maneuvering in relation to an air-to-air threat. This sortie shall be flown as a 1 vs. 1 or 1 vs. 2.

Requirement. Practice defensive maneuvers with emphasis on hard turns, break turns, maneuvering velocity, one-circle/two-circle fights and negating tracking solutions. The pilot shall review threat analysis, ASE and expendable integration with regard to the threat, and a detailed aircrew brief on threat reaction throughout all phases of an attack. CRM shall be briefed by the pilot to include incorporation of the RVD, aircrew lookout doctrine/scan sectors, threat call template and honoring the nearest threat. An event debrief with the aggressor flight lead is recommended. RQD-661 shall be logged upon completion of this event.

Performance Standard. Pilot should demonstrate the ability to conduct defensive maneuvers while simultaneously orchestrating the crew's actions against an A/A threat.

Prerequisite. DEFTAC-463.

Ordnance. 140 flares, 160 chaff.

External Syllabus Support. Single or section of aggressor aircraft and approved airspace.

112. INSTRUCTOR TRAINING

1. Purpose. To train qualified pilots to instruct various stages within the Core Introduction, Core Basic, Core Advanced and Core Plus phases.

2. General. Pilots shall be recommended for instructor designation via Aircrew Performance Review Board (APRB). Upon recommendation, the pilot shall complete appropriate syllabus requirements and be designated by the commanding officer. Standardization shall be emphasized throughout this phase.

3. Core Skill Introduction Stage Instructor

a. Purpose. Train the pilot as a Core Skill Introduction Stage Instructor. These instructors are primarily utilized at the Fleet Replacement Squadron (FRS). Tactical squadrons may utilize Stage Instructors at the discretion of the commanding officer.

b. Flight and Simulator Event Training. (3 Events, 8.0 Hours).

SFAI-500 2.0 E OFT/WST S

Goal. Train IUT as a Core Skill Introduction Instructor (CSII).

Requirement. Instructor shall discuss instructional techniques, aircraft/pilot monitoring, defensive posture, and common student errors. IUT shall demonstrate the ability to

maintain a safe training environment while conducting a simulated FAI-103 and correcting common student errors as simulated by qualified Core Skill Introduction Evaluator (CSIE) in the right seat.

Performance Standard. Per the NFM.

Prerequisite. RQD-695.

External Syllabus Support. CSI.

FAI-501 3.0 E 1 KC-130 A

Goal. Train IUT as a Core Skill Introduction Instructor (CSII).

Requirement. Instructor shall discuss instructional techniques, aircraft/pilot monitoring, defensive posture, and common student errors. IUT shall demonstrate the ability to maintain a safe training environment while conducting a simulated FAI-103 and correcting common student errors as simulated by qualified Core Skill Introduction Evaluator (CSIE) in the right seat.

Performance Standard. Per the NFM.

Prerequisite. SFAI-500.

FAI-502 3.0 E 1 KC-130 A

Goal. Qualify IUT as a Core Skill Introduction Instructor (CSII).

Requirement. IUT in left seat shall conduct Core Skill Introduction aircraft sortie with a replacement pilot in the right seat that includes engine-out operations. The flight shall be supervised by a CSIE. Upon completion of this event, the pilot shall log RQD-688 and may be designated a Core Skill Introduction Instructor (CSII) by the commanding officer.

Performance Standard. Per the NFM.

Prerequisite. FAI-501.

4. Core Skill T&R Instructor

a. Purpose. Train the Fleet TPC to instruct select events within the Core Basic, Core Advanced and Core Plus phases. This is a basic instructor qualification that ensures instruction is standardized within fleet units at all levels.

b. General

(1) A prospective T&R instructor shall be a TPC that the APRB and commanding officer determine has the requisite airmanship and maturity to begin pilot instruction. The TPC shall be Core Advanced phase complete prior to being recommended by the APRB.

(2) The events a T&R instructor may instruct are delineated in the individual event descriptions but are generally limited to AAR, formation, and TACNAV (non-LAT events).

(3) The T&R Instructor designation requires only 1 event. However, commanding officers may elect to apply more stringent requirements to attain designation.

c. Crew requirements. The minimum crew as defined by the NFM or ANTPP is required for flight events.

d. Ground/Academic Training. The IUT shall review all directives pertinent to the safe conduct of flight to include the OPNAV 3710, Instrument Flight Manual, AIM/FAR, NFM, all tactics publications and local SOPs. The IUT shall be familiar with the T&R Program Manual and this MCO.

e. Flight and Simulator Event Training. (1 Event, 3.0 Hours).

T&R-520 3.0 E 1 KC-130 A (N)

Goal. Qualify IUT as a T&R Instructor.

Requirement. This event shall be flown in conjunction with a Core Basic or Core Advanced event with the IUT instructing a pilot under the supervision of a qualified ANI or NSI. The IUT shall conduct the mission brief and execute the syllabus event in accordance with the event description. Upon completion of this event, the pilot shall log RQD-694 and may be designated a T&R instructor by the commanding officer.

Performance Standard. The IUT shall be evaluated on the ability to correctly brief the flight, demonstrate and introduce maneuvers in accordance with applicable directives, correct student deficiencies, conduct proper debrief and display appropriate subject matter expertise.

Prerequisite. RQD-685, APRB recommendation.

External Syllabus Support. See appropriate Core Basic or Core Advanced stage description.

5. NATOPS Instructor

a. Purpose. Qualify IUT as a NATOPS Instructor/Assistant NATOPS Instructor (NI/ANI).

b. General. The purpose of this stage is to qualify the IUT as a NATOPS instructor. The NI/ANI primarily conducts annual NATOPS and Instrument evaluations as well as administering the TPC Upgrade syllabus. The IUT shall be introduced to and practice compound aircraft emergencies from the right and left seat and shall be proficient in 2-engine emergency operations. The IUT shall be instructed on proper check-ride preparation, in-flight supervision of the aircraft and pilot and post-flight administrative requirements.

c. Crew requirements. Two pilots are required for simulator events. The minimum crew as defined by the NFM or ANTPP is required for flight events.

d. Ground/Academic Training. The IUT shall be familiar with all applicable OPNAV and NATOPS directives, with an emphasis on instrument and NATOPS emergency procedures.

e. Flight and Simulator Training. (3 Events, 9.0 Hours).

SNI-590 3.0 E OFT/WST S

Goal. Prepare the IUT for the ANI/NI Qualification. Standardize maneuver instruction.

Requirement. Introduce the IUT to the skills required to correct common student errors from the right seat. Shall be instructed by either ANI or NE/NI or a qualified WST CSI. Emphasize 3 and 2-engine aircraft approaches and landings, instructional techniques, check-ride preparation, aircraft/pilot monitoring and post-check administrative duties.

Performance Standard. Satisfactory completion of events per the NFM.

Prerequisite. RQD-685, APRB recommended.

External Syllabus Support. CSI or ANI/NI.

NI-591 3.0 E 1 KC-130 A

Goal. Train the IUT for ANI/NI.

Requirement. Shall be instructed by a NE/NI with the IUT in the right seat and the instructor in the left seat. Emphasis shall be on 3 and 2-engine aircraft approaches and landings in 50%, 100% and no-flap landing configurations. The IUT shall be evaluated on instructional technique, check-ride preparation, aircraft/pilot monitoring and post-check administrative duties. A minimum of one 2-engine, no flap landing from the right seat shall be demonstrated by the IUT.

Performance Standard. The IUT shall demonstrate the skills required to perform required maneuvers correctly and correct common student errors while maintaining situational awareness and safe operating conditions.

Prerequisite. SNI-590, RQD-685, APRB recommended.

External Syllabus Support. NE/NI.

NI-592 3.0 E OFT/WST A/S

Goal. Qualify the IUT for the ANI/NI.

Requirement. Shall be instructed by a NE/NI with the IUT in the right seat administering a NATOPS evaluation to a pilot in

the left seat. The IUT shall be evaluated on instructional technique, check-ride preparation, aircraft/pilot monitoring and post-check administrative duties. A minimum of one 2-engine, no flap landing from the right seat shall be demonstrated by the IUT. Upon completion of this event, the IUT shall log the RQD-695 and may be designated a NI/ANI by the commanding officer.

Performance Standard. The IUT shall demonstrate the skills required to perform required maneuvers correctly and correct common student errors while maintaining situational awareness and safe operating conditions.

Prerequisite. NI-591, RQD-685, APRB recommended.

External Syllabus Support. NE/NI.

6. Low Altitude Tactics Instructor (LATI)

a. Purpose. To certify a KC-130 F/R/T Pilot as an instructor capable of safely conducting ground and airborne instruction of the KC-130 LAT syllabus.

b. General. Completion of the Core Advanced and Core Plus LAT syllabus is a prerequisite. The IUT stage shall be administered by the Squadron LATI.

c. Crew requirements. Refer to the MAWTS-1 Course Catalog.

d. Ground/Academic Training. Refer to MAWTS-1 KC-130 Course Catalogue.

e. Flight Event Training. (4 Events, 8.0 hours).

LATI-530 2.0 E 1 KC-130 A

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the LATI POI.

LATI-531 2.0 E 1 KC-130 A

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the LATI POI.

LATI-532 2.0 R E 2 KC-130 A

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the LATI POI.

LATI-533 2.0 R E 1 KC-130 A

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the LATI POI.

7. Defensive Tactics Instructor (DEFTACI)

a. Purpose. To certify the KC-130 F/R/T Pilot as an instructor capable of safely conducting ground and airborne instruction of the KC-130 DEFTAC syllabus.

b. General. The T&R Program Manual and the MAWTS-1 KC-130 course catalog are germane. Completion of the DEFTAC syllabus and LAT I certification/ designation are prerequisites. The IUT flight syllabus may be administered by the Squadron DEFTACI.

c. Crew requirements. Refer to the MAWTS-1 KC-130 Course Catalog.

d. Ground/Academic Training. Refer to the MAWTS-1 KC-130 Course Catalog.

e. Flight Event Training. (4 Events, 4.0 hours).

DEFTACI-540 1.0 R E 1 KC-130 A

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the DEFTACI POI.

DEFTACI-541 1.0 R E 1 KC-130 A

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the DEFTACI POI.

DEFTACI-542 1.0 R E 2 KC-130 A

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the DEFTACI POI.

DEFTACI-543 1.0 R E 1 KC-130 A

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the DEFTACI POI.

8. Night Systems Instructor (NSI)

a. Purpose. To certify a KC-130 F/R/T Pilot as an instructor capable of safely conducting ground and airborne instruction of the KC-130 Night Systems syllabus.

b. General. Reference the MAWTS-1 KC-130 Course Catalog for the NSI POI.

c. Crew requirements. Refer to the MAWTS-1 Course Catalog.

d. Ground/Academic Training. Refer to the MAWTS-1 Course Catalog.

e. Flight Event Training. (4 Events, 8.0 Hours).

NSI-550 2.0 R E 1 KC-130 A NS

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the NSI POI.

NSI-551 2.0 R E 1 KC-130 A NS

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the NSI POI.

NSI-552 2.0 R E 2 KC-130 A NS

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the NSI POI.

NSI-553 2.0 R E 1 KC-130 A NS

Requirement. Reference the MAWTS-1 KC-130 Course Catalogue for the NSI POI.

9. Weapons and Tactics Instructor (WTI)

a. Purpose. Develop highly qualified pilots into effective unit tactics instructors and expose them to current Marine Corps tactical doctrine. Additionally, this stage is designed to increase knowledge and experience of the capabilities and associated tasks of the KC-130.

b. General. Tactics and techniques will be taught per the KC-130 Tactical Manual and the MAWTS-1 supplements. Only MAWTS-1 instructors shall instruct/qualify flights in this stage.

c. Flight Training. See the MAWTS-1 Course Catalog.

10. Flight Leadership Standardization Evaluator (FLSE)

a. Purpose. Certify IUT as a FLSE.

b. General. FLSEs ensure flight leadership standardization across all squadrons. The FLSE shall conduct a standardized evaluation of a prospective flight leader's ability to safely and effectively perform the duties as a flight lead. Prospective FLSEs shall complete the POI listed below. Upon completion of the POI, the squadron CO will nominate the prospective FLSE to the MAG CO for approval and designation. Designated FLSEs are required to complete annual standardization training with Program Coordinator.

c. Redesignation. FLSE re-designation criteria for aircrew that do not require Core Skill Introduction Refresher training is at the discretion of the MAG CO. For aircrew requiring Core Skill Introduction Refresher training, the minimum re-designation requirement for FLSE positions is successful completion of the associated T&R FLSE POI.

d. Crew requirements. Two pilots are required for simulator events. The minimum crew as defined by the NFM or ANTP is required for flight events.

e. Ground/Academic Training. The FLSE UT shall be familiar with all directives pertinent to formation and/or multi-plane refueling in the NFM, OPNAV 3710, FAR/AIM, ANTP, ATP-56B, and local SOPs.

f. Flight and Simulator Training. (1 Event, 3.0 Hours).

FLSE-593 3.0 R 2+ KC-130 A/S (NS)

Goal. Certify the IUT to be designated a FLSE.

Requirement. Shall be instructed by the Program Coordinator with the FLSE under training (FLSE UT) administering a SL, DL,

or RAC evaluation to pilot under training. In addition to discussion items, the FLSE UT shall be evaluated on instructional technique and the standardization of related T&R POI items. A minimum of one rendezvous and recovery shall be executed. Flight should be flown in conjunction with a tactical mission. Upon completion of this event, the FLSE UT may be designated a FLSE by the commanding officer.

Performance Standard. The FLSE UT shall demonstrate complete knowledge and understanding of self-paced readings and lectures in all formation and RAC POIs. The FLSE UT shall safely demonstrate the skills required to instruct and evaluate required maneuvers accurately, and correct common student errors to ensure standardization of the KC-130 FLSE program.

Prerequisite. Designated DL.

External Syllabus Support. Program Coordinator.

113. REQUIREMENTS, QUALIFICATIONS AND DESIGNATIONS (RQD)

1. General. To provide a vehicle for tracking codes associated with qualifications and designations. E-coded sorties are evaluation sorties. E-coded sorties in the 600-level phase may be logged in conjunction with any sortie that completes its stage. For example, RQD-686 may be flown in conjunction with TACNAV-224. Once the flight to attain the qualification/designation is complete, a letter from the squadron commanding officer awarding the qualification/designation shall be placed in the NATOPS and APR before that qualification/designation can be utilized.

2. TPC Preparation Stage

a. Purpose. Qualify the pilot as a Transport Plane Commander (TPC).

b. General. The TPC preparation syllabus is designed to prepare the pilot to command a KC-130 and crew in all aspects of flight.

(1) The Proficiency Review Flights (PRFs) (RQD-600 to RQD-602) will be flown to screen T2Ps for upgrade. Each flight should be flown with a separate evaluator. Upon successful completion of RQD-602, the T2P shall complete the TPC Preparation Simulator syllabus.

(2) The TPC Preparation simulator syllabus (SRQD-603) introduces the pilot to multiple, compound emergency scenarios and emphasizes landing the aircraft safely under 1 and 2-engine-out situations. It also provides a comprehensive review of crucial aircraft systems and limitations. If a pilot attends USAF Aircraft Commander Qualification Course (ACQ), commanders may waive the simulator syllabus.

(3) Upon successful completion of the PRF and TPC Preparation Simulator syllabus, the TPC shall have met the prerequisites for the TPC Route Evaluation (RQD-604) and TPC NATOPS Evaluation (RQD-685).

(4) The prerequisites to begin the TPC Upgrade Syllabus are completion of Core Advanced training, currency/flight time per NFM, and the specific requirements for TPC designation per OPNAVINST 3710.7_.

c. Crew Requirements. Two pilots are required for simulator events. The minimum crew as defined by the NFM or ANTTP is required for flight events.

d. Ground/Academic Training. The pilot shall be familiar with all applicable OPNAV and NATOPS directives, with an emphasis on instrument and NATOPS emergency procedures.

e. Flight and Simulator Event Training. (5 Events, 44.0 Hours).

RQD-600 3.0 E 1 KC-130 A

Goal. Screen for TPC designation.

Requirement. Review engine start malfunctions, ground, normal and emergency procedures, stall series, GCA and ILS approach procedures, propeller malfunctions and emergency landings in all configurations.

Performance Standard. Per the NFM.

Prerequisite. RQD-684. APRB recommendation.

RQD-601 3.0 E 1 KC-130 A (N)

Goal. Screen for TPC designation.

Requirement. Review ground fires, hydraulic malfunctions, 3-engine circling approaches, no-flap landings, and aircraft limitations. Practice engine start malfunctions, ground normal and emergency procedures, GCA and ILS approach procedures, propeller malfunctions and emergency landings in all configurations.

Performance Standard. Per the NFM.

Prerequisite. RQD-601.

RQD-602 3.0 E 1 KC-130 A

Goal. Screen for TPC designation.

Requirement. Review engine and electrical malfunctions, unusual attitude recovery, and partial panel/no gyro approaches. Practice engine start malfunctions, ground, normal and emergency procedures, GCA and ILS approach procedures, propeller malfunctions and emergency landings in all configurations.

Performance Standard. Per the NFM.

Prerequisite. RQD-601.

RQD-603 27.0 E OFT/WST S

Goal. TPC Upgrade Preparation Simulator Syllabus.

Requirement. This is a tracking code to identify the completion of the TPC Upgrade Preparation Simulator Syllabus. The syllabus includes 9 simulator events. See the TPC Upgrade Preparation Simulator Syllabus Guide for individual event descriptions and requirements.

Performance Standard. Per the NFM.

Prerequisite. RQD-602.

External Syllabus Support. CSI or ANI.

RQD-604 8.0 E 1 KC-130 A (N)

Goal. TPC NATOPS Route Check evaluation.

Requirement. This event shall be conducted on a long range over water mission requiring the pilot to review ICAO operations, aircraft cruise and drift-down performance, over water emergency procedures and cargo/passenger coordination. It is recommended the route evaluation be conducted during a multi-day mission to allow evaluation of the pilot's ground duties and crew handling, to include billeting, aircraft parking and servicing and diplomatic clearance coordination.

Performance Standard. Per the NFM and OPNAVINST 3710.7_.

Prerequisite. RQD-603.

3. LAT Qualification (LATQ)

a. Purpose. Track LAT Qualification designation.

b. General. See course description and requirements in Core Basic and Core Advanced phase.

c. Simulator and Flight Training. (2 Events, 0.0 Hours).

RQD-620 0.0

Goal. Tracking code for Right Seat LAT qualification.

Prerequisite. TACNAV-221.

RQD-621 0.0

Goal. Tracking code for LAT qualification.

Prerequisite. TACNAV-322.

4. Section Leader (SL) Designation

a. Purpose. Prepare for and certify the pilot as a SL.

b. General. The pilot shall review section formations, multi-plane AAR formations, planned and inadvertent weather penetrations and section recovery techniques. One flight should be flown at night under NVG conditions. All prospective SL events shall be evaluated by a designated SL or higher. It is recommended that the Tactical RAC Qualification (RQD-636) be conducted in conjunction with either RQD-630 or 631.

c. Requirements. The minimum crew as defined by the NFM or ANTP is required for flight events.

d. Academic Training. All requirements delineated in the matrix below shall be completed and tracked prior to the SL evaluation/certification event.

SECTION LEADER (SL) MATRIX

SELF PACED READINGS	DATE COMP	
NFM CH 14.2		
OPNAVINST 3710.7 CH 5.1.12 Formation Flying		
ANTTP 3-22.3-KC-130 CH 2.3.6 FWAAR Formation		
ANTTP 3-22.3-KC-130 CH 2.4.8 HAAR Formation		
ANTTP 3-22.3-KC-130 CH 4 Formation		
ANTTP 3-22.3-KC-130 CH 5.2.7 Formation Air Delivery		
ATP-56B Part 1 Para 406 Loss of Visual Contact		
ATP-56B Part 2 CH 2 Formation Procedures		
ATP-56B Part 3 CH 3 Formation HAAR Procedures		
ATP-56B Part 3 CH 4 Safety Procedures		
BRIEFING/CHALK TALK REQUIREMENTS	DATE COMP	INSTRUCTOR
Section Departures		
Section Formations		
Low-Altitude Formation		
Multi-Plane AAR Formations		
Planned Weather Penetration		
Inadvertent Weather Penetration		
Section Recoveries (Approaches/Overhead)		
NORDO Procedures		
SL Brief		
Section Debrief		
ADMINISTRATIVE FLIGHT REQUIREMENTS		
Formation Start, Taxi, Run-Up		
Section Takeoff		
Section Rendezvous		
Cruise/Parade Positions		
Under-run		
Cross-under		
Section Recovery		
TACNAV/AD/AAR *		
Night Aided/Unaided **		

* One event shall be flown in conjunction with a tactical mission.
** One event should be flown at night.

e. Flight and Simulator Event Training (2 Events, 6.0 Hours).

SL-630 3.0 E 2 KC-130 A (N)

Goal. Train the pilot, as a KC-130 SL.

Requirement. This event shall be instructed by a designated SL. This event should be flown as part of tactical mission (AAR preferred). The SL UT shall conduct the formation leader brief, review formation start, taxi, run-up, takeoff, and recovery procedures under day, night and NVG conditions. Review proper management of all comm/nav equipment associated with formation flight and proper formation communications procedures.

Prerequisite. 300 level complete, 100 flight hours as a TPC, three flights in wingman position as a designated TPC, APRB recommendation, CO approval, and SL academics complete.

Performance Standard

- (1) The SL UT shall successfully plan, brief and lead a section of KC-130s.
- (2) The SL UT shall successfully conduct a mission brief and debrief IAW the ANTTP KC-130 Tactical Pocket Guide.
- (3) The SL UT shall successfully demonstrate thorough knowledge of the self-paced reading in the SL Matrix.
- (4) The SL UT shall successfully complete the maneuvers and procedures per the NFM, KC-130 ANTTP, and OPNAVINST 3710.7_.

External Syllabus Support Requirements. MOA or appropriate training area.

SL-631

3.0 R E 2 KC-130 A (N)

Goal. Certify the pilot, as a KC-130 SL.

Requirement. This event shall be evaluated by a designated FLSE. If RQD-630 did not include a tactical mission, then RQD-631 shall be flown in conjunction with a tactical mission. The SL UT shall conduct the formation leader brief, review formation start, taxi, run-up, takeoff, and recovery procedures under day, night and NVG conditions. Review proper management of all comm/nav equipment associated with formation flight and proper formation communications procedures. Upon completion of this event, the pilot may be designated a SL by the commanding officer.

Performance Standard

- (1) The SL UT shall successfully plan, brief and lead a section of KC-130s.
- (2) The SL UT shall successfully conduct a mission brief and debrief IAW the ANTTP KC-130 Tactical Pocket Guide.
- (3) The SL UT shall successfully demonstrate thorough knowledge of the self-paced reading in the SL Matrix.
- (4) The SL UT shall successfully complete the maneuvers and procedures per the NFM, KC-130 ANTTP, and OPNAVINST 3710.7_.

Prerequisite. SL-630.

External Syllabus Support Requirements. MOA or appropriate training area.

SL-632

2 KC-130 A

Goal. Track SL proficiency.

Requirement. To maintain SL proficiency a pilot shall brief, lead, and debrief (or evaluate a prospective SL) the designated event in accordance with the mission performance standards for that event.

Prerequisite. Designated SL.

5. Division Leader (DL) Designation

a. Purpose. Prepare for and certify the pilot as a DL.

b. General. During the workup stage for DL, 1 flight should be a multi-plane AAR evolution and one flight should be flown at night under NVG conditions in order to develop the prospective DL's flight leadership. The pilot shall review multi-plane AAR formations, planned and inadvertent weather penetrations and division recovery techniques. All prospective DL events shall be evaluated by a designated DL. The DL Matrix will be used to track academic and administrative training.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTP is required for flight events.

d. Academic Training. All requirements delineated in the DL matrix shall be completed prior to the DL evaluation/certification event.

DIVISION LEADER MATRIX

SELF PACED READINGS	DATE COMP	
NFM CH 14.2		
OPNAVINST 3710.7 CH 5.1.12 Formation Flying		
ANTTP 3-22.3-KC-130 CH 2.3.6 FWAAR Formation		
ANTTP 3-22.3-KC-130 CH 2.4.8 HAAR Formation		
ANTTP 3-22.3-KC-130 CH 4 Formation		
ANTTP 3-22.3-KC-130 CH 5.2.7 Formation Air Delivery		
ATP-56B Part 1 Para 406 Loss of Visual Contact		
ATP-56B Part 2 CH 2 Formation Procedures		
ATP-56B Part 3 CH 3 Formation HAAR Procedures		
ATP-56B Part 3 CH 4 Safety Procedures		
BRIEFING/CHALK TALK REQUIREMENTS	DATE COMP	INSTRUCTOR
Formation Departures		
Division Formations		
Low-Altitude Formations		
Multi-Plane AAR Formations		
Planned Weather Penetration		
Inadvertent Weather Penetration		
Division Recoveries (Approaches/Overhead)		
NORDO Procedures		
Division Leader Brief		
ADMINISTRATIVE FLIGHT REQUIREMENTS		
Formation Start, Taxi, Run-Up		
Division Takeoff		
Division Rendezvous		
Cruise/Parade Positions		
Underrun		
Crossunder		
Division Recovery		
TacNav/AD/AAR *		
Night Aided/Unaided **		

* One event shall be flown in conjunction with a tactical mission.

** One event should be flown at night.

e. Flight Training. (2 Events, 6.0 Hours).

DL-633 3.0 E 3+ KC-130 A (N)

Goal. Train the pilot, as a KC-130 DL.

Requirement. This event shall be instructed by a designated DL. This event should be flown as part of a multi-plane AAR mission. The DL UT shall conduct the formation leader brief, review formation start, taxi, run-up, takeoff, and recovery procedures under day, night and NVG conditions. Review proper management of all comm/nav equipment associated with formation flight and proper formation communications procedures.

Performance Standard

- (1) The DL UT shall plan, brief, and lead a Division of KC-130s.
- (2) The DL UT shall conduct a mission brief and debrief IAW the ANTTP KC-130 Tactical Pocket Guide.
- (3) The DL UT shall demonstrate thorough knowledge of the self paced reading in the DL Matrix.

(4) The DL UT shall satisfactory complete the maneuvers and procedures per the NFM, KC-130 ANTP, and OPNAVINST 3710.7_.

Prerequisite. Minimum of three flights as a designated SL, 200 flight hours as a TPC, APRB recommendation, CO approval, and DL academics complete.

External Syllabus Support Requirements. MOA or appropriate training area.

DL-634 3.0 R E 3+ KC-130 A (N)

Goal. Certify the pilot, as a KC-130 DL.

Requirement. This event shall be evaluated by a designated FLSE. If RQD-632 did not include a tactical mission, then RQD-633 shall be flown in conjunction with a multi-plane AAR mission. The DL UT shall conduct the formation leader brief, review formation start, taxi, run-up, takeoff, and recovery procedures under day, night, and NVG conditions. Review proper management of all comm/nav equipment associated with formation flight and proper formation communications procedures. Upon completion of this event, the pilot may be designated a DL by the commanding officer.

Prerequisite. RQD-632.

Performance Standard

- (1) The DL UT shall plan, brief, and lead a Division of KC-130s.
- (2) The DL UT shall conduct a mission brief and debrief IAW the ANTP KC-130 Tactical Pocket Guide.
- (3) The DL UT shall demonstrate thorough knowledge of the self paced reading in the DL Matrix.
- (4) The DL UT shall satisfactory complete the maneuvers and procedures per the NFM, KC-130 ANTP, and OPNAVINST 3710.7_.

External Syllabus Support Requirements. MOA or appropriate training area.

DL-635 3+ KC-130 A

Goal. Track DL proficiency.

Requirement. To maintain DL proficiency a pilot shall brief, lead, and debrief (or evaluate a prospective DL) the designated event in accordance with the mission performance standards for that event.

Prerequisite. Designated DL.

6. Tactical Refueling Area Commander (TACRAC) Designation

a. Purpose. Certify the TPC as a Refueling Area Commander for multi-plane, static orbit, air-to-air refueling operations.

b. General. A designated TACRAC shall be capable of commanding a KC-130 refueling cell on a static-orbit tanker track to include fuel management and control of receivers in and around the tanker cell. The RQD-636 evaluator shall be a designated FLSE designated as a TACRAC. At the discretion of the

NAVMC 3500.52
18 Jun 08

squadron commanding officer, a letter designating the pilot as TACRAC shall be placed in the NATOPS jacket and APR. This designation should be completed during the pilot's SL training.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTP is required for flight events.

d. Academic Training. All requirements delineated in the TACRAC Matrix shall be completed and tracked prior to the TACRAC evaluation/certification event.

TACRAC MATRIX

SELF PACED READINGS	DATE COMP	
NFM CH 14.1 IFR System		
NFM CH 14.2 Formation Flight		
OPNAVINST 3710.7 CH 5.1.12 Formation Flying		
ANTTP 3-22.3-KC-130 CH 2.3.6 FWAAR Formation		
ANTTP 3-22.3-KC-130 CH 2.4.8 HAAR Formation		
ANTTP 3-22.3-KC-130 CH 4 Formation		
ATP-56B Part 1 Para 406 Loss of Visual Contact		
ATP-56B Part 2 CH 2 Formation Procedures		
ATP-56B Part 3 CH 3 Formation HAAR Procedures		
ATP-56B Part 4 CH 4 Safety Procedures		
BRIEFING/CHALK TALK REQUIREMENTS	DATE COMP	INSTRUCTOR
Air Refueling Limitations		
Multi-Plane AAR Formations		
Rendezvous Procedures		
OPARS		
ALTRV Procedures		
Weather Considerations		
Planned Weather Penetration		
Inadvertent Weather Penetration		
Receiver/Fuel Management		
NORDO Procedures		
Refueling Area Commander Brief		
Night Aided/Unaided		
Emergency Air Refueling Procedures		
ADMINISTRATIVE FLIGHT REQUIREMENTS	DATE COMP	INSTRUCTOR
Rendezvous		
Refueling Formation Positions		
Radio Management/Voice Procedures		
Receiver/Fuel Management		

e. Flight Training. (1 Event, 3.0 Hours).

RAC-636 3.0 R E 2+ KC-130 A (N)

Goal. Certify the pilot as a Tactical RAC.

Requirement. This event shall be evaluated by a designated FLSE designated as a TACRAC. Brief, conduct, and control a multi-tanker AAR mission. Discuss responsibilities of Flight Leader and Refueling Area Commander on a static orbit track. Focus should be on refueling formation integrity, receiver management, and fuel management for the entire flight.

Performance Standard

- (1) The TACRAC under instruction shall successfully plan and brief the tanker and receiver force on all applicable procedures of the entire AAR evolution.
- (2) The TACRAC under instruction shall successfully conduct a mission brief and debrief IAW the ANTP KC-130 Tactical Pocket Guide.
- (3) The TACRAC under instruction shall successfully demonstrate thorough knowledge of the self paced reading in the TACRAC Matrix.
- (4) The TACRAC under instruction shall successfully complete the maneuvers and procedures per the NFM, KC-130 ANTP, ATP-56B and OPNAVINST 3710.7_.

Prerequisite. Designated SL (can be conducted in conjunction with SL 631 or 632), and TACRAC academics complete.

External Syllabus Support. Receiver aircraft. MOA or appropriate training area.

RAC-637

2+ KC-130 A

Goal. Track TACRAC proficiency.

Requirement. To maintain proficiency as a TACRAC a pilot shall brief, lead, and debrief the designated event in accordance with the mission performance standards for that event.

7. Strategic Refueling Area Commander (STRATRAC) Designation

a. Purpose. Certify the TPC as a STRATRAC for long range refueling operations.

b. General. This designation qualifies the pilot to act as RAC for extended over-water tanker missions. A detailed knowledge of both tanker and receiver fuel management, ALTRV scheduling facilities outlined in ATP-56B, long-range navigation techniques, flight lead/rendezvous controller responsibilities and international flight operations is required. The RQD-638 evaluator shall be a designated FLSE designated as a STRATRAC. Commanders should select only the most skilled and experienced aircraft commanders for this designation.

c. Crew Requirements. The minimum crew as defined by the NFM or ANTP is required for flight events.

d. Academic Training. All requirements delineated in the STRATRAC Matrix shall be completed prior to the STRATRAC evaluation/certification event.

STRATRAC MATRIX

SELF PACED READINGS	DATE COMP	
NFM CH 14.1 IFR System		
NFM CH 14.2 Formation Flight		
OPNAVINST 3710.7 CH 5.1.12 Formation Flying		
ANTTP 3-22.3-KC-130 CH 2 Air-to-Air Refueling		
ANTTP 3-22.3-KC-130 CH 4 Formation		
ATP-56B Part 1 General Procedures		
ATP-56B Part 2 CH 2 Formation Procedures		
ATP-56B Part 3 CH 3 Formation HAAR Procedures		
Squadron Tactical Systems Operators SOP		
BRIEFING/CHALK TALK REQUIREMENTS	DATE COMP	INSTRUCTOR
Air Refueling Limitations		
Long-Range Navigation Techniques		
Weather Considerations		
Movement Control		
Tanker/Receiver Performance Data		
ALTRV Procedures		
International Flight Operations		
OPARS		
Multi-Plane AAR Formations		
Tanker/Receiver Fuel Management		
Control/Management of Receivers/Tankers		
Rendezvous Procedures		
Planned Weather Penetration		
Inadvertent Weather Penetration		
Contingency Planning		
Hose Factor		
Abort/Bingo Criteria		
Divert Planning		
NORDO Procedures		
Flight Lead/RAC/Rendezvous Controller Responsibilities		
Refueling Area Commander Brief		
Night Aided/Unaided		
Emergency Air Refueling Procedures		
ADMINISTRATIVE FLIGHT REQUIREMENTS	DATE COMP	INSTRUCTOR
Rendezvous		
Refueling Formation Positions		
Radio Management/Voice Procedures		
Receiver/Fuel Management		

e. Flight Training. (1 Event, 6.0 Hours).

RAC-638 6.0 R E 2+ KC-130 A (N)

Goal. Strategic RAC designation.

Requirement. This event shall be evaluated by a designated FLSE designated as a STRATRAC. Brief, conduct, and control a multi-tanker extended AR mission. Discuss responsibilities of Refueling Area Commander, Flight Leader, and Rendezvous Controller. Explain movement control, ALTRVs, abort criteria, hose factor, contingency planning, RAC functions, rendezvous control, weather recce, and path finding. Review radio

procedures, NAVAID/RADAR/TCAS procedures, tanker/receiver management and emergency procedures related to AAR.

Performance Standard. Successfully plan, brief and execute a long-range AAR mission in support of FW/TR/RW receivers deployment operations.

Prerequisite. AR-419, designated DL and TACRAC, STRATRAC academics complete, APRB recommendation, CO approval.

External Syllabus Support. FW/TR/RW receivers, ALTRV scheduling facilities outlined in ATP-56B.

SL-639 2 KC-130 A

Goal. Track STRATRAC proficiency.

Requirement. To maintain proficiency as a STRATRAC a pilot shall brief, lead, and debrief the designated event in accordance with the mission performance standards for that event.

Prerequisite. Designated STRATRAC.

8. DEFTAC Qualification

RQD-661 0.0

Goal. Track DEFTAC Qualification.

Prerequisite. DEFTAC-462,463,464, RQD-621.

9. Familiarization

RQD-680 0.0

Goal. Track Left Seat FAI Qualification.

Prerequisite. FAI-300,301,302.

10. Instrument

- a. Purpose. Conduct annual Instrument evaluation.
- b. General. The policy, requirements, and prerequisites concerning NATOPS instrument evaluations are contained in OPNAVINST 3710.7_, NFM, and the NIFM.
- c. Crew Requirements. Two pilots are required for simulator events. The minimum crew as defined by the NFM or ANTFP is required for flight events.
- d. Ground Training/Evaluation. Ground training and evaluation shall be conducted per OPNAVINSTINST 3710.7_, NFM, and NIFM.
- e. Flight Training. (2 Events, 4.0 Hours).

RQD-681 2.0 SC,R E 1 KC-130 A/S (N)
Goal. Conduct a standard instrument flight evaluation.
Requirement. Designate pilot per OPNAVINST 3710.7_, NFM, and the IFM.
Performance Standard. Per OPNAVINST 3710.7_, NFM, and the IFM.
Prerequisite. Minimum experience per OPNAVINST 3710.7_.

RQD-682 2.0 SC,R E 1 KC-130 A/S (N)
Goal. Conduct a special instrument flight evaluation.
Requirement. Per OPNAVINST 3710.7_, NFM, and the NIFM.
Performance Standard. Per OPNAVINST 3710.7_, NFM, and the NIFM.
Prerequisite. Minimum experience per OPNAVINST 3710.7_.

11. NATOPS

a. Purpose. Qualify pilot as T3P, T2P or TPC.

b. General

(1) A designated T3P may begin the Core Basic and Core advanced phases of instruction.

(2) The T2P NATOPS evaluation may be conducted when the T3P has completed the Core Basic phase and should be completed in the right seat.

c. Crew Requirements. Two pilots are required for simulator events. The minimum crew as defined by the NFM or ANTP is required for flight events.

d. Ground Training/Evaluation. Open and closed book NATOPS examinations and the specific requirements for T3P designation per OPNAVINST 3710.7_.

e. Flight Training. (3 Events, 7.0 Hours).

RQD-683 3.0 SC E 1 KC-130 A/S (N*)
Goal. T3P NATOPS evaluation flight.
Requirement. ANI shall conduct T3P NATOPS evaluation flight. Emphasize right seat copilot duties to include comm/nav management, voice procedures, situational awareness and NATOPS/Instrument procedures. Basic, Transition, Series Conversion, and T3P Refresher pilots shall be evaluated in the right seat. TPC and T2P Refresher pilots should be evaluated in the left seat. Pilot should compute TOLD card.

Performance Standard. Per the NFM and OPNAVINST 3710.7_.

Prerequisite. 100 series complete.

RQD-684

2.0 SC E 1 KC-130 A/S (N)

Goal. Qualify as a Transport Second Pilot (T2P).

Requirement. The T2P check shall be instructed by an ANI/NI and shall be conducted with the pilot in the right seat. Emphasize right seat copilot duties to include comm/nav management, voice procedures, situational awareness and NATOPS/Instrument procedures. This sortie should be flown in conjunction with a tactical mission. For pilots who are already designated T2P, this event may be flown in the left seat.

Performance Standard. The pilot shall perform copilot duties per the NFM and TACMAN/ANTTP.

Prerequisite. Core Basic phase complete, APRB recommendation.

RQD-685

2.0 SC,R E 1 KC-130 A/S (N)

Goal. TPC NATOPS evaluation.

Requirement. Complete the TPC NATOPS evaluation per the NFM. A pilot's initial TPC NATOPS check shall be flown in the aircraft.

Performance Standard. Per the NFM and OPNAVINST 3710.7_.

Prerequisite. RQD-604.

12. Night Systems Qualification (NSQ)

RQD-686

0.0

Goal. Track NS Qualification.

Prerequisite. SNS-203, NS-204, NS-205, TACNAV-223, TACNAV-224.

13. Post Maintenance Check Flight Pilot

- a. Purpose. Qualify the TPC as a post maintenance check pilot.
- b. Crew Requirements. NATOPS minimum crew.
- c. Ground/Academic Training. Functional Check Flight Examination.
- d. Flight Training. (1 Event, 2.0 Hours).

RQD-687

2.0 SC, R, E 1 KC-130 A

Goal. Qualify the pilot as a PMCF pilot.

Requirement. The flight shall consist of an "A" profile functional check flight and be instructed by a qualified and proficient FCF pilot. For tracking purposes, copilots may also log this code.

Performance Standard. Satisfactorily execute procedures per the NFM, OPNAVINST 3710.7_, and OPNAVINST 4790.2_.

Prerequisite. TPC, APRB.

14. Instructor Tracking Codes. To provide tracking codes for Instructor Designations.

- RQD-688 0.0
Goal. Track Core Skill Introduction Instructor Designation.
Prerequisite. FAI-502.
- RQD-693 0.0
Goal. Track FLSE annual standardization training.
Prerequisite. Designated FLSE.
- RQD-694 0.0
Goal. Track T&R Instructor Designation.
Prerequisite. NI-590.
- RQD-695 0.0
Goal. Track NATOPS Instructor Designation.
Prerequisite. NI-591.
- RQD-696 0.0
Goal. Track LAT Instructor Designation.
Prerequisite. LAT-533.
- RQD-697 0.0
Goal. Track DEFTAC Instructor Designation.
Prerequisite. See MAWTS-1 Course Catalog; DEFTAC-543.
- RQD-698 0.0
Goal. Track Night Systems Instructor Designation.
Prerequisite. See MAWTS-1 Course Catalog; NSI-553.

RQD-699 0.0

Goal. Track Weapons and Tactics Instructor Designation.

Prerequisite. See MAWTS-1 Course Catalog; WTI-592.

114. EXPENDABLE ORDNANCE REQUIREMENTS

BASIC/TRANSITION/CONVERSION/REFRESHER

ORDNANCE	100 SERIES	200 SERIES	300 SERIES	400 SERIES	IUT	ANNUAL
Chaff	N/A	N/A	5000	600	600	6200
Flare	N/A	5000	5000	600	600	11200
LUU-2A/B, B/B, LUU-19	N/A	N/A	N/A	150	N/A	150

115. SYLLABUS MATRIX

KC-130/FAI PILOT														
100 SERIES CORE SKILL INTRODUCTION														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
FAI														
SFAI	001	SIM-EXPANDED CHECKLIST UP TO T/O		2.0	*	S		D			E	1.0		001
SFAI	002	SIM-EXPANDED CHECKLIST T/O TO SECURE		2.0	*	S		D	001		E	1.0		002
SFAI	003	SIM-START MALFUNCTIONS		2.0	*	S		D	002		E	1.0		003
SFAI	004	SIM-GROUND EMERGENCIES		2.0	*	S		D	003		E	1.0		004
SFAI	005	SIM-STAGE REVIEW; CHECKLISTS, EPs		2.0	*	S		D	004	R	E	1.0		005
SFAI	006	SIM-PROPELLER MALFUNCTIONS		4.0	*	S		D	005		E	1.0		006
SFAI	007	SIM-STEEP TURNS, STALLS		4.0	*	S		D	006		E	1.0		007
SFAI	008	SIM-GCA APP, SYSTEMS MALF		4.0	*	S		D	007		E	1.0		008
SFAI	009	SIM-PRECISION (ILS) APP, SYSTEMS MALF		4.0	*	S		D	008		E	1.0		009
SFAI	010	SIM-NONPRECISION APP, SYSTEMS MALF		4.0	*	S		D	009		E	1.0		010
SFAI	011	SIM-HIGH APP, PENETRATION, SYS MALF		4.0	*	S		D	010		E	1.0		011
SFAI	012	SIM-ENGINE OUT APPROACHES		4.0	*	S		D	011	R	E	1.0		012
SFAI	013	SIM-TWO ENGINE APPROACH, PART PANEL		4.0	*	S		D	012	R	E	1.0		013
SFAI	014	SIM-STAGE REVIEW; BOLD FACE EPs		2.0	*	S		D	013	R	E	1.0		014
FAI	100	VFR PATTERN, STEEP TURNS, STALLS	3.0		*	A	1	D	014		E	1.0		100
FAI	101	INSTRUMENT FLIGHT PROCEDURES	3.0		*	A	1	D	100	R	E	1.0		101
FAI	102	PRECISION APPROACHES	3.0		*	A	1	N*	101		E	1.0		102
FAI	103	NON-PRECISION APPROACHES	3.0		*	A	1	(N*)	102	R	E	1.0		103
FAI	104	HOLDING, CIRCLING APPROACHES	3.0		*	A	1	D	103		E	1.0		104
FAI	105	ENGINE OUT OPERATIONS, PREC APP	3.0		*	A	1	N*	104	R	E	1.0		105
FAI	106	ENGINE OUT OPERATIONS, NON-PREC APP	3.0		*	A	1	D	105		E	1.0		106
FAI	107	IN FLIGHT EPs, DEMONSTRATE 2-ENGINE	3.0		*	A	1	D	106	R	E	1.0		107
FAI	108	PARTIAL PANEL, NO GYRO APPROACHES	3.0		*	A	1	N*	107		E	1.0		108
FAI	109	STAGE REVIEW	3.0		*	A	1	(N*)	108	R	E	1.0		109
				30.0	44.0							24.0		
AERIAL REFUELING														
SAR	015	SIM-FW/RW AAR PROCEDURES, EPs		4.0	*	S		D	014		E	1.0		110
AR	110	FWAR PROCEDURES	3.0		*	A	1	(N*)	105, 015		E	1.0		110
AR	111	RWAR PROCEDURES	3.0		*	A	1	D	105, 015		E	1.0		
			6.0	4.0								3.0		
TACTICAL NAVIGATION														
TACNAV	120	TACTICAL NAVIGATION PROCEDURES	2.0		*	A	1	D	105		E	1.0		130, 131
			2.0	0.0								1.0		
FORMATION														
FORM	130	BASIC FORMATION	2.0		*	A	2	D	105		E	1.0		130, 131
			2.0	0.0								1.0		
POST MAINTENANCE CHECK FLIGHT														
SPMCF	016	POST MAINTENANCE CHECK CO-PILOT DUTIES		2.0	*	S		D	014		E	1.0		016
			0.0	2.0								1.0		
LONG RANGE NAVIGATION														
LRNAV	150	LONG RANGE NAVIGATION PROCEDURES	8.0		*	A	1	(N*)	105		E	1.0		150
LRNAV	151	LONG RANGE NAVIGATION PROCEDURES	8.0		*	A	1	(N*)	150		E	2.0		151
			16.0	0.0								3.0		
CORE SKILL INTRODUCTORY EVALUATION														
CSIX	190	NATOPS/INTRUMENT CHECK	2.0		*	A	1	(N*)	109	R	E	2.0		190
			2.0	0.0								2.0		
		TOTAL FLT/SIM HOURS FOR STAGE	58.0	50.0								35.0		

SC-130FPI PILOT														
200-SERIES CORE SKILL BASIC														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	FOI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
FAI														
SFAI	200	SFAI		3.0	*	S		D 190		SC		0.0		200
FAI	201	FAI	2.0			365	A 1	D 200		SC		0.5	200	201
FAI	202	NFAI	3.0			365	A 1	N* 201		SC, R		0.5	201	202
			5.0	3.0								1.0		
NIGHT SYSTEMS														
SNS	203	SIM NSFAI		3.0	*	S		NS NSQ GRND		SC, R		0.0		203
NS	204	HLL NSFAI	2.0			365	A 1	NS 202, 203		SC, R		0.5	201	204
NS	205	LLL NSFAI	2.0			180	A 1	NS 204		SC		0.5	201, 204	205
			4.0	3.0								1.0		
AERIAL REFUELING														
AR	210	FWAR	4.0			365	A 1	D 201				1.0	201	210
AR	211	NFWAR	4.0			365	A 1	(N) 202, 210		SC, R		0.5	201, 210, (202 N), (204 NS) (205 LLL)	211
AR	212	RWAR	3.0			180	A 1	D 201		SC		0.5	201	212
AR	213	NSRWAR	3.0			180	A 1	NS 202, 204/205, 212		SC, R		1.0	201, 212, (204 NS), (205 LLL)	213
			14.0	0.0								3.0		
TACTICAL NAVIGATION														
TACNAV	220	DTACNAV	2.0			365	A 1	D 201				1.0	201	220
TACNAV	221	RSLAT	2.0			180	A 1	D 201, 220		SC, R		0.5	201, 220	221
STACNAV	222	NSTACNAV		2.0	*	S		NS 201		SC		0.0		222
TACNAV	223	HLL NSLL	2.0			365	A 1	NS 204, 220, 222				0.5	201, 204, 220	223
TACNAV	224	LLL NSLL	2.0			180	A 1	NS 205, 223		SC, R		1.0	201, 204, 205, 220, 223	224
			8.0	2.0								3.0		
FORMATION														
SFORM	230	SIM FORM		2.0	*	S		D 201				0.0		230
FORM	231	FORM	2.0			365	A 2	D 201				1.0	201	231
FORM	232	NSFORM	2.0			365	A 2	NS 231, NSQ		SC, R		1.0	201, 231, (204 NS), (205 LLL)	232
			4.0	2.0								2.0		
AERIAL DELIVERY														
SAD	240	SAD		2.0	*	S		D 201				0.0	201	240
AD	241	AD	2.0			365	A 1	D 201, 240				0.5	201	241
AD	242	NSAD	2.0			365	A 1	NS 241, 204 HLL, 205 LLL		SC, R		0.5	201, 241, (204 NS), (205 LLL)	242
			4.0	2.0								1.0		

KC-135R/PY PILOT															
200 SERIES CORE SKILL BASIC															
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION	
LONG RANGE NAVIGATION															
LRNAV	250	LRNAV	8.0		365	A	1	(N*)	202	SC, R		1.0	201, (202 N)	250	
			8.0	0.0								1.0			
THREAT REACTION															
STHRX (I)	260	STHRX (I)		2.0	*	S		D		SC		0.0		260	
THR (I)	261	THR (I)	2.0		365	A/S	1	(N)	220, 260, (223), (224)	SC, R	E	0.5		261	
			2.0	2.0								0.5			
ASSAULT LANDING ZONE															
SALZ	270	SALZ		3.0	*	S		NS	200	SC		0.0		270	
ALZ	271	ALZ	3.0		180	A	1	D	201, 270	SC		1.0	201	271	
ALZ	272	NSALZ	3.0		180	A	1	NS	204 HLL, 205 LLL, 271	SC, R		1.0	201, 271, (204NS), (205LLL)	272	
ALZ	274	RGR	2.0		730	A	1	(N)	201, 202, 204 HLL, 205 LLL	SC, R		0.5		274	
			8.0	3.0								2.5			
TOTAL FLT/SIM HOURS FOR STAGE			57.0	17.0	TOTAL CRP FOR STAGE							15.0			

KC-130FET PILOT														
300 SERIES CORE SKILL ADVANCED														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
FAI														
SFAI	300	LS SFAI		3.0	*	S	1	D	202	SC				300
FAI	301	LS FAI	2.0		365	A	1	D	300	SC		0.5	201	301
FAI	302	LS N FAI	2.0		365	A	1	N*	301	SC, R		0.5	201, 202, 301	302
				4.0	3.0							1.0		
NIGHT SYSTEMS														
NS	303	LS NS FAI	2.0		180	A	1	NS	204HLL, 205LLL, 302	SC, R		0.5	201, 301, (204 NS), (205 LLL)	303
				2.0	0.0							0.5		
AERIAL REFUELING														
AR	311	LS FW AR	3.0		365	A	1	(N)	210, (211), 301, 302, (303 NS)	SC, R		1.0	201, 210, 301, (204, 211, 303 NS), (202, 211, 302 if night)	311
AR	312	LS RW AR	3.0		180	A	1	D	212, 301	SC, R		1.0	201, 212, 301	312
AR	313	LS NVG RWAR	3.0		180	A	1	NS	213, 301, 303, 312	SC, R		1.0	201, 212, 213, 301, 303, 312, (204 NS), (205 LLL)	313
				9.0	0.0							3.0		
TACTICAL NAVIGATION														
TACNAV	320	LS LL NAV	2.0		365	A	1	D	220, 301	SC		1.0	201, 220, 301	320
TACNAV	321	LS LAT	2.0		180	A	1	D	221, 261, 320, 620	SC		1.0	201, 220, 221, 301, 320	321
TACNAV	322	LS LAT CK	2.0		180	A	1	D	321	SC, R		1.0	201, 220, 221, 301, 320, 321	322
TACNAV	323	HLL LSLNNAV	2.0		365	A	1	NS	223, 303, 320	SC		1.0	201, 204, 220, 223, 301, 303, 320	323
TACNAV	324	LLL LSLNNAV	2.0		180	A	1	NS	224, 303, 320	SC, R		1.0	201, 205, 220, 223, 224, 301, 303, 320, 323	324
				10.0	0.0							5.0		
FORMATION														
FORM	330	LS FORM	2.0		365	A	2	D	231, 301	SC		1.0	231, 301	330
FORM	331	LS NS FORM	2.0		365	A	2+	NS	303, 330	SC, R		1.0	201, 301, 303, 330, (204, 231, 232 NS), (205 LLL)	331
FORM	332	LS DIV	2.0		365	A	3+	(N)	330, (331 NS), (430 if unaided)	SC, R		1.0	201, 231, 301, 330, (204, 232, 303, 331 NS), (205 LLL)	332
				6.0	0.0							3.0		
MEDIUM-PLANE AIR-TO-AIR REFUELING														
FORMAR	333	LS FW FORMAR	4.0		365	A	2+	(N)	311, 330, 331 if aided, 430 if UA, 332 if DIV	SC, R		0.5	201, 210, 231, 301, 311, 330, 334 (204, 211, 232, 303, 331 NS), (205 NS LLL), 332 if DIV, 430 if UA	333
FORMAR	334	LS RW FORMAR	4.0		365	A	2+	(N)	312, 330, (313, 331 if aided), (413, 430 if UA), 332 if DIV	SC, R		0.5	201, 212, 231, 301, 312, 330, 333 (204, 213, 232, 303, 313, 331 NS), (205 NS LLL), 332 if DIV, (413, 430 if UA)	
				8.0	0.0							1.0		
AERIAL DELIVERY														
AD	340	AD	2.0		365	A	1	D	241, 301	SC		1.0	201, 241, 301	340
AD	341	NS AD	2.0		365	A	1	NS	242, 303, 340	SC, R		1.0	201, 241, 242, 301, 303, 340, (204 NS), (205 LLL)	341
				4.0	0.0							2.0		

RC-130VFP PILOT														
300 SERIES CORE SKILL ADVANCE														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
THREAT REACTION														
STHRX (R)	360	STHRX (R)		3.0	*	S			222,261,300	SC				360
THR (R)	361	THR (R)	2.0		365	A/S	1	(N)	222,260,360	SC,R	0.5	261,360		361
			2.0	3.0							0.5			
ASSAULT LANDING ZONE														
ALZ	370	LS ALZ	2.0	180	A	1	D		271,301	SC,R	1.0	201,271,301		370
ALZ	371	HLL LS ALZ	2.0	180	A	1	NS		272,303,370	SC	1.0	201,204,271,272,301,303,370		371
ALZ	372	LLL LS ALZ	2.0	180	A	1	NS		371	SC,R	1.0	201,205,271,272,301,303,370,371		372
ALZ	373	UNIMP LS ALZ	2.0	730	A	1	(NS)		272,303 if night 370	SC,R	1.0	201,271,301,370,(204,272, 303,371 if NS),(205,372 if LLL)		470
			8.0	0.0							4.0			
TOTAL FTR/SIM HOURS FOR STAGE			53.0	6.0							TOTAL CRP FOR STAGE		20.0	

KC-130RFP PILOT													
400 HOURS CORE FIVE SKILLS													
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	POI	EVALUATION CRP	CHAINING	EVENT CONVERSION
ABRIAL REFUELING													
AR	413	NRWAR	3.0		365	A	1	N*	312	SC,R	0.5	212, 213, 312, 313	413
AR	419	LRAAR	6.0		730	A	2	(N)	See Event	SC,R	0.5	201, 250, 301, DIV/SEC/RW/FW CODES MUST ALSO BE LOGGED	493
			9.0	0.0							1.0		
NAUTICAL NAVIGATION													
TACNAV	420	SEC TACNAV	2.0		365	A	2	D	320, 330	SC,R	0.5	201, 220, 301, 320, 330	420
TACNAV	421	SECLAT	2.0		180	A	2	D	322, 330, 420	SC,R	0.5	201, 221, 231, 301, 320, 321, 322, 330, 420	421
TACNAV	423	NSSEC TACNAV	2.0		180	A	2	NS	331, 323 (HLL), 324 (LLL), 420	SC,R	0.5	201, 220, 301, 320, 331, 420, (204, 224, 303, 323 NS), (205, 324 LLL)	423
			6.0	0.0							1.5		
FORMATION													
FORM	430	UFORM	2.0		180	A	2	N*	330, 332 IF DIV	R	0.5	201, 202, 231, 232, 301, 302, 330, 331, (322 DIV)	430
			2.0	0.0							0.5		
AERIAL DELIVERY													
AD	440	UAD	2.0		365	A	1	N*	RS 202, 241, LS 302, 340	SC,R	0.4	201, 202, 241, 301, 302, 340, (242, 341 NS)	440
AD	441	D/N JPADS	2.0		730	A	1	(N)	SEE EVENT	R	0.3	440 if UA, RS 201, 202 if NIGHT, 241, (204HLL, 205LLL, 242 if NS). LS 301, 302 if NIGHT, 340, (303, 341 is NS)	
AD	442	D/N PER HALO, HAHO	2.0		365	A	1	(N)	RS 201, 202 if night, (204HLL, 205LLL if aided). LS 301, 302 if night, (303 if aided)	R	0.5	440 if UA: RS 201, 241, 202 if night, (204, 242 NS), 205 LLL LS 301, 340, 302 if night, (303, 341 NS)	442
AD	444	BI	2.0		*	A	1	N	RS 202, (204, 205 IF AIDED), LS 302, (303 IF AIDED)		0.3	RS 202, (204, 205 IF AIDED), LS 302, (303 IF AIDED)	444
			8.0	0.0							1.5		
DEFENSIVE TACTICS													
DEFTAC	462	IV1	2.0		180	A	1	D	360, 621		0.1		462
DEFTAC	463	IV2	2.0		180	A	1	D	462		0.1	201, 301, 462	463
DEFTAC	464	QUAL	2.0		180	A	1	D	463	SC,R	0.3	201, 301, 462, 463	464
			6.0	0.0							0.5		
TOTAL FLE/SIM HOURS FOR STAGE			31.0	0.0					TOTAL CRP FOR STAGE			5.0	

KC-130R/E FLIGHT														
500 SERIES INSTRUCTOR TRAINING														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REPLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
CORE SKILL INTRODUCTION INSTRUCTOR														
SFAI	500	CSII		2.0	*	S		D	695		E	0.0	201	
FAI	501	CSII	3.0		*	A	1	D	500		E	0.0	201	
FAI	502	CSII	3.0		*	A	1	D	501		E	0.0	201	
			6.0	2.0								0.0		
TRAINING AND READINESS INSTRUCTOR														
T&R	520	T&R I	3.0		*	A	1	(N)	685, APRB		E	0.0		
			3.0	0.0								0.0		
NAIOPS INSTRUCTOR														
SNI	590	ANI, NI		3.0	*	S		D	685, APRB		E	0.0		
NI	591	ANI, NI	3.0		*	A	1	D	590, 685, APRB		E	0.0	201, 301	
NI	592	ANI, NI	3.0		*	A/S	1	D	591, 685, APRB		E	0.0	201, 301	
			6.0	3.0								0.0		
FLIGHT LEADERSHIP STANDARDIZATION EVALUATOR (FLSE)														
FLSE	593	FLSE CERT	3.0		*	A/S	2+(NS)		Div Lead	R	E	0.0		
			3.0	0.0								0.0		
LOW ALTITUDE TACTICS INSTRUCTOR														
LATI	530	LATI	2.0		*	A	1	D	MAWTS-1 COURSE CATALOG		E	0.0		
LATI	531	LATI	2.0		*	A	1	D	MAWTS-1 COURSE CATALOG		E	0.0		
LATI	532	LATI	2.0		*	A	2	D	MAWTS-1 COURSE CATALOG	R	E	0.0		
LATI	533	LATI	2.0		*	A	1	D	MAWTS-1 COURSE CATALOG	R	E	0.0		
			8.0	0.0								0.0		
DEFENSIVE TACTICS INSTRUCTOR														
DEFTACI	540	DEFTACI	1.0		*	A	1	D	MAWTS-1 COURSE CATALOG	R	E	0.0		
DEFTACI	541	DEFTACI	1.0		*	A	1	D	MAWTS-1 COURSE CATALOG	R	E	0.0		
DEFTACI	542	DEFTACI	1.0		*	A	2	D	MAWTS-1 COURSE CATALOG	R	E	0.0		
DEFTACI	543	DEFTACI	1.0		*	A	1	D	MAWTS-1 COURSE CATALOG	R	E	0.0		
			4.0	0.0								0.0		
NIGHT SYSTEMS INSTRUCTOR														
NSI	550	NSI	2.0		*	A	1	NS	MAWTS-1 COURSE CATALOG	R	E	0.0		
NSI	551	NSI	2.0		*	A	1	NS	MAWTS-1 COURSE CATALOG	R	E	0.0		
NSI	552	NSI	2.0		*	A	2	NS	MAWTS-1 COURSE CATALOG	R	E	0.0		
NSI	553	NSI	2.0		*	A	1	NS	MAWTS-1 COURSE CATALOG	R	E	0.0		
			8.0	0.0								0.0		
TOTAL TDI/SIM HOURS FOR STAGE			38.0	5.0								0.0		
											TOTAL CRP FOR STAGE		0.0	

KC-130ERT PILOT														
600 SERIES REQUIREMENTS / QUALIFICATIONS / DESIGNATIONS														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
TPC PREPARATION														
RQD	600	PRF	3.0		*	A	1	D	684, APRB REC		E			600
RQD	601	PRF	3.0		*	A	1	(N)	600		E			601
RQD	602	PRF	3.0		*	A	1	D	601		E			602
RQD	603	SIMS		27.0	*	S	1	D	602		E			603
RQD	604	RCHK	8.0		*	A	1	(N)	603		E			604
			17.0	27.0								0.0		
LAT QUALIFICATION														
RQD	620	RS LAT	0.0					D	221					620
RQD	621	LS LAT	0.0					D	322					621
			0.0	0.0								0.0		
SECTION LEADER (SL) DESIGNATION														
SL	630	SEC LD PRACT	3.0		*	A	2	(N)	685, 100 TPC HOURS		E			630
SL	631	SEC LD CERT	3.0		-	A	2	(N)	630	R	E			631
SL	632	SEC LD PROF	-		365	A	2	(N)	DESIGNATED SEC LD					-
			6.0	0.0								0.0		
DIVISION LEADER (DL) DESIGNATION														
DL	633	DIV LD PRACT	3.0		*	A	3	(N)	631, 200 TPC HOURS		E			632
DL	634	DIV LD CERT	3.0		-	A	3	(N)	632	R	E			633
DL	635	DIV LD PROF	-		365	A	3	(N)	DESIGNATED DIV LD					-
			6.0	0.0								0.0		
TACTICAL REFUELING AREA COMMANDER														
RAC	636	TACRAC CERT	3.0		-	A	2	(N)	DESIGNATED SL	R	E			636
RAC	637	TACRAC PROF	-		365	A	2	(N)	DESIGNATED TACRAC					-
			3.0	0.0								0.0		
STRATEGIC REFUELING AREA COMMANDER														
RAC	638	STRATRAC CERT	6.0		-	A	1+	(N)	636, 419, 633	R	E			637
RAC	639	STRATRAC PROF	-		730	A	1+	(N)	DESIGNATED STRATRAC					-
			6.0	0.0								0.0		
DEFTAC QUALIFICATION														
RQD	661	DEFTAC QUAL	0.0						462, 463, 464, 621					661
			0.0	0.0								0.0		
PARTICULARIZATION														
RQD	680	LS QUAL	0.0						300, 301, 302					680
			0.0	0.0								0.0		
INSTRUMENT														
RQD	681	STD INST	2.0		365	A/S	1	(N)	MIN PER 3710.7 AND IFM	SC, R	E			681
RQD	682	SPEC INST	2.0		365	A/S	1	(N)	MIN PER 3710.7 AND IFM	SC, R	E			682
			4.0	0.0								0.0		
NATOPS														
RQD	683	T3P	3.0		365	A/S	1	(N*)	100 SERIES COMPLETE	SC	E			683
RQD	684	T2P	2.0		365	A/S	1	(N)	CORE PLUS COMPLETE, APRB REC	SC	E			684
RQD	685	TPC	2.0		365	A/S	1	(N)	604	SC, R	E			685
			7.0	0.0								0.0		

KC-135RQF PILOT														
600 SERIES REQUIREMENTS / QUALIFICATIONS / DESIGNATIONS														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	# OF A/C	CONDITIONS	PREREQ	FOI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
NIGHT SYSTEMS QUALIFICATION														
RQD	686	NSQ	0.0						203,204,205,223,224					686
			0.0	0.0								0.0		

POST MAINTENANCE CHECK FLIGHT PILOT														
RQD	687	PFCF	2.0				+ A 1 D		TPC,APRB					687
			2.0	0.0								0.0		
INSTRUCTOR TRACKING CODES														
RQD	688	CSII	0.0						502					
RQD	694	T&R	0.0						590					694
RQD	695	NATOPS	0.0						591					695
RQD	696	LAT	0.0						533					696
RQD	697	DEFTAC	0.0						MAWTS-1 CC, 543					697
RQD	698	NSI	0.0						MAWTS-1 CC, 553					698
RQD	699	WTI	0.0						MAWTS-1 CC, 592					699
			0.0	0.0								0.0		
TOTAL FLT/SM CODES FOR STAGE			51.0	27.0								0.0		
												TOTAL CRP FOR STAGE	0.0	

CHAPTER 2

KC-130FRT FLIGHT ENGINEER

	<u>PARAGRAPH</u>	<u>PAGE</u>
MARINE AERIAL REFUELER TRANSPORT SQUADRON UNIT CORE COMPETENCY	200	2-3
PROGRAMS OF INSTRUCTION (POI) FOR BASIC, CONVERSION, AND KC-130J SERIES CONVERSION FLIGHT ENGINEER.....	201	2-10
POI FOR REFRESHER FLIGHT ENGINEER.....	202	2-11
POI FOR INSTRUCTOR FLIGHT ENGINEER.....	203	2-11
GROUND TRAINING COURSES OF INSTRUCTION.....	204	2-11
AIRCREW TRAINING REFERENCES.....	205	2-12
GRADUATE LEVEL COURSES.....	206	2-12
EVENT PERFORMANCE REQUIREMENTS.....	207	2-12
CORE SKILL INTRODUCTION TRAINING.....	208	2-14
CORE SKILL BASIC TRAINING.....	209	2-30
CORE SKILL ADVANCED TRAINING.....	210	2-38
CORE SKILL PLUS TRAINING.....	211	2-41
INSTRUCTOR TRAINING.....	212	2-43
REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS (RQD).....	213	2-45
SYLLABUS MATRIX.....	214	2-50

*** * NOTE * ***

Crew Resource Management shall be briefed before all flights and/or events.

CHAPTER 2

KC-130FRT FLIGHT ENGINEER

200. MARINE AERIAL REFUELING SQUADRON (KC-130) UNIT CORE COMPETENCY

1. Background. Marine Aviation plays a crucial role in the MAGTF's ability to conduct Maneuver Warfare. The ultimate goal of Marine Aviation is to attain the highest possible combat readiness to support Expeditionary Maneuver Warfare while at the same time preserving and conserving our Marines and equipment. Embedded within our combat readiness is the ability to rapidly, effectively, and efficiently deploy on short notice and the ability to quickly and effectively plan for crises and/or contingency operations thereby ensuring Marine Aviation remains ready for combat when and where the need arises. The KC-130FRT T&R Manual represents the collaborative effort of KC-130FRT Subject Matter Experts who designed training standards to maximize the full combat capabilities of the KC-130FRT and its crew. These standards, intrinsic in the core competency section, describe and define unit capabilities and requirements necessary to maintain like-squadron proficiency in core skills and combat leadership. Training events are based on specific requirements and performance standards to ensure aircrew maintain a common base of training and depth of combat capabilities. Together, the T&R comprises a building block approach to ensure that trained aircrews remain ready, relevant, and fully capable of supporting the MAGTF commander.

2. VMGR Mission. Support the MAGTF Commander by providing aerial refueling and assault support, day or night under all weather conditions during expeditionary, joint, or combined operations.

3. Mission Essential Task List (METL)

- a. (UJTL TA 1.1.1) Conduct Tactical Airlift
 - Conduct assault support transport.
- b. (UJTL TA 1.1.4) Conduct Sea and Air Deployment Operations
 - Maintain the capability to deploy and operate from advanced bases, expeditionary airfields and forward operating bases.
 - Perform organizational maintenance on assigned aircraft.
- c. (UJTL TA 1.2.2) Conduct Airborne Operations
 - Provide air delivered assault support transport of combat troops, equipment and supplies.
 - Provide support for casualty evacuation operations.
 - Maintain self-defense capability from ground-to-air and air-to-air threats.
- d. (UJTL TA 4.2) Distribute Supplies and Provide Transport Services
 - Conduct aerial re-supply.
 - Provide support for mobile Forward Arming and Refueling Points (FARPS).
 - Provide support for Rapid Ground Refueling (RGR) of aircraft and Vehicles.
- e. (UJTL TA 4.2.3) Conduct Air Refueling
 - Provide Tactical and Long Range Aerial Refueling.

- f. (UJTL TA 5) Exercise Command and Control
 - Provide Airborne Platform for the Airborne DASC Command Post.
- g. (UJTL TA 6.2) Conduct Joint Personnel Recovery
 - Conduct Tactical Recovery of Aircraft and Personnel (TRAP) Operations.
 - Augment local Search and Rescue (SAR) assets.
- h. (UJTL TA 6.4) Conduct Noncombatant Evacuation
 - Provide support for evacuation operations.

4. Table of Organization. Refer to Table of Organization 8820 and 8821 managed by Total Force Structure, MCCDC, for current authorized organizational structure and personnel strength for KC-130FRT units. As of this publication date, KC-130FRT units are authorized:

Squadron
12 Aircraft
42 Pilots [26 TPC/16 CP (T2P or T3P)]
23 Navigators
25 Flight Engineers
24 Loadmasters
24 Flight Mechanics

Detachment
6 Aircraft
19 Pilots [11 TPC/8 CP (T2P or T3P)]
11 Navigators
12 Flight Engineers
12 Loadmasters
12 Flight Mechanics

5. Core Capability. A core capable squadron is able to sustain 9 sorties on a daily basis during contingency/combat operations. The above sortie rates are based on 3.0 hour average sortie duration and assumes \geq 70 percent FMC aircraft and \geq 90 percent T/O aircrew on hand. If unit FMC aircraft $<$ 70 percent or T/O aircrew $<$ 90 percent, core capability will be degraded by a like percentage. A core capable squadron is able to accomplish all tasks designated in the unit METL from a main or expeditionary base.

6. METL/Core Skill Matrix. KC-130FRT core skills directly support the METL as follows:

KC-130FRT CORE SKILLS													
METL	FAI	NSQ	AR	TACNAV	FORM	MULTI PLANE AR	AD	LRNAV	THRX (I)	THRX (R)	ALZ	CPL	RGR
A. Conduct Tactical Airlift	X	X		X	X			X	X	X	X	X	
B. Conduct Sea and Air Deployment Operations	X	X			X			X	X	X	X	X	
C. Conduct Airborne Operations	X	X		X	X		X	X	X	X		X	
D. Distribute Supplies and Provide Transport Services	X	X		X			X	X	X	X	X	X	X
E. Conduct Air Refueling	X	X	X	X	X	X		X	X	X			
F. Exercise Command and Control	X	X						X	X	X		X	
G. Conduct Joint Personnel Recovery	X	X	X	X	X	X	X	X	X	X	X	X	X
H. Conduct Noncombatant Evacuation	X	X	X	X	X	X		X	X	X	X	X	X

KC-130FRT CORE-PLUS SKILLS					
METL	TACNAV	FORM	AD	DEVTRC	AR
A. Conduct Tactical Airlift	X	X		X	
B. Conduct Sea and Air Deployment Operations		X		X	X
C. Conduct Airborne Operations		X	X	X	
D. Distribute Supplies and Provide Transport Services			X	X	X
E. Conduct Air Refueling		X		X	X
F. Exercise Command and Control					
G. Conduct Joint Personnel Recovery		X	X	X	X
H. Conduct Noncombatant Evacuation		X		X	X

7. KC-130FRT Core Model Minimum Requirements. Squadron core competency reflects the minimum level of competency a squadron must achieve to perform its core capability. Squadron core competency is measured in terms of minimum Core Skill Proficiency (CSP). As a minimum, in order to be considered Core Competent, a unit must possess the following numbers of crews who are proficient in each core skill (Unit CSP).

KC-130FRT CSP Requirements Unit							
CORE SKILL CORE PLUS	Pilot	Copilot	TSO	FE	LM	FM	Crews
FAI	14	14	14	14	14	14	14
NS	9	9	9	9	9	9	9
AR	14	14	14	14	14	14	14
TACNAV	9	9	9	9	9	9	9
FORM	8	8		8			8
MULTI-PLANE AR	4	4					4
AD	4	4	4	4	8	4	4
LRNAV	12	12	12	12	12	12	12
THR(X) (I)	6	6	6	6	6	6	6
THR(X) (R)	4	4	4	4			4
ALZ	9	9	9	9	9	9	9
CPL					18		18
RGR				8	8	8	8
TACNAV	2	2					2
FORM	2	2					2
AD	4	4	4	4	8	4	4
DEFTAC	2	2	2	2	2	2	2
AR	2		2				2

KC-130FRT CSP Requirements 6 Plane Detachment							
CORE SKILL CORE PLUS	Pilot	Copilot	TSO	FE	LM	FM	Crews
FAI	7	7	7	7	7	7	7
NS	5	5	5	5	5	5	5
AR	7	7	7	7	7	7	7
TACNAV	5	5	5	5	5	5	5
FORM	4	4		4			4
MULTI-PLANE AR	2	2					2
AD	2	2	2	2	4	2	2
LRNAV	6	6	6	6	6	6	6
THR(X)(I)	3	3	3	3	3	3	3
THR(X)(R)	2	2	2	2			2
ALZ	5	5	5	5	5	5	5
CPL					9		9
RGR				4	4	4	4
TACNAV	2	2					2
FORM	2	2					2
AD	2	2	2	2	4	2	2
DEFTAC	1	1	1	1	1	1	1
AR	2		2				2

8. In order to be considered proficient in a core skill (individual CSP), a crewmember must attain and maintain proficiency in core skill events, as delineated in paragraphs a. and b. below.

a. Events Required to Attain Individual CSP. To initially attain CSP, a crewmember must successfully complete all of the T&R events listed in the charts below for those core skills:

KC-130FRT FLIGHT ENGINEER - ATTAIN - Core Skill Proficiency											
KC-130FRT FE Core Skills	FAM	NS	RW/FW AR	TAC NAV	AD	LONG RANGE NAV	ALZ	RGR	THR(X) (R)	THR(X) (I)	FORM
Events required to Attain CSP	200R	204 205R	210 211R 212 213R	220R 223 224R 321R	241 242R	250R	271R 272 273R	274R	360R	361R	331R

KC-130FRT FLIGHT ENGINEER - ATTAIN - Core + Skill Proficiency		
KC-130FRT FE Core + Skills	AD	DEFTAC
Events required to Attain Core + Proficiency	442R 444R	461 462R

b. Events Required to Maintain Individual CSP. To maintain CSP, a crewmember must maintain proficiency in all of the T&R events listed in the charts below for those core skills.

KC-130FRT FLIGHT ENGINEER - MAINTAIN - Core Skill Proficiency											
KC-130FRT FE Core Skills	FAM	NS	RW/FW AR	TAC NAV	AD	LONG RANGE NAV	ALZ	RGR	THRX (R)	THRX (I)	FORM
Events required to Maintain CSP	200R	205R	211R 213R	224R 321R	242R	250R	273R	274R	360R	361R	331R

KC-130FRT FLIGHT ENGINEER - MAINTAIN - Core + Skill Proficiency		
KC-130FRT FE Core + Skills	AD	DEFTAC
Events required to Maintain Core + Proficiency	442R 444R	462R

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

Qualification (TRACKING CODE)	Initial Event Qualification Requirements.
NSQ(611)	NS-204, NS-205, TACNAV-223, TACNAV-224, RQD-681 and a designation letter signed by the Commanding Officer.

Designation (TRACKING CODE)	Initial Event Designation Requirements.
Engine Run (600)	Upon completion of RQD-600, Commanding Officer shall designate FE engine run certified.
Taxi (601)	Upon completion of RQD-601, Commanding Officer shall designate FE Taxi certified.
FE-2 NATOPS Evaluation (680)	Core Introduction Phase complete and a designation letter signed by Commanding Officer.
FE-1 NATOPS Evaluation (681)	Codes 200-274, RQD-600, RQD-601, RQD-602 complete with the exception of NS codes. Plane Captain Syllabi Complete IAW OPNAV 3710.7 and a designation letter signed by Commanding Officer. May also instruct training for 200 Level Flight Mechanic codes.
Annual NATOPS (682)	RQD-681, Annual NATOPS evaluation designation.
Assistant NATOPS Instructor (683)	RQD-690, RQD-681, RQD-682, 1500 Flight Hours as qualified Flight Engineer, certification by the Squadron NATOPS Instructor and a designation letter signed by the Commanding Officer. May assist in completing SCK-104,114,150.
NATOPS Instructor (684)	RQD-690, RQD-681, RQD-682, RQD-683, 1500 Flight Hours as qualified Flight Engineer, certification by the Model Manager Evaluator and a designation letter signed by the Commanding Officer. Designates the ANI, FEI and FE-2.
FEI (690)	Completion of SFAM-500 through SFAM-504 and 1000 flight hours as a qualified Flight Engineer and a designation letter signed by the Commanding Officer. May instruct all FM and FE 100-300 codes.
NSI (691)	Upon certification by MAWTS-1 FE will be designated a NSI by the Commanding Officer.
WTI (692)	Upon certification by MAWTS-1 FE will be designated a WTI by the Commanding Officer.

10. Instructor Requirements. A squadron should possess the following numbers of aircrew with the listed instructor designations IAW the KC-130 T&R and MCO 3500.12C (WTPP).

KC-130 Squadron	
INSTRUCTOR DESIGNATION	Flight Engineers
LATI	Not Required
ANI	6
WTI	2
DEFTACI	Not Required
NSI	3
FEI	10