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Flying Operations

RC/OC/WC/TC-135-OPERATIONS PROCEDURES

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This volume implements AFPD 11-2, *Aircrew Operations*; AFPD 11-4, *Aviation Service*; and AFI 11-202 Volume 3, *General Flight Rules*. It establishes the minimum Air Force standards for operations while performing duties in the RC/OC/WC/TC-135. It applies to all RC/OC/WC/TC-135 units, Air National Guard, and Air Force Reserve personnel who operate RC/OC/WC/TC- 135 aircraft. Major Commands (MAJCOM) and Numbered Air Forces (NAF) will forward proposed supplements to this volume to Air Force Directorate of Current Operations (AF/A3O) through Air Combat Command (ACC), Airborne Reconnaissance, and Surveillance Operations (ACC/A3CR) for approval prior to publication in accordance with (IAW) AFPD 11-2. Copies of MAJCOM and NAF-level supplements, after approved and published, will be provided by the issuing MAJCOM/NAF to AF/A3O, ACC/A3CR, and the user MAJCOM, NAF, National Guard Bureau (NGB) and Air Force Reserve Command offices of primary responsibility. Field units below MAJCOM/NAF level will forward copies of their supplements to this publication to their parent MAJCOM/NAF office of primary responsibility for post publication review. This manual requires the collection and or maintenance of information protected by the Privacy Act of 1974 authorized by Title 10 United States Code, Section 9013, Secretary of the Air Force. The applicable SORN (identify SORN number and title) is available at: **http://dpclo.defense.gov/Privacy/SORNs.aspx**. Keep supplements current by complying with AFI 33-360, *Publications and Forms Management*. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Instruction 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with the Air Force Records Disposition Schedule located in the Air Force Records

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SUMMARY OF CHANGES

This document has been substantially revised and needs to be completely reviewed

Chapter 1

GENERAL INFORMATION

1.1. Roles and Responsibilites

1.1.1. This AFMAN provides guidelines for RC/OC/WC/TC-135 operations and applies to RC/OC/WC/ TC-135 aircrews and all management levels concerned with operation of the RC/OC/WC/TC-135. The annotation "C-135" applies to RC/OC/WC/TC-135. It is both a compilation of information from aircraft flight manuals, flight information publications (FLIP), and Air Force directives, as well as an original source document for many areas. Basic source directives have precedence in the case of any conflicts, revisions, and matters of interpretation.

1.1.2. ACC/A3 is the agency responsible for the administration for this manual IAW AFPD 11-2.

1.1.3. Provide ACC/A3TV, and all applicable MAJCOM/A3s a copy of approved supplements to this manual. Copies will be current and available to planning staffs from headquarters to aircrew level.

1.1.4. The 55th OG Supplement to this manual will be utilized by all 55th OG assigned C-135 aircrew under all Operational Control (OPCON)/Tactical Control (TACON) authorities. OPCON/TACON guidance takes precedence over the 55th OG Supplement (i.e., Combatant Command (COCOM) aircraft Concept of Operations (CONOP), MAJCOM/Expeditionary Wing/Group guidance/supplements).

1.2. Deviations and Waivers. Do not deviate from the policies and guidance in this AFMAN under normal circumstances, except:

1.2.1. For safety.

1.2.2. When beyond Command and Control (C2) communications capability and it is necessary to protect the crew or aircraft from a situation not covered by this AFMAN, the Pilot in Command (PIC) has ultimate authority and responsibility for the course of action to be taken. Report all deviations or exceptions without waiver through channels to MAJCOM OPR and Office of Collateral Responsibility (OCR).

1.2.3. When a controlling source publication changes, that publication takes precedence until the change is incorporated herein. After a change is made to a controlling source, a change to this AFMAN will be distributed in a timely manner.

1.2.4. Waiver authority is the MAJCOM/A3, or equivalent, exercising TACON unless delegated lower in this AFMAN. Waiver requests for training missions under ACC TACON will be submitted through channels to ACC/A3C. Waivers required for exercises and operational missions involving aircraft from more than one unit or command should be coordinated with other participants to ensure standardization. In all cases, waiver approval and coordination should be published in the operations order (OPORD), CONOP, or operations plan (OPLAN).

Chapter 2

COMMAND AND CONTROL (C2)

2.1. Commander Authority. Steady state C-135 forces are OPCON to the Air Force and TACON to ACC unless an approved order transfers OPCON and/or TACON.

2.2. Aircraft Commander (AC) Responsibility and Authority. A PIC is designated for all flights on the flight authorizations. **(T-1)** PICs are:

2.2.1. In command of all persons aboard the aircraft. **(T-1).**

2.2.2. Responsible for the welfare of the crew and the safe accomplishment of the mission. **(T-1).**

2.2.3. Vested with the authority necessary to manage crew resources to accomplish the mission and will make decisions not specifically assigned to higher authority. **(T-1).**

2.2.4. Final authority for requesting or accepting any waivers affecting the crew or mission. **(T-1).**

2.2.5. The PIC is responsible for interaction between the aircrew and the C2 agency or the applicable support detachment. Any factor that may affect mission accomplishment, or when transiting a stop without a support agency, the PIC will ensure necessary mission information is placed into the C2 system by the most expeditious means available. The PIC will establish a point of contact with the appropriate C2 agency or support detachment prior to entering crew rest. **(T-1).**

2.2.6. If the PIC refuses a mission for safety reasons, the aircraft will not depart until the conditions have been corrected, improved or waived by the MAJCOM/A3 or equivalent, exercising TACON unless delegated lower. **(T-1).**

Chapter 3

CREW COMPLEMENT AND MANAGEMENT

3.1. Aircrew Qualification. Primary crewmembers, or those occupying a primary position during flight, must be qualified or in training for qualification (i.e., Pre-Pilot Upgrade (Pre-PUP)) for that crew position. The crewmember must be under the supervision of an instructor or flight examiner if non-current or in training. **Exceptions:** Pilot Senior Staff Members who have completed the Senior Staff Course (A004) may occupy either pilot seat under direct Instructor Pilot (IP) supervision. If conducting student training on operational missions, qualified crewmembers must be able to take the student's place and assume their duties in the event of an emergency or operational necessity. **(T-3).**

3.1.1. Crewmembers undergoing difference qualification between C-135 variants can credit events for continuation training provided their qualification is current. If the crewmember will not maintain dual-qualification, difference training cannot be credited toward continuation training.

3.2. Minimum Crew Manning. The minimum crew required for flight for C-135s is IAW the applicable Mission Design Series (MDS) Vol 1, an instructor pilot with an unqualified pilot enrolled in a formal course of training can satisfy the two-pilot requirement. Augmentation requirements are defined in AFI 11-202V3, ACCSUP. **(T-3).**

3.2.1. Augmentation:

3.2.1.1. C-135 require an extra AC and navigator.

3.2.2. Minimum Taxi Crew.

3.2.2.1. The minimum crew required to employ the mission system will ensure compliance with applicable United States Signals Intelligence Directives (USSIDS).

3.2.3. Mission Systems Operations In-Flight. The minimum crew required to employ the mission system for each C-135 MDS is **IAW Table 3.1** and the Crew Manning List (CML). The waiver authority for the minimum crew required in **Table 3.1** is the Squadron Commander or Detachment Commander. If the minimum number is reduced, the remaining crewmember should be experienced IAW AFMAN11-2RC-135V1, *RC/OC/WC/TC-135—Aircrew Training* and the Letter of Certification (Letter of Xs) and will not instruct a student.

3.2.4. The minimum crew required to employ the mission system will also be IAW the CML requirements. The waiver authority for the CML is the OG/CC, or appropriate EOG/CC or O-6 with EOG/CC authority unless identified otherwise in the IAW applicable USSIDS, approved CML, or aircraft specific CONOPs. **(T-3).**

3.2.5. Additional Crewmembers. Additional crewmembers may be added at the discretion of the Squadron Director of Operations (SQ/DO) or Detachment Director of Operations (DETDO), to meet mission tasking.

Table 3.1. Minimum Mission Crew Manning.

	Rivet Joint ELINT/ Cryptologic mission	Cobra Ball Mission system	Combat Sent Mission System	Open Skies Mission System	Constant Phoenix Mission System
TC	1	1	1	N/A	N/A
STP Raven	N/A	N/A	1	N/A	N/A
Manual Raven	N/A	N/A	1	N/A	N/A
Raven 1/2	N/A	1	N/A	N/A	N/A
Raven 3	N/A	1	N/A	N/A	N/A
ASE1	1	1	1	N/A	N/A
ASE2	N/A	2	N/A	N/A	N/A
ASE3	1	N/A	2	N/A	N/A
ASE5	2	N/A	N/A	N/A	N/A
SMT	N/A	N/A	N/A	2	N/A
SEO	N/A	N/A	N/A	N/A	2

3.3. Mission Essential Personnel (MEP). MEP approval is in accordance with AFI 11-401 and the MAJCOM and/or Wing Supplement. MEPs may be seated on the flight deck or crew compartment during takeoff and landing with the concurrence of the PIC. MEP personnel must occupy a seat certified for takeoff and landing and wear safety belts/harnesses. **(T-3).**

3.4. Crew Rest and Ground Time.

3.4.1. The PIC will determine ground time and crew rest IAW AFI 11- 202V3 and mission requirements.

3.4.2. Post Deployment or Extended Temporary duty (TDY) Recovery Time. Recovery time is used to recover from the cumulative effects of the mission and tend to personal needs and matters deferred while deployed for extended durations.

3.4.2.1. Special Pass Days. If Airmen wish to travel outside the local area, they may travel up to four days using the special pass, but they must return to the duty station to take additional stand down time. Compensatory time is IAW AFI 36-3003, *Special Pass Regulations*.

3.4.2.2. Crewmembers will be given compensatory and Special Pass days IAW AFI 11-202V3_ACCSUP, as supplemented by AFI 36-3003, Command Air Combat Command (COMACC) POST- DEPLOYMENT DOWNTIME GUIDANCE, and **Table 3.2**.

Table 3.2. Compensatory and Rest & Recovery (R&R) Days.

DEPLOYMENT LENGTH	COMPENSATORY DAYS	R&R DAYS	TOTAL DAYS
< 6 weeks	**Up to 4**	**0**	**Up to 4**
6 weeks	**4**	**3**	**7**

7 weeks	**4**	**4**	**8**
8 weeks	**4**	**5**	**9**
9 weeks	**4**	**6**	**10**
10 weeks	**4**	**7**	**11**
11 weeks	**4**	**8**	**12**
12 weeks	**4**	**10**	**14**

3.4.2.3. Waivers. The SQ/CC or acting representative is designated post deployment recovery time waiver authority when requested by a specific member.

3.5. Transition Duty Day. Transition duty day period (reference AFI 11-202V3 and applicable MAJCOM supplement) applies only to pilots and navigators.

3.6. Orientation, Incentive and Familiarization Flights. Orientation, incentive, and familiarization flights will be flown IAW AFI 11-401, *Aviation Management* and the MAJCOM supplement. The AC will be responsible for the safe transportation of the passengers. The AC or designated individual will brief the applicable sections of the passenger briefing guide attachment.

Chapter 4

OPERATING RESTRICTIONS

4.1. Objectives. Final responsibility regarding equipment, systems or flight maneuvers required for a mission rests with the PIC. All units operating C-135 aircraft will comply with the appropriate 55 OG/CC approved Minimum Equipment List, OPR 55 OG/OGV. **(T-3).**

4.2. Operating Guidance. This chapter lists the equipment, systems and flight maneuvers considered essential for C-135 missions. The restrictions apply at all times unless specified.

4.2.1. The OG/CC, or appropriate EOG/CC or O-6 with EOG/CC authority, is the waiver authority for these restrictions delegated no lower than Squadron/Detachment Commanders:

4.2.1.1. Taxi approval for intended route with an Runway Condition Reading (RCR) less than 8 reported for the parking ramp, taxiways and runway.

4.2.2. Delegated to the Squadron and Detachment Commanders:

4.2.2.1. Maximum Crosswind. Authorize take off or recovery of aircraft within maximum flight manual limitations.

4.2.2.2. Use reverse thrust data when calculating Take-off and Landing Data (TOLD).

4.2.2.3. Using headwind advantages to compute takeoff performance.

4.3. Three-Engine Ferry Operations. Three-engine operations during peacetime should only be accomplished after exhausting all other avenues to return an aircraft with an inoperative engine to mission capable status. MAJCOM/A3 must approve three engine ferry sorties delegated no lower than WG/CC.

4.4. Flight Maneuvers. Maneuvers listed in **Table 4.1** are authorized for qualification and continuation training. They are applicable to all mission and series C-135 aircraft, except when prohibited or restricted by the flight manual or other current directives. **(T-3). NOTE: Touch-and-Go and Receiver Air Refueling Supervision.**

Table 4.1. Maneuvers Authorized for Qualification and Continuation Training.

AC / IP	AC IP	Ceiling (ft)	Visibility (sm)	Crosswind (kts)	Day / Night	RCR
	Touch and Go[4]	1000 200	3 1/2	10 15	D / N	≥9
	3 Engine Landing[1]	3000 1000[2]	3 2[2]	10 15	D Only D / N	23 ≥9
	3 Engine Go Around[1]	3000 1000[2]	3 2[2]	N/A	D Only D / N	23 ≥9

IP Only (or Direct Supervision)	**3 Engine Go Around (RP Off)[2]**	1000	2	N/A	D / N	≥9
	3 Engine Touch, 4 Engine Go[2]	1000	2	15	D / N	≥9
	Simulated Engine Failure Takeoff Continued[5,2]	1000	2	N/A	D / N	N/A
	30 Flap Touch and Go	200	1/2	15	D / N	≥9
	Landing Attitude Demo[3]	N/A	N/A	15	D / N	N/A

Notes:	1.ACs may not supervise 3 engine maneuvers. 2.Simulated emergency procedures during the day require circling minimums. Simulated emergency procedures at night require 1000/2 or circling minimums whichever is greater. 3.Landing Attitude Demos must use a runway of sufficient width and length to permit a safe, normal, full-stop landing. 4.Do not accomplish Touch-and-Go landings on slush, ice or snow covered runways. 5.Do not retard the throttle on a simulated engine failure takeoff continued prior to 200 feet above ground level (AGL), gear up. 6.The following maneuvers must be conducted or supervised by an IP: a.AR Limits (requires direct IP supervision) b.Trim Demo. c.Spoiler / Lateral Control Demo.

4.4.1. AC can accomplish (not supervise) Touch-and-Go landings with any qualified Co-Pilot. **(T-3).**

4.4.2. AC (Non-IP) Supervision of Co-Pilot Maneuvers.

4.4.2.1. Non-instructor AC may supervise unit copilot's touch-and-go landings and receiver AR under the following conditions:

4.4.2.2. The SQ/CC has certified the copilot to perform events under AC supervision and it is documented in the unit's Letter of Certification (Letter of Xs).

4.4.3. Copilot Maneuvers While Supervised by a Non-IP AC.

4.4.3.1. An Instructor/Evaluator Pilot must document on a Training Accomplishment and Progress Report (TAPR) that the copilot is able to accomplish either/both event(s) to a safe level. **(T-3).**

4.4.3.2. The squadron commander must certify the copilot on the Letter of Certification (Letter of Xs). **(T-3).**

4.5. Touch-and-Go Landing Limitations. Touch-and-go landings are prohibited on:

4.5.1. Slush, ice, or snow covered runways. When conditions are "patchy" and/or greater than 25% runway coverage, but less than 50% coverage is reported, touch-and-go landings are at the discretion of the OG/CC, or appropriate EOG/CC or O-6 with EOG/CC authority.

4.5.2. Field Conditions (FICON) Runway Condition Code ≤ 3 (reported on any third of the runway).

4.5.3. Runway Conditions Reading RCR ≤ 8.

4.6. Operating Limitations. Do not practice emergency procedures that degrade aircraft performance or flight control capabilities unless specifically authorized elsewhere in this section.

4.6.1. The AC/IP will alert applicable crewmembers prior to practicing emergency procedures.

4.6.2. In an actual emergency, terminate all training and emergency procedures practice. Training should be resumed only when the PIC determines it is safe.

4.6.3. The powered rudder (and the Engine Failure Assist System (EFAS) for RC/TC-135 aircraft) will be on for all takeoffs and landings except for an actual system failure.

4.6.4. Maximum crosswind for takeoff and landing during non-Emergency War Order is 25 knots unless waived by the SQ/CC or Detachment Commander (DETCO). **(T-3).**

4.6.5. Practice Emergency or Abnormal Gear and Flap Operation must be accomplished clear of clouds (not applicable when IP is occupying a pilot seat). **(T-3).**

4.6.6. C-135 aircraft must have takeoff weather of 1600 feet (500m) Runway Visual Range (RVR). If RVR is 1000 feet to the 1600 feet (300m to 500m), the mission must be higher headquarters directed and takeoff approved by the SQ/CC, DETCO, or designated representative. **(T-3).**

4.6.7. C-135 aircraft are authorized to fly Category I Instrument Landing System (ILS) approaches with 1800 feet (550m) RVR or greater IAW the Instrument Approach Plate (IAP) and touchdown zone RVR must be equal to or greater than the specified minimums on IAP. **(T-3).**

4.7. Performance Requirements.

4.7.1. Departure Performance Planning. Use AFI 11-202V3, AFMAN 11-217, *Flight Operations* this chapter, and the appropriate MAJCOM or Wing supplements. During mission planning, the flight crew will determine a gross weight that ensures C-135 performance will meet or exceed departure requirements. **Note**: In the event performance capability cannot meet the climb gradient at the desired gross weight either defuel, use other applicable methods (Instrument Flight Rules (IFR) Climb Performance section in AFI 11-202V3), or delay until more favorable conditions exist. **(T-3).**

4.7.1.1. One Engine Inoperative. Vertically clear all obstacles. If C-135 aircraft are unable to meet the published climb gradient or 200 ft/nm, whichever is higher, crews may subtract 48 ft/nm from the gradient with operations supervisor approval. Crews are reminded this procedure allows for as little as zero feet of obstacle clearance.

4.7.1.2. Special Departure Procedure (SDP). [N/A WC-135] SDPs are authorized and available for RC/TC/OC-135 and WC-135W aircraft. Operationally necessary are any Operational/Higher Headquarters (HHQ) mission or any sortie that originates from Offutt AFB (KOFF), Lincoln Airport (KLNK) or as defined by the SQ/CC or DETCO.

4.7.2. Do not practice traffic pattern operations, instrument approaches, low approaches or go-arounds at gross weights that will not afford a minimum climb gradient of 3.3%. For TF- 33 equipped aircraft compute with 3 engines, flaps 30, gear up (gear down for emergency procedures practice). For F-108 equipped aircraft compute the climb gradient using threshold speed minus 10 knots, 3 engines, flaps 30, gear up (gear down for simulated emergency procedures practice), go-around N1 setting, and selected asymmetric N1 setting (between flight idle and max asymmetric N1). Include the effect of the air conditioning systems.

4.8. Traffic Pattern Limitations. The following limitations apply to both Touch-and-Go and full stop landings:

4.8.1. Flap Setting. Do not practice landings with less than 30 degree flaps. 30 degree flap, full stop landings are prohibited except in emergencies that dictate 30 degree flaps as the optimum or only landing configuration. Careful consideration should be given to runway length, landing distance (including flare and stopping distance), crosswinds, RCR, and other factors influencing the landing ground roll in deciding to land with less than 50 degrees of flaps. For OC/WC/RC/TC-135 aircraft, it is permissible to use up to 95% delayed braking factor when determining 30 flap total landing distance on planned touch and go landings. **(T-3).**

4.8.2. Gross Weight. Landing gross weights will not exceed 210,000 pounds for TF-33 equipped aircraft or 220,000 pounds for F-108 aircraft for normal operation. If mission requirements dictate, and a safe stopping distance exists, the SQ/CC or DETCO may authorize landings up to flight manual weight limits. **(T-3).**

4.8.3. Multiple Full Stop Landings. Compute brake energy prior to each subsequent takeoff.

4.8.4. Go-Arounds.Initiate a planned go-around not later than 200-foot Height Above Touchdown (HAT) (does not apply to a landing attitude demonstration).

4.8.5. Limit angle of bank to 30 degrees during traffic pattern operations.

4.9. Prohibited in-flight maneuvers. In addition to flight manual prohibited maneuvers, the following maneuvers will not be practiced or demonstrated in flight: **(T-3).**

4.9.1. Stalls. **(T-3).**

4.9.2. Spins. **(T-3).**

4.9.3. Dutch roll. **(T-3).**

4.9.4. Emergency descent. **(T-3).**

4.9.5. Unusual attitudes. **(T-3).**

4.9.6. Compound emergencies (except simulated engine-out with rudder power off). **(T-3).**

4.9.7. Tactics maneuvers (unless MAJCOM-approved). **(T-3).**

4.9.8. Initial buffet. **(T-3).**

4.9.9. Turns greater than 45 degree bank (except MAJCOM-approved tactics maneuvers). **(T-3).**

4.9.10. Simulated jammed stabilizer. **(T-3).**

4.9.11. Combat departure. **(T-3).**

4.9.12. Runaway stabilizer trim. **(T-3).**

4.9.13. Do not simulate failure of two engines in flight while conducting simulated engine out procedures. Do not actually shut down an engine for training. **(T-3).**

4.10. Low Altitude Operations (LAO). The following low altitude procedures are provided in support of Open Skies, Constant Phoenix, and Combat Sent in-flight operational and training missions planned or flown at altitudes below 6000 feet AGL, in addition to Technical Order (T.O.) guidance. **(T-3).**

4.10.1. Altitude.

4.10.1.1. 55 OG/CC, or appropriate EOG/CC, or O-6 with EOG authority must approve overland flights below 3000 feet AGL or over water flights below 1000 feet AGL. Approval should be obtained prior to departure for the deployment or mission. **(T-3).**

4.10.1.2. RC-135 altitudes are restricted IAW AFTTP 3-1 (class).

4.10.1.3. When the OG/CC has not approved overland flights below 3000 feet the selected altitude will provide a minimum clearance of 3000 feet from the highest obstruction or terrain within 4 Nautical Miles (NM) of planned course centerline. **(T-3).**

4.10.2. All overland LAO flights will be conducted in Day Visual Meteorological Conditions (VMC) conditions unless the flight is operating on an IFR clearance in controlled airspace.

4.10.3. Weather. Crews will obtain a turbulence forecast for the planned LAO route and, if possible, avoid areas of known/suspected turbulence greater than light. **(T-3).**

4.10.3.1. Do not conduct LAO flights in areas of forecast severe turbulence or reported moderate or severe turbulence. If continuous moderate or greater turbulence is encountered, deviate or abort the route as soon as possible.

4.10.3.2. Immediately terminate LAO operations if surface winds exceed 40 knots or when moderate or greater turbulence is experienced. This will avoid the possibility of the aircraft reaching its structural limits caused by wind gust factors.

4.10.3.3. Do not conduct LAO flights in areas of forecast severe icing conditions or in areas of reported moderate or severe icing conditions.

4.10.4. Equipment. The following equipment will be operational during LAO operations: **(T-3).**

4.10.4.1. Window heat. **(T-3).**

4.10.4.2. Yaw damper system. **(T-3).**

4.10.4.3. Cockpit accelerometer. **(T-3).**

4.10.4.4. Inertial Navigation System (INS) able to provide safe corridor navigation (no INS degrades exist). **(T-3).**

4.10.4.5. All axis of the autopilot must be operational for training flights and operational LAO beyond the first 12 hours of the Flight Duty Period. **(T-3).**

4.10.4.6. Radar. (When convective activity is forecasted or when flying over land). **(T-3).**

4.10.5. There are no duration limits for flights entirely over water. From the beginning of LAO up to 5 hours (6 hours if augmented), may be over land. Any LAO after that must be over water or above 6000 feet AGL. **(T-3).**

4.10.6. Reserve fuel tanks will remain full during LAO unless aircraft gross weight is less than 165,000 lbs. **(T-3).**

4.10.7. Bird Strike Mitigation. Bird strike potential at low altitude is increased. Consult FLIP, migratory bird publications and local bird activity indicators prior to flight. **(T-3).**

4.10.7.1. When the potential for a bird strike during LAO is likely, window heat should be on high. **(T-3).**

4.10.7.2. Report observed hazardous low altitude bird activity to planners during mission debriefing. **(T-3).**

4.10.7.3. For flights in areas where local altimeter settings are not available, use the forecast minimum altimeter setting. At level off altitude, match baro altimeter to radar or CARA altimeter and cross-check every 15 minutes **(T-3).**

Chapter 5

OPERATIONAL

5.1. Checklists.

5.1.1. Momentary hesitations for coordination items, Air Traffic Control (ATC) interruptions, and deviations specified in the flight manual, etc., are authorized.

5.2. Duty Station. A qualified pilot will be in control of the aircraft at all times during flight. **Exception:** Senior staff members who have completed the Senior Staff Course or unqualified pilots undergoing qualification training (under the supervision of a Faculty Training Course (FTC)-approved instructor). All crewmembers will be at their duty station or in an approved seat during all takeoffs, departures, AR, approaches and landings. During other phases of flight, crewmembers may leave their duty station for brief periods of time. The IP seat should be occupied to assist the crew in avoiding other aircraft during takeoff, departure, low level, penetration, approaches and landings when additional aircrew personnel are aboard. Crewmembers will notify the crew area commander (e.g., AC, TC, or AMS as applicable) prior to departing assigned primary duty stations. **(T-3).**

5.3. Flight Deck Entry. PIC may authorize passengers and observers access to the flight deck during takeoff, climb, AR, descent and landing only if seats with seat belts are available. Passengers will not be permitted access to the pilot or copilot position. During takeoff and landing, observers will be seated in a seat approved for use in takeoff and landing with appropriate safety belts and shoulder harnesses fastened. **(T-3).**

5.4. Takeoff and Landing Guidance. The pilot flying must be current and qualified for the maneuver being flown or under direct IP supervision if regaining currency or undergoing upgrade qualification training. **(T-3).**

5.5. Seat Belts.

5.5.1. Crewmembers occupying the pilot, copilot, navigator, or additional crewmember positions will have seat belts fastened at all times in accordance with T.O. procedures unless crew duties dictate otherwise. **(T-3).**

5.5.2. All crewmembers will be seated with seat belts and shoulder harnesses fastened during takeoff and landing. For taxi and AR operations, all aircrew members should (passengers will) be seated with seatbelts fastened, unless crew duties dictate otherwise. Crewmembers performing instructor or flight examiner duties are exempt from seat belt requirements during non-critical phases of flight; however, a seat with an operable seat belt will be assigned and should be used unless it would interfere with performance of duties. **(T-3).**

5.6. Communications Guidance.

5.6.1. Command Radios.

5.6.1.1. The pilot normally makes all ATC radio calls but other crewmembers, such as the navigator, may be required to assist, as applicable.

5.6.1.2. In terminal areas the pilot, copilot, and navigator, will monitor the primary command (ATC) radio unless directed otherwise. The navigator or designated crewmember should monitor C2 frequencies on the inbound and outbound leg, during

takeoff, climb-out, AR, descent, approach, landing and traffic pattern operations, unless otherwise directed. **(T-3).**

5.6.1.3. Both pilots will monitor UHF Guard (VHF Guard when appropriate) frequency regardless of primary radio. The navigator should monitor Guard during receiver AR and at the ACs discretion during other times. Pilots normally will not monitor GUARD during receiver aerial refueling. **(T-3).**

5.7. Runway, Taxiway, and Airfield Requirements. Minimum runway requirements for RC-135 aircraft are 8,000 feet length and 147 foot width. Minimum runway requirements for TC/OC/WC-135 aircraft are 7,000 feet length 147 foot width. Minimum taxiway width for RC/TC/WC-135 is 74 feet. OC-135 minimum taxiway width is 50 feet. **(T-3).**

5.7.1. The PIC should use marshallers and wing walkers or deplaned crewmembers to act as observers while maneuvering on the ramp or taxiways with less width than specified in this manual or aircraft clearance from equipment (e.g., vehicles or parked aircraft) may be a concern. **(T-3).**

5.7.2. Landing distance will be computed based on actual aircraft configuration and runway conditions and will include flare distance and ground roll. C-135 aircraft will normally use 80% delayed braking factor. ACs may elect to use up to 90% delayed braking factor as an exception on a case by case basis if operationally necessary for full stop landings. OG/CC, or appropriate EOG/CC or O-6 with EOG/CC authority, approval is required for full-stop landings planned with greater than 90% delayed braking factor. OG/CC, or appropriate EOG/CC or O-6 with EOG/CC authority can delegate this waiver authority to the SQ/CC, DETCO on a case-by-case basis or for the duration of a deployment. **(T-3).**

5.7.3. Operations runways with grooved or porous surfaces: An RCR 15 may be used to compute critical field length, critical engine failure speed, and refusal speed for all operational and training missions when reported “wet” runway conditions exist. If a numerical RCR or Runway Surface Condition (RSC) is reported, crews must still us the reported value for TOLD calculations. This authorization does not apply to landing data computations or when standing water is on the runway. Determination of standing water versus wet runway conditions will be made by the OG/CC or appropriate EOG/CC or O-6 with EOG/CC authority. **(T-3).**

5.8. Aircraft Taxi Obstruction Clearance and Takeoff Criteria.

5.8.1. Intersection takeoffs may be accomplished provided the operating environment (i.e., gross weight, obstructions, climb criteria, weather, etc.) will allow a safe takeoff and departure using reduced thrust procedures. This decision to make intersection takeoffs rests solely with the PIC.

5.9. Fuel Reserves and Alternate Airport Requirements.

5.9.1. Fuel Requirements. Plan all missions to arrive overhead destination or worst case alternate fix with no less than 15,000 pounds fuel reserve, or in accordance with AFI 11-202V3, whichever is greater. **(T-3).**

5.9.2. Minimum landing fuel is 12,000 pounds. If it becomes apparent the aircraft will land with 12,000 pounds of fuel remaining or less, declare "Minimum Fuel" and land short of destination; or divert as required. **(T-3).**

5.9.3. Emergency landing fuel is 10,000 pounds.

5.10. Fuel Jettisoning. No prior approval is required for fuel jettisoning during an aircraft emergency when immediate reduction of gross weight is a critical factor in safely recovering aircraft/personnel. If possible, record altitude, position and winds aloft. When the situation permits, notify the controlling agency of actions and location of fuel jettisoning. **(T-3).**

5.10.1. Record all pertinent data to include flight conditions, altitude, airspeed, air temperature, wind direction and velocity, type and amount of fuel, aircraft type and position at time of jettison, time and duration of jettison activity, and reason jettison was accomplished. **Note:** Unit commanders will retain the fuel jettison information for 6 months as documentation in the event of claim against the government resulting from fuel jettison. **(T-3).**

5.10.2. ACs will obtain SQ/CC, DETCO, or DO approval for fuel jettison when immediate reduction of gross weight is not required. **(T-3).**

5.11. Autopilot Failure. With any axis of the autopilot inoperative, the crew duty period is restricted to 12 hours un-augmented or 16 hours augmented. SQ/CC or DETCO, is the waiver authority. **(T-3).**

5.12. Adverse Weather. Do not fly in any severe conditions (i.e., severe icing or turbulence). A short climb or descent through forecast severe and/or actual moderate conditions are permitted at the discretion of the PIC, however sustained flight in these conditions are prohibited. The following will mitigate exposure to thunderstorm hazards when operating in the vicinity of an aerodrome in an area where thunderstorms are occurring or are forecast. Aircrews will: **(T-3).**

5.12.1. Try to maintain VMC.

5.12.2. Maintain at least a 5 NM separation from heavy rain showers.

5.12.3. Not takeoff or land under conditions of freezing rain or freezing drizzle or when thunderstorms are producing hazardous conditions (such as hail, strong winds, gust fronts, heavy rain, wind shear, or microbursts). **(T-3).**

5.12.4. Avoid areas of high lightning potential, i.e., clouds within plus or minus 5000 feet of the freezing level.

5.13. Pre-Flight.

5.13.1. AFTO Form 781, *AFORMS—ARMS Aircrew/Mission Flight Data Document*. The exceptional release must be signed before flight. Ensure that the Air Force fuel identaplate is aboard the aircraft. **(T-3).**

5.13.2. Crewmembers may perform aircraft servicing duties when qualified maintenance support is not available. Crewmembers may augment maintenance refueling teams at en route stops.

5.13.3. The PIC will ensure aircrews that turn aircraft without qualified maintenance specialist assistance comply with the appropriate maintenance T.O. In addition, the AC will enter a red dash symbol in the AFTO Form 781H, *Aerospace vehicle Flight Status and Maintenance*, updating current status, and enter a red dash symbol in a discrepancy that reflects that the applicable maintenance inspection (i.e., preflight, through-flight, basic post-flight) is overdue. **(T-3).**

5.14. Departure.

5.14.1. Mission departures are considered on time if the aircraft is airborne within plus or minus 30 minutes of scheduled takeoff time.

5.14.2. Scheduled takeoff time may be adjusted as necessary to meet the rendezvous time. Notify scheduling and controlling agency of any deviations affecting the control time.

5.15. Navigation.

5.15.1. Crews may fly with a laptop or approved Electronic Flight Bag capable of providing a moving map display, from an approved GPS/ADS-B In receiver for training or operational missions.

5.15.2. Crews may utilize commercial mission planning software (i.e., ARINC, Jeppesen, ForeFlight) for mission planning/flight plan filing and fuel predictions (with appropriate Flight Performance Module (FPM) installed).

5.15.3. Equal Time Point guidance does not apply to tactical operations conducted over open water where fuel planning for a return to the primary recovery base or recovery to an Equal Time Point (ETP), as required for flight, and annotate the ETP (digital/paper), or utilize onboard navigational equipment. The ETP may be calculated and displayed via the Flight Management System (FMS) in real-time, if available.

5.15.4. Airspace and equipment certifications will be documented, as required, in the AFMAN 11-2RC-135 V3 55 Wing Supplement and specific aircraft T.O. **(T-3).**

5.15.5. C-135 crews may utilize the FMS function (Cold Temperature Compensation), where available and required, for Cold Weather Altitude Corrections instead of utilizing the Flight Information Handbook.

5.16. Customs, Insect, and Pest Control.

5.16.1. No personnel should leave the aircraft prior to a Customs inspection unless authorized by the PIC, Customs Agent, or as directed below:

5.16.1.1. The minimum number of maintenance personnel may leave the aircraft once pulling into the chocks unless directed otherwise by the Customs Agent.

5.16.1.2. Emergency or extenuating circumstances but the PIC must notify the Customs Agent as soon as possible.

5.16.2. ACs will ensure required pest control is accomplished according to DODD 4500.54E, *DOD Foreign Clearance Program*; or as directed by higher headquarters. Certify the spraying on Customs Form 7507, *General Declaration* or on forms provided by the host country. **(T-0).**

5.16.3. When seeing any insect or rodent infestation of the aircraft inflight, notify the destination command and control agency, base operations, or airport manager of the situation before landing so the proper authorities can meet the aircraft.

5.16.4. On arrival, open cargo doors or hatches to allow entry of officials required to inspect the aircraft for insect or rodent infestation or to de-plane the minimum number of crewmembers required to chock the aircraft. Do not load or unload cargo or passengers until the inspection is completed. This procedure may be altered to satisfy mission or local requirements.

5.17. Arresting Cables. (Does not include recessed cables)

5.17.1. RC-135 aircraft will ensure all approach end barriers and cables are removed prior to recovery. TOLD calculations must support a full stop landing before the departure end cable/barrier. **(T-3).**

5.17.2. If time or operational constraints dictate, the AC may taxi over approach end cables and use the remaining runway for takeoff.

5.17.3. PICs will account for runway available from the approach end to the departure end cable/barrier. TOLD calculations must support a departure or a full stop abort before the departure end cable/barrier. **(T-3).**

5.18. Alert. Alert procedures will be initiated by the applicable squadron commander or DETCO, when mission requirements require a quick response to HHQ taskings. The applicable squadron commander or DETCO is the waiver/modification authority for C-135 alert procedures.

5.18.1. ALPHA Alert. Aircrew is capable of launching within one (1) hour of crew notification. Crews should be quartered near the alert aircraft with sufficient transportation to launch in accordance with mission timing. Crew members are given 12-hours of pre-alert crew rest. A crew will not stay on ALPHA alert duty for more than 48 hours. After 48 hours, the crew must be launched, released, or entered into pre-departure crew rest. Crew duty begins when the PIC is notified of the launch order.

5.18.2. BRAVO Alert. Aircrew is capable of launching within four (4) hours of crew notification. Crew members are given 12-hours of pre-alert crew rest. After crew rest, they are placed on telephone standby. A crew will not stay on BRAVO alert duty for more than 48 hours. After 48 hours, the crew must be launched, released, or entered into pre-departure crew rest. Crew duty begins when the PIC is alerted for duty.

Chapter 6

LOCAL SUPPLEMENT

6.1. General. The 55 OG supplement should be distributed to MAJCOM/NAF OPRs, as applicable. This supplement should not duplicate and will not be less restrictive than the provisions of this or any other publications without prior authorization from the appropriate MAJCOM/NAF OPR.

Chapter 7

C-135--AIRCRAFT SECURITY

7.1. General. This chapter provides guidance on aircraft security and preventing and resisting aircraft piracy (hijacking) of C-135 aircraft. AFI 13-207-O, *Preventing and Resisting Aircraft Piracy (Hijacking) (FOUO)*; AFI 31-101, *Integrated Defense*; and specific MAJCOM security publications contain additional guidance. Aircrews will not release information concerning hijacking attempts or identify armed aircrew members or missions to the public.

7.2. Protection Levels (PL). Aircraft security at a non-US or non-AF military installations is the responsibility of the TACON authority to coordinate and ensure it meets the PL requirements. **(T-3).**

7.2.1. The RC/WC-135 is designated a security PL 2 (or equivalent) resource when on alert, when deployed OCONUS (not to include Alaska or Hawaii), or when Sensitive Compartmented Information (SCI) configured. **Note**: Aircraft are considered SCI configured when they are "mission loaded" for SCI operations. It is a PL 3 (or equivalent) resource at all other times. At contractor facilities, the RC/WC-135 must receive the same level of security required for PL 2 (or equivalent) resources under AF control.

7.2.2. The OC-135 should be treated as PL 3 when operational and have crew entry chute locked when left unattended. It is a PL 4 when used for training or in depot status. **(T-3).**

7.2.3. The TC-135 will be treated as PL 3 to the maximum extent possible. **(T-3).**

7.3. Air Force Physical Security Program. The following security procedures will implement AFI 31-101, requirements for C-135 aircraft:

7.3.1. Aircraft will be secured for the appropriate protection level IAW AFI 31-101 and this manual. **(T-3).**

7.3.2. At non-US and non-AF military installations, the TACON authority and AC will determine the adequacy of local security capabilities to provide aircraft security commensurate with this volume. If security is determined to be inadequate, the aircraft will depart to a station where adequate security is available. **(T-3).**

7.3.3. The security force must be made aware of all visits to the aircraft, as applicable. **(T-3).**

7.3.4. Security support is a continual requirement and is not negated by the presence of aircrew or ground crewmembers. Security force support terminates only after the aircraft doors are closed and the aircraft taxies. **(T-3).**

7.3.5. Ensure Communication Security (COMSEC) and other classified materials are turned in at destination and receipts are obtained for COMSEC and classified material if not stored on the aircraft. Combat crew communications or appropriate command and control agency will provide temporary storage for COMSEC and other classified materials during en route, turnaround, and crew rest stops. **(T-3).**

7.3.6. Ensure all modes and codes are zeroized, as required, and any classified route of flight is erased before leaving the aircraft, as applicable.

7.4. En route Security. The planning agency must coordinate TACON authority to ensure adequate en route security is available. If required, ACs will receive a threat assessment and an en route security capability evaluation briefing from local Security Forces Squadron (SFS) and/or the Office of Special Investigations (OSI) for areas of intended operation prior to home station departure and should request updates from en route Command, Control, and Communications (C3) agencies as required. If required, a Fly Away Security (FAS) team will be assigned to the mission as requested by the appropriate TACON authority. Reference AFI 31-101 for FAS program procedures. **(T-3).**

7.4.1. The FAS team is responsible to the AC at all times and the AC will ensure the FAS team members receive a full aircrew briefing. **(T-3).**

7.4.2. The PIC will assess the local situation and take the following actions as required. **(T-3).**

7.4.2.1. Request area security post or patrols from local security forces commensurate with appropriate designated protection level.

7.4.2.2. During short ground times, direct crewmembers to remain with the aircraft and maintain surveillance of aircraft entrances and activities in the aircraft vicinity.

7.4.2.3. If local security forces are unavailable or are unacceptable to the AC and the crew has not been augmented with a FAS team, the PIC may waive the flight duty period limits and crew rest requirements and depart as soon as possible for a base considered reliable. Report movement and intentions to the controlling agency as soon as practical. If departure is not possible, the aircrew must secure the aircraft to the best of their ability (2-3 people are recommended to secure the aircraft). In no case will the entire crew leave the aircraft unattended. Crew rest requirements will be subordinate to aircraft security when the airframe may be at risk. The AC should rotate a security detail among the crew to provide for both aircraft protection and crew rest until relief is available. Request security assistance from the nearest DOD installation, US Embassy, local military, or law enforcement agencies as appropriate.

7.4.2.4. Unescorted entry is granted to aircrew members and support personnel assigned to the mission who possess their home station AF Form 1199D, *USAF Restricted Area Badge(Blue) (Accountable)*, supported by an Entry Access Letter (EAL), aircrew orders, and all others must be escorted within the area. Aircrew members and assigned crew chiefs are authorized escort authority. Normally, non-US nationals, such as cargo handlers, can perform their duties under escort and should not be placed on the EAL.

7.4.3. When parking on a secure ramp, the aircraft will normally be left unlocked to allow ground support personnel immediate access. If the PIC determines that security is necessary (professional gear or personal items left on the aircraft), the crew will use only breakable seals (i.e., forestry service "boxcar" seals, safety wire, etc.). **(T-3).**

7.4.3.1. If ground personnel need to access a sealed aircraft, they will request permission from local command and control agency, which will log the breach in their logbook and notify the crew at alert time. Ground personnel will reseal the aircraft using similar means. **(T-3).**

7.4.3.2. If unauthorized entry is suspected or an unauthorized seal breakage occurs report via the appropriate Air Force-approved form for an AC's report on services or facilities.

7.4.4. When parking on a ramp where the PIC determines that security may be a problem, the aircraft will be sealed or locked. If further security is required, other measures (Security Forces teams, local security, etc.) will be utilized. **(T-3).**

7.5. Detecting Unauthorized Entry. If, in the PIC's judgment, the aircraft needs to be locked and sealed in order to detect unauthorized entry, then:

7.5.1. Use available aircraft ground security locking devices.

7.5.2. Secure the hatches and doors in a manner that will indicate unauthorized entry (e.g., tape inside of doors and hatches to airframe so that entry pulls tape loose).

7.5.3. Close and lock the main crew entrance door.

7.5.4. Wipe the immediate area around lock and latches clean to aid in investigation of a forced entry.

7.5.5. Report any unauthorized entry or tampering to the Office of Special Investigation (OSI), security forces or local authorities, and the C3 agency. Have aircraft thoroughly inspected prior to flight.

Chapter 8

AIR REFUELING (AR)

8.1. A/R without Tanker Disconnect Capability. Without tanker disconnect capability means the boom operator cannot trigger an immediate disconnect. Do not attempt further contacts with a tanker after a known loss of tanker disconnect capability **Exception:** Fuel emergency situations, OPLAN 801X, airborne alert, receiver over water deployment or redeployment and operational missions. **(T-3).**

8.2. Manual/Emergency Boom Latching. To complete training or evaluation in manual/emergency boom latching procedures, the following conditions must be met:

8.2.1. An instructor pilot (IP) must directly supervise the receiver activity on board receiver aircraft. **(T-3).**

8.2.2. Contacts must be limited to the minimum required. **(T-3).**

8.2.3. Receiver AR system must be fully operable. **Note:** Receiver pilot and boom operator must coordinate all actions as required by applicable directives when making AR contacts during the situations listed above. **(T-3).**

8.3. Prohibited Refueling Maneuvers. When operating in manual/emergency boom latching or when the tanker does not have disconnect capability, the following maneuvers are prohibited: **(T-3).**

8.3.1. Practice emergency separation while in contact.

8.3.2. Demonstration of boom envelope limits.

8.4. Practice Emergency Separation.

8.4.1. Prior to actual accomplishment of a practice emergency separation, coordination is mandatory between the tanker pilot, boom operator, and receiver pilot on when the separation will occur and who will give the command for separation. **(T-3).**

8.4.2. If separation is initiated from the contact position, the receiver's AR system must be in NORMAL and a boom operator initiated disconnect capability with the receiver must have been demonstrated. **(T-3).**

8.4.3. Practice emergency separations may be accomplished with passengers onboard.

8.5. Limits Demonstrations. Limits demonstrations will only be flown under direct IP supervision and only after a tanker disconnect capability is demonstrated **(T-3).**

Chapter 9

MISSION PLANNING

9.1. Mission Development/Planning. The SQ/DO or DETDO, if applicable, will actively direct the execution of the unit's flying schedule. The SQ/DO will ensure that all operations personnel provide crews with the requisite support to plan and execute mission. The SQ/DO will ensure crews/mission planners have no barriers to mission planning and ensure that every mission is thoroughly planned, briefed, executed, and debriefed, as applicable. The PIC has overall responsibility for mission material accuracy and review. **(T-3).**

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Deputy Chief of Staff, Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 11-2, *Aircrew Operations,* 31 January 2019

AFPD 11-4, *Aviation Service,* 12 April 2019

AFI 11-202V3, *General Flight Rules,* 10 August 2016

AFI 11-202V3_ACCSUP, *General Flight Rules,* 07 July 2019

AFMAN 11-2RC-135V1, *RC/OC/WC/TC-135—Aircrew Training,* 13 September 2019

AFMAN 11-217, *Flight Operations*, 10 June 2019

AFI 11-401, *Aviation Management*, 10 December 2010

AFI 13-207-O, *Preventing and Resisting Aircraft Piracy (Hijacking)(FOUO),* 5 February 2019

AFI 31-101, *Integrated Defense (ID),* 5 July 2017

AFI 33-360, *Publications and Forms Management,* 1 December 2015

AFI 33-322, *Records Management and Information Governance Program,* 6 March 2020

AFI 36-3003, *Military Leave Program,* 11 May 2016

DODD 4500.54E, *DOD Foreign Clearance Program*, 24 May 2017

DODI 7730.67, *Aviation Incentive Pays and Bonus Program,* 20 October 2016

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AF Form 1199D, *USAF Restricted Area Badge (Blue) (Accountable)*

AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*

AFTO Form 781H, *Aerospace Vehicle Flight Status and Maintenance*

Customs Form 7507, *General Declaration*

Abbreviations and Acronyms

AC—Aircraft Commander

ACC—Air Combat Command

AR—Air Refueling

ASE—Airborne Systems Engineer

ATC—Air Traffic Control

C2—Command and Control

C3—Command, Control, and Communications

CFIC—Centralized Flight Instructor Course

CML—Crew Manning Letter

COCOM—Combatant Command

COMSEC—Communications Security

CONOP—Concept of Operation

EAL—Entry Access Letter

EFAS—Engine Failure Assist System

ELINT—Electronic Intelligence

ETP—Equal Time Point

FAS—Fly Away Security

FLIP—Flight Information Publication

FMS—Flight Management System

HQ—Headquarters

IFR—Instrument Flight Rules

IAP—Instrument Approach Plate

IAW—In Accordance With

INS—Inertial Navigation System

IP—Instructor Pilot

LAO—Low Altitude Operations

MAJCOM—Major Command

MDS—Mission Design Series

MEP—Mission Essential Personnel

NAF—Numbered Air Force

OCR—Office of Collateral Responsibility

OPCON—Operational Control

OPLAN—Operation Plan

OPORD—Operations Order

OPR—Office of Primary Responsibility

OSI—Office of Special Investigation

PIC—Pilot in Command

PL—Protection Level

RCR—Runway Condition Reading

RVR—Runway Visual Range

SCI—Sensitive Compartmented Information

SDP—Standard Departure Procedure

STP—Scientific Technical Processor

TACON—Tactical Control

T.O.—Technical Order

TOLD—Take-off and Landing Data

USSID—United States Signals Intelligence Directive

VMC—Visual Meteorological Condition

Terms

Additional Crewmember—Individual possessing valid aeronautical orders, who is not required to perform in-flight duties and is assigned in addition to or authorized to accompany the normal crew complement required for that mission according to **Chapter 3** of this volume. Additional crewmembers may not log flying time unless specifically authorized in this volume.

Administrative Control—Direction or exercise of authority over subordinate or other organizations in respect to administration and support, including organization of Service forces, control of resources and equipment, personnel management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations. Also called **ADCON**.

Combatant Command—A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have geographic or functional responsibilities.

Combatant Command (command authority)—Nontransferable command authority established by title 10 ("Armed Forces"), United States Code, section 164, exercised only by commanders of unified or specified combatant commands unless otherwise directed by the President or the Secretary of Defense. Combatant command (command authority) cannot be delegated and is the authority of the combatant commander to perform those functions of command over assigned forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command. Combatant command (command authority) should be exercised through the commanders of subordinate organizations. Normally this authority is exercised though subordinate joint force commanders and service and/or functional component commanders. Combatant command (command authority) provides full authority to organize and employ commands and forces, as the combatant commander considers necessary to accomplish assigned missions. Operational control is inherent in combatant command (command authority). Also called **COCOM**.

Critical Phases of Flight—Takeoff, AR, approach to landing, landing, flight maneuvers that require direct instructor supervision, and designated formal training unit, Combat Training Squadron (CTS) or Centralized Flight Instructor Course (CFIC) only maneuvers. Approaches to

planned missed approaches and air refueling rendezvous are not considered critical phases of flight. This definition applies only to this AFMAN.

Delay—Failure of an aircraft to depart due to maintenance or operational reasons at the scheduled departure time plus 30 minutes.

Execution—Command-level approval for initiation of a mission or portion thereof after due consideration of all pertinent factors. Execution authority is restricted to designated command authority.

Experienced Crewmember—Requirements listed in AFMAN 11-2RC-135V1. Individual must also be designated "experienced" by the squadron commander.

Fuel Reserve—Amount of usable fuel carried beyond that required to complete the flight as planned.

Ground Time—Interval between arrival in the blocks and next takeoff time.

HHQ Missions—Missions executed at or above the NAF. HHQ missions include: deployment, redeployment, reconnaissance operations, Open Skies Joint Trial/Treaty Flights, Operational Readiness Inspections ORIs, and Programmed Depot Maintenance (PDM) input/output. Exercise missions flown in support of HHQ exercise, example GREEN FLAG, COPE THUNDER, FLEETEX, etc., are also considered HHQ missions as well as exercise support to classified users or executed as directed on an operational or exercise Air Tasking Order.

Mission—Movement of aircraft from a designated point of origin to a designated destination as defined by assigned mission identifier, mission nickname, or both in the schedule, mission directive, OPORD or OPLAN.

Operational Control—Transferable command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority). Operational control may be delegated and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and service and/or functional component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces, as the commander in operational control considers necessary to accomplish assigned missions. Operational control does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. Also called **OPCON**.

Over-Water Flight—Any flight that exceeds power-off gliding distance from land.

Primary Position—Any seat in which you can log "Primary flight time" per AFI 11-401: ―Log primary flight time only when performing duties at a duty position established for that specialty. (i.e., Instructor seats and crew rest seats are not considered primary positions, with the exception of ASE's).

Scheduled Takeoff Time—Takeoff time as established in the schedule or operations order (OPORD).

Tactical Control—Command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned. Tactical control is inherent in operational control. Tactical control may be delegated to, and exercised at any level at or below the level of combatant command. Also called **TACON**.

Training Mission—Mission executed at the unit level for the sole purpose of aircrew training for upgrade or proficiency. Does not include operational missions as defined in this volume