

**BY ORDER OF THE 375TH
AIRLIFT WING COMMANDER**



**AIR FORCE INSTRUCTION 11-2C-9
VOLUME 3**

**SCOTT AIR FORCE BASE
Supplement 1**

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Flying Operations

C-9 OPERATIONS PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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OPR: 375 OG/OGV (Maj Theodore G. Weibel)

Certified by: 375OG/OGV
(Lt Col Richard W. Milliken)

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AFI 11-2C-9, Volume 3, C-9 Operations Procedures, 1 June 2000, is supplemented as follows. This supplement sets procedures for all C-9A aircraft operating under the direction of the 375 AW/932 AW. The Chief, 375th Operations (OG) Group Stan Eval (375 OG/OGV) has overall responsibility for administration of this supplement. Send comments and suggested improvements to this supplement on AF Form 847, **Recommendation for Change of Publication**, through channels to 375 OG/OGV, 859 Buchanan Street, Scott AFB IL 62225-5118, or E-mail to: <mailto:375og-ogv@scott.af.mil>.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

Chapter 10

375 AW/932 AW C-9 LOCAL PROCEDURES

10.1. General. This supplement contains policies and guidance unique to the mission of the 375 AW/932 AW. This supplement will be used in conjunction with the basic instruction, aircraft flight manual, flight information publications, and applicable HQ USAF and HQ AMC directives. The 375 OG/CC has overall responsibility and waiver authority for this supplement (see AFI 11-2C-9V3, *C-9 Operations Procedures*, paragraph 1.4.).

10.2. (Added) Command and Control.

10.2.1. (Added) The operational control of the C-9A aeromedical missions within the Continental United States (CONUS) is exercised by the Commander, Air Mobility Command. Flight following and mission coordination of Air Force Reserve Command (AFRC) airlift and training missions is exercised by HQ AFRC/DO. In conjunction with the Global Patient Movement Requirements Center (GPMRC), the Tanker Airlift Control Center (TACC) accepts requirements from eligible users, integrates aeromedical airlift requests into missions, and manages each mission until it is completed (see AFI 11-2C-9V3, paragraph 2.1.).

10.2.2. (Added) The mission planning function is handled by TACC. Complete mission information will be provided by TACC to the 375 AW Command Post (375 AW/CP) before mission show time. In turn, the 375 AW/CP will present mission set-up folders, including complete Integrated Flight Planning System mission products, to the aircrew in Building 505 at show time. For aircrews that are away from home station after remaining overnight (RON), TACC faxes packages to the Aeromedical Staging Squadrons (ASTS) as described in paragraph **10.2.5. (Added)** of this supplement. If not, 375 AW/CP maintains a copy of the products and can fax them to the aircraft commander (AC) outside of TACC planner's duty hours (see AFI 11-2C-9V3, paragraph 2.1.).

10.2.3. (Added) Rerouting or Diverting a Mission. En route diversion support will be worked through the TACC. If the crew must deviate from the planned mission itinerary (e.g., weather or medical emergency), notify the TACC as soon as practical. If a diversion becomes necessary due to a change in a patient's condition, the AC will make every effort to comply with the requests of the Medical Crew Director (MCD). If an en route diversion becomes necessary for reasons other than a change in a patient's condition, the AC will coordinate with the MCD before deciding the point of landing. The welfare of the patient is an important consideration in all decisions (see AFI 11-2C-9V3, paragraph 2.4.1.).

10.2.4. (Added) Aircrew Responsibilities. During RONS, crews will not use the ASTS for command and control purposes. At RON locations that have an AMC CP (e.g., Andrews and Travis AFBs), crews will recap the day's mission times and establish a legal for alert time with the CP. By show time the following morning, mission set-up materials will be faxed to the ASTS by the TACC or the local CP. The AC must call the local CP or TACC to verify the accuracy of the information. At locations without an AMC CP (e.g., Keesler and Kelly AFBs), crews will contact the TACC directly to recap the day and establish a legal for alert time. At such locations, the crew will plan to self-alert, must tell the TACC how the crew may be reached during crew rest, and where the next day's mission information should be faxed for crew pick-up (see AFI 11-2C-9V3, paragraph 2.5.).

10.2.4.1. (Added) Upon mission completion at Scott AFB, provide completed copies of all required mission forms to the 375 AW CP.

10.2.5. (Added) Operational C2 Reporting. The procedures listed in AFI 11-2C-9V3, paragraph 2.6., pertain only to aircraft movement reporting. The MCD will obtain patient information directly through the GPMRC.

10.2.5.1. (Added) The AC will ensure arrival and departure times are passed to the TACC as soon as practical. When operating at a location with an AMC CP, this information is automatically passed for the crew via C2IPS. However, when operating at a location without an AMC CP, the crew must pass the times directly to the TACC. Aircrews may contact the TACC by dialing 1-800-AIR-MOBL (1-800-247-6625), or requesting a phone patch on an HF Global Command and Control Frequency, as outlined in the flight information handbook. To ensure an effective and efficient command and control process, the TACC needs prompt notification of aircraft departures and arrivals. The TACC initiates an overdue aircraft checklist when they cannot confirm aircraft arrival at the destination within 30 minutes of an estimated time of arrival (ETA) at CONUS stations and within 1 hour of ETA at Outside the Continental United States (OCONUS) stations. If they do not receive a departure message, the aircraft is considered overdue at its destination when it exceeds the time limits above based on the aircraft's estimated time of departure. If mission controllers are unable to confirm aircraft status within 1 hour, they request TACC Director of Operations (senior) approval to notify the appropriate rescue coordination center to begin an extended communications search. To prevent unnecessary initiation of the overdue aircraft checklist, if communications capability is limited at the next destination, the TACC recommends advising the controller that you will not contact them until the subsequent destination. The TACC will manage all CONUS C-9 airvac missions. For OCONUS training missions, the TACC will manage the departure from Scott AFB. After departure, the appropriate cell will assume responsibility for flight following (AFRC CP for 932 AW training and airlift missions flying on AFRC-approved mission itineraries). Do not wait through several stops to report times, and do not delay the mission to pass routine movement information if you cannot establish communications with the TACC. When conducting local area transition training at other than Scott AFB and MidAmerica Airport runways, instructors will inform the 375 AW/CP of the training location prior to departing Scott AFB, and the instructors will monitor the 375 AW/CP frequencies while airborne if feasible. One-day out-and-back trainers that depart the local area and full stop at another location will report landing times and maintenance status for flight following purposes to the 375 AW/CP (see AFI 11-2C-9V3, paragraph 2.6.1.).

10.2.6. (Added) For mission delays, the AC and MCD will discuss and jointly determine the reason for the delay. The AC has the responsibility to pass the delay information to the TACC. Review AMCI 10-202V6, *Mission Reliability Reporting System (MRRS)*, for delay codes (see AFI 11-2C-9V3, paragraph 2.6.3.).

10.2.7. (Added) Telephone numbers that may be frequently used are listed in **Table 10.1. (Added)** (see AFI 11-2C-9V3, paragraph 2.8.).

Table 10.1. (Added) C2 Agency Telephone Numbers.

Agency	Telephone Number
TACC	1-800-AIR-MOBL
TACC C-9 MISSIONS	DSN 779-0322
TACC C-9 FLIGHT PLANNERS	DSN 779-3625/3189
SCOTT COMMAND POST	DSN 576-5891
USTC/GPMRC	DSN 779-4201/800-874-8966

Agency	Telephone Number
TACC AE Cell Duty Officer	DSN 779-0330
ANDREWS COMMAND POST	DSN 858-5058
TRAVIS COMMAND POST	DSN 837-5517
ANDREWS ASTS	DSN 858-5424
KEESLER ASTS	DSN 597-6153
KELLY ASTS	DSN 554-7237
TRAVIS ASTS	DSN 799-3540
AFRC COMMAND POST	DSN 497-0680/800-223-1784 x70680

10.2.8. (Added) Senior Medical Authority. The MCD is the senior medical authority onboard all aero-medical evacuation (AE) missions and is responsible for determining what is beneficial or detrimental to the patients. If a physician is onboard as an attendant, he or she will make medical decisions with respect to that specific patients care and may be consulted for advice as appropriate.

10.3. (Added) Crew Management.

10.3.1. (Added) Crew Complement for AE Missions. Aircrews will use the following additional guidance when using Table 3.1. **NOTES:** 1. When passengers are carried without a qualified flight nurse or AE technician, the AC will designate a current and qualified C-9 crewmember to perform these duties (1 qualified crewmember for up to 20 passengers; 2 qualified crewmembers required if more than 20 passengers are carried). The crewmember will perform flight attendant duties described in TO 1C-9A-1, *Flight Manual (Douglas Aircraft)*, and brief all passengers IAW paragraph 6.12.7., this supplement. The briefing guide is located in the aircraft mission kit. Ensure all equipment is secured prior to takeoff and assist passengers as necessary during flight. If a crash landing or ditching becomes necessary, accomplish the First Steward Checklist for the applicable situation at the direction of the AC (see Table 3.1.).

10.3.2. (Added) The Flight Duty Period (FDP) should not be planned to exceed 14 hours (waiver authority for a mission planned in excess of 14 hours is the 375 OG/CC). The HQ AMC/DO remains the waiver authority for missions that will exceed 16 hours of FDP (see AFI 11-2C-9V3, paragraph 3.6.5.1.).

10.3.3. (Added) Missions will be limited to a maximum of eight stops. A ninth stop can be added with the 375 OG/CC's approval. Any stops added after the TACC flight planner's duty hours or after crew show require 375 OG/CC approval, excluding changes for added urgent patients (see AFI 11-2C-9V3, paragraph 3.6.).

10.4. (Added) Examples of limited nonflying duties include mission planning and light office duties. The duties will be at aircrew discretion, and crews will not be scheduled for office duties during that time period (see AFI 11-2C-9V3, paragraph 3.7.1.).

10.5. (Added) Operational Procedures.

10.5.1. (Added) Flight Station Entry. Aircraft commanders will not allow routine passengers to sit in the jump seat for takeoffs or landings. Authorized jump seat personnel include other pilots, additional medical crewmembers, crew chiefs or distinguished visitors (see AFI 11-2C-9V3, paragraph 5.3.).

10.5.2. (Added) Seat Belts. Medical crew instructors or medical flight examiners are not exempt from standard seat belt requirements. Aeromedical Evacuation Crewmembers (AECM) should be secured with

litter straps or other restraints when away from their seats for takeoff or landing (see AFI 11-2C-9V3, paragraph 5.7.4.).

10.5.3. (Added) Transportation of Pets. Pets are not permitted on AE flights. Working dogs may be carried IAW DOD 4515.13-R, *Air Transportation Eligibility* (see AFI 11-2C-9V3, paragraph 5.13.).

10.5.4. (Added) Runway Condition Reading Limitations. The 375 AW/932 AW C-9s will not take off on runways covered with wet snow, slush or standing water (see AFI 11-2C-9V3, paragraph 5.15.2.).

10.5.5. (Added) Airfield Suitability and Restrictions Report (ASRR). Units conducting operations into the Central or South American theaters will comply with theater restrictions cited in **Table 10.2. (Added)** (see AFI 11-2C-9V3, paragraph 5.15.7.).

Table 10.2. (Added) 375 OG Central and South American Theater Restrictions.

The AC will have 300 hours MP time in the C-9A
MP time includes initial mission evaluation
MP time does NOT include FP time
IP/EPs are NOT excluded from the MP time requirement
The AC must have operated in the respective theater as a crewmember in the C-9A within the previous 3 years. EXCEPTION: The AC restriction does not apply if the copilot is at least an MP or higher who has operated in the respective theater in the C-9A; however, the AC's hour restrictions cited above must still be met.

10.5.5.1. (Added) 375 OG Certification Airfields. The 375 OG supplements the certification airfields cited in Part One of the ASRR with Eagle County Regional Colorado.

NOTE: Prior to operating in this airfield, the AC must have actively monitored a takeoff and approach in the C-9A to obtain certification. **EXCEPTION:** The AC restriction does not apply if the copilot is a least an MP or higher who has operated into the respective field in the C-9A. Waiver authority for the above airfields is the 375 OG/CC.

10.5.5.2. (Added) Aircrews planning OCONUS flights will reference **Attachment 5 (Added)**, this supplement.

10.5.6. (Added) Post Flight. For aircraft equipped with a Global Positioning System/Flight Management System, check inertial navigation unit drift prior to shutdown (see AFI 11-2C-9V3, paragraph 5.18.6.).

10.5.7. (Added) FCF (Functional Check Flight) Restrictions. An FCF crew will consist of, as a minimum, an FCF-certified instructor pilot (IP) (in command) and an FCF-certified AC. Waiver authority for this policy is the 375 OG/CC. Pilot certification will consist of completing the FCF training specified in the 375 OG FCF Pilot Training Program, contained in the Wing Employment Training Plan. This training is the same for IPs and ACs with the exception that ACs don't have to fly an FCF profile prior to being certified. Place the FCF training and certification letter in the left side of the pilot's flight evaluation folder after it has been completed (see AFI 11-2C-9V3, paragraph 5.21.2.).

10.5.8. (Added) Power-Back. Units will request approval for power-back training through their respective OG/CC. The 375 OG/CC has approved the 375 OSS/OSF, to include power back training in the AC's curriculum (includes prior qualified pilots being qualified as "First Pilots" during initial qualification training). The training will be documented in the student's AF Form 4022, **Airman Training Folder**, to

be forwarded to the gaining unit. In all other cases, the power-back procedure will only be used as a last resort and requires 375 OG/CC approval (see AFI 11-2C-9V3, paragraph 5.24.).

10.6. (Added) Aircrew Procedures.

10.6.1. (Added) Aircrew Uniform. In accordance with AFI 11-301, *Aircrew Life Support Program*, flying jackets listed in AS 016, *Special Purpose Clothing and Personal Equipment*, and TO 14P3-1-112, *Maint Instr – Nomex Flt Gr Coveralls, Types CWU-27/P and CWU-28/P and Gloves, Type GS/FRP-2, Jacket, Flyers Summer Type CWU-36/P, Jacket, Flyers Winter Type CWU-45/P, Hood, Winter, Flyers (CWU-17/P Jacket), Trousers, Flyers, Extreme Cold Weather, CWU-18/P*, are the only jackets aircrew are authorized to wear during flight. The A-2 Leather Flight Jacket does not provide the same degree of fire protection as the Nomex ® Flight Jackets and should not be worn during flight (see AFI 11-2C-9V3, paragraph 6.1.2.).

10.6.1.1. (Added) Crewmembers will remove earrings prior to performing aircrew duties in or around the aircraft.

10.6.2. (Added) Passports/Shot Records. Due to the nature of our near offshore and mobility requirements, 375 AW and 932 AW medical crewmembers will carry shot records and passports on all missions (see AFI 11-2C-9V3, paragraph 6.2.1.).

10.6.3. (Added) Mission Kits. In addition to mandatory items indicated by the “*” symbol, mission kits will include items indicated by the “&” symbol contained in **Table 10.3. (Added)** (see AFI 11-2C-9V3, paragraph 6.10.).

Table 10.3. (Added) 375 AW/932 AW Mission Kit Requirements.

& AFI 11-2C-9V3_375AWSUP1, <i>375 AW/932 AW C-9A Local Operating Procedures</i>
& AFI 23-202, <i>Buying Petroleum Products, and Other Supplies and Services Off-Station</i>
& SAFBI 13-201, <i>Airfield Management and Air Traffic Control</i>
& 375 AW Wing Operations Plan
& DD Form 175, Flight Plan, Military
& DD Form 1801, International Flight Plan, DOD
& DD Form 2131 or AF Form 96, Passenger Manifest
& AF Form 15, USAF Invoice
& AF Form 315, USAF AVFuels Invoice
& AF Form 457, USAF Hazard Report
& AMC Form 41, Flight Authorization
& AMC Form 97, AMC Unusual Occurrence/Bird Strike Worksheet
& 375 AW Form 2, Loading Schedule (C-9 Aircraft)
& Customs Form 6059B, Customs Declarations
& Tanker Airlift Control Center Pamphlet
& Emergency Passenger Oxygen System (EPOS) Briefing Guide (see Attachment 7 , this supplement)
& Integrated Flight Management (IFM) Aircrew Flimsy
& Flying Training Briefings

10.6.4. (Added) Route Navigation Kits. The 11 AS will maintain Route Navigation Kits for each locally based C-9A for CONUS missions. Base Operations will ensure availability of a minimum of two complete worldwide kits (see AFI 11-2C-9V3, paragraph 6.11.).

10.6.5. (Added) Patient/Passenger Briefings. The EPOS Briefing Guide (see [Attachment 6 \(Added\)](#), this supplement) will be used to brief passengers and patients. The briefing guide will be reproduced and inserted behind each AECM's AFI 11-2C-9V3 CL-3, *Patient/Passenger Briefings Guide*. A copy will also be placed in the mission kit for briefings, in the event no AECMs are part of the crew complement and passengers are carried (see AFI 11-2C-9V3, paragraph 6.12.7.).

10.6.6. (Added) Departure Routing/Climb-out Performance. The maximum recommended takeoff weight charts for the C-9A guarantee a 2.4% climb gradient. The 2.5% gradient, now mandated, requires that the Initial Climbout Gradients - One Engine Charts, Figure A2-22 or Figure A2-41 in TO 1C-9A-1-1, *Performance Manual (Performance Data)*, be used to determine if the aircraft is capable of meeting the 2.5% gradient (see AFI 11-2C-9V3, paragraph 6.16.2.).

10.6.7. (Added) Adverse Weather.

10.6.7.1. (Added) Freezing Precipitation/Icing. Observed or forecast freezing drizzle correlates to "moderate icing." Freezing rain correlates to "severe icing." The bottom line is this policy. If the forecast is for freezing rain, the icing condition will be severe. If the forecast is for freezing drizzle, the icing should be forecasted as moderate. In any event, if the forecast specifically calls for severe icing (regardless of whether it is associated with freezing rain or drizzle), the icing condition is severe (see AFI 11-2C-9V3, paragraph 6.21.1.).

10.6.7.2. (Added) When a weather warning is issued at Scott AFB, comply with procedures outlined in SAFBI 13-201, *Airfield Management and Air Traffic Control (ATC)*. Crews should follow these procedures at any airfield unless more restrictive guidance is available (see AFI 11-2C-9V3, paragraph 6.21.).

10.6.8. (Added) Fuel Conservation. [Attachment 7](#), this supplement, C-9A Fuel Conservation Guide is provided to aircrews as possible fuel conservation techniques. (See paragraph 6.22.).

10.6.9. (Added) Aircraft Servicing and Ground Operations.

10.6.9.1. (Added) Aircraft Fuel Purchase. Aircrews will comply with the procedures outlined in the In-Flight Refueling (IFR) Supplement (extract below from the U.S. IFR Supplement): Fuel available through U.S. Military Base Supply, Into-Plane Contract and/or reciprocal agreement, is listed first. Military fuel entry is followed by "Mil." Where contract fuel is available, the name of the refueling agent is shown. Military fuel should be used first if it is available. When military fuel cannot be obtained, but contract fuel is available, government aircraft should refuel with contract fuel to avoid potential disputes with into-plane contractors. Fuel that is not available through the avenues listed above is shown preceded by NC (no contract) and enclosed in parentheses. If there are questions as to whether a contract exists at an individual airport location, DFSC/PH Fort Belvoir, VA can be contacted by telephone via DSN 427-8489 or Comm (703) 767-8489. **NOTE:** The DD Form 1896, **Jet Fuel Identaplate**, is the only acceptable plate for use in documenting into-plane contract fuel purchases (see AFI 11-2C-9V3, paragraph 6.24.).

10.6.9.2. (Added) Concurrent Ground Operations. Concurrent servicing during aeromedical missions, including the loading and unloading of patients and passengers is allowed to stay on mission timing IAW TO 00-25-172. If no delay is anticipated, crews should comply with (AFI 11-2C-9V3, paragraph 6.24.5. and minimize the number of people onboard the aircraft (see AFI 11-2C-9V3, paragraph 6.24.3.).

10.6.9.2.1. (Added) Grounding Procedures. In accordance with TO 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding (ATOS)*, grounding can be accomplished by contacting the aircraft grounding/bonding connector, an unpainted aircraft surface (i.e., forward stair rails) or a static ground (i.e., the metal rings embedded into the ramp) by bare hand (see AFI 11-2C-9V3, paragraph 6.24.3.1.).

10.6.9.2.2. (Added) Deplaning Patients/Passengers before Refueling. When deplaning patients or passengers before refueling or any ground stops, the individual escorting the group must coordinate with responsible personnel and determine a safe location to stand. This coordination could include transient services, ground maintenance, or Security Forces. If no one is available and you are at a location where normal AE support personnel are not available, the patients/passengers should remain on board. This policy does not include permission to smoke. A responsible ground agent must grant specific permission before allowing any person to smoke. Air Force standards and guidelines do not always apply to other DoD or civil airfields. It is the entire crew's responsibility to ensure this guidance is followed and safety is not compromised by anyone (see AFI 11-2C-9V3, paragraph 6.24.3.3.).

10.6.9.2.3. (Added) The no smoking restriction includes medical support personnel accomplishing patient transfer duties (see AFI 11-2C-9V3, paragraph 6.24.3.6.).

10.6.9.2.4. (Added) The safety observer will restrict vehicle movement within the Fuel Servicing Safety Zone (FSSZ). The FSSZ is the area within 50 feet of any pressurized fuel port (i.e., fuel truck, single point refueling receptacle, etc.), and 25 feet around aircraft fuel vent outlets (see AFI 11-2C-9V3, paragraph 6.24.3.7.).

10.6.10. (Added) Oxygen Requirements. Minimum oxygen requirements to depart home station are 15 liters-cabin/6 liters-crew. If mission requirements dictate, the AC and MCD may increase these minimums. Missions may depart with less upon concurrence of the AC, MCD, and GPMRC (see AFI 11-2C-9V3, paragraph 6.25.1.).

10.6.11. (Added) Passenger Handling (see AFI 11-2C-9V3, paragraph 6.27.).

10.6.11.1. (Added) Passenger's Seat Release. The MCD will provide the AC a tentative seat release to subsequent stops and final destination using the 375 AW Form 50, **C-9 Load Message**. The MCD will prepare the 375 AW Form 50 in duplicate, prior to arrival at each en route destination. The original will be given to the AC; the 3AET will provide a copy to the ground emergency personnel at en route stops. No duplicate is required on the termination leg. After considering aircraft performance limitations, the AC will ensure a maximum seat release is passed to the next destination (see AFI 11-2C-9V3, paragraph 6.27.1.).

10.6.11.2. Passenger Manifesting. A complete, updated Space "A" manifest will be left with a responsible agency at every stop prior to takeoff. The 375 OG/OGV has identified responsible agencies and prioritized them (see AFI 11-2C-9V3, paragraph 6.27.2.).

10.6.11.2.1. (Added) If a passenger terminal is available, leave a complete manifest of Space "A" passengers with a passenger terminal representative prior to takeoff.

10.6.11.2.2. (Added) If no passenger terminal is available, leave a complete Space "A" manifest with Base Operations.

10.6.11.2.3. (Added) If a passenger terminal and Base Operations are not available, leave the Space "A" manifest with Transient Alert personnel.

10.6.11.2.4. (Added) If the above-mentioned agencies are not available, leave a complete Space "A" manifest with Airport Security.

10.6.11.2.5. (Added) If a responsible person is not available to accept the passenger manifest, call the GPMRC controller and pass the full names and SSN of all space-available passengers manifested at that stop, and leave the name and location of the last complete manifest.

10.6.11.2.6. (Added) To alleviate the need to handwrite copies of Space "A" manifests, include the request for copies during the inbound message call. If necessary, have the next passenger terminal make the appropriate copies. Passengers manifested to a stop will not be remanifested to another stop beyond that point by the MCD unless no passenger service facility is available.

10.6.11.3. (Added) All 375 AW/932 AW aircrew members that plan to depart Scott AFB in an authorized additional crewmember (ACM) status will provide the Scott CP with a copy of their orders a minimum of 2 hours prior to the mission departure time (see AFI 11-2C-9V3, paragraph 6.27.7.).

10.6.12. (Added) Patient Loading Factors (see AFI 11-2C-9V3, paragraph 6.28.).

10.6.12.1. (Added) Patient Preparation. When there is a patient manifest change, the MCD will notify GPMRC of changes to planned or actual configuration prior to takeoff. In cases of add-on patients when the facility provides the MCD with the site and control number, the MCD is not required to call the GPMRC. Use a landline, if feasible. If not, use the cellular phone. If no phone is available, instruct the medical facility to find a phone ASAP and call the GPMRC 1-800 extension to update the manifest. The GPMRC will update and work the change (see AFI 11-2C-9V3, paragraph 6.28.1.).

10.6.12.2. (Added) Aircrew Seating. The flying crew chief (FCC) will normally occupy the jump seat during critical phases of flight. Since the jump seat is not approved for crash landing or ditching, an approved seat must be reserved for the FCC. Ensure either the forward ACM or an airline-type seat is available. If sufficient rest is not attained at RON locations, consideration should be given to reserving an airline-type seat for the FCC. If mission dictates the requirement for two FCCs, reserve a minimum of one airline-type seat due to the weight restriction of the forward ACM seat. If a seat is reserved for the FCC's use, ensure mission planning and patient loads are based on one less available seat. The MCD must notify the GPMRC as soon as this decision is made. The 2FN will reserve an appropriate passenger seat for the FCC (see AFI 11-2C-9V3, paragraph 6.28.5.).

10.6.12.3. (Added) Third Aeromedical Technician Crew Seat. Research has shown this seat was manufactured and approved IAW FAA standards, but not military specifications standards. In light of these facts, the seat is approved for use during all phases of flight by the 3d AET. However, if a passenger seat is available in Row 6, the 3d AET may elect to sit in one of those seats. The seat release will not be adjusted to provide a blue seat.

10.6.13. (Added) On-Time Takeoffs. If delays occur that will significantly delay arrival times at subsequent stops (15 minutes or more), the AC should coordinate with the MCD to determine if an adjusted schedule should be flown and/or down-line hospitals should be advised. Notify GPMRC to coordinate arrival/departure times with down-line medical facilities. Departures are authorized for medical facility "no shows" with GPMRC coordination if the facility has not or will not arrive by the scheduled departure time and only routine patients are involved. **NOTE:** For urgent, priority, and special patients, GPMRC approval must be obtained prior to departing in the event of a medical facility "no show." Early departures may be authorized on a case-by-case basis with prior coordination through the TACC/GPMRC (see AFI 11-2C-9V3, paragraph 6.31.).

10.6.14. (Added) Life Support and Dash 21 Equipment Documentation. The Charge Medical Technician (CMT) will inventory all aircraft life support equipment for aeromedical evacuation missions. The AC is responsible for the inventory on all other missions and may delegate that duty to another qualified crew-member (see AFI 11-2C-9V3, paragraph 6.51.).

10.6.14.1. (Added) Pre-positioned Life Support Equipment. All aircraft will have the life support equipment in the quantities listed in **Table 10.4. (Added)** (see AFI 11-2C-9V3, paragraph 6.51.3.).

Table 10.4. (Added) Prepositioned Life Support Equipment.

Equipment	Quantity
Personal Breathing Equipment	8
Airborne Warning and Control System	5
Quick-Dons	3
Smoke Mask	1
Restraint Harness	1
Survival Kit	1
20-Man Life Raft	3
20-Man Life Raft Outer Kit	3
Demonstration LPU Kit	1
EPOS	50
Life Preserver Set (LPS)	1
NOTE: LPS contains the following	
Adult/Child Life Preservers	50
MB-1 Adult Casualty Life Preservers	20
LPU-6/P Infant Cots	05

10.6.14.1.1. (Added) Adult/Child Life preservers will be placed under each patient/passenger seat and available at all crew positions. The remaining life support equipment will be stored in the patient's coat closet.

10.6.14.1.2. (Added) Twenty-Person Life Rafts. All missions will carry three 20-person life rafts in addition to those items listed above. Two life rafts will be placed under the central storage area; one will be placed on the floor of the patient coat closet.

10.6.14.2. (Added) The three-step ladder will be placed in the crew storage compartment.

10.6.14.3. (Added) The GPMRC is aware that litters may be limited to a "three-high" configuration if, in support of litter patients, extra medical supplies and/or medical equipment must be secured on a litter. If litter space is lost due to storage needs, notify the GPMRC of reduced litter space.

10.6.15. (Added) C-9A Litter Patient Door/Operation. In accordance with TO 1C-9A-1-CL-4, *AET's Abbreviated Checklist, Flying Crew Chiefs*, only qualified crewmembers and maintenance personnel who have received appropriate formal training on the litter ramp and door operation may operate the litter patient door and ramp. It is possible for the litter patient door open annunciator light to indicate that the

door is closed and locked when it is not. This situation can happen when the door is closed, but resting on the doorjamb and not actually locked. Adhere to the following procedures:

10.6.15.1. (Added) Local Flights. The pilot making the external walk-around inspection will ensure that both external manual latch controls indicate the door is latched. The same individual will perform a visual check of the latches and lock pins located on the inside of the litter patient door to ensure the latches are in the closed position and the lockpins are in the locked position. This inspection will be reported to the AC prior to taxi.

10.6.15.2. (Added) Airevac Missions. The AC will appoint a crewmember, normally the flying crew chief or CMT, to inspect the litter patient door both inside and outside to ensure that it is properly closed and latched. The crewmember will report the doors status to a pilot prior to takeoff.

10.6.15.3. (Added) The AC will brief flight and medical crews on the above procedures prior to every mission.

10.6.15.4. (Added) An Over-Weight Litter (OWL) may be carried as standard equipment on all AE missions. The MCD will decide if the OWL will be carried in the main cabin or in the forward cargo hold.

10.6.15.5. (Added) An Emergency Equipment Litter (EEL) may be placed on all C-9 AE operational and training missions. Use and placement of the EEL is left to the discretion of the MCD.

10.6.15.5.1. (Added) If an EEL is used, crews will be responsible for setting up the cantilever arms, litter, and preflight of equipment. For charging purposes, equipment will be plugged into aircraft power for the entire duration of the mission. If additional electrical outlets are needed, utilize the ECAS cord. In lieu of an EEL, medical equipment should be stowed in central stowage in flight.

10.6.15.5.2. (Added) Equipment guidance not found in AFI 41-309, *Aeromedical Evacuation Equipment Standards*, can be located in the 375 AES Medical Logistics Supplement Index publications kit. The AECMs will use the Emergency Equipment Litter Guide, located in the Supplement Index, for guidance to set up the EEL.

10.6.15.5.3. (Added) The MCD's medical mission planning should allow for the setup of an emergency litter for in-flight medical emergencies. Keep in mind that equipment must be secured for landing, the emergency patient should be at a working level for CPR, and, if needed, crewmembers may need to be secured to the litter for landing.

10.6.15.5.4. (Added) The AE medical equipment should be stored in central stowage for security reasons during RON stops and will be stored in central stowage at home station. IME will remove rechargeable emergency medical equipment (LifePak 10 batteries and IMPAC suction) from the aircraft on mission termination to be charged IAW AFI 41-309. The IME Shop will replace all nonemergency medical equipment monthly with a one-for-one switch. The IME personnel will be at the aircraft for equipment support during all missions departing and returning home station.

10.6.16. (Added) Closing or Opening the Aft Stairway. Closing or opening the aft stairs will not be routinely accomplished from outside the aircraft. If it is necessary to close or open the aft stairs from the outside before closing the stairs, ensure no one is on the stairs aft of the aft cabin door by making visual/verbal contact with the crewmember providing coverage of the aft section of the aircraft.

10.6.17. (Added) Hand-Carried Baggage. All patients' hand-carried baggage will have a DD Form 600, **Patient's Baggage Tag**, attached. This policy will expedite returning hand-carried baggage in the event an article is inadvertently left on the aircraft due to tail swaps, ground evacuations, etc. Crewmembers

must ensure that all hand-carried baggage fits underneath the seat or is properly stowed in the cargo compartment. Articles will not be placed on top of the life rafts/preservers or impede emergency equipment in the patient coat closet.

10.7. (Added) Fuel Documentation. The AF Form 664, **Aircraft Fuels Documentation Log**, must be used to document fuel purchases. The flying crew chief will complete AF Form 664 on off-station missions; pilots will complete the form for flights without flying crew chiefs. Spell out the airfield name and also use the ICAO Identifier. Personnel will ensure the fueling station location is legible on the fueling receipt. This step will make it easier for tracking purposes if a discrepancy occurs. Bring the AF Form 664 into the Maintenance Debrief at the end of the day for trainers or at the end of the mission for airevac and cross-country trainers. The AC is responsible for the completeness, accuracy, and legibility of this form (see AFI 11-2C-9V3, paragraph 8.6.3.1.).

10.8. (Added) Training Policy.

10.8.1. (Added) The AC touch-and-go certification will not be routinely used. Certification must be approved by the respective OG/CC, in addition to the squadron commander (see AFI 11-2C-9V3, paragraph 9.6.11.).

10.8.2. (Added) Flight Following. When conducting local area transition training at other than Scott AFB and MidAmerica Airport runways, instructors will inform the 375 AW/CP of the training location prior to departing Scott AFB, and the instructors will monitor the CP frequency while airborne if feasible. Off-station trainers will report landing times and maintenance status for flight following purposes to the CP.

10.9. (Added) Forms Prescribed. The 375 AW Form 2, **Loading Schedule (C-9A Aircraft)**, will be used to ensure the aircraft stabilizer setting is correct. The 375 AW Form 19, **C-9A Flight Planning Log**, will be used for planning C-9 missions. The 375 AW Form 19 shows scheduled takeoff and arrival times, planned and required fuel loads, and planned patient loads. The 375 AW Form 50 is used for computing aircraft stabilizer setting and relaying arrival information. The AMC Form 278, **Debriefing and Recovery Preplan**, should be completed at the end of each mission with maintenance debriefing personnel to ensure complete communication between Operations and Maintenance concerning aircraft suitability for operational missions (see AFI 11-2C-9V3, Chapter 8.).

10.10. (Added) Forms Adopted. AF Form 847, **Recommendation for Change of Publication**; AF Form 4022, **Aircrew Training Folder**; DD Form 1896, **JetFuel Identaplate**

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

DOD 4515.13-R, *Air Transportation Eligibility*

AFI 11-2C-9V3 CL-3, *Patient/Passenger Briefings Guide*

AFI 11-301, *Aircrew Life Support Program*

AFI 11-401/AMC1, *Aviation Management*

AFI 41-309, *Aeromedical Evacuation Equipment Standards*

AMCI 10-202V6, *Mission Reliability Reporting System (MRRS)*

SAFBI 13-201, *Airfield Management and Air Traffic Control*

TO 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding (ATOS)*

TO 14P3-1-112, *Maint Instr – Nomex Flt Gr Coveralls, Types CWU-27/P and CWU-28/P and Gloves, Type GS/FRP-2, Jacket, Flyers Summer Type CWU-36/P, Jacket, Flyers Winter Type CWU-45/P, Hood, Winter, Flyers (CWU-17/P Jacket), Trousers, Flyers, Extreme Cold Weather, CWU-18/P*

TO 1C-9A-1, *Flight Manual (Douglas Aircraft)*

TO 1C-9A-1-1, *Flight Manual—Performance Data*

TO 1C-9A-1-CL-4, *AET's Abbreviated Checklist, Flying Crew Chiefs*

AS 016, *Special Purpose Clothing and Personal Equipment*

Douglas Service Special Supplement-DC-9 Series 20/30/40 Fuel Conservation

Abbreviations and Acronyms

ACM—Additional Crew Member

AE—Aeromedical Evacuation

AECM—Aeromedical Evacuation Crew Member

AFRC—Air Force Reserve Command

ASTS—Aeromedical Staging Squadron

CONUS—Continental United States

CP—Command Post

EEL—Emergency Equipment Litter

EPOS—Emergency Passenger Oxygen System

FCC—Flying Crew Chief

FCF—Functional Check Flight

FCG—Foreign Clearance Guide

FL—Flight Level

FLIP—Flight Information Publication

FSSZ—Fuel Servicing Safety Zone

GPMRC—Global Patient Movement Requirements Center

IFR—In-Flight Refueling

IME—In-Flight Medical Equipment

IP—Instructor Pilot

KIAS—Knots Indicated Air Speed

KT—Knot

LPS—Life Preserver Set

MEGP—Mission-Essential Ground Personnel

OG—Operations Group

OCONUS—Outside the Continental United States

OWL—Over-Weight Litter

RON—Remaining Overnight

TACC—Tanker Airlift Control Center

Attachment 5 (Added)**375 AW GUIDE TO OCONUS OPERATIONS**

A5.1. (Added) This guide should aid aircrews in preparation for operating outside the CONUS. It is not meant to replace currently published documents such as Flight Information Publications (FLIP), Foreign Clearance Guides, Air Force Instructions or Air Mobility Command Instructions.

A5.2. (Added) Information on hazards, restrictions, and limitations not found in other publications is solicited from all operators. All units/personnel are tasked to submit pertinent data to update this summary whenever a condition is identified that will adversely affect our operation. After each scheduled mission outside the CONUS (except Canada), submit an after-action report with a brief description of minor problems and items of interest (*would like this to be brief by exception if possible / jrv*) to HQ AMC/TACC/XOO, DOA and DOV. For 375 AW- or 932 AW-generated missions, submit a report to 375/932 AW/OGV only.

A5.3. (Added) General Information. It is important that you research all the airfields you will transit, to include possible alternates. Since DoD approach plates only provide limited coverage of Central and South America, the Caribbean and some European international airfields, you may need to obtain approved Jeppesen Approach Plates. The DoD coverage may include some approaches to the airfields you will transit, but not to all available runways. In some cases, DoD has a published non-precision approach to an airfield when Jeppesen has an instrument landing system. Jeppesens are maintained at HQ AMC/DOT for emergency use only. Crews must arrange for their own Jeppesens through local purchase. In any case, only HQ “approved” non-DoD products may be used for navigation.

A5.3.1. (Added) Certification/Restricted Airfields. Headquarters AMC Airfield Suitability and Restrictions Report (ASRR) has designated certain fields as certification, restricted or daylight only, due to unique hazards or operating procedures. Crews may also call the AMC CP or TACC for the latest changes and updates that are available from GDSS. The 375 OG certification airfields are listed in this supplement (see AFI 11-2C-9V3, paragraph 10.5.17.2.).

A5.3.2. (Added) Many additional sources are available on information about non-CONUS airfields. Units should maintain continuity books with information such as parking location, hotels, transportation, etc., to help future crews. The information should be updated as part of the after-action reports provided by each crew. The 375 AW, 932 AW, and 375 OG/OGV will file these reports and can provide a summary of this information on request. Reports are also posted on the 375 OG/OGV website at:

<https://www.scott.af.mil/375aw/375og/375ogv/ogvhome.htm>.

A5.3.3. (Added) Command and Control. Aircrews will pass command and control information, as directed, to HQ AMC/TACC. The USAF Global HF/SSB Stations listed in FLIP include a chart depicting areas of coverage and suggested frequency band selection based upon time of day. Keep in mind that atmospheric and other factors affect reception, making it necessary to attempt contact on all available frequencies. On the ground, you can call your controlling agency from embassies, consulates, or have them send a message to HQ AMC/TACC for you.

A5.3.4. (Added) Many ATC agencies, particularly those operating a nonradar facility, do not have the capability to quickly translate coordinates in a position report. With the exception of oceanic position reports, when asked for your position, it is usually easier to give your position as a radial and DME from a navigation aid or point on an airway, rather than LAT/LONG from your FMS/GPS/INS. Coordinates are appropriate when passing a PIREP to weather personnel who may not be familiar with nav aids by name.

A5.3.5. (Added) Be prepared for communication difficulties. Language barriers, accents, and unfamiliar names make radio communication a challenge. Listed below are some techniques for minimizing problems:

A5.3.5.1. (Added) Monitor the radios closely. If you do not hear the controller for a lengthy period, try a radio check.

A5.3.5.2. (Added) Monitor your position on the en route charts. As you approach FIR/UIR and sector boundaries, expect a frequency change. If this step does not happen, query the controller. En route charts usually have the sector controller's frequencies annotated on them.

A5.3.5.3. (Added) If you are unable to raise the controller, try disabling the squelch function on your radio. You can also attempt a relay with another aircraft on frequency. Many regions have listed a VHF frequency that is monitored by other aircraft operating within that area and can offer assistance with relaying information and position reports.

A5.3.5.4. (Added) Tune and monitor VHF/UHF guard. Many foreign civil ATC facilities do not use VHF guard. If you are in a bind, UHF guard may at least help you contact with a military facility that can relay information or get a usable VHF frequency for you.

A5.3.5.5. (Added) Be prepared when calling a new agency. Have a position report prepared, especially if you are operating in a nonradar environment. Being familiar with your filed routing and nav aids along your route will make it easier to copy clearances and reroutes.

A5.3.6. (Added) Aircrews will carry terrain charts for intended destinations.

A5.4. (Added) Flight Planning. While this guide cannot provide an all-inclusive checklist for flight planning, it will attempt to highlight several publications, some of the shortcomings, and special- emphasis items to address during the planning phase of your mission.

A5.4.1. (Added) Mission Tasking. If diplomatic clearance is required for the routing, destination, or alternate, the clearance number and routing specified in the diplomatic clearance request should be available to the crew. Some airports cannot be used as alternates and this information may be published in the IFR Supplement, Area Planning or Foreign Clearance Guide. The diplomatically cleared routing may not be the preferred or standard routing. This routing could be because of political reasons or simply because the person sending the clearance request was not aware of preferred routings. If time permits and a routing is specified in your diplomatic clearance, try to ensure that the computer flight plan request includes your cleared routing. In any event, file and fly the routing specified in the diplomatic clearance. The diplomatic clearance may also specify the use of a special call sign. If so, this call sign will be used and filed on the flight plan for that particular leg.

A5.4.2. (Added) Foreign Clearance Guide (FCG). Check both the unclassified and classified editions for your destination and for countries you will overfly along your route. Ensure that you are entering the destination country at an Aerodrome of Entry at a time when Customs personnel are available and that you will have the required paperwork for customs and immigration. Check the valid time for diplomatic clearances if needed. Some times are valid from 0001L on the date requested, and early or late arrival is no problem. Other times are valid for meeting the requested time at the FIR boundary, no earlier. The expiration times vary and may be by date, requested time + 24 hours or longer. Look for restrictions to imports and other limitations that you may need to brief to your passengers, such as no photography on the flight line, or whether military or civilian government employees require an official passport or visa. A handy item to jot down is the phone number of the embassy, consulate or defense attaché, in that country. They

can be very helpful when schedule changes, maintenance or other problems arise, and you need access to DSN to contact your controlling agency. The FCG also addresses spraying for insects before landing. If you need to spray, be sure you get the proper insecticide before leaving home station.

A5.4.3. (Added) Flight Information Publication Area Planning. Use the volume that is appropriate for the area of operation. Check Section A, Regional Supplementary Procedures, Section B, FIR/UIR Supplementary Procedures, and Section C, National Supplementary Procedures, for the country you are traveling to and for those you overfly. Look for any special flight planning information, such as required remarks on flight plans, ETAs for boundaries that may be required, and transponder settings to be used. The Route and Area Restrictions Section and Additional Information Sections contain information applicable to over flight and when landing in that country. Finally, Supplementary Airport Remarks may be published for your destination or alternate. In some cases, the preferred routing between two countries is published in the listing for the country you overfly. Because information is spread out between the three sections and under many titles, area planning is full of "gotcha" types of information. A great example is a required radio call 5-minutes prior to entering Barranguilla FIR (Columbia), with the warning that "ATC will not offer safe control over aircraft that do not comply." You may easily miss that; it is buried under the heading "Position Reporting" in National Supplementary Procedures for Columbia. Don't forget the Planning Change Notices filed in the front of the book. They are published every 8 weeks and are cumulative (i.e., 16 weeks after a new Area Planning is published, there will be two PCNs to check until the next AP comes out at the 24-week point).

A5.4.4. (Added) Once you have studied all of the FLIP, FCG, etc., you will find yourself with a wealth of information. One tip to ensure making the right radio calls and squawking the right codes is to highlight points on your computer flight plan or AF Form 70, **Pilot's Flight Plan and Flight's Log (PDF)**, and note the requirements in the margin. It can also be helpful to take a few extra minutes when preparing for descent and review your notes on the destination and be sure you are prepared not only for the approach and landing, but also for your reception by customs and immigration officials at your destination.

A5.4.5. (Added) Intelligence. Arrange for an Intelligence briefing before your flight. Try to schedule it as soon as you know about the mission to give Intelligence personnel time to adequately research your destination. Air Force Instruction 11-401/AMC1, *Aviation Management*, requires the AC to certify that he or she has reviewed the Airfield Threat File. This action is done by initialing and dating your FCIF card.

Attachment 6 (Added)**EPOS BRIEFING GUIDE**

A6.1. (Added) The Emergency Passenger Oxygen System (EPOS) Briefing Guide, **Table A6.1. (Added)**, will be used to brief passengers and patients. This briefing guide will be reproduced and inserted behind each AECM's AFI 11-2C-9V3 CL-3, *Patient/Passenger Briefings Guide*. A copy will also be placed in the mission kit for briefings in the event no AECMs are part of the crew complement and passengers are carried.

Table A6.1. (Added) EPOS Briefing Guide.

EPOS BRIEFING

1. In addition to our passenger oxygen provisions, this aircraft is equipped with the Emergency Passenger Oxygen System or EPOS. The EPOS is intended for use in the event of an in-flight or ground egress emergency in a smoke or toxic fume environment. Each seat is equipped with an EPOS located (state location).
2. Please direct your attention to _____, who will demonstrate donning the EPOS. When directed to don the EPOS, open the storage pouch and remove the vacuum-sealed bag by pulling the red tape. Remove the EPOS hood from the bag and unfold. Hold the EPOS hood with the neck seal (silver end) facing you. Pull the red ball with one hand while holding the oxygen cylinder with the other hand. The red ball and lever must pull free of the oxygen bottle. Spread the neck seal with palms facing each other. Push both hands inside to stretch it open. Pull the hood over your head and neck. Breathe normally.
3. While wearing the hood, you should hear a hiss for about 5 minutes after activating the oxygen cylinder. This lets you know that oxygen is flowing. If you do not hear a hissing sound after pulling the red ball, immediately remove the EPOS from your head. Sufficient oxygen will be supplied for an extended period of time when the hood is fully inflated.
4. Remove the EPOS when the hood collapses against your face, you are clear of the hazard, or you are directed to do so by aircrew personnel. Ensure your own EPOS is properly donned and operating correctly before attempting to assist others.

Attachment 7

C-9A FUEL CONSERVATION GUIDE

A7.1. (Added) Since we are all responsible for conserving resources, the following techniques should be used, whenever possible, while operating the 375 AW C-9s.

A7.2. (Added) Ground Operations.

A7.2.1. (Added) Delay starting the auxiliary power unit (APU) until required to ensure patient comfort. When conditions at an en route station permit, request external power and shut down the APU. The APU burns an average of 350 pounds (52 gallons) of JP-8 per hour. At the military rate of 78 cents per gallon (FY98 cost), the estimated cost equates to roughly \$40 per hour. This cost may seem petty on the surface, but conscious effort from all pilots and flying crew chiefs could easily save 3 hours of APU use on all the C-9s flying on any given day. When taken over the period of 1 year, this action equates to saving over \$40,000 a year in aircraft fuel cost alone, not counting the maintenance savings of extended APU life. In comparison, the external electrical power cart uses on average 3.5 gallons per hour of Number 2 Diesel Fuel, at a fuel cost of a little more than \$3 per hour. Flying crew chiefs can greatly help the fuel conservation effort in this area by aggressively requesting and suggesting external power cart use at opportune locations.

A7.2.2. (Added) Single engine taxiing with delayed engine starts can save considerable fuel. The C-9 burns roughly 6 gallons per minute while taxiing. Both engines burn a combined 800-100 pounds of fuel per hour providing minimal thrust. A single engine will provide a greater amount of thrust per pound of fuel flow; here in lies the fuel savings. This taxi burn rate will not be exactly cut in half during single engine taxi; however, we could easily save 20 gallons at some locations because of long taxi times or ground delays. Plan on starting the second engine to provide for sufficient warm-up and so the "Before Takeoff" checklist can be completed without being rushed. Consider the safety tradeoff of having the other pilot "heads down" in the cockpit during a high workload or busy/congested taxi route when considering a delayed engine start. Having the flying crew chief in the cockpit for an extra set of eyes while one pilot is "heads down" is highly recommended. Flying crew chiefs can help the fuel conservation effort by aggressively querying about or suggesting single engine taxi procedures prior to engine start.

A7.2.3. (Added) Single engine taxi after landing should be the norm. However, do not shut down an engine unless it has been stabilized in idle for at least 2 minutes to prevent premature turbine and bearing degradation. The 2-minute stabilization time at idle is critical to prevent premature engine overhaul. In addition, if the engine was operated above 85 percent N2 rpm, Dash-1 guidance requiring a 5-minute cool-down period must be followed.

A7.3. (Added) In-Flight Operations.

A7.3.1. (Added) Keep unidentified fuel to a minimum. Expect to burn 3 to 4 percent of your tankered fuel every hour. This is equal to 150 to 250 pounds per hour at cruise.

A7.3.2. (Added) The Long Range Cruise Profile is to be used, whenever feasible. As a rule of thumb, "whenever feasible" means:

A7.3.2.1. (Added) The mission is not behind schedule and en route delays are not expected.

A7.3.2.2. (Added) Use of the Long Range Cruise profile will not significantly impact the mission schedule.

A7.3.2.3. (Added) The particular mission leg does not have a head-wind factor.

A7.3.3. (Added) Climbing to higher than flight-planned altitudes can yield the advantages of more nautical miles (NM) per 1,000 pounds of fuel and a longer time on the descent profile. The formula that the 375 AW C-9A Computer Flight Planning System uses [$4 + (\text{Distance}/10)$, rounded to the higher altitude if not correct for direction] assumes departure from a sea-level airport. Higher altitudes than planned can be beneficially achieved when departing the higher elevation airports on legs less than 300 NM. This technique is especially beneficial when both the departure and arrival airfields are more than 1,000 feet MSL. For example, consider the 215 NM leg from Mountain Home AFB ID to Hill AFB UT, flight planned at FL250. Since Mountain Home's elevation is 3,500 feet, you can easily climb to FL290 and still get cruise time at that level while achieving a higher TAS and more NM per pound of fuel than FL250. This option should always be considered on legs similar to the example when (1) no significant ATC altitude hold-downs have occurred, and (2) no significant increase in head winds will occur. Similarly, consider your destination field's elevation when considering your descent point to stay as high as you can, as long as you can. The flight planning "routes database" is being updated with higher altitudes on all legs similar to the example. This action is to be done as the routes are used. If you find a route where a higher altitude can be used, give the flight planners some feedback.

A7.3.4. (Added) Changing flight planned altitude to take advantage of more favorable winds should also be considered. As a rule of thumb, change altitude if you can gain greater than a 5-kt/per 1,000 feet wind advantage, when using Long Range Cruise or 8 kt/per 1,000 feet using .78 cruise. This action can be used to the best advantage on some of our westbound legs to "duck under" high jet stream-associated head winds during the winter months.

A7.3.5. (Added) Use the appropriate Cruise Charts whenever possible, and readjust the power setting to maintain the chosen speed/Mach Number Cruise Profile as fuel burns off (approximately every 20 minutes). Fuel savings of over 200 pounds per hour can be achieved by maintaining the proper Mach number on our longer legs.

A7.3.6. (Added) An optimum descent profile can have a profound impact on fuel consumption. Fuel savings occur when you "stay as high as you can, as long as you can" to a point you can use an idle 250 knots indicated air speed (KIAS) descent. Actually, just climbing to the optimum altitude and starting an immediate idle 250 KIAS descent and only spooling up the engines at 1,000 feet above ground level prior to landing, is the ultimate in a C-9 fuel savings profile. The ATC constraints, weather, and individual aircraft's pressurization system often limit use of these profiles, but the basic techniques can be used during all descents. In keeping with the "high as you can, long as you can" philosophy, simultaneously reaching an ATC crossing altitude and distance restriction saves fuel over reaching the altitude early and adding thrust to "drive" to the crossing restriction point. Even using drag devices with the throttles back to reach an altitude restriction will save fuel over "driving" to a restriction point. You can save fuel by delaying configuration and engine spool up in the terminal area prior to landing by keeping a slightly higher descent profile and using configuration to lose excess altitude. Fuel savings end during the final approach phase, never sacrifice a stabilized approach or accept excess threshold speed. Begin your fuel-saving techniques again when clear of the runway. Using flaps 40 degrees for landing will save fuel due to decreased drag and thrust requirements, but the tradeoff is increased landing distances, brake wear, and possible reduced patient/passenger comfort. Flaps 40-degree landings should not be used if above normal or abrupt braking will become necessary to safely stop the aircraft or make desired runway exits.

A7.4. (Added) As a final word, fuel conservation should always be a consideration; however, never at the expense of safety. Always ensure enough fuel is available for planned flight time with appropriate

reserves. Never put yourself in a position where a lack of fuel forces you to make a bad decision or causes unnecessary disruption to the mission. The above information was extracted from TO 1C-9A-1, TO 1C-9A-1-1, and *Douglas Service Special Supplement-DC-9 Series 20/30/40 Fuel Conservation*.

SCOTTY E. LEWIS, Colonel, USAF
Commander, 375th Operations Group