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Flying Operations

C-38 OPERATIONS PROCEDURES

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This instruction implements Air Force Instruction (AFI) 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, and references AFI 11-202, Volume 3, *General Flight Rules*. It establishes policy for the operation of the C-38 aircraft to safely and successfully accomplish worldwide mobility missions. This instruction applies to the Air National Guard (ANG). This instruction does not apply to the US Air Force Reserves or the Civil Air Patrol. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

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Order 9397, *Numbering System for Federal Accounts Relating to Individual Persons*, November 22, 1943 as amended by Executive Order 9397, *Relating to Federal Agency Use of Social Security Numbers*, November 18, 2008. The Paperwork Reduction Act of 1995 affects this instruction.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. This version incorporates changes mandated by the AMC/A3V standardized template. Major changes include: aligning this document to the new AMC/A3V AFI 11-2MDSV3 template and removal of the C-22B aircraft along with all references to Flight Attendants and Flight Engineers.

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Chapter 1

GENERAL INFORMATION

1.1. General.

1.1.1. This AFI provides policy for operating the C-38 aircraft. It is an original source document for many areas but, for efficacy, restates information found in aircraft flight manuals, flight information publications (FLIP), and other Air Force directives. When guidance in this AFI conflicts with another basic/source document, that document takes precedence. For matters where this AFI is the source document, waiver authority is In Accordance With (IAW) **paragraph 1.4** of this AFI. For matters where this AFI repeats information in another document, follow waiver authority outlined in the basic/source document.

1.1.2. Unit commanders and agency directors involved with or supporting C-38 operations shall make current copies of this AFI available to appropriate personnel. Transportation and Base Operations passenger manifesting agencies will maintain a current copy of this AFI.

1.2. Applicability. This AFI applies to individuals, aircrew members, support personnel, and managers involved with operating or supporting the C-38.

1.3. Key Words Explained.

1.3.1. "Will" and "shall" indicate a mandatory requirement.

1.3.2. "Should" indicates a preferred, but not mandatory, method of accomplishment.

1.3.3. "May" indicates an acceptable or suggested means of accomplishment.

1.3.4. "NOTE" indicates operating procedures, techniques, etc., considered essential to emphasize.

1.3.5. "CAUTION" indicates operating procedures, techniques, etc., which could result in damage to equipment if not carefully followed.

1.3.6. "WARNING" indicates operating procedures, techniques, etc., which could result in personal injury or loss of life if not carefully followed.

1.4. Deviations and Waivers. Do not deviate from policies in this AFI except when the situation demands immediate action to ensure safety. The Pilot in Command (PIC) is vested with ultimate mission authority and is responsible for each course-of-action taken.

1.4.1. Deviations. The Pilot in Command (PIC) shall report deviations or exceptions taken without waiver through 201 AS/DOV to NGB/A3OM who in turn shall notify NGB/A3.

1.4.2. Waivers. Unless otherwise directed, waiver authority for the contents of this instruction is NGB/A3. Waiver for contingency missions will be listed in the Operations Order (OPORD)/Air Tasking Order (ATO).

1.4.2.1. Due to the unique nature of ANG C-38 missions, waiver authority for specific areas of this instruction are delegated to the unit wing, group or squadron commander. Areas in which the waiver authority is delegated to wing, group or squadron leadership are specifically annotated in this regulation. Waiver authority for those areas not

specified in this regulation as delegated to wing, group or squadron level is at the NGB/A3 level. All waivers and waiver requests prior to mission execution to any provision of this instruction must be reported to 201 AS/DOV through applicable C2 centers. Unit C2 centers are mission operations and squadron operations center (SOC), as applicable.

1.4.2.2. Long-term waivers affect multiple aircraft/multiple missions but are not permanent in nature (expire at a specific date/time). NGB/A3 will maintain copies of all long-term waivers.

1.4.2.3. Nothing in this Instruction shall be interpreted to prohibit a commander from withholding waiver authority, to include waiver authority delegated by this Instruction.

1.4.3. Waiver reporting. Waiver requests for missions in execution will be coordinated with NGB/A3. PIC's must report all waiver requests to 201 AS/DOV through applicable C2 centers. Informational copies will be sent to the Air National Guard Command Center (NGB/A3XC).

1.5. Supplemental Procedures. This AFI is a basic directive. Each user MAJCOM or operational theater may supplement this AFI according to AFI 11-200. Stipulate unique MAJCOM procedures (shall not be less restrictive than this basic document) and publish MAJCOM/A3/DO-approved permanent waivers in the MAJCOM supplement.

1.5.1. Combined Command Operations. Plan and conduct all operations that include forces from multiple MAJCOMs using provisions in this AFI. Do not assume or expect aircrews to perform MAJCOM theater unique procedures without owning MAJCOM/A3/DO approval and advance training.

1.5.2. Coordination Process. Forward MAJCOM approved supplements (attach AF Form 673, *Air Force Publication/Form Action Request*) to NGB/A3OM who shall facilitate the AMC/A3 and HQ AFFSA/A3O approval process.

1.6. Local Supplement Coordination Process. Operations Group commanders (OG/CCs) shall define local operating procedures to this instruction in a unit supplement. OG/CCs or equivalent shall obtain NGB/A3 approval prior to releasing the local supplement. NGB/A3OM will maintain an electronic copy of the approved supplement. The local supplement shall not be less restrictive than this parent regulation.

1.7. Requisition and Distribution Procedures. Unit commanders may provide copies to aircrew members and associated personnel.

1.8. Improvement Recommendations. Send comments and suggested improvements to this instruction on an AF Form 847, *Recommendation for Change of Publication*, through channels to NGB/A3 IAW procedures in AFI 11-215, *USAF Flight Manual Program (FMP)* and MAJCOM Supplement.

1.9. Definitions. Find explanations or definitions of terms and abbreviations commonly used in the aviation community in Code of Federal Regulations (CFR) Title 14, Part 1; *DoD FLIP General Planning*, Chapter 2; and Joint Pub 102, *The DoD Dictionary of Military and Associated Terms*. See [Attachment 1](#) for common terms used herein.

1.10. Aircrew Operational Reports. The reporting requirements in this instruction are exempt from licensing IAW paragraph 2.11.10. of AFI 33-324, *The Information Collections and Reports*

Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections.

Chapter 2

COMMAND AND CONTROL

2.1. General. The Mobility Air Forces (MAF) command and control (C2) network consists of the following C2 centers: 618 Tanker Airlift Control Center (618 TACC), Pacific Air Forces (PACAF) or United States Air Forces Europe (USAFE) Air and Space Operations Centers (AOCs), Air National Guard (ANG) Readiness Center, Air Force Reserve Command (AFRC) Command Center, theater Air and Space Operations Centers (AOC), Air Mobility Division (AMD), Joint Operational Support Airlift Center (JOSAC), Special Air Missions Division, Office of Assistant Vice Chief of Staff, USAF (CVAM), Unit Command Posts, Air Mobility Control Centers (AMCC), Contingency Response Groups (CRG), Contingency Response Elements (CRE), and Special Tactics Teams (STT). C2 centers are action agents for the MAF commander with execution authority (operational control) over mobility missions/forces.

2.2. Mission Execution Authority. Headquarters commanders with command authority over MAF resources hold execution authority for directed missions. Commanders with execution authority formulate plans, allocate assets, and approve missions through a local command post or C2 staff. OG/CCs serve as execution authority for local training missions and may approve transition training on positioning/depositioning legs in coordination with the appropriate office (CVAM, AMD, NGB/A3, WHMO, etc). The pilot in command will execute missions operating outside normal communication channels (use last known mission orders or best course of action).

2.2.1. AMC. All active duty operational units, including the Presidential Airlift Group (PAG) (part of the 89th Airlift Wing (89 AW), are aligned under 18 AF. CVAM is responsible for tasking and scheduling CONUS-based VIP aircraft other than Presidential Airlift. All requirements involving movement of VIP aircraft are coordinated with AF/CVAM, through unit C2 staff. Unit C2 staff serve as the single point-of-contact (POC) within the wing for mission assignments from AF/CVAM. Unit current operations or SOC provide support to the wing commander to ensure missions are planned between the PIC and CVAM. During the execution phase, mission changes are passed from the on-board contact to the PIC, who will assess impact to the crew (crew rest, crew duty day, weather, airfield suitability, etc.). PIC will forward the request to unit C2, then to CVAM for approval. PIC must ensure the on-board contact is aware that final approval is from CVAM.

2.2.2. USAFE/PACAF. Tasking and execution approval will be IAW command/local supplements.

2.2.3. ANG. Mission validation from AF/CVAM will be received through NGB/A3XE. ANGRCC/CC controls 201 AS missions in liaison with AF/CVAM for C2 of CVAM tasked missions. JOSAC is execution authority for OSA missions. Unit C2 acts as a 24 hour POC.

2.2.4. PAG/Presidential Support. WHMO is responsible for tasking Presidential Aircraft and Presidential Flight Support Aircraft. Non-operational PAG flights that are "atypical" in any respect, including those that have any unique aspects or that may attract public or media interest, concern or criticism, must be reported at least ten days in advance, if feasible, through the AMC chain of command and approved by AMC/CC or AMC/CV following coordination with AMC/A3, PA and JA. Details concerning routine non-operational PAG

flights (flights that are not “atypical” in any respect) will be reported to 89 AW/CC prior to the mission.

2.2.5. Off-Station Trainer (OST). The Wing Commander (WG/CC) is mission approval authority for unit OST’s (may be delegated to the OG/CC or equivalent). Commanders will carefully review proposed OST itineraries to weigh costs/benefits and minimize impact and maximize benefit to the unit’s aircrew training program. Forward approved OST itineraries to NGB/A3XE before mission departure.

2.3. Pilot in Command (PIC) Responsibility and Authority. SQ/CCs shall designate an aircraft commander (AC), instructor pilot (IP), or evaluator pilot (EP) as the PIC for all flights, on a flight authorization form, IAW AFI 11-401, *Aviation Management*, and applicable supplements. This includes AC upgrade candidates on an Operational Mission Evaluation (OME). An unqualified or non-mission ready pilot may not be designated as PIC. PICs are:

2.3.1. In command of all persons aboard the aircraft.

2.3.2. Vested with authority to accomplish the assigned mission. The PIC shall only fly events authorized in the mission tasking unless, in the PIC’s judgment, an emergency condition demands otherwise. Fly unscheduled training events (for example, air refueling (AR) or transition training) after obtaining approval of the execution authority.

2.3.3. The final mission authority and will make decisions not assigned to higher authority.

2.3.4. The final authority for requesting or accepting aircrew or mission waivers.

2.3.5. Responsible for passing mission progress reports (at least daily) to C2 agents. PICs will inform C2 agents of factors that may impact mission accomplishment. When transiting a stop without a C2 agent, the PIC shall enter mission information into the C2 system by the most expeditious means available. PICs will establish a POC with the appropriate C2 agent prior to entering crew rest. Local C2 agents are responsible for coordinating mission support requirements on the PICs behalf.

2.3.6. Responsible for interaction between aircrew members and mission support personnel and will establish a point-of-contact (POC) with the appropriate C2 agent prior to entering crew rest. Local C2 agents are responsible for coordinating mission support requirements on the PIC’s behalf.

2.3.7. Responsible for the welfare of aircrew members, Mission Essential Personnel (MEP), passengers, and the safe accomplishment of the mission.

2.3.8. Responsible for the safe, comfortable, and reliable accomplishment of the mission. It is imperative that the aircrew notify the PIC of all issues that may affect the mission. Aircrews are empowered to make decisions for safety at any time, then notify the PIC of actions taken.

2.4. Mission Clearance Decision. The PIC has final responsibility for safe conduct of the mission and possesses full authority for all mission operational decisions. Conduct all flights with the priorities of **SAFETY** *first*, passenger **COMFORT** *second*, and schedule **RELIABILITY** *third*.

2.4.1. Mission Confirmation. Prior to the first leg of each mission, the PIC will review the mission itinerary, landing locations, other applicable mission requirements with the onboard

contact. Any itinerary discrepancies must be resolved before departure with the C2 agency and mission execution authority through the appropriate C2 channels.

2.4.2. Reroutes and Diverts. PICs may reroute or divert their missions if required due to emergency situations, adverse weather or other unforeseen circumstances. Attempt to coordinate mission diversions in advance with the C2 agency, tasking agency, and dispatch function (if applicable). Before directing an aircraft to an alternate airfield, the C2 agency should ensure the PIC is provided existing and forecast weather, Notice to Airmen (NOTAM), Airfield Suitability and Restriction Report (ASRR) information and airfield security/Phoenix Raven requirements. If the planned alternate becomes unsuitable while enroute, the PIC will coordinate with the C2 agency for other suitable alternates. The C2 agency will coordinate with customs and ground service agencies to prepare for arrival. The PIC is the final authority on the suitability of an alternate airfield.

2.4.3. Mission Changes. Reroutes or other itinerary changes requested by the DV while enroute must be approved by the C2 agency and the mission tasking authority. If the itinerary changes by 1 hour or more, an itinerary change message must be coordinated by the aircrew/C2 to all affected agencies. Itinerary changes of less than 1 hour that affect diplomatic clearance windows must also be coordinated with affected agencies.

2.4.4. Divert Coordination. In the event of an airborne diversion, the PIC will coordinate all required clearances, aircraft servicing requirements and aircraft security arrangements. Contract Dispatch/Flight Management, Unit CP, SOC, AMD will assist the PIC when requested. The PIC will also provide DV and party with all necessary assistance, including obtaining transportation and lodging.

2.5. Operational C2 Reporting. The PIC will report standard Command MAF movement information (departure, arrival, or diversion) to appropriate C2 agencies. Onboard communication/data equipment and Communications Security (COMSEC)/OPORD requirements may dictate messaging methods. The PIC will establish a POC with the local C2 agency, U.S. Embassy, U.S. Consulate, or Fixed Base Operator (FBO) before entering crew rest.

2.5.1. Unusual Circumstances. PICs will immediately notify the C2 agency and tasking agency of any unusual occurrences. This includes maintenance problems, aircraft malfunctions, security and operational concerns. PICs should not wait until arrival to send message if in flight communications are available. However, non-secure communications media should not be used to transmit sensitive information.

2.5.2. Crew Location. Notify the C2 agency of aircrew location and telephone number during each crew rest and any time the crew will leave the immediate vicinity of the aircraft.

2.5.3. Commercial Dispatch Services (CDS)/Integrated Flight Management (IFM) Controlled Missions. The Dispatcher/Flight Managers (FM) are a C2 conduit authorized for VIP missions. Contract Dispatchers/Flight Managers provide the PIC with flight plans, flight following, flight support and act as a C2 link to the C2 agency and Air Traffic Control (ATC). Communication is accomplished via digital data-link, radio, and landline connectivity between MAJCOM C2 with mission execution authority and the aircraft. For critical C2 communications, voice communications via Satellite Communications (SATCOM), Defense Switched Network (DSN), High Frequency (HF) communications, etc.

are the primary method. The C2 agency will determine COMSEC requirements for CLOSE HOLD missions.

2.5.4. HF Communications. HF is the primary means of access to the military worldwide C2 network. During transoceanic flights, pilots will set one HF radio to the ATC frequency and use Selective Calling (SELCAL) if available. The second HF radio should be operated in Automatic Link Establishment (ALE) mode, if available, to support voice contacts between the PIC and MAJCOM C2 with mission execution authority. Frequencies for GLOBAL HF stations are listed in the Flight Information Handbook (FIH).

2.5.5. L-Band SATCOM. L-Band SATCOM provides a worldwide communications capability (secondary to HF). PICs may use L-band SATCOM for routine unclassified communication. Due to large volume of traffic, MAJCOM C2 with mission execution authority will only forward L-Band messages when the PIC specifically requests this service. In this case, the L-Band message to MAJCOM C2 must include, "Relay, no C2 agent (or negative HF contact) at (include station name)" in the message remarks. Limit SATCOM communications to operational traffic. Turn the transceiver and laptop on during preflight and leave it configured to transmit and receive messages until aircraft power down at destination.

2.5.5.1. L-Band SATCOM Messages and Advisories. The PIC, or designee, will transmit an on-station message at the beginning of each crew duty day. The PIC will transmit an arrival advisory to the arrival C2 agency. The PIC will transmit (free-text messages) mission delay, in-flight refuel, and on/off-load reports. **NOTE:** For missions operating through sensitive or classified locations disable the Global Positioning System (GPS) position-reporting feature of the system.

2.5.5.2. Computer management. OG/CC shall develop procedures for management of flight crew mission computers at home station. Aircrews will not leave laptop computers in an unsecured location.

2.5.6. AERO-H/I. The AERO-H/I satellite voice system should be used as an alternate means of communication for aircraft with ALE/L-Band SATCOM messaging capability between the aircraft, C2 agencies, and certain ATC units. AERO-H/I voice is a backup for the controller to pilot datalink system (CPDLC) and C2 communications (datalink and VHF/HF voice). Certain C2 agencies and ATC units may be selected in the AERO-H/I directory.

2.5.6.1. AERO-H/I voice may not be used for routine communications with ATC or for personal use. Also, due to its high cost, other communications options should be considered before using the satellite voice. It should be used for ATC communication only as a backup to CPDLC or as otherwise instructed. AERO-H/I voice may be required as a backup to CPDLC on certain routes.

2.5.7. DV Messages. Airborne unclassified messages originated by DV passengers may be transmitted at the discretion of the Pilot in Command (PIC).

2.6. Mission Commander Responsibilities. For complex missions and multi-sortie events, OG/CC's (or equivalent) may direct designation of a mission commander to act as overall authority for mission execution. When so designated, the mission commander exercises command authority over all mission personnel. Mission commanders will inform the appropriate

mission execution authority through the appropriate C2 staffs of any factors that may affect mission accomplishment.

2.6.1. Unit C2 staff serve as the single POC within the wing for mission assignments from tasking agency. Unit Mission Operations and Unit SOC ensure missions are planned and coordinated with the tasking, dispatch and flight management agencies, as applicable. During the mission planning phase, these agencies are the link between the PIC, C2 agency and MAJCOM with mission execution authority.

2.6.1.1. For all multi-ship operations, (eg., funeral runs and summits), OG/CC will ensure, through the unit C2, that an appropriate level of ground/flight supervision is provided for the entire mission. Emphasis should be placed on who is the overall mission commander for the operation.

2.7. C2 Agency Telephone Numbers. Reference 201 AS In-Flight Guide for a listing of telephone numbers to assist C-38 aircrew in coordinating mission requirements.

2.8. Close Watch Missions. All VIP missions are Close Watch missions and receive special C2 attention. PICs will promptly notify the appropriate C2 agency of delays, aborts, or other events that affect on-time departure and provide the local C2 (CP, flight management, dispatch, etc.) the estimated time in commission (ETIC), planned Estimated Time of Departure (ETD), and Estimated Time of Arrival (ETA) as soon as safety allows. Local C2 agent will notify the C2 agency and mission execution authority when delays are anticipated to occur.

2.9. Law Enforcement Support. It is the policy of the Department of Defense (DOD) to cooperate with civilian law enforcement officials to the maximum extent practicable. AFI 10-801, *Assistance to Civilian Law Enforcement Agencies*, incorporates the appropriate directive and provides uniform policies and procedures to be followed concerning support provided to federal, state, and local civilian law enforcement agencies. It establishes specific limitations and restrictions on the use of Air Force personnel, equipment, facilities and services by civilian law enforcement organizations. Report all requests for assistance and coordinate all requests from civilian law enforcement authorities through C2 channels.

Chapter 3

AIRCREW COMPLEMENT/MANAGEMENT

3.1. General. This chapter provides guiding principles to form/manage mobility aircrews. Commanders at all levels shall follow this policy to form aircrews and to develop aircrew-related work/rest schedules that optimize efficiency of mobility forces engaged in worldwide operations.

3.2. Crew Complement. Minimum crew complement for basic and augmented flight duty periods (FDP) are in [Table 3.1](#)

Table 3.1. Aircrew Complement.

Crew Position	Basic	Augmented
Aircraft Commander*	1	N/A
Pilot	1	N/A

(*). Operations Officer policy on manning overseas missions. The ability to quickly replace crewmembers in the event of an emergency or illness is significantly hindered on overseas missions. Therefore, carry an additional Aircraft Commander on overseas missions.

3.3. Aircrew Qualification. Primary crewmembers or those occupying a primary position during flight, must be qualified (current and valid AF Form 8, *Certificate of Aircrew Qualification*) or in training for qualification in that crew position. **EXCEPTION:** The Chairman of the Joint Chiefs of Staff, the Vice Chairman of the Joint Chiefs of Staff, the Air Force Chief of Staff, the Air Force Vice Chief of Staff, Combatant Commanders, and MAJCOM Commanders, Wing/CC/CV and OG/CC are the only senior officers (O-6 and above) authorized to perform pilot duties on VIP Aircraft. They must be rated Air Force pilots and comply with AFI 11-401.

3.3.1. Unit senior officers completing Senior Officer Qualification course (restricted AF Form 8) or orientation training for a Senior Officer Familiarization flight may occupy a primary crew position when under direct instructor supervision. Refer to AFI 11-401 for procedures and requirements governing senior leader flying.

3.3.2. Crew members who complete the Senior Officer Qualification Course will log “FP” for Flight Authorization Duty Code on the AFTO 781, *ARMS Aircrew/ Mission Flight Data Document*.

3.3.3. Crew members who complete a Senior Officer Familiarization flight will log “OP” for Flight Authorization Duty Code on the AFTO 781, *ARMS Aircrew/ Mission Flight Data Document*.

3.4. Pilots. An IP must supervise non-current or unqualified pilots regaining currency or qualification (direct IP supervision during takeoffs, landings and emergency procedures).

3.4.1. Missions with Passengers. To occupy a pilot’s seat with passengers, pilots must have a current AF Form 8 for the Mission Design Series (MDS)-specific aircraft. For takeoff, approach and landing one of the following conditions must be met:

3.4.1.1. Two qualified and current pilots (1 AC or higher, 1 FP or higher) must be at the controls.

3.4.1.2. A qualified pilot non-current no more than 60 days for flying currency requirements and an IP providing direct supervision (must be at the controls). AC's regaining currency will be designated PIC.

3.4.1.3. A qualified NMR pilot accomplishing phase II qualification training and an IP providing direct supervision.

3.4.1.4. A qualified AC upgrade candidate on an initial or requalification OME and a qualified pilot (FP or higher) under supervision of a qualified EP must be at the controls (AC upgrade candidates will be designated in command).

3.4.1.5. A basic qualified (valid AF Form 8 in MDS-specific aircraft) senior officer who has completed a Senior Officer Qualification course may occupy either pilot seat under direct IP supervision.

3.4.2. Qualification Training. Initial qualification, requalification, or upgrade training (AC upgrade training allowed) for pilots will not be conducted on missions with passengers onboard. Mission qualification training, OMEs, and line training/development missions may be conducted on missions with passengers onboard only if the individual in training is qualified to the applicable level.

3.4.3. Local Training and Evaluation Missions. Non-current or unqualified pilots may perform crew duties under the supervision of a qualified instructor or examiner. If passengers are carried, paragraph 3.4.1. of this AFI applies.

3.4.4. When unit authorized maintenance specialists and/or civilian contractors are flying in the aircraft for the purpose of conducting in-flight maintenance inspections, including touch-and-go landings, the restrictions in paragraph 3.4.1. of this AFI (concerning pilots with passengers) are waived for these specialists/contractors only. However, the maintenance/contractor personnel should be deplaned after completion of the in-flight inspection.

3.5. Not Used.

3.6. Not Used.

3.7. Aircrew Management. SQ/CCs and en route C2 agents shall ensure work/rest cycles permit an aircrew adequate time to safely accomplish mission duties and personal time for rest.

3.7.1. Flight Duty Period (FDP). FDP is the period of time starting at mission report time and ending immediately after the aircrew completes the final engine shutdown of the day. SQ/CCs shall form aircrews based on worst-case FDP in the mission directive. Reduce FDP when the autopilot pitch servo fails after departure IAW information below. If the autopilot fails after departure, consider mission requirements and determine the best course of action to preclude further mission delays due to reduced FDP. The best course of action may include diverting to an airfield with maintenance capability. Contact C2, coordinate intentions, and comply with limitations. **NOTE:** Failure of the autopilot pitch servo does not require a FDP reduction on the leg the failure is experienced.

3.7.1.1. Basic Crew FDP. The maximum FDP for a basic aircrew is 16 hours (12 hours when the autopilot pitch axis is inoperative). All tactical maneuvers will be accomplished within the first 12 hours of the FDP.

3.7.1.1.1. When extended en route ground times, non-optimum routing/winds, weather delays or other extenuating circumstances will increase a basic to an augmented FDP, a PIC with an augmented crew may accept an augmented FDP as long as:

3.7.1.1.1.1. The C2 agent or PIC discovers the extenuating circumstances before the first takeoff of the day.

3.7.1.1.1.2. The PIC verifies all augmenting aircrew members can get adequate rest en route.

3.7.1.1.2. A PIC with a basic crew may seek OG/CC approval to extend the FDP as much as 2 hours to complete a scheduled mission. If mission requirements justify the risk and the PIC is unable to contact the waiver authority, the PIC may extend maximum FDP up to 2 hours. Only use this provision to recover from unscheduled/unplanned en route delays/changes. C2 agents shall not ask PICs to exercise this option. A PIC with a basic crew may seek OG/CC approval to extend the tactical duty day by as much as 2 hours to a maximum of 14 hours.

3.7.1.2. **Not Used.**

3.7.1.3. **Not Used.**

3.7.1.4. **Not Used.**

3.7.1.5. Training FDP.

3.7.1.5.1. Maximum FDP for training, Functional Check Flight (FCF) and Acceptance Check Flight (ACFs) missions is 16 hours (12 hours when the autopilot pitch servo is inoperative). Conduct the mission as follows:

3.7.1.5.2. Complete all FCF/ACF checks and transition events during the first 12 hours of the FDP.

3.7.1.5.2.1. Crews may perform FCF/ACF checks and transition events on local training missions provided their time from start duty does not exceed 16 hours and actual flight duty does not exceed 12 hours.

3.7.1.5.3. Crews may position/de-position to home station or a deployed staging base following training (do not exceed 12 hours when the autopilot pitch servo is inoperative).

3.7.1.6. Technician Status. CDT and FDP include both military and civilian work and begin when an individual reports for their first duty period (military or civilian). (This does not preclude a civilian from starting a pay period prior to the report for their first duty period, only from showing to perform office duties prior to CDT and FDP.)

3.7.2. Crew Duty Time (CDT). CDT is that period of time an aircrew may perform combined ground/flight duties. For planning purposes, 45 minutes will be used as the time to complete post-FDP duties. Plan the mission so aircrew members may complete post-mission

duties within maximum CDT. An aircrew member may perform mission-related duties for other missions when approved by member's home station SQ/CC or equivalent. Maximum CDT is 16+45 hours for a basic aircrew. If the option in para 3.7.1.1.2. is exercised, increase the maximum basic CDT by up to 2 hours.

3.7.3. Except as outlined below, CDT/FDP begins 1 hour after aircrew alert notification. SQ/CC or equivalent may task aircrew members to perform other duties before they begin flight-related duties or MAJCOM/A3 with mission execution authority may authorize a C2 agent to alert an aircrew member early. Begin CDT/FDP when the first aircrew member reports for those duties.

3.7.3.1. For Self-alerts, CDT/FDP begins at established showtime. The PIC shall coordinate early individual/crew mission report times with C2 agents. If an early report time is utilized, begin CDT/FDP when the first aircrew member reports for duty.

3.7.3.2. CDT/FDP Extensions. See AFI 11-202, Volume 3.

3.7.4. Deadhead Time. MAF aircrew members may deadhead for the purpose of positioning or de-positioning to perform a mobility mission or mission support function. Crewmembers may deadhead for a maximum of 24 hours. OG/CC or equivalent may approve crewmembers to deadhead in excess of 24 hours.

3.7.4.1. Current/qualified aircrew members may perform primary aircrew duties after flying in deadhead status provided they do not exceed a basic FDP (FDP starts at report time for deadhead flight).

3.7.4.2. Aircrew members may deadhead after performing primary crew duties, for a maximum of 24 hours from the time the crewmember's FDP began.

3.7.4.3. Crewmembers must have standard pre-departure crew rest prior to deadheading IAW paragraph 3.10.1. and/or 3.10.2.

3.7.5. Aircrew Member Support of Aircraft Generation Activities (Pre-flight, cargo up-/off-load, start, and taxi aircraft). Crew rest is required IAW AFI 11-202V3. The duty day begins when the aircrew member reports for official duties. Maximum crew duty time is 12 hours.

3.8. Scheduling Restrictions. IAW AFI 11-202V3, In addition, SQ/CCs shall not schedule an aircrew member to fly nor will an aircrew member perform aircrew duties:

3.8.1. When the flight will exceed maximum flying time limitations of AFI 11-202V3.

3.8.2. Within 12 hours of consuming alcoholic beverages (based on scheduled takeoff, or ALFA standby force legal for alert time, or earliest show time from BRAVO alert) or while impaired by its after effects.

3.8.3. When using nasal sprays to treat symptoms of head congestion existing before flight. An aircrew member may use oxymetazoline or phenylephrine nasal sprays as "get-me-downs" following an unexpected ear or sinus block during flight.

3.9. Fatigue Countermeasures Management Program.

3.9.1. Aircrew may use medications with prior approval (on a voluntary basis following ground testing) that enhance natural rest during off-cycle crew rest periods. This section

provides guidance for the use of no-go pills (prescription medications) that help aircrew initiate and maintain restful sleep during off-cycle (circadian desynchrony) crew rest periods. Fliers shall not use no-go pills in flight.

3.9.2. It is USAF policy that aircrew shall never use no-go pills as a first choice counter-fatigue management (CM) tool. Proper sleep/rest cycles represent the primary fatigue CM, with 'smart' scheduling procedures and napping techniques (inflight and/or ground-based) augmenting this primary CM. Flight surgeons will educate aircrew members about these and other fatigue CM.

3.9.3. Responsibility for counter-fatigue management of aircrew medicinal products rests with the home station Flight Surgeon (FS) and with each individual aircrew member. Aircrew members may obtain no-go pills from any USAF or other authorized flight surgeon. Off station/deployed flight surgeons shall confirm individual aircrew ground testing results via the "MAF Aircrew Medication Ground Test Card" carried by aircrew members prior to dispensing no-go pills to TDY/deployed fliers.

3.9.4. Unit Operational Risk Management (ORM) programs shall include use of no-go medication with OG/CC and FS oversight. A basic counter-fatigue ORM model is available for mission planners, OG/CC, crew, and FS on the AMC/A3V website. Training materials are available at the local FS office.

3.9.5. Home station or deployed FSs trained using the AMC/SG-approved (lead command) fatigue countermeasures materials are the point of contact for no-go prescription.

3.9.6. Aircrew members on Personnel Reliability Program (PRP) status will follow PRP notification procedures if prescribed no-go pills.

3.9.7. Aircrew will consider the following examples of missions prone to causing fatigue (may cause sleep disruptions) in their decision to use no-go medications:

3.9.7.1. Home station night launch missions (with 2000-0530L show times) greater than four hours duration.

3.9.7.2. Crew rest facilities lacking an optimal sleeping environment (quiet, air-conditioned, and darkened).

3.9.7.3. Off-station missions that are 4 or more time zones from home station.

3.9.7.4. Rotating schedules (stair-stepped flying schedules) with greater than 6-hour flight time duration.

3.9.7.5. Missions that run consistently near a 14-hour (or greater) duty day.

3.9.8. In no case will crewmembers consume a no-go pill on a timeline where they would be under the effect of the medication while they perform aircrew duties (use mission report or legal for alert time to determine latest time to take no-go medication). SQ/CC will not schedule crewmembers to fly or perform crew duties during the following minimum DNIF periods for consuming no-go pills.

3.9.8.1. Restoril (temazepam) – 12 hours minimum DNIF.

3.9.8.2. Ambien (zolpidem) – 6 hours minimum DNIF.

3.9.8.3. Sonata (zaleplon) – 4 hours minimum DNIF.

3.9.9. Accountability for this program is made challenging by the worldwide mobility mission of AMC/MAF aircrew; therefore, the following are aircrew member's responsibilities:

3.9.9.1. Aircrew members will complete ground testing for each no-go pill and receive flight surgeon clearance prior to using a particular no-go pill in the flying environment.

3.9.9.2. Aircrew members shall not operate heavy equipment or perform aircrew duties during the minimum DNIF period for each no-go pill outlined in paragraph 3.9.8.

3.9.9.3. Aircrew members shall not take no-go-pills within 12 hours of consuming alcohol, or vice versa.

3.9.9.4. Aircrew members will fill out an AMC-approved (lead command) "No-Go Pill Usage Questionnaire" detailing how they used their last prescription when requesting a refill from the FS.

3.9.9.5. Limit use of Restoril (temazepam) and Ambien (zolpidem) to a maximum of seven consecutive days and no more than 20 days in a 60-day period. In order to support dynamic MAF mission requirements, FS will consider providing a prescription for 60 days (20 pills) at a time if requested by the aircrew member.

3.9.9.6. Limit use of Sonata (zaleplon) to a maximum of 10 consecutive days and no more than 28 days in a 60-day period. In order to support dynamic MAF mission requirements, FS will consider providing a prescription for 60 days (28 pills) at a time if requested by the aircrew member.

3.9.9.7. Aircrew will inform the FS of any other medications (including nutritional supplements and over the counter medications) they are taking so the FS can evaluate potential interactions.

3.10. Crew Rest/Enroute Ground Time. Reference paragraph 1.4.2. for the waiver authority to waive any portion of the crew rest period or ground time as needed to meet mission tasking IAW AFI 11-202V3 and MAJCOM Supplements.

3.10.1. Home-Station Pre-Departure Crew Rest. As a minimum, crewmembers will enter crew rest 12 hours prior to alert time or, when self-alerting, 12 hours prior to reporting time. For missions that will keep aircrew members off station 16 hours or more, unit commanders will enter primary and deadhead aircrew members into pre-departure crew rest 24 hours before the LFA time. Aircrew members deadheading to join a mission via commercial travel are entitled to 24 hours of pre-departure crew rest prior to reporting at the commercial airport. Aircrew members (including those that will be travelling via commercial means prior to joining a mission) may perform limited non-flying duties during the first 12 hours of pre-departure crew rest. OG/CCs may waive any portion of the first 12 hours of pre-departure crew rest. Do not manifest deadhead aircrew members as passengers to deny pre-departure crew rest. **EXCEPTION:** ANG aircrews will comply with the provisions in AFI 11-202V3 and appropriate supplement regarding home station pre-departure crew rest.

3.10.2. Off-station/En route Crew Rest. The crew rest period is normally a minimum 12-hour non-duty period before the FDP begins. The minimum en route crew rest period is 12 hours before scheduled report time (for exceptions, reference para 3.10.3. of this AFI). This provides aircrews at least 8 hours to sleep plus 4 hours to travel, relax, and dine.

3.10.2.1. Except during emergencies or as authorized by MAJCOM/A3 with mission execution authority, C2 agents shall not disturb an aircrew member in crew rest. When necessary to interrupt aircrew members' crew rest period, re-enter that aircrew in a subsequent minimum 12 hour crew rest period after they complete official duties.

3.10.2.2. Do not enter aircrew members into crew rest until they complete official post-flight duties. Those duties may include, but are not limited to, refueling, aircraft preparation, aircrew arming, minor maintenance, or mission debriefing.

3.10.3. Off-station/En route Ground Time. A minimum 15 hour ground time between block-in to block-out should normally be planned. OG/CC is waiver authority for missions in planning phase to no less than 12 hours from block-in to block-out. For missions in execution, the PIC may waive to no less than 12 hours from block-in to block-out to accommodate special CVAM/AMD/DV requests. Do not plan consecutive 12 hour-to-12 hour crew rests.

3.10.3.1. Before reducing normal ground time consider mission preparation time and other factors peculiar to the mission. Reference paragraph 1.4.2. for the waiver authority to reduce crew rest to less than 12 hours from block-in to block-out. It is not to be used for DV scheduling convenience.

3.10.3.2. Ground time reduction will ensure aircrew is afforded 8 hours of uninterrupted sleep and adequate time for transportation and meals.

3.10.3.3. PIC will notify the tasking agency and C2 of all modifications to ground time.

3.10.4. Crew Enhancement Crew Rest (CECR). CECR is not an alternative to a safety-of-flight delay but provides aircrews a means to minimize the adverse effects of a crew alert and report period outside normal duty time. CECR periods should be of minimum duration and are normally used during de-positioning legs. Tasking authorities shall approve PIC requests to delay alert time to normalize the work-rest cycle or increase messing options when mission allows. When requests are disapproved, the C2 agent will inform the PIC of the reason for disapproval.

3.10.5. Post-Mission Crew Rest (PMCR). SQ/CCs shall give aircrew members returning to home base sufficient time to recover from cumulative effects of the mission and tend to personal needs. PMCR begins upon mission termination.

3.10.5.1. For missions that keep an aircrew off station 16 or more hours, the SQ/CC shall provide 1 hour (up to 96 hours) PMCR for each 3 hours off-station. Do not enter aircrew members in pre-departure crew rest until the PMCR period expires.

3.10.5.2. PMCR is not applicable to continuing missions and parent MAJCOM/A3 may suspend PMCR during contingency operations.

3.10.5.3. OG/CCs (or equivalents) are PMCR waiver authority.

3.10.6. FCC/RAVEN Work and Rest Plan. For off-station missions, FCCs and RAVENs are responsible to the PIC only. Aircrew crew rest rules do not apply. The PIC will determine how long FCCs and RAVENs can safely perform duties. FCCs and RAVENs must have the opportunity to rest 8 hours in each 24-hour period. For FCC work-rest plan guidance, see AFI 21-101, *Aircraft and Equipment Maintenance Management*, and associated MAJCOM supplements.

3.10.6.1. Unless specified in AFI 21-101 or applicable MAJCOM supplements, FCCs will only perform in flight duties/maintenance when in the opinion of the PIC an emergency condition exists requiring FCC's assistance.

3.10.6.2. Upon arrival at en route locations the PIC will determine how long the FCC can safely perform aircraft maintenance duties on assigned aircraft.

3.10.7. The lead USAF component will publish parent MAJCOM/A3-approved crew rest waivers in the Exercise or Contingency OPORD, Operations Plan (OPLAN), or Concept of Operations (CONOPS).

3.10.8. The Prime Knight program streamlines the process of getting aircrews from aircraft parking ramp into lodging/crew rest. It is only successful when billeting agents receive accurate aircrew/mission information in a timely manner.

3.10.8.1. C2 Agent Responsibilities. C2 agents for MAJCOM with mission execution authority will forward information on the departing aircrew's orders to a POC for the next crew rest location's Prime Knight function.

3.10.8.2. PIC Responsibilities. If departing from a location with a C2 agency, ensure a C2 agent has accurate aircrew/mission information to forward to the next Prime Knight POC. If departing from a facility without a C2 agency, the PIC will call the next crew rest location Prime Knight POC to pass aircrew/mission information.

3.10.8.3. SQ/CC or designated authenticating official shall ensure Temporary Duty (TDY)/Flight orders clearly indicate the unit fund cite so that the PIC may make Prime Knight reservations in advance.

3.11. Alerting Procedures. Self-alerting procedures are normally used for all VIP Missions. The PIC sets the crew reporting time and location. Home-station departure show time will normally be 2+00 prior to scheduled takeoff time. PICs may change the home station reporting time as necessary if approved by unit Mission Operations or SOC. Normally, off-station crew reporting time is 2 hours prior to scheduled departure time. The PIC may establish reporting times as required for mission accomplishment (e.g. scheduled mission departure time changes, increased travel time from hotel to plane, customs, etc).

3.11.1. The latest allowable alert time for an aircrew given a legal for alert time (e.g. as a maintenance back-up) is 6 hours after the expected alert time. The PIC may extend that window to 8 hours when flying as the primary crew or 12 hours when dead-heading. The controlling C2 agency will not ask the PIC to accept more than the 6 hour window.

3.12. Stage Management. VIP missions may require stage crews. When a stage crew is needed due to flight duty period limitations, maintenance difficulties, etc., ensure unit validates the requirement and assists in determining transportation requirements, in place times, mission specific details, etc.

3.13. Standby Force Duty. C2 Agents for MAJCOM with mission execution authority shall task units for Standby Force Duty not later than 18 hours prior to legal for alert time. This allows crewmembers 12 hours of pre-standby crew rest and 6 hours for aircraft pre-flight duty. When aircrews are unable to complete all preflight duties within 6 hours of crew show time, provide an additional 12-hour pre-standby crew rest. If MAJCOM C2 agents are unable to provide 18 hours prior notification, the SQ/CC shall place the pre-standby crew in 12 hour crew

rest and follow aircraft generation procedures in paragraph 3.7.5. of this AFI to prepare the aircraft for launch. The SQ/CC may keep an aircrew in ALFA/BRAVO status up to 48 hours. After 48 hours, C2 must launch, release, or re-enter aircrew into 12 hour pre-departure crew rest. Reference paragraph 1.4.2. for the waiver authority to extend this period for contingencies. Standby/Alert Force Duty shall not be used as a tool to eliminate pre-departure crew rest.

3.13.1. ALFA Standby Force. When tasked, SQ/CC shall posture an aircraft and aircrew as an ALFA Standby Force able to launch within 1 hour. Once SQ/CC forms an ALFA Standby Force, that aircrew will accomplish follow-on pre-flights required by the AFM. Follow-on pre-flights done during normal waking hours do not interrupt crew rest. Begin CDT/FDP when C2 agent directs the aircrew to launch from crew rest or while performing pre-flight (begin CDT/FDP when the aircrew arrived at the aircraft to do the pre-flight).

3.13.2. BRAVO Standby Force. When tasked, SQ/CC shall posture an aircraft and/or aircrew in BRAVO Standby Force to permit launch within 3 hours (normally 1 hour to show and 2 hours to perform preflight duties). Follow-on pre-flights, if required, interrupt crew rest. Begin CDT/FDP when aircrew shows for duty.

3.13.3. CHARLIE Standby Force. When tasked, SQ/CC shall posture aircrews as a CHARLIE Standby Force ready to enter crew rest within 2 hours. Tasked aircrews will be legal for alert 12 hours after entering crew rest. SQ/CC may keep aircrews in CHARLIE status up to 72 hours. After 72 hours, release aircrews or enter them into 12 hours crew rest for directed mission, training mission, or subsequent standby force duty.

3.13.4. Wing Standby/Alert Duty. OG/CC's and unit C2 with mission execution authority determine Standby/alert status and initiate scheduling procedures if needed.

3.13.4.1. VIP Standby/alert crews should perform standby/alert duty at home. At their discretion, standby/alert crewmembers are permitted to perform up to 4 hours of on-base duties each 24-hour standby/alert period; they are not limited to staying at home for their entire duty period. Although not limited to staying at home, standby/alert aircrew must be capable of proceeding directly to the unit immediately upon notification (response times will be published in unit supplements/OIs). Alert crewmembers quartered off base may be required to perform alert duty on base if travel time between quarters and the alert aircraft jeopardizes alert reaction time. Assigning quarters on base must be coordinated through the squadron operations officer.

3.13.4.2. The primary method of contact will always be the telephone. Ensure alerting organization has an operable and reachable contact phone number. Pagers/beepers will only be used as a backup method of contact.

3.13.4.3. Commanders will not require crewmembers to perform any duties other than standby/alert duty during standby/alert.

3.13.4.4. Crew Rest. Crewmembers are given 12 hours of pre-standby/alert crew rest prior to assuming Alpha or Bravo alert. Crews are legal for mission reporting after pre-standby/alert crew rest. Preflight duties, if required, interrupt crew rest. In no case will a crewmember be placed on Alpha or Bravo standby/alert duty within 12 hours of the previous flight duty period.

3.13.4.5. Schedule standby/alert crews to have the most flexible crew complement for the maximum applicable CDT/FDP. Notify unit C2 and the tasking authority if any part of a crew complement cannot be manned at the applicable manning level.

3.13.4.6. Response Time. Tasking authority (through unit C2), will determine the aircraft alert requirements unless previously specified. Normal alert response time for VIP Aircraft is 2 hours. Tasked units will ensure an alert crew is available for the C-38 and a backup aircraft if required.

3.13.4.7. Standby/alert crewmembers will not fly local missions while on alert. OG/CC or equivalent (with tasking authority/C2 concurrence) may waive this requirement. VIP or contingency missions may be flown following the local if crew rest and CDT/FDP limitations per this AFI are followed.

3.13.4.8. Crewmembers will not be scheduled for more than 3 consecutive standby/alert duty periods.

3.13.4.9. Reference [paragraph 1.4.2](#) for the waiver authority to waive all or any part of alert crew rest period. Post standby/alert crew rest waiver procedures are the same as PMCR. On completion of standby/alert duty, aircrew members may be dispatched on a mission.

3.13.5. Pre-Departure Standby/alert duty. Standby/alert duty and pre-departure crew rest may be concurrent if notification is provided at least 12 hours prior to mission reporting.

3.13.5.1. If started, post-standby/alert crew rest must be completed before the start of pre-departure crew rest.

3.13.5.2. If an aircrew member is dispatched on a mission, compute the post-mission crew rest time on standby/alert time plus mission time.

3.13.6. Post-Standby/Alert Crew Rest. Aircrew members not dispatched on a mission following Alpha or Bravo standby/alert duty will receive post-mission standby/alert crew rest as follows:

3.13.6.1. If standby/alert duty is performed away from normal quarters, crew rest time is computed from this standby/alert time on the same basis as for mission time.

3.13.6.2. If standby/alert duty was performed in normal quarters, no crew rest time is authorized.

3.14. Orientation Flights and Incentive Flights. Refer to DoD 4515.13-R, *Air Transportation*, AFI 11-401, and the appropriate MAJCOM supplement.

3.15. Interfly. Interfly is a temporary arrangement between OG/CCs or equivalent to permit current and qualified aircrew members from one unit to perform primary aircrew duties on another unit's aircraft. NGB/A3 has delegated approval authority to wing commanders for active duty/AFRC interfly with ANG. Participating aircrews shall use guidelines established by the lead command or as specified in the OPLAN or CONOPS. Conduct interfly operations as follows:

3.15.1. OG/CC's or equivalent may authorize interfly of aircrews and/or aircraft. Normally interfly should be limited to specific operations, exercises, or special circumstances but may be used to relieve short-term qualified manpower shortfalls, or in Combined Command

Operations (ref. paragraph 1.5.1. of this AFI). Long-term interfly arrangements may be found in command-to-command Memorandums of Agreement (MOAs) or Letters of Agreement (LOAs). Associate Reserve units and active duty HQ Staff/MAJCOM Staff evaluation or inspection teams have existing interfly arrangements. Interservice agreements on like aircraft must be approved by parent MAJCOM A3s and other service equivalents.

3.15.2. Interfly is authorized under the following conditions:

3.15.2.1. Aircraft ownership is not transferred.

3.15.2.2. Aircrew shall be current and qualified in the MDS (aircraft and model), as well as unique systems or configuration required to fly the aircraft/mission.

3.15.2.3. Aircrew members will follow operational procedures established by the lead command for the MDS. The Mission Commander or PIC will brief MAJCOM-specific items. The aircraft owning unit will direct appropriate operations instructions and restrictions, as appropriate, for the aircrew members who interfly.

3.16. Mission Essential Personnel. Crewmembers qualified in mobility aircraft are authorized MEP status on any mobility aircraft to accomplish training, evaluation, or pre-/de-position in support of mobility operations. MAJCOM designated crewmembers who are assigned or authorized to accompany the normal crew complement are allowed MEP status.

3.16.1. Crewmembers in MEP status are not authorized to:

3.16.1.1. Displace manifested passengers.

3.16.1.2. Maintain currency and/or log flying time.

3.16.1.3. Travel in this status while on leave. **EXCEPTION:** ANG Air Technicians may be in a civilian leave status while traveling en route to perform in a military duty status.

3.16.1.4. Travel on VIP Aircraft unless authorized by the tasking authority through the PIC.

3.16.1.5. Travel on Special Assignment Airlift Missions (SAAM) when specifically restricted by the mission directive (mission cut).

3.16.1.6. Travel on Operational Support Airlift (OSA) aircraft unless authorized by the tasking authority through the PIC.

3.16.2. All MEPs require valid travel/flight orders or supporting message authorizing MEP status. OG/CC may authorize MEP status for unit assigned mobility aircrews.

3.16.3. Flight evaluators have priority and will not be displaced by any other MEP. The priority for evaluators is MAJCOM, NAF, group, then squadron level.

3.16.4. MEPs normally travel in the crew compartment. If the number of MEPs desiring travel exceeds the capacity of the crew compartment, the PIC will coordinate with home station C2 before seating MEPs in the passenger compartment. Seats not previously assigned may only be used for MEPs with tasking agency approval. 3.16.5. The PIC or designated representative will brief MEPs on seat assignment, appropriate mission information, emergency procedures including egress, and armed crewmembers.

3.16.5. Additional procedures and policies regarding MEPs are contained in AFI 11-401 and AMCI 11-208. PICs will ensure personnel traveling in this status are properly authorized.

3.17. Mobility Mission Observer (MMO) Program. MAJCOM supplements or additional directives may establish programs authorizing senior military and civilian personnel to fly for mobility mission familiarization. For AMC MMO information reference AMCI 11-208.

Chapter 4

AIRCRAFT OPERATING RESTRICTIONS

4.1. Objective. The ultimate objective of the aircraft maintenance team is to provide an aircraft for launch with all equipment operational (Fully Mission Capable). Lack of available spare parts, skilled technicians, and manpower limitations have a negative and direct impact on mission accomplishment. However, redundant systems may allow safe operation with less than all equipment operational for certain missions under specific circumstances. VIP Aircraft MELs are provided in separate publications. The PIC, using the following policies, determines an aircraft's overall status. Make a detailed explanation of the discrepancy in the AFTO 781A, *Maintenance Discrepancy and Work Document*, include the following maintenance identifiers to effectively communicate aircraft status:

4.1.1. Mission Essential (ME). An item, system, or subsystem component essential for safe aircraft operation or mission completion will be designated ME by the PIC. A PIC accepting an aircraft (one mission or mission segment) without an item or system does not commit that PIC (or a different PIC) to subsequent operations with the same item or system inoperative.

4.1.2. Mission Contributing (MC). An item, system or subsystem component, which is not currently essential for safe aircraft operation or mission completion, will be designated as MC. MC discrepancies should be cleared at the earliest opportunity to the extent that maintenance skills, ground time, and spare part availability permit. If circumstances change, an MC item may be upgraded to ME status. In the PIC's judgment, if mission safety would be compromised by the lack of any component, re-designate the component as ME. Do not delay a mission to correct an MC discrepancy.

4.1.3. Open Item (OI). Discrepancies not expected to adversely impact the current mission or any subsequent mission are designated as OIs. These items receive low priority and are normally worked at home station.

4.1.4. Engine performance, aircraft attitude, vertical velocity indications, altitude, speed, and heading instruments should be operative in both pilot positions. For instruments with both analog and digital displays, either the analog or digital presentation is acceptable.

4.2. Minimum Equipment List (MEL) Policy. It would be impractical to prepare a list that would anticipate all possible combinations of equipment malfunction and contingent circumstances. As such, commercial derivatives have extensive MELs that provide guidance to make safe dispatch decisions with VIP Aircraft.

4.2.1. Description. The aircraft MEL lists the minimum equipment and systems to launch the aircraft under routine operations. The list does not necessarily include all equipment or systems essential to airworthiness (e.g. rudder, ailerons, elevators, flaps, tires, etc.). The MEL shall not conflict with the AFM or USAF/MAJCOM directives. Those items that state a minimum requirement and have no listed exceptions are grounding items.

4.2.2. Waiver Authority. PICs must refer to their aircraft MEL or Federal Aviation Administration (FAA) approved Master Minimum Equipment List (MMEL) for inoperative systems before dispatch. Deviations must be approved by the unit OG/CC (or equivalent) prior to departure. Coordinate with unit stan/eval, system program directors, aircraft

manufacturers and maintenance personnel. Safety-of-flight is paramount. MAJCOM Stan/Eval shall be informed of all granted MEL deviations within 24 hours of departure.

4.2.3. The PIC is responsible for exercising the necessary judgment to ensure aircraft are not dispatched with multiple items inoperative that may result in an unsafe degradation and/or an undue increase in crew workload. The possibility of additional failures during continued operation with inoperative systems or components shall also be considered. This chapter is not intended to allow for continued operation of the aircraft for an indefinite period with systems/subsystems inoperative.

4.2.3.1. System components required to complete emergency procedures and associated warning systems will be operational. All emergency equipment will be installed unless specifically exempted by mission requirements/directives (e.g., depot inputs with minimum survival kits). One time flight authorizations to repair facilities may be authorized for primary crewmembers only. For all one time flight authorizations, notify MAJCOM Stan/Eval of OG/CC actions. **NOTE:** Do not accept an aircraft from factories, modification centers, or depots unless all instruments are installed and operative.

4.2.4. Off Station Waiver Policy. PICs will consider route segment (navigation requirements, terrain, weather, etc.) when determining required equipment to safely navigate and operate the aircraft. If, after exploring all options, the PIC determines a safe launch is possible with an MEL item inoperable the PIC shall request an OG/CC waiver. Use C2 channels to notify the appropriate tasking agency of intentions. Plan a minimum 1-hour response from unit stan/eval (OGV or equivalent) to respond to the waiver request.

4.2.5. Off-Station Maintenance Difficulties. PICs with maintenance difficulties away from home station will coordinate all requirements for supply and maintenance assistance with local support agencies and unit maintenance support agencies. Do not accept aircraft parts or maintenance without thorough coordination with home station C2 and maintenance agencies. Keep unit C2 centers informed of current aircraft status through CP channels. If an aircraft arrives at any station with a maintenance status that would prevent or delay departure, the PIC will take whatever action is necessary to have aircraft restored to MR status as soon as possible after landing, regardless of scheduled ground time. Aircraft must be MR as soon as possible to support DV schedule changes or diversion to a higher priority mission. The PIC will monitor maintenance and report when the aircraft is restored to MR status.

4.2.5.1. If parts are required, advise unit C2 that supply assistance is required. The PIC may be provided a contact that can arrange for parts locally. If parts will be shipped, C2 (CP, AMD, etc.) will provide the aircrew with shipping details. Normally, parts are shipped to the PIC in care of the U.S. Embassy or other mission supply activity. The PIC or embassy will make arrangements to have someone pickup the shipment as soon as possible after it arrives. When the parts shipment has been received, notify unit C2 to preclude unnecessary tracing actions.

4.2.5.2. If maintenance assistance is required beyond the scope of local capabilities, advise unit C2 of anticipated requirements. If necessary, maintenance specialists will be dispatched from home unit.

4.2.5.3. Parts are furnished by the Contractor Operated Maintenance Base Supply (COMBS) facilities. All repairable parts must be returned to the COMBS facilities. The PIC will ensure the defective parts are returned to home unit upon the aircraft from which they were removed or by the most advantageous means available. The PIC will relay the method of shipment and name/phone number of the local contact, if applicable, to unit C2. Ensure the crew chief attaches AFTO 350, *Repairable Item Processing Tag* to each defective part upon removal. Coordination for supply support will be arranged through the contractors support facilities at other stations.

4.2.6. Maintenance Delay. If a maintenance condition exists that will prevent or delay a VIP departure, the PIC will advise C2 centers immediately. Depending on DV desires and the urgency of their schedule, the PIC, the on-board contact, and unit C2 will coordinate a new departure time. PIC, in coordination with unit C2 and/or MAJCOM C2 with mission execution authority, shall arrange substitute transportation if available and acceptable to the DV.

4.3. Waiver Protocol. Waiver to operate with degraded equipment exceeding this chapter and the aircraft MEL/MMEL will be coordinated through unit C2 centers in coordination with unit stan/eval and waiver approval through unit OG/CC or equivalent. Notify MAJCOM Stan/Eval with mission execution authority at the earliest opportunity (within 24 hours of departure).

4.4. Technical Assistance Service. The PIC may request (at anytime in the decision process) technical support from their home unit stan/eval, MAJCOM/A3 staff, and maintenance representatives to include commercial derivative engineering support.

4.4.1. PICs electing to operate with degraded equipment or aircraft systems (with appropriate waiver) must coordinate mission requirements (i.e. revised departure times, fuel requirements, maintenance requirements, etc.) with C2 centers prior to flight.

4.4.2. When it is necessary to protect the crew or aircraft from a situation not covered by this AFI and immediate action is required, the PIC may elect to deviate according to **paragraph 1.4** of this AFI. Report deviations (without a pre-approved waiver), through channels to MAJCOM/A3 with mission execution authority within 48 hours. Units must be prepared to collect background information and submit a followup written report upon request.

4.5. One-Time Flights. If an aircraft has a safety-of-flight condition beyond the immediate or final repair capability of an en route facility, temporary repairs may be made to allow a one-time flight to a pre-selected facility capable of final repair.

4.5.1. PIC's Recommendation. PICs will send their recommendations to C2 centers.

4.5.2. Approval Authority. MAJCOM/A3 with mission execution authority is approval authority for one-time, safety-of-flight conditions with passengers on board. **EXCEPTION:** OG/CC is approval authority for one-time, safety-of-flight conditions without passengers on board. Notify parent MAJCOM Stan/Eval of actions at the earliest opportunity.

Chapter 5

OPERATIONAL PROCEDURES

5.1. Checklists. MDS specific checklists are designed as clean up checklists, and items may be accomplished prior to the checklist being read. A checklist is not complete until all items have been accomplished. Momentary hesitations for coordination items, ATC interruptions, and deviations specified in the AFM, etc., are authorized. Notes amplifying checklist procedures or limitations may be added to the checklists (in pencil). Currency of notes is the crewmember's responsibility and may be evaluated.

5.1.1. Checklist Inserts. MAJCOM Stan/Evals shall approve the use of checklist inserts to supplement AFMs. If the AFM is a TO, approval will be IAW AFI 11-215, *USAF Flight Manuals Program (FMP)*. If the AFM is a commercially provided manual, approvals will parallel procedures outlined in AFI 11-215. For AMC and AMC gained units, AMC/A3V is the checklist insert approval authority. These inserts may be placed in an in-flight guide or at the end of the checklist. All proposed checklist inserts must have a POC. If any crew member has recommendations or changes they should contact the POC. Submit changes to the AFM to MAJCOM Stan/Eval and provide copies to HQ AMC Stan/Eval for final approval. Local in-flight guides and inserts not affecting AFM guidance and procedures may be locally approved by OG/OGV or equivalent.

5.1.2. Flight Operations Manuals (FOM) and Quick Reaction Checklists (QRC) are authorized. AF Form 847 will be processed through MAJCOM Stan/Eval for revision approval.

5.2. Duty Station. Both pilots shall be in their seats during flight. One of the pilots may be out of their seat for brief periods (approximately 15 minutes) to meet physiological needs. Crewmembers will notify the pilot prior to departing assigned primary duty stations.

5.2.1. With both pilots in their seats, PICs may authorize rest periods for one pilot occupying a primary duty station during non-critical phases of flight (the other pilot will be awake and alert). Only one pilot may be absent from their duty station at a time, except as required when entering or exiting the flight deck.

5.2.2. When additional aircrew personnel are on board, the observer's seat should be occupied, preferably by a qualified pilot if available, to assist the crew in avoiding other aircraft during ground operations, and critical phases of flight.

5.2.3. Unqualified pilots in qualification training and qualified senior officers may occupy a pilot seat during flight provided another qualified pilot is in the other seat. During critical phases of flight, they must be under direct IP supervision (at a set of controls).

5.3. Flight Station Entry. PICs may authorize passengers and observers access to the flight station or jumpseat during non-critical phases of flight. Critical phases of flight are defined as taxi, takeoff, approach and landing. In all cases, sufficient oxygen sources must be available to meet the requirements of AFI 11-202V3. Passengers and observers will not be permitted access to the pilot or copilot stations regardless of its availability.

5.4. Takeoff and Landing Policy. An aircraft commander, or above, will occupy either the left or the right seat during all takeoffs and landings. The designated PIC (A-code) is not required to occupy a primary position, but still retains overall authority for conduct of the mission.

5.4.1. AC Takeoff and Landing Policy. Conditions permitting, a qualified and current pilot certified as an AC, IP, or EP will accomplish all takeoffs, approaches, and landings from the left seat under the following conditions:

5.4.1.1. Aircraft emergencies, unless conditions prevent compliance.

5.4.1.2. When making an actual Category (CAT) II Instrument Approach Landing System (ILS) approach.

5.4.1.3. When operating to or from airfields requiring airfield related waivers. **EXEPTION:** On Operational Mission Evaluations (OMEs), EPs may allow pilots being evaluated to remain in the seat if the waiver is for weight bearing capacity to the ASRR.

5.4.2. Missions in Command. Only missions where the individual is certified as an AC and designated as PIC on the flight orders will be credited as missions in command.

5.4.3. Takeoff and Landing Policy. FPs can accomplish takeoffs and landings on any mission at the discretion of the PIC using the guidance in paragraph 5.4.1. of this AFI.

5.5. Landing Gear and Flap Operating Policy. Unless the AFM directs otherwise, the pilot in the left seat will command gear and flap operations and the pilot in the right seat will activate the systems. The right seat pilot will acknowledge the command prior to system activation. If the pilot flying (PF) the aircraft is in the right seat, that pilot should command gear and flap operations to include a go-around. The pilot monitoring (PM) in the left seat will acknowledge the command prior to gear/flap system activation by the right seat pilot. MDS Cockpit/Crew Resource Management (CRM) differences should be thoroughly briefed for right seat procedures to include programming flight management systems.

5.6. Outside Observer. When available, use a crewmember to assist in outside clearing during all taxi operations and any time the aircraft is below 10,000 feet Above Ground Level (AGL). If the aircraft will penetrate a known or suspected Weapons Engagement Zone (WEZ), the PIC will review, brief, and assign specific observer duties according to applicable AFTTP lookout doctrine.

5.7. Seat Belts.

5.7.1. All occupants will have a designated seat with a seat belt. Use of seat belts will be as directed by the PIC and the AFM. The use of an Infant Car Seat (ICS) aboard aircraft is not mandatory. Crewmembers will assist passengers in securing the ICS in the seat. The PIC will be the final authority in determining if the ICS is adequately secured.

5.7.2. Crewmembers occupying primary crew positions will have seat belts fastened at all times in-flight, unless crew duties dictate otherwise.

5.7.3. All crewmembers will be seated with seat belts and shoulder harnesses fastened during taxi, takeoff, and landing, unless crew duties dictate otherwise. Crewmembers performing instructor or flight examiner duties are exempt from seat belt requirements unless they occupy a crew station; however, a seat with an operable seat belt will be available.

5.8. Aircraft Lighting. Set aircraft lighting IAW this AFI, AFI 11-202V3, AFI 11-218, AFM, AFTTPs, and applicable AOR guidance.

5.9. Portable Electronic Devices. Comply with AFI 11-202V3, paragraph 2.5.1.

5.9.1. Portable non-transmitting devices are authorized IAW AFI 11-202V3, paragraph 2.5.1. and include audio and video recorders, playback devices, computers, peripherals, electronic entertainment devices, radio receivers, and personal digital assistants (PDA). Navigation aid Portable Electronic Devices (PED) are covered in 5.23 of this Instruction.

5.9.2. Unauthorized equipment (e.g., Walkman-type radios/tape players, CD players, etc.) will not be connected to the aircraft intercom, Public Address (PA) or radio systems.

5.9.3. Portable Satellite (SAT) Phones. The use of portable SAT phones (IRIDIUM, FLIGHTCELL etc.) in flight is authorized on the C-38 in Visual Meteorological Conditions (VMC) above 10,000 feet. Until Lead Command approved, they are not authorized for use in Instrument Meteorological Conditions (IMC) or to be connected to aircraft power or antennas. Suction cup antenna use is authorized.

5.9.3.1. SAT phones will not be used below 10,000 feet or in IMC.

5.10. Tobacco Use on Air Force Aircraft. Tobacco use, to include smokeless (spit/loose) products, is prohibited on Air Force aircraft per AFI 40-102, *Tobacco Use in the Air Force*. If an exception to policy is required, it must be coordinated through HQ AFMOA/SGZP to HQ USAF/CC for approval.

5.11. Advisory Calls. The PF will announce intentions for departures, arrivals, approaches, and when circumstances require deviating from normal procedures and when circumstances require deviating from normal procedures. The PM will make all advisory calls except those designated for other crewmembers. NOTE: Automated aircraft advisory calls satisfy this requirement.

5.11.1. Deviations.

5.11.1.1. Any crewmember will immediately notify the PF when deviation of heading (+/- 10 degrees), airspeed (+/-10 kts), or altitude (+/- 100 feet) is observed and no attempt is being made to correct the deviation.

5.11.1.2. Any crewmember seeing a potential terrain or obstruction problem will immediately notify the PF.

5.11.2. Advisory calls: Refer to [Table 5.1](#) through [Table 5.4](#) for a listing of mandatory advisory calls, responses, and aircrew actions.

Table 5.1. Climb Out.

PHASE OF FLIGHT	PM CALL	PF RESPONSE
Transition Altitude	“Transition Altitude, 29.92, Set”	“Transition Altitude, 29.92, Set”
1000’ below assigned altitude	“Altitude (passing) for Altitude (Assigned)”	“Altitude (passing) for Altitude (Assigned)”

Table 5.2. Descent.

PHASE OF FLIGHT	PM CALL	PF RESPONSE
Transition Level	“Transition Level, (Local Altimeter) Set”	“Transition Level, (Local Altimeter) Set”
1000’ above assigned altitude	“Altitude (passing) for Altitude (Assigned)”	“Altitude (passing) for Altitude (Assigned)”

Table 5.3. Non-precision Approaches (5).

PHASE OF FLIGHT	PM CALL	PF RESPONSE
100 feet above Final Approach Fix (FAF) Altitude	“100 above”	
100 feet above step down altitude	“100 above”	
100 feet above Minimum Descent Altitude (MDA)	“Approaching Minimums”	Acknowledge
At MDA	“Minimums”	
Runway environment in sight and will remain in sight	“Runway in Sight”	(1)
Missed Approach Point (MAP)	“Missed Approach Point” (4)	“Landing” or “Going Around”

Table 5.4. Precision Approaches (5).

PHASE OF FLIGHT	PM CALL	PF RESPONSE
100 feet above glide slope intercept altitude	“100 above”	
100 feet above Decision Height (DH)/ Decision Altitude (DA)	“Approaching Minimums”	Acknowledge
At DH/DA	“Minimums”	(3)
Runway environment in sight and will remain in sight		“Landing”
Only Approach Lights in sight (CAT I ILS)		“Continuing” (2)
Approach Lights and/or Runway	“Go-around”	“Going Around”

environment not in sight		
At 100' Above TDZE (CAT I ILS)	“100 Feet” See note (4)	“Landing” or “Going Around”
<p>NOTES:</p> <p>(1) The PF will announce his/her intentions to either land or go-around.</p> <p>(2) With weather at CAT I minimums on a CAT I ILS, the pilot may not see the runway environment at DH; however, the initial portion of the approach lights may be visible. The pilot may continue to 100 HAT with reference to the approach lights only. The pilot may not descend below 100 feet above touchdown zone elevation using the approach lights as reference unless the red terminating bars or the red side row bars are distinctly visible and identifiable.</p> <p>(3) The PF will announce his/her intentions to either land, continue (CAT I), or go-around. Respond with the intention to land if runway environment is in sight, will remain in sight throughout touchdown and the aircraft is in a position for a safe landing.</p> <p>(4) If the pilot flying has stated “landing” then this call is not required.</p> <p>(5) Refer to stabilized approach criteria in paragraph 5.11.4.</p>		

5.11.3. **Stabilized Approach.** Unstable approaches are primary contributors to numerous military and civilian mishaps. Stabilized approaches are essential for the safe operation of aircraft and are mandatory. The following criteria define specific parameters that mitigate risk during this critical phase of flight. This philosophy requires aircrew to take immediate corrective actions to stabilize the approach when outside designated parameters.

5.11.3.1. The following criteria apply to all approaches:

5.11.3.1.1. At 1000 feet AGL:

5.11.3.1.1.1. Aircraft is in approach configuration. Circling configuration is acceptable for circling approaches.

5.11.3.1.1.2. Airspeed is appropriate for the configuration and conditions.

5.11.3.1.1.3. Sink rate is no greater than 1000fpm. **Note:** Under certain conditions (WX, Threats, Terrain, etc.) some IAPs and Tactical Approaches may require greater than a 1000 fpm descent rate.

5.11.3.1.1.3.1. Non-precision Approaches. Pilots should calculate a constant descent gradient profile from the FAF altitude to the VDP (IAW AFMAN 11-217). This is considered the safest profile and should be used to the max extent possible. During a go-around, ensure descent below the MDA does not occur.

5.11.3.1.1.4. All briefings and checklists are complete unless contrary to T.O. guidance.

5.11.3.1.1.5. Aircraft is on the correct track.

5.11.3.1.1.6. Aircraft in the correct bank angle to maintain proper approach track for instrument, circling, or visual/tactical approach.

5.11.3.1.1.7. Power set to maintain the descent profile at approach speed.

5.11.3.1.1.8. If these criteria are not met by 1000 feet AGL, the PM will announce the deviation and the PF will take immediate corrective action. PM states "1000' xxxx," where "xxxx" equates to a concise description of the unstable characteristic(s) which clearly relay to the PM what actions are required to return the aircraft to a stable platform. Examples: "1000', fast," or "1000', half a dot low". If criteria are met, PM will simply state "1000'."

5.11.3.1.2. From 500 AGL to the runway, if these parameters are exceeded the PM will announce "Go-Around" and the PF will execute a go-around/missed approach. If criteria for stable approach are met, the PM will state "500."

5.11.3.1.2.1. Not Used

5.11.3.1.2.2. Not Used

5.11.3.1.3. Not Used

5.11.3.1.3.1. Momentary minor corrections or deviations are acceptable and defined as:

5.11.3.1.3.1.1. Airspeed: +10/-5 kts from target

5.11.3.1.3.1.2. Bank Angle: +/- 15 degrees

5.11.3.1.3.1.3. Rate of Descent: +/- 300 FPM from target

5.11.3.2. Descent Planning and Energy Management. Aircrews will ensure the aircraft is following the planned descent profile. All non-tactical descents should follow a normal descent profile IAW AFMAN 11-217 procedures and techniques in the absence of ATC or FLIP guidance. All tactical descents should follow published tactical procedures/profiles. When unforeseen interruptions alter the planned descent, immediately correct any deviations. It may be necessary to hold, request vectors, or take alternate actions in order to comply with the planned descent profile.

5.11.3.3. Visual Transition. It is imperative for aircrews to review the airfield environment. Identify key features such as approach light type, airfield lighting, geographic layout/configuration of runways, taxiways, ramps, etc. To the max extent possible, this study will take place during the crew mission briefing and reviewed again prior to descent.

5.11.3.4. Missed Approach/Go-Around. Aircrews will conduct a thorough briefing for anticipated missed approach/go-around scenarios. This briefing will include a discussion of specific crewmember duties.

5.12. Communications Policy. Recorded aircraft crew communications are considered factual and therefore the Air Force does not give a promise of confidentiality to aircrews regarding their recorded aircraft crew communications. Crewmembers are expected to maintain a high degree of cockpit professionalism and crew coordination at all times.

5.12.1. Sterile Cockpit. Limit conversation to that essential for crew coordination and mission accomplishment during taxi, takeoff, approach, landing, flight below 10,000 feet Mean Sea Level (MSL) (except cruise), and penetration of a known or suspected WEZ.

5.12.2. Aircraft Interphone/Datalink. Do not discuss classified information over interphone or clear VHF/HF datalink [Aircraft Communications Addressing and Reporting System (ACARS)/Airborne Flight Information System (AFIS)] channels. Primary crewmembers will monitor interphone. Crewmembers will advise the PIC prior to checking off interphone.

5.12.3. Command Radios:

5.12.3.1. The PM normally makes all ATC radio calls. Normally, use only one command radio, plus guard. Monitoring two controlling agencies' transmissions simultaneously is not recommended. **EXCEPTION:** ILS/PRM approaches.

5.12.3.2. In terminal areas the primary crewmembers at assigned stations will monitor the primary command radio unless directed otherwise.

5.12.3.3. The pilot operating the command radios will inform the crew when the primary radio is changed. Also, announce the radio (if different from the primary) on which to monitor guard.

5.12.3.4. One pilot should record and will acknowledge all ATC clearances. The other pilot will monitor the read-back. This includes all transmissions pertaining to ATC instructions involving departure, en route, and approach procedures. Disregard this procedure when ATC instructions require immediate execution or when such action interferes with completion of more important duties or physiological needs.

5.12.3.5. Both pilots will monitor UHF and VHF guard frequencies to the maximum extent possible.

5.12.3.6. The Federal Communications Commission (FCC) prohibits the use of unauthorized frequencies for interplane, HAVE QUICK and SECURE VOICE training.

5.12.3.7. When the aircraft is in other than a normal configuration (for example, an engine inoperative, hydraulic or electrical malfunction, communications difficulty, etc.), the pilot should request simultaneous transmission of the controller's instructions on a single frequency approach if in a terminal area under radar control.

5.12.4. CRM Assertive Statement "Time Out":

5.12.4.1. "Time Out" is the common assertive statement for use by all crewmembers. The use of "Time Out" will:

5.12.4.1.1. Provide a clear warning sign of a deviation or loss of situational awareness.

5.12.4.1.2. Provide an opportunity to break the error chain before a mishap occurs.

5.12.4.1.3. Notify all crewmembers that someone sees the aircraft or crew departing from established guidelines, the briefed scenario, or that someone is simply uncomfortable with the developing conditions.

5.12.4.2. As soon as possible after a "Time Out" has been called, the aircrew will take the following actions:

5.12.4.2.1. Safety permitting, stabilize the aircraft.

5.12.4.2.2. The initiating crewmember will voice his or her concerns to the crew.

5.12.4.2.3. The PIC will provide all other crewmembers with the opportunity to voice inputs relative to the stated concerns.

5.12.4.2.4. After considering all inputs, the PIC will direct the aircrew to continue the current course of action or direct a new course of action. **NOTE:** The PIC is the final decision authority.

5.12.5. Sterile Cockpit. With the exception of cruise flight, conversation below 18,000' MSL will be limited to mission, departure, or approach essential items. Every effort will be made to accomplish briefings and appropriate checklists prior to top of descent (TOD). Sterile cockpit procedures also apply during taxi and air refueling operations.

5.12.6. Heads-up/Heads-down. Any crewmember that observes both pilots heads-down at the same time (other than heads-down instrument flying) shall alert the PF without delay.

5.12.7. CRM Enhancement. PICs will conduct a CRM exercise on the first suitable segment of each mission. This will be done at level off on a non interference basis with other mission requirements. Take the exercise to a logical conclusion and ensure crew communications and duties are appropriate. Suggested topics are rapid decompression, oceanic contingency operation, emergency divert or other MAJCOM or locally generated Special Interest Item (SII).

5.12.8. Critical Action Coordination. Those actions that are flight critical/irreversible in nature and should always be confirmed by two crew members. These actions include, but are not limited to, pulling the engine fire handle, placing the engine start switch to stop, discharging agent, and dumping fuel. The crew member performing the action points to the affected switch/handle and verbally seeks confirmation from a second crew member (i.e."CONFIRM NUMBER ONE"). The crew member confirming the action looks at the affected switch/handle and acknowledges (i.e."NUMBER ONE CONFIRMED").

5.13. Transportation of Pets. Transporting pets (dogs and cats) on aircraft will be coordinated through unit OG/CC (or equivalent) for approval with C2 agencies (CVAM, AMD, etc). Other pets or animals are normally prohibited. Waiver authority is OUSD(AT&L). Units are responsible for developing guidance regarding handling of pets during flight.

5.14. Alcoholic Beverages. Dispensing of alcoholic beverages on VIP Aircraft is approved.

5.15. Runway, Taxiway, and Airfield Requirements use Tables 5. 5. and 5.6

Table 5.5. Minimum Runway Length.

MDS Aircraft	Minimum Runway Length for Landing	Minimum Runway Length for Touch and Go's
C-38	5000 feet (1525 meters)	6000 feet (1829 meters)

5.15.1. Waiver requirements. If operationally necessary, the unit OG/CC may approve use of runways shorter than specified. Approval requires careful evaluation of aircraft and crew capabilities. Request waivers through C2 centers, unit stan/eval for OG/CC approval. If operations are approved, a qualified and current AC, IP or EP will make the landing and takeoff from the left seat. Inform MAJCOM/Stan Eval of all OG/CC waivers granted.

5.15.1.1. The minimum runway length for takeoff or landing should not be waived to less than 4500 feet for the C-38.

5.15.2. Runway length for takeoff.

5.15.2.1. Do not attempt takeoff if runway available is less than critical field length.

5.15.3. Runway Length for Landing.

5.15.3.1. Minimum required runway for landing will be based on landing distance computed from 50 feet over threshold.

5.15.3.2. Compute landing distance with no-reverse thrust.

5.15.4. Minimum Runway and Taxiway Width Requirements.

Table 5.6. Minimum Runway and Taxiway Width Requirements.

MDS Aircraft	Minimum Runway Width	Minimum Taxiway Width	Minimum Width 180 Degree Turn
C-38	50 feet (16 meters)	25 feet (8 meters)	55 feet (17 meters)

5.15.4.1. Waiver Authority. If operationally necessary, the unit OG/CC (or equivalent) may approve use of narrower runways or taxiways than specified. Approval requires careful evaluation of aircraft and crew capabilities, as well as airfield facilities. Request waivers through C2 centers and unit stan/eval for OG/CC approval. If operations are approved, a qualified and current instructor or flight examiner will make the takeoff/landing/taxi (as appropriate) from the left seat. Inform NGB/A3OM of all waivers granted. In all cases, AC's should consider deplaning a crewmember if at all doubtful of the result to safely marshal the aircraft.

5.15.5. Use of Overruns. If approach end overruns are available and stressed or authorized for normal operations, they may be used to increase the runway available for takeoff. Departure end overruns (if stressed and authorized) may also be used for landing if needed.

5.15.6. Takeoff or Landing Over Raised Arresting Cables (does not include recessed cables).

5.15.6.1. When conditions permit [aircraft gross weight, runway length, weather, winds, Takeoff and Landing Data (TOLD), etc.] and the PIC has considered the potential for damaging the aircraft, make takeoffs and landings beyond raised cable barriers. Use the entire length of runway if necessary. Be aware that operations over arresting gear barriers at speeds in excess of taxi speed may result in damage to the aircraft.

5.15.6.2. Do not land on a raised arresting cable. Damage may occur to the cable or aircraft.

5.15.6.3. If the aircraft lands before a raised arresting cable and rolls over it, the flight crew should contact the tower to have the cable inspected (this does not include rolling over a cable at normal taxi speeds).

5.15.6.4. Do not takeoff or land over a raised arresting cable that has been reported as slack, loose, or improperly rigged by NOTAM, Automated Terminal Information Service (ATIS), ATC, etc.

5.15.7. Other Airfield Requirements.

5.15.7.1. Consult with MAJCOM Airfield Suitability Branch (HQ AMC/A3AS for MAJCOMs without an airfield suitability branch) for suitability guidance. Once a mission is in execution, the PIC is responsible for determining airfield suitability based upon operational need. Airfield certification requirements are detailed in the ASRR.

5.15.7.2. Aircrews and planning agencies will contact HQ AMC/A3AS for all questions pertaining to airfield weight bearing capacity and will review the Global Decision Support System (GDSS)/GDSS2/ASRR before all off-station operations for which AMC is the mission execution authority. 18AF/CC is the waiver authority for the restrictions in GDSS/GDSS2 Giant Report and ASRR for AMC and AMC-gained aircraft, unless specifically delegated in this Instruction or AMCI 11-208. Direct GDSS/GDSS2 Giant Report and ASRR waiver requests to HQ AMC/A3AS. Parent MAJCOM/A3 is the waiver authority for non-AMC missions. The PIC is responsible for waiver compliance. Consult the ASRR for airfield certification requirements.

5.15.8. **Wind Restrictions.** Airfields will be considered unusable for takeoff and landing when winds (including gusts) are greater than established in [Table 5.7](#)

Table 5.7. Wind Restrictions.

MDS Aircraft	Maximum Wind Any Direction	Maximum Tailwind Component	Maximum Crosswind Component
C-38	50 knots	10 knots	29 knots

5.15.8.1. The maximum crosswind component during manual (autopilot off) CAT II is 10 knots.

5.15.8.2. Reference chapter 9 for CAT II training restrictions.

5.15.9. Runway Condition Reading (RCR) or Runway Surface Condition (RSC). Comply with information provided in Table 5.8.

Table 5.8. Crosswinds for Varying RSC.

WET	STANDING WATER	SNOW (NO MELTING)	SNOW (MELTING)	ICE (NO MELTING)	ICE (MELTING)
16 KTS	12 KTS	16 KTS	7 KTS	7 KTS	NOT AUTHORIZED

5.15.9.1. Determine RCR versus maximum allowable crosswind component from the AFM. Braking Action/Mu values from the AFM define runway condition and aircraft capability. RCR equivalents to Braking Action/Mu values are found in the AFM.

5.15.9.2. Operations on runways partially covered with snow or ice, takeoff data will be based on the reported RSC or RCR for the cleared portion of the runway. To ensure proper takeoff performance in the event of an engine failure, the runway should be cleared to allow for your maximum Vmcg offset. If your required Vmcg offset either

side of centerline is not cleared to the reported RSC, then the RSC of the unclear portion, up to your required offset, will be used for takeoff data computations.

5.15.9.3. RCR Reporting. RCR information is obtained only within 20 feet of the runway centerline. Only the average RCR is reported. Many portions of the runway (laterally and longitudinally) may have a significantly lower RCR than the value reported.

5.15.9.4. Wet vs. RCR. For operations on wet, un-grooved runways, use the RCR designated as "wet" in the AFM for all takeoff and landing data. Use RCR 12 if the "wet" RCR is not designated in the AFM. For wet operations on grooved runways, use the RCR corresponding to "Dry" in the AFM.

5.15.9.5. No Reported RCR or RSC. When RCR or RSC reporting is not available, flight crews are to consider a runway surface as wet when there is sufficient water on the surface to cause reflective glare or when rain is falling.

5.15.9.6. Localized Hazards. RCR or RSC reports do not call attention to localized RSC hazards, i.e. standing water pools, snow, and sand drifts. Such hazards probably will not be reported unless accompanied by reduced RCR. Pilots should be alert to the possibility of this condition existing and, if deemed safe, attempt to avoid these hazards.

5.15.9.7. RCR Corrections. Do not use runways with reported RCR lower than the lowest RCR correction contained in the AFM.

5.15.9.8. If the runway is wet and the reported RCR is higher than the AFM wet RCR, the actual reported RCR may be used for mission accomplishment.

5.16. Aircraft Taxi Obstruction Clearance Criteria and Foreign Object Damage (FOD) Avoidance.

5.16.1. Without wing walkers, avoid taxi obstructions by at least 25 feet. With wing walkers, avoid taxi obstructions by at least 10 feet. **EXCEPTION:** Aircraft at home station may delete wing walker restriction IAW AFI 11-218, *Aircraft Operations and Movement on the Ground*, if paragraphs 1.22.2. or 1.22.3 (as applicable) are complied with.

5.16.2. When taxi clearance is doubtful, use one or more wing walkers. If wing walkers are unavailable, de-plane one or more crewmembers to maintain obstruction clearance and provide marshalling. Use AFI 11-218 signals. The PIC should use marshallers, wing walkers, deplaned crewmembers, or a crewmember positioned at a door or window to act as an observer while maneuvering on narrow taxiways. During night taxi operations, marshallers should have an illuminated wand in each hand. Observers should be in a position to observe wing walkers at all times (through door or windows) and communicate to the pilot.

5.16.3. FOD Avoidance. Make every effort to minimize the potential for engine FOD. Crews should:

5.16.3.1. Carefully review airfield layout during mission planning. Be familiar with taxi routes, turn requirements, and areas for potential FOD.

5.16.3.2. Confirm that taxi routes have been swept. If a taxi route has not been swept, consider taxiing via an alternate route.

5.16.3.3. Minimize power settings during all taxi operations.

5.16.3.4. Avoid (when possible) 180-degree turns.

5.16.3.5. Avoid (when possible) taxi operations that would position a wing engine over an unprepared or un-swept surface. If it becomes absolutely necessary to position a wing engine over an unprepared or un-swept surface, the engine should be left in idle (to the maximum extent possible) until the engine is back over an improved surface. Consider increasing power on remaining engines.

5.16.3.6. If it becomes absolutely necessary to accomplish a 180-degree turn on a narrow runway, the turn should be accomplished at an intersection of a link taxiway or at a designated turn around pad.

5.17. Human Remains (HR). MAJCOM/A3 with mission execution authority must authorize transport of HRs on VIP Aircraft.

5.18. Fuel Jettison Procedures. Fuel jettison is limited to the minimum necessary for safe and effective flight operations. Except in the case of an emergency, prior to jettisoning fuel, crews will notify the appropriate ATC or flight service facility of intentions, altitude, and location. Inform the appropriate ATC or flight service facility when the operation is complete.

5.19. Aircraft Speed. IAW AFI 11-202V3, AFM, and applicable AFTTPs.

5.20. Bird/Wildlife Aircraft Strike Hazard (BASH) Programs. BASH programs are centralized unit efforts that provide information cross-feed, hazard identification, and a consolidated course of action. As a minimum, units must implement the following procedures:

5.20.1. Ensure compliance with the following Bird Watch Condition restrictions.

5.20.1.1. Bird Watch Condition Low - No operating restrictions.

5.20.1.2. Bird Watch Condition Moderate - Initial takeoffs and final landings allowed only when departure and arrival routes will avoid bird activity. Local Instrument Flight Rules (IFR)/Visual Flight Rules (VFR) traffic pattern activity is prohibited.

5.20.1.3. Bird Watch Condition Severe - All takeoffs and landings are prohibited. Waiver authority is local OG/CC or equivalent. Reference [paragraph 1.4.2](#) for the waiver authority to operate at non-DoD airfields.

5.20.2. Make every effort to not schedule takeoffs, landings, and low-levels from one hour before to one hour after sunrise and sunset during the BASH phase II period. Significant bird hazards will be published in FLIP Area Planning (AP) and the IFR Supplement along with the associated airfield operating hour restrictions and avoidance instructions.

5.20.3. When operating at airfields where no BASH program exists, PIC's have the authority to delay takeoffs and arrivals due to bird condition. Coordinate through appropriate C2 authority.

5.20.4. The PIC should consider bird migratory patterns during the en route portion of the mission to help minimize the potential of an in-flight bird strike. The Bird Avoidance Model (BAM) on HQ AFSC/SEF website contains BASH information including regionalized CONUS bird migration patterns, European BIRDTAMS, Portable Flight Planning System (PFPS) software overlay, and the latest news. The Avian Hazard Advisory System (AHAS)

website is another source for real time bird hazard information. Both sites may be accessed through the AMC aircrew mission planning portal. See AFPAM 91-212, *Bird/Wildlife Aircraft Strike Hazard (BASH) Management Techniques*, for additional information.

5.20.5. Following a bird strike, aircrews should land as soon as conditions permit to have the aircraft inspected by qualified maintenance personnel. Aircrews involved in a wildlife strike will fill out an AF Form 853, *Air Force Wildlife Strike Report*, and forward to the appropriate safety office.

5.20.5.1. Bird strike damage cannot be accurately assessed in-flight, and undetected damage may result in a complex airborne emergency; only qualified maintenance personnel on the ground can make reliable damage assessments.

5.20.5.2. Aircrews should not change the aircraft configuration until it has been determined that it is safe to do so. However, crewmember judgment should always prevail in any situation in making a decision concerning safety of the aircrew and aircraft.

5.21. Functional Check Flights (FCF), Acceptance Check Flights (ACF) and Operational Check Flights (OCF). FCFs and ACFs will be performed according to TO 1-1-300, *Acceptance/Functional Check Flt and Maint Opr Checks*, and the applicable AFI 21-101. FCF flights/programs are not applicable to leased aircraft (except where specifically annotated in lease agreement).

5.21.1. Terms and Abbreviations:

5.21.1.1. FCF. FCFs are performed after accomplishing inspections or maintenance to assure the aircraft is airworthy and capable of mission accomplishment. FCF certification required.

5.21.1.2. ACF. ACFs specify guidelines for accepting new production aircraft and to determine compliance with contractual requirements. ACF certification required.

5.21.1.3. OCF. OCFs will be performed to verify functionality for could not duplicate (CND) and non-safety of flight items. Aircraft will be at least Partial Mission-Capable (PMC) to perform an OCF. PIC will be at least an instructor pilot.

5.21.2. FCF Restrictions:

5.21.2.1. Conditions requiring an FCF typically include (but are not limited to) major retrofit modifications, removal or replacement of moveable flight control surfaces, major repairs that would affect the flying characteristics of the aircraft, adjustment, removal, or replacement of major components of the flight control system for which airworthiness cannot be verified by maintenance operational checks, or removal or replacement of an engine. Final determination for conditions requiring an FCF are contained in manufacturer's guidance or maintenance TOs.

5.21.2.2. OG/CC's are responsible for the wing FCF program. The OG/CC may waive a complete FCF and authorize an FCF to check only systems disturbed by maintenance, inspection or modification.

5.21.2.3. Minimum Crew Complement: Pilot: At least one FCF/ACF certified instructor, second pilot must be current and qualified.

5.21.2.4. Check flights should be conducted within the designated check flight airspace of the airfield from which the flight was launched except when the flight must be conducted under specific conditions, not compatible with local conditions and area restrictions.

5.21.2.5. Reference paragraph 1.4.2. for the waiver authority to approve a combined FCF and ferry flight with degraded systems.

5.21.2.6. FCFs and ACFs will be accomplished by the best qualified instructor/evaluator aircrews. The OG/CC will provide written designation of FCF/ACF qualified aircrew.

5.21.2.7. FCFs will normally be conducted in daylight, VMC conditions. However, the OG/CC may authorize a flight under a combination of VFR, IFR, and "VFR on Top" conditions. The flight will begin in VFR conditions. If the aircraft and all systems are operating properly, it may proceed IFR to penetrate cloud cover to VFR on top to continue the altitude phase of the flight.

5.21.2.8. FCF aborts. If a malfunction occurs during an FCF and is not related to the condition generating the FCF, and the original condition operationally checks good, the aircraft may be released for flight.

5.21.2.9. OG/CC (or equivalent) and deployed mission commander may authorize temporary waivers to these FCF procedures for aircrew qualification when operationally necessary. Permanent waiver requests require MAJCOM Stan/Eval approval.

5.22. Participation in Aerial Events. IAW AFI 11-209, *Aerial Event Policy and Procedures*, all aerial events must be sanctioned and individually approved by the appropriate military authority, and dated with the FAA. AFI 11-209 clearly identifies events sanctioned for support, and specifies the approval authority for each type. AFI 11-209 also stipulates that units participating in aerial events will ensure activities are coordinated with the FAA through the regional USAF representative.

5.23. Hand Held GPS and Portable Electronic Devices for Navigation. All VIP Aircraft have integrated GPS. As a backup, aircrews are authorized to carry an approved handheld GPS unit for additional situational awareness. Use of a handheld GPS unit as an IFR navigation aid is prohibited. An Electronic Flight Bag (EFB) is a portable tablet computer. It contains a database of approach charts/plates for use in flight. Some EFBs are integrated into the Flight Management Computer (FMC)/Flight Management System (FMS) or have a hand-held GPS and suction cup antenna. Use of these devices for instrument procedures (below 10,000 feet) must be approved by HQ AFFSA/A3OF and MAJCOM/A3 with mission execution authority. All non-transmitting portable electronic devices require Electromagnetic Interference (EMI)/Electromagnetic Compatibility (EMC) testing for use in flight below 10,000 feet. AMC/A3V maintains a list of approved carry-on electrical devices. Contact AMC/A3VS for specifics.

5.23.1. Before using the device in-flight, aircrew members must receive training and aircraft must be capable of supporting the hand-held GPS equipment. The portable GPS will not be used to update Inertial Navigation Systems (INS)/Inertial Reference Systems (IRS) equipment unless the portable GPS position can be confirmed by another aircraft source [i.e. radar, Tactical Air Navigation (TACAN), Very High Frequency Omni-Directional Radio-Range (VOR), another INS/IRS, or navigator].

5.24. Traffic Alert and Collision Avoidance System (TCAS). TCAS is designed to enhance crew awareness of nearby traffic and issue advisories for timely visual acquisition or appropriate vertical flight path maneuvers to avoid potential collisions. It is intended as a backup to visual collision avoidance, application of right-of-way rules and ATC separation. The PIC will file an AF Form 651, *Hazardous Air Traffic Report (HATR)* if required to deviate due to an resolution advisory (RA).

5.24.1. Aircrew must comply with all RA's. This ensures aircraft separation computed by TCAS. Failure to follow the computed RA may result in a midair collision. Advise ATC as soon as practical when a deviation becomes necessary due to a TCAS resolution advisory.

5.24.2. Aircrew should visually clear the airspace and obtain clearance prior to maneuvering the aircraft in response to a TCAS traffic advisory (TA).

5.25. Radar/Radio Altimeter.

5.25.1. Any crewmember detecting the illumination of the radar/radio altimeter Low Altitude Warning Light will immediately notify the PF. Terrain clearance and aircraft position must be verified.

5.25.2. Before departure the radar/radio altimeter should be set to the emergency return minimums altitude or the first planned approach for local training unless AFM specifies different. Normally, use the height above touchdown/height above aerodrome (HAT/HAA) for IMC, or 600 feet for VMC departures.

5.25.3. Set the radar/radio altimeter to the HAT/HAA during instrument approaches.

5.26. Not Used.

5.27. Not Used.

5.28. Aircraft Recovery From Unprepared Surfaces. Aircrews should not attempt to recover an aircraft after inadvertent entry onto unprepared surfaces not suitable for taxi. Using the appropriate equipment, ground crews will accomplish aircraft recovery. **EXCEPTION:** In highly unusual situations, it may be necessary for VIP aircrews to recover the aircraft. Accomplish recovery only if the PIC has coordinated with unit safety, stan/eval and appropriate MAJCOM maintenance authorities through the unit C2 centers to confirm there is no aircraft damage and the surface will support the aircraft.

5.29. Engines Running Onload/Offload (ERO) Procedures. Accomplish IAW applicable AFM and AFTTPs.

5.30. Use of Automation.

5.30.1. General Automation Procedures. There must be a clear understanding of the Pilot Flying (PF) and the Pilot Monitoring (PM) duties at all times. Aircrews are expected to fly the aircraft using the highest level of automation, balanced with the requirement to maintain basic flying skills. However, pilots are authorized to choose an appropriate level of automation consistent with changing flight environments. If the use of automation creates a loss of situational awareness or results in task saturation, shift to a less demanding level or disconnect the automation entirely and re-establish desired aircraft path and control. If the automation is not performing as expected, take over manually. Reference backup

navigational aids (NAVAIDs) (if available) that define the procedure when using the FMC/FMS.

5.30.2. Verbalize, Verify, and Monitor (VVM) is a closed-loop system of communication designed to significantly reduce typical automation selection errors between the PF and PM. VVM consists of the following three step process:

5.30.2.1. Prior to making any changes in the GP, FMS, CDU, Altitude Alerter, etc., , the pilot making the entries will VERBALIZE the intended changes.

5.30.2.2. Both pilots will VERIFY the intended changes prior to execution.

5.30.2.3. Both pilots will MONITOR the aircraft to ensure the expected performance is achieved.

5.30.2.4. The PF will announce changes to the level of automation, flight director and autopilot mode selections, and mode transitions to the maximum extent possible (e.g. “Autopilot engaged”, “Altitude Hold”, “Nav-Capture”, etc.). The PM will acknowledge the call.

5.30.3. It is the responsibility of the crew to fully understand the operations and limitations of the automation on the aircraft. In flight, the PF will determine the most desirable level of automation for a given situation. The PM provides basis for duties to aid PF, he must manage PF workload, set priorities and employ the available resources, including automation, to help PF maintain overall situational awareness.

5.30.4. Use appropriate levels of automation as required by the flight conditions. The first priority is to fly the aircraft. The FMC/FMS/Automatic Flight Director System (AFDS) and Mission Computer are intended to aid in workload management, not complicate it. As the flight situation changes, do not feel locked into a level of automation.

5.30.5. Avoid the following common pitfalls associated with over-reliance, misuse, or misunderstanding of automation.

5.30.5.1. Fixating on the automation. One pilot should always remain heads up. Establish clear roles for computer related tasks. Announce “pilot heads down” when the task requires focusing significant attention on the mission computer in flight.

5.30.5.2. Misprioritizing programming tasks. Extensive reprogramming during critical phases of flight or during periods of high workload should be avoided.

5.30.5.3. Mode awareness. The PF should monitor flight mode annunciations and make AFDS panel changes during coupled operations. Programming the FMC/FMS should be verified by PF prior to coupling route to the autopilot. During uncoupled flight, the PF should direct the PM to make changes to the AFDS panel to match the flight director. Confirm all mode changes by observing the correct flight mode annunciations.

5.30.5.4. Altitude Window. The most critically missed area of responsibility is the altitude window on the AFDS panel. Typically, (autopilot on or off), the PM sets the cleared altitude in the window and confirms the altitude with the PF. It is vital that the PM obtain verbal confirmation from PF after setting an assigned altitude on the AFDS panel.

5.30.5.5. Over-reliance on automation. Practice flight operations at all levels of automation to be proficient. If the automation is not performing as expected, take over manually. Reference backup navigational aids (NAVAIDs) (if available) that define the procedure when using the FMC/FMS.

5.31. Aircraft Defensive System (DS). Operate DS IAW applicable AFMs, technical instructions, AFTTPs, and command guidance.

5.32. Mobility Aircrew Fall Protection. Aircrew members are prohibited from climbing onto the upper fuselage or wing surfaces unless there is an operational necessity. When operational conditions dictate that aircrew members must climb onto upper fuselage or wing surfaces, they will do so only when conditions are dry and while wearing a maintenance safety harness and properly engaged lanyard. PICs will ensure no other personnel (excluding qualified ops/maintenance personnel) have access to, or are allowed to, climb onto the fuselage or wings. **EXCEPTION:** Aircraft that do not have the ability to anchor the maintenance safety harness and lanyard are exempt from the harness requirement until a suitable alternate is available.

Chapter 6

AIRCREW PROCEDURES

Section 6A—Pre-mission

6.1. Aircrew Uniform.

6.1.1. Wear the aircrew uniform, as outlined in AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*, on all missions, unless otherwise authorized. VIP aircrews are authorized to wear civilian attire and non-fire retardant uniforms while performing aircrew duties (this approval meets the waiver requirement of AFI 11-301, Volume 1, *Aircrew Flight Equipment (AFE) Program*).

6.1.2. Aircrew Uniforms. Flight crews will comply with AFI 36-2903 standards at all times, including while off duty. Flight crews wear the aircrew uniform as directed by unit OG/CC or equivalent as specified in local supplement or MAJCOM supplement to this AFI.

6.1.3. Locals, FCFs, and Ferry Flights. Uniforms for local flights are specified by the squadron. Crewmembers on FCF/ferry/training flights away from home station may wear any authorized uniform combination. Crew chiefs and maintenance personnel are authorized to wear the utility uniform.

6.1.4. TDY VIP flight crews will comply with AFI 36-2903 standards at all times, including while off duty. Clothing will present a neat, conservative appearance and be appropriate for the country and/or hotel/facilities being visited. At no time will crewmembers wear clothing with profane or obscene statements, pictures, or logos. Male crewmembers are not authorized the wear of earrings.

6.1.5. Uniforms for aircraft security RAVENs. RAVENs and RAVEN augmentees will wear the same type clothing, military or civilian, as the rest of the aircrew. For stateside and overseas missions scheduled to Remain Overnight (RON) at civilian airports or overseas missions transiting US military bases where civilian clothing is required for travel, civilian clothing will be worn while performing sentry duties. The RAVEN Non-Commissioned Officer in Charge (NCOIC) will coordinate duty uniform requirements with the PIC prior to mission departure.

6.1.6. Personnel will have the appropriate items of clothing in their possession when flying in Arctic and Antarctic regions and Desert regions IAW OPORD (if applicable). **EXCEPTION:** Not applicable to transoceanic flights or when staging or transiting Elmendorf AFB.

6.2. Personal Requirements.

6.2.1. Passports. Carry a valid passport on all missions scheduled outside the CONUS (OCONUS). **EXCEPTION:** Unit commanders may authorize personnel who have applied for or submitted passports for renewal to act as crewmembers on missions not scheduled to transit locations where passports are required. PICs are responsible for ensuring passports (with applicable visas) are carried by crewmembers when required.

6.2.2. Shot Record. Crewmembers must maintain worldwide shot requirements and carry their shot records on all OCONUS missions.

6.2.3. Driver's License. A valid state driver's license is required on each TDY where use of US government general purpose vehicles may be required. Crewmembers will contact the local airfield manager before driving on the flight line.

6.2.4. Identification Tags. Crewmembers will carry two identification tags (aka dog tags) on all flights.

6.2.5. FOD Hazards. Crewmembers will not wear wigs, hairpieces, rings, ornaments, or earrings in the aircraft or on the flight line. **EXCEPTION:** Crewmembers may wear elastic hair fasteners and/or pins, clips, earrings or barrettes (IAW AFI 36-2903) provided they do not interfere with the wearing of headsets, or the donning of oxygen equipment. They will be accounted for before and after flight.

6.2.6. Flight Gloves. All crewmembers should have Nomex gloves in their possession.

6.2.7. Flashlight. Each crewmember must carry an operable flashlight for night flights.

6.2.8. Headgear. Do not wear headgear that interferes with donning the oxygen mask or smoke goggles while performing crew duties.

6.2.9. Hearing Protection. Each crew member will have appropriate hearing protection available for the conditions encountered on the flight line.

6.2.10. Reflective Belts. Crew members will have reflective belts in their possession. These are to be used on the flight line between dusk to dawn (or as directed by local supplement).

6.2.11. Protective and Survival Gear. If required IAW applicable AOR guidance, the PIC will ensure appropriate crew members are equipped with protective gear (e.g. body armor, laser eye protection, etc.) and survival equipment (e.g. survival kit, escape and evasion kit, etc.).

6.3. Pre-mission Actions.

6.3.1. Mission Planning and Airfield Review. The PIC is responsible for ensuring all mission planning, foreign clearance and en route support requirements are coordinated. Planning activities may be accomplished by contracted dispatch, flight management agencies or mission operations personnel. The PIC is ultimately responsible for validating all planning material prior to execution. The suggested mission planning review areas for aircrew and IFM/CDS/AMD include, but are not limited to:

6.3.1.1. Airspace/Airfield Review. Aircrews will use MAJCOM approved Unclassified But Sensitive Protocol Router (NIPR) and Secret Internet Protocol Router (SIPR) network websites. The AMC Aircrew Portal and theater-specific websites provide vital links to planning. Include FLIP, Flight Information Region (fir)/Upper Flight Information Region (uir)/Air Defense Identification Zone (adiz), aOR, and Jeppesen procedures as well as study of runways, taxiways, and ramp areas. Refer to paragraph 5.15. of this AFI for minimum runway and taxiway requirements. Check weight bearing capacities. Contact AMC/A3AS (Airfield Suitability), and/or Airfield Manager directly if airport capabilities are questionable. Check adequacy of parking space and if adverse weather is possible arrange for hangar space if available. Check for DoD contract

fueling/service/AGE availability prior to making any arrangements with airport facilities. If cold weather operations are expected, check snow removal and de-icing capabilities.

6.3.1.2. Airspace classifications, AMC Giant Report, ASRR, Airport Qualification & Familiarization Manual, and airport qualification videos (if available).

6.3.1.3. Theater Instrument Procedures. Required instruments and/or procedures for Non-DoD Approaches, International Civil Aviation Organization (ICAO) course reversal approaches, circling, holding, Non Directional Beacon (NDB) approaches, Host Nation/Jeppesen Approaches, and transition altitudes/altimeter setting procedures, terminal GPS coverage [Receiver Autonomous Integrity Monitoring (RAIM) check if applicable]. Notify appropriate MAJCOM Terminal Instrument Procedures (TERPS) office as soon as possible to request reviews of non-DoD procedures (unless using the host government-sanctioned FLIP product for airfields located in a Special Accredited Host Nation).

6.3.1.4. Oceanic/Organized Track Systems. Consult North Atlantic Minimum Navigation Performance Specification (MNPS) Airspace Operations Manual, FAA Oceanic NOTAMS, and FLIP AP series, to verify MNPS airspace, Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) and North Atlantic and Pacific Region Track Systems requirements.

6.3.1.5. Communication and Emergency Procedures. FLIP AP series, FIH, C2, over-water position reporting, CPDLC procedures, lost communications procedures, emergency procedures, and weather information sources.

6.3.1.6. Border Clearance. Foreign Clearance Guide (FCG), Aircraft Clearance and Personnel Customs, Immigration, Agriculture, Insect and Pest Control, Diplomatic Clearance Log.

6.3.1.7. Flight planning. DD Form 1801, *DoD International Flight Plan*, Jeppesen Approach Plates and Charts, theater weather conditions, fuel reserves and alternate requirements, Extended Range Operations (EROPS) fuel requirements, MEL/MMEL dispatch restrictions, Equal Time Points (ETP)/critical wind factors, and NOTAMs [RAIM - GPS, Air Route Traffic Control Center (ARTCC), enroute and international NOTAMs].

6.3.1.8. Special Military Operations. Obtain Altitude Reservations (ALTRV), AOR procedures, SPINS, ATO's and review "Due Regard" procedures if applicable to the mission.

6.3.1.9. Other Regulatory Requirements. General navigation procedures, Aircrew Flight Equipment (AFE), hazardous cargo, crew rest/crew duty time, aircraft records/AFTO 781, *ARMS Aircrew/Mission Data Document*, procedures, Mission Essential Personnel, passenger handling, etc.

6.3.1.10. Location Information. C2 reporting procedures, maintenance problems, aircraft security, embassy/consulate contacts, social customs, billeting, transportation, and cash billing.

6.3.2. Pre-Mission Planning. Pre-mission planning responsibilities include, but are not limited to the following:

6.3.2.1. Review tasking and itinerary. When mission confirms, contact the DV mission contact. Inform the on-board contact officer that excessive carry on baggage cannot be stowed in the passenger compartment. Confirm on-board communication requirements.

6.3.2.2. Review applicable OPORD, SPINS, ATO, Jeppesen products and DoD FLIP.

6.3.2.3. Foreign Clearance. Review the FCG and classified FCG. Ensure the planned itinerary can be flown in compliance with the provisions of the FCG. If not, obtain an exception to the FCG through the Defense Attaché Office (DAO) or State Department channels or coordinate an itinerary change. Start visa processing as soon as possible.

6.3.2.4. Flight Itinerary. Confirm itinerary times and prepare a flight itinerary. Itinerary leg times are block-to-block times (door closed to door open) and include time for taxi-out, takeoff, climb, descent, approach, landing, and taxi-in. After completion of planned computer flight plan (CFP), current operations/CDS/IFM will notify C2 if CFP + taxi block times are in excess of scheduled block times. Reference local supplement for unit standards and guidance for programmed (AVISOURCE, GDSS, etc) vs. CFP block times. Notify C2 and re-compute departure times to meet “hard” block times if requested. In all cases, ensure forecast winds, payload and drag factors are accurately assessed.

6.3.2.5. Messages. Advance notice and/or diplomatic clearance messages are required for all missions to destinations OCONUS, including flights to Alaska, Hawaii, and Puerto Rico. Exact requirements and addressees for each country are found in the FCG and classified FCG. See local supplement for additional unit guidance on message formats and procedures.

6.3.2.6. Protection of DV foreign travel itineraries is required by DoD and USAF policy guidance. For unclassified missions operating outside the United States, US possessions, or Canada, do not include the name of the DV in unclassified messages or email. Make every effort to keep DV itinerary and trip itinerary separate to enhance OPSEC. See local supplement for security measures to transmit itinerary, hotel reservations and DV messages.

6.3.2.7. En Route Support. PICs are ultimately responsible to ensure en route support at all destinations. If applicable, ensure CDS/IFM/AMD/CAOC arrange en route support. For most OCONUS missions, arrange support by tasking the local Defense/Air Attaché by e-mail or AUTOMATED MESSAGE HANDLING SYSTEM (AMHS) message. For all CONUS missions (and as necessary for foreign missions), PICs will confirm destination support through CDS/IFM/AMD (as applicable). When a mission or portion of a mission is canceled or changed, the PIC is responsible for advising affected support agencies or attaches. 618th Tanker Airlift Control Center (TACC) is available for VIP support (USAFE/PACAF support provided by AMD and CENTAF support provided by CAOC).

6.3.2.8. Coordinate for worldwide FLIP, TAAD procedures and sufficient COMSEC materials for the duration of the mission.

6.3.2.9. Review anti-hijacking procedures (AFI 13-207, *Preventing and Resisting Piracy (Hijacking)* (FOUO), and chapter 7 of this AFI).

6.3.2.10. Obtain terminal terrain charts for unfamiliar destinations, if available.

6.3.2.11. If applicable, release available seats to passenger terminal (See paragraph 6.51.1. of this AFI).

6.3.2.12. Comply with the AMC Phoenix Raven Locations list for enroute aircraft security.

6.3.3. Parking, Servicing, and Aircrew Requirements. The following should be considered when planning missions into certain locations:

6.3.3.1. Guard and Reserve Facilities. On missions to CONUS civil airports with a military facility (ANG/AFRC) capable of providing support, use the military facility; however, there are exceptions. If the mission will arrive or depart outside the normal operating hours of the military facility (nights, weekends, or holidays) use a civilian facility (terminal, FBO ramp, etc.) provided you can arrange the necessary support. If the using agency requests use of a civilian facility in preference to an available military facility, use the civilian facility. If your DV party has a requirement to use the military facility, make arrangements to use the military facility. In general, avoid requiring ANG/AFRC units to work overtime in support of VIP Missions unless the using agency has a specific need to use the military facility or suitable support cannot be obtained from civilian sources.

6.3.3.2. Contract Servicing Agents. When you plan to use civilian facilities for parking or servicing, refer to the worldwide merchant directory for the Multi Service Card via <https://www.airseacard.com>. Use the government fuel contractor unless you cannot obtain the required services. If your mission requires parking away from the contracted fueling ramp, try to arrange trucking of fuel/servicing at the parking spot; don't plan to taxi to the contracted fuel ramp solely for refueling. Use approved government credit card if you must purchase fuel from other than the designated government contract vendor.

6.3.3.3. Border Clearance. Missions entering or departing the United States will normally use a regular or special foreign clearance base, a civil international airport of entry (AOE), or a landing rights aerodrome as specified in the FCG. Military inspectors at special foreign clearance bases are only authorized to clear aircraft participating in the special projects listed for each base in the FCG. When aircraft not participating in the approved special projects require clearance, the special foreign clearance base commander must obtain advance approval from US border clearance officials in order to clear the aircraft. Aircraft must not transit a special foreign clearance base for clearance unless advance approval is confirmed. If the mission requires, arrangements can be made to use any suitable CONUS airfield, but the PIC must coordinate border clearance inspections with all appropriate government agencies in advance. Refer to the FCG, classified FCG, and applicable AFIs.

6.3.3.4. Security Support. Standard message formats include security support. If RAVENs are assigned to the mission, the senior RAVEN NCO can assist in arranging support. However, security support arrangements are the PIC's responsibility. If additional aircraft security support and/or threat suppression is required, the PIC should contact the applicable tasking agency for assistance.

6.3.3.5. **Aircrew Billeting.** Crew integrity is a mission requirement. PICs must know where their crewmembers are at all times. Itinerary changes are common and often require immediate action by crewmembers. To provide crew control, all crewmembers should be billeted at the same facility at en route stops. The PIC must have a "class A" or equivalent phone in the room. The mission contact officer/escort and the CP controller must know the location of the crew and how to contact them. Crew integrity does not require the whole crew to be billeted together in a BOQ. "Billeted at the same facility" means billeted on the same base or at the same hotel complex; however, if the whole crew is not together, the EAC must have a room phone. When government quarters are available, but not suitable, use an AF Form 2282, *Statement of Adverse Effect - Use of Government Facilities*, to justify the non-use.

6.3.3.6. **Not Used.**

6.3.3.7. **Advance Per Diem.** Normally, advance per diem will not be paid to crewmembers, they are expected to use their government provided credit cards. When the mission requires an advance that is too large to reasonably collect from an automatic teller, the squadron administration section will assist in arranging advance per diem payments. On missions where substantial cash payments are anticipated for aircrew transportation and other incidental official crew expenses, the PIC will designate a transportation officer to receive an additional advance and be responsible for these payments. Refer to the Joint Federal Travel Regulation (JFTR) for information about per diem rates and procedures to follow when applying for special per diem allowances.

6.3.4. **Other planning factors:**

6.3.4.1. The SOC serves as POC between mission operations, mission execution authority, and crewmembers. Contact unit SOC for coordination with mission operations or mission execution authority during mission planning and itinerary changes.

6.3.4.2. All VIP Missions are considered "FOR OFFICIAL USE ONLY" and crewmembers will not discuss the mission or any DV information with anyone without a need to know. Unclassified missions may be designated "CLOSE HOLD". In this case, certain mission details are restricted from normal release to military/non-military agencies/contracted dispatch. Clarify the applicable restrictions with unit C2 centers and mission execution authority prior to any mission planning or coordination activities.

6.3.4.3. Confirm the aircraft tail number with the contact officer. Obtain the contact officer's home/cell telephone number and provide him/her with the PIC's home/cell telephone number. Notify unit C2 if the contact's name or phone number is different from the one listed with the SOC/CP printout.

6.3.4.4. Prearrange your pre-departure weather briefing (DV weather package, "social", etc.) IAW local supplement. Provide all details needed to prepare your weather briefing. Do not request (DV weather package, "social", etc.) for "CLOSE HOLD" missions.

6.3.4.5. VIP aircrews will prearrange special communications support as follows:

6.3.4.5.1. High Frequency Global Communications System (HFGCS, formerly known as Mystic Star)/Andrews Very Important Person (VIP) HF support is required for all missions transporting the Secretary of Defense. HFGCS support is also

available on a priority basis for aircraft transporting the Vice President, cabinet members, service secretaries, and service chiefs of staff. When HFGCS/Andrews VIP support is required, the PIC will ensure appropriate agencies are notified. Last minute requests at crew show time are not acceptable. For alert missions, the PIC will request the unit CP or AMD controller to arrange coverage.

6.3.4.5.2. FM radio support is provided by the White House Communications Agency (WHCA) IAW established priorities.

6.3.4.5.3. Current procedures for use of the HFGCS network and the WHCA FM networks are described in the 89 OG/CC Special Communications Support Procedures Package available in each mission kit and at the SOC.

6.3.4.5.4. Denial of service from Andrews Airways. When denied service from Andrews Airways due to higher priority traffic and the aircraft is working another airways station, inform 89 AW CP which station you are working.

6.3.4.5.5. Denial of service from WHCA. When denied service from WHCA on White House missions with a Secure Communications Required profile, notify SOC and advise them to contact mission operations and CVAM immediately.

6.3.4.5.6. Prior to transiting an AOR with special communication requirements, the PIC should contact the unit Intelligence or Tactics office for AOR communication plan and, as applicable, ATO integration.

6.3.4.5.7. Crews will notify contact officer of aircraft capabilities and the costs associated with the respective systems.

6.3.4.6. Arrange for spare parts as required. PICs on extended overseas missions to areas where support facilities are limited may request certain spares be issued for a particular trip. Coordinate requirements with C2 agencies and maintenance control personnel.

6.3.5. Not Used.

6.3.6. Itinerary Coordination. Use the following procedures when confirming and planning itinerary details:

6.3.6.1. Preposition for DV pickups. Plan to preposition for DV pickups two hours prior to the scheduled departure time (or as directed by local supplement/directives). PICs may request to preposition the night prior to an early morning pickup depending on aircraft and crew availability. Early preposition may also be requested to allow adequate crew rest prior to an extended crew duty day. Coordinate request for early preposition with unit C2.

6.3.6.2. Not Used.

6.3.6.3. Manifest Information. The PIC will coordinate with the contact when manifested passengers are not present at departure time. PICs shall designate a crewmember to review manifests for accuracy prior to mission departure. PIC's will not depart without primary DV onboard unless authorized by C2.

6.4. Aircrew Publications Requirements. As a minimum, PICs will carry current copies of AFI 11-202V3 and this AFI on all flights. Additionally, the PIC will ensure the aircraft has a complete set of current AFMs. All must be readily available in the cockpit during all phases of

flight. MAJCOM/A3 with mission execution authority approval is required to use electronic publications in lieu of paper manuals. All other crew positions must carry the appropriate abbreviated checklists. Additional individual aircrew publications requirements will be specified in local supplements.

6.5. Airfield Review. All crewmembers will review Airport Qualification and Familiarization Manuals, audiovisual slide tape programs and review any certification airfields available prior to departure. In addition, aircrews will review appropriate websites, (e.g. AMC Aircrew Portal, CENTAF AOR CAOC) for all restrictions and certification policies for a particular airfield. Contact MAJCOM Airfield Suitability and Analysis Branch for all questions pertaining to airfield weight bearing and suitability prior to all off-station operations. Airfield suitability waivers must be coordinated through unit Stan/Eval to MAJCOM/A3 with mission execution authority for approval. The OG/CC or equivalent may waive the airfield certification requirement (special aircrew certification).

6.6. Aircrew Intelligence Briefing and Tactics Support. Before leaving home station on missions traveling OCONUS (except Alaska and Hawaii), crews will receive an intelligence briefing that will emphasize terrorist, enemy, and friendly political and military development in the area in which they will be flying. Crews must also receive an intelligence brief prior to entering specific AOR. As a complement to the intelligence briefing, the PIC should review and coordinate necessary tactics with the theater and/or unit Tactics office. In theater, aircrews should receive intelligence updates on initial arrival at a forward operating location, or en route stop, and thereafter when significant developments occur. Report information of possible intelligence value to the local intelligence officers as soon as possible to ensure timely dissemination of mission reports (MISREP). In addition, the PIC should provide the Tactics office with feedback on tactical considerations.

Section 6B—Pre-departure

6.7. Not Used.

6.8. Flight Crew Information File (FCIF) Procedures.

6.8.1. Review FCIF, volume 1 (index and safety-of-flight files, as a minimum), before all missions or ground aircrew duties. Update the FCIF currency record with the latest FCIF item number, date, and crewmember's initials or as specified.

6.8.2. Crewmembers delinquent in FCIF review or joining a mission en route will receive an FCIF update from a primary aircrew member counterpart on the mission. Instructor pilots who fly with general officers are responsible for briefing appropriate FCIF items; the instructor pilot should initial the general's FCIF card.

6.8.3. Crewmembers not assigned or attached to the unit operating a mission will certify FCIF review by entering the last FCIF number and their initials behind their name on the file copy of the flight authorization.

6.8.4. Squadrons are responsible for ensuring TDY aircrews receive newly released FCIFs which may result in mission impact.

6.9. Flight Crew Bulletins (FCB).

6.9.1. FCBs are issued under provisions of AFI 11-202V2 and MAJCOM supplements. Operations Group Stan/Eval will be the Office of Primary Responsibility (OPR) for FCBs. Items in FCBs may include local supplement and policies concerning equipment and personnel generally not found in any other publications.

6.9.2. All crewmembers should be cognizant of FCB contents.

6.10. Mission Kits. Carry mission kits (hard or electronic copy) on all operational missions. Mission kits will contain all forms and publications necessary for safe and efficient conduct of the mission. Squadron stan/eval will determine and publish the contents of the mission kit/mission computer by specific MDS aircraft type. Suggested items include:

6.10.1. Publications.

6.10.1.1. AFI 11-401, *Aviation Management*.

6.10.1.2. DESC-I-31 (Defense Energy Support Center Interim Policy Guidance), *Purchase of Aviation Fuel and Services at Commercial Locations* (previously AFI 23-202, *Buying Petroleum Products and Other Supplies and Services Off-Station*).

6.10.1.3. AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*.

6.10.1.4. AMCI 11-208, *Tanker/Airlift Operations* (AMC/AMC-gained aircrew only).

6.10.1.5. AFI 31-104, *Air Force RAVEN Program* (including appropriate MAJCOM supplements).

6.10.1.6. Airfield Suitability and Restrictions Report (ASRR).

6.10.1.7. AMC Aircrew Border Clearance Guide.

6.10.1.8. Flight Crew Bulletin (FCB).

6.10.2. Forms.

6.10.2.1. DD Form 175, *Military Flight Plan*

6.10.2.2. DD Form 1351-2, *Travel Voucher or Sub-voucher*

6.10.2.3. DD Form 1351-2c, *Travel Voucher or Sub-voucher (Continuation Sheet)*

6.10.2.4. DD Form 1801, *DoD International Flight Plan*

6.10.2.5. DD Form 1854, *US Customs Accompanied Baggage Declaration*

6.10.2.6. DD Form 2131, *Passenger Manifest*

6.10.2.7. AF Form 15, *United States Air Force Invoice*

6.10.2.8. AF Form 457, *USAF Hazard Report*

6.10.2.9. AF Form 651, *Hazardous Air Traffic Report (HATR)*

6.10.2.10. AF Form 711B, *USAF Mishap Report*

6.10.2.11. AFTO 781, *ARMS Aircrew/Mission Flight Data Document*

6.10.2.12. AF Form 1297, *Temporary Issue Receipt*.

- 6.10.2.13. AF Form 2282, *Statement of Adverse Effect - Use of Government Facilities*
- 6.10.2.14. AF Form 3211, *Customer Comments*.
- 6.10.2.15. AF Form 4031, *CRM Skills Criteria Training/Evaluation*
- 6.10.2.16. AF Form 4075, *Aircraft Load Data Worksheet*
- 6.10.2.17. AF Form 4085, *Mission Expense Record*
- 6.10.2.18. AMC Form 22, *AMC Passenger Survey*
- 6.10.2.19. AMC Form 43, *AMC Transient Aircrew Comments*
- 6.10.2.20. AMC Form 54, *Aircraft Commander's Report on Services/Facilities*
- 6.10.2.21. AMC Form 97, *AMC In-Flight Emergency and Unusual Occurrence Worksheet*
- 6.10.2.22. AMC Form 196, *Aircraft Commander's Report on Crewmember*
- 6.10.2.23. Customs Form (CF) 6059B, *Customs Form*
- 6.10.2.24. Customs Form (CF) 7507, *General Declaration (Outward/Inward) Agriculture, Customs, Immigration, and Public Health*
- 6.10.2.25. H.M.S. Customs Declaration.
- 6.10.2.26. Japanese Customs Declaration.
- 6.10.3. Orders.
 - 6.10.3.1. DD Form 1610, *Request and Authorization for TDY Travel of DoD Personnel*.
 - 6.10.3.2. AF Form 1631, *NATO Travel Order/Ordre De Mission OTAN* (when required).
 - 6.10.3.3. AMC Form 41, *Flight Authorization*.
- 6.10.4. MAJCOM approved Computer Programs.
 - 6.10.4.1. Weight and Balance Software.
 - 6.10.4.2. Flight Planning Software.
 - 6.10.4.3. Performance Software.
- 6.10.5. Miscellaneous.
 - 6.10.5.1. Box car seals.
 - 6.10.5.2. Masking Tape.

6.11. Route Navigation Kits. The PIC is responsible for the contents of route navigation kits. Kit contents are determined by the mission itinerary. Include all publications, charts, and forms required to fly the mission and comply with all FLIP and FCG requirements. Route navigation publications, charts, and forms for areas of routine operations may be kept on the aircraft. PICs will verify the currency of route navigation publications prior to departure from home station.

- 6.11.1. Aircraft Route Navigation Kits. The route navigation kits maintained on each aircraft include sufficient FLIP charts, approach booklets, Standard Instrument Departures (SID)/Standard Terminal Arrival Routes (STAR) and supplements for any local or OCONUS

mission. Aircrews without a navigator position will carry and maintain only one set of enroute charts, one set of DoD area arrival charts, and one IFR supplement. Two sets of enroute charts/DoD area arrival charts are authorized for those aircraft maintaining a navigator position. Units issuing laptops to aircrews with updated electronic FLIP planning documents do not have to issue paper versions. Specific unit procedures are in local supplement.

6.12. Briefing Requirements.

6.12.1. Pre-mission Briefings. Before departing home station, the PIC will schedule and conduct a pre-mission briefing. The PIC will brief crewmembers on all aspects of the mission using OG/OGV or unit stan/eval developed and approved briefing guides, omit items that do not apply. As a minimum, at least one person from each crew position will attend the pre-mission briefing.

6.12.1.1. The necessity of pre-mission briefings for short notice, standby/alert, or one day missions will be at the PICs discretion. In this case, ensure all required information has been passed to the appropriate crewmembers.

6.12.1.2. Use the following checklist as a guide for home station pre-mission briefings:

6.12.1.2.1. Mission Requirements. Mission number, aircraft number, DV name and title, passenger load, itinerary, departure time and crew reporting.

6.12.1.2.2. Intelligence. Political/military situation, airfield threat/security situation, terrorist or other threat advisories.

6.12.1.2.3. Tactics. If required IAW Intelligence briefing and/or AOR guidance, review applicable AOR/airfield procedures and AFTTPs with crew members.

6.12.1.2.4. Special Requirements. Honors arrivals/departures, press, special FCG requirements, and special immunizations.

6.12.1.2.5. Personal Requirements. Aircrew uniform/civilian clothing, passports, shot, records, FCIF review, billeting arrangements, protective/survival gear, government issue travel card.

6.12.1.2.6. Normal Procedures. Cockpit discipline, communication with DV party, (only PIC will brief contact officer on mission details, block times, adverse weather, etc.), aircraft cleanliness, student responsibilities, aircrew transportation (transportation officer), aircrew baggage security, un-manifested packages, sabotage/stowaway surveillance, hijacking, aircraft security, and surveillance for narcotics.

6.12.1.2.7. Emergency Procedures. As a minimum, discuss general communication and provide scenario discussion for Emergency Procedures pertaining to the mission.

6.12.1.2.8. Crew Duties and Responsibilities. Designate EAC and review duties (supervision, crew location during crew rest, communication on mission changes). Designate crewmember responsible for passports, trip/NAV/Crypto kits, etc. RAVEN duties include duty schedule, review aircraft access policies, brief FCG firearms restrictions. FCC duties include fuel loads, aircraft configuration, and en route maintenance. If transiting a threat environment, review and assign specific

lookout doctrine and combat entry and exit checklist duties to appropriate crew members.

6.12.1.2.9. Crew Conduct. Review personal conduct in foreign areas and personal article security on aircraft.

6.12.2. En Route Briefings. Conduct crew briefings en route as required. Prior to entering crew rest, the PIC will brief the crew on the requirements for the next mission leg. Route and leg briefings should be conducted for every leg prior to departure with applicable crewmembers or a designated representative for each crew specialty. PICs should keep on-board contacts informed of mission specifics, changes, problems, etc. Use the following checklist as a guide for en route briefings:

6.12.2.1. Crew contact procedures during crew rest.

6.12.2.2. Departure time.

6.12.2.3. Crew reporting time and place (transportation arrangements).

6.12.2.4. Fuel load.

6.12.2.5. Uniform changes, if applicable.

6.12.2.6. Aircraft security requirements.

6.12.3. CP Briefings. At show time, the PIC or designated crew representative should contact the Unit CP or AMD prior to departure for any last minute changes, aircraft status or crew/passenger messages.

6.12.4. Weather Briefings. See AFI 11-202V3 requirements. Obtain a briefing on current weather, trends, and forecasts for the proposed route, destination, and alternates. The weather briefing may be documented on a DD Form 175-1, *Flight Weather Briefing*, AMC Form 181, *AMC Mission Weather Briefing*, IFM/Contract Dispatch crew paper weather briefing, or other MAJCOM approved form. **EXCEPTION:** Verbal weather briefings are acceptable for local area training missions.

6.12.4.1. Approved weather sources. US Military weather services, FAA-approved (Dispatch, Jeppesen, Flight Service, etc.), or any host nation civil or military weather source are considered approved weather sources.

6.12.5. NOTAM information is permitted from the following sources: US Military services, any FAA approved source (Dispatch Services, Jeppesen, Flight Service, etc.), or any host nation civil or military source.

6.12.6. Buffer Zone. Prior to operating an aircraft within or adjacent to an established buffer zone, the PIC will ensure primary crewmembers are briefed on current buffer zone procedures outlined in appropriate directives.

6.12.7. Peacetime and Wartime SAFE PASSAGE Procedures. Pilots must be familiar with peacetime and wartime safe passage of friendly military aircraft (if applicable).

6.12.8. Intelligence and Tactics. Receive an updated intelligence briefing and, if appropriate, update the crew on changed intelligence reports and associated tactics.

6.13. Call Signs. During radio transmissions, crews will use the following ATC call signs.

6.13.1. Training Missions. Aircraft use the static call sign “BOXER” followed by a 2-digit suffix assigned to the instructor or evaluator. Use the assigned static call sign on all local flights including depot inputs and pickups.

6.13.2. NGB Directed Missions. Aircraft will use the static call sign “BOXER” followed by a 2-digit suffix assigned to the aircraft commander or as assigned by mission operations.

6.13.3. HQ USAF/CVAM Directed Missions. Aircraft will use the call signs assigned by the OPOD, mission itinerary, diplomatic clearance, or as assigned by mission operations. CVAM missions normally use the static call sign “BOXER” followed by a 2-digit suffix assigned by mission operations.

6.13.4. JOSAC Missions. Use the static call sign “BOXR” (No “E”) and the last three digits of the mission number.

6.13.5. For OPSEC and tactical purposes, the PIC may coordinate for call sign change with applicable C2.

6.13.6. All call sign changes will be accomplished IAW AFI 33-217, *Voice Call Sign Program*.

6.14. Instrument Flight Rules. Conduct flight operations under IFR to the maximum extent possible without unacceptable mission degradation. **EXCEPTION:** On training flights, VFR flight rules, VFR terminal area procedures, and visual patterns will be reviewed, practiced and de-briefed to ensure aircrew VFR flight proficiency and knowledge of VFR procedures and rules are maintained.

6.15. Flight Data Verification.

6.15.1. Aircrews should acquaint themselves with the mission and individual sortie requirements to ensure successful mission accomplishment. Wing, group and squadron staff should monitor crew activity and be available to resolve problem areas.

6.15.2. Only MAJCOM approved CFPs are to be used for aircraft operations. Approved flight planning programs include Advanced Computer Flight Plan (ACFP), Jeppesen, PFPS, and those used by CDS. Every effort should be made to ensure each mission segment has the current wind data.

6.15.3. Flight crews may manually compute flight plans. However, CFPs should be utilized to the maximum extent practical. The flight crew has final responsibility for accuracy of the flight plan used.

6.15.4. Flight crews will verify diplomatically-cleared route and fuel computation for accuracy prior to departure. Range summary charts should be used to confirm CFP fuel burn rates.

6.15.5. TOLD will be verified IAW the AFM. Use of MAJCOM approved contracted performance programs is authorized.

6.16. Departure Planning. Use AFI 11-202V3, AFMAN 11-217V1, AFMAN 11-217V3, this chapter, and the appropriate MAJCOM supplements. Regardless of the type of departure flown (IFR/VFR), review the following (as appropriate): IFR Departure Procedure, instrument approach plate, NOTAMs, GDSS/GDSS2, ASRR Giant Report and suitable terrain charts. *NOTE:* Crews shall ensure that One Engine Inoperative (OEI) climb performance calculations

IAW procedures contained in AFMs comply with and are in accordance with AFI 11-202V3 required climb gradient guidance.

6.16.1. VFR Departures. NOTE: VFR departures will not be flown in lieu of obstacle clearance planning.

6.16.1.1. VFR departures are authorized when there is no authorized IFR departure procedure for the airport, when the aircraft cannot depart using one of the IFR departure methods contained in AFI 11-202V3 and AFMAN 11-217V1, when operational requirements dictate (i.e. tactical necessity), or when most of the sortie is planned as a VFR flight. VFR departures require detailed planning to ensure obstacles and terrain are avoided.

6.16.1.2. PICs will always ensure they can comply with published climb gradients OEI, even during VFR departures. If the mission justifies the increased risk, PICs may request (or the MAJCOM/A3 may direct) a noncompliant VFR departure, IAW AFI 11-202V3, Attachment 3. Crews must also adhere to the following:

6.16.1.2.1. Utilize radar advisory, monitoring, or control services when practical, and ensure flight following by any available means (ie FSS or C2).

6.16.1.2.2. Consider reducing aircraft gross weight and/or delaying the mission until environmental conditions improve.

6.16.1.2.3. Crews must be knowledgeable of and comply with guidance contained in AFMAN 11-217V2.

6.16.1.2.4. Crews are responsible for terrain and obstacle planning/avoidance and must climb to the Minimum IFR Altitude (MIA) as soon as practical.

6.16.1.2.5. Crews will use all available resources to mitigate risk. This includes (but not limited to) supervisors, ORM, aircraft flight manuals, and aircraft commander discretion.

6.16.1.3. The minimum climb performance for VFR departures is determined by ensuring all the following conditions are met:

6.16.1.3.1. All-engine climb capability ensures obstacle avoidance along the departure route.

6.16.1.3.2. One Engine Inoperative (OEI) climb capability shall ensure departure or emergency return route provides obstacle avoidance. NOTE: If unable to comply with any of the above conditions, download cargo/fuel or delay until conditions can be met.

6.16.1.4. Refer to FLIP for host nation VFR requirements before flying VFR outside of CONUS.

6.16.1.5. When departing VFR, maintain VFR cloud clearances until obtaining an IFR clearance and reaching the IFR MEA.

6.16.2. IFR Departures: Aircrews must use an approved IFR departure method as outlined in AFI 11-202V3 and AFMAN 11-217V1.

6.16.2.1. If the airport does not have an authorized IFR departure method, depart VFR IAW VFR departure procedures in this AFI. An IFR departure is not authorized at airfields without an instrument approach.

6.16.2.2. IFR departures require detailed planning to ensure obstacles and high terrain are avoided. Adhere to screen height/departure end of runway (DER) requirements for IFR departure planning (AFMAN 11-217V1). **NOTE:** Screen height requirements for departures depend on the agency that wrote the departure and/or the airfield where the departure is being flown. There is no standard or easy way for crews to determine screen height requirements. Therefore, when using departures other than those listed below, or when any doubt exists about which screen height to use, plan to cross the DER at 35 feet (minimum) unless you can ascertain a different screen height requirement from an appropriate authority.

6.16.2.2.1. Special Departure Procedure (SDP): Published on SDP.

6.16.2.2.2. USAF/USN produced SIDs or USAF/USN/USMC airfield: Zero feet.

6.16.2.2.3. US Army, FAA SID, and joint use airfield within the US: 35 feet unless published.

6.16.2.2.4. NATO Countries (except US and Canada) Military Airports: 35 feet.

6.16.2.2.5. NATO Countries (except US and Canada) Civil Airports: 16 feet or as published.

6.16.2.2.6. Other ICAO nations: 16 feet or as published.

6.16.2.2.7. All others: 35 feet unless published.

6.16.2.3. Aircraft must meet the published climb gradient for the departure runway with all engines operating. If no minimum climb gradient is published, 200 ft/nm will be used. **NOTE:** In the event the aircraft is unable to meet the published ALL ENGINE climb gradient, download cargo/fuel or delay until more favorable conditions exist.

6.16.2.4. Use one of the following methods to ensure the aircraft can vertically clear all obstacles along the planned departure route with OEI:

6.16.2.4.1. Special Departure Procedures (SDP). NGB/A3O authorizes the use of Jeppesen or CDS provided SDP's for VIP Aircraft. SDP's utilize worldwide obstacle database criteria to calculate OEI emergency gross weights, flap settings, and provide escape routing. SDP's and associated OEI obstacle routings (Takeoff Procedures) provide optimum dispatch takeoff weights at specified departure locations. Each must be specifically designed for your MDS. SDP's must be current. If obstacle NOTAM affects SDP routing, do not use the SDP. Aircrew must use the AFM and/or computer based performance tools for OEI departure planning. Verify aircraft OEI climb gradient will clear all obstacles along the planned flight path. **NOTE:** Use of SDP's as alternate departure routing (no emergency) is not authorized.

6.16.2.4.2. Minimum climb gradient. The TERPS standard minimum climb gradient is 200 ft/nm, which is based on the standard obstacle clearance surface (OCS) of 152 ft/nm plus the required obstacle clearance (ROC) of 48 ft/nm. If an SDP is not available, the crew must ensure compliance with any obstacle-based minimum climb

gradients for the selected departure, with OEI. Minimum climb gradients may be published as a 'Trouble T' restriction in the IFR Take-off Minimums section of FLIP or on a SID. Operations supervisors may approve climb gradient reduction IAW 11-202 V3, Chapter 8. Minimum climb gradients do not take into account low, close in obstacles (obstacles or terrain 200' AGL and below) which should normally be published as a NOTE on the SID or IFR departure procedure (Trouble T). Crews must also ensure the aircraft can clear these close in obstacles. **NOTE:** If the requirements of paragraph 6.16.2.4. of this AFI cannot be met, download cargo/fuel or delay until more favorable conditions exist. **NOTE:** For the purpose of this instruction an operations supervisor is defined as a Director of Operations (DO), Squadron Commander (Sq/CC) or designated authority by the Sq/CC or Operations Group Commander.

6.16.3. Tactical Departure Procedures. If transiting an AOR and airfield with TAAD procedures, the PIC should review these procedures and apply tactics IAW applicable AFTTPs.

6.17. Weather Minimums for Takeoff. Departures with weather below landing minimums are authorized IAW AFI 11-202V3, chapter 8. When weather is below approach and landing minimums (ceiling and visibility), a departure alternate is required (see paragraph 6.19. of this AFI).

Table 6.1. Takeoff Weather Minimums Runway Visual Range (RVR).

Mission	Visibility	Remarks
Operational (Note 2)	RVR 600 (200 meters)	When less than RVR 1600, but equal to or greater than RVR 600, the crew may take off if mission priority dictates, provided the runway has a minimum of 2 functioning RVR readouts (minimum RVR 600 on all functioning readouts) and runway centerline lighting is operational. When 3 transmissometers are installed, all are controlling.
All Others (Note 1)	RVR 1600 (490 meters)	For runways with more than one operating RVR readout, RVR must read 1600 minimum on all.
<p>NOTES:</p> <ol style="list-style-type: none"> 1. In the absence of RVR readouts, reported visibility will be no lower than 1/2SM (800 meters). 2. If the runway has only one functional RVR readout or no centerline lighting, the minimum RVR is 1600. 		

6.18. Alternate Planning. Select alternate airports meeting the requirements of AFI 11-202V3. Choose alternates that best meet mission requirements and conserve fuel; they should not be within the same terminal area, if terminal forecasts are marginal. Select alternates that are not restricted by FLIP, FCG, or diplomatic clearances, and are compatible with the mission load and performance characteristics of the aircraft. The PIC retains final authority in the choice of

alternates; however, selection by support agencies normally should be used if they meet the above criteria and the aircraft has already been serviced.

6.19. Departure Alternates.

6.19.1. A departure alternate is required if weather is below landing minimums for an available approach (at departure aerodrome). Do not use CAT II/III ILS minimums to determine if a departure alternate is required.

6.19.2. Suitability of Departure Alternates. When a departure alternate is required, the aircraft must be capable of maintaining the Minimum Enroute Altitude (MEA) or Minimum Obstruction Clearance Altitude (MOCA), whichever is higher, to the alternate using OEI performance criteria. To qualify as a departure alternate, the airfield must meet one of the following conditions:

6.19.2.1. Existing weather at an alternate within 30 minutes flying time must be equal to or better than the published approach minimums and forecast to remain so until 1 hour after takeoff, but in no case forecast to be lower than 200-1/2 (RVR 2400/730m), or;

6.19.2.2. The existing weather at an alternate within 1 hour flying must be at least 500-1 above the lowest compatible published approach minimums, but not less than 600-2 for a precision approach or 800-2 for a non-precision approach, and forecast to remain so for 1 hour after ETA at the alternate.

6.20. Destination Requirements (for filing purposes). The forecast destination weather will be according to AFI 11-202V3 and the following:

6.20.1. File two alternates when:

6.20.1.1. The forecast visibility (intermittent or prevailing) is less than published for an available DoD or National Aeronautical Charting Office (NACO) precision approach; or

6.20.1.2. The forecast ceiling or visibility (intermittent or prevailing) is less than published for all other approaches. For approaches with no published ceiling requirement (for example Jeppesen approaches), the minimum required ceiling shall be computed by taking the published HAA or HAT and rounding it up to the nearest one hundred feet (or as determined by MAJCOM TERPs review). For example, a Jeppesen VOR approach with a published HAA of 642 feet would require a forecasted ceiling of 700 feet.

6.20.1.3. The forecast surface winds (intermittent or prevailing) exceed limits corrected for RCR.

6.20.2. File an alternate, regardless of forecast weather, when the destination aerodrome is outside the 48 conterminous states. **EXCEPTION:** OCONUS, intra-theater flights that do not exceed 3-hours, comply with basic AFI 11-202V3.

6.20.3. When filing to a remote or island destination, aircrews will use 1+15 holding fuel (in lieu of an alternate and 45 minutes holding fuel). A remote or island destination is defined as any aerodrome which, due to its unique geographic location, offers no suitable alternate (civil or military) within 2 hours flying time. The forecast weather at the remote or island destination must meet the following criteria:

6.20.3.1. The prevailing surface winds, corrected for RCR, must be within limits at ETA and forecast to remain so for 2 hours thereafter, and

6.20.3.2. The prevailing ceiling and visibility must be equal to or greater than published minimums for an available non-precision approach [excluding Approach Surveillance Radar (ASR)], for ETA plus 2 hours. However, if a precision approach is available, the ceiling or visibility may be intermittently below non-precision approach minimums (excluding ASR), but not below precision approach minimums (for ETA plus 2 hours). **NOTE:** See chapter 17 of this AFI for fuel planning considerations for destination requirements.

6.21. Adverse Weather.

6.21.1. Turbulence. Flight into areas of forecast or reported severe turbulence is prohibited.

6.21.1.1. Crews should confirm the type of aircraft the forecast turbulence applies to, or what type of aircraft reported the encounter, to gain a more accurate picture for their route of flight. Turbulence category charts are found in Air Force Weather Agency technical note AFWA/TN 98/002, *Meteorological Techniques*.

6.21.1.2. The PIC is responsible for ensuring all passengers are seated, with seat belts fastened, when areas of moderate or greater turbulence are encountered or anticipated. **WARNING:** Serious injury may occur if passengers do not have their seat belts fastened and the aircraft encounters moderate or severe turbulence.

6.21.1.3. Do not fly into an area of known or forecast moderate or greater mountain wave turbulence.

6.21.2. Icing. Flight into areas of forecast or reported severe icing is prohibited. Prolonged operation, such as cruise flight or holding, in areas of moderate icing should be avoided. **NOTE:** Air Force Weather Agency technical note AFWA/TN 98/002, *Meteorological Techniques*, states that freezing drizzle is equivalent to moderate icing and freezing rain is equivalent to severe icing.

6.21.2.1. Do not takeoff under conditions of freezing rain. Do not takeoff under conditions of freezing drizzle except when the aircraft has been properly de-iced/anti-iced with approved commercial Type II/IV de-icing fluids IAW applicable AFM procedures. For additional information regarding USAF de-ice/anti-ice requirements and procedures, consult TO 42C-1-2.

6.21.2.2. Freezing precipitation, snow, freezing fog, or temperatures near 0°C, may cause ice or frost to accumulate on aircraft surfaces. When an aircraft requires de-icing/anti-icing prior to takeoff, refer to the following:

6.21.2.2.1. Aircrews will only use de-ice and anti-ice fluids listed in the AFM or approved by the aircraft manufacturer. Aircrews will be familiar with, and follow all restrictions in the AFM with respect to anti-ice/de-ice procedures and holdover times.

6.21.2.2.2. MIL-A-8243 Type I and Type II de-icing fluids provide little anti-icing benefit, and therefore have limited holdover times. As a guide, for approved anti-icing fluids, crews may use published anti-icing holdover times IAW TO 42C-1-2, *Anti-Icing, Deicing and Defrosting of Parked Acft*, and AFFSA holdover tables located at the AFFSA website. The holdover time begins when anti-icing fluid is first applied and the PIC shall use time, temperature, and dilution of mixture to determine

when times are exceeded and re-apply fluid if required. Aircrews may use manufacturer provided holdover tables.

6.21.2.2.3. In all cases, PICs will ensure a visual inspection of the aircraft is completed within 5 minutes of departure. In addition to a visual inspection, a tactile inspection may be required within 5 minutes of departure per the aircraft AFM. The PIC will conduct a tactile inspection as necessary IAW the AFM.

6.21.3. Thunderstorms. Do not fly directly above (within 2,000 feet) thunderstorms or cumulonimbus clouds. If unable to vertically clear thunderstorms or cumulonimbus clouds by at least 2,000 feet, avoid them by at least:

6.21.3.1. 20NM at or above flight level FL230.

6.21.3.2. 10NM below FL230. **CAUTION:** Aircraft damage may occur 20NM or more from any thunderstorms. Aircrews must familiarize themselves with information on thunderstorm development and hazard.

6.21.3.3. The use of ground-based radar as a means of thunderstorm avoidance should only be used to assist in departing an inadvertently penetrated area of significant weather. It should never be considered a normal avoidance procedure. When relying exclusively on ground-based radar for weather avoidance, and the ground controller is unable to provide avoidance instructions, attempt to maintain VMC by:

6.21.3.3.1. Changing routing.

6.21.3.3.2. Diverting to alternate.

6.21.3.3.3. Declaring an emergency and requesting priority assistance.

6.21.3.4. Aircrews should avoid flying in areas of recently dissipated thunderstorms and advected clouds (horizontal movement of clouds caused by wind) downwind of thunderstorms.

6.21.3.5. In order to minimize exposure to thunderstorm hazards when approaching or departing an airport in an area where thunderstorms are occurring or are forecast:

6.21.3.5.1. Attempt to maintain VMC.

6.21.3.5.2. Maintain at least 5NM separation from heavy rain showers.

6.21.3.5.3. Avoid areas of high lightning potential, i.e., clouds within plus or minus 5,000 feet of the freezing level or plus or minus 8°C of the freezing level. **NOTE:** Approaches or departures may be accomplished when thunderstorms are within 10NMs. The thunderstorms must not be producing any hazardous conditions (such as hail, lightning, strong winds, gusts fronts, heavy rain, wind shear, or microburst) at the airport, and must not be forecast or observed to be moving in the direction of the route of flight (to include the planned missed approach corridor, if applicable).

6.21.4. When performing approaches and landings at locations where temperatures are 0°C or below, refer to the FIH Section D, Temperature Correction Chart, to correct MDA, DH, and other altitudes inside the FAF.

6.21.5. In-flight Weather Advisories. Significant Meteorological Information (SIGMET) and other National Weather Service in-flight weather advisories are issued for large areas.

Contact appropriate military weather facility or flight service station to determine mission applicability and impact.

6.21.6. Volcanic Dust Precautions. Aircraft flight operations in areas of forecast or known volcanic activity or dust is prohibited. Plan all missions to avoid volcanic activity by at least 20 NMs.

6.21.7. Lightning Avoidance. The following conditions are most favorable for lightning strikes and prolonged flight in them should be avoided:

6.21.7.1. Within 8 degrees C of freezing.

6.21.7.2. In clouds or in any intensity of precipitation or turbulence associated with thunderstorms.

6.22. Standby/Alert Mission Pre-departure Procedures. Standby/Alert missions include any mission where the scheduled departure time is less than 12 hours after original notification. Procedures for standby/alert missions will vary depending on the type mission, type of aircraft and time available between notification and departure. Procedures also vary depending on time of day (i.e., duty hours or non-duty hours). The following general procedures apply in most cases:

6.22.1. Normally the standby/alert PIC is notified of an standby/alert mission by mission operations, SOC, or aircrew scheduler. When notified, the following will be covered:

6.22.1.1. The mission number, departure spot, expected departure time, DV name and position, and number of passengers.

6.22.1.2. The itinerary details which are available. You may be asked to confirm times, airports, preferred FBOs, etc.

6.22.1.3. Fuel load requirements.

6.22.1.4. Threat assessment, tactics and airfield security information as applicable.

6.22.1.5. Items you want briefed to your crewmembers during notification. You should specify aircrew uniform or civilian clothes.

6.22.2. For immediate launches overseas during duty hours, the SOC or aircrew scheduler will arrange for passports, shot records and navigation kits (as applicable) to be delivered to the aircraft. In addition, the SOC or aircrew scheduler will arrange an intelligence briefing and/or intelligence package pick-up. After duty hours, the PIC will designate who will pick up passports, shot records, navigation kits, intelligence package (as applicable) and confirm who will handle pre-launch paperwork. Normally, the duty scheduler (during duty hours), SOC or the CP/AMD (after duty hours) will order a weather briefing, intelligence briefing, and computer flight plans, if required. Current North Atlantic Track (NAT) messages are always available at the CP. For missions departing immediately, the duty scheduler (during duty hours) or the CP/AMD (after duty hours) will file a flight plan for the first mission leg. The crew must arrange desired dispatch/mission operations service for subsequent legs. The duty scheduler will assist in obtaining CFPs when requested. During duty hours, the SOC will coordinate with mission operations to prepare and dispatch diplomatic clearance and advance notice messages. After duty hours, the CP/AMD controller will arrange to handle

messages. If you have adequate crew rest and notice prior to departure, you may accomplish pre-launch flight planning yourself.

6.22.3. The SOC and aircrew schedulers will notify the rest of the crewmembers. They will be briefed on the mission/aircraft numbers, departure time, where the aircraft is/will be spotted, required fuel load, general itinerary and number of days away, and any items the PIC has designated for briefing.

6.22.4. Reporting.

6.22.5.1. PICs normally report to squadron to pick up the dispatch flight plan, weather briefing and intelligence package, file a flight plan (if required), and then report to the aircraft. For immediate launches, one of the other pilots will normally report directly to the aircraft. For all other launches, one of the other pilots will normally pick up passports/shot records, crew orders, navigation kits, and intelligence packages (as applicable), then report to the aircraft for pre-launch preparation.

6.22.5.2. FCCs report directly to the aircraft to monitor fueling and reconfiguration, and accomplish preflight inspections. Keep the SOC advised of any aircraft problems.

6.22.6. Immediate Launch Clearances. Pilots should ask clearance delivery for a full route clearance if the IFM/CDS, SOC or aircrew scheduler files the flight plan.

6.23. Crew Station Times. Crewmembers will normally be at their duty stations with all checklists accomplished up to the point of engine start not later than 30 minutes prior to departure. Crewmembers will be prepared to depart as expeditiously as is safely possible if the DV arrives early.

6.24. Operational Risk Management (ORM). ORM is a logic based, common sense approach to making calculated decisions on human, material, and environmental factors before, during, and after all operations. USAF policy on ORM is contained in AFPD 90-9, *Operational Risk Management*. PICs will accomplish ORM worksheets IAW MAJCOM and local guidance as part of predeparture/preflight activities.

Section 6C—Preflight

6.25. AFTO 781, ARMS Aircrew/Mission Flight Data Document.

6.25.1. Review AFTO 781 series before applying power to the aircraft or operating aircraft systems. The exceptional release must be signed before flight. A maintenance officer, maintenance superintendent, or authorized civilian normally signs the exceptional release. If one of these individuals is not available, the PIC may sign the exceptional release. Ensure that the DD Form 1896, *DoD Fuel Identaplate*, and AIR card is aboard the aircraft.

6.25.2. One-Time Flights. An aircraft may be released for a one-time flight with a condition that might be hazardous for continued use, provided the aircraft is airworthy for one flight to another station. Refer to TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*, for downgrade authority and procedures. After the maintenance release is obtained, coordinate mission requirements with the controlling agency. The PIC's concurrence is required before the aircraft can be flown. Approval authority for one-time flights is contained in paragraph 4.6.

6.25.3. For Red X clearing procedures at stations without maintenance support, refer to paragraph 16.4. of this AFI.

6.26. En Route Aircraft Preflights. FCCs, if carried, will accomplish aircraft preflights following crew rest. If the ground time will exceed 72 hours or if the aircraft has been left unattended, aircrews should accomplish an aircraft inspection/walk-around of the aircraft within 24 hours of scheduled departure, when practical. Anytime en route maintenance has been performed, the affected systems will be pre-flighted and should be operationally checked as soon as possible if practical. Thru-flight inspections will be completed anytime a preflight is not required. Pilots will ensure flight controls are checked IAW the AFM.

6.27. Aircrew Life Sustaining Equipment Requirements. The minimum quantity of oxygen aboard the aircraft before takeoff must be sufficient to accomplish the planned flight from the ETP to recovery, should oxygen be required.

6.28. Fleet Service. Ensure required fleet service items are aboard the aircraft early enough to permit inventory prior to engine start.

6.29. Crash Position Indicator (CPI) and Emergency Locator Transmitter (ELT). CPIs and ELTs must be operative for all flights except those remaining in the local area. If a CPI or ELT deploys or activates inadvertently, notify ATC immediately. In the case of a deployed CPI, if the aircraft is scheduled to fly a local or is en route with no replacement airfoil available and the airplane is permitted to continue the mission, a locally manufactured airfoil should be installed over the missing CPI.

6.30. Handling of Classified Cargo, Registered Mail, High-Visibility Aircraft Parts Shipments, and Courier Material.

6.30.1. These shipments are normally not carried on VIP passenger aircraft. PICs may accept or decline shipments at their discretion based on mission requirements or crew or aircraft capabilities. Receipts will be obtained for classified cargo, high-visibility aircraft parts shipments, signature services, and registered mail at the on-load and off-load station using the cargo manifest.

6.30.1.1. Defense Courier Service (DCS) couriers coordinating with the PIC are authorized to designate officer or enlisted, (E-5 and above) crewmembers on military aircraft as couriers to escort and safeguard courier material when other qualified personnel are not available. Qualified passengers, if carried, are designated before designating crewmembers. The following restrictions apply:

6.30.1.1.1. Primary crewmembers will not be designated without the consent of the PIC.

6.30.1.1.2. Crewmembers on aircraft scheduled to stop at locations where DCS couriers cannot provide en route support will not be designated as couriers. This does not relieve the PIC of the responsibility for life and death urgent shipments.

6.30.2. During stops at en route locations supported by DCS stations, DCS couriers are required to meet designated couriers to protect the material.

6.30.2.1. During unscheduled stops, crewmembers may place courier material in temporary custody of the following agencies listed in descending order of priority:

- 6.30.2.1.1. DCS courier
- 6.30.2.1.2. TOP SECRET control officer of the US armed forces
- 6.30.2.1.3. US Department of State diplomatic courier
- 6.30.2.1.4. US Department of State activity
- 6.30.2.1.5. US military guards
- 6.30.2.1.6. US DoD civilian guards

6.30.3. If unable to follow the itinerary to the destination of the courier material, or if material is lost, stolen, or otherwise compromised, report circumstances to the nearest Defense Courier Station and notify the local US military commander or US government activity.

6.30.4. Life or death urgency shipments consist of biological or other medical supplies of such urgency that human life is dependent upon immediate receipt. Shipments will be manifested separately and the manifest annotated with the words LIFE OR DEATH URGENCY. All shipments will be handled on a hand-to-hand receipt basis, using either the air cargo manifest or the DD Form 1907, *Signature and Tally Record*, for unit moves. The PIC, or designated representative, will be briefed on the urgency of the shipment and be made the custodian during flight.

Section 6D—Departure

6.31. On Time Takeoffs. A delay is charged any time the DV and passengers are ready to move at the scheduled departure time and the aircraft is not ready for departure or cannot depart due to maintenance or operational reasons.

6.31.1. The simplest definition of a VIP delay is a failure to block out when the DV is ready at the scheduled time due to maintenance or operational reasons, thus delaying the DV. To promote the credibility of our reliability rate the following will be considered delays:

6.31.1.1. A delay is credited when the mission blocked out "on-time" but could not takeoff due to maintenance or operational reasons, thus delaying the DV.

6.31.1.2. A delay is credited when the mission blocked out "early" but could not takeoff due to maintenance or operational reasons, thus delaying the DV. The DV party should expect departure any time after stations time (30 minutes prior to scheduled takeoff time), or any time the crew has agreed (explicitly, or by loading the party, closing the door and implying readiness for departure) to depart early. If the party arrives prior to stations time and the crew is not ready a delay will not be charged. When the crew indicates they are ready (i.e. boarding party, closing door, removing stairs, starting engines, etc.), further delay would constitute a VIP delay.

6.31.1.3. A delay is credited when the mission blocked out and took off "on-time" but air aborted or diverted to an airport other than the next scheduled stop due to maintenance or operational reasons, thus delaying the DV.

6.31.2. Right side engine may be started prior to final on-load of all passengers provided baggage door is closed and locked in order to expedite overall engine start process. The PIC

will ensure the right side of the aircraft is safe and clear. The left side engine will not be started until all passengers, baggage and gear are on board, the baggage door is closed, locked and the area around the aircraft is safe and clear.

6.32. Cabin Security Procedures for Takeoff and Landing. The following procedures should be followed prior to all takeoffs and landings:

6.32.1. The PNF should assure all carry-on luggage, equipment and supplies are secured as soon as possible after boarding passengers. Ensure all passenger carry-on baggage is stowed to prevent a hazard during unforeseen events on takeoff or landing (i.e. aborted takeoff, emergency landing, low-level wind shear, turbulence, etc.) all seats are in the upright position and tray tables are stowed.

Section 6E—En route

6.33. Flight Progress.

6.33.1. Prior to coast out fix, plot the oceanic portion of the flight on an appropriate Oceanic Plotting Chart (OPC). Annotate the chart with the mission number, PIC's name, preparer's name, and date. If practical, chart may be reused.

6.33.2. Anytime waypoint data is inserted into the FMC/FMS, it will be verified by two primary crewmembers. Check both the coordinate information and the distances between waypoints against the flight plan.

6.33.3. In-flight, use all available navigational aids to monitor FMC/FMS performance. Immediately report malfunctions or any loss of navigation capability which degrades centerline accuracy to the controlling ARTCC. Use the following procedures for flight progress:

6.33.3.1. *Obtain a coast out fix prior to, or immediately on entering the CAT I Route or overwater EROPS segment. Perform a gross navigation error check/altimetry check using available NAVAIDs and annotate the position, altitude and time on the chart.*

6.33.3.2. When approaching each waypoint, recheck coordinates for the next waypoint. Approximately 10 minutes after passing each oceanic waypoint, record and plot the aircraft position and time on the chart, and ensure compliance with courses and ETA tolerances.

6.33.3.3. If a revised clearance is received, record and plot the new route of flight on the chart. For CPDLC operations, maintain a log of ATC clearances and retain with the OPC.

6.33.3.4. Monitor FMC/FMS loaded EROPS ETP alternates for weather/NOTAMs. Contact dispatch or weather for updates if necessary.

6.33.4. Post Mission Papers. Upon return to home station, turn in the charts (copies if reused) and applicable computer flight plans to the squadron stan/eval function. Squadron stan/eval will retain the charts, CFPs, CPDLC clearance logs, and associated materials for a minimum of 3 months.

6.33.5. Operations in International/National Territorial Airspace (See FLIP, FCG, AP, and MDS series instruction for further guidance). US military aircraft and DoD personnel

entering another nation to conduct US government business therein must have the approval of the foreign government concerned to enter their airspace. Foreign clearances for US international air operations are obtained through the DAO. Refer to FLIP GP for discussion of international strait passage, archipelagic sea lane passage, procedures to follow if intercepted, and other international foreign sovereignty issues.

6.33.5.1. There are essentially two types of airspace: international airspace and national territorial airspace. International airspace includes all airspace seaward of coastal states' territorial seas. Military aircraft operate in such areas free of interference or control by the coastal state. National Territorial airspace, also referred to as territorial or sovereign airspace, includes airspace above territorial seas, archipelagic waters, inland waters, and land territory and is sovereign airspace. Overflight may be conducted in such areas only with the consent of the sovereign country.

6.33.5.2. IAW international law, the US recognizes territorial sea claims and the corresponding airspace up to 12 nautical miles measured from baselines drawn consistent with international law (normally the low-water mark). Diplomatic constraints and/or a lack of diplomatic clearances usually result in missions operating in international airspace. Because of this, it is imperative sufficient information be provided far enough in advance to allow compliance with FCG requirements established by the countries concerned. The US does not normally recognize territorial claims beyond 12 nautical miles; however, specific guidance from certain US authorities may establish limits, which differ from the standard.

6.33.5.3. Flight Information Region (FIR). An FIR is defined as an area of airspace within which flight information and related services are provided. An FIR does not reflect international borders or sovereign airspace. Aircraft may operate within an established FIR without approval of the adjacent controlling coastal state/country, provided the PIC avoids flight in sovereign airspace.

6.33.5.4. Aircrews on a flight plan route, which takes them from international airspace into national territorial airspace for which approved aircraft clearances were obtained, should not amend entry point(s).

6.33.5.5. Safe Passage violations of foreign sovereignty result from unauthorized or improper entry or departure of aircraft. Aircrews should not enter into territorial airspace (12 NM seaward from sovereign landmass) for which a clearance has not been duly requested and granted through diplomatic channels.

6.33.5.6. ATC agencies are not vested with authority to grant diplomatic clearances for penetration of sovereign airspace where prior clearance is required from the respective country. Aircraft diplomatic clearances are obtained through diplomatic channels only.

6.33.5.7. In the event air traffic control agencies challenge the validity of a flight routing or attempt to negate existing clearances, pilots must evaluate the circumstances. The normal response will be to attempt to advise the air traffic control agency that the aircraft will continue to planned destination as cleared in international airspace. The key phrase is "in international airspace." Safety of flight is paramount in determining mission continuation. Under no circumstances should aircrews construe a clearance which routes their mission over sovereign airspace which was not approved through diplomatic

channels prior to mission departure, as being valid authorization. If faced with this situation, aircrews must contact the appropriate MAJCOM C2, as soon as possible, to obtain the correct approvals.

6.33.5.8. Aircrews operating missions requiring unique or specially developed routing will normally be briefed at home station, onload station, and/or by the last C2 facility transited prior to performing the critical portion of the mission.

6.33.5.9. Aircrews normally are not tasked to and should not fly "due regard" routings unless coordinated with the appropriate MAJCOM C2 with mission execution authority and specifically directed in the mission FRAG. The "due regard" or "operational" option obligates the military PIC to be their own ATC agency to separate their aircraft from all other air traffic. If operational requirements dictate, PICs may exercise the "due regard" option to protect their aircraft. Aircraft will return to normal air traffic services as soon as practical.

6.33.6. SPINS. Prior to transiting AOR airspace, review specific theater guidance, including SPINS. At a minimum, review the AOR communication plan, special airspace, and airfield ingress and egress procedures. Ensure FMC/FMS waypoints for tactical reporting points, approaches, and departures are loaded. If appropriate, review combat entry and exit checklists with crew members and designate a time/point to initiate or complete the checklists.

6.34. Navigational Aid Capability. Refer to chapter 11 of this AFI.

6.35. Communications Instructions for Reporting Vital Intelligence Sightings (CIRVIS) and Other Reports. Report all vital intelligence sightings from aircraft as indicated in FLIP planning or FLIP En route Supplement.

6.35.1. In-Flight harassment or hostile action against aircraft. Aircraft subjected to harassment or hostile action by foreign aircraft will immediately contact the nearest USAF air and ground voice facility and report the encounter. Include aircraft nationality, type, insignia, or any other identifying features; note position, heading, time, speed when harassed, and the type of harassment. Request relay of the report to the nearest C2 center. Also attempt to contact the nearest CP when in UHF and VHF range.

6.35.2. Other incidents will be reported as indicated in AFI 10-206, *Operational Reporting*.

6.36. Communications.

6.36.1. HF Communications. Confine message traffic to essential operational matters. Perform an HF radio ground check prior to takeoff when the use of HF radio may be required for ATC or C2 communications. Establish HF contact before going out of UHF and VHF range. If unable to establish HF contact with the controlling HF station and an alternate means of relay of ATC information in oceanic areas is not available, return to the nearest suitable support base.

6.36.2. General. Provide ARTCC position and weather observations when required. If unable to contact an ATC agency, attempt relay through the GLOBAL HF stations. Frequencies for GLOBAL HF stations are listed in the FIH.

6.36.3. AF Form 72, *Air Report (AIREP)*. When directed by departing weather facility, take and record an AIREP at each position report over a CAT I Route. Identify inaccurate CFP

winds by special report if the average wind for a route segment exceeds either 30 degrees error in wind direction or 25 knots in wind speed. Turn in completed AF Form 72 to the destination USAF weather facility.

6.36.4. SELCAL code assignments:

6.36.4.1. Tail number 94-1569: BH-AM.

6.36.4.2. Tail number 94-1570: EF-KL.

6.36.5. ATO and SPINS. Prior to transiting an AOR with SPINS and ATO requirements, load assigned IFF modes/codes. Additionally, contact and monitor appropriate C2 agencies at designated times and points along route of flight.

6.37. In-Flight Emergency Procedures. The PIC shall report deviations from directives that may occur as a result of an emergency according to AFI 11-202V3. Time and conditions permitting, inform passengers of the situation and intentions.

6.37.1. Notification of Controlling Agencies. When practical after completing the aircraft emergency action checklists and associated actions, crews should furnish the controlling agency and appropriate C2 center a description of the difficulty, assistance required, intentions, and any other pertinent information.

6.37.2. The PIC may initiate a CONFERENCE HOTEL/SKYHOOK when additional expertise is necessary. Communications procedures are as follow:

6.37.2.1. Local Area. When in UHF or VHF range, initiate the conference over appropriate frequencies.

6.37.2.2. En route. Attempt to establish a phone patch with the nearest or controlling C2 center using GLOBAL HF network, UHF/VHF stations, SATCOM, etc. If unable, aircrews are permitted to use ARINC radio service as an additional avenue for phone patch connectivity (ref paragraph 6.37.2.4. of this AFI).

6.37.2.3. Provide the following information when time permits.

6.37.2.3.1. Narrative description of the situation to include actions taken by the crew and the intentions of the PIC.

6.37.2.3.2. Fuel on board and hours of endurance.

6.37.2.3.3. Position.

6.37.2.3.4. Altitude and flight conditions.

6.37.2.3.5. Number of personnel and DVs on board.

6.37.2.3.6. Qualification of PIC.

6.37.2.3.7. Planned landing base.

6.37.2.3.8. ETA at landing base.

6.37.2.4. ARINC phone patch. If unable to contact a station with phone patch capability, the USAF has a contract with ARINC to provide this capability. ARINC has VHF coverage over the CONUS and Caribbean regions and HF coverage over most of the Atlantic and Pacific regions. Contact procedures can be found in the IFM Aircrew

Flimsy available on the TACC web site. It is recommended that this flimsy be placed in each mission kit. Additionally, ARINC is the oceanic position reporting service provider, and the position reporting frequencies found on enroute charts can be used to obtain phone patch frequencies from the radio operator.

6.38. Need for Medical Assistance. When a person aboard the aircraft requires medical care, the PIC will notify the station of intended landing in sufficient time so the aircraft may be met by medical personnel. Notification will include the patient's sex, approximate age, and major complaint.

6.39. Weather Forecasts.

6.39.1. PIC is responsible for obtaining destination weather prior to descent. The primary sources are TACC Global Mobility Weather Operations, Operational Weather Squadrons (OWS), USAF weather flights via pilot-to-meteorologist service (PMSV), MAJCOM approved CDS or FAA Flight Service Stations (FSS). Refer to the FIH for an OWS listing and their applicable AORs. The ATC system can provide weather information to en route aircraft.

6.40. Not Used.

Section 6F—Arrival

6.41. Descent. Prior to descent into unfamiliar areas, appropriate terrain charts [Operational Navigation Chart (ONC), Sectional Aeronautical Chart, Tactical Pilotage Chart (TPC), or Joint Operations Graphic (JOG)] should be reviewed to increase aircrew situational awareness of obstructions. Primary crewmembers will not be involved in duties other than aircraft operations, descent and approach monitoring, and required checklist items from the initial descent point to landing.

6.41.1. Night and Marginal Weather Operations. Fly a precision approach, if available, at night or during marginal weather. If a precision approach is not available, fly any available approved instrument approach.

6.41.1.1. During night VMC conditions, if an approved instrument approach is not available, a visual approach may be flown as long as crews review appropriate VFR terrain charts and the intended runway has outlined runway lighting and is clearly discernible IAW AFI 11-202V3 paragraph 5.12. However, VIP crews should back up the visual approach with visual glide slope indicator (VASI, PAPI etc.). Use of FMC/FMS solution [Lateral Navigation (LNAV)/VNAV] and/or Enhanced Vision System (EVS) is authorized in lieu of visual glide slope lighting.

6.41.1.2. On training and evaluation flights at familiar fields, pilots may perform VFR traffic patterns without (VASI, PAPI etc.). See local supplement for listing of familiar fields and local restrictions.

6.41.1.3. For recovery at home station, pilots may elect to fly a visual or non-precision approach, if weather minimums permit.

6.41.2. Tactical Considerations. Prior to descending through a known or suspected WEZ, the PIC should review applicable AFTTP options with the crew. In addition, the PIC must comply with published AOR SPINS and airfield tactical arrival procedures.

6.42. Instrument Approach Procedures. DoD/National Geospatial-Intelligence Agency (NGA), NACO or MAJCOM approved FLIP procedure can be flown by USAF aircrews without requiring a TERPS review. Any non-DoD (Jeppesen, Host Nation) approach requires a TERPS review that can be requested through the appropriate MAJCOM TERPS office. **EXCEPTION:** Aircrew using the host government-sanctioned FLIP product for airfields located in a Special Accredited Host Nation do not require TERPS reviews.

6.42.1. Weather. Prior to starting an instrument approach or beginning an en route descent, pilots will confirm that existing weather is reported to be at or above required minimums for the lowest compatible approach. Pilots shall increase the published visibility minimums of an instrument approach by ½ SM or as noted in NOTAMs, on ATIS, or on the approach plate, when the runway approach lighting system (ALS) is inoperative. **NOTE:** This applies only to the ALS itself, not to VASIs, PAPIs, and other lights that are not a component of the ALS.

6.42.2. Precision Approach Minima. The ILS or Precision Approach Radar (PAR) decision height will provide a height above touchdown of 200 ft or higher. For CAT II ILS approaches, use the lowest published radar altitude. For PAR approaches, visibility will be no lower than RVR 2400 (730 meters) or 1/2 mile visibility (800 meters) with no RVR readout available.

6.42.3. Circling approach minimums will be as published for the applicable aircraft category. If not published by category, limit circling minimums to an MDA based on a HAA and visibility as indicated below or as published, whichever is higher.

6.42.3.1. Category C: 500 feet HAA, 1 1/2-half mile visibility.

6.42.3.2. Categories D and E: 600 feet HAA and 2-mile visibility.

6.42.4. NDB approaches. NDB approaches may be flown during day, night, or IMC after compliance with any airfield restrictions in GDSS and the ASRR (note: some airfields will continue to be restricted IAW ASRR criteria for mountainous terrain, landing illusions, etc.). Back up each approach with available NAVAIDs/area navigation (RNAV)/GPS to include loading the NDB coordinates in the FMC/FMS (if equipped).

6.42.5. RNAV, GPS and RNAV(GPS) Instrument Departures, Arrival and Approaches. All VIP aircrews are authorized to fly pure GPS, RNAV, and RNAV(GPS) instrument departures, arrivals, day or night, IMC or VMC. Comply with procedures and temperature corrections IAW AFI 11-202V3 and FIH. Aircraft must have RNP as published on the IAP. The PM shall monitor lateral cross track, vertical velocity trends, IAW AFM guidance and report alerts [required navigation performance (RNP), RAIM or loss of GPS signal] to the PF. PF shall execute missed approach if excessive deviations occur.

6.42.5.1. Equipment. Aircraft must have operable RNAV (INS/IRS) and/or GPS-updated FMC/FMS equipment to ensure sufficient RAIM, or appropriate level of actual navigation performance (ANP) is available IAW AFM procedures prior to initiating the approach. IAP notes such as “DME/DME RNP 0.3 N/A” or “GPS Required” state that GPS signal and aircraft equipment must be operational to start the approach. For aircraft where the MEL/MMEL does not allow the approach, or if the required approach RAIM/ANP is not available, the approach shall not be flown.

6.42.5.2. RNAV Instrument Approaches. All VIP Aircraft and certified aircrews are approved to perform RNAV approaches IAW AFI 11-202V3 and AFM guidance.

6.42.5.2.1. LNAV approaches. LNAV approaches are non-precision approaches and may be flown IMC to a barometric LNAV MDA(H). They may be also be flown using VNAV procedures to a derived decision altitude (DDA) = LNAV MDA(H) +50ft. The PM shall monitor lateral track error IAW AFM guidance and provide trends to the PF.

6.42.5.2.2. VNAV approaches. VNAV procedures differ from LNAV procedures as they are similar to ILS procedures following vertical path guidance. VNAV approaches may be flown IMC to a VNAV DA(H). IAW AFM guidance, C-38 aircraft are authorized descent to published barometric VNAV DA (corrected for temp) in World Geodetic System 1984 (WGS-84) compliant airspace only. Use of remote altimeter settings to VNAV DA(H) minimums is prohibited. The PM shall monitor lateral/vertical track error IAW AFM guidance and provide trends for PF.

6.42.5.2.3. RNAV (RNP) approaches. Aircrews are not authorized to fly RNAV (RNP) approaches until aircraft equipment is certified, aircrews are trained, and NGB/A3 has issued operational approval. This does not affect the capability to fly RNAV, RNAV (GPS), GPS, or “OR GPS” approaches.

6.42.5.3. Overlay approaches. The GPS Approach Overlay Program is an authorization for pilots to use GPS avionics under IFR for flying designated nonprecision instrument approach procedures, except LOC, LDA, and simplified directional facility (SDF) procedures. These procedures are now identified by the name of the procedure and “or GPS” (e.g., VOR/DME or GPS RWY 15). Other previous types of overlays have either been converted to this format or replaced with stand-alone procedures. Only approaches contained in the current onboard navigation database are authorized.

6.42.5.4. WGS-84 compliance. Individual country compliance with the WGS-84 means that the country’s NAVAID and obstacle database conforms to the same US grid standard that today’s updated avionics use to determine position. US NAS/Canadian Domestic Airspace is WGS-84 compliant. WGS-84 compliance is one of several items which are monitored to determine if a country’s published RNAV(GPS) and overlay terminal procedures are authorized for use by USAF aircrews. PICs shall check www.jepesen.com to determine compliance if a country’s WGS-84 status is in doubt. On the Jeppesen home page, type “WGS-84 Status Report” in the search field to access the compliance list. Except as noted below, only those procedures that are WGS-84 compliant may be flown using FMC/FMS guidance.

6.42.6. Not Used.

6.42.7. Not Used.

6.42.8. Weather below minimums: Pilots will not execute an approach if advised prior to starting the en route descent or penetration that the airfield is below landing minimums.

6.42.8.1. If a pilot starts the published approach, (an en route descent to an approach may be considered a published approach), and subsequently determines the weather is below

minimums, the pilot must not deviate from the last ATC clearance until obtaining a new or amended clearance. The pilot may elect to:

6.42.8.2. Request clearance to a holding fix or alternate, as applicable.

6.42.8.3. Continue the approach as published to the missed approach point and land, if the aircraft is in a position to make a safe landing and the runway environment is in sight.

6.42.8.3.1. Established on a Segment of the Approach. If established on a segment of the approach or being radar vectored to final approach and the weather is reported or observed to be below approach minimums, the PIC has the option of continuing the approach to the MAP/DA/DH. If deciding to abandon the approach, level off (or descend if a lower altitude is required for the missed approach procedure). Comply with the last assigned clearance until a new or amended clearance is received.

6.42.8.3.2. Do not continue the approach below minimums unless the aircraft is in a position to make a safe landing and the runway environment is in sight.

6.42.8.3.3. If the approach is continued, PICs will ensure sufficient fuel is available to complete the approach and missed approach and proceed to a suitable alternate with normal fuel reserves.

6.42.8.3.4. CAT II approaches will not be continued if weather is reported below CAT II minimums.

6.42.8.3.5. The PIC has final responsibility for determining when the destination is below designated minimums and for initiating proper clearance requests.

6.42.9. CAT II Procedures. Special aircraft and aircrew training required. Refer to AFI 11-217V1, Chapter 19 and appropriate AFM for CAT II ILS information.

6.42.9.1. CAT II minimum RVR of 1200 ft (350 meters).

6.42.9.2. CAT II minimums based on a HAT no lower than 100 ft.

6.42.9.3. CAT II approaches without radio altimeter (RA) setting for DH are authorized. In this case IAP statement "RA NA" denotes irregular terrain changes that affect RA. Utilize barometric DH and inner marker if approved on the IAP. If inner marker is inoperative, CAT II approaches are not authorized.

6.42.9.4. CAT I ILS procedures will be used when unable to use alternate AFM guidance for local barometric DA(H) procedures.

6.42.9.5. Not Used.

6.42.9.6. Not Used.

6.42.9.7. Use Surface Movement Guidance and Control System (SMGCS) lighting (if available) at destination and taxi route.

6.43. Tactical Arrivals. If ingressing a WEZ and/or an airfield with known or suspected threats, review applicable AFTTPs and published airfield tactical arrival procedures with the crew.

6.44. Unscheduled Landings. Notify the airfield selected for an emergency diversion as soon as possible to allow maximum time to prepare the required assistance or services. ARTCC and C2 centers will assist the PIC as necessary in notifying the appropriate agencies.

6.44.1. Over-Flying Scheduled Refueling Stops. Before offering to over fly scheduled refueling stops, the PIC must consider all consequences that may arise. As a minimum, coordination with the contact, final arrival airport, over flight windows and greeting parties must be considered. Optimally the option of over-flying refueling stops should be coordinated with the contact and C2 through appropriate channels prior to departing home station.

6.45. Maintenance Debrief. Complete the AFTO 781, *ARMS Flight and Mission Data Report*, after each flight. After landing, crewmembers debrief maintenance personnel on the condition of the aircraft, engines, avionics equipment, and all installed special equipment as required. Crewmembers are also responsible for documenting cosmetic faults on the aircraft to ensure maintenance is aware of the flaw. See local maintenance debrief policies in local supplement of this AFI.

6.46. Customs and Border Clearance.

6.46.1. Normal Operations:

6.46.1.1. The unit dispatching the mission is normally responsible for the border clearance of all aircraft.

6.46.1.2. When staff support is not available, border clearance is the responsibility of the PIC. Duties may be assigned to ground personnel or to other designated crewmembers, but the PIC retains ultimate responsibility. The PIC is responsible for ensuring the following:

6.46.1.2.1. Crew members and passengers possess current passports and valid visas, when required.

6.46.1.2.2. Crew members and passengers have current record of immunization.

6.46.1.2.3. Cargo entry documents are in proper order.

6.46.1.2.4. Departing or entering the US through an airport where border clearance can be obtained.

6.46.1.2.5. Obtaining border clearance for aircraft cargo, passengers, crew and baggage, if required, before takeoff to a foreign area or after arrival from a foreign area.

6.46.1.2.6. Spraying the aircraft (FCG and paragraph 6.47. of this AFI).

6.46.2. Procedures for US Entry:

6.46.2.1. En route the designated crewmember will distribute personal customs declarations to all passengers and crew members. The designated crewmember will also brief passengers and crew members on customs regulations, and prepare and compile necessary border clearance forms for the PIC's signature.

6.46.2.2. En route, notify the C2 agency or airfield contact at the base of intended landing of any change in ETA to ensure that border clearance is accomplished as soon as possible after landing.

6.46.2.3. Obtain a permit to proceed when military necessities require that an aircraft (which has landed in the United States for customs clearance) proceed to another location in the US to obtain border clearance. The permit to proceed delays customs inspection of cargo, passengers, and crew until arrival at the off-load station and saves intermediate off-loading and reloading normally required for customs inspection. The permit to proceed is valid only to the airport of next landing where the border clearance must be completed or a new permit to proceed issued by a customs official. Do not make intermediate stops between the issue point of the permit to proceed and destination of manifested cargo unless required by an emergency situation or directed by the controlling C2 center.

6.46.2.4. When an aircraft lands for a US border clearance, a US Customs representative normally will meet the aircraft to obtain the required documents. Do not deplane passengers or crew members unless necessary for safety or the preservation of life and property. Do not unload until approved by customs and agriculture personnel or their designated representatives. This procedure applies to the initial landing in the US and all landings required when operating on a permit to proceed or until all crew, passengers, and cargo complete final border clearance.

6.46.3. Inspections of US aircraft by foreign officials:

6.46.3.1. Follow USAF policy on status of military aircraft as stated in the FCG, chapter 6, section G. In substance, this policy holds that US military aircraft are immune from searches, seizures, and inspections (including customs and safety inspections) by foreign officials. In addition, PICs must be aware of and adhere to any specific FCG provisions for individual countries.

6.46.3.2. If confronted with a search request by foreign authorities, aircrews should use the following procedures:

6.46.3.2.1. In most cases, search attempts may be halted simply by a statement of the PIC to the foreign official that the aircraft is a sovereign instrumentality not subject to search without consent of USAF headquarters or the US Department of State officials in the country concerned. This should be clearly conveyed in a polite manner so as not to offend foreign authorities who may honestly, but mistakenly, believe they have authority to search USAF aircraft.

6.46.3.2.2. If foreign authorities insist on conducting a search, the PIC should make every effort to delay the search until he or she can contact USAF headquarters or the appropriate embassy officials. The PIC should then notify these agencies of the foreign request by the most expeditious means available and follow their instructions.

6.46.3.2.3. If foreign officials refuse to desist in their search request, pending notification to USAF headquarters or the appropriate embassy, the PIC should indicate that he or she would prefer to fly the aircraft elsewhere (provided fuel, flying time, and mechanical considerations permit a safe flight) and request permission to do so.

6.46.3.2.4. If permission is refused and the foreign authorities insist on forcing their way on board an aircraft, the PIC should state that he protests the course of action being pursued and that he intends to notify both USAF headquarters and the appropriate American embassy of the foreign action. The PIC should not attempt physical resistance, and should thereafter report the incident to USAF headquarters and appropriate embassy as soon as possible. The PIC should escort foreign authorities if the inspection cannot be avoided.

6.46.3.3. Other procedures may apply when carrying sensitive cargo or equipment. Follow these procedures and applicable portions of classified FCG.

6.47. Insect and Pest Control.

6.47.1. Responsibility. PIC will ensure required spraying is accomplished according to AFJI 48-104, *Quarantine Regulations of the Armed Forces*, FCG, or as directed by higher headquarters. Certify the spraying on Customs Form (CF) 7507, or on forms provided by the country transited. Aircraft should never be sprayed with passengers on-board. The only exception is when the FCG mandates it.

6.47.1.1. When spraying is required, use insecticide, aerosol d-phenothrin-2 percent, National Stock Number (NSN) 6840-01-067-6674 (or equivalent), to spray the aircraft. Use the following guidelines:

6.47.1.1.1. Direct the nozzle toward the ceiling of the compartment or space being sprayed.

6.47.1.1.2. Spray spaces inaccessible from within the aircraft after completely loading fuel, baggage, cargo, and passengers, including baggage compartments, wheel wells, and other similar spaces.

6.47.1.1.3. Spray the cabin, cockpit, and other spaces accessible from within the aircraft after the crew is aboard and after closing all doors, windows, hatches, and ventilation openings. **CAUTION:** If the insecticide label directs disembarkation after use, spray prior to boarding crew or passengers. Close all doors and hatches for 10 minutes after dispensing and ventilate for 15 minutes before allowing anyone on board.

6.47.1.2. Spraying Times. Spray the aircraft for the following times unless longer periods are specified for the country being transited:

Table 6.2. Spray Times.

MDS Aircraft	Spraying Time
C-38	15 Sec

6.47.2. Responsibility of PIC In-flight. When seeing any insect or rodent infestation of the aircraft in-flight, notify the destination C2 center, base operations, or airport manager of the situation before landing so the proper authorities can meet the aircraft.

6.47.3. Procedure at Aerial Port of Disembarkation (APOD). On arrival at an APOD, do not open cargo doors or hatches except to enplane officials required to inspect the aircraft for insect or rodent infestation or to deplane the minimum number of crewmembers required for

block-in duties. Do not on-load or off-load cargo or passengers until the inspection is satisfactorily completed. This procedure may be altered to satisfy mission or local requirements, as arranged by the base air terminal manager or the local C2 organization.

Section 6G—Miscellaneous

6.48. Dropped Object Response. If a dropped object is discovered, the flight crew will:

6.48.1. Notify the Mission Operations or SOC and the controlling agency as soon as practical; includes routing, altitude, weather, etc.

6.48.2. Notify unit safety and maintenance at the next station transited.

6.49. Cockpit Voice Recorder (CVR) and Flight Data Recorder (FDR). If involved in a mishap or incident, after landing and terminating the emergency, open the CVR and FDR power circuit breakers.

6.49.1. FDR and CVR systems, if installed, should be operative prior to departure and operated continuously from the start of the takeoff roll until the aircraft has completed landing roll at destination. If en route failure occurs, continue the mission to a station where adequate repairs can be made. If involved in a mishap or incident, open the CVR and FDR power circuit breaker after landing and after terminating the emergency. CVR recordings are considered factual and the transcript is not a privileged document. The actual aircrew voices on the tape should be considered protected under the Privacy Act. See AFI 91-204, *Safety Investigations and Reports*.

6.50. Aircrew Flight Equipment and Dash 21 Equipment Documentation. The PIC or designated representative will:

6.50.1. Prior to departing home station or en route stations, ensure appropriate serviceable protective clothing, Aircrew Flight Equipment (AFE), survival, and dash 21 equipment for the entire or remainder of the mission are aboard the aircraft. Review applicable leased aircraft procedures.

6.50.2. Prior to departing home station and following en route crew changes, review AF Form 4076, *Aircraft Dash 21 Equipment Inventory*, to ensure all required dash 21 equipment has been certified as installed by maintenance, the initial check has been signed by maintenance, and configuration documents match mission requirements.

6.50.3. Prior to departing home station and following en route crew changes, review, sign, and date the AFTO 46, *Pre-positioned Life Support Equipment*, to ensure all required protective clothing aircrew flight and survival equipment have been certified as installed by AFE technicians, and that configuration documents match mission requirements. Ensure appropriate number and type of life preservers are aboard for over-water missions carrying children and infants.

6.50.4. Missing Equipment. Aircrew members discovering equipment missing will accomplish the following:

6.50.4.1. Make an AFTO 781 entry for equipment found missing. Additionally, ensure equipment removed from the aircraft at an en route station is documented in the AFTO 781.

6.50.4.2. Annotate AF 4076 and AFTO 46 in the next vacant column, by indicating the quantity remaining for the item. Ensure the ICAO location designator is entered above the check number of that column.

6.50.4.3. Leave AF 4076 and AFTO 46 on board the aircraft in the event of an en route crew change.

6.50.4.4. Advise the PIC and determine whether the missing equipment should be recovered or replaced before mission continuation.

6.50.4.5. Assist, as required, in preparing reports of survey for missing equipment.

6.50.4.6. When possible, advise MAJCOM Stan/Eval (or airport management) before mission continuation.

6.50.5. Additional Equipment. If more equipment is discovered during the preflight than is annotated on the AF 4076 and AFTO 46, annotate the total quantity in the next vacant column for the item. Ensure the ICAO location designator is entered above the check number of that column.

6.51. Passenger Restrictions. The only passengers on missions transporting DVs will be those of the official party and those space available passengers authorized by the on-board contact officer.

6.51.1. Space Available Passengers. For other than revenue and White House missions, PICs are authorized to release space available seats on mission legs when no official passengers are aboard (positioning and de-positioning legs). PICs are encouraged to release maximum space available seats subject to the following restrictions:

6.51.1.1. Revenue Missions. These are missions for which the using agency (typically a government agency other than DoD) is reimbursing DoD for use of the aircraft. Space available passengers on revenue missions must be approved in advance by USAF/CVAM/AMD/JOSAC (as appropriate) and the using agency contact officer through unit C2 agencies. This is essential to ensure proper funding and reimbursement. Consult CVAM/AMD/JOSAC to determine mission revenue status if in doubt. Congressional Delegations (CODEL) are not revenue missions.

6.51.1.2. White House Support Missions. Space available passengers will generally not be permitted aboard White House support mission aircraft without express permission of HQ USAF/CVAM. This is normally due to the security status of the aircraft, which may include positioning and de-positioning legs. When it is necessary to move aircrew members or support personnel on White House support mission aircraft, the WHMO will be advised and permission obtained through the unit C2 and CVAM. On de-positioning legs space available passengers will usually be permitted if the aircraft is no longer required to maintain an upgraded security status.

6.51.1.3. Billing. Space available passengers on revenue missions may be subject to being billed commercial first-class airfare by the using agency for the applicable route, depending on that agency's policy. If the DV or on-board contact officer releases seats, aircraft commander must ensure that any additional financial liability for the passengers is specified by the using agency on-board contact officer. PIC will ensure passengers understand and agree to any reimbursement conditions prior to boarding.

6.51.1.4. Anti-hijacking Inspections. Board space available passengers only after anti-hijacking inspections are completed. If a space available seat release is anticipated at an en route station, the local passenger service facility will be advised of the inspection requirement. Procedures for anti-hijacking inspections by the aircrew at stations without a military passenger service facility are specified in chapter 13. The PIC has final authority for accepting space available passengers.

6.51.2. Passenger Boarding. On all missions operating without security guards or a FA, the PIC or his/her designate will ensure that all passengers are listed on the passenger manifest prior to boarding the aircraft. Passengers will be greeted and checked at the bottom of the steps. The PIC or the mission escort officer must clear any passengers not listed on the manifest prior to entering the aircraft. This task will be completed at the beginning of each mission and any time passengers have to re-board the aircraft.

6.52. Airfield Data Reports. Aircrews transiting strange airfields or airfields where conditions may adversely affect subsequent flight will:

6.52.1. Report airfield characteristics that produce illusions, such as runway length, width, slope, and lighting, as compared to standard runways, sloping approach terrain, runway contrast against surrounding terrain, haze, glare, etc.

6.52.2. Debrief the next C2 center transited.

6.53. Impoundment of Aircraft. If an aircraft is involved in a serious in-flight or ground incident, the PIC should impound the aircraft immediately after landing and contact the controlling C2 center and parent MAJCOM safety office for further instructions.

6.54. No Show Passenger Baggage. Unclaimed passenger baggage and untagged baggage will be subject to search and seizure. Under no circumstances will it be allowed on the aircraft. Tagged but no-show passenger baggage or baggage of passengers removed from flight will be downloaded prior to departure. Aircrew will not accept unaccompanied baggage except IAW AMCI 24-101.

6.55. Wake Turbulence Avoidance. Comply with wake turbulence avoidance criteria. Acceptance of traffic information, instructions to follow an aircraft, or a visual approach clearance is acknowledgment that the PIC will ensure takeoff and landing intervals and accepts responsibility of providing wake turbulence separation. Refer to FLIP GP section 6 for more information concerning wake turbulence separation.

6.56. Operations at Airports Above 10,000' MSL. Use approved AFM procedures and the following aircrew procedures for operations at airports above 10,000' MSL:

6.56.1. Raise cabin altitude to 10,000 feet during the descent. Configure aircraft pressurization, air conditioning, and oxygen/warning systems as required and complete the remaining depressurization on final approach.

6.56.2. A specific timed period of oxygen use prior to landing is not required. Aircrew members use oxygen during descent, approach, landing, takeoff, and ground operations when engines are running/checklist operations in progress.

6.56.3. PIC briefing and passenger briefings must include cautions on high altitude operations and hypoxia. All passengers are susceptible to hypoxia during depressurized flight above 10,000 feet cabin altitude. Take your time during ground operations at high

altitude. Monitor and back up other crewmembers servicing or loading the aircraft. Keep portable oxygen bottles readily available in the event of over-exertion or hypoxia. Administer oxygen to any passenger displaying hypoxia symptoms.

6.56.4. Emergency Egress Restrictions. **CAUTION:** Do not, repeat, do not land pressurized.

6.57. Classified Equipment and Material.

6.57.1. Equipment. When classified equipment is onboard, ensure aircraft security requirements are met according to chapter 7 of this AFI. At bases not under jurisdiction of the USAF, ensure the aircraft and equipment are protected. AFI 31-401, *Information Security Program Management*, provides specific guidance concerning the security of various levels of classified equipment aboard aircraft.

6.57.2. Material. Ensure COMSEC and other classified materials are turned in at destination and receipts are obtained for COMSEC and classified material. The on-site C2 center will provide temporary storage for COMSEC and other classified materials during en route, turnaround, and crew rest stops. If a storage facility is not available, the aircraft gun storage box or classified safe may be used for material classified up to and including SECRET. Encrypted COMSEC will only be transferred to authorized DoD personnel.

6.57.3. IFF/Selective Identification Feature (SIF). Ground check IFF/SIF prior to takeoff (ground test assets permitting). IFF self-test or radar interrogation will satisfy this requirement. This check is not required on stopover flights if the IFF is operational upon landing unless required by theater directives.

6.57.4. Mode 4. Aircrews will ensure that they have an operable Mode 4 when required for mission accomplishment. Aircrews will conduct an operational ground test of the Mode 4 (ground test assets permitting) prior to deployment overseas, or as specified in the OPORD or contingency/exercise tasking.

6.57.4.1. Attempt to fix an inoperable Mode 4 prior to takeoff. Do not delay takeoff or cancel a mission for an inoperable Mode 4, except when the aircraft will transit an area where safe passage procedures are implemented.

6.57.4.2. Conduct a ground or inflight check of the Mode 4 on all missions departing the CONUS for overseas locations. Aircrews can request the Mode 4 interrogation check through NORAD on UHF frequency 364.2. Ground and inflight checks of the Mode 4, when conducted, are mandatory maintenance debrief items. Crews will annotate successful and unsuccessful interrogation of the Mode 4 on all aircraft forms (AFTO 781A).

6.57.4.3. Aircraft with inoperable Mode 4 will continue to their intended destinations. Repairs will be accomplished at the first destination where equipment, parts, and maintenance technicians are available. In theaters where safe passage is implemented, aircraft will follow procedures for inoperable Mode 4 as directed in the applicable airspace control order or ATO.

6.57.4.4. Aircrews will carry COMSEC equipment and documents required to operate the Mode 4 on missions when required for mission accomplishment. Prior to departing

for any destination without COMSEC storage facilities, crews will contact their local COMSEC managers for guidance.

6.57.4.5. Aircrews will carry COMSEC equipment and documents required to operate the Mode 4 on missions when required for mission accomplishment. Prior to departing for any destination without COMSEC storage facilities, crews will contact their local COMSEC managers for guidance.

Chapter 7

AIRCRAFT SECURITY

7.1. General. Your mission places you and your aircraft in an environment highly vulnerable to security threats. The importance of the DVs transported and the high frequency of missions into civil airports throughout the world magnify this vulnerability. Positive security measures are required at all times. This chapter provides guidance on aircraft security and preventing and resisting aircraft piracy (hijacking) of VIP Aircraft. AFI 13-207, AFI 31-101, *The Air Force Installation Security Program (FOUO)*, 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. Security. The OG/CC or above may direct the use of security personnel above and beyond the requirements of AFI 31-101. The waiver approval authority for VIP RAVEN team composition, security and RAVEN team support requirements is the WG/CC exercising authority over VIP Aircraft.

7.2.1. Protection Level (PL)-1. Presidential WHMO, Office of the Secretary of Defense (OSD) designated aircraft are required continuous security protection at home station, en route operating locations and contract maintenance facilities. Depending on the mission, the C-38 may be designated a PL-1 resource. Refer to AFI 31-101 for PL-1 security requirements.

7.2.2. PL-2/PL-3. The C-38A is normally designated as a PL-3 resource. Depending on the mission, the C-38A may be designated as a PL-2 resource. Refer to AFI 31-101 for PL-2/3 security requirements.

7.3. Air Force Installation Security Program. The following security procedures will implement AFI 31-101 requirements for VIP Aircraft:

7.3.1. PIC Authority. The PIC will ensure that adequate aircraft security measures are provided at all times.

7.3.2. Advance Security Support Arrangements. The PIC will ensure security support has been coordinated at en route stations in advance. If security requirements cannot be met prior to departure, the airfield may be deemed unsuitable for RON by the unit. Units may use ORM teams and Mission Assessment Groups (MAG) to integrate MAJCOM and AOR Intel/Threat Working Group (TWG) recommendations to determine suitability. OG/CC or equivalent is arbiter for security. Home station CP and unit C2 will assist the PIC for alert missions or en route diversions.

7.3.3. Briefings. When required, PICs will obtain threat assessment and security capability evaluation briefings before departing home station. Unit C2 will provide the PIC with pertinent updates en route.

7.3.4. Baggage Security. Baggage not certified safe for loading by a responsible government agency will be inspected prior to loading at the PIC's discretion. Verify baggage identification against passenger manifest. Aircrew members will secure their own baggage. The PIC is responsible for explaining baggage security requirements to the mission contact.

7.3.4.1. On PL-1 and PL-2 aircraft, all passenger baggage will be inspected prior to loading. A RAVEN will verify baggage identification against the passenger manifest.

7.3.5. Fuel Security.

7.3.5.1. Fuel for PL-1 Presidential Aircraft must pass a laboratory analysis and be secured until used. The USAF advance agent will obtain and secure this fuel.

7.3.5.2. Fuel for other aircraft do not require secured fuel. Use fuel obtained from large capacity, high use sources not pre-designated for VIP Aircraft.

7.3.6. Flight Line Photography. There are no restrictions on exterior photography of VIP Aircraft. Interior photos of enroute VIP Aircraft are at the discretion of the PIC and the principle DV. Care must be taken to remove all classified materials from sight prior to authorizing any photography. Specific airfields may have restrictions regarding the photography of aircraft.

7.4. Not Used.

7.5. En Route Security.

7.5.1. Aircraft Access Control. Positive control of access to VIP Aircraft is mandatory.

7.5.1.1. When directed by the OG/CC, ASNCOs control access to VIP Aircraft. They will positively identify all individuals granted unescorted entry to the aircraft.

7.5.1.2. When RAVENs do not accompany aircraft, the aircrew is responsible for controlling access. At USAF installations, a passenger service representative normally assists in boarding passengers. The passenger service representative should be at the aircraft prior to passenger arrival and remain at the aircraft until loading is complete. Monitor all servicing and support personnel. Do not allow unidentified personnel onboard or around the aircraft. Escort unofficial visitors on board the aircraft and keep them under surveillance until they depart.

7.5.2. Use of Aircraft Sealing Devices. Except for Presidential, Presidential Support, and SDSAM aircraft protected by a RAVEN, VIP Aircraft should be sealed (at the discretion of the PIC) during all RONs and during any ground time when aircrew is absent from the aircraft. Seal doors and hatches according to local wing directives. Aircraft with an onboard ground security system meet the intent of this paragraph.

7.5.3. Refer to chapter 15 of this AFI for specific RAVEN procedures.

7.5.4. RAVEN policy. Typical teams will consist of a minimum of two USAF security force members depending on MDS and MAJCOM security requirements. The team travels as MEPs and are responsible to the PIC at all times. In turn, PICs are responsible for their welfare (transportation, lodging, etc.). PICs will ensure security team members receive a mission briefing and aircraft egress/passenger briefing (as appropriate).

7.6. Detecting Unauthorized Entry.

7.6.1. Suspected Unauthorized Entry. If the PIC suspects the aircraft has been tampered with or subjected to unauthorized entry, take the following actions:

7.6.1.1. Notify the local security authorities and request a thorough inspection of the aircraft for sabotage, explosive devices, and pilferage.

7.6.1.2. Notify CP and C2 centers. Advise them of any requirements for assistance, and give them your estimate of a revised departure time.

7.6.1.3. If there are indications that sabotage is a definite possibility or if security inspections may delay the DV party, notify the mission contact officer. Establish suitable departure time and if necessary, coordinate suitable alternate transportation through current operations or SOC.

7.6.1.4. Monitor the security check of the aircraft. When cleared by security authorities, conduct a thorough preflight inspection. Look for broken wiring, damaged components, foreign devices, etc.

7.6.1.5. If both the security authorities and the PIC are assured aircraft is safe to fly, notify the OG/CC. Depart only with the OG/CC approval. Safety and aircraft security take priority over minimizing DV inconvenience.

7.6.2. Security awareness is crucial to effective mission accomplishment. Aircrews must always remain vigilant to their surroundings, especially at high threat, low security locations. During preflight activities, aircrews will inspect all accessible areas, to include aircraft wheel wells, and cargo compartments for personnel or other unfamiliar devices. Report any suspicious items to host security forces. Aircrews will maintain a heightened security posture throughout all pre-takeoff activities.

7.7. Preventing and Resisting Hijacking.

7.7.1. General Hijacking Guidance. A hijacking could create a serious international incident and jeopardize the safety of passengers and crew. High level DVs traveling aboard VIP Aircraft increase potential severity of any hijacking incident. Expect the National Military Command Center (NMCC) to become involved in resolving hijack crises. Military C2 is central POC if a hijacking threatens your VIP Aircraft or passengers at any location. The PIC is the coordinating authority for anti-hijacking procedures. The PIC has first-hand knowledge of the situation and must take every opportunity to keep command authorities apprised of the situation. Use military C2 channels to contact NMCC, who in turn will relay instructions to the PIC.

7.7.2. The Air Transportation Act of 1974 and the Federal Aviation Act of 1958, as amended, vest the FAA Administrator with exclusive responsibility for the direction of law enforcement activity in aircraft hijacking situations involving all aircraft (civil and military) in-flight in the United States.

7.7.3. In taking action during an aircraft hijacking situation, military forces will act under military command within the scope of their duties.

7.7.4. In the event an aircraft involved in an aircraft hijacking situation is carrying documents, equipment, or material that the DoD has determined to be highly sensitive, the DoD will provide the FAA, and where appropriate, the FBI, with all pertinent information. Where possible, the FAA will consult and cooperate with DoD prior to directing any law enforcement activity.

7.7.5. An aircraft is most vulnerable to hijacking when the aircrew is aboard and the aircraft is operationally ready for flight.

7.7.6. A concerted effort must be made to prevent the hijacking of military or military contract aircraft by detecting potential hijackers before they board the aircraft.

7.7.7. Should preventive efforts fail, any actual attempt to hijack a military aircraft must be resisted in a manner appropriate to the situation. Resistance may vary from dissuasion to direct confrontation, including the use of weapons. RAVENs are authorized to use weapons to subdue a hijacker.

7.7.8. Since air piracy may be committed by political terrorists or by individuals to whom the threat of death is not a deterrent but a stimulus, ordinary law enforcement procedures may be ineffective. Thus, successful conclusion of a hijacking situation and apprehension of the hijackers may require use of specialized law enforcement techniques and procedures.

7.7.9. Delaying actions have been most successful in overcoming hijackings without loss of life or property.

7.7.10. In the case of an aircraft carrying passengers, the primary concern is the safety of the passengers.

7.7.11. Assistance to hijacked civil or military contract aircraft will be rendered as requested by the PIC of the aircraft and the authority exercising OPCON of the anti-hijacking effort.

7.8. Preventive Measures. Commanders at all levels must ensure preventive measures are taken to minimize access to the aircraft by potential hijackers. When VIP Aircraft are operating away from home station, the PIC will ensure provisions of this chapter and AFI 13-207, as supplemented, are complied with.

7.8.1. Preventive measures include the following:

7.8.1.1. The host station passenger processing or manifesting facility should conduct anti-hijacking inspections.

7.8.1.2. Do not board passengers until the PIC is fully satisfied with inspection results.

7.8.1.3. In the absence of qualified passenger service representatives, the PIC will ensure the anti-hijacking inspection of passengers and baggage is accomplished.

7.8.2. Medical facility commanders are responsible for anti-hijacking inspection of patients. When patients are delivered to the aircraft by civilian sources, the aircrew will perform required inspections prior to loading.

7.8.3. During exercises or contingencies in support of combat operations involving the movement of large groups of personnel, the unit being supported should manifest passengers and perform anti-hijacking inspections.

7.8.4. Passengers will not carry weapons or ammunition on their person or in hand-carried baggage aboard an aircraft. **EXCEPTION:** Special agents, guards of the Secret Service or State Department, Personal Security Details and other individuals specifically authorized to carry weapons.

7.8.5. If weapons must be cleared, ask the individual to:

7.8.5.1. Move to a safe, clear area at least 50 feet from any aircraft, equipment, or personnel before unholstering or unslinging their weapons.

7.8.5.2. Clear weapons IAW standard safety procedures.

7.9. Initial Response. When an act of air piracy involves an Air Force installation or aircraft within the United States, response will be according to the following guidelines until such time as FAA assumes active direction of anti-hijacking efforts. Resist all attempts to hijack a military aircraft. Resistance may vary from simple discussion through deception and subterfuge, to direct physical confrontation, including the prudent use of weapons.

7.9.1. To counter a hijacking, actual or threatened, delay movement of the aircraft to provide time for ground personnel and the aircrew to establish communication and execute coordinated resistance actions.

7.10. In-Flight Resistance. After airborne, success in thwarting a hijacking depends on the resourcefulness of the aircrew. Many variables of a hijacking preclude use of any specific counter-hijacking procedure. Some key factors should be evaluated before deciding a course of action to be taken, including the nature of the threat, danger to life or crippling damage to the aircraft in-flight, destination indicated by the hijacker, and the presence of sensitive material onboard. Some counter-hijacking actions the aircrew may consider are:

7.10.1. Engage the hijackers in conversation to calm him or her and to evaluate what course of action might be effective.

7.10.2. Dissuade the hijacker.

7.10.3. Use facts or subterfuge to convince the hijacker intermediate stops are necessary.

7.10.4. Propose more favorable alternatives, such as landing in a neutral, rather than a hostile, country.

7.10.5. Exploit any reasonable opportunity to incapacitate or overcome the hijacker physically, including the prudent use of firearms.

7.10.6. Never give up control of the aircraft to a hijacker.

7.11. Communications Between Aircrew and Ground Agencies. Crews facing a hijacking threat will notify ground agencies by any means available as soon as practical and follow-up with situation reports as circumstances permit. Detailed guidance is contained in AFI 13-207.

7.11.1. Crews will transmit an in-the-clear notification of hijacking to ATC. If an in-the-clear transmission is not possible, set transponder to 7500. If unable to set the transponder, or if not under radar control, transmit a radio message indicating transponder change to 7500.

7.11.2. Aircrews will not use the covert signals depicted in AFI 13-207 Table 2, Covert Signals, to communicate the presence of a hijacking situation. Code words, covert notification actions, and further transponder changes will not be used.

7.12. Forced Penetration of Unfriendly Airspace. These procedures are designed to deter possible hostile action against the hijacked aircraft that has been forced to penetrate airspace of a nation unfriendly to the United States.

7.12.1. If instructions from the unfriendly nation are received either by radio contact or by air intercept before boundary crossing, comply with instructions received.

7.12.2. If no contact with unfriendly nation is made before approaching a boundary:

7.12.2.1. Maintain TAS not more than 400 knots.

7.12.2.2. Maintain an altitude between 10,000 and 25,000 feet if possible.

7.12.2.3. Fly a direct course toward destination announced by the hijacker, if no course is specified.

7.12.2.4. Transmit the international distress signal, MAYDAY, on any of the international distress frequencies (121.5 MHz, 243.0 MHz, or 2182 KHz) in an effort to establish communications.

7.12.2.5. Set Mode 3 code 7700 on transponder.

7.12.2.6. If radio contact cannot be established, follow procedures set forth in FLIP.

7.12.3. Consider the presence of classified documents and equipment aboard the aircraft. When a landing in an unfriendly nation is imminent, attempt to dispose of or destroy the equipment or material.

7.13. Arming of Crewmembers. Aircrews will be armed on all overseas missions unless RAVENs are a part of the crew (not required for a CONUS depot input for OCONUS units). Units will establish which crewmembers will be armed in their supplement to this AFI. All crewmembers should know who is armed. Arm aircrews on CONUS missions only when directed by the mission operations or SOC IAW OPORD or OPLAN. Unit commanders will ensure that crewmembers are trained in weapon issue, loading, safety, firing, transfer, and receipt procedures. Comply with AFI 31-207, *Arming and Use of Force by Air Force Personnel*. If an armed crewmember must leave the crew en route, transfer the weapon to another authorized crewmember using AF Form 1297, *Temporary Issue Receipt*.

7.13.1. Standby/Alert Launches. Do not delay the mission to pick-up weapons. If it appears there will be an unacceptable wait to get weapons, proceed to the aircraft and notify the CP.

7.13.2. Crew Rest. When crew must RON, secure weapons in the aircraft gun box with approved lock. Do not use local armories.

7.13.3. Wearing of Weapons. Wear weapons in holster, concealed at all times to prevent identifying armed crewmembers. Do not wear weapons off the flight line except to and from the C2 center, armories and other facilities associated with aircrew activities. When OCONUS, wearing weapons outside the aircraft is discouraged. Keep armed crewmembers inside the aircraft.

7.13.4. Weapons Storage In-flight. Crewmembers will be armed before preflight, onload, or offload duties and until completion of all offload duties. When no passengers are onboard, weapons may be stored in the gun box in-flight after a satisfactory stowaway check. Crewmembers will rearm before landing. Weapons need not be unloaded before placing them in a gun box.

7.13.5. Crewmembers will ensure they are reissued the same weapon until mission termination at home station.

7.13.6. Loading and Transfer of Weapons. Load and unload weapons at approved clearing barrels if available. Do not use a hand-to-hand transfer of loaded weapons to another crewmember; place the weapon on a flat surface.

7.14. Force Protection. Crews must be alert to the possibility of terrorist activities at all times. Reference AFMAN 10-100, *Airman's Manual*; Joint Service Guide 5260, *Service Member's Personal Protection Guide: A Self-Help Handbook to Combating Terrorism*; AFI 10-245, *Antiterrorism*; and applicable AFTTPs for Force Protection measures. The following considerations may help crewmembers avoid becoming victims of terrorism when operating OCONUS:

7.14.1. Personal Conduct. Crews must realize their conduct can make them a target for individuals dissatisfied with US foreign involvement in their national affairs. Local foreign nationals may or may not condone a military presence - crew conduct will be watched and judged. Therefore, utilize the following:

7.14.1.1. Maintain good military bearing both on and off duty.

7.14.1.2. Avoid dressing in clothes that highlight the fact you are an American, i.e. cowboy hats, wide belt buckles, shirts with pro-American slogans, etc.

7.14.1.3. Do not wear clothing displaying profanity.

7.14.1.4. Know where "off limits" areas are and avoid them.

7.14.1.5. When possible, travel in groups of two or more.

7.14.1.6. Avoid demonstrations for any cause.

7.14.1.7. Avoid discussion of politics.

7.14.1.8. Avoid using ranks or titles in public places.

7.14.2. Ground transportation security. When traveling to and from billeting, messing facilities, etc. consider the following to minimize drawing attention to yourself as a potential target:

7.14.2.1. If possible, consider not using a car that announces government ownership.

7.14.2.2. Park in well-lighted areas.

7.14.2.3. Always lock your car. If possible, do not leave it on the street overnight.

7.14.2.4. Avoid isolated roads and dark alleys.

7.14.3. Personal Identification. Consider the following actions to avoid advertising the fact you are an American:

7.14.3.1. Avoid military style luggage such as B-4 bags and duffel bags with military logos, etc. Luggage tags should be nondescript and not reflect the type of mission (e.g. no souvenir luggage tags from previous VIP Missions). All bags, including hand-carried bags, will have luggage tags.

7.14.3.2. Consider placing your official passport and related documents such as military ID, flight orders, dog tags in your hand-carried luggage and not in your wallet or purse.

7.14.3.3. Wear conservative styled civilian clothing when using commercial transportation.

7.14.4. Hotel Security. When billeted in commercial hotels, crews need to be aware of the following:

- 7.14.4.1. If possible, obtain rooms between the second and sixth floors.
- 7.14.4.2. Always lock interior locks when occupying rooms.
- 7.14.4.3. Always assume your room is monitored and avoid viewing or discussing classified material.
- 7.14.4.4. Sanitized crew lists with names only should be used to record room numbers.
- 7.14.4.5. At no time should the crew orders be given to hotel registration clerks.
- 7.14.4.6. Orders, itineraries, or other mission related materials should not be left in clear view in hotel rooms.
- 7.14.4.7. Avoid home station addresses on hotel registrations and baggage tags.

7.15. Protecting Classified Material on Aircraft. The PIC is responsible for protection of classified materials aboard their aircraft. See requirements in AFI 31-401. As a minimum, ensure the IFF equipment is set to zero before leaving the aircraft.

Chapter 8

OPERATIONAL REPORTS AND FORMS

8.1. General. Applicable reports and forms are contained in this chapter. A copy of all reports and forms will be sent to the 113WG/CP while away from home station.

8.2. AF Form 457, USAF Hazard Report. See AFI 91-202, *The US Air Force Mishap Prevention Program*.

8.2.1. The Air Force hazard reporting system provides a means for Air Force personnel to alert supervisors and commanders to hazardous conditions requiring prompt corrective action.

8.2.2. Special Procedures for Hazard Reports Concerning Weather. Complete the front of an AF Form 457 and address it to the parent wing flying safety office. If a computer flight plan deficiency is involved, attach one copy of the AF Form 72, *Air Report (AIREP)* or AF Form 4053, *INS Flight Plan and Log*, and the CFP to the report. Send the report so that the parent wing flying safety office receives it within 5 days.

8.3. AF Form 651, Hazardous Air Traffic Report (HATR). The AF Form 651 is a tool to report near midair collisions and alleged hazardous air traffic conditions. See Attachment 3 of AFI 91-202 for more information concerning the HATR program.

8.3.1. AFI 91-204, and AFMAN 91-223, *Aviation Safety Investigations and Reports*, list HATR reportable incidents.

8.3.2. The PIC shall report the hazardous condition to the nearest ATC agency (e.g. ARTCC, FSS, control tower, or aeronautical radio station) as quickly as safety allows. Include the following information in the radio call (as appropriate):

8.3.2.1. Aircraft identification or call sign.

8.3.2.2. Time and place (radial/DME of NAVAID, position relative to the airfield, incident, etc).

8.3.2.3. Altitude or flight level.

8.3.2.4. Description of the other aircraft or vehicle.

8.3.2.5. Advise controlling ATC agency that the PIC will file a HATR upon landing.

8.3.3. Deadline to file a HATR is 24 hours after event via any communication mode available. If landing airport has a USAF airfield management function, submit completed AF Form 651 to the airfield management officer for forwarding to the wing safety office. If landing airport does not have an airfield management office, notify the safety office of the Air Force base nearest to location where the condition occurred, PIC's home base safety office, or as prescribed by overseas MAJCOM. In that case, provide contact sufficient information to prepare AF Form 651.

8.4. AMC Form 97, AMC In-Flight Emergency and Unusual Occurrence Worksheet (AMC and AMC Gained Only). The AMC Form 97 is a tool to notify appropriate authorities of any mishap involving crewmembers or aircraft. PICs shall complete all appropriate areas of the form in as much detail as possible. When notified, AMC C2 agents will inform their

supervisor/commander to start investigation and reporting activities IAW AFI 91-204, and Operations Report 3 (OPREP-3) procedures. In addition, PICs will preserve all mission and flight related documents, (e.g. flight plans, weather briefings, NOTAMs, Weight and Balance form, etc.) for collection by appropriate safety officials.

8.4.1. PICs will report crewmember or passenger injury, aircraft damage, or injury/damage to another organization's people or equipment caused by PIC's aircraft/crewmember. At a minimum, report the following:

8.4.1.1. Any physiological episode (physiological reaction, near accident, or hazard in-flight due to medical or physiological reasons). **NOTE:** Crewmembers and passengers involved in a physiological episode will see a flight surgeon to be evaluated and to ensure the incident is reported in the Air Force Safety Automated System (AFSAS) as soon as practical.

8.4.1.2. A human factor related situation, [e.g. misinterpretation of instruments; information overload (i.e. tactile, aural, and visual input too fast to permit reasonable analysis/decision); aircrew task saturation (i.e. too many responses/actions required in a short period of time); or confused switchology (i.e. adjacent switches where actuation of wrong switch creates dangerous situation)]. Anonymous reports are acceptable.

8.4.1.3. A condition that required engine shutdown, in-flight flameout, engine failure, suspected engine power loss, or loss of thrust that required descent below MEA. Engine failures include, but are not limited to, shrapnel from a failed internal engine component penetrating the engine case, engine case rupture/burn-through, engine nacelle fire, substantial fuel leak, or unselected thrust reversal. Consistent with safety, immediately report incidents that involve multiple engines (may report single-engine incidents upon landing). **NOTE:** Exclude intentional shutdowns for training and/or FCF unless the engine fails to restart.

8.4.1.4. A flight control malfunction (including the autopilot and trim systems) that results in an unexpected or hazardous change of flight attitude, altitude, or heading. Enter the flag words, "Reportable Flight Control Malfunction" in the AFTO 781A.

8.4.1.5. A landing gear malfunction aggravated by failed emergency system or procedures.

8.4.1.6. An in-flight loss of all pitot-static or gyro-stabilized attitude/directional instrument indications.

8.4.1.7. Any spillage/leakage of radioactive, toxic, corrosive, or flammable material from aircraft stores or cargo.

8.4.1.8. Conditions that required pilot to depart takeoff or landing surface.

8.4.1.9. All in-flight fires regardless of damage.

8.4.1.10. All bird/wildlife strikes regardless of damage.

8.4.1.11. Incidents that, in the PIC's judgment, are in the interest of flight safety.

8.4.2. Always provide your home station safety officer a copy of relevant information. Make every effort to preserve all mission and flight related documents, such as flight plans, weather briefings, NOTAMs, Weight and Balance form, etc., for collection by appropriate

safety officials. PICs shall use the following precedence to report mishaps (as soon as feasible after event):

- 8.4.2.1. MAJCOM flight safety officer (FSO).
- 8.4.2.2. Any FSO.
- 8.4.2.3. The nearest USAF C2 center.
- 8.4.2.4. Any USAF Airfield Management Operations.

8.5. Report Violations, Unusual Events, or Circumstances. PICs shall document events that require them to deviate from AFI 11-202V3 (unless waived by competent authority) or alleged navigation errors (include over-water position errors over 24NMs, border, or ATC violations). Do not release names or personal aircrew information to non-USAF agencies.

8.5.1. Describe deviation(s) using the following report format:

- 8.5.1.1. Facts. Report pertinent details of the event.
- 8.5.1.2. Investigation and analysis. Report circumstances which required/drove deviation(s).
- 8.5.1.3. Findings and conclusions.
- 8.5.1.4. Recommendations to prevent recurrence.
- 8.5.1.5. Corrective actions taken.

8.5.2. Include the following attachments with the report:

- 8.5.2.1. Formal notification of incident.
- 8.5.2.2. Approved crew orders.
- 8.5.2.3. Crewmembers' official statements (if applicable).
- 8.5.2.4. Other pertinent documents submitted in evidence (logs, charts, etc.).

8.5.3. In addition to above (when aircraft is equipped), PIC shall download original flight plan to a floppy disk and turn it in to the C2 center or parent standardization and evaluation office.

8.5.4. OG/CC shall send the original investigation report to the parent MAJCOM within 45 days of the event/notification.

8.5.5. Use OPREP-3 reporting procedures contained in AFI 10-206, *Operational Reporting*, for navigation errors over 24 NMs.

8.5.5.1. When notified of a navigation position error, the PIC (or agency that receives initial notification) shall document the circumstances surrounding the incident (using report format below) and ensure C2 agents submit an OPREP-3. Include the following information in the report:

- 8.5.5.1.1. The name and location of agency/unit submitting report.
- 8.5.5.1.2. Affected mission identification number.

8.5.5.1.3. Reference OPREPs-3 to determine type of event (i.e., state "navigation position error.").

8.5.5.1.4. The date, time (Zulu), and location (e.g., ARTCC area) of alleged infraction.

8.5.5.1.5. Describe facts and circumstances. Include aircraft type and tail number, unit (aircrew's wing or squadron), home base, route of flight, point of alleged deviation, and miles off course.

8.5.6. PICs shall expeditiously report unusual events/circumstances that impact their mission to appropriate MAJCOM agencies. Reportable events include, but are not limited to, spectrum interference, uncoordinated aircraft interception, fuel dumping, multiple engine failure, hostile fire, injury to passenger or aircrew member, hostile attacks on aircraft communications networks, etc. This list is not all exhaustive. Most events require C2 agents to forward OPREP reports to higher headquarters. In all cases, pass the "who, what, when, where, why, and how" of the incident to a C2 agency.

8.5.6.1. The Spectrum Interference Resolution Program, covered in AFI 10-707, *Spectrum Interference Resolution Program*, establishes procedures to combat the effect of meaconing, intrusion, jamming, and interference. PICs who encounter EMI will report the event to the nearest C2 agency as soon as practical.

8.5.6.1.1. Address EMI reports to: HQ AMC SCOTT AFB IL//A6O// and addressees listed in AFI 10-707. Send reports via electronic message format with the following information in plain text:

8.5.6.1.1.1. Frequency selected when EMI occurred.

8.5.6.1.1.2. Equipment affected by EMI. Location of the system. The system function, name, nomenclature, manufacturer with model number or other system description. The operating mode of the system, if applicable (frequency agile, pulse doppler, search, etc.).

8.5.6.1.1.3. Description of EMI (noise, pulsed, continuous, intermittent, on so forth).

8.5.6.1.1.4. Effect EMI had on system performance (reduced range, false targets, reduced intelligibility, data errors, etc.).

8.5.6.1.1.5. Date(s) and time(s) of EMI.

8.5.6.1.1.6. Location where EMI occurred (coordinates or line of bearing, if known, otherwise state as unknown).

8.5.6.1.1.7. Source of the EMI if known.

8.5.6.1.1.8. List other units that received interference (if known) and their location or distance and bearing from your location.

8.5.6.1.1.9. A clear, concise narrative summary on what you know about the EMI, with any actions taken to resolve the problem.

8.5.6.1.1.10. Whether or not PIC wants expert/technical assistance (include level of security clearance expert requires).

8.5.6.1.1.11. Specify impact the EMI had on your mission.

8.5.6.1.1.12. Provide a POC (Name, Rank, DSN/Commercial Phone Number, and Duty hours).

8.5.6.1.2. C2 agents must prepare an OPREP-3 if EMI is suspected meaconing, intrusion, or jamming, interference sufficient to cause a hazard, or if, in the PIC's judgment, the situation warrants such a report.

8.5.6.1.3. PICs shall serve as classification authority for EMI reports. Evaluate an adversaries' ability to exploit certain systems using EMI and protect information accordingly. PICs on a non-sensitive mission or who judge the EMI to be interference from a non-hostile source need not classify EMI reports unless that report would reveal system vulnerability. Classify interference report(s) at stations located in combat areas or during sensitive military missions.

8.5.6.2. On aircraft that dial into the GNOC, CSOs must report hostile attacks on aircraft networks to the GNOC, where protective measures will be implemented and reported. Hostile attacks may include penetration attempts, denial of service, viruses, or malicious code. This is not an all-inclusive list.

8.6. Petroleum, Oil and Lubricants (POL) - Aviation Fuels Documentation. This section prescribes aviation POL (AVPOL) procedures that ensure correct documentation, form and invoice processing, and program supervision (reference DESC-I-31, *Purchase of Aviation Fuel and Services at Commercial Locations*). Use the Multi Service Corporation (MSC) AIR card for the purchase of aviation fuel and ancillary ground services at commercial airports (and some military installations) worldwide. The AIR card is authorized for use by all U.S. government aircraft, state, and local law enforcement aircraft, and some foreign government aircraft. All PICs should plan to use the "platinum" MSC card. In most cases, there will be no changes when refueling at non-Defense Energy Support Center (DESC) contract locations. The MSC card is accepted at approximately 4,800 locations worldwide. A list of all MSC-accepting merchants can be found at <https://www.airseacard.com>. It replaces the Standard Form (SF) 44, *Purchase Order-Invoice-Voucher*, at locations that accept the MSC card. MSC can be contacted 24 hours a day, 7 days a week regarding acceptance or refueling issues. Their toll free number is 1-866-308-3811.

8.6.1. Responsibilities. Aircrew and maintenance personnel will be familiar with AVPOL procedures and documentation requirements of this chapter. Improper use of the MSC card could create financial liability for the purchaser.

8.6.2. Refuel/defuel USAF aircraft at DoD locations whenever possible. If DoD service is not available, purchase fuel from other source(s) in the following priority:

8.6.2.1. Defense Fuel Supply Center (DFSC) or Canadian into-plane contracts.

8.6.2.2. Foreign government air forces. **NOTE:** DoD FLIP en route supplements identify locations with into-plane contracts.

8.6.3. AVPOL Forms Documentation and Procedures.

8.6.3.1. The DD Form 1898, *Fuel Sale Slip*, is the fuel transaction receipt used for purchases at other DoD locations, including DFSC into-plane contract locations. Log and place the DD Form 1898 inside the AF Form 664, *Aircraft Fuels Documenting Log*. The

PIC or designated representative shall complete this form. **NOTE:** If the contractor insists on a unique invoice along with the DD Form 1898, annotate the vendor's invoice with "DUPLICATE DD Form 1898 ACCOMPLISHED."

8.6.3.2. The AF Form 664, *Aircraft Fuels Documenting Log*, is a tool to log and store all AVPOL transaction forms. Record all off-station transactions on the front of the form and insert the original form inside the envelope. Turn in the AF Form 664, with supporting forms, to maintenance debriefing or as directed by local procedures. The PIC or designated representative shall complete this form when appropriate.

8.6.3.3. The SF 44 may be used to purchase fuel, ground services and/or other authorized products when no MSC card contract is in place.

8.6.3.3.1. SF 44 fuel purchases where FBO agrees to invoice DESC for payment.

8.6.3.3.1.1. The aircrew shall present the SF 44 as the purchase invoice when an FBO refuses to accept the MSC card. The aircrew shall complete the SF 44 and attach it to the FBO vendor ticket/invoice when the FBO also declines use of the SF 44 and uses its own invoice/receipt. Fuel purchases shall be documented on a separate SF 44 from ground services and other authorized products since the FBO must invoice DESC for the fuel and the customer for non-fuel product and services.

8.6.3.3.1.2. Copies 1 and 2 of the SF 44 shall be provided to the FBO. Copy 1 of the SF 44 and one copy of the FBO commercial invoice, if applicable, shall be forwarded to the following address by the FBO to bill/invoice DESC: DESC-RRF, Building 1621-K, 2261 Hughes Avenue, Suite 128, Lackland AFB, Texas 78236.

8.6.3.3.1.3. Copy 3 of the SF 44 and one copy of the FBO commercial invoice, if applicable, shall be provided to the aircrew. Log and place a copy inside the AF Form 664. Aircrews shall present all fuel purchase receipts to the designated aviation squadron Certifying Official and/or Accountable Official upon return to home station to enable timely validation and financial obligation processing into the Fuels Automated System.

8.6.3.3.2. SF 44 fuel purchases where the FBO requires cash payment.

8.6.3.3.2.1. Cash fuel purchases are only authorized when either the FCG, requires cash payment, or when FBO locations outside the United States and U. S. Territories refuse MSC card and/or SF 44 invoicing processes. Aircrews required to pay cash for aviation fuel purchases shall employ the following procedures (**NOTE:** these procedures do not apply to non-fuel products or services):

8.6.3.3.2.1.1. The aircrew shall obtain cash from a local DoD Finance source that is charged to an approved Treasury suspense account prior to home station departure.

8.6.3.3.2.1.2. Aircrews shall complete the SF 44 and obtain the FBO fuel vendor annotation in block 11 of the SF 44 to confirm total cash amount and also sign and date the SF 44 blocks 20 and 21. Log and place a copy inside the AF Form 664. Aircrew shall return unused cash to their local DoD

Finance source upon return to home station. Present the completed SF 44 (for non-fuel charges only) to the appropriate home station administrative personnel for processing (e.g., Wing Refueling Document Control Officer, Finance Office, etc.)

8.6.3.3.3. SF 44 purchases of ground services and other approved products (not fuel).

8.6.3.3.3.1. Complete a separate SF 44 for non-fuel purchases. Provide the FBO copies 1 and 2 of the SF 44. The FBO shall use copy 1 and one copy of the FBO commercial invoice, if applicable, to directly bill/invoice the purchasing organization. Block 9 of the SF 44 shall reflect the organization name and address of the finance office responsible for payment to the FBO. The purchasing organization shall make payment to the FBO upon receipt of the invoice from the FBO. Log and place a copy inside the AF Form 664.

8.6.3.3.4. If the vendor presents their own form for signature and accepts the SF 44, write the statement "SF 44 Executed" on the vendor's form.

8.6.3.3.5. Turn in two copies of the SF 44 to the operations officer at home station.

8.6.3.3.6. Present the aircraft identaplate for purchases at SITCO Agreement locations. Make certain the invoice includes date of transaction, grade of product, quantity issued/defueled, unit of measure, and signature of USAF member who accepted product. If vendor also requires completed SF 44 write statement, "AF FORMS EXECUTED" on vendor's invoice. Log and place a copy inside the AF Form 664.

8.6.3.4. Purchasing Aviation Fuel in Canada. The DoD and Canadian Department of National Defense have signed a memorandum of understanding allowing DoD aircraft to use the DD Form 1896 when refueling at Canadian airfields with a Canadian National Defense Contract (CNDC). Use the AIR card for fuel purchases at Canadian airports without a CNDC, and for ground handling services at all Canadian airports.

8.6.3.5. Host Nation Forms. Use host country forms to effect purchases at foreign military airfields, including "replacement-in-kind" locations. Hand scribe information from aircraft identaplate on the local form. Log and place a copy inside the AF Form 664.

8.6.3.6. AF Form 1994, *Fuel Issue/Defuel Document*, records fuel purchases at USAF bases using a valid DD Form 1896. The PIC or designated representative shall complete the form then log and place a copy inside the AF Form 664.

8.6.3.7. AFTO 781H, *Aerospace Vehicle Flight Status and Maintenance Document*, records POL actions for particular airframe IAW applicable directives. The PIC or designated representative shall complete the form and turn it in to maintenance debrief following the mission.

8.6.3.8. DD Form 1896, *DoD Fuel Identaplate*, is the aircraft fuel and oil charge card.

8.6.3.9. For off-station missions, the PIC will complete or verify accuracy of the AF Form 15, AF Form 664, AFTO 781H, DD Form 1898, and associated fuels receipts then place them in the AF Form 664 (use eight digits for all USAF aircraft tail number entries). The PIC will transmit all AF Form 664 information via phone, fax, or message

if mission causes him/her to be off-station past the last day of the month (unless addressed in the unit supplement to this AFI).

8.6.3.10. Mexican non-DESC-contract refuelings. There are no changes when refueling at the following non-DESC-contract Mexican locations and identified merchant(s): Monterrey (ICAO - MMMY) Aero Servicios Monterrey; Monterrey (ICAO - MMAN) Aero Corporacion Azor, Asertec, Avianet Intl de Mexico, Aeroservicios Monterrey; Puerto Vallarta (ICAO - MMPR) Aerotron; Sattilo (ICAO - MMIO) Services Est Aero, Mexhaga; Toluca (ICAO - MMTO) Aerolineas Jecutivas, Avemex, Uvavemex. When refueling is required in Mexico at other than these identified locations/merchants, aircrews should call World Fuel Services at 1-800-345-3818, extension 3 (24 hrs). Direct number is 1-305-428-8000. The call should be made 24 hours ahead of required refueling. Any requirement presented with less than 24 hours advance notice may not be met (but they will work the requirement as best they can to meet the user need). World Fuel Services must make arrangements with the Mexican governmental fueling authority to allow refueling, and the authority's business hours are M-Th, 0900-1400 and 1600-1700; Friday 0900-1400.

8.7. Not Used.

8.8. AMC Form 54, *Aircraft Commander's Report on Services/Facilities*. The AMC Form 54 is a tool to report level of excellence for services encountered during mobility operations. Be quick to identify outstanding performers and attempt to resolve problems at lowest level practical. PICs should advise affected agency on their intent to submit an AMC Form 54. Provide a copy of the completed form to local station AMC C2 agency. Upon return to home station, PICs will coordinate form with SQ/CC and OG/CC. For AMC Form 54s that require AMC coordination, OG/CCs shall review and submit AMC Form 54 to 18AF/CC.

8.9. AMC Form 196, *Aircraft Commander's Report on Crew Member*. The AMC Form 196 is a tool to document an aircrew member or Mission Essential Personnel's outstanding, below average, or unsatisfactory performance during a mobility mission. Be quick to identify outstanding performers and attempt to solve problems at lowest level practical (provide local senior leaders opportunity to resolve problems as they occur). Send the report to subject's unit commander.

8.10. AMC Form 43, *AMC Transient Aircrew Comments*. The AMC Form 43 is a tool to report level of excellence for transient facilities. Any crewmember may submit this report whether or not the PIC includes an unsatisfactory item in the trip report. Send completed AMC Form 43 to HQ AMC/A1SC, or MAJCOM equivalent.

Chapter 9

TRAINING POLICY

9.1. Passengers on Training Missions.

9.1.1. Carrying of passengers during initial or re-qualification training will be IAW with AFI 11-401 and this instruction.

9.1.2. Mission qualification training, en route evaluations, OSTs, and line development missions may be conducted on missions with passengers provided the individual in training is qualified (completed aircraft evaluation with a valid AF Form 8).

9.1.3. Multiple practice approaches will not be accomplished with passengers. **EXCEPTION:** When approved by the parent MAJCOM/A3, maintenance and civilian employees, under direct contract to the DoD and engaged in official direct mission support activities, considered mission essential may be onboard when touch-and-go landings are performed providing the mission is a designated training flight and an IP or EP is in command.

9.2. Touch and Go Landing Limitations. Practice touch-and-go landings only on designated training, evaluation, and currency missions.

9.2.1. Touch-and-go landings. May be performed by:

9.2.1.1. Instructor pilots, instructor pilot candidates on initial or re-qualification instructor evaluations, and flight examiner pilots from either seat.

9.2.1.2. Any pilot from either seat provided that an instructor pilot, instructor pilot candidate on initial or re-qualification instructor evaluation, or flight examiner pilot is in the other seat.

9.2.2. Wind and runway restrictions. Comply with wind restrictions, RCR and crosswind limits, and runway requirements in chapter 5 of this AFL. Do not exceed the normal or recommended zone of AFM takeoff and landing crosswind component charts.

9.2.3. Weather. The minimum reported weather required to perform touch-and-go landings is 300 foot ceiling and RVR 4000, 1200 meters (3/4-mile visibility without RVR). **NOTE:** RVR values published in a METAR or other meteorological source will indicate full values for RVR. FLIP abbreviations are coded to 100s of feet. Example: FLIP will indicate RVR 40 whereas the METAR will indicate 4000ft. Thus RVR 40 = 4000ft.

9.2.4. Passengers. Touch-and-go landings with passengers are prohibited. Touch-and-go landings with MEPs are authorized.

9.2.5. Reverse thrust. Do not place the throttles in reverse during a touch-and-go landing. If the throttles are inadvertently taken into reverse thrust, reject the takeoff. Rejected takeoffs will not be practiced.

9.2.6. Heavy jets. Do not perform touch-and-go landings when 747, C-5 or 757 aircraft are operating in the VFR pattern. Apply appropriate spacing to provide adequate wake turbulence avoidance.

9.2.7. Stop-and-go-landings. Stop-and-go-landings are not authorized.

9.2.8. Minimum Runway for Touch and Go Landings. The minimum runway for touch and go landings is per the AFM or **Table 9.1**, whichever is greater. For all aircraft, ensure aircraft performance assures full stop capability corrected for [configuration, pressure altitude (density altitude if appropriate), temperature, RCR/RSC and crosswinds] per AFM.

Table 9.1. Minimum Runway Length for Touch and Go Landings.

MDS Aircraft Type	Minimum Runway Length
C-38	6000 feet

9.3. Tactical Training. Accomplish tactical training, including tactical descents, arrivals, and departures IAW AFI 11-2VIPV1, this AFI, applicable AFTTPs, and local guidance. Observe aircraft operating limits at all times. Reference chapter 19 of this AFI.

9.4. Simulated Emergency Flight Procedures.

9.4.1. Simulated emergency procedures other than engine-out approaches and landings will be limited to non-critical phases of flight and will be kept to a minimum at night or in IMC. Simulated emergency procedures will only be conducted under direct supervision of an IP. Use a realistic training/evaluation approach and do not compound emergencies.

9.4.2. Special Maneuvers. Refer to applicable MDS directives or approved Stan/Eval checklist handouts or guides for procedures to accomplish simulated emergency flight training and tactical maneuvers that are not covered in the AFM.

9.4.3. Simulated engine failures. Simulated engine failures are not authorized at less than the engine-out minimum control speeds (as published in the AFM) or when any actual emergency exists.

9.4.3.1. Do not perform simulated engine-out approaches at night or in IMC.

9.4.3.2. Not Used.

9.4.4. Do not perform no-flap or no-slat approaches at night or in IMC.

9.5. Fuel Planning.

9.5.1. Planning Factors for Local Flights. When planning fuel requirements for local flights, consider planned flight training times, planned ground times between locals, and planned minimum landing fuel requirements, IAW chapter 17 of this AFI. Local training flights may be scheduled for more or less flying time with the proper coordination.

9.5.1.1. IPs and EPs will initiate an approach to a full stop landing when fuel on board is equal to or less than the amount specified in chapter 17 as the minimum fuel for landing. Request priority handling from air traffic control if necessary.

9.6. Operating Limitations.

9.6.1. Policy: Unless specifically authorized elsewhere in this section, do not practice emergency procedures that degrade aircraft performance or flight control capabilities (in-flight).

9.6.1.1. In an actual emergency, terminate all training and flight maneuvers practice. Training should be resumed only when the PIC determines it is safe to do so.

9.6.2. Training Maneuver Restrictions. Use **Table 9.2** Training Maneuver Restrictions and minimum altitudes.

Table 9.2. Training Maneuver Restrictions.

Maneuver	Altitude Restrictions	Other Restrictions
Actual Engine Shutdown	5,000 feet AGL Minimum	Do not practice actual engine shutdown unless required for an FCF or for an FCF training flight. Under no circumstances will an engine be shutdown for engine out landing or missed approach training.
Any Simulated Emergency On Takeoff or On Landing	Initiate at or above 1000 feet AGL	For simulated engine failure on takeoff, IP must guard incorrect rudder. For landing, simulated engine out emergencies should be initiated prior to configuration, unless required for training.
Simulated Engine Out Go-Around or Missed Approach	Initiate at or above 300 feet AGL	In the event of an unplanned go-around/missed approach below 300' AGL, use all engines. IP must guard incorrect rudder.
Approach to Stalls	10,000 feet AGL minimum	Limited to day VMC conditions. Do not accomplish unless required for FCF training, certification, or accomplishment.
Restricted Low Approaches-Men and/or Equipment On Runway	Initiate at or above 500 feet AGL	None
Planned VFR Go-Arounds With Simulated Emergencies Other Than Engine Out	Initiate at or above 100 feet AGL	None
Simulated Landing	Initiate at or above 50 feet AGL	Limited to weather required for circling minimums. (See Note)
Steep Turns	5,000 feet AGL minimum	Limited to day, VMC conditions.
Slow Flight and Flight on the Back Side of the Power Curve	10,000 feet AGL minimum	Limited to day, VMC conditions.

NOTE: Simulated Landings. Use this procedure only when conducting simulated landing training and not to practice missed approaches; it allows simulated training in restricted aircraft when the objective is to practice setting up the correct landing picture. Begin the go-around no later than approximately 2,000 feet remaining. No simulated emergencies allowed. Use the normal landing configuration: Gear down, flaps 40. All other training restrictions apply.

9.7. Prohibited In-Flight Maneuvers. The following maneuvers will only be accomplished in the simulator and not practiced or demonstrated in-flight:

- 9.7.1. Simulated engine-out takeoffs
- 9.7.2. Aborted takeoffs
- 9.7.3. Full stalls
- 9.7.4. Unusual attitudes
- 9.7.5. Dutch roll demonstrations
- 9.7.6. Simulated emergency descents
- 9.7.7. Not used
- 9.7.8. Not used
- 9.7.9. No-slat landings
- 9.7.10. Simulated jammed stabilizer approach and landings
- 9.7.11. Split flap landings
- 9.7.12. Landing with inoperative hydraulic system
- 9.7.13. Not used
- 9.7.14. Circling approach with simulated engine out
- 9.7.15. Tactics maneuvers (except MAJCOM approved tactics maneuvers)

9.8. Instructor Pilot Briefing. Before all training and evaluation missions, instructors and evaluators will thoroughly brief their crews on all aspects of the mission according to locally developed briefing guides. Briefing guides will be approved by unit OG/OGV.

9.9. Debriefing. Instructors and flight examiners will accomplish the following:

- 9.9.1. Review and evaluate overall training performed.
- 9.9.2. Review training requirements fulfilled for each student and aircrew member.
- 9.9.3. Answer technical questions.
- 9.9.4. For crewmembers requiring further training, assign specific areas for further study prior to the next training period.
- 9.9.5. Complete training and evaluation records.

9.10. Simulated Instrument Flight. Artificial vision restricting devices are not authorized for any phase of flight. Simulated instrument flight may be flown and logged without the use of a vision restricting device.

9.11. CAT II Approach Training.

9.11.1. CAT II training and evaluations may be conducted at any ILS facility where signal output is accurate and stable enough to achieve the desired training.

9.11.1.1. Weather. No lower than 200-foot ceiling and 1/2-mile visibility (RVR 2400, 730 meters) or Category I minimums, whichever is greater. NOTE: RVR values published in a METAR or other meteorological source will indicate full values for RVR. FLIP abbreviations are coded to 100s of feet. Example: FLIP will indicate RVR 24 whereas a METAR will indicate 2400. Thus RVR 24 = 2400ft.

9.11.1.2. Winds. Maximum crosswind component will be IAW 5.15.8 of this regulation.

9.11.1.3. When a CAT II DH is not published, DH will be based on HAT of 100 feet.

Chapter 10

AIRCREW OPERATIONS IN CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR THREAT ENVIRONMENT

10.1. Overview. The proliferation of Chemical, Biological, Radiological, and Nuclear (CBRN) weapons and the means to deliver them present serious security threats to the global operations of air mobility forces. This chapter describes the CBRN threat, passive defense measures to mitigate that threat, and guidance for ground and flight operations in a contaminated environment. If crews are not trained or equipped to operate in the CBRN environment, this chapter is for information only.

10.2. Understanding the CBRN Threat.

10.2.1. Chemical Weapons. Militarily significant chemical weapons include nerve, blister, choking, and blood agents. A key point for aircrew members to remember is that time is on your side. The ultra-violet (UV) rays of the sun, high temperatures, and high absorption rates of chemicals all decrease their lethality. Most chemical agents will either evaporate or absorb into surfaces. For decontamination, cleaning with hot soap and water and/or a 5 percent bleach solution currently appears to be the best and most practical method of removing chemical agents that may remain as a contact hazard on glass, and unpainted metal. Currently, the only decontaminant authorized for use on aircraft is soap and water. NOTE: Recent tests indicate that as a decontaminated aircraft dries, the absorbed chemical warfare agent (CWA) may resurface from painted surfaces causing contact and vapor hazards.

10.2.2. Biological Weapons. Biological warfare agents (BWA) are normally divided into three areas: bacteria (i.e., Anthrax) that live outside the cell, reproduce, and are normally susceptible to antibiotics; toxins (i.e., Ricin), that are poisons produced by living organisms or plants; and viruses (i.e., Smallpox) that normally require the host of a living cell to survive and reproduce. Viruses and toxins do not respond to antibiotics. It is probable that the medical community would be the first to recognize that an upsurge in “flu-like symptoms” is actually a bio attack. Although BWA are degraded by UV rays, humidity and high/low temperatures, some BWA (i.e., Anthrax spores) may have a long life, lasting decades under the right conditions. Current immunizations and good personal hygiene help prevent infection.

10.2.3. Radiological Weapons. The radiation dispersal device (RDD), or so-called “dirty bomb,” is the typical radiological weapon. RDD is any device that disseminates radioactive material without using a nuclear detonation. Key points to remember are that shielding and distance are the best defenses against radiation exposure.

10.2.4. Nuclear Weapons. The threat from a nuclear device is from the initial blast, heat, and radiation. In addition, the Electromagnetic Pulse (EMP) from a nuclear detonation can damage electronic equipment. The best protection is a combination of shielding, distance from the blast, and limited time of exposure.

10.3. CBRN Passive Defense Measures. Passive defense measures are those activities conducted to negate, contain, and manage the effects of CBRN attack. Passive defense measures include pre, trans, and post-attack actions designed to mitigate the CBRN threat through contamination avoidance, protection, and contamination control.

10.3.1. Contamination Avoidance. Contamination avoidance is the most important passive defense measure. Techniques for contamination avoidance include: inflight diversion, survival launch, and minimizing exposure to contaminated cargo, aerospace ground equipment (AGE), and material handling equipment (MHE).

10.3.1.1. Inflight Diversion. When advised that a destination airfield is under CBRN attack or has been contaminated, the aircrew will divert to an uncontaminated airfield, if at all possible. Authority to land at a contaminated airfield will be specified in the controlling OPORD

10.3.1.2. Survival Launch. If caught on the ground during attack warning, every reasonable effort will be made to launch to avoid the attack. Upon proper clearances, aircrew may launch to survive if they have sufficient fuel and unrestricted, safe access to the runway. In practice, this option may only be practical for aircraft that have just landed or aircraft at or near the end of the runway. If launch is not possible, shut down engines and avoid running environmental control systems. Close aircraft doors, don Individual Protective Equipment (IPE), and seek personal protective cover on the base. If time does not permit using base facilities, remain in the sealed aircraft for a minimum of one-hour after the attack and/or follow host-base guidance.

10.3.1.3. Avoiding Cross Contamination from AGE, MHE, and Cargo. All formerly contaminated equipment and cargo must be marked to facilitate contamination avoidance and the use of protective measures. Additionally, the air shipment of formerly contaminated cargo requires special precautions and must be specifically authorized by the senior transportation commander.

10.3.2. Protection. When exposure to chemical and/or biological agents cannot be avoided, protection provides the force with the ability to survive and operate in a CBRN environment. Protection is afforded by individual protective equipment, collective protection, and hardening of facilities.

10.3.2.1. Individual Protective Equipment. The current in-flight protective gear for aircrew members is the Aircrew Chemical Defense Ensemble (ACDE). The ACDE includes the newer Aircrew Eye-Respiratory Protection System (AERPS) above the shoulders and the CWU-66/P or CWU-77/P Integrated Aircrew Chemical Coverall (IACC). The Ground Crew Ensemble (GCE) consists of the protective mask, C2 series canister (or filter element for MCU-2A/P protective mask), and over garment, boots, and gloves. The ACDE and GCE provide protection against chemical and biological agents. They do not provide blast or radiation protection from an RDD or nuclear detonation. The ACDE requires care during donning using "buddy dressing" procedures and AFE expertise during processing through the Aircrew Contamination Control Area (ACCA). (Note: AECMs will utilize the MCU-2A series mask).

10.3.2.1.1. ACDE/GCE Issue. Aircrews will be issued sized ACDE and GCE at home station. Aircrews will ensure their ACDE and GCE are available at all times while in a CBRN threat area. Aircrew members will confirm the mobility bag contents and correct sizes.

10.3.2.1.2. ACDE Wear During Ground Operations. Because aircraft contamination is unlikely to occur during flight, ground operations can represent the highest threat to

aircrew safety. Protection from enemy attacks and exposure to liquid chemical agents is paramount. Aircrew should limit activities to essential duties only, and separate ground duties from air duties.

10.3.2.2. Collective Protection. Collective protection provides a temperature-controlled, contamination-free environment to allow personnel relief from continuous wear of IPE such as the ACDE. The basic concept for most facility collective protective solutions is to employ overpressure, filtration, and controlled entry/exit. The intent is to provide rest and relief accommodations, as well as provide medical treatment in contamination free zone. All pressurization systems should be shut down and doors sealed if the crew finds itself in need of immediate protection. Crewmembers should avail themselves of facilities, if provided, on the airfield.

10.3.2.3. Hardening. Permanent and expedient hardening measures are used to strengthen buildings and utility systems or provide barriers to resist blast effects. To reduce the potential of vapor exposure, personnel should consider the use of facilities above the first floor.

10.3.3. Contamination Control. In the post-attack environment, contamination control measures limit the spread of chemical, biological, and radiological contamination through disease prevention measures, decontamination, and use of Exchange Zone (EZ) operations. Effective contamination control helps sustain air mobility operations by minimizing performance degradation, casualties, or loss of material.

10.3.3.1. Disease Prevention. Up-to-date immunizations, standard personal hygiene practices, and the use of chemoprophylaxis are effective biological warfare defensive measures.

10.3.3.2. Decontamination.

10.3.3.2.1. Inflight Decontamination. Air washing is a useful inflight decontamination technique for removing most of the liquid agent from aircraft metal surfaces. However, vapor hazards may remain in areas where the airflow characteristics prevent complete off-gassing (i.e., wheel wells, flap wells, rivet and screw heads, joints, etc.). Flights of at least 2 to 4 hours are recommended, and lower altitudes are more effective than higher altitudes. Fly with the aircraft configured (gear, flaps, and slats extended) as long as possible to maximize the airflow in and around as many places as possible. Be advised that exterior contamination may seep into the aircraft interior creating a vapor hazard for aircrews. Use of ACDE is recommended.

10.3.3.2.2. Limits of Decontamination. Complete decontamination of aircraft and equipment may be difficult, if not impossible, to achieve. Formerly contaminated assets will be restricted to DOD-controlled airfields and not released from US government control.

10.3.3.3. Exchange Zone (EZ) Operations. The AMC Concept for Air Mobility Operations in a Chemical and Biological Environment (CB CONOPS) describes a method for continuing the vital flow of personnel into a contaminated airfield while limiting the number of air mobility aircraft and personnel exposed to the contaminated environment. The purpose of the EZ is to minimize the spread of contamination within

the air mobility fleet, preserving as many aircraft as possible for unrestricted international flight. The EZ is an area (located at uncontaminated airfield) set aside to facilitate the exchange of uncontaminated (clean) cargo/passengers to a contaminated (dirty) airframe, or visa versa, without cross-contamination. Additional information on the EZ is available through HQ AMC/A3X.

10.4. Flight Operations.

10.4.1. Mission Planning. Aircrews must be mentally prepared to face the dangers of CBRN weapons. Flight/mission planning must be thorough. Aircraft commanders should emphasize ACDE wear, crew coordination, CBRN hazards and countermeasures, inflight diversion, plans for onload/offload in the event of a ground attack, and plans for the return leg in the event of aircraft contamination. Alternative scenario plans should also be considered in the event MOPP conditions change.

10.4.2. Establishing the Threat Level. Aircrews should monitor command and control channels to ensure they receive the latest information concerning the destination's alert condition. Diversion of aircraft to alternate "clean" locations may be required, unless operational necessity otherwise dictates. The TACC or theater C2 agency (normally through the controlling OPORD) will direct aircrew pre-exposure activities such as medical pre-treatment for chemical/biological exposure.

10.4.3. Fuel Requirements. Extra fuel may be needed to compensate for altitude restrictions as the result of CB agent exposure. During purge periods, the aircraft will be unpressurized. Although the aircrew can use the aircraft oxygen systems, passengers wearing GCE cannot, thus restricting the aircraft cruise altitude and increasing fuel requirements accordingly.

10.4.4. Oxygen Requirements. Operating a contaminated aircraft will increase oxygen requirements. Aircrew wear of ACDE will require use of the aircraft oxygen system to counter actual/suspected contamination. Using the 100 percent oxygen setting offers the greatest protection in a contaminated environment. Appropriate oxygen reservoir levels must be planned to meet higher consumption rates. Use the aircraft Dash 1 charts to calculate the required reservoir levels.

10.4.5. Donning Equipment. Aircrew will don ACDE based on the alarm condition (See Airman's Manual (AFMAN 10-100). Use the "buddy dressing" procedures, and refer to AMCVA 11-303, *AERP Donning Checklist* and AMCVA 11-304, *ACDE Donning Checklist*, to ensure proper wear. When wearing the ACDE, Atropine and 2 PAM Chloride auto injectors will be kept in the upper left ACDE pocket. If the integrated survival vest/body armor is worn, the Atropine and 2 PAM Chloride auto injectors may be kept in the lower right flight suit pocket. This standardized location will enable personnel to locate the medication should an individual be overcome by CWA poisoning. M-9 paper on the flight suit will facilitate detection of liquid chemical agents and ACCA processing. M-9 paper should be placed on the flight suit prior to entering the CBRN threat area or when an alarm "yellow" or higher has been declared. When inbound to a CBRN threat area, prior to descent, the aircraft commander will ensure crew and passengers don appropriate protective equipment IAW arrival destination's MOPP level and brief aircrew operations in the CBRN threat area. As a minimum, this briefing will include: flight deck isolation, oxygen requirements, air conditioning system requirements, IPE requirements, ground operations, and MOPP levels. Aircrew members must determine if the wear of the integrated survival

vest/body armor and LPUs will restrict dexterity and mobility to the point that it becomes a safety issue. If the aircrew deems the equipment to create a safety of flight concern, then the items may be pre-positioned (instead of worn) on the aircraft to be readily available to the aircrew.

10.4.6. Communicating Down-line Support. Pass aircraft and cargo contamination information through command and control channels when inbound. This information will be used to determine if a diversion flight is required or decontamination teams are needed. Report the physical condition of any crew/passengers who are showing agent symptoms and whether they are wearing chemical defense ensembles.

10.5. Ground Operations.

10.5.1. Crew Rest Procedures. Operational necessity may require the aircrew to rest/fly in a contaminated environment. If the mission is not being staged by another aircrew or pre-flight crews are not available, the aircrew may pre-flight, load, and secure the aircraft prior to entering crew rest. The departing aircrew will perform necessary crew preparations and pre-flight briefings. Then, they will report to the ACCA for processing and ACDE donning with assistance from ALS personnel. If possible, aircrew transport should be provided in a covered vehicle. Aircrews should avoid pre-flying the aircraft prior to departure to prevent contamination spread to them and/or the aircraft. As aircrews proceed to fly, they will require assistance from ground support personnel in removing their aircrew protective overcape and overboots prior to entering the aircraft.

10.5.2. Onload and Offload Considerations. Extreme care must be exercised to prevent contamination spread to the aircraft interior during ground operations, particularly to the flight deck area. Reduce the number of personnel entering the aircraft. Contaminated engine covers, safety pins and chocks will not be placed in the aircraft unless sealed in clean plastic bags. Aircrew members entering the aircraft will remove plastic overboots and overcape portions of the aircrew ensemble and ensure flight/mobility bags are free of contaminants and placed in clean plastic bags. Prior to entering the aircraft all personnel should implement boot wash/decontamination procedures. Aircrew exiting aircraft into a contaminated environment will don plastic overboots and overcape prior to leaving the aircraft.

10.5.3. Communications. Conducting on/offloading operations, while wearing the complete ACDE, complicates communications capability. Use the mini-amplifier/speaker or the aircraft public address system and augment with flashlight and hand signals, as required.

10.5.4. Airlift of Retrograde Cargo. Only CRITICAL retrograde cargo will be moved from a contaminated to an uncontaminated airbase. Critical requirements are pre-designated in theater war plans. Onload cargo will be protected prior to and while being transported to the aircraft. If contaminated, protective cover(s) will be removed/replaced just prior to placing the cargo on the aircraft. It is the user's responsibility to decontaminate cargo for air shipment. The airlift of contaminated or formerly contaminated cargo requires the approval of the senior transportation commander.

10.5.5. Passenger/Patients. A path should be decontaminated between the aircraft and the ground transportation vehicle to reduce interior contamination when loading/unloading passengers/patients. Normally, externally contaminated patients and those infected with contagious biological agents will not be transported onboard AMC or AMC-procured

aircraft. The AMC/CC is the waiver authority to this policy. (NOTE: An altitude below 10,000 feet is recommended due to AECM use of the ground chemical mask.)

10.5.6. Physiological Factors. Aircraft commanders must be very sensitive to the problems resulting from physical exertion while wearing ACDE. The aircraft commander should consider factors such as ground time, temperature and remaining mission requirements when determining on/offload capabilities. Individuals involved should be closely monitored for adverse physiological effects.

10.5.7. Work Degradation Factors. Work timetables need to be adjusted to minimize thermal stress caused by wearing the ACDE. Aircrews must weigh all factors when performing in-flight and ground duties. The following are degradation factors for wearing full GCE, and may also be used to represent the Task Time Multipliers for the ACDE. To estimate how much time it takes to perform a task or operation, (1) take the Task Time Multiplier (**Table 10.1**) for the appropriate Work Rate and ambient air temperature and (2) multiply it by the time it normally takes to perform the task. For example, given a heavy work rate and an air temperature of 70F, the crewmember should expect a normal one hour task to take 2.1 hours while wearing ACDE. A more extensive discussion of this subject is found in AFMAN 32-4005, *Personnel Protection and Attack Actions*.

Table 10.1. Task Time Multipliers.

Work Rate	Temperature		
	20-49 F -6 to 9 C	50-84 F 10 to 28 C	85-100 F 29 to 38 C
Light	1.2	1.4	1.5
Moderate	1.3	1.4	3.0
Heavy	1.7	2.1	5.0

10.5.8. Outbound with Actual/Suspected Chemical Contamination. Once airborne with actual/suspected vapor contamination, the aircraft must be purged for 2 hours using Smoke and Fume Elimination procedures. To ensure no liquid contamination exists, a close inspection of aircrew, passenger ensembles, and cargo will be conducted using M-8 and M-9 detection paper. Detection paper only detects certain liquid agents and will not detect vapor hazards. Above the shoulder ACDE should only be removed if there is absolutely no vapor hazard. Be advised that residual contamination (below the detectable levels of currently fielded detection equipment) may be harmful in an enclosed space. The aircrew must take every precaution to prevent spreading of liquid contaminants, especially on the flight deck area. The best course is to identify actual/suspected contamination, avoid those areas for the remainder of the flight, and keep the cargo compartments cool. If an aircrew member or passenger has been in contact with liquid contaminants, all personnel aboard the aircraft will stay in full ACDE/GCE until processed through their respective contamination control area (CCA). Upon arrival, the contaminated aircraft will be parked in an isolated area and cordoned to protect unsuspecting ground personnel.

10.5.9. Documenting Aircraft Contamination. When it is suspected or known that an aerospace vehicle or piece of equipment has been contaminated with a radiological, biological or chemical contaminant, a Red X will be entered and an annotation will be made in historical records for the lifecycle of the equipment.

10.5.10. 10-Foot Rule. The 10-foot rule was developed in order to provide guidance for protecting personnel using or handling contaminated resources (such as pallets) or working in locations with materials that might retain a residual chemical. The 10-foot rule embodies a safety factor that goes beyond current OSD guidance (which allows removal of IPE whenever detectors no longer detect a chemical agent vapor hazard). There are two phases associated with the 10-foot rule.

10.5.10.1. Initial Phase. During the initial phase, personnel will remain in MOPP 4 whenever they stay within 10 feet of the contaminated equipment for more than a few seconds. This MOPP level provides personnel the maximum protection from the chemical agent as it transitions from a contact and vapor hazard to a vapor hazard only.

10.5.10.2. Follow-on Phase. In the follow-on phase, personnel will use gloves of a sort (i.e. leather, rubber, cloth, etc.) when operating on or handling the contaminated equipment. Although a contact hazard is unlikely, relatively small amounts of the agent may still be present. The use of gloves will ensure that unnecessary bare skin contact with agent residue is avoided.

10.5.10.3. **Table 10.2** shows times associated with initial and follow-on phases of the 10-foot rule. To simplify response processes, commanders may choose to use the worst case scenario as the foundation for all 10-foot rule actions, i.e., 24 hours for the initial phase and all periods of time greater than 24 hours for the follow-on phase.

Table 10.2. Ten-Foot Rule Time Standards (Source: AFMAN 10-2602).

"10-Foot Rule" Time Standards*		
Agent	Initial Phase	Follow-on Phase
HD	0-12 hrs	Greater than 12 hrs
GB	0-12 hrs	Greater than 12 hrs
GD, GF, GA	0-12 hrs	Greater than 18 hrs
VX, R33	0-12 hrs	Greater than 24 hrs
* Rule is based on expected contamination on an airbase following a chemical attack. Adjust times if agent concentration is higher than expected.		

Chapter 11

NAVIGATION PROCEDURES

11.1. Mission Planning.

11.1.1. The PIC or designated representative shall verify that proposed routes and flight altitudes/levels provide proper terrain clearance and meet FLIP, FCG and AOR requirements.

11.1.2. The PIC or his/her delegate shall crosscheck the CFP route of flight against the route of flight entered on the DD Form 175, *Military Flight Plan*, DD Form 1801 or ICAO flight plan.

11.1.3. If a CFP is out of date or not available and routing or meteorological information is desired, the PIC should obtain direct assistance from the CDS or IFM. CFPs and CFP tracks to assist in manual flight planning are available with a current account through the AMC Aircrew Portal.

11.1.4. Flight Plan. Cross-check the CFP planned route against the route of flight entered on the DD Form 175 or DD Form 1801 and the approved diplomatic clearance.

11.2. Flight Charts. Complete oceanic plotting IAW para 6.33.3. of this AFL.

11.3. Navigational Aid Capability. The following airspace categories are each defined in FLIP, and are considered special qualification airspace: MNPS, Reduced Vertical Separation Minimum (RVSM), Basic Area Navigation (BRNAV), and RNP.

11.3.1. North Atlantic MNPS airspace system procedures are as follows:

11.3.1.1. MNPS standards are mandatory.

11.3.1.2. Aircraft that lose one INS/IRS prior to airspace entry will comply with North Atlantic MNPS Airspace Operations Manual (as applicable) and appropriate FLIP series. Although the North Atlantic MNPS Airspace Operations Manual is not regulatory for airspace other than North Atlantic MNPS operations, it provides solid general guidance for operations in other oceanic regions.

11.3.1.3. Aircraft that lose all INS/IRS capability prior to designated airspace entry may continue if the crew re-files outside MNPS airspace and NAVAIDs are available to maintain proper navigation tolerances.

11.3.2. RVSM Airspace. Airspace where RVSM is applied is considered special qualification airspace. Both the operator and the specific aircraft type must be approved for operations in these areas. Refer to FLIP AP/2 and the following for RVSM requirements:

11.3.2.1. Both primary altimeters, at least one autopilot, the altitude advisory system, and the transponder, must be fully operational. The PIC will request a new clearance to avoid this airspace should any of this equipment fail.

11.3.2.2. Engage the autopilot during level cruise, except when circumstances such as the need to re-trim the aircraft or turbulence require disengagement.

11.3.2.3. Crosscheck the altimeters before or immediately upon coast out. Record readings of both altimeters.

11.3.2.4. Continuously crosscheck the primary altimeters to ensure they agree \pm 200 feet.

11.3.2.5. Limit climb and descent rates to 1,000 feet per minute when operating near other aircraft to reduce potential TCAS advisories.

11.3.2.6. Immediately notify ATC if any of the required equipment fails after entry into RVSM airspace and coordinate a plan of action.

11.3.2.7. Document in the aircraft forms malfunctions or failures of RVSM required equipment.

11.3.3. BRNAV Airspace. Airspace where BRNAV is applied is considered special qualification airspace. Both the operator and the specific aircraft type must be approved for operations in these areas. BRNAV navigation accuracy criteria is RNP-5. Aircraft with integrated GPS have no BRNAV restrictions. Without GPS, aircraft must auto update every two hours (as required) to maintain actual centerline within \pm 5 NM of ATC cleared route.

11.3.3.1. Minimum equipment to operate in BRNAV airspace is one INS/IRS capable of updates or an FAA approved GPS with RAIM or equivalent system. Flights entering BRNAV airspace after long overwater flight must be especially aware of BRNAV tolerances and update accordingly.

11.3.3.2. Aircraft unable to maintain BRNAV tolerances must advise ATC immediately and take appropriate coordinated action.

11.3.3.3. Document (in the aircraft forms) malfunctions or failures of BRNAV required equipment, including the failure of this equipment to meet BRNAV tolerances.

11.3.4. RNP Airspace. Airspace where RNP is applied is considered special qualification airspace. Both the operator and the specific aircraft type must be approved for operations in these areas. RNP airspace is being incorporated around the world to increase air traffic capacity by decreasing separation requirements between routes. VIP Aircraft are approved for RNP, but limited to operational time restrictions based on navigation equipment. These limitations will be annotated in local supplement and updated by unit stan/eval when appropriate.

11.3.4.1. RNP-10. Compliance includes navigation accuracy within 10NM of actual position 95% of the time. Aircraft not possessing integrated GPS with RAIM, or equivalent system, are limited in how long they may operate in RNP-10 airspace. The following are RNP-10 requirements:

11.3.4.1.1. Flight Planning. Verify aircraft is approved for RNP operation, assess mission impact and ensure appropriate code is annotated on the flight plan IAW FLIP GP.

11.3.4.1.2. Preflight Procedures. Review maintenance logs to ascertain status of RNP-10 equipment and particular attention should be paid to navigation antennas and the condition of the fuselage skin in the vicinity of these antennas.

11.3.4.1.3. Enroute. At least two long range navigation systems certified for RNP-10 must be operational at the oceanic entry point. Periodic crosschecks will be accomplished to identify navigation errors and prevent inadvertent deviation from ATC cleared routes. Advise ATC of the deterioration or failure of navigation

equipment below navigation performance requirements and coordinate appropriate actions.

11.3.4.1.4. Document (in the aircraft forms) malfunctions or failures of RNP required equipment, including the failure of this equipment to meet RNP tolerances.

11.3.5. CPDLC Operations. Refer to applicable FLIP, FAA and MDS guidance for CPDLC operations. Specific operations and procedures must be approved by MAJCOM/A3 with mission execution authority. Verify equipment and ensure appropriate code is annotated on the flight plan IAW FLIP GP.

11.4. Navigator Procedures. Not used.

11.5. High Latitudes/Grid Navigation/Polar Routes. Operations when flying north of 70 degrees latitude require provisions for conversion of heading systems from magnetic to true, or operations with Grid procedures. Provisions for INS/IRS failure must be considered. Refer to the AFM for specific procedures.

11.5.1. Use of Polar Routes is authorized. Ensure aircraft MEL, performance capability and navigation capability exists for the entire route. Utilize all IFM/CDS functions and review polar route navigation procedures in FLIP (Arctic Control Area, NavCanada, Alaska Supplements, etc.). Follow MDS specific guidance for alternate planning and EROPS, if applicable. Ensure alternates qualify and are suitable for use. Comply with all cold weather/polar operations manual restrictions (fuel temperature, cold weather operations, etc.).

11.5.2. Navigators. Backup grid procedures should be used when flying north of 70 degrees north latitude (except Alaska) and south of 60 degrees south latitude or where the convergence of meridians or magnetic variation changes preclude using true and magnetic direction references.

11.5.2.1. INS/IRS Operation. Set compasses to computed grid heading in order to have a current grid heading available should INS/IRS fail.

11.5.2.2. If INS/IRS fail, aircraft will be directed by grid heading until exiting the grid area.

11.5.3. En route requirements with INS/IRS inoperative:

11.5.3.1. Navigators. Comply with FLIP (Arctic Control Area or other applicable procedures). Check aircraft's grid heading each 30 minutes during the first hour after grid entry. Thereafter, heading checks are required every hour. When entering grid operation, apply convergence to the true heading. Establish the aircraft on computed true heading references. When exiting grid, apply variation to obtain magnetic headings to the flight plan to verify the accuracy of the courses measured and conversion data used. This will ensure the validity of initial entry headings and provide precise target headings for exit.

11.5.3.2. Determine the precession information for gyros after each heading check. Do not reset the gyros unnecessarily. When precession is one degree or less do not reset the gyros since the error may be in the observation.

11.5.3.3. If a grid heading can't be determined at the regular time interval by celestial, use the previous precession information to determine heading changes.

11.6. CDS/IFM. All VIP Aircraft are authorized to utilize MAJCOM approved CDS/IFM (this includes AFMC contracted services as part of aircraft procurement/sustainment if coordinated with the lead command). PIC is overall responsible for monitoring accuracy and completeness of flight planning.

11.6.1. Certified Dispatchers are authorized to mission plan, obtain/transmit weather information, obtain/transmit diplomatic clearance messages, compute flight plans, electronically file and flight follow VIP Aircraft. PIC must verify dispatch release via signature, verbal communication or datalink. At locations with MAF C2, PIC should confirm actions with CP or AMD. Secure Launch and Close Hold missions may require modification of planning factors. OG/CC or equivalent shall inform PIC if mission is not to be dispatched.

11.6.2. Messages. CDS Dispatchers are not authorized to send official AMHS messages.

11.6.2.1. Close Hold. Units may further restrict CDS activities to accommodate sensitive missions. In such cases, the unit will perform flight planning and dispatch services.

11.6.3. Dip Clearances. Dispatchers may obtain diplomatic clearances. PIC's are responsible for overall border clearance, approval authority for flight plans and country clearance. Verify flight plan annotates appropriate diplomatic clearances for border clearance and safe passage.

11.6.4. Datalink. Use of HF and VHF datalink is approved for enroute dispatch and C2 capability. Dispatchers shall notify PIC of updated alternates and weather prior to obtaining clearances (departure, oceanic, approach). In any case, PICs should update enroute alternate weather prior to oceanic entry point via any means (HF or datalink). If unable to contact the crew via datalink, dispatchers should contact crew by any/all means for all planning problems or changes. If still unable to contact the crew, CDS/IFM must notify ARTCC, unit C2, CP or AMD to pass information to the aircraft.

11.6.4.1. CPDLC. MAJCOM authorized users may use flight following and oceanic clearance release procedures via ATC datalink. Ensure appropriate ATS log-on procedures are followed (Pacific Operations Manual, CNS/ATM Asia, etc). Initiate HF communication (typically 15-45 minutes prior to entry) and establish log on communication. Ensure log on is accepted and advise ATC via HF voice if communication is not established. Minimize the use of free text messages. Maintain log of ATC datalink communications and retain with post mission paperwork at unit stan/eval IAW unit procedures.

Chapter 12

FLIGHT ENGINEER (FE) PROCEDURES

12.1. Not used.

Chapter 13

FLIGHT ATTENDENT (FA) PROCEDURES

13.1. Not Used.

Chapter 14

COMMUNICATION SYSTEMS OPERATOR (CSO) PROCEDURES

14.1. Not used.

Chapter 15

AIRCRAFT SECURITY (RAVEN) PROCEDURES

15.1. General. This chapter outlines aircrew responsibilities and procedures for aircraft security NCOs (RAVENs) assigned to VIP missions. On missions, they are under the authority of the PIC. The RAVEN NCOIC will be pre-designated and will supervise the other RAVENs during the mission.

15.2. Responsibilities. RAVENs protect Presidential, Presidential Support, and certain other VIP missions and associated equipment according to AFI 31-101, 31-104V1, AFJI 31-102, *Physical Security* and Chapter 7 of this AFI. RAVENs are responsible to the PIC, who approves and coordinates any authorized deviations from the procedures in AFI 31-101, 31-104, and AFJI 31-102. RAVENs coordinate aircraft security protection with local military and civilian authorities. Assure local security efforts are smoothly integrated into the total security system to protect the aircraft. WG/CCs may authorize the use of augmentees to RAVEN teams.

15.3. Permission Procedures. All RAVENs will attend the PIC's aircrew briefing, when applicable. **EXCEPTION:** When RAVENs are not collocated, ensure the RAVEN NCOIC is verbally briefed by the PIC on the day the aircrew brief is held and that the entire RAVEN team is briefed by the PIC on the day of departure. The RAVEN NCOIC briefs his team on mission requirements, threat analysis, and specific duty assignments for the mission. The RAVEN NCOIC contacts the PIC when notified of the mission and assists in coordinating advance security support at en route destinations as required.

15.4. Preflight Procedures. RAVENs will arm themselves and will normally report to the aircraft not later than 2 hours prior to scheduled departure time.

15.4.1. Security Check. Conduct a complete security check of the aircraft, inside and outside. Assume sentry positions as directed by the RAVEN NCOIC.

15.4.2. Mission Information. The RAVEN NCOIC is responsible for obtaining passenger manifests and crew orders, mission itinerary cards, en route stop cards, and the AF Form 1109, *Visitor Register Log*.

15.4.3. Aircraft Access Control. Personnel listed on the applicable unescorted entry list or the passenger manifest will be granted unescorted entry on the aircraft. Manifest changes are approved by the mission contact officer or PIC. RAVENs board the aircraft only after all passengers and other aircrew members have boarded.

15.4.4. Baggage Control. One RAVEN will be positioned as a sentry at the baggage compartment until all baggage is loaded and the compartment is secured. Assure all baggage is properly identified. Cross-check baggage labels against the passenger manifest.

15.5. In-Flight Procedures. Report all security problems to the PIC. When the aircraft is transporting space available passengers, the RAVEN NCOIC assigns team members (if required) to occupy seats in each passenger compartment where passengers are seated. Don't allow passengers to have access to their stowed baggage in-flight.

15.6. Post-Flight Procedures. When the aircraft blocks in, RAVENs deplane first. Take up pre-designated positions fore and aft of the aircraft. When the baggage compartment is opened,

one RAVEN monitors baggage unloading and remains as a sentry until the baggage compartment is secured. If crew baggage will be out of crewmember's control, (e.g. clearing customs) a RAVEN will accompany the baggage at all times. If using secured fuel supplies, one RAVEN checks the numbered seals against the documents provided by the mission contact officer or advance agent.

15.6.1. Local Security. If local security forces will augment RAVENs during ground times, the RAVEN NCOIC will brief them on their duties and responsibilities.

15.6.2. Miscellaneous. At least one RAVEN will always be stationed as primary sentry at all times. The RAVEN NCOIC schedules RAVENs for sentry duty.

15.7. Post Mission Procedures.

15.7.1. Terminating Security Protection. If the aircraft security status is to be terminated, RAVENs remain at the aircraft until all passengers and baggage are unloaded and the PIC terminates the upgraded security status according to AFI 31-101.

15.7.2. After Termination. When relieved, turn in weapons and ammunition to the armory. Comply with local debriefing requirements. The RAVEN NCOIC turns in the completed AF Form 1109, *Visitor Register Log*.

15.8. AF Form 1109, *Visitor Register Log*. Consult local directives concerning completion and authentication procedures for this form.

Chapter 16

FLYING CREW CHIEF (FCC) PROCEDURES

16.1. General. This chapter outlines duties and responsibilities of aircraft crew chiefs. Normally, crew chiefs are assigned to fly on C-38 OCONUS missions. The maintenance organization coordinates with appropriate agency (SOC or equivalent) to schedule crew chiefs to each mission. Manning requirements are IAW chapter 3 of this AFI. The crew chief will be listed on the flight authorization.

16.2. Responsibilities. The crew chief is the primary aircraft mechanic and performs maintenance to maintain a mission-ready aircraft status. After reporting for a mission, the crew chief is responsible to the PIC. As a minimum, the crew chief shall:

- 16.2.1. Perform or assist aircraft servicing at all stations.
- 16.2.2. Accomplish preflight, thru-flight and post-flight inspections per TO 00-20-1 and applicable supplements.
- 16.2.3. Manage the aircraft's en route mission support kit (MSK) and log.
- 16.2.4. Perform maintenance at en route stations.
- 16.2.5. Perform aircraft block-out and block-in procedures.
- 16.2.6. Ensure inventory of aircrew flight equipment and dash-21 equipment is accomplished, as the PIC's representative.
- 16.2.7. Maintain the AFTO 781 series. Inform PIC of all maintenance discrepancies entered in AFTO 781A.
- 16.2.8. Be responsible for the DD Form 1896 and Multi Service Card.
- 16.2.9. Be responsible for AF Form 15 and handle all aircraft related payments on aircraft.

16.3. Procedures. Attend the PIC's pre-mission aircrew briefing. Brief the PIC on status of the aircraft, recent maintenance history, and MSK concerns. Discuss requirements for aerospace ground equipment (AGE) and servicing requirements needed at each stop. Confirm aircraft configuration.

- 16.3.1. For All Departures. Assure the required fuel load, as briefed by the PIC, is aboard. Ensure completion of the pre-departure checklist (if applicable) and all required MSK items are aboard aircraft. Aircraft positioning will be accomplished by taxiing aircraft with qualified aircrew members or by towing aircraft by maintenance support personnel to terminal or DV spot when required. Ensure required AGE is available and connect to aircraft as required. Ensure AFTO forms are properly completed. Assist aircraft baggage/cargo loading to ensure weight and balance criteria is properly maintained. Report any deviations to PIC.
- 16.3.2. In-flight Duties. FCCs will not perform in flight duties/maintenance unless in the opinion of the PIC an emergency condition exists requiring FCC's assistance.
- 16.3.3. For All Arrivals (Intermediate or Overnight). Perform scanner duties outside of the aircraft (as required) during ground operations as required by the PIC. Deplane before DV

and passengers. Ensure aircraft is safely blocked-in. Coordinate necessary ground support and equipment for departure and servicing procedures. Accomplish all servicing and perform required maintenance. Perform any required inspections. Ensure required AGE is available for departure.

16.3.3.1. For Overnight Stops. Accomplish post-flight inspections. Perform or assist all servicing operations. Install required FOD/dust covers and plugs IAW the AFM.

16.3.4. If Maintenance Is Required. When aircraft parts are required, use available MSK parts to the maximum extent possible. Coordinate with PIC before ordering or purchasing parts from available sources. Always determine the applicable part number through the Illustrated Parts Catalog, or contracted servicing partner prior to ordering and/or purchasing parts. Coordinate with the PIC to determine delivery location for all shipped parts. Ensure home station maintenance is informed and can aid in coordination for parts. Advise unit C2 (CP or AMD) of estimated ETIC for dispatch release. Typically, ETIC = parts delivery time to aircraft + job completion time. Communicate this time to PIC when able.

16.3.5. On Return to Home Station. Comply with local debriefing requirements. Replace (or back order) any used MSK items. Turn in all AF Form 15 and AF Form 664 to unit resource manager.

16.4. Authority to Clear Red X Symbols in the AFTO 781A. IAW TO 00-20-1, when authorized by the home station maintenance group commander and CLS agreement, certified FCCs are authorized to clear red X write-ups.

Chapter 17

FUEL PLANNING

17.1. Fuel Requirements. This paragraph implements standard minimum fuel requirements and will be used in conjunction with procedures established in the C-38 AFM.

17.2. General. As a minimum, required ramp fuel will consist of all fuel required for engine start, taxi, warm-up, APU operation, takeoff, climb, cruise, en route reserves (if required), alternate/approach/missed approach (if required), descent, approach, and landing.

17.3. Reserve Fuel Planning. Plan a 45-minute fuel reserve at destination or alternate (when an alternate is required).

17.3.1. Reserve fuel will be computed using consumption rates providing maximum endurance at 10,000 feet MSL at destination gross weight. If an alternate is required, compute using weight at alternate destination. When computing reserve fuel for remote destinations, use consumption rates providing maximum endurance at 20,000 feet MSL.

17.3.2. En route reserve fuel. Compute using 10% of the flight time fuel over Class II airspace, not to exceed 1 hour at normal cruise OR contingency fuel as designated on commercially dispatched flight plans.

17.4. Alternate Fuel Planning. If required, plan fuel to an alternate IAW AFI 11-202V3 and chapter 6 of this regulation.

17.4.1. If two alternates are required, compute fuel from destination to most distant alternate.

17.4.2. For remote destinations, holding is authorized in lieu of an alternate airport. In such situations, use 2+00 reserve fuel (1+15 holding in lieu of an alternate and 0+45 fuel reserve IAW [17.3](#)).

17.4.3. When determining fuel required for holding in lieu of an alternate, compute using holding tables at 20,000 feet MSL at destination gross weight.

17.5. Equal Time Points (ETPs).

17.5.1. If the flying time to a suitable alternate airfield exceeds 60 minutes, computed at 10,000 feet, single-engine cruise speed, in still air, from any point along the route of flight, computation of an ETP is required. ETPs may be computed by MAJCOM certified CFPs. Annotate it along the planned route of flight on the OPC/Global Navigation Chart.

17.5.2. Compute ETPs according to the following formula:

$$FL100 ETP (nm) = \frac{D \times GSR}{GSR + GSC}$$

D - distance in nautical miles between destination field and recovery field (not necessarily the departure field).

GSR - average ground speed to continue to return to a recovery field at 10,000 feet. To compute groundspeed, apply forecast headwind/tailwind component at 10,000 feet to true airspeed.

GSC - average ground speed to continue to destination at 10,000 feet.

Example: D = 1040nm, 10,000 feet winds forecast 60 kt headwind to continue, 80 kt tailwind to

return, TAS at 10,000 feet, Long Range Cruise (LRC), is 324 kts at std day, 86,000 lb gross wt.

$$ETP = \frac{1040 \times 404}{404 + 264} = 629 \text{ nm from the recovery base}$$

NOTE: The computation above will yield an ETP based on recovering or continuing at 10,000 feet. This is the most limiting case, and will ensure an accurate ETP in the event of an emergency such as a rapid decompression.

17.6. Safety. PICs must ensure that all factors be considered when determining ramp fuel. For all aircraft, factor in payload and the risk involved in fuel planning over oceanic and mountainous regions and the resultant OEI performance capability during all phases of the flight. Consider fuel needed at ETPs and en route alternate suitability. Finally, consider weather patterns at the destination alternate. If it is too close to a poor weather destination, increase ramp fuel to provide a more suitable alternate.

17.7. Fuel Conservation. Aircrew and mission planners will manage aviation fuel as a limited commodity and precious resource. Fuel optimization will be considered throughout all phases of mission planning and execution. Excessive ramp and recovery fuel adds to aircraft gross weight and increases fuel consumption. Do not ferry extra fuel beyond optimum requirements for safe mission accomplishment and training objectives. Aircrew and mission planners will optimize flight plans and flight routing for fuel efficiency. In-flight procedures such as climb/descent profiles and power settings should also be considered for efficient fuel usage. Aircrew should employ the following aviation fuel optimization measures without compromising flight safety or jeopardizing mission/training accomplishment:

17.7.1. Use optimized CFPs when possible. LRC and optimum altitude should be flown. Limit the use of the APU when possible. Delay engine start. Cruise Center of Gravity (CG) should be aft if practical. Fly en route descents when possible.

17.7.2. Normal cruise speed for the C-38 is Maximum Continuous Thrust. Do not exceed FAR or host nation aircraft speed restrictions.

17.7.3. Extra fuel (identified/unidentified) may be added to required ramp fuel load. Unidentified fuel allows crews some flexibility when dealing with unplanned contingencies (e.g., unreliable NAVAIDs, weather avoidance, ATC delays, etc.) and should be kept to a minimum. Do not carry extra fuel for convenience; roughly 3 percent of the excess will be burned each hour. Use the following guidelines when determining extra fuel requirements:

17.7.3.1. When fuel availability is limited or not available at en route stops.

17.7.3.2. When compressed ground times during single multi-day sortie missions preclude refueling at en route stops.

17.7.3.3. When en route refueling would delay or be detrimental to mission accomplishment.

17.7.3.4. For known holding delays in excess of standard.

17.7.3.5. For anticipated off course weather avoidance to include avoidance of forecast turbulence detrimental to passenger comfort.

17.7.3.6. If decompression with passengers would cause a descent to an unplanned altitude resulting in consumption in excess of planned fuel; add fuel to recover at a suitable alternate at the appropriate altitude.

17.7.3.7. To offset increased fuel consumption due to icing.

17.7.3.8. When destination NAVAIDs, ATC services, or landing aids are unreliable or insufficient.

17.8. Fuel Limitations. VIP Aircraft are not allowed to operate on JP-8+100 except in emergency conditions. If inadvertent refueling with JP-8+100 occurs, the aircraft will be immediately de-fueled prior to flight. All JP-8+100 locations are required to maintain a clean JP-8 capability to support transient aircraft. Every effort must be made not to allow aircraft flight while serviced with JP-8+100. If emergency refueling occurs utilizing JP-8+100, flight crews will make an AFTO 781 entry stating, "CAUTION: Aircraft refueled using JP-8+100, preventive measures must be taken when de-fueling. Close coordination with maintenance and POL fuels personnel must be accomplished."

17.9. Aircraft Specific Fuel Planning. As a minimum, comply with AFI 11-202V3 fuel requirements and the following:

Table 17.1. C-38 Fuel Planning Chart.

Fuel Load Component	Requirement
1. APU, Start, Taxi, Takeoff	200 pounds
2. En route ¹	Fuel for planned climb and cruise to overhead destination at cruise altitude or initial approach fix altitude
3. En route reserve	Fuel for 10 percent of flight time over Class II route or route segments at normal cruise
4. Approach and landing	200 pounds
5. Alternate, required by paragraph 6.18. ²	Fuel from overhead destination to the alternate at normal speed and altitude
6. Minimum fuel required at destination, or landing at alternate (if an alternate is required IAW 11-203V3)	1000 pounds
<p>NOTES:</p> <p>(1) Include all planned off-course maneuvering for departure or en route deviations.</p> <p>(2) When two alternates are required, compute fuel from the destination to the most distant alternate only.</p>	

17.9.1. Minimum fuel is 800 pounds. Crews should plan to terminate all missions with not less than 800 pounds. When operating in FAA airspace, pilots will declare “minimum fuel” to the controlling agency when in their judgment the aircraft may land at the intended destination with less than these amounts.

17.9.2. Emergency fuel is 600 pounds. Crews will declare an emergency whenever it is determined that they will land with emergency fuel or less.

17.9.3. Fuel Computations for Class II Routing. When flying along a Class II routing, crews should ensure they have enough fuel to complete the flight from the equal time point (ETP). Consider worst case recovery with one-engine inoperative or two-engine unpressurized. Calculate Class II fuel reserve as 10% of flight time fuel over the Class II route/route segment, not to exceed 1+00 fuel at normal cruise.

17.9.4. Standard Ramp Fuel Loads. This is normally the minimum fuel load for all missions departing home station. If you require less than the standard fuel load due to runway length or conditions at nearby destinations, notify the squadron operations center immediately. They will advise maintenance who will take action to refuel or de-fuel your aircraft to desired fuel load. Aircraft will not be de-fueled solely for the purposes of fuel conservation. Standard ramp fuel loads, planned local training flying times, scheduled ground times between locals, and minimum landing fuel are in [Table 17.2](#) Standard Fuel Loads and Local Turn Times.

Table 17.2. Standard Fuel Loads and Local Turn Times.

MDS Aircraft	Fuel Load	Flying Time	Ground Time
C-38	4800	2.0	1+15

Chapter 18
AIR REFUELING

18.1. Not used.

Chapter 19

TACTICAL EMPLOYMENT

19.1. Not Used

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DCS, Operations, Plans and Requirements

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AF Form 15, *United States Air Force Invoice*

AF Form 72, *Air Report (AIREP)*

AF Form 457, *USAF Hazard Report*

AF Form 651, *Hazardous Air Traffic Report (HATR)*

AF Form 664, *Aircraft Fuels Documenting Log*

AF Form 673, *Air Force Publication/Form Action Request*

AF Form 711B, *USAF Mishap Report*

AF Form 847, *Recommendation for Change of Publication*

AF Form 853, *Air Force Wildlife Strike Report*

AF Form 1109, *Visitor Register Log*

AF Form 1297, *Temporary Issue Receipt*

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Abbreviations and Acronyms

AC—Aircraft Commander

ACDE—Aircrew Chemical Defense Ensemble

ACF—Acceptance Check Flight

ACFP—Advanced Computer Flight Plan

ADIZ—Air Defense Identification Zone

AFDS—Automatic Flight Director System

AFE—Aircrew Flight Equipment

AFFSA—Air Force Flight Standards Agency

AFIS—Airborne Flight Information System
AFSAS—Air Force Safety Automated System
AFM—Flight Crew Manual
AFTTP—Air Force Tactics, Techniques, and Procedures
AGE—Aerospace Ground Equipment
AGL—Above Ground Level
AHAS—Avian Hazard Advisory System
AIREP—Air Report
ALE—Automatic Link Establishment
ALS—Approach Lighting System
ALTRV—Altitude Reservation
AMD—Air Mobility Division
AMHS—Automated Message Handling System
ANP—Actual Navigation Performance
AOE—Airport of Entry
AOR—Area of Responsibility
AP—Area Planning
APOD—Aerial Port of Disembarkation
ARTCC—Air Route Traffic Control Center
ASR—Approach Surveillance Radar
ASRR—Airfield Suitability and Restriction Report
ATC—Air Traffic Control
ATIS—Automated Terminal Information Service
ATO—Air Tasking Order
AVPOL—Aviation Petroleum, Oil and Lubricants
BAM—Bird Aircraft Model
BASH—Bird Aircraft Strike Hazard
BRNAV—Basic Area Navigation Airspace
C2—Command and Control
CAOC—Combined Air Operations Center
CBTA—Chemical-Biological Threat Area
CCA—Contamination Control Area

CDI—Course Deviation Indicator
CDS—Commercial Dispatch Service
CDT—Crew Duty Time
CECR—Crew Enhancement Crew Rest
CFP—Computer Flight Plan
CFR—Code of Federal Regulations
CIRVIS—Communications Instructions for Reporting Vital Intelligence Sightings
CG—Center of Gravity
CLS—Contracted Logistics Support
CND—Could Not Duplicate
CNDC—Canadian National Defense Contract
CNS/ATM—Communications, Navigation, Surveillance/Air Traffic Management
CODEL—Congressional Delegation
COMBS—Contractor Operated Maintenance Base Supply
COMSEC—Communications Security
CONOPS—Concept of Operations
CONUS—Continental United States
CP—Command Post
CPDLC—Controller to Pilot Datalink Capability
CPI—Crash Position Indicator
CRM—Cockpit/Crew Resource Management
CSS—Concurrent Servicing Supervisor
CVAM—Special Air Missions Office
CVR—Cockpit Voice Recorder
CW—Chemical Warfare
DA—Decision Altitude
DAA—Designated Approval Authority
DAO—Defense Attaché Office
DCS—Defense Courier Service
DER—Departure End of Runway
DESC—Defense Energy Support Center
DFSC—Defense Fuel Supply Center

DH—Decision Height
DNIF—Duty Not Including Flying
DoD—Department of Defense
DS—Defensive System
DSN—Defense Switching Network
DSO—Data Systems Operator
DV—Distinguished Visitor
DVG—Distinguished Visitor Guard
EAC—Enlisted Aircrew Coordinator
EACN—Executive Airlift Communications Network
EFB—Electronic Flight Bag
ELT—Emergency Locator Transmitter
EMC—Electromagnetic Compatibility
EMI—Electromagnetic Interference
EP—Evaluator Pilot
ERO—Engines Running Onload/Offload
EROPS—Extended Range Operations
ETA—Estimated Time of Arrival
ETB—Estimated Time of Block-in/Block-out
ETD—Estimated Time of Departure
ETIC—Estimated Time In Commission
ETP—Equal Time Point
EVS—Enhanced Vision System
FAA—Federal Aviation Administration
FAF—Final Approach Fix
FBO—Fixed Base Operator
FCB—Flight Crew Bulletin
FCC—Federal Communications Commission
FCC—Flying Crew Chief
FCF—Functional Check Flight
FCG—Foreign Clearance Guide
FCIF—Flight Crew Information File

FDP—Flight Duty Period
FDR—Flight Data Recorder
FE—Flight Engineer
FIH—Flight Information Handbook
FIR—Flight Information Region
FLIP—Flight Information Publication
FM—Flight Manager
FMC—Flight Management Computer
FMS—Flight Management System
FOM—Flight Operations Manual
FS—Flight Surgeon
FSO—Flight Safety Officer
FSS—Flight Service Station
FOD—Foreign Object Damage
GCE—Ground Crew Ensemble
GDSS—Global Decision Support System
GNOC—Government Network Operations Center
GP—General Planning
GPS—Global Positioning System
HAA—Height Above Aerodrome
HAT—Height Above Touchdown
HATR—Hazardous Air Traffic Report
HF—High Frequency
HFGCS—High Frequency Global Communications System
HR—Human Remains
IA—Information Assurance
IAW—In Accordance With
ICAO—International Civil Aviation Organization
ICS—Infant Car Seat
IFF—Identification Friend or Foe
IFM—Integrated Flight Management
IFR—Instrument Flight Rules

ILS—Instrument Landing System
IMC—Instrument Meteorological Conditions
IMT—Information Management Tool
INS—Inertial Navigation System
IP—Instructor Pilot
IRS—Inertial Reference System
ISSO—Information Systems Security Officer
JFTR—Joint Federal Travel Regulation
JOG—Joint Operational Graphic
JOSAC—Joint Operational Support Airlift Center
LAN—Local Area Network
LFA—Legal For Alert
LNAV—Lateral Navigation
LOA—Letter of Agreement
LRC—Long Range Cruise
MAF—Mobility Air Forces
MAG—Military Assistance Group
MAP—Missed Approach Point
MARSA—Military Assumes Responsibility for Separation of Aircraft
MC—Mission Contributing
MDA—Minimum Descent Altitude
MDS—Mission Design Series
ME—Mission Essential
MEA—Minimum Enroute Altitude
MEP—Mission Essential Personnel
MEL—Minimum Equipment List
MISREP—Mission Report
MLS—Microwave Landing System
MMEL—Master Minimum Equipment List
MMO—Mobility Mission Observer
MNPS—Minimum Navigation Performance Specifications
MOA—Minimum Operating Altitude

MOCA—Minimum Obstruction Clearance Altitude
MOPP—Mission Oriented Protective Posture
MR—Mission Ready
MSC—Multi Service Corporation
MSK—Mission Support Kit
MSL—Mean Sea Level
NACO—National Aeronautical Charting Office
NAF—Numbered Air Force
NAT—North Atlantic Track
NCOIC—Non-Commissioned Officer in Charge
NDB—Non Directional Beacon
NGA—National Geospatial-Intelligence Agency
NIPR—Unclassified But Sensitive Internet Protocol Router
NMC—Not Mission Capable
NMCC—National Military Command Center
NMR—Non-Mission Ready
NOTAM—Notice to Airmen
NSA—National Security Agency
OCF—Operational Check Flight
OCONUS—Outside the CONUS
OCS—Obstacle Clearance Surface
OEI—One Engine Inoperative
OI—Open Item
OME—Operational Mission Evaluation
ONC—Operational Navigation Chart
OPC—Oceanic Plotting Chart
OPCON—Operational Control
OPLAN—Operations Plan
OPORD—Operations Order
OPR—Office of Primary Responsibility
ORM—Operational Risk Management
OSA—Operational Support Airlift

OSD—Office of the Secretary of Defense
OST—Off-Station Trainer
OWS—Operational Weather Squadron
PA—Public Address
PAR—Precision Approach Radar
PDA—Personal Digital Assistant
PED—Portable Electronic Device
PF—Pilot Flying
PFPS—Portable Flight Planning System
PIC—Pilot in Command
PL—Protection Level
PM—Pilot Monitoring
PMC—Partial Mission-Capable
PMCR—Post Mission Crew Rest
PMSV—Pilot to Meteorologist Service
POC—Point of Contact
POL—Petroleum, Oil and Lubricants
PRP—Personnel Reliability Program
QRC—Quick Reaction Checklist
RA—Resolution Advisory
RAIM—Receiver Autonomous Integrity Monitoring
RCR—Runway Condition Reading
RNAV—Area Navigation
RNP—Required Navigation Performance
ROC—Required Obstacle Clearance
RON—Remain Overnight
RSC—Runway Surface Condition
RTRB—Realistic Training Review Board
RVSM—Reduced Vertical Separation Minimum
SAAM—Special Assignment Airlift Mission
SAM—Special Air Mission
SATCOM—Satellite Communication

SDF—Simplified Directional Facility
SEB—Stan/Eval Board
SELCAL—Selective Calling
SF—Standard Form
SID—Standard Instrument Departure
SIF—Selective Identification Feature
SIGMET—Significant Meteorological Information
SIPR—Secret Internet Protocol Router
SMGCS—Surface Movement Guidance and Control System
SOC—Squadron Operations Center
SPINS—Special Instructions
SPR—Single Point Refueling
STAR—Standard Terminal Arrival Route
TA—Traffic Advisory
TAAD—Tactical Arrival and Departure
TACAN—Tactical Air Navigation
TACC—Tanker/Airlift Control Center
TCAS—Traffic Alert and Collision Avoidance System
TDY—Temporary Duty
TERPS—Terminal Instrument Procedures
TO—Technical Order
TOLD—Takeoff and Landing Data
TPC—Tactical Pilotage Chart
TRB—Tactics Review Board
TWG—Threat Working Group
UIR—Upper Flight Information Region
VFR—Visual Flight Rules
VIP—Very Important Person
VMC—Visual Meteorological Conditions
VNAV—Vertical Navigation
VOR—Very High Frequency Omni-Directional Radio-Range
WEZ—Weapons Engagement Zone

WHCA—White House Communications Agency

WHMO—White House Military Office

Terms: Common mobility terms and associated abbreviation. Additional terms common to the aviation community may also be found in FAR, Part 1 and DoD FLIP, General Flight Planning, chapter 2.

Advance Notice Message.—A message dispatched when required by the FCG to provide advance notification to interested agencies of mission itinerary and support requirements. It may be combined with a diplomatic clearance request message.

Aeromedical Evacuation Coordination Center (AECC).—A coordination center, within the Joint Air Operations Center, which monitors all activities related to aeromedical evacuation (AE) operations execution. It manages the medical aspects of the AE mission and serves as the net control station for AE communications. It coordinates medical requirements with airlift capability, assigns medical missions to the appropriate AE elements, and monitors patient movement activities.

Aircrew Threat Advisory.—An intelligence message containing information about a situation which may pose a direct threat to MAF aircrews.

Air Force Satellite Communication (AFSATCOM).—Satellite communications system capable of 75 bits per second (BPS) record message traffic.

Air Force Component Commander (AFCC). —In a unified, sub -unified, or joint task force command, the Air Force commander charged with the overall conduct of Air Force air operations. Also referred to as commander, Air Force forces (COMAFFOR).

Aircraft Security NCO (ASNCO).—Security Forces personnel assigned as integral members of SAM aircrews to protect Presidential, Presidential Support, and SDSAM aircraft and associated personnel and equipment. See chapter 15 of this AFI for an amplified explanation.

Airlift.—Aircraft is considered to be performing airlift when manifested passengers or cargo are carried.

Air Mobility Control Center (AMCC).—Provides global coordination of tanker and airlift for AMC and operationally reports to the TACC. Functions as the AMC agency that manages and directs ground support activities and controls aircraft and aircrews operating AMC strategic missions through overseas locations.

Air Mobility Element.—(DoD) The air mobility element is an extension of the Air Mobility Command Tanker Airlift Control Center deployed to a theater when requested by the geographic combatant commander. It coordinates strategic airlift operations with the theater airlift management system and collocates with the air operations center whenever possible (also called AME).

Air Mobility Division (AMD).—Provides global coordination of tanker and airlift for USAFE and PACAF MAFs. Functions as the agency that manages and directs air and ground support activities and controls aircraft and aircrews operating USAFE/PACAF strategic missions through overseas locations.

Air Reserve Component (ARC).—Refers to Air National Guard and AFRC forces, both Associate and Unit Equipped.

Antarctic Flight.—Flight conducted south of 56 degrees south latitude.

Arctic Flight.—Flight conducted between 15 degrees and 180 degrees west longitude (exclusive of Iceland) north of 50 degrees north latitude between 1 October and 15 April. Transoceanic flights are excluded.

Arrival Time.—The block-in time, rather than the landing time.

Air Route Traffic Control Center (ARTCC).—The principal facility exercising en route control of aircraft operating under instrument flight rules within its area of jurisdiction. Approximately 26 such centers cover the United States and its possessions. Each has a communication capability to adjacent centers.

Air Traffic Control (ATC).—A service operated by appropriate authority to promote the safe, orderly and expeditious flow of air traffic.

Alert Aircraft/Crew.—A designated aircraft and crew capable of launching on a mission within a predetermined period of time beginning with launch notification from C2.

Allowable Cabin Load (ACL).—The maximum payload which can be carried on a mission. It is the difference between the zero fuel weight limit and the aircraft operating weight.

Augmented Crew.—Basic aircrew supplemented by additional qualified aircrew members to permit in-flight rest periods as defined in chapter 3 of this AFI.

Avisource.—Interactive computer database system used by USAF/CVAM to schedule and manage VIP Missions.

BAM.—Bird Avoidance Model at website <http://www.usahas.com>

Bird Aircraft Strike Hazard (BASH).—An Air Force program designed to reduce the risk of bird strikes.

Bird Condition Low.—No significant bird activity which would present a probable hazard to flying operations. No operating restrictions.

Bird Condition Moderate.—Concentrations of 5 to 15 large birds (waterfowl, raptors, gulls, etc.) or 15 to 30 small birds (terns, swallows, etc.) observable in locations that represent a probable hazard to flying operations.

Bird Condition Severe.—Concentrations of more than 15 large birds (waterfowl, raptors, gulls, etc.) or more than 30 small birds (terns, swallows, etc.) observable in locations that represent a probable hazard to flying operations.

Block Time.—Time determined by the scheduling agency responsible for mission accomplishment for the aircraft to arrive at (block in) or depart from (block out) the parking spot. “Block Time” may be defined as the time the door will open on arrival.

BLUE BARK.—US military personnel, US citizen civilian employees of the DoD, and the dependents of both categories who travel in connection with the death of an immediate family member. It also applies to designated escorts for dependents of deceased military members. Furthermore, the term is used to designate the personal shipment of a deceased member.

Border Clearance.—Those clearances and inspections required to comply with federal, state, and local agricultural, customs, immigration, and immunizations requirements.

Class II Airspace. Long—range navigation beyond the limits of the operational service volume of ground-based NAVAIDS (formerly known as a Category I route).

CLOSE HOLD.—USAF term assigned to all aspects of a DV airlift when destination, passengers' names, or other mission details are restricted from general release.

COIN ASSIST.—Nickname used to designate dependent spouses accompanying dependent children and dependent parents of military personnel reported missing or captured who may travel space available on military aircraft for humanitarian purposes on approval of the Chief of Staff, United States Army; Chief of Staff, United States Air Force; Chief of Naval Operations; or the Commandant of the Marine Corps.

Commander Support Missions (CSM).—DV Missions supporting Combatant, Unified and Sub-unified Commanders in 4 star positions. CSMs are authorized CVAM/AMD support.

Command and Control (C2).—The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. C2 functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.

Command and Control Center (C2 center).—Each C2 center provides supervision, guidance, and control within its assigned area of responsibility. For the purpose of this AFI, C2 centers including operations centers, CPs, air mobility elements, tanker airlift control elements (TALCE), air mobility control centers, and tanker task forces.

Command and Control Information Processing System (C2IPS).—Computer-based information transmission and information handling for C2 functions associated with the Director of Mobility Forces (DIRMOBFOR), AME fixed units, and TALCE. Interfaces to and automatically updates the Global Decision Support System (GDSS).

Communications Systems Operator (CSO).—Flight crewmember responsible for inspecting, operating, and maintaining all communications and electronic equipment aboard the aircraft. See chapter 14 of this AFI for an amplified explanation.

CONFERENCE SKYHOOK.—Communication conference available to help aircrews solve in-flight problems that require additional expertise. Contact C2 centers to establish links with unit Stan/Eval, Maintenance, Contract Logistics Support and Systems Programs Technicians.

Contingency Mission.—Mission operated in direct support of an OPORD, OPLAN, disaster, or emergency.

Critical Leg.—The segment of a mission that determines the ACL which may be carried over that route.

Critical Phase Of Flight.—Takeoff, air refueling, formation below minimum safe altitude, low level, airdrop, approach, and landing.

CVAM (Special Air Missions Office).—Agency within the office of the USAF Vice Chief of Staff responsible for scheduling and committing all Air Force airlift required to support the White House or any other executive branch of the government. The single coordinating agent

for AMC and AMC-gained VIP Aircraft fleet and schedules AMC and AMC-gained VIP Missions.

Deadhead Time.—Duty time for crewmembers in passenger status, positioning or de-positioning for a mission or mission support function.

Departure Time.—The block-out time, rather than the takeoff time.

Designated Courier.—Officer or enlisted member in the grade of E-5 or above of the US Armed Forces, or a Department of State diplomatic courier, selected by the Defense Courier Service (DCS) to accept, safeguard, and deliver DCS material as directed. A primary aircrew member should be used as a courier only as a last resort.

Diplomatic Clearance Request Message.—A message dispatched to request diplomatic clearance for over-flight and/or transit of foreign territories. Message content and addresses are specified in the FCG. This message is usually combined with the advance notice message.

Direct Instructor Supervision.—Supervision by an instructor of like specialty with immediate access to controls (for pilots, the instructor must occupy either the pilot or copilot seat).

Director, Mobility Forces (DIRMOBFOR).—Individual in command of all mobility forces within a designated area or for a designated operation. In overseas theaters, the DIRMOBFOR is normally responsible for theater mobility force management. The Air Force component commander exercises OPCON of assigned or attached mobility forces through the DIRMOBFOR. The DIRMOBFOR monitors and manages assigned mobility forces operating in theater.

Dispatch.—Dispatch is defined as the start of takeoff roll.

Distinguished Visitor (DV).—Passengers, including those of friendly nations, of colonel rank and higher, or equivalent status including diplomats, cabinet members, members of Congress, and other individuals designated by the DoD due to their mission or position (includes BLUE BARK and COIN ASSIST).

Distinguished Visitor/HFGCS Message (DV Message).—A classified message dispatched with the DVs name/status code and mission number. This message also establishes HFGCS priority and requests HFGCS network and support. This message is usually sent with the advance notice and diplomatic clearance request message.

Diverse Departure.—The airfield has been assessed for departure by TERPS personnel and no penetration of the obstacle surfaces exists. An aircraft may depart the field, climb to 400 feet above the departure end of the runway elevation, turn in any direction, and if a minimum climb gradient of 200'/NM is maintained, be assured of obstacle clearance. This is normally indicated on DoD/NOAA publications by the absence of any published departure procedures.

Due Regard.—Operational situations that do not lend themselves to International Civil Aviation Organization (ICAO) flight procedures, such as military contingencies, classified missions, politically sensitive missions, or training activities. Flight under "Due Regard" obligates the military PIC to be his or her own ATC agency and to separate his or her aircraft from all other air traffic (See *FLIP GP*, section 7).

Enlisted Aircrew Coordinator (EAC).—The appointed NCO crewmember (not necessarily the ranking) tasked with coordinating all enlisted aircrew issues and concerns in regards to a

particular mission. Enlisted crewmembers should attempt to resolve most issues and concerns with the EAC who in turn reports to the PIC.

Equal Time Point (ETP).—The point along a route at which an aircraft may either proceed to the destination/first suitable airport, or return to the departure base/last suitable airport in the same amount of time. It may be based on all engines operating or with one engine inoperative.

Estimated Time of Arrival (ETA).—Same as estimated block-in time. Landing time is different than ETA.

Estimated Time of Block-in/Block-out (ETB).—Same as estimated time aircraft door will open for arrival or close for departure.

Estimated Time of Departure (ETD).—Same as Estimated Time of Block-out. Takeoff time is different than departure time.

Estimated Time In Commission(ETIC).—Estimated time required to complete required maintenance.

Extended Range Operations (EROPS).—For twin engine aircraft, those flights conducted over a route containing a point further than 60 minutes flying time at the one-engine inoperative cruise speed (under standard conditions in still air) from a suitable en route alternate.

Familiar Field.—An airport in the local flying area at which unit assigned aircraft routinely perform transition training. Each operations group commander will designate familiar fields within their local flying area. See local supplement for approved fields and limitations.

First Pilots.—First pilots are highly experienced pilots who are qualified IAW volumes 1 and 2 of this instruction to taxi, takeoff, and land the aircraft from the left seat under the supervision of a qualified VIP AC.

Global Decision Support System (GDSS).—MAF's primary execution C2 system. GDSS is used to manage the execution of MAF airlift and tanker missions.

Global Patient Movement Requirements Center.—A joint activity reporting directly to the Commander in Chief, US Transportation Command, the DoD single manager for the regulation of movement of uniformed services patients. The Global Patient Movement Requirements Center authorizes transfers to medical treatment facilities of the Military Departments or the Department of Veterans Affairs and coordinates inter theater and CONUS patient movement requirements with the appropriate transportation component commands of US Transportation Command.

Ground Time.—Interval between engine shut down and next takeoff time. For VIP Missions this normally is defined as the interval between VIP door open on arrival and VIP door close on departure.

Hazardous Cargo or Materials.—Articles or substances that are capable of posing significant risk to health, safety, or property when transported by air. These articles or substances are classified as explosive (class 1), compressed gas (class 2), flammable liquid (class 3), flammable solid (class 4), oxidizer and organic peroxide (class 5), poison and infectious substances (class 6), radioactive material (class 7), corrosive material (class 8), or miscellaneous dangerous goods (class 9). Classes may be subdivided into divisions to further identify hazard, i.e., 1.1, 2.3, 6.1, etc.

High Frequency Global Communications System (HFGCS).—Worldwide high frequency (HF) network tied together with high quality, dedicated, intersite circuits to provide worldwide communication capability for high ranking government officials. When activated for a mission, the master net control station at Andrews AFB has the capability to remotely seize control of HF equipment at various locations; therefore, the airborne operator is always in contact with the operator at Andrews. HFGCS service is only provided for certain missions.

Hotel Reservation Message (HOTRES).—A message dispatched to request crew accommodations and transportation per the scheduled mission itinerary. This message is usually combined with the advance notice message and diplomatic clearance request message.

Instructor Supervision.—Supervision by an instructor of like specialty. For critical phases of flight, the instructor must occupy one of the seats or stations, with immediate access to the controls.

Itinerary Change Message (Itin Change).—A message dispatched to change the original itinerary, due to changes in the scheduled mission, published in the original advance notice message or diplomatic clearance message.

L-Band SATCOM.—600 BPS SATCOM system contracted through the International Maritime Satellite Organization (INMARSAT), used primarily for C2. The system consists of a satellite transceiver, a laptop computer, and a printer.

Landing Status Codes:—When possible, identify system as Mission Essential (ME) or Mission Contributing (MC).

Code 0:—Ground Abort

Code 1:—Aircraft is Mission Capable with no additional discrepancies

Code 2:—Aircraft or system has major discrepancies, but is capable of further mission assignment within normal turnaround times.

Code 3:—Aircraft or system has major discrepancies in mission essential equipment that may require extensive repair or replacement prior to further mission assignment. The discrepancy may not affect safety-of-flight and the aircraft may be Not Mission Capable (NMC) flyable.

Code 4:—Aircraft or system has suspected or known radiological, chemical, or biological contamination.

Code 5:—Aircraft or system has suspected or known battle damage.

Leg Time.—Time between door closed on departure to door open on arrival.

Local Training Mission.—A mission scheduled to originate and terminate at home station, generated for training or evaluation, and executed at the local level.

Meal. Any service that involves preparation and/or cooking of cold and/or hot food items. Serving pre—packaged food and/or drink items (such as pretzels, chips, or sodas) does not constitute a meal.

Mission.—The task, together with the purpose, that clearly indicated the action to be taken and the reason therefor. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. The dispatching of one or more aircraft to accomplish one particular task.

Mission Advisory.—Message dispatched by C2 agencies, liaison officers, or PICs advising all interested agencies of any changes in status affecting the mission.

Mobility Air Force (MAF).—Forces assigned to mobility aircraft or MAJCOMs with operational or tactical control of mobility aircraft.

Operational Control (OPCON).—Transferable command authority that may be exercised by commanders at any echelon at or below the level of combatant command. OPCON is inherent in combatant command (command authority). OPCON 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. OPCON 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. OPCON normally provides full authority to organize commands and forces and to employ those forces as the commanders in OPCON considers necessary to accomplish assigned missions. OPCON does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training.

Operational Missions.—Missions executed at or above MAJCOM C2 level. Operational missions termed "Close Watch" include CORONET missions and AFI 11-221, *Air Refueling Management (KC-10 and KC-135)*, priority 1, 2, and 3 missions tasked by the MAJCOM C2. Other operational missions such as deployment, re-deployment, reconnaissance operations, operational readiness inspections (ORI), channel or SAAM, and JA/ATT missions may be designated "Close Watch" as necessary.

Opportune Airlift.—Transportation of personnel, cargo, or both aboard aircraft with no expenditure of additional flying hours to support the airlift.

Originating Station.—Base from which an aircraft starts on an assigned mission. May or may not be the home station of the aircraft.

Operational Risk Management (ORM).—ORM is a logic based, common sense approach to making calculated decisions on human, material, and environmental factors before, during, and after all operations. USAF policy on ORM is contained in AFD 90-9. PICs will accomplish ORM worksheets IAW MAJCOM and local guidance as part of preflight activities (see paragraph 6.24. of this AFI).

Operational Support Airlift Mission (OSA).—Movements of high-priority passengers and cargo with time, place, or mission-sensitive requirements.

Overwater Flight.—Any flight that exceeds power off gliding distance from land.

Permit to Proceed.—Aircraft not cleared at the first US port of entry may move to another US airport on a permit to proceed issued by customs officials at the first port of entry. This permit lists the requirements to be met at the next point of landing, i.e. number of crew and passengers, cargo not yet cleared. PICs are responsible to deliver the permit to proceed to the customs inspector at the base where final clearance is performed (Heavy monetary fines can be imposed on the PIC for not complying with permit to proceed procedures).

Point of No Return.—A point along an aircraft track beyond which its endurance will not permit return to its own or some other associated base on its own fuel supply.

Point of Safe Return.—Most distant point along the planned route from which an aircraft may safely return to its point of departure or alternate airport with required fuel reserve.

Positioning and De-positioning Missions.—Positioning missions are performed to relocate aircraft for the purpose of conducting a mission. De-positioning missions are made to return aircraft from bases at which missions have terminated.

Presidential Aircraft.—Any aircraft used to transport the President of the United States, or designated as a Presidential Aircraft by White House Military Office through the PAG. Presidential Aircraft require continuous security protection at home station, en route operating locations, and contract maintenance facilities. Other aircraft may be temporarily upgraded to Presidential aircraft security status for a particular mission.

Presidential Airlift Mission.—A category of operational missions involving or supporting transport of the President of the United States. Does not include training missions.

Quick Stop.—Set of procedures designed to expedite the movement of selected missions by reducing ground times at en route or turnaround stations.

Ramp Coordinator.—Designated representative of the C2 center whose primary duty is the coordination of ground handling activities on the ramp during large scale operations.

Ramp Freeze.—Term used at Andrews AFB to denote a set of security procedures within a fixed geographical area on the flight line to ensure the safety of high-level DVs. Generally, all vehicular traffic is prohibited in a designated area except for security police and personnel and vehicles directly supporting the departing or arriving DV. Refer to AAFBR 900-6 for further information.

RAVEN.—Air Force Security personnel specially trained for aircraft protection.

VIP Delay.—A VIP delay occurs when the DV and accompanying party is ready for departure and the DV's departure is delayed due to maintenance or operational reasons.

Scheduled Takeoff Time.—That time established in the mission itinerary for departure.

Scheduled Return Date (SRD).—Scheduling tool used by air mobility units to predict when crews will return to home station. It allows force managers to plan aircrew availability and provide crews visibility over monthly flying activities. AMC and AMCgained aircrews (except those on standby at home station) will have an SRD established on their flight orders.

Significant Meteorological Information (SIGMET).—Area weather advisory issued by an ICAO meteorological office relayed to and broadcast by the applicable ATC agency. SIGMET advisories are issued for tornadoes, lines of thunderstorms, embedded thunderstorms, large hail, severe and extreme turbulence, severe icing, and widespread dust or sand storms. SIGMETs frequently cover a large geographical area and vertical thickness. They are prepared for general aviation and may not consider aircraft type or capability.

Special Air Mission (SAM).—Missions tasked and scheduled at the direction of USAF/CVAM.

Special Assignment Airlift Mission (SAAM).—Airlift requirements for special pick-up or delivery by AMC at points other than established AMC routes, and which require special

consideration because of the number of passengers involved, the weight or size of the cargo, the urgency or sensitivity of movement, or other special factors. A SAAM can be flown by any appropriate unit and is not the same as a SAM mission.

Specifically Designated Special Air Mission (SDSAM).—Any mission specifically identified by USAF/CVAM as requiring special security procedures.

Squadron.—Refers to VIP fixed-wing aircraft squadrons within the MAF.

Stations Time.—Normally, 30 minutes prior to departure time. Aircrews will have completed their pre-flight duties/appropriate checklists, and be at their crew positions.

618th TACC.—The Air Mobility Command direct reporting unit responsible for tasking and controlling operational missions for all activities involving forces supporting US Transportation Command's global air mobility mission. The Tanker Airlift Control Center is comprised of the following functions: current operations, C2, logistics operations, aerial port operations, aeromedical evacuation, flight planning, diplomatic clearances, weather, and intelligence.

Tanker Airlift Control Element (TALCE).—Team of qualified Air Force personnel established to control, coordinate, and function as an Air Force tanker and airlift C2 facility at a base where normal AMC C2 facilities are not established or require augmentation. TALCEs support and control contingency operations on both a planned and no-notice basis.

Tanker Task Force (TTF).—Force of tanker aircraft assembled and tasked to perform a specific function.

Theater Patient Movement Requirements Center (TPMRC).—The TPMRC is responsible for theater wide patient movement (e.g., medical regulating and AE scheduling), and coordinates with theater MTFs to allocate the proper treatment assets required to support its role. The primary role of the TPMRC is to devise theater plans and schedules and then monitor their execution in concert with the GPMRC. The TPMRC is responsible to the Combatant Commander through the Combatant Command Surgeon. The TPMRC is also responsible for all aspect of intra-theater patient movement management. A TPMRC provides C2 for patient movement management operations in its theater of operations, as directed by its Combatant Commander's operational policy, and in coordination with USTRANSCOM, acting as a supporting combatant command, responsible for inter-theater and CONUS patient movement.

Time Out.—Common assertive statement used to voice crewmember concern when safety may be jeopardized.

Training Mission.—Mission executed at the wing level or below for the primary purpose of aircrew training for upgrade or proficiency. Synonymous with non-operational mission. Does not include operational missions as defined in this AFI.

Unescorted Entry List.—Computerized lists of personnel authorized unescorted entry to Presidential, Presidential Support, and certain other OSA/VIPSAM missions to perform their duties. Unescorted Entry Lists are also categorized to indicate individuals authorized to escort personnel onto aircraft, and individuals authorized to grant escorted entry to the aircraft. Unescorted Entry List categories are published in AFI 31-101.

Unit Move.—Unit relocation in support of a contingency or exercise deployment/redeployment. These moves are made to desired areas of operation or to designated locations, and are made IAW a troop movement schedule.

Validation Authority.—The agency or office tasked to review and approve/disapprove a proposed airlift requirement.

VIP Aircraft.—Aircraft tasked to perform a VIP mission.

VIP Mission.—A category of operational mission that includes Special Airlift Missions (SAM), Commander Support Missions (CSM), Distinguished Visitor Guard (DVG) missions and Distinguished Visitor (DV) missions to include Presidential Airlift Missions tasked through the White House Military Office (WHMO), and DV missions tasked through the Office of Assistant Vice Chief of Staff (HQ USAF/CVAM), Theater Air Mobility Divisions (AMD) and the Joint Operational Support Airlift Center (JOSAC). Does not include training missions.

White House Communications Agency (WHCA).—A joint service field unit of the Defense Information Service Agency (DISA) which provides communications support for the White House.

Zero Fuel Weight (Actual).—Weight, expressed in pounds, of a loaded aircraft not including wing and body tank fuel. All weight in excess of the maximum zero fuel weight will consist of usable fuel.

Zero Fuel Weight (Maximum).—The weight expressed in pounds where an addition to the aircraft gross weight can be made only by adding fuel in the tanks. This value is called “Limiting Wing Fuel” on the DD Form 365-4, Weight and Balance Clearance Form.