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FUELS MANAGEMENT

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This instruction implements AF Policy Directive (AFPD) 23-2, *Management of US Air Force Bulk Petroleum and Related Products*, Department of Defense Directive (DoDD) 4140.25, *DoD Management Policy for Energy Commodities and Related Services*, and the Defense Energy Support Center (DESC) Interim Policies and Procedures. It provides managers at all AF activities with policy and procedures for fuels operations. This instruction applies to all Active Duty, Reserve, Guard, and Civil Air Patrol personnel that receive, store, issue, perform quality control, and/or account for aviation fuels, ground fuels, cryogenic fluids, and missile propellants. Certain fuel accounts with small mission requirements may be exempt from certain provisions of this instruction with their Major Command (MAJCOM) approval. The use of any specific manufacturer name, commercial product, commodity, or service created by this publication does not imply endorsement by the Air Force. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at https://afrims.amc.af.mil/rds_series.cfm. Defense Energy Support Center (DESC) requires that

Defense Working Capital Fund (DWCF) records be maintained in accordance with (IAW) DESC-P-3, *Document/Data Control and Retention*. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*, and route AF Form 847s from the field through the appropriate functional chain of command.

(ANG) This supplements implements and extends the guidance of Air Force Instruction (AFI) 23-201, *Fuels Management* dated 1 December 2010. The AFI is published word-for-word without editorial review. This supplement describes ANG procedures for use in conjunction with the basic AFI. This supplement applies to Air National Guard (ANG) units that receive, store, issue, quality control, and account for aviation fuels, ground fuels, cryogenic fluids, deicing fluids, and missile propellants. When ANG units are mobilized or federally activated by their respective Major Command (MAJCOM), the gaining MAJCOM supplements apply. Units may supplement this AFI; however they cannot make policies less stringent than identified in the basic and this ANG supplement. All unit supplements will be coordinated and approved by NGB/A4RMF prior to final publishing. Upon receipt of this integrated supplement, discard the Air Force basic publication.

SUMMARY OF CHANGES

This interim change affects the below paragraphs. Significant changes include: clarification of mishap reporting procedures, establishment of tool control program and automated information technology management procedures, updated SERE training requirements for FARP and ABFDS personnel, deletion of Air Force Fuels Policy Directive references. A margin bar indicates newly revised material.

(ANG) This document is substantially revised and must be completely reviewed. Changes include: changing the Resource Control Center to the Fuels Service Center, updates to Fuels Working Groups, changes to the Fuels Management Flight Structure, and significant changes to the ABFDS and FARP training requirements.

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Chapter 1

THE FUELS MANAGEMENT FLIGHT

1.1. Objectives.

1.1.1. Provide a standard Fuels management organizational structure, see [Attachment 4](#). **NOTE:** MAJCOMs may approve deviations to the structure with prior coordination from HQ AF/A4LE.

1.1.1. (ANG) **NOTES:** 2. The ANG fulltime workforce utilizes duty titles found in attachment 4 during Unit Training Assemblies (UTA) only.

1.1.2. Improve fuels management quality and capability.

1.1.3. Ensure quality bulk petroleum products, cryogenic fluids, and missile propellants are issued safely and efficiently to using organizations.

1.2. Assigning the Responsible Officer (RO). The squadron commander appoints a RO IAW DoD 4140.25-M, *DoD Management of Bulk Petroleum Products, Natural Gas, and Coal*, AFI 23-111, *Management of Government Property in Possession of the AF*, and/or DESC Interim Policies and Procedures. Individuals must complete the Petroleum Logistics Management Course (PLMC) completion prior to being appointed as an RO. This PLMC requirement may be waived on a case-by-case basis by the Air Force Petroleum Agency (AFPET).

1.2. (ANG) Assigning the Responsible Officer (RO). Each unit will maintain the documentation officially designating the Fuels Superintendent as the Responsible Officer. PLMC must be attended within two years of being appointed the Responsible Officer. The appointing office will promptly advise Defense Energy Supply Center-Facilities and Distribution Management Inventory Division (DESC-N) of the name, rank/grade, and phone number of the Fuels Superintendent appointed as the Responsible Officer.

1.2.1. For contractor-operated bases, ROs, Terminal Managers (TM), and Property Administrators (PA) are assigned IAW DoD 4140.25-M and/or DESC Interim Policy and Procedures. Care and safekeeping of government property is assigned to the contractor by contract IAW DoD 4140.25-M, Chap. 10. In addition, the Functional Area Chief (FAC) or Quality Assurance Evaluator (QAE) will perform duties of a RO provided they have attended PLMC.

1.2.2. Contractors will maintain fuels accounting records IAW contract provisions, DoD 4140.25-M, Chap. 2, Section D and DESC Interim Policies and Procedures.

1.2.3. Contractor personnel responsible for management of fuels accounts are required to have completed PLMC.

1.2.4. At Government-Owned, Contract-Operated (GOCO)s, the squadron commander/equivalent will appoint in writing an E-6 or above or civilian equivalent to serve as PA to exercise those responsibilities identified in DoD 4140.25-M, Chap. 2, Section D. Personnel serving as a PA must have completed PLMC.

1.3. Supporting War Plans. Managers must be familiar with AFI 10-401, *AF Operations, Planning and Execution* and AFI 10-404, *Base Support and Expeditionary Site Planning*, when preparing their war plans.

1.4. Submitting Military Construction (MILCON) and Sustainment, Restoration, & Modernization (SRM) Projects.

1.4.1. The Fuels Management Team (FMT), consisting of the Fuels Management Flight Commander (FMFC) and the Fuels Manager (FM)/Superintendent validates the operational requirements of each project:

1.4.1.1. They review the DD Form 1391, *Military Construction Project Data*, for Defense Logistics Agency (DLA) MILCON projects and reviews Sustainment Restoration Modernization (SRM) projects prior to Base Civil Engineering (BCE) submission into the Automated Civil Engineering System-Project Management (ACES-PM) and forwarding to MAJCOM Liquid Fuels Engineers, Programmers and Fuels Management Staff's. Receive an informational copy of MAJCOM SRM projects.

1.4.1.2. Includes complete justification according to DoD 4140.25-M.

1.4.1.3. Appoints a person to monitor and track progress for all SRM/MILCON projects and coordinate with BCE.

1.4.2. MAJCOM Fuels Management will

1.4.2.1. Validate base-level requirements in accordance with AFI 32-1021, *Planning and Programming Military Construction (MILCON) Projects*. Maintain access to the DESC Sustainment Restoration Modernization/Energy (SRM/E) database showing MAJCOM concurrence/non-concurrence for audit purposes.

1.4.2.2. Ensure the following information is compiled and verified

1.4.2.2.1. Is the tank size the minimum required?

1.4.2.2.2. Storage capacity must be adequate to support Peacetime Operating Stock (POS) and War Reserve Material (WRM) requirements. Consideration to mission changes must be included in computation.

1.4.2.2.3. Does the project fulfill installation mission needs?

1.4.2.2.4. Does the DD Form 1391 clearly state what the mission is, i.e. strategic, enroute, power projection?

1.4.2.2.5. How does the project effect the operation?

1.4.2.2.6. Have better alternatives been considered?

1.4.2.2.7. Does the project meet eligibility requirements as stated in DoD 4140.25-M?

1.4.2.2.8. Does the project fit the definitions for MILCON as stated in DoD 4140.25-M?

1.4.3. Coordinate with MAJCOM engineers and programmers to prioritize validated projects.

1.4.4. Forward a courtesy copy of the coversheet and DD Form 1391 to the AFPET with a prioritized listing of the projects. The AFPET will consolidate the projects and forward the MILCON package to HQ AF/A4LE for coordination.

1.4.5. MAJCOMs and Installation staffs involved in the SRM process should immediately obtain a SRM-E account (<https://srme.rkeng.com>).

1.4.5.1. All MAJCOMs and Installation staffs should keep the SRM-E database updated with all deficiencies and supporting information allowing DESC and DLA to properly forecast funding requirements.

1.4.5.2. Each deficiency submitted within SRM-E must contain a strong descriptive justification, supporting documentation, a facility real property number, and a Base / MAJCOM priority.

1.4.6. The AFPET chairs the AF pre-Installation Planning Review Board (IPRB) to prioritize the AF projects and submit to HQ DLA/DESC.

1.4.7. The AFPET represents the USAF on the DESC-chaired IPRB, as a voting member, to prioritize DLA MILCON projects.

1.5. Reporting Fuel-Related Mishaps.

1.5.1. The FMT:

1.5.1.1. Submit an initial Mishap Report through the AFPET website the within 24 hrs (preferably the same day) as the incident occurs as required by HQ AF/A4LE, AFPET, AFI 91-204, *Safety Investigations and Reports*, and AFI 10-206, *Operational Reporting*. Reportable fuel-related spill/mishap defined: Any fuel spill as a result of a mishap, or any event resulting in suspected/confirmed fuel contamination, fuel commingling, fuel spill, fire, product loss, fuel handling/equipment damage and/or failure, fuel vehicle accident, and fuel related personnel injury. If Automated Mishap reporter is unavailable at your location report, send Mishap to parent MAJCOM via fax or electronic message using the format provided in Attachment 11 of this instruction.

1.5.1.1. (ANG) Notify NGB Fuels office by phone prior to submitting a report through the Mishap Reporter. If Automated Mishap reporter is unavailable at your location, send Mishap to NGB Fuels Staff via fax using the format provided in Attachment 11 of this instruction. If spill/mishap occurs on the weekend or holiday, file report through Mishap Reporter and send a follow up e-mail to NGB Fuels Staff.

1.5.1.2. The web-based Mishap Report program automatically forwards notification to AF/A4LE, AFPET, and applicable MAJCOM Fuels Management Staff. FMT will forward all generated mishap reports of 25 gallons or more to their respective DESC Region within 24 hrs to satisfy DESC requirements

1.5.1.3. Provide a report update within 30 days through the AFPET Automated Mishap Reporter regarding final outcome of the investigation and lessons learned.

1.5.2. MAJCOM Fuels Management

1.5.2.1. Ensure their command bases report all mishaps as pre-defined. Validate the initial FMT mishap report and update status within 24 hours. **NOTE:** AFPET will not report mishaps to DESC without MAJCOM validation.

1.5.2.2. Disseminates lessons learned as cross-flow information within the command and to AFPET.

1.5.2.3. Validate report update to AFPET within 30 days through the AFPET Automated Mishap Reporter regarding final outcome of the investigation and lessons learned.

1.5.3. AFPET

1.5.3.1. AFPET shall provide notification to HQ DESC-WE when the validated incident involves a DESC reportable fuel spill: twenty-five (25) gallons or greater on land and/or any fuel spill (regardless of quantity) on navigable water which creates a water sheen.

1.5.3.2. Maintain and monitor the follow-up mishap status reports in coordination with the MAJCOM.

1.5.3.3. Jointly determine with MAJCOM Fuels Management whether mishap circumstances warrant on-site technical evaluation and formally request visit access to the incident location through the MAJCOM.

1.5.3.4. Coordinate with DESC for on-site visits/ investigations related to mishaps/fuels spills involving fuel facilities and/or when the incident will likely result in adverse environmental consequences or media coverage.

1.5.3.5. Advise the USAF fuels community of mishap trends and recommend corrective procedural and/or technical data changes, as necessary.

1.5.3.6. Prepare and distribute a monthly/annual (calendar year) mishap report trend and analyses.

1.6. Managing Inspection Discrepancies. The FMT:

1.6.1. Corrects all deficiencies and eliminates their causes.

1.6.2. Reviews all uncorrected vehicle, equipment, and facility discrepancies monthly.

1.6.3. Engages chain of command to correct unresolved discrepancies as required.

1.7. Controlling Personnel Quality. The FMT:

1.7.1. Interviews personnel within 30 days of arrival to review qualifications, past experience and future training needs.

1.7.1. (ANG) Interviews newly assigned personnel prior to completion of two Unit Training Assemblies to review qualifications, past experience and future training needs.

1.7.2. Reports any training or qualification discrepancies to the Squadron Training Manager.

1.8. Task Restrictions. The FMT:

1.8.1. Monitors individuals working eight or more continuous hours performing fuel and/or cryogenic handling operations for alertness and situational awareness.

1.8.2. Will not allow untrained personnel to perform fuels or cryogenics operations without task-qualified supervision.

1.9. Augmenting Personnel:

1.9.1. Only task-qualified personnel with AF Specialty Code (AFSC) 2F0X1, US Civil Service, US Contract employees, host national military/civilian, or sister service equivalent are allowed to perform fuels or cryogenics operations. Non-fuels personnel may augment as the second person for safety coverage after receiving fuels workplace specific briefing regarding their responsibilities.

1.9.2. Do not use Forward Area Refueling Point (FARP) operators for any mobility tasking other than FARP requirements.

1.9.3. DELETED.

1.10. Managing Fuel Contract Operations.

The Contracting Officer's Representative (COR) or PA for the contract (the FAC or QAE) works with the contracting office to

1.10.1. Perform a technical review of service contracts to ensure quality fuel support.

1.10.2. Coordinate all base fuels service contracts with MAJCOM Fuels Management, HQ AFPET and HQ AF/A4LE.

1.10.3. Ensure the contract specifies

1.10.3.1. Training and qualification meets AFSC 2F0X1 requirements.

1.10.3.2. Spot check evaluations and recurring certification are similar to AF requirements.

1.10.3.3. Performance requirement documents or performance work statements comply with this instruction, DoD 4140.25-M, AFMAN 23-110, *USAF Supply Manual* and AFI 31-601, *Industrial Security Program Management*.

1.10.3.4. The contractor will provide an organizational chart to illustrate how communications of all fuel support requirements are funneled to the Fuels Service Center (FSC).

1.10.3.5. A fully qualified single point of contact for coordinating, controlling, and directing fuel servicing operations. Ensures all customer requirements are fulfilled in a timely manner and off-specification or wrong grade of product is not issued to aircraft, equipment, or vehicles.

1.10.3.6. The QAE will monitor contractor performance IAW Occupational Safety and Health Administration (OSHA) Standards (see [Attachment 1](#) for a recommended list—list not meant to be all-inclusive). In addition, use AF Occupational Safety and Health (AFOSH) Standards as necessary.

1.10.4. Personnel filling Quality Assurance Evaluator positions must be AF Specialty Code (AFSC) 2F071, civilian equivalent or higher.

1.10.5. The QAE will monitor command and control capabilities to ensure fuel quality standards are met, and physical controls exist to prevent use of unserviceable equipment or product.

1.10.6. Fuels operations under contractor or Most Efficient Organization (MEO) will not deviate from this instruction. They will follow procedures outlined in this AFI, paragraph 1.20, to request relief from this instruction.

1.10.7. At locations where the Bulk Storage Facility are operated by DESC contract, a COR will be assigned to monitor contractor performance and compliance.

1.11. Special Tools, Equipment, and Facilities.

1.11.1. Requirements are specified in Allowance Standard (AS) 488, *Fuel Storage and Gas Generating Equipment/Storage Tanks and Maintenance Support Equipment*. As a minimum the following items shall be located in or near the Fuels Management Flight

1.11.1.1. A vehicle wash rack equipped with appropriate environmental controls.

1.11.1.2. A liquid degreasing machine capable of cleaning engines on mobile fueling equipment (make sure the discharge from the degreaser drains into appropriate environmental controls).

1.11.1.3. A compressed air source.

1.11.1.4. 10 or 20-ton capacity hydraulic jack.

1.11.1.5. Pneumatic impact wrench.

1.11.1.6. Approved static grounding post.

1.11.1.7. 10 or 20-ton capacity jack stands.

1.11.1.8. A multi-meter.

1.11.1.9. A tire dolly.

1.11.2. Facilities:

1.11.2.1. AFH 32-1084, *Facility Requirements* and MIL-HDBK-1022A, *Petroleum Fuel Facilities* describes requirements for constructing new facilities.

1.11.2.1. (ANG) ANG facilities will conform to ANG Handbook 32-1084, *ANG Facility Requirements*. This handbook supplements AF Handbook 32-1084.

1.12. Using Hydrants. Hydrant systems are efficient and should be used to refuel and defuel large aircraft.

1.12.1. Surveying Hydrant Use:

1.12.1.1. Conduct a joint survey every three years, in conjunction with refueling unit validation, with members from the Operations Group, Maintenance Group, the Mission Support Group, and Fuels Management Flight to determine the optimum hydrant and mobile refueler use ratio. Include manpower, equipment availability, and sortie rates; staff to wing commander for approval. **NOTE:** A joint survey is not required every three years when local procedures for managing hydrant utilization rates are published in a base supplement to this instruction and are reviewed annually.

1.12.2. Modification/Deactivation. Before modifying or deactivating hydrant systems, send a request to the MAJCOM that includes:

1.12.2.1. Capability of existing system.

1.12.2.2. Current and programmed fueling requirements.

1.12.2.3. Maintenance cost savings and/or avoidance, possible use of tankage, and proposed method of fueling support.

1.12.2.4. Coordinate request through BCE.

1.13. Managing Organizational Fuel Tanks. Follow the procedures in AFI 23-204, *Organizational Fuel Tanks*.

1.13.1. Use Business System Modernization-Energy (BSM-E) to schedule sampling of support tanks used for heating purposes. Provide a copy of area lab test results to the Fuels Environmental Coordinator.

1.13.2. Maintain a current list of all organizational fuel tanks and trained tank custodians in the FSC. Verify grade of fuel and tank custodian prior to fuel delivery from Fuels Management.

1.14. Vehicle Fuel Servicing. Use the military service station when practical. During contingencies or exercises, service vehicles by mobile fueling units as required. **NOTE:** All flexible fuel vehicles will operate using alternative fuel when available on the installation or within 5 miles or 15 minutes from the base gate, unless a Section 701 waiver has been coordinated through the parent MAJCOM and granted IAW with Energy Policy ACT 2005.

1.14.1. General Purpose Vehicles. These vehicles will refuel at the base service station, local vendor, organizational issue tank or mobile refueling unit when approved by the FMT.

1.14.2. Special Purpose Vehicles. Use a mobile refueling unit to service special purpose vehicles and Materiel Handling Equipment (MHE) that cannot easily travel to the base service station due to body design or propulsion method.

1.14.3. The FMT will develop procedures for authorizing and validating requests for mobile servicing.

1.15. Using Fuel Servicing Units:

1.15.1. See paragraph 5.14 for authorized refueling equipment.

1.15.2. Obtain MAJCOM approval to use aviation fuel vehicles to issue ground products for periods over 90 days.

1.15.3. Notify MAJCOM when using fuel servicing units to assist in environmental clean-up operations. Before returning them to normal service, ensure they meet quality control requirements outlined in T.O. 42B-1-1, *Quality Control of Fuels and Lubricants*.

1.16. Communication with Operators during Fuel Transfers:

1.16.1. Maintain two-way communication between pumping and receiving stations for all fuel transfers.

1.16.2. Use dedicated circuits (hot lines), extra telephone circuits, or outgoing call restrictions to ensure telephone contact in an emergency. Provide a loud bell, gong, horn or other signaling device outside and in high noise areas or maintain radio contact.

1.17. Establishing Fuels Operating Instructions (FOI) and Checklists. Assign individual identification numbers to FOIs and Checklists, review and document at least annually. Use the following guidelines. **NOTE:** The referenced FOIs are directive in nature and should be developed in accordance with AFI 33-360, *Publications and Forms Management*, and unit level guidance issued by the local publications manager.

1.17.1. FOIs:

1.17.1.1. Write FOIs to provide local procedures.

1.17.1.2. Do not duplicate information contained in other directives unless necessary to consolidate or emphasize.

1.17.1.3. Designate the fuels operations that require the mandatory use of locally developed checklists.

1.17.2. Checklists:

1.17.2.1. Write checklists in a simple, concise and comprehensive manner.

1.17.2.2. Keep them one page long, if possible.

1.17.2.3. Include emergency action procedures at the beginning of the checklist.

1.17.2.4. Make them bilingual, if necessary.

1.18. Maintaining Technical Orders (T. O.).

1.18.1. Establish an independent T.O. account with the base technical order distributing office. For smaller flights, it is acceptable to establish a sub-account from an existing T.O. account.

1.18.2. Maintain T.O.s required for individual base support requirements.

1.18.3. Maintain additional T.O.s required for training and deployments.

1.18.4. Maintain training and deployment T.O.s in current status at all times; do not mark as "For Training Use Only". Use electronic versions of T.O.s for training when available.

1.19. Reporting of Technical Data and Materiel Deficiencies.

1.19.1. Identify errors, contradictions, procedures requiring clarification and materiel deficiencies following procedures in T.O.s 00-5-1, *AF Technical Order System*, and 00-35D-54, *USAF Materiel Deficiency Reporting and Investigating System*.

1.19.2. See T.O. 00-5-1 for guidance on preparing AFTO Form 22, *Technical Manual Change Recommendation and Reply*.

1.20. Obtaining Waivers to This Instruction. Send requests for waivers to your MAJCOM. MAJCOMs may waive provisions of this instruction for up to 1 year and will send an information copy to HQ AF/A4LE. HQ AF/A4LE approves permanent waivers (deviations over one year). Make sure each request does the following:

1.20.1. Explains all circumstances that prevent compliance with this instruction.

1.20.2. Defines the exact limits of the waiver.

1.20.3. Specifies waiver duration.

1.20.4. Describes alternate procedure and explain how it will ensure safety.

1.20.5. Show local waiver request coordination.

Chapter 2

DUTIES OF ORGANIZATIONS INTERACTING WITH FUELS MANAGEMENT

2.1. HQ USAF. The Directorate of Logistics; Material Support, Vehicles, and Equipment Division (HQ AF/A4LE):

2.1.1. Establishes USAF policy for managing petroleum resources.

2.1.2. Provides staff supervision to implement management concepts outlined in this instruction.

2.1.3. Develops budget estimates and accomplishes other financial management responsibilities.

2.1.4. Provides representation to the DESC Component Steering Group (CSG).

2.1.5. Manages Logistics Education Advancement Program (LEAP) IAW [Attachment 3](#).

2.1.6. Chairs AF Installation Planning Review Board (IPRB). Hosted by AFPET annually prior to the DESC IPRB (approx Oct-Nov) to review and validate MILCON projects, implement Fuels Infrastructure policy, review SRM projects, and prepare AF inputs to the DESC IPRB.

2.1.6.1. AF-IPRB Core Members: AF/A4LE, AFPET, AFCESA/CESM, MAJCOM FMTs, MAJCOM Engineer.

2.1.6.2. AF-IPRB Advisors: DESC-F.

2.1.7. Chairs the Fuels Utilization & Training Workshop (U&TW). Hosted by AETC biennially or as directed by the 2F Career Field Manager to develop and implement fuels training requirements and material.

2.1.7.1. U&TW Core Members: AF/A4LE, AFPET, MAJCOM FMTs, 2F Training Manager (Schoolhouse Superintendent).

2.1.7.2. U&TW Advisors: AETC Training Manager, Fuels Officer Course Representative.

2.1.8. Chairs the Fuels Support Equipment & Vehicle Working Group (FSEVWG). Hosted by AFPET biennially, or more frequently as determined by the Fuels Career Field Manager, to review and develop vehicle and equipment policy, allowance standards, performance specifications, depot maintenance requirements, and technical development for AF fuels applications.

2.1.8.1. FSEVWG Core Members: AF/A4LE, AFPET, MAJCOM FMTs.

2.1.8.2. FSEVWG Advisors: WR-ALC/LES/LEE, 2F Training Manager (Schoolhouse Superintendent), Air Force Logistics Management Agency (AFLMA).

2.1.9. Chairs Air Force Fuels Services Day held in conjunction with DESC World-Wide or PETRO conferences as directed by the 2F Career Field Manager. AF/A4LE, AFPET, and MAJCOM FMTs are core members.

2.2. AF Petroleum Agency (AFPET):

2.2.1. AF service control point for MILCON and SRM programs.

2.2.1.1. AF MILCON Responsibilities

2.2.1.1.1. Coordinates with AF/A7C/P for the MILCON data call.

2.2.1.1.2. Establishes submission schedule for AF projects to ensure submissions meet the DESC data call.

2.2.1.1.3. Ensures MAJCOMs complete DD Form 1391 for MILCON consideration.

2.2.1.1.4. Provides technical assistance to base/MAJCOM personnel in preparing DD Form 1391s.

2.2.1.1.5. Reviews construction designs to ensure standardization/modernization consistency.

2.2.1.2. AF SRM Responsibilities

2.2.1.2.1. Manages Air Force wide SRM program, supporting MAJCOM/DRU for all capitalized fuels infrastructure.

2.2.1.2.2. Coordinates requirements and champions MAJCOM/DRUs priorities.

2.2.1.2.3. Coordinates all alternate fuel infrastructure concerns with MAJCOM, Air Staff, and DESC.

2.2.1.2.4. Monitors the SRM-E database to have current information regarding emergencies and when deficiencies reach the SCP level for review/acceptance/rejections/comments.

2.2.2. Manages the AF fuel, vehicle and equipment programs.

2.2.2.1. Consolidate and validate equipment/vehicle requirements and coordinate with item managers on funding/procurement programs.

2.2.2.2. Develops, validates and coordinates equipment/vehicle allowance standards with item managers.

2.2.2.3. Reviews, validates, and provides updates on equipment/vehicle T.O.s.

2.2.2.4. Provides item managers with detailed customer requirements to include technological advances for new buy programs.

2.2.2.5. Evaluates commercial-off-the-shelf equipment capabilities and coordinates requirements with MAJCOMs.

2.2.3. Provides plans and programs management analysis and oversight.

2.2.3.1. Collects, analyzes and publishes base fuel mishap reports and environmental incidents.

2.2.3.2. Provides trend analysis on data effecting or potentially effecting fuel operations.

2.2.3.3. DELETED.

2.2.3.4. Performs research for HQ AF/A4LE and shares knowledge with MAJCOMs.

- 2.2.3.5. Coordinates MAJCOM and Air Staff requests for DESC optimization studies.
- 2.2.3.6. Coordinates draft DESC publications and policy revisions with MAJCOM staffs and support agencies prior to submission to HQ AF/A4LE for staffing, approval and publishing.
- 2.2.3.7. Consolidates MAJCOM Energy Policy Act plans and validates against DESC capabilities for HQ AF/A4LE approval.
- 2.2.4. Manages the AF fuels requirement program.
 - 2.2.4.1. Validates, consolidates and coordinates annual fuel requirements with DESC and MAJCOMs.
 - 2.2.4.2. Validates and coordinates inventory levels of Peacetime Operating Stock (POS) with DESC annually.
- 2.2.5. Publishes the AF Fuels Directory annually and updates as required.
- 2.2.6. Service Control Point for AF fuel quality assurance/product engineering issues.
 - 2.2.6.1. Provides technical support and quality assurance for fuels, lubricants, chemicals, propellants, and gases worldwide.
 - 2.2.6.2. Manages 42B T.O. series for quality control guidance and operates the aerospace fuels area laboratories.
 - 2.2.6.3. Arranges contract testing on an emergency basis at designated locations.
 - 2.2.6.4. Performs product service engineering.
 - 2.2.6.5. Staff AFPET Technical Assistance Team which provides assistance to detect and correct deficiencies in product quality, handling procedures and fuel systems (**Attachment 12**).
- 2.2.7. Functions as AF lead for Fuels Automation.
 - 2.2.7.1. Manages AF testing of new systems and interfaces.
 - 2.2.7.1.1. Coordinate testing requirements with MAJCOMs and test locations.
 - 2.2.7.1.2. Provides test results to DESC with recommended improvements.
 - 2.2.7.2. Administers system change requests and AF recommended system upgrades.
 - 2.2.7.3. Provides acquisition, disposition and replacement instructions for Automated Information Technology (AIT) IAW Attachment 14.
 - 2.2.7.4. Provides oversight for BSM-E Helpdesk trouble reporting and facilitates resolutions with applicable agencies.
 - 2.2.7.5. Oversees AF rejects and coordinates with MAJCOMs for resolution.
- 2.2.8. Manages the Petroleum Resource Automated Management (PETROL RAM) program:
 - 2.2.8.1. Automatic Tank Gauging (ATG).
 - 2.2.8.2. Automated Fuels Service Station (AFSS).
 - 2.2.8.3. Mobile Automated Fuels Service Station (MAFSS).

2.2.8.4. Aircraft Data Collection/Fuels Dispensing Systems (ADC/FDS).

2.2.8.5. Pump and valve control.

2.2.9. AF liaison to DESC Operations Center during contingencies and exercises.

2.2.9.1. Staff the DESC Operations Center to provide assistance to the war fighter.

2.2.9.2. Performs fuel site surveys and technical assistance visits upon request.

2.2.9.3. Advises DESC on operational and product requirements affecting AF units.

2.3. Defense Energy Support Center (DESC):

2.3.1. The World-wide Integrated Materiel Manager (IMM) for bulk petroleum products IAW DoD 4140.25-M and Interim policies.

2.3.2. CONUS Defense Energy Office/Defense Energy Region (DEO/DER) monitors customer activity, capability, and operating practices.

2.3.3. In overseas areas, the COCOM Joint Petroleum Office (JPO) provides assistance to DESC for IMM responsibilities.

2.3.4. Furnishes DD Form 448, *Military Interdepartmental Purchase Request* (MIPR), for recurring environmental expenses and SRM IAW DoD 4140.25-M.

2.4. Major Command (MAJCOM), Field Operating Agency (FOA) and Operating Locations (OL):

2.4.1. All MAJCOMs, FOAs, & OLs

2.4.1.1. Provide guidance to ensure that assigned units comply with this instruction.

2.4.1.2. Review and validate fuels vehicle and equipment authorizations.

2.4.1.3. Plan and program for fuels facilities required to carry out organizational responsibilities.

2.4.1.4. Consolidate, validate, and submit fuel and missile propellant requirements to AFPET.

2.4.1.5. Promote supply, maintenance, security, and safety discipline in all fuels operations.

2.4.1.6. Obtain quotas for technical training.

2.4.1.7. Participates in energy conservation programs IAW current environmental legislation.

2.4.1.7.1. Consolidate base level Alternative Fuel Compliance Plans.

2.4.1.7.2. Coordinate with MAJCOM Vehicle Management to ensure compliance with the Energy Policy Act and Executive Orders goals.

2.4.1.8. Develop fuels support for contingency wartime plans.

2.4.1.9. Validate the War Consumable Distribution Objective (WCDO) document, and the Inventory Management Plan (IMP).

2.4.1.10. Develops fuels wartime requirements in accordance with the War Mobilization Plan (WMP) and sends courtesy copy to AFPET.

2.4.1.11. Manage the Fuel Mobility Support Equipment (FMSE)/Fuels Operational Readiness Capability Equipment (FORCE) storage, maintenance, and training.

2.4.1.12. Ensures units comply with all federal, state, local and foreign government environmental laws and regulations.

2.4.1.13. MAJCOMs will coordinate all equipment, refueling vehicles and FMSE/FORCE acquisition requirements through AFPET.

2.4.2. AFLMA is a field operating agency (FOA) assigned to HQ USAF/A4/7 and reports directly to HQ USAF/A4/7P. The AFLMA

2.4.2.1. Conducts logistics improvement studies to increase AF readiness and combat capability.

2.4.2.2. Develops, evaluates, and recommends improved concepts and methods to enhance logistics efficiency and effectiveness.

2.5. Squadron Commander:

2.5.1. Budgets for all Designed Operations Capability (DOC) statement and Air Expeditionary Force (AEF) tasked Unit Type Codes (UTCs) mission readiness training requirements.

2.5.2. Provides personal and safety equipment.

2.5.3. Reviews semiannual inspections.

2.6. Base Civil Engineer (BCE):

2.6.1. Maintains permanently installed fuels facilities and equipment, and provides 24-hour maintenance support.

2.6.2. Provides detailed base "Liquid Fuel System" schematic.

2.6.3. Provides the detailed schematic charts and Operating Instructions (OI) for each permanently installed fuel facility.

2.6.4. Provides certified base pipeline inventories (capacity in US gallons) and gauging charts (in 1/8-inch increments and US gallons) for each storage tank designated by Fuels Management.

2.6.5. Paints, marks and color codes permanently installed fuel facilities to comply with MIL-STD-101, *Color Code for Pipelines and for Compressed Gas Cylinders*, MIL-STD-161G, *Identification Methods for Bulk Petroleum Products Systems Including Hydrocarbon Missile Fuels* and AFOSH STD 91-501 *AF Consolidated Occupational Safety Standard*, Chap. 20.

2.6.6. Provides emergency power for fuels facilities IAW AFI 32-1063, *Electrical Power Systems*.

2.6.7. Provides or contracts vegetation control and grass cutting in fuels management areas (includes dikes and cut and cover tanks).

2.6.8. In coordination with Fuels Management, establishes a winterization program to remove snow and prevent water accumulation in tank roof drains.

2.6.9. Inspects, cleans or deactivates tanks and removes tank bottoms and sludge. **NOTE:** Fuels Management personnel do not assist in removing manhole covers or engage in any task associated with tank inspection or cleaning. See T.O. 37-1-1, *General Operation and Inspection of Installed Fuel Storage and Dispensing Systems*.

2.6.10. Performs corrosion control on fixed facilities.

2.6.11. Maintains a war reserve level on fixed system filter separator elements.

2.6.12. Provide a sunroof over liquid oxygen (LOX) and liquid nitrogen (LIN) storage tanks.

2.7. Aircraft Maintenance:

2.7.1. Coordinates refueling support requirements and schedules maintenance activities to minimize any delay of refueling support during aircraft servicing operations.

2.7.2. Furnishes weekly flying schedules and promptly notifies the FMT of schedule changes.

2.7.3. Assists fuels personnel in positioning refueling equipment.

2.7.4. Connects and disconnects nozzles.

2.7.5. Assists in filling liquid oxygen and nitrogen servicing carts.

2.7.6. Establishes aircraft fuel servicing priorities, when not outlined in the In-Garrison Expeditionary Site Plan (IGESP).

2.7.7. Parks or tows aircraft to hydrant outlets.

2.7.8. Provides reason for defuel, estimated quantity and fuel grade to the FSC.

2.7.9. Prior to defuel, verifies the last grade of fuel serviced to the aircraft by checking AFTO Form 781F, *Aerospace Vehicle Flight Report and Maintenance*. **NOTE:** Notify FSC prior to starting defuel operation if aircraft was fueled with JP-8+100 or any grade other than the grade identified at time of dispatch.

2.7.10. Segregates and recovers petroleum products drained from aircraft and support equipment.

2.7.11. Develops procedures and trains personnel on preventing commingling and introduction of liquid or solid wastes into collection containers.

2.8. Missile Maintenance: 2.8.1, Forecasts and reports missile propellants requirements according to AFMAN 23-110, Vol. I, Part 3, Chap. 4 (until incorporated into DoD 4140.25-M).

2.9. Wing Safety Office 2.9.1, Performs annual inspections of the fuels flight and other inspections requested by the FMT.

2.10. Base Bioenvironmental Engineering (BEE):

2.10.1. Perform required inspections of fuel functions at request of the FMT.

Chapter 3

IMPLEMENTING THE OCCUPATIONAL SAFETY AND HEALTH PROGRAM

3.1. The FMT:

3.1.1. Ensures Fuels Management complies with all applicable DoD and AFOSH Instructions to protect the health of personnel exposed to fuel.

3.1.2. Develops and implements cost-effective business improvements and process reengineering initiatives to minimize and control environmental, safety and occupational health risks.

3.1.3. Applies Operational Risk Management (ORM) techniques IAW AFI 90-901, *Operational Risk Management*, to identify and manage risks. Ensures compliance with environmental, safety and occupational health standards to improve performance and enhance personnel effectiveness.

3.2. Providing Protective Equipment and Personnel Clothing:

3.2.1. Budgets for and provides personal protection equipment (PPE) to fuels personnel. PPE includes:

3.2.1.1. Inclement weather gear.

3.2.1.2. Hearing protection.

3.2.1.3. Safety toe boots.

3.2.1.4. Cream or soap to prevent dermatitis.

3.2.1.5. Eye protection.

3.2.1.6. Fall protection.

3.2.1.7. Specialized gloves, aprons and coveralls for handling hazardous materiel. This includes tri-layer coveralls identified for use in “wet fuel operations” such as bladder clean-up.

3.2.1.8. Coordinates with Wing Safety and BEE for equipment needed to enter toxic environments, i.e., permit required confined spaces. **NOTE:** Consult with BEE on all matters regarding the provision of, or changes to, PPE for workers covered under this instruction.

3.2.2. The FMT ensures

3.2.2.1. Personal safety equipment is properly inspected and used/worn including safety toe boots.

3.2.2.2. Personnel are trained on potential occupational hazards and how to protect themselves.

3.2.2.3. Physical examinations for occupational health are performed in a timely manner.

3.2.2.4. Personnel receiving, storing, issuing, and sampling petroleum and cryogenic products wear protective clothing per AFOSH Standards 91-501 Chap. 14, and 91-67,

Liquid Nitrogen and Oxygen Safety, and T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*. These items are allowed in AS 016, *Special Purpose Clothing and Personal Equipment*.

3.2.2.5. Fuels personnel wear reflective safety devices currently listed in AS 016 during hours of darkness or reduced visibility.

3.2.2.6. Emergency showers or eyewashes and spill clean-up materiel are available.

3.2.2.7. Safety observers working in the cryogenics area wear the same level of PPE worn by the fuels specialist performing the task.

3.3. Two-Person Policy:

3.3.1. The FMT ensures contractor employees, aircraft maintenance technicians or other individuals acting as a second person during fuel or cryogenic operations are knowledgeable of the hazards involved and corrective actions required to take in an emergency (see paragraph 1.9.).

3.3.2. Two people must be present when:

3.3.2.1. Servicing aircraft.

3.3.2.2. Issuing fuel to organizational tanks.

3.3.2.3. Entering confined spaces IAW AFOSH STD 91-25, *Confined Spaces*.

3.3.2.4. Gauging and sampling above ground tanks. **NOTE:** When manually gauging a floating roof tank from the roof, or when anyone descends to the roof, one person remains on the platform at the top of the tank. In gauging all other types of above ground tanks, one person remains on the ground. (Exception: above ground low profile tanks under 10 ft). Personnel must use a self-contained breathing apparatus when descending onto floating roof tanks with geodesic domes.

3.3.2.5. Receiving, generating or transferring cryogenic fluids.

3.3.2.6. Transferring high-pressure gases.

3.3.2.7. Off-loading tank cars or tank trucks.

3.3.2.8. Filling trucks or returning fuel to bulk storage. **NOTE:** Does not apply when returning fuel to a storage tank equipped with an operational automatic high-level shut-off valve and the truck has an operational deadman control system. This also does not apply during fillstand operations when equipped with an operational deadman control or Scully-type overfill prevention system. These “one-person” operations require constant contact with the FSC.

3.3.2.9. Transferring and receiving fuel requires one person at the transfer point and one person at the receiving point.

3.3.2.10. Collecting fuel samples from fixed fuel systems. **NOTE:** One person takes the sample and the second person is in visual contact and is aware of the operation.

3.3.2.11. When performing laboratory operations IAW AFOSH STD 91-38, *Hydrocarbon Fuels.-General*.

3.4. Preventing Fires:

3.4.1. Controlling Smoking Materials.

3.4.1.1. Do not smoke or use spark/flame-producing devices in any refueling unit, fuel pump house, fuel or cryogenics storage/production area or laboratory (excluding flashpoint tester).

3.4.1.2. Post and enforce smoking restrictions.

3.4.1.3. The fire department designates smoking areas.

3.4.2. Controlling Static Electricity.

3.4.2.1. The fuels safety monitor familiarizes personnel with the nature of static electricity and the hazards of static charges when handling fuels IAW T.O. 00-25-172.

3.4.2.2. Do not don or remove outer garments within the Fuels Servicing Safety Zone. Clothing restrictions are outlined in T.O. 00-25-172.

3.5. Laboratory Safety:

3.5.1. Use specialized laboratory equipment.

3.5.2. Fuels laboratory personnel must take precautions to ensure the area is safe for testing.

3.5.3. See AFOSH STD 91-38.

3.6. Limiting Foreign Object Damage (FOD):

3.6.1. Accomplish FOD prevention procedures IAW AFI 21-101, *Aerospace Equipment Maintenance Management*.

3.6.2. Inspect all fueling equipment for FOD during the daily operator inspection.

3.6.3. When operating vehicles on unpaved surfaces, inspect and remove FOD before traveling on the flight line.

3.6.4. Do not drive fueling vehicles over "FOD shakers".

Chapter 4

ESTABLISHING A SECURITY PROGRAM

4.1. Duties of the Security Monitor:

- 4.1.1. Review security plans and programs.
- 4.1.2. Provide fuels personnel with security training upon arrival and annually thereafter.
- 4.1.3. Implements information security program IAW AFI 31-401, *Information Security Program Management*.
- 4.1.4. Familiarizes fuel personnel on controlled or restricted area procedures IAW AFI 31-101, *The AF Installation Security Program (FOUO)*.
- 4.1.5. Consults Base Resource Protection Committee concerning fuels/cryogenic products protection.
- 4.1.6. Instruct personnel on computer security procedures IAW AFI 33-202, Vol. I, *Network and Computer Security*. The FMT can delegate this responsibility.
- 4.1.7. Institutes measures to secure fillstand servicing controls/fueling units IAW T.O. 37-1-1.

4.2. Securing Fuels Facilities and Equipment:

- 4.2.1. When not attended, the FMT locks:
 - 4.2.1.1. All access and dispensing points on ground fuel equipment to include sump and tank drains in a manner which prevents access to cargo tank contents. **NOTE:** This includes fuel bowsers.
 - 4.2.1.2. Dispensing pump nozzles or main power source, except on automated dispensing pumps.
 - 4.2.1.3. Gates of fenced areas within fuels management control when areas are not staffed or under surveillance.
 - 4.2.1.4. Gauge hatches and other access points on all storage and hydrant tanks outside of protected (fenced) areas unless exempted by the Base Resource Protection Committee.
 - 4.2.1.5. Electrical control panels and bulk fuel off-loading systems outside protected areas.
- 4.2.2. Establish proper key control. (Recommend magnetic locks for areas where climatic conditions are severe.) Obtain approval from the local Resource Protection Committee to use combination locks.

Chapter 5

DUTIES OF THE FUELS MANAGEMENT TEAM

5.1. Fuels Management Team (FMT). The Fuels Management Flight Commander (FMFC) and Fuels Manager/Superintendent form a team to maintain command and control, together they:

5.1. (ANG)Fuels Management Team (FMT). The ANG does not have an FMFC, therefore, the Logistics Readiness Squadron (LRS) Commander or his/her designee and the Fuels Superintendent will comprise the FMT.

5.1.1. Manage the requisition, receipt, storage, issue, quality and accounting of fuel and cryogenic products; manage the requisition and accounting of missile propellants.

5.1.2. Maintain Prepositioned War Reserve Stocks (PWRS).

5.1.3. Develop and validate IGESPs, operational, and contingency/exercise.

5.1.4. Establish vehicle, equipment, and facility minimum essential levels. **NOTE:** Coordinate facility levels with Water and Fuels System Maintenance (WFM) and vehicles levels with Vehicle Maintenance.

5.2. Establishes the Information Manager and Base System Modernization/Energy (BSM-E) Administrator function(s). **NOTE:** Local FMT may consolidate Information Manager and BSM-E Administrator functions under one person.

5.2.1. The Information Manager:

5.2.1.1. Prepares and files all formal correspondence and ensures proper distribution of correspondence, reports, publications and forms.

5.2.1.2. Reviews Fuels Management Flight File Plan at least annually for accuracy and completeness. Coordinate changes with responsible Functional Area Records Manager (FARM).

5.2.1.3. Acts as the control point for maintenance of all publications, directives and T.O.s. **Attachment 1** provides a list of all major publications, T.O.s and Allowance Standards related to the fuels career field.

5.2.1.4. Serve as Fuels Management's focal point for all AF Form 3215s, *IT/NSS Requirements Document*.

5.2.1.5. Conducts training for assigned personnel on the use of computers to include security, use of email, internet, and locally used programs.

5.2.2. The BSM-E Administrator

5.2.2.1. Performs backup of the systems and vital databases. FSC may accomplish this during nightly closeout.

5.2.2.2. Develops a backup routine and maintains backup media IAW DoD 4140.25-M and DESC Interim Policy and Procedural Guidance.

5.2.2.3. Establishes an operational user's guide library for all fuels automation programs.

5.2.2.4. Accomplish system changes and program releases as directed.

5.2.2.5. Provides assistance with software/hardware problems and facilitates resolution. Report all known or suspected errors through the appropriate organization/helpdesk.

5.2.2.6. Maintains current Automated Data Processing Equipment (ADPE) appointment letter and conducts annual inventory IAW local directives.

5.2.2.7. Performs preventative maintenance and upgrades on Fuels Management ADPE.

5.2.2.8. Maintains continuity book containing at a minimum: ADPE appointment letter, recent inventory listing, network layout (building or base), justification letters, and other pertinent information.

5.3. Lockout/Tagout Program. The FMT

5.3.1. Establishes a lockout/tagout program IAW AFOSH STD 91-501, Chap. 21.

5.3.2. Assigns responsibility for caution tags to the NCOIC Fuels Laboratory.

5.3.3. Makes the determination, in writing, as to which element will manage danger tags. **NOTE:** Additional guidance is provided for caution tags in paragraph 7.17.

5.4. Designed Operational Capability (DOC) Statements:

5.4.1. DOC Statement. Review the DOC statements annually to ensure the ability to support the requirements. The DOC statement is the baseline for Status of Resources and Training System (SORTS) reporting. Ensure element supervisors and fuels support personnel are familiar with current requirements.

5.4.2. See AFI 10-401 on how UTCs are used during war planning. **NOTE:** AFPAM 23-221, *Fuels Logistics Planning*, contains a description of all fuels UTCs.

5.5. Preparing Required Reports:

5.5.1. Report SORTS IAW AFI 10-201, *Status of Resource and Training System*.

5.5.2. Bulk Petroleum Contingency Report (REPOL). The REPOL report provides DESC, Joint Staff, COCOM, CSAF, HQ AF/A4LE and the MAJCOMs with summary information on damage and deficiencies affecting bulk petroleum supplies, storage and distribution systems.

5.5.2.1. Submit REPOL reports IAW CJCSM 3150.14B, *Joint Reporting Structure Logistics* and AFI 10-206, or when requested. Combatant commanders will provide the report format.

5.5.2.2. The REPOL is designated emergency status code C1: continue reporting during emergency conditions, priority precedence.

5.5.2.3. Continue reporting during MINIMIZE.

5.5.2.4. The FMT will develop local procedures for processing classified reports.

5.6. Developing an Alert Recall Plan. The FMT

5.6.1. Prepares and distributes an alert recall plan.

5.6.2. Ensures the plan remains current at all times.

5.6.3. Develops alternate notification procedures for communication failure conditions.

5.7. Preparing Fuel Support Plans. Use AFI 10-404, AFI 10-401 and AFPAM 23-221 as a guide when preparing fuels appendixes to the base war support plan, operation plans and mobility support plans. Basic references required to prepare a valid support plan include:

- 5.7.1. Inventory Management Plan (IMP) extract.
- 5.7.2. Aircraft Parking Plan.
- 5.7.3. Base Wartime Aircraft Activity (WAA) Report.
- 5.7.4. Air Mobility Command minimum ground times.
- 5.7.5. Time-Phased Force Deployment Data (TPFDD).
- 5.7.6. Integrated Consumable Item Support (ICIS) fuels module.

5.8. Reviewing the War and Mobilization Plan (WMP). Coordinate with LRS readiness flight to review the WMP, Vol. IV, Wartime Aircraft Activity (WAA) Report to ensure you can support the aircraft activity listed.

5.9. Maintaining Prepositioned War Reserve Stock (PWRS):

- 5.9.1. Review IMP IAW DoD 4140.25-M; MAJCOM's ensure bases maintain a current copy of their IMP. It can be found on the DESC website.
- 5.9.2. PWRS for non-petroleum products. Refer to AFI 25-101, *War Reserve Materiel (WRM) Program Guidance and Procedures*.
 - 5.9.2.1. Maintain LOX/LIN War Consumable Distribution Objective (WCDO) levels through in-house production and/or a commercial source.
- 5.9.3. Penetration of Minimum Inventory Levels. Report minimum inventory penetrations IAW DoD 4140.25-M; forward an information copy to the MAJCOM Fuels Office.
- 5.9.4. Maximum 1 day requirements:
 - 5.9.4.1. Coordinate with LRS Readiness Flight to obtain MAX 1-day requirements.

5.10. Fuels Facility Plan. Obtain detailed base "Liquid Fuel System" schematics from BCE. Color code active facilities by product IAW clipboard color scheme described in [Attachment 9](#). Identify all major fuels facilities by name (i.e., FSC, LAB, RFM, etc.). Provide a current copy to the parent MAJCOM when facility changes occur or as directed by the parent MAJCOM.

5.11. Maintaining Emergency Power Capability:

- 5.11.1. Identify and coordinate emergency power requirements with BCE.
- 5.11.2. Preposition emergency generators at bulk storage, cryogenic production and hydrant facilities.
- 5.11.3. Establish procedures to provide power when generators are not prepositioned.
- 5.11.4. Train fuels personnel to operate emergency power generators IAW AFI 32-1063.
NOTE: Only BCE personnel are authorized to verify proper generator connections. Use only qualified personnel to operate generators after connections are complete.

5.12. Operating a Fuels Radio Net. A separate radio net for fuels management is preferred.

- 5.12.1. Train Fuels personnel on radio operation procedures.

5.12.2. [Attachment 2](#) lists the radio transmission codes.

5.13. Facility Requirements. Use AF Handbook (AFH) 32-1084 to develop fuels facilities project requests. This handbook provides space allowance criteria by category code. AFI 32-1024, *Standard Facility Requirements*, lists OPRs and provides an overview of the facility requirements system. MIL-HDBK-1022A provides guidelines for new construction of POL facilities.

5.13. (ANG) Facility Requirements. Also refer to ANG Handbook 32-1084.

5.13.1. Provide cold weather locations with an indoor preventive maintenance facility.

5.14. Computing Refueling Equipment Authorizations:

5.14.1. Use AS 019, *Vehicles*, in conjunction with the Aircraft Servicing Capability (ASC) program to compute vehicle authorizations.

5.14.2. Review authorized fueling vehicles (aviation and ground products), including WRM vehicles, every three years or when mission changes dictate.

5.14.3. Coordinate validation through the Vehicle Management Flight; provide copy of the complete validation to MAJCOM.

5.14.4. Maintain source documents until the completion of the next validation.

5.14.5. Refer to AS 019 for type and number of vehicles to accomplish various refueling operations.

5.14.6. Refer to the Vehicle Validation Procedures located on the AFPET Community of Practice for step-by-step instructions.

5.15. Providing Covered Structure for Fueling Units. In cold weather and heavy snowfall areas, submit a work request for heated facilities to park fueling units.

5.16. Understanding the Management Engineering Program (MEP). See [Attachment 10](#) for general information on the MEP.

5.16.1. Fuels functional responsibilities in the MEP:

5.16.1.1. Know the AF Manpower Standard (AFMS) for Fuels Management AF Manpower Document (AFMD) 41D1.

5.16.1.1. (ANG) Know the ANG Manpower Standard (ANGMS) for Fuels Management ANG Manpower Standard ANGMS 41D1.

5.16.1.2. Evaluate the number of people assigned to the fuels flight.

5.16.1.3. Take action to identify personnel overages/shortages.

5.16.1.4. Request manpower to accomplish the mission as necessary.

5.16.2. Take a proactive role during the manpower standards development process:

5.16.2.1. Know the manpower study schedule.

5.16.2.2. Provide recommendations to the function review workshop.

5.16.2.3. Review all manpower study documentation such as work center description, measurement plan and final report for accuracy and provide any corrections.

5.16.2.4. Verify measurement data accuracy.

5.16.2.5. Coordinate on manpower variances.

5.16.2.6. Assist in developing work center productivity enhancements.

5.16.2.7. Submit Authorization Change Requests (ACR) to local Manpower Office.

5.16.3. Monitor the Unit Manpower Document (UMD) and Unit Personnel Management Roster (UPMR).

5.16.3.1. Monitor increases and decreases in the unit's authorized strength to ensure the number of people is sufficient to do the job.

5.16.3.2. Review the UPMR to ensure it reflects the people assigned against the number of positions authorized on the UMD.

5.16.3.3. Coordinate with the Manpower Office to correct errors.

5.17. Developing Alternative Fuel Compliance Plan (AFCP):

5.17.1. Adhere to federal mandates that require the use of alternative fuels. When applicable, develop a combined Fuels and Vehicle Management plan to comply with MAJCOM guidance.

5.17.2. Identify best use of alternative fuels.

5.17.3. Determine shortfalls in storage and dispensing systems to handle AFCP products.

5.17.4. Develop AFCP projects IAW paragraph 1.4; provide a copy to the parent MAJCOM.

5.18. Manage Tool Control Program

5.18.1. Establish tool control program IAW AFI 23-302, *Vehicle Management*.

5.18.2. Ensure all tool kits are inventoried and documented at least quarterly.

5.18.3. As a minimum tool kits will be inspected and documented on a daily basis (when used) at the end of each shift.

5.19. Automated Information Technology (AIT)

5.19.1. AIT program initiatives electronically capture both fuel inventory and transaction data to enhance productivity and management control.

5.19.2. Mandatory use of fuels AIT equipment is required to enhance operational safety, accounting accuracy, and timeliness while enabling centralized command and control.

Chapter 6

CONDUCTING FUELS OPERATIONS

6.1. Duties of the Fuels Operation Section Chief:

6.1.1. Supervise the Distribution, Hydrants, Cryogenics, Maintenance and, Facilities functions (where applicable).

6.1.1. (ANG) Supervise the Distribution, Storage, Hydrants, Cryogenics, Maintenance and, Facilities functions (where applicable).

6.1.2. Reviews aircraft flying schedules for fuels support requirements and tailors work shifts accordingly.

6.1.3. Provides proper security, storage, and operator maintenance of assigned equipment.

6.1.4. Submits requests for facility and equipment changes.

6.1.5. Reviews Compliance evaluation reports and validates corrective actions.

6.1.6. Manages assigned vehicles.

6.1.7. Establishes product rotation procedures for Hydrants and fuel storage Facilities where applicable, IAW DoD 4140.25-M, Vol. II, Chap. 7.

6.1.8. DELETED.

6.1.9. Regularly use all tanks, transfer pipelines, pumps, meters, filter-separators, and fillstands to help prevent deterioration of pumps, seals, and gaskets.

6.1.10. Exercise alternate resupply capability at least annually to validate training, facilities and support plans. If your alternate mode is tank truck or rail car, ensure the offloading area is in compliance with environmental regulations. If not, coordinate with BCE to find acceptable workarounds to allow alternate capability testing. Bases whose sole resupply mode is tank truck are not required to exercise alternate capability. Additionally, for bases that receive via railcar and use the same off-loading headers during alternate mode of receipt do not require alternate capability testing.

6.1.11. Perform Vehicle Control Officer (VCO) duties to include monthly briefings and inspections IAW base VCO guidelines. Duties may be delegated in writing to a subordinate.

6.1.12. Provide at least 30 days hands on training prior to attending Refueling Equipment Maintenance Course.

6.1.12. (ANG) NGB/A4RMF may approve waivers upon coordination with the schoolhouse/AFPET.

6.2. Duties of the NCOIC Fuels Distribution:

6.2.1. Supervises expeditors, hydrants, mobile refueling, and refueling maintenance elements.

6.2.2. Assists Operations Section Chief with duties listed in paragraph 6.1 and ensures actions directed by the FSC are accomplished in a safe and efficient manner.

- 6.2.3. Coordinates with BCE on scheduled maintenance and deficiencies.
- 6.2.4. Reviews flying schedules to ensure resources are available to meet requirements.
- 6.2.5. Spot-checks operator's hydrants, refueling maintenance, and flight-line operations.
- 6.2.5. (ANG) Monitors hydrants, refueling maintenance, and flight-line operations.
- 6.2.6. Reviews inspection records for permanently installed hydrant facilities, AFTO Form 39, *Fuel System Inspection and Discrepancy Report*.
- 6.2.7. Reviews the BSM-E log-sheet daily and takes corrective action when necessary.
- 6.2.7. (ANG) These duties will be performed by individual performing daily closeout.

6.3. Duties of the Fuels Expediter:

6.3. (ANG)NOTE: ANG does not have adequate manpower during the workweek to provide an Expeditor. Expeditor duties will be performed during UTA's.

- 6.3.1. Assists in coordinating and directing fuel servicing operations. **NOTE:** An expediter is not required for ground fuel operations.
- 6.3.2. Monitors fueling operations, initiates action to correct deficiencies, terminates unsafe operations and reports discrepancies.
- 6.3.3. Maintains a tool kit for on-the-spot repairs to refueling vehicles.
- 6.3.4. Maintains a spill response kit for containment and clean-up of small leaks or spills. (Notify Fuels Environmental Coordinator each time kit is used.)
- 6.3.5. Maintains a FOD collection bag or box in the expeditor vehicle and report FOD IAW local guidance.
- 6.3.6. Provides assistance for hydrant servicing operations.
- 6.3.7. Maintains close liaison with the FSC to report progress of operations and coordinate changes in scheduled work plans.

6.4. Duties of the Hydrant Supervisor:

- 6.4.1. Coordinates operator's maintenance of the hydrant system.
- 6.4.2. Establishes a hydrant system flushing program IAW T.O. 37-1-1.
- 6.4.3. Updates the hydrant status board in BSM-E.
- 6.4.4. Coordinates transfers between bulk fuel storage tanks and hydrant tanks.
 - 6.4.4.1. Ensures communication is maintained during fuel movement via telephone or radio.
 - 6.4.4.2. Operators must remain in immediate vicinity during fuel movement IAW T.O. 37-1-1.
 - 6.4.4.3. Establish contact every 10 minutes between the transfer and receiving points during the last 30 minutes of the estimated transfer completion time.
 - 6.4.4.4. When installed, use Fuels Manager to monitor progress during transfer and receipt operations.

6.5. Duties of the Mobile Distribution Supervisor:

- 6.5.1. Ensures personnel are trained on necessary equipment.
- 6.5.2. Initiates driver disqualification action when an individual's attitude, mental, or physical conditions are potentially unsafe for operating vehicles.
- 6.5.3. Familiarizes refueling unit operators with flight line safety, aircraft parking ramps, runway crossings, aircraft taxiways and control tower signals.

6.6. Duties of the Refueling Maintenance Supervisor:

- 6.6.1. Inspect refueling vehicles and equipment.
- 6.6.2. Performs inspections each day the vehicle/equipment is used.
- 6.6.3. Inspects all vehicles/equipment at least every 7 days.
- 6.6.4. Uses the operator's inspection guide and trouble report AF IMT 1807, *Operator's Inspection Guide and Trouble Report (Fuel Servicing)*.
- 6.6.4. **(ANG)** AF IMT 1807 has three signature blocks for each day of the month; one per shift. Vehicle and equipment inspections are only required on one signature line for each day used. Additional signatures for the 2nd and 3rd shifts are not required. Units may disregard item 36, LUBE/OIL CHANGE, on page two, as Transportation monitors such requirements. Item 37 may contain more than one written-in inspection item, and one coinciding signature may be used to indicate all inspection on that line have been completed. Additional items may be added in margins (space) provided below item 37.
- 6.6.5. Removes unsafe or inoperable vehicles/equipment from service and repairs or turns equipment over to the appropriate maintenance activity for corrective action.
- 6.6.6. Coordinates with Vehicle Management to ensure all required vehicles/equipment are turned in on time for scheduled and unscheduled maintenance inspections.
- 6.6.7. Trains personnel to inspect and maintain pumping systems; records inspection results on appropriate forms.
- 6.6.8. Reviews vehicle inspection forms and validates repairs before the vehicle is released for service.
- 6.6.9. Updates the truck status board in BSM-E.
- 6.6.10. Establish an effective mobile equipment corrosion control program.
- 6.6.10. **(ANG)** An effective mobile equipment corrosion control program will be provided by the Vehicle Management Flight.
- 6.6.11. DELETED.
- 6.6.12. Establish a special purpose vehicle checkpoint using the team concept. Preventative maintenance teams consist of four people: vehicle operator, one person at front of the vehicle, one person at rear of the vehicle, and team chief. NOTE: During weekends, holidays and stand-down periods, preventive maintenance teams may consist of two or three persons to inspect only the number of vehicles anticipated to support workload.

6.6.12. (ANG) Establish a special purpose vehicle checkpoint using the team concept. Preventative maintenance teams consist of four people: vehicle operator, one person at front of the vehicle, one person at rear of the vehicle, and team chief. The ANG fulltime workforce is exempt from the team concept requirement during the work week; however, operator inspections are required IAW applicable equipment/vehicle T.O.s. The use of the team concept is mandatory during UTA's.

6.6.12.1. Develop specific checklist and training plan outlining team member responsibilities.

6.6.12.2. Annotate discrepancies on applicable forms.

6.6.12.3. Perform corrective action on pumping system discrepancies; turn over chassis discrepancies to Vehicle Management for corrective action.

6.6.12.4. Inspect pre-positioned or dispersed vehicles in place at the option of the FMT.

6.6.12.5. A vehicle checkpoint is not required at non-flying activities. Operator inspections are required IAW applicable equipment/vehicle T.O.s.

6.6.12.6. A covered shelter is required for refueling unit pumping system maintenance operations. **NOTE:** At contingency locations where facilities and space may be limited, recommend co-located maintenance facilities for Vehicle Maintenance and Refueling Maintenance.

6.6.13. Perform Vehicle Pre-check. Each vehicle operator performs a pre-check prior to use:

6.6.13.1. Ensure the vehicle was inspected within the last 24 hours.

6.6.13.2. Perform a "walk around" inspection of the vehicle checking for damage, fluid leaks and other obvious discrepancies such as flat tires.

6.6.13.3. Do not move the vehicle if it fails the check.

6.6.13.4. Report the discrepancy to the FSC and take corrective action per instructions.

6.7. Duties of the Facilities Supervisor:

6.7.1. Supervises bulk fuel storage facilities, service station and cryogenics storage.

6.7.2. Coordinates receipt, storage, transfer, and inventory of bulk/packaged fuels, deicing fluid, methanol, anhydrous ammonia, compressed gas cylinders, LOX, LIN, Liquefied Petroleum Gas (LPG), Compressed Natural Gas (CNG) and other fuel products.

6.7.3. Ensures proper fuel sampling procedures are adhered to during receipts. Coordinate with Lab personnel to ensure samples are properly recorded in BSM-E.

6.7.4. Coordinates inspection and organizational maintenance on all bulk storage facilities and equipment.

6.7.4.1. Records deficiencies on AFTO Form 39.

6.7.4.2. Obtains work order numbers from BCE and records on the AFTO Form 39.

6.7.4.3. Ensures BCE properly documents the AFTO Form 39 when deficiencies are corrected.

6.7.4.4. Observes the condition and performance of installed filters, separators and strainers.

6.7.4.5. Updates the equipment status board in BSM-E.

6.7.5. Coordinates with the BCE on scheduled maintenance and tank cleaning.

6.7.6. Transfers fuel between bulk storage tanks and hydrants tanks.

6.7.6.1. Ensures communication is maintained during fuel movement via telephone or radio.

6.7.6.2. Operators must remain in immediate vicinity during fuel movement IAW T.O. 37-1-1.

6.7.6.3. Establish contact every 10 minutes between the transfer and receiving points during the last 30 minutes of the estimated transfer completion time.

6.7.6.4. When installed use Fuels Manager to monitor progress during transfer and receipt operations.

6.7.7. Take inventories IAW DoD 4140.25-M and/or DESC Interim policies.

6.7.8. Base Service Station.

6.7.8.1. Maintain a service station to provide automotive gasoline, diesel fuel, and approved alternative fuels for all authorized vehicles and equipment.

6.7.8.2. Equip the service station with a phone for customer use to report emergencies.

6.8. Preventing Fuel Commingling:

6.8.1. Use a product selection device (different size couplers and nozzles) or lock control system when handling more than one grade of fuel.

6.8.2. If the tank contains a common receipt/issue line, displace the defueled product into the tank prior to issue from the tank.

6.8.3. Do not return fuel through gauging hatches.

6.9. Verifying the Condition of Fuel Tank Trucks and Cars:

6.9.1. Ensure tank trucks and tank cars are inspected for hazardous conditions before off-loading.

6.9.2. If hazardous conditions exist:

6.9.2.1. Notify the quality assurance representative, MAJCOM, and AFPET who, in turn, will coordinate action with DESC Contracting Division.

6.9.2.2. Document all refusals in writing within 24 hours IAW DoD 4140.25-M, with an information copy to the parent MAJCOM, AFPET, and DEO/DER.

6.10. Duties of the Cryogenic Storage Supervisor:

6.10.1. Receives, stores, transfers, inventories and documents transactions of LOX and LIN.

6.10.2. Establishes an effective cryogenics conservation program to minimize losses.

6.10.3. Follows the sampling and testing program as prescribed by the 42B-series T.O.s.

6.10.4. Establishes a safety program IAW AFOSH STD 91-67.

6.10.5. Inspects AFTO Form 134, *Aviator Breathing Oxygen Servicing Trailer Log (Liquid/Gaseous)*, on LOX carts prior to servicing. Do not service if the form is not properly annotated. **NOTE:** See T.O. 42B6-1-1, *Quality Control of Aviator's Breathing Oxygen/Aviators Gaseous Breathing Oxygen*, for specific responsibilities on documentation of the AFTO Form 134, quality control requirements, and restrictions on filling LOX carts.

6.10.6. Develop written procedures to identify, report, and limit low use LOX carts. Coordinate procedures with using organizations.

6.11. Controlling Entry and Exit of Petroleum Transport Vehicles:

6.11.1. The Mission Support Group Commander designates authorized entry and exit gates for fuel and cryogenic transport vehicles, and appoints personnel to serve as delivery escorts. **NOTE:** Base fuels personnel will not be assigned as escorts to areas outside the Fuels Managers span of control. These escorts will be assigned IAW AFI 23-204.

6.11.2. The FMT

6.11.2.1. Ensures incoming transport vehicles are inspected IAW DoD 4140.25-M, Vol. II, Chap. 5, and/or DESC Interim Policies and Procedures and re-inspected before departing the installation. Do not inspect vehicles delivering fuel to the Base Exchange service stations or aero clubs.

6.11.2.2. Ensures delivery documents reflect the date, time inspected, and signature of the inspectors performing the incoming and outgoing inspections. Provide one copy to the carrier and one copy to the FSC for filing.

6.11.2.3. Ensures that Fuels Compliance conducts random spot checks of transport vehicles making single and multiple fuel delivery drops to government tanks outside of Fuels Management storage areas. Notify appropriate agencies when discrepancies exist.

6.11.2.4. Conducts vehicle escort training and documents IAW AFI 23-204. Verify escorts or custodians are supervising and receiving deliveries IAW AFI 23-204.

6.11.2.5. Ensures vehicle escorts are trained on the actual operation they are expected to perform.

6.12. Managing Liquid Missile Propellants:

6.12.1. The FMT

6.12.1.1. Accounts for liquid missile propellants, cryogenics, hypergols and gasses, and their receipt, storage, transfer and delivery.

6.12.1.2. Monitors maintenance of facilities and equipment.

6.12.1.3. Ensures fuels and oxidizers operations comply with applicable directives.

6.12.1.4. Approves accounting documentation IAW AFMAN 23-110, Vol. I, Part 3, Chap. 4.

6.12.1.5. Mitigates hazards using the Process Safety Management Program.

6.12.1.6. Monitors compliance with environmental requirements.

6.12.1.7. Monitors maintenance and handling of PPE and Self-Contained Atmospheric Protection Ensemble, and other hypergolic safety hazards.

6.12.1.8. Ensures adequate resource availability for on-base missile and satellite programs.

6.13. Duties of the Cryogenic Production Supervisor:

6.13.1. Monitor maintenance forms, ensures procedural compliance, and takes necessary corrective action.

6.13.2. Conserve cryogenics.

6.13.3. Establish a supply account for cryogenics operations, if required.

6.13.4. Coordinate on all base projects pertaining to cryogenic products.

6.13.5. The FMT

6.13.5.1. Assigns fully qualified personnel as the cryogenics production supervisor.

6.13.5.2. In conjunction with the Fuels Training Supervisor assigns Special Experience Identifier(s) (SEI) IAW Air Force Enlisted Classification Directory (AFECD).

6.13.5.3. Perform monthly inspection of cryogenics areas and reviews AFTO IMT 244, *Industrial Support Equipment Record*.

6.14. Equipment and Facilities Used in Cryogenic Production:

6.14.1. Cryogenic Production Plants. Various types and sizes of plants are authorized in AS 488. The FMT coordinates plant approval, plant locations, arrangements, and requirements with the MAJCOM. LRS Materiel Management Flight stores and issues gas cylinders according to 42B-series T.O.s and applicable supply manuals.

6.14.2. Support equipment and cryogenics facility requirements are found in [Attachment 5](#).

6.14.3. The BCE maintains the facility, the installed property, and required utilities.

6.15. Inspecting and Operating Cryogenic Plants:

6.15.1. Inspecting equipment. The cryogenics production supervisor inspects production plants according to applicable 36G1-series T.O.s and records maintenance on an AFTO IMT 244 according to T.O.s 00-20-1, *Aerospace Maintenance Inspection Documentation, Policies and Procedures*.

6.15.1.1. Reflect condition status, when inspections are due and completed, items due for replacement, and discrepancies noted with corrective action taken.

6.15.1.2. When required, use published checklists or work cards.

6.15.1.3. Record hourly plant readings on applicable plant log sheet.

6.15.1.3.1. Review these forms daily.

6.15.1.3.2. Use T.O. 00-20-1 to explain the status symbols.

6.15.1.3.3. Use the AFTO IMT 95, *Significant Historical Data*, for generation and support equipment.

6.15.1.4. The FMT designates in writing personnel authorized to clear “Red X” conditions.

6.15.1.5. Calibrating Temperature and Pressure Gauges.

6.15.1.5.1. Zero out and check gauges for accuracy in conjunction with equipment inspections.

6.15.1.5.2. Document calibration or non-calibration IAW T.O. 00-20-1.

6.16. Maintaining Equipment:

6.16.1. Cryogenics personnel

6.16.1.1. Perform daily organizational maintenance.

6.16.1.2. Perform all inspections, lubrications, and routine adjustments of equipment.

6.16.1.3. Perform intermediate maintenance of all production plants and equipment to include repair or replacement of major assemblies and components.

6.16.2. Obtaining Authority for Depot Maintenance

6.16.2.1. Consider contract maintenance when equipment maintenance requirements exceed the base capability.

6.16.2.2. If contract maintenance is not available, contact the applicable MAJCOM FMT who, in turn, contacts the AFPET to determine a course of action.

6.16.2.3. MAJCOMs may authorize base-level activities to contact the AFPET directly when necessary.

6.16.2.4. As a last resort, request a depot maintenance assistance site visit (see T.O. 00-25-107, *Maintenance Assistance*) through your MAJCOM.

6.16.3. Qualified maintenance personnel can modify the equipment when authorized by a Time Compliance Technical Order or an item manager.

6.16.4. Report production and storage equipment deficiencies according to paragraph 1.19 of this AFI.

6.17. Maintaining Cryogenic Storage Tanks:

6.17.1. The cryogenics supervisor

6.17.1.1. Performs maintenance.

6.17.1.2. Submits work requests for corrosion control and painting.

6.17.1.3. Submits requests to modify storage containers through MAJCOM and item manager.

6.17.1.4. Maintains vacuum on all storage tanks IAW T.O. 37C2-8-1-116 WC-1, *Vacuum Limits*.

6.17.1.5. Complete all periodic inspections IAW T.O. 37C2-8-1-116 WC-1 to ensure loss rates are minimized.

6.17.1.5.1. Documents vacuum/meter readings and date on AFTO IMT 95. Repair and/or replace tanks that develop a history of poor vacuum performance.

6.17.1.6. Reports tanks that cannot efficiently store product to the MAJCOM.

6.17.2. Servicing Cart Operation and Maintenance

6.17.2.1. The using organization maintains carts to include purging and pulling vacuum.

6.17.2.2. Verify AFTO IMT 244 to ensure carts meet safe operating conditions. Do not fill carts that do not meet safe operating conditions.

6.17.3. Maintaining War Reserve Tanks. The FMT

6.17.3.1. Verifies storage tanks held in war reserve status are completely serviceable.

6.17.3.2. Maintains an overboard vent system (OVS) for each 400-gallon cryogenic tank listed on the DOC statement IAW T.O. 37C2-8-1-127, *Liquid Oxygen/Nitrogen Overboard Vent System*.

6.17.3.3. Stores the OVS in a locked box or footlocker, and inventories annually.

6.17.4. Prepares air transportable cryogenic storage tanks for shipment.

6.17.4.1. Ensure an approved static grounding reel is affixed on each 400-gallon tank.

6.17.4.2. Consults T.O. 37C2-8-1-127 for OVS instructions for air shipment.

6.17.5. Painting and marking of cryogenics storage containers:

6.17.5.1. Paints, marks and maintains corrosion control on containers IAW T.O. 35-1-3, *Corrosion, Prevention, Painting and Marking of USAF Support Equipment (SE)*.

6.17.5.2. Positions decals and markings IAW applicable publications.

6.17.5.3. Requisitions decals IAW applicable standards. Locate decal part numbers in the applicable storage container dash 4 T.O. illustrated parts breakdown (IPB).

6.18. Reducing Cryogenic Losses:

6.18.1. Limit fill periods to minimum number required to support mission.

6.18.2. Only fill carts required for aircraft servicing. Encourage using organizations to keep active carts to a minimum, and maintain other carts in a purged, standby status.

6.18.3. Keep active tanks as full as economically possible.

6.19. Performing Quality Control. Accomplish required on-line product tests and record results on production forms IAW applicable plant T.O.s.

6.19.1. Coordinate with Lab personnel to ensure scheduled tests and results are input in BSM-E.

6.20. Obtaining Supply Support:

6.20.1. The FMT initiates requisitions for plants or tanks on AF IMT 601, *Equipment Action Request*, for items not already authorized IAW AFMAN 23-110 and applicable Allowance Standards.

Chapter 7

IMPLEMENTING THE FUELS INFORMATION SERVICE CENTER (FISC)

7.1. Establishing the FISC. The FISC is charged with management of fuels resources, providing support, accounting, and laboratory analysis of fuel and cryogenic products. The FMT will:

- 7.1.1. Staff the FSC with a minimum of two personnel with SEI 040. Contracted, ANG and AFRC fuels operations may staff the FSC with one person with SEI 040.
- 7.1.2. Staff the fuels laboratory with a minimum of one person with SEI 039.
- 7.1.3. Award 039 and 040 SEIs based on prerequisites listed in Air Force Enlisted Classification Directory (AFECD).
- 7.1.4. Provide at least 30 days hands on training prior to attending Fuels Quality Control and BSM-E Inventory Accounting courses.
- 7.1.4. (ANG) NGB/A4RMF may approve waivers upon coordination with the schoolhouse/AFPET.

7.2. Duties of the FISC Section Chief:

- 7.2.1. Supervises the FSC, Fuels Support, and Fuels Laboratory functions.
- 7.2.2. Reviews flying schedules and coordinates with Fuels Operations Section Chief to meet mission requirements.
- 7.2.3. Familiarizes fuels controllers with Defense Working Capital Fund (DWCF) principles and procedures set forth in DoD 4140.25-M.
- 7.2.4. Ensures all fuels support functions are accomplished.
- 7.2.5. Ensures laboratory technicians do not perform tests, work with chemicals or use equipment unsupervised until they are trained on the task.
 - 7.2.5.1. Reviews reports, ensures fuel meets quality standards and identifies negative trend patterns.
 - 7.2.5.2. Recommends changes to improve product quality.
- 7.2.6. Maintain classified computer systems IAW local security guidance.
- 7.2.7. Ensure FSC relocation procedures are established to ensure uninterrupted fuel support is maintained.
- 7.2.8. Reviews Compliance evaluation reports and validates corrective actions.

7.3. Duties of the FSC NCOIC:

- 7.3.1. Monitors fuels operations and maintains fuels accounts according to applicable directives. Use BSM-E to collect, store, monitor, and process:
 - 7.3.1.1. All fuel servicing and accounting transactions.
 - 7.3.1.2. Product inventory management.

- 7.3.1.3. Vehicle and equipment status.
- 7.3.1.4. List of key personnel including element and home telephone.
- 7.3.1.5. Submit data to the Fuels Automated System (FAS) Enterprise Server (FES) according to DESC processing guidance.
- 7.3.1.6. Reconcile with the FES and clear rejects IAW DESC Interim Policy and Procedures.
- 7.3.1.7. Maintain a document control function for fuels documents and transactions processed IAW DESC Interim Policy P-3.
- 7.3.1.8. Provides current inventory status of all products and other pertinent information on receipts, storage, and issue transactions and monitors IMP/WRM levels.
- 7.3.2. Maintains a backup copy of the BSM-E system IAW DESC Interim Policy and Procedures.
- 7.3.3. Maintains one DESC provided Uninterruptible Power Source (UPS) for the BSM-E server.
- 7.3.4. Coordinates with using organizations for requirements forecasting.
- 7.3.5. Displays flight line layout showing all servicing locations.
- 7.3.6. Monitors aircraft generation status.
- 7.3.7. Acts as the single point of contact for the flight during other than normal duty hours.
- 7.3.7. **(ANG)** Maintenance Operations Control Center or Base Operations will contact the Fuels Superintendent or Fuels Recall List when the FSC is not manned or during other than normal duty hours.
- 7.3.8. Transfers pertinent information to each shift controller, Fuels Operations, FISC Section Chief, FMT and supporting agencies.
- 7.3.8. **(ANG)** When applicable, shift leaders will transfer pertinent information to gain shift leadership.
- 7.3.9. Informs FMT, Operations Section Chief, FISC Section Chief, WFM and/or Vehicle Management when in-commission status reaches minimum levels.
- 7.3.10. Maintain the status of emergency power generators and a list of trained operators.
- 7.3.11. Communicate using radios and telephones. Radios are primary means of communication between FSC and fuels operations. The FSC requires immediate contact with the Maintenance Operations Center (MOC) and positive control over all fuels facilities and flight line operations. Equip the FSC with at least three telephone lines:
 - 7.3.11.1. A "Class A" line.
 - 7.3.11.2. A "Class C" line.
 - 7.3.11.3. A direct line to MOC.
- 7.3.11. **(ANG)** ANG units shall equip the FSC with at least two telephone lines to include a direct line to the MOCC.
 - 7.3.11.1. A "Class A" line.
 - 7.3.11.2. A "Class C" line.
 - 7.3.11.3. A direct line to MOC.

7.3.11.4. Recommend adding FSC to the crash net for emergency notifications.

7.3.12. Provides fuel inventory and equipment status to the Installation Control center as requested.

7.4. Preparing for Disasters:

7.4.1. The FSC supervisor equips the FSC with:

7.4.1.1. A standard base grid map with all fuel facilities marked or highlighted.

7.4.1.2. A fuels alert recall roster.

7.4.1.3. Disaster/emergency checklists or operating instructions.

7.4.1.4. An alternate parking plan to relocate fueling equipment.

7.4.2. In event of an emergency, the fuels controller:

7.4.2.1. Notifies chain of command IAW locally established procedures.

7.4.2.2. Records actions taken and personnel notified.

7.5. Issuing Servicing Clipboard:

7.5.1. The fuels controller issues servicing clipboards containing the following forms:

7.5.1.1. AFTO Form 422, *Differential Pressure Log*.

7.5.1.2. DELETED.

7.5.1.3. DD Form 1898, *Fuel Sale Slip*.

7.5.2. At time of dispatch provides the fuels operator with:

7.5.2.1. Grade of fuel.

7.5.2.2. Refueling vehicle/equipment registration number.

7.5.2.3. Authorized delivery point (aircraft type and serial number or facility number).

7.5.2.4. Reason and estimated quantity of defuel.

7.5.2.5. An applicable fuel servicing checklist.

7.5.3. Marking Clipboards.

7.5.3.1. Mark the clipboard front to indicate product and vehicle/equipment registration number.

7.5.3.2. Color-code clipboards when handling more than one grade of aviation or ground fuel, (i.e., a base handling JP-8, MUR and LS2/DS2, is not required to color code their aviation fuel clipboards, but is required to color code their ground products clipboards). Use the color scheme in [Attachment 9](#).

7.6. Weather Warnings. At bases without automatic weather warning equipment, the FMT formalizes a written agreement with the installation weather detachment, MOC and base operations to receive weather warnings. Staff the agreement through applicable SQ/CCs. The FSC

7.6.1. Notifies all fuels personnel of the weather warning.

7.6.2. Records all pertinent information.

7.6.3. Terminates fuel operations, to include commercial cryogenics receipts and issues performed outdoors, and bare base cryogenic operations when:

7.6.3.1. Lightning is within 5 miles.

7.6.3.2. Other potentially hazardous conditions exist as determined by the base weather officer.

7.6.4. The following operations may continue:

7.6.4.1. Cryogenic production operations (product being introduced into base storage tanks/cylinders from the plant).

7.6.4.2. Issues from the base service station.

7.6.4.3. Commercial and DoD pipeline receipts.

7.6.4.4. Vehicle movements (including refuelers).

7.6.4.5. Pipeline transfer operations (including bulk storage to hydrant tanks).

7.6.5. FSC informs all elements to resume operations and annotates termination time.

7.7. Controlling Keys:

7.7.1. The FSC maintains spare keys for locks used to secure fuels equipment, facilities and refueler ignitions. The fuels laboratory maintains keys and locks used as part of the lockout/tagout program.

7.7.2. Check spare keys for operation and correct identification semi-annually. Route the inspection report through the FMT.

7.7.3. When a spare key is permanently issued, replace the spare key or re-cylinder the lock.

7.7.4. Keep keys in ignition of fueling units and propellant transporters at all times.

7.7.5. Keys issued to personnel for extended periods of time for operational use will be signed for on a hand receipt.

7.8. Selling Aviation Products to Contract, Charter and Civil Aircraft. DESC Cash Sale instructions outlines guidance for cash sales of Defense Logistics Agency (DLA) owned product. The FMT will:

7.8. (ANG)Not applicable to ANG.

7.8.1. If credit sales are not authorized; follow the guidance in DoD 4140.25-M and/or DESC Interim Policy and Procedures for performing a cash sale.

7.8.2. Appoint personnel in writing authorized to collect cash obtained from these sales IAW DoDFMR 7000.14-R, Vol. IV, *Disbursing Policies and Procedures*.

7.8.3. Provide for the safekeeping of cash IAW AFI 31-101. **NOTE:** Off-duty personnel cannot safeguard money collected from cash sales.

7.9. Accounting for Special and Missile Fuels:

7.9.1. DESC establishes procedures for processing special fuels.

7.9.2. Accounting for missile fuels. The FSC

7.9.2.1. Accounts for propellants, oxidizers, pressurants, and related items according to AFMAN 23-110, Vol. I, Part 3, Chap. 4 (until incorporated into DoD 4140.25-M).

7.10. Accounting for Liquid Oxygen and Liquid Nitrogen. The FSC requisitions the products IAW DESC Interim Ordering Instructions and accounts for LOX and LIN according to AFMAN 23-110 (until incorporated into DoD 4140.25-M).

7.11. Establishing the Fuels Support Function. The FMT:

7.11.1. Establishes a formal rotational training plan to maintain a balance of skills within the flight.

7.11.1. (ANG) Not applicable to the ANG.

7.12. Duties of the Flight Mobility Monitor:

7.12.1. Evaluates and reports the overall fuels flight mobility status to FMT.

7.12.2. Monitors mobility personnel compliance in maintaining updated documents, individual mobility equipment, training, and immunizations.

7.12.3. Schedules personnel requiring special qualifications training.

7.12.4. Ensures personnel assigned UTCs meet requirements in [Attachment 13](#).

7.12.5. Selects personnel with at least two years retainability to attend Aerial Bulk Fuel Delivery System (ABFDS) and Forward Area Refueling Point (FARP) schools.

7.12.6. Maintain a current listing of all SEI, flight physicals, physiological training, and any other unique training requirements for ABFDS and FARP personnel.

7.12.7. Schedule flight physicals and physiological training at least 45 days before due date.

7.12.8. Maintain AF IMT 702, *Individual Physiological Training Record*, and AF IMT 1042, *Medical Recommendation for Flying or Special Operational Duty*, for ABFDS qualified personnel.

7.12.9. Identifies mobility support funding requirements to the squadron resource manager in support of DOC tasked UTC requirements.

7.12.10. Prepare and processes equipment for deployment.

7.12.11. Coordinates with local agencies to meet MAJCOM deployment time frames.

7.12.12. Must be familiar with unit DOC statement, UTC posturing, coding procedures, and status of all flight UTCs within AEF Reporting Tool (ART).

7.13. Duties of the Fuels Training Monitor:

7.13.1. Administer the upgrade training program according to AFI 36-2201, Vol. I, II, and III.

7.13.2. Designates in writing qualified personnel as trainers.

7.13.3. Develop training programs for all assigned equipment and systems.

7.13.4. Coordinates Fuels Management's training program with squadron training.

- 7.13.5. Maintains Weighted Airman Promotion System (WAPS) study materiel.
- 7.13.5. (ANG) Not applicable to the ANG.
- 7.13.6. Schedules generator operation and fire extinguisher training. Ensures drivers training is scheduled through the Vehicle Control Non-Commissioned Officer (VCNCO).
- 7.13.7. Maintains personnel qualifications in BSM-E.
- 7.13.8. Ensures the appropriate SEI is recommended and awarded to personnel IAW AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, and the AFECD..
- 7.13.9. Establishes a tank custodian training program IAW AFI 23-204.
 - 7.13.9.1. Develops a comprehensive checklist to ensure organizations understand and comply with tank custodian requirements. Use AFI 23-204 as a basic guide.
- 7.13.10. Review and document all training records within Training Business Area (TBA) semi-annually.
- 7.13.10. (ANG) Review and document all training records within Training Business Area (TBA) annually.
- 7.13.11. Develop Fire Prevention Training to include:
 - 7.13.11.1. Fire reporting procedures.
 - 7.13.11.2. Facility evacuation and vehicle evacuation from fuel servicing areas.
 - 7.13.11.3. Fuel spill response.
 - 7.13.11.4. Emergency shutdown procedures.
 - 7.13.11.5. Hazard elimination.
- 7.13.12. Schedule Chemical Warfare Defense Equipment (CWDE) Training IAW AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*, and document on individual AF IMT 1098, *Special Task Certification and Recurring Training*, BSM-E, or automated forms.
 - 7.13.12.1. Train all deployable personnel.
 - 7.13.12.2. Task Qualification Training (TQT). Train personnel to perform assigned tasks in MOPP 4 gear based on requirements of the UTC they are assigned against.
 - 7.13.12.3. During TQT, wear full chemical warfare ensemble while driving/operating fuel vehicles and equipment. Discuss hazards associated with working in MOPP 4 gear before performing the training scenario. Ensure the trainee is under direct supervision of a certified trainer. FMT may authorize some simulation for identified tasks that can't be completed at training location. **NOTE:** TQT must be accomplished prior to operating vehicles in MOPP 4 unsupervised. (After initial TQT, annual refresher training is required).
- 7.13.13. Developing a Rotational Training Program:
 - 7.13.13. (ANG) Not applicable to ANG.

7.13.13.1. In coordination with the FMT, implements a base-level rotational training program IAW core tasks identified in the Career Field Education and Training Plan (CFETP).

7.13.13.2. A formal rotational program is not required if the location has fewer than 15 military personnel and those with 12 to 15 month tour lengths.

7.13.13.3. Use the following guidelines and the CFETP as a template:

7.13.13.3.1. 5-Skill Level: Experience in mobile distribution, hydrants, service station, and laboratory functions.

7.13.13.3.2. 7-Skill Level: Familiar with the areas necessary for the 5-Skill Level plus refueling maintenance, FSC, and cryogenics.

7.13.14. Manage FMT Publication Familiarization Program. Familiarize personnel with applicable publications and advise them of significant changes.

7.14. Duties of the Fuels Materiel Control Monitor:

7.14.1. Coordinates supply and equipment transactions with appropriate LRS flights.

7.14.2. Buys needed parts, tools and equipment.

7.14.3. Establishes bench stock and special level authorizations, if required.

7.14.4. Monitors equipment authorizations and Custodian Authorization/Custody Receipt Listings (CA/CRLs).

7.14.5. Provides FMT approved supply and equipment budget forecasts to squadron resource advisor.

7.14.6. Manage Government Purchase Card Program IAW AFI 64-117, *AF Government-Wide Purchase Card Program*.

7.15. Establishing a Fuels Laboratory Function:

7.15.1. The FMT will:

7.15.1.1. Establish base fuels laboratory function to evaluate the cleanliness of fuel and proper operation of fuel-handling systems, for each base handling aviation fuel. **NOTE:** The area fuels laboratory conducts full specification tests to determine chemical and physical properties of a product.

7.15.1.2. Use AFH 32-1084 and AFOSH 91-38 to identify laboratory facility criteria.

7.15.1.2. **(ANG)** Also reference ANG Handbook 32-1084.

7.15.1.3. Equip laboratory to perform tests specified by 42-Series Technical Orders for all products handled. Refer to AS 460, *Quality Control Laboratories*, for fuels laboratory equipment.

7.15.1.4. **(Added-ANG)** Every effort must be made to ensure that the fuels flight has a fuels laboratory to perform fuel testing IAW 42-Series Technical Orders. Units that do not have a lab will initiate a Memorandum of Agreement (MOA) with the host fuels flight to allow qualified ANG personnel to perform normal laboratory technician duties and maintain proficiency.

7.15.2. MAJCOMs approve variances to laboratory facility criteria with coordination from the AF Safety Center, Ground Safety (HQ AFSC/SEG) and MAJCOM Safety offices.

7.15.3. The AFPET approves fuel analyses performed anywhere other than a qualified base fuels laboratory facility. This does not include field-testing in a contingency environment.

7.16. Duties of the NCOIC Fuels Laboratory:

7.16.1. Ensure BSM-E reflects accurate sample due dates and fuel/cryogenic sample results. NOTE: Only qualified personnel assigned to the Fuels Laboratory can input data into BSM-E. Record visual fuel samples from vehicles, equipment and facilities at discretion of FMT for trend analysis of water accumulation/removal from fuel systems.

7.16.2. Use AFTO Form 150, *Base Fuels Sampling and Testing Record*, at deployed locations if automation is unavailable.

7.16.3. Administer Caution Tag Program.

7.17. Caution Tag Program. The NCOIC Fuels Laboratory:

7.17.1. Notifies FSC when placing or removing an AF Form 980, *Caution Tag*.

7.17.2. Records caution tag actions in BSM-E.

7.17.3. Ensures that Caution Tag program data has been successfully backed up.

7.17.4. Place an AF Form 980 on refueling equipment and facilities that are overdue laboratory sampling.

7.18. Establishing Sampling and Testing Requirements:

7.18.1. Establish sampling requirements and laboratory correlation program IAW T.O. 42B-1-1.

7.18.2. FMT approves trained personnel not assigned to the fuels laboratory to draw and analyze fuel samples.

7.19. Handling Contaminated and Off-Specification Fuel Products:

7.19.1. Laboratory Personnel

7.19.1.1. Immediately notify FMT and FSC of any suspected contaminated or off-specification fuel.

7.19.1.2. Immediately remove fuel stocks, equipment and facilities from service using an AF Form 980 and a lock to prevent use.

7.19.1.3. Analyze samples to determine problem and root cause.

7.19.2. The FMT

7.19.2.1. Informs squadron commander, affected agencies, and agencies listed in T.O. 42B-1-1.

7.19.2.2. Immediately notifies MAJCOM (via telephone within 2 hours of the incident) and follow up message or electronic message within 24 hours of occurrence with an info copy to AFPET.

7.19.2.3. MAJCOM notifies the applicable DEO/DER Quality Section and the assigned Quality Surveillance Representative.

7.20. Crashed Aircraft Fuel Samples:

7.20.1. Lab personnel draw and submit fuel samples associated with aircraft incidents IAW T.O. 42B-1-1.

7.20.2. Crash Sampling Kit. The Lab personnel

7.20.2.1. Refer to T.O. 42B-1-1 for the mandatory kit items.

7.20.2.2. Inventory and inspect kit annually for serviceability. Seal to prevent removal of equipment, and check the seal semiannually, documenting both inspections in BSM-E. Re-inspect kit if there is any evidence of tampering.

Chapter 8

COMPLIANCE AND ENVIRONMENTAL

8.1. Duties of the Compliance & Environmental Section. The Compliance & Environmental Section Chief manages the inspection and environmental programs.

8.1.1. The FMT appoints a person to perform inspection functions and a person to perform environmental compliance functions. **NOTE:** At locations with limited manning, the applicable parent MAJCOM may authorize the same person to perform both functions, as long as all responsibilities are met.

8.1.1. (ANG) FMT is authorized to assigned the same person to perform both the compliance and environmental functions, as long as all responsibilities are met.

8.1.2. The Compliance Section Chief will

8.1.2.1. Establish a safety program IAW AFI 91-301, *AF Occupational and Environmental Safety, Fire Prevention, and Health (AFOSH) Program*, and AFOSH Standards.

8.1.2.2. Provide topics to present at daily safety briefings.

8.1.2.2. (ANG) Provide topics to present at safety briefings.

8.1.2.3. Attend safety briefings on a random basis to check for effectiveness.

8.1.2.4. At least quarterly, brief and document fuels personnel on safety matters; to include hazards, safety precautions, first-aid measures and off-duty seasonal hazards and precautions. Include high visibility items such as safe handling of fuel soaked clothes, prenatal precautions and wear of contact lenses.

8.1.2.4. (ANG) Element supervisors are present in ANG fuels sections only during UTA. The Fuels Safety Monitor or designated representative will conduct a safety briefing during each UTA. Topics will include, but are not limited to hazards, safety precautions, first-aid measures, mishaps/accidents, directive/technical order updates, off-duty seasonal hazards/precautions and any safety hazards that have developed since the last UTA. Also include high visibility items such as safe handling of fuel soaked clothes, prenatal precautions and wear of contact lenses. This briefing will be documented and signed by all personnel within the fuels flight and maintained for a minimum of 12 months.

8.1.2.5. Inspect the fuels management activity occupational safety and health program semiannually using an AF IMT 2420, *Quality Assurance Inspection Summary*, or automated equivalent. You may combine semiannual inspections with internal evaluations.

8.1.2.5. (ANG) Inspect the fuels management activity occupational safety and health program annually using an AF IMT 2420, *Quality Assurance Inspection Summary*, or automated equivalent. You may combine annually inspections with internal evaluations.

8.1.2.6. Establish an effective hazard reporting system IAW AFI 91-204.

8.1.3. The Fuels Environmental Supervisor will

- 8.1.3.1. Provide weekly environmental topics for inclusion in safety briefings.
- 8.1.3.1. (ANG) Provide environmental topics for inclusion in safety briefings.
- 8.1.3.2. Assure compliance with federal, state, and local environmental laws/regulations and AF Policy Directives and Instructions. At overseas locations, assure compliance with Final Governing Standards (FGS) or the Overseas Environmental Baseline Guidance Document (OEBGD) in the absence of the FGS.
- 8.1.3.3. Consult with the installation Environmental Protection Committee, Base Environmental Manager, Base Civil Engineer (BCE), Base Bioenvironmental Engineer, and Staff Judge Advocate to stay current of local environmental rules, restrictions, and regulations.
- 8.1.3.4. Address recurring environmental expenses IAW DoD 4140.25-M and DESC Interim Policy and Procedures.
 - 8.1.3.4.1. Coordinate with the installation environmental office to identify and determine annual recurring expenses eligible for environmental funding.
 - 8.1.3.4.2. Coordinate with installation environmental office to determine environmental compliance actions and projects upon DESC's annual request for action.
 - 8.1.3.4.3. Stay familiar of emergency funding reimbursement procedures for spill cleanup actions IAW DoD 4140.25-M, and DESC Interim Policy and Procedures.

8.2. Evaluation Guidelines. The Compliance Section Chief may refer to the MAJCOM inspection checklist. This checklist may be supplemented by MAJCOMs/Units for local conditions to evaluate the following:

- 8.2.1. Management effectiveness.
- 8.2.2. Administrative/LAN procedures.
- 8.2.3. FISC accounting procedures.
- 8.2.4. Operator performance.
- 8.2.5. Ground safety and fire prevention.
- 8.2.6. Environmental compliance.
- 8.2.7. Corrosion control.
- 8.2.8. Care of equipment and facilities.
- 8.2.9. Training.
- 8.2.10. Product quality procedures.

8.3. Performing Semiannual Evaluations:

- 8.3.1. The Compliance Section Chief will
 - 8.3.1.1. Evaluate each element, except its own function, semiannually (at least once each six months).

8.3.1.1. **(ANG)** Evaluate each element, except its own function, annually (at least once each twelve months).

8.3.1.2. Revisit after 30 days but within 45 days to check each discrepancy found during the semiannual evaluation.

8.3.1.2. **(ANG)** Revisit during the next UTA to check each discrepancy found during the annual evaluation.

8.3.2. Discuss evaluation areas, special items of concern and discrepancies from the last evaluation with the element supervisor.

8.3.3. The FMT designates an evaluator to perform a semiannual assessment of the Compliance & Environmental element.

8.3.3. **(ANG)** The FMT designates an evaluator to perform an annual assessment of the Compliance & Environmental element.

8.4. Conducting Spot Checks

8.4.1. Perform at least 10 no-notice spot checks each week. At bases with less than 20 full-time fuels personnel perform at least two no-notice spot checks per week.

8.4.1. **(ANG)** Perform at least eight (8) no-notice spot checks each month.

8.4.2. Spot-check all shifts including weekends on a monthly basis. If spot check is rated unsatisfactory, do not consolidate it with others. Route unsatisfactory spot checks separately, identifying the failure and circumstances involved. Immediately route the unsatisfactory spot-check through the responsible supervisor and chain of command to the FMT.

8.4.2. **(ANG)** Spot checks must include evaluations during the work week and UTAs. If spot check is rated unsatisfactory, do not consolidate it with others. Route unsatisfactory spot checks separately, identifying the failure and circumstances involved. Immediately route the unsatisfactory spot-check through the responsible supervisor and chain of command to the FMT.

8.4.2.1. **(Added-ANG)** Do not document technician performance on AF Form 2419 or equivalent. Technician supervisors will evaluate technicians during the week IAW Office of Personnel Management standards.

8.4.3. Conduct spot checks during exercises and contingencies.

8.4.4. Stop the operation and notify the immediate supervisor and the FMT if a major safety violation is found. A major safety violation is an unsafe facility/vehicle/equipment that wasn't removed from use or properly danger/caution tagged, or a person committing a safety violation that could result in injury to personnel or damage to aircraft, equipment, or facilities.

8.4.5. Annotate results from spot checks on AF IMT 2419, *Routing and Review of Quality Control Reports*, or electronic equivalent, and route through the supervisor chain to the FMT.

8.4.6. Discuss positive and negative findings to include root causes and corrective actions.

8.4.7. Identify recurring discrepancies within a particular element or across the entire flight (negative trends) to the FMT for correction.

8.5. Evaluation Assessment Criteria. Rate all evaluations (semi-annual and spot checks) as either "Satisfactory" or "Unsatisfactory". **NOTE:** The 5 tier rating system may be used on semi-annual inspections at the discretion of the FMT.

8.5. (ANG)Evaluation Assessment Criteria. Rate all evaluations (annual and spot checks) as either "Satisfactory" or "Unsatisfactory". **NOTE:** The 5 tier rating system may be used on annual inspections at the discretion of the FMT.

8.6. Preparing and Routing the Report:

8.6.1. The Compliance Section Chief will

8.6.1.1. For semi-annual inspections prepare and route the AF IMT 2419 and/or AF IMT 2420 or computer product to the applicable element supervisor and chain of command to include the squadron command section.

8.6.1.1. (ANG) For annual inspections prepare and route the AF IMT 2419 and/or AF IMT 2420 or computer product to the applicable element supervisor and chain of command to include the squadron command section.

8.6.1.2. Carry forward open items to the next report.

8.6.1.3. For weekly spot checks prepare and route the AF IMT 2419 and/or AF IMT 2420 or computer product used to the applicable element supervisor and chain of command to the FMT.

8.6.1.3. (ANG) For spot checks prepare and route the AF IMT 2419 and/or AF IMT 2420 or computer product used to the applicable element supervisor and chain of command to the FMT.

8.6.1.4. For failed spot checks route a separate AF IMT 2419 and/or AF IMT 2420 or computer generated product to the applicable element supervisor and chain of command to the FMT.

8.6.2. The element supervisor will

8.6.2.1. Reply to each discrepancy stating the root cause and corrective action to prevent recurrence. For items not immediately corrected, provide an action plan with the estimated completion date.

8.6.3. Each reviewer verifies the corrective actions.

8.6.3.1. If the evaluator observes a discrepancy under the span of control of an outside agency, the FMT informs the agency and routes the report through the squadron commander to the agency.

8.7. Spill Prevention and Containment. The FMT:

8.7.1. Ensures all FMT fuel tanks are equipped with high-level alarms and/or automatic high-level shut-off valves. These alarms are in addition to the Fuels Manager automated alarms.

8.7.2. Coordinates with BCE to establish safe fill levels for all storage tanks.

8.7.3. Provides secondary containment that is impermeable to petroleum products at all primary loading and unloading facilities and for all above ground tanks larger than 660

gallons IAW UFC3-460 03 *Operation and Maintenance: Maintenance of Petroleum Facilities*.

8.7.4. Establishes procedures to prevent unauthorized discharge of water containing residual petroleum products or hazardous chemicals that have leached out of the petroleum product.

8.7.5. Coordinates with the base environmental manager to sample and properly dispose of fuel tank dike drainage and tank bottom water.

8.7.6. Coordinates with the Civil Engineer Operations Flight to establish procedures for the proper operation, inspection and maintenance of oil/water separators.

8.7.7. Develops local operating procedures for collection, segregation, storage and disposition of waste and reusable bulk petroleum products IAW AFI 23-502, *Recoverable and Unusable Liquid Petroleum Products*.

8.7.8. Ensures fuels personnel understand responsibilities as outlined in the base Spill Prevention Control and Countermeasures (SPCC) Plan and the base's hazardous materiel emergency planning and response plan (HAZMAT plan) which addresses federal, state, and local spill prevention and response requirements.

8.7.9. Notify the base environmental manager of any changes in fuels operations that may require an amendment to the HAZMAT plan.

8.7.10. Ensures adequate spill prevention and clean-up materiel are readily available.

8.8. Waste Management:

8.8.1. Waste Fuels will be handled by the Base Civil Engineer IAW AFI 23-502 and in compliance with federal, state, and local environmental laws/regulations and AF Policy Directives and Instructions.

8.8.2. The FMT ensures

8.8.2.1. MAJCOM and/or AFPET are contacted to get disposal instructions for off-specification product or fuel/water mixtures.

8.8.2.2. Installed hydrants, storage sumps, and slop tanks are NOT used to collect or store waste fuels.

8.8.2.3. Written MAJCOM approval is obtained if stock listed vehicles and trailers are requested for the collection and transport of waste fuels or oils. Before returning vehicles to normal service, ensure they meet compliance requirements outlined in T.O. 42B-1-1.

8.9. Leak Detection. The FMT:

8.9.1. Assures that any chemicals or additives injected into USAF fuels are approved by the agencies listed in T.O. 42B-1-1.

8.9.2. Ensures fuels personnel are present for all inoculations of leak detection chemicals in FMT controlled storage tanks.

8.9.3. Maintains inoculation records IAW T.O. 42B-1-1.

8.9.4. DELETED.

8.9.5. Requires operator training on installed leak detection systems.

Chapter 9

FUELS MOBILITY SUPPORT

9.1. Duties of the Fuels Mobility Support Section Chief. At the FMTs discretion, a Fuels Mobility Support Element can be created for locations storing and/or using Fuels Mobility Support Equipment (FMSE) and/or Fuels Operational Readiness Capability Equipment (FORCE).

9.1.1. The Fuels Mobility Support Section Chief

9.1.1.1. Identifies fiscal year mobility support funding requirements to the squadron commander's resource manager.

9.1.1.2. Performs operator maintenance on mobility equipment.

9.1.1.3. Maintains technical orders and records for FMSE/FORCE.

9.1.1.4. Prepares and processes equipment, Mobility Readiness Spares Packages (MRSP) and JFDES kits for deployment.

9.1.1.5. Coordinates with transportation, supply, and personnel functions to meet MAJCOM deployment time frames. Transfer accountability of CA/CRL items to deployed supply account if deployment time period exceeds AFI 23-110 requirements.

9.1.1.6. Performs unit mobility monitor responsibilities in paragraph 7.12 as determined by the FMT.

9.1.1.7. Maintains records of all FMSE/FORCE transactions (i.e. maintenance, inspection, salvage, and transfer of equipment).

9.2. Managing FMSE/FORCE

9.2.1. MAJCOMs storing FMSE/FORCE

9.2.1.1. Designate storage bases, prescribe command reporting, and administer a management program.

9.2.1.2. Calculate FMSE/FORCE personnel and equipment requirements to support current AF planning guidance. Maintain source documents until completion of the next validation.

9.2.1.3. Programs for fiscal year funding through appropriate agencies.

9.2.1.4. Develops procedures to obtain up-front money for reconstitution.

9.3. How to Store, Maintain, Inspect, and Deploy FMSE/FORCE and FARP Equipment:

9.3.1. FMT will

9.3.1.1. Store all equipment inside where possible. In allocating inside storage, give priority to rubber products and filter-separator elements. When inside storage space is not adequate use covered outside storage. In both cases, provide dust covers for all openings in valves, hoses, nozzles, and equipment items.

9.3.1.2. Store bladders (to include ABFDS bladders) IAW T.O. 37A-1-101, *USAF Fuel, Water and Lubricant Dispensing Systems*.

9.3.1.3. DELETE

9.3.1.4. Store and maintain FARP equipment IAW Forward Area Manifold (FAM) Cart Manual.

9.3.1.5. Provide recurring inspection and maintenance on stored FARP assets. Equipment will be stored in a ready for deployment posture. Any deviation of equipment or down time will be reported to HQ AFSOC/A4RE, parent MAJCOM and AFPET.

9.3.2. MAJCOMs and FMTs provide recurring inspection and maintenance for all assigned equipment.

9.3.2.1. Use T.O. 37A-1-101 for operation, servicing, and maintenance of air transportable fuel systems.

9.3.2.2. Use FAM Cart Manual for operating, servicing, and maintaining FARP equipment.

9.3.3. To prepare ABFDS, FMSE, FORCE, or FARP equipment for deployment:

9.3.3.1. Inspect equipment.

9.3.3.2. Charge the batteries, run engines, visually inspect 10K and 50K bladders, and place bladders in slings/cradles or crates.

9.3.3.3. Inspect and leak check ABFDS bladders according to T.O. 37A9-3-7-1.

9.3.3.4. Inspect and prepare FARP equipment IAW FAM Cart Manual.

9.3.3.5. Prepare the equipment for shipment IAW AF Inter-service Manual AFMAN 24-204(I), *Preparing Hazardous Materials for Military Air Shipments*.

9.3.3.6. Deploy equipment records IAW AFMAN 23-110, Vol. II, Part 3, Chap. 1. Be sure to keep a copy of the originals in case others are lost in shipment.

9.4. FMSE and/or FORCE Set-up:

9.4.1. Use AFPAM 23-221 for executing fuel support operations particularly at other than main operating bases.

9.4.2. Locate and install FMSE/FORCE based on:

9.4.2.1. The airfield layout and type of aircraft supported.

9.4.2.2. The resupply source.

9.4.2.3. Aircraft taxi and/or tow capability.

9.4.2.4. The layout of roads and water channels.

9.4.2.5. Other facility limitations.

9.4.3. Use PMU-27 service station set-up to support ground fuels.

9.4.4. Site cryogenics facility to minimize the travel time and distance flight line servicing units move for refilling; provide accessibility for tank truck deliveries; and comply with distance criteria of AFMAN 91-201, *Explosives Safety Standards*.

9.5. Using ABFDS, FMSE, FORCE, or FARP for Exercise Support:

9.5.1. For activities planning to use fuels support equipment for any reason other than OPLAN taskings, review the constraints of AFI 25-101, Chap. 6.

9.5.2. Submit requests to parent MAJCOM Fuels Management Office.

9.5.3. Activities submitting requests must:

9.5.3.1. Provide 10 working days advance notice when practical.

9.5.3.2. Provide purpose of intended use.

9.5.3.3. Use UTCs to identify equipment and quantity when possible. UTCs may be tailored to suit the using organizations requirements.

9.5.3.4. Provide the in-place date at deployment location and length of loan.

9.5.3.5. Provide the full name, unit of assignment, and DSN phone number of the person(s) responsible for receiving, maintaining, and returning the equipment.

9.5.3.6. List fund cites for transportation, FMSE/FORCE reconstitution, and TDY of operator personnel IAW AFI 25-101, when requested.

9.5.3.7. Deploy equipment records IAW AFMAN 23-110, Vol. II, Part 3, Chap. 1. **NOTE:** IAW AFI 25-201, *Support Agreements Procedures*, reconstitution will include the “up front” expense of associated MRSP, fuel bladders, batteries, and any other items that will require maintenance, repair, or replacement.

9.5.3.8. Forward special transportation information. Dedicated airlift is the preferred mode of transport.

9.5.3.9. Provide complete address of deployment location and on-site point of contact telephone numbers.

9.5.4. Using FARP:

9.5.4.1. For taskings of FARP personnel and/or equipment for exercises/contingencies which will require more than 24 continuous hours away from home station, submit notification of deployment to HQ AFSOC/A4RE within 24 hours of receipt of tasking.

9.6. Establishing ABFDS and FARP Operational and Training Requirements:

9.6.1. ABFDS and FARP operators

9.6.1.1. Are qualified fuels specialists, AFSC 2F0X1, MSgt and below.

9.6.1.2. Must meet ASC9C flying duty qualification standards.

9.6.1.3. Are Classified as having an Aviation Service Code of 9C (Operations Support)

9.6.2. At a minimum, ABFDS Operator must meet the following requirements:

9.6.2.1. Annual 9C Flight Physical.

9.6.2.2. Physiological Training (Every 5 years).

9.6.2.3. Small Arms Training (9mm).

9.6.2.4. Intelligence Training (ISOPREP Card).

9.6.2.5. Life Support Equipment Training.

9.6.2.6. Complete Survival, Evasion, Resistance, and Escape (SERE) initial and refresher training for Enlisted and Non-Rated Aircrew IAW AFI 16-1301, *Survival, Evasion, Resistance, and Escape (SERE) Program*.

9.6.3. Additional ABFDS Requirements:

9.6.3.1. HQ AF/A4TQ allocates new and recurring man-year requirements to the MAJCOMs on a fiscal year basis and supplements them on a semi-annual basis (when requested).

9.6.3.2. MAJCOM Fuels Management Office will

9.6.3.2.1. Forecast and submit annual ABFDS crew flying hour (man-year) requirements IAW AFI 11-402, Chap. 8, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*.

9.6.3.2.2. Submit flying hour request through their respective MAJCOM Flight Management office for validation.

9.6.3.2.3. Manage ABFDS from the command level.

9.6.3.2.4. The local Host Aviation Resource Manager's (HARM) office publishes aeronautical orders for ABFDS crews.

9.6.4. At a minimum, FARP Operator must meet the following requirements:

9.6.4.1. Annual 9C Flight Physical.

9.6.4.2. Physiological Training (Every 5 years).

9.6.4.3. Small Arms Training (9mm).

9.6.4.4. Aircraft Ground Egress Training.

9.6.4.5. Night Vision Device Training.

9.6.4.6. Intelligence Training (ISOPREP Card).

9.6.4.7. Life Support Equipment Training.

9.6.4.8. Complete SERE initial and refresher training for Forward Area Refueling Point (FARP) Personnel IAW AFI 16-1301.

9.6.5. Additional FARP Requirements:

9.6.5.1. HQ AFSOC/A4RE will

9.6.5.1.1. Certify the program and qualify the initial cadre including trainers of personnel at each new FARP location prior to their initial commitment date.

9.6.5.1.2. Establish and coordinate policy and procedures for FARP operations with AFPET.

9.6.5.2. Duties of the FMT

- 9.6.5.2.1. Conducts initial interviews with all prospective FARP operators.
- 9.6.5.2.2. Ensures adequate personnel are designated and trained to meet 24-hour mission readiness requirements.
- 9.6.5.2.3. Ensures all FARP policies from AFSOC/A4RE are implemented. **NOTE:** FARP is a primary duty. SOCOM funded FARP personnel will not be assigned duties that interfere with FARP requirements.
- 9.6.5.2.4. Appoints all FARP certifiers in writing.
- 9.6.5.2.5. Provides covered storage area for FARP servicing equipment and secured storage for FARP personnel equipment.

9.6.5.3. Duties of the FARP Team Chief

- 9.6.5.3.1. Monitors FARP personnel and equipment to ensure all training is accomplished, qualifications are maintained, and readiness status meets mission operation requirements.
- 9.6.5.3.2. Briefs FARP personnel on all policies issues by HQ AFSOC/A4RE.
- 9.6.5.3.3. Provides management with a monthly status update.
- 9.6.5.3.4. Provides the FSC with a roster of primary and alternate team members on recall standby.
- 9.6.5.3.5. Coordinates with the flying squadron's planners/schedulers to ensure personnel availability for training and mission requirements.
- 9.6.5.3.6. Submits the FARP budget to HQ AFSOC/A4RE by 1 April each year.
- 9.6.5.3.7. Submits the FARP inventory to AFPET and HQ AFSOC/A4RE and the FARP training reports to HQ AFSOC/A4RE semiannually (1 April and 1 October).
- 9.6.5.3.8. Submit a mission sheet to HQ AFSOC/A4RE after every FARP mission or tasking (to include training) within two duty days after return to home station.
- 9.6.5.3.9. Ensure FARP operations are conducted as outlined in AFI 11-235, *Forward Area Refueling Point (FARP) Operations*.
- 9.6.5.3.10. Provide a trip report to HQ AFSOC/A4RE after each FARP TDY or deployment within five duty days after return to home station.
- 9.6.5.3.11. Ensure each FARP program has hoses to perform DOC tasked/UTC requirements on hand at all times.

9.6.5.4. Currency requirements:

- 9.6.5.4.1. Perform one FARP mission every twelve months, from fixed wing aircraft to rotary wing or fixed wing aircraft with engines running, under blacked out conditions using Night Vision Goggles (NVGs).

9.6.5.5. Certifier Requirements

9.6.5.5.1. Meet all requirements in paragraph 9.6.4, be current, qualified, and appointed by the FMT in writing.

9.6.6. The Logistics Readiness Squadron commander, using AS 016, Part B, ensures ABFDS and FARP specialists received the personal equipment in [Attachment 8](#).

9.6.7. The Base Hospital issues ABFDS and FARP operator's prescription glasses according to AFJI 44-117, *Ophthalmic Services*.

Chapter 10

INFORMATION COLLECTION, RECORDS, AND FORMS:

10.1. Information Collections. No information collections are accomplished by this publication.

10.1.1. Records. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW AFMAN 33-363 and disposed of IAW the AFRIMS Records Disposition Schedule located at https://afrims.amc.af.mil/rds_series.cfm. DESC requires that DWCF records be maintained IAW DESC-P-3.

10.1.2. Forms (Adopted and Prescribed).

10.1.2.1. Adopted Forms. AF Form 847, *Recommendation for Change of Publication*, DD Form 1391, *Military Construction Project Data*, AFTO Form 22, *Technical Manual (TM) Change Recommendation and Reply*, DD Form 448, *Military Interdepartmental Purchase Request*, AFTO Form 781F, *Aerospace Vehicle Flight Report and Maintenance*, AF Form 3215, *IT/NSS Requirements Document*, AFTO Form 39, *Fuel System Inspection and Discrepancy Report*, AF IMT 1807, *Operator's Inspection Guide and Trouble Report (Fuel Servicing)*, AFTO Form 134, *Aviator Breathing Oxygen Servicing Trailer Log (Liquid/Gaseous)*, AFTO IMT 244, *Industrial Support Equipment Record*, AFTO IMT 95, *Significant Historical Data*, AF IMT 601, *Equipment Action Request*, AFTO Form 422, *Differential Pressure Log*, AF Form 1232, *Bulk Fuel Issue/Defuel Summary*, DD Form 1898, *Fuel Sale Slip*, AF IMT 702, *Individual Physiological Training Record*, AF IMT 1042, *Medical Recommendation for Flying or Special Operational Duty*, AF IMT 1098, *Special Task Certification and Recurring Training*, AFTO Form 150, *Base Fuels Sampling and Testing Record*, AF Form 980, *Caution Tag*, AF IMT 2420, *Quality Control Inspection Summary*, and AF IMT 2419, *Routing and Review of Quality Control Reports*.

10.1.2.2. Prescribed Forms. No forms are prescribed by this publication.

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(ANG)

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

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Abbreviations and Acronyms

ABFDS—Aerial Bulk Fuel Delivery System

ACR—Authorization Change Requests

ADC/FDS—Aircraft Data Collection/Fuels Dispensing Systems

ADPE—Automated Data Processing Equipment

AFECD—Air Force Enlisted Classification Directory

AFCP—Alternative Fuel Compliance Plan

AFLMA—Air Force Logistics Management Agency
AFMD—AF Manpower Document
AFMIA—AF Manpower and Innovation Agency
AFMS—AF Manpower Standard
AFOSH—Air Force Occupational Safety and Health Standards
AFPET—Air Force Petroleum Agency
AFRIMS—Air Force Records Information Management System
AFSC—Air Force Specialty Code
AFSS—Automated Fuel Service Station
ART—AEF Reporting Tool
AS—Allowance Standard
ASC—Aircraft Servicing Capability
ATG—Automatic Tank Gauging
BCE—Base Civil Engineering
BEE—Base Bioenvironmental Engineering
BSM—E—Base System Modernization-Energy
BSME—ECAP—BSM-E Payback Capital Investment Program
BSP—Base Support Plan
CA/CRLs—Custodian Authorization/Custody Receipt Listings
CCDR—Combatant Commander
CFETP—Career Field Education and Training Plan
CNG—Compressed Natural Gas
COCOM—Combatant Command
COR—Contracting Officer Representative
CSG—Competent Steering Group
CSIP—Component Sponsored Investment Program
CWDE—Chemical Warfare Defense Equipment
DEO—Defense Energy Office
DER—Defense Energy Region
DESC—Defense Energy Support Center
DLA—Defense Logistics Agency
DOC—Design Operational Capability

DoDD—Department of Defense Directive
DRU—Direct Reporting Unit
DWCF—Defense Working Capital Fund
ECAC—Evasion, Conduct after Capture
FAC—Functional Area Chief
FAM CART—Forward Area Manifold Cart
FARM—Functional Account Records Manager
FARP—Forward Area Refueling Point
FAS—Fuels Automated System
FSC—Fuels Service Center
FES—FAS Enterprise Server
FGS—Final Governing Standards
FISC—Fuels Information Service Center
FM—Fuels Manager
FMFC—Fuels Management Flight Commander
FMSE—Fuels Mobility Support Equipment
FMT—Fuels Management Team
FOA—Field Operating Agency
FOD—Foreign Object Damage
FOI—Fuels Operating Instruction
FORCE—Fuels Operational Readiness Capability Equipment
FSEVWG—Fuels Support Equipment & Vehicle Working Group
GOCO—Government-Owned, Contract –Operated
HAZMAT—Hazardous Materials
HARM—Host Aviation Resource Manager
IGESP—In-Garrison Expeditionary Site Plans
IMM—Integrated Materiel Manager
IMP—Inventory Management Plan
IPRB—Installation Planning Review Board
JPO—Joint Petroleum Office
LAN—Local Area Network
LEAP—Logistics Education Advancement Program

LIN—Liquid Nitrogen
LOX—Liquid Oxygen
LPG—Liquefied Petroleum Gas
MAFSS—Mobile Automated Fuel Service Station
MAJCOM—Major Command
MEO—Most Efficient Organization
MEP—Management Engineering Program
MHE—Material Handling Equipment
MILCON—Military Construction
MIPR—Military Interdepartmental Purchase Request
MO—Manpower and Organization Office
MOC—Maintenance Operations Center
MRSP—Mobility Readiness Spare Packages
NVG—Night Vision Goggles
OEBGD—Overseas Environmental Baseline Guidance Document
OL—Operating Locations
OI—Operating Instruction
OPLAN—Operations Plan
ORM—Operational Risk Management
OSHA—Occupational Safety and Health Administration
OVS—Overboard Vent System
PA—Property Administrators
PEP—Professional Enhancement Program
PETROL RAM—Petroleum Resource Automated Management
PLMC—Petroleum Logistics Management Course
PMEL—Precision Measurement Equipment Laboratory
POS—Peacetime Operating Stock
PPE—Personal Protective Equipment
PWRR—Prepositioned War Reserve Requirement
PWRS—Prepositioned War Reserve Stocks
PWS—Performance Work Statements
QAE—Quality Assurance Evaluator

RDS—Air Force Records Disposition Schedule
REPOL—Bulk Petroleum Contingency Report
RFM—Refueling Maintenance
RO—Responsible Officer
SEI—Special Experience Identifier
SERE—Survival, Evasion, Resistance, and Escape
SORTS—Status of Resources and Training System
SPCC—Spill Prevention Control and Countermeasures
SRM—Sustainment, Restoration, and Modernization
TBA—Training Business Area
TM—Terminal Manager
TPFDD—Time-Phased Force Deployment Data
TQT—Task Qualification Training
UMD—Unit Manpower Document
UPMR—Unit Personnel Management Roster
UPS—Uninterruptible Power Source
UTC—Unit Type Code
U & TW—Utilization & Training Workshop
VCNCO—Vehicle Control Non-Commissioned Officer
VCO—Vehicle Control Officer
WAA—Wartime Aircraft Activity
WAPS—Weighted Airman Promotion System
WCDO—War Consumable Distribution Objective
WFM—Water and Fuels System Maintenance
WMP—War and Mobilization Plan
WRM—War Reserve Materiel

Terms

Aerospace Fuels Laboratory—Provide testing services to bases on samples of petroleum and related products. Conduct specification tests to determine the quality of petroleum products under procurement and in the AF supply system.

Bulk Petroleum Products—Petroleum product delivered in volumes greater than 208 liters (55 U.S. gallons) such as tank trucks/cars, pipelines, coastal barges, and ocean tankers. This term can apply to several DESC purchase programs including the Bulk Fuels Program for military specification jet and marine fuels, the Posts, Camps, and Stations commercial gasoline and

diesels, and the Bunkers Fuel Program. Product is stored in tankage having a fill capacity greater than 208 liters (55 U.S. gallons).

Business System Modernization/Energy (BSM-E)—A vertically integrated automated information system consisting of base-level components and “enterprise” level systems providing visibility of bulk fuel assets and transactions to Services, Combatant Commanders (CCDR), vendors, and DESC.

Civil Aircraft—All non-government aircraft (domestic and foreign) other than contract and charter carrier aircraft.

Confined Space—A space that 1. Is large enough and configured so a worker can bodily enter and perform assigned work; and 2. Has limited or restricted means for entry or exit (for example: tanks, vessels, silos, storage bins, hoppers, vaults, manholes, and pits are spaces that may have limited means of entry); and 3. Is not designed for continuous human occupancy.

Contract Carriers—Air carriers under contract to any department of the US Government. They are under operational control of the department concerned at rates lower than published rates on file with the Civil Aeronautics Board.

Cryogenics—The science of refrigeration, with reference to methods for producing very low temperatures.

Defense Energy Support Center (DESC)—An organizational component of the Defense Logistics Agency (DLA). DESC is the integrated materiel manager/DoD central procurement agent for bulk petroleum, natural gas, coal and associated services. DESC owns and manages the bulk petroleum products in the Department of Defense to the point-of-sale (end user).

DESC Field Office—A subsidiary of a DESC region. (Example: DESC-United Kingdom is subordinate to DESC-Europe.) Responsibilities are often similar to those of the DESC region. It may perform transportation and traffic management functions such as oversight of transportation-related contracts, product slate reporting, and management of inland petroleum distribution/transportation. Primary function is to act as a liaison for a DESC region in support of contract administrative functions, inventory management, transportation and traffic management, and provide support to the Military Services and major commands. Selected DESC field offices may perform quality surveillance in support of DLA-owned fuel received, stored and shipped within their regional areas.

DESC Region—A management component of the Defense Energy Support Center (DESC) with a geographic area of responsibility to monitor DESC contracts for adequate customer support, control fuel deliveries, perform contract administration functions such as property administration and quality surveillance, provide/coordinate transportation support and emergency planning and report inventory/supply transactions.

Defense Working Capital Fund (DWCF)—A DoD revolving funds that finances the buying and selling of goods and services. It also provides cost visibility and accountability to facilitate business operations. DLA inventories are sold to end user organizational accounts (military units and federal agencies) that reimburse the DLA Division – DWCF for costs incurred.

Design Operational Capability (DOC) Statement—A summary of a unit’s mission and resources for which it has been organized, designed and equipped.

Determinable Losses—The actual loss of inventory, the cause of which is determinable; such as contamination, fire, downgrading of products, etc.

Forward Area Refueling Point (FARP)—An operation used to hot refuel aircraft in areas where fuel is otherwise not available. Fuel is transferred from a source aircraft's (C-130, C-141, C17 or C-5) internal tanks to receiver aircraft while both aircraft's engines are running. Typically accomplished at remote locations under blackout conditions.

Ground Products—Those refined petroleum products normally intended for use in administrative, combat, and tactical vehicles; materiel handling equipment; special purpose vehicles; and stationary power and heating equipment.

Hydrant System—An aircraft fuel servicing facility that can provide fuel through one or more outlets into an aircraft. The hydrant system generally consists of operating storage tanks (older hydrant systems normally have many 50,000 gallon tanks while newer systems normally have two 10,000 barrel tanks), pumps, filter-separators, pipelines, and dispensing.

Inventory Management Plan (IMP)—A DoD integrated plan of bulk fuel inventory levels and storage requirements designed to utilize DoD resources more efficiently and provide financial management data.

Military Construction (MILCON)—Any construction, alteration, development, conversion, or extension of any kind carried out with respect to a military installation.

Organizational Fuel Tank—Any tank, other than integral vehicle tanks or hand-carried safety cans, not under exclusive fuels management control.

Peacetime Operating Stock (POS)—Inventory held at a location to sustain peacetime operations. It includes the unobtainables, safety levels, augmented levels, and economic resupply quantity.

Prepositioned War Reserve Requirement (PWRR)—That portion of the war reserve materiel requirement that the current Secretary of Defense guidance dictates be reserved and positioned at or near the point of planned use or issue to the user prior to hostilities to reduce reaction time and to assure timely support of a specific force or project until replenishment can be effected.

Prepositioned War Reserve Stocks (PWRS)—The assets that are designated to satisfy the prepositioned war reserve materiel requirement.

Professional Enhancement Program (PEP)—Managerial development program designed to provide hands-on headquarters experience in fuels management for mid-level officers.

Quality Assurance Evaluator (QAE)—A person who represents the contracting officer in performing contractor evaluation functions.

Responsible Officer (RO)—Appointed by the squadron commander. This person must be proficient in fuels management and is responsible for the care and safeguarding of the petroleum stocks. This person also ensures accountable records are maintained and required reports are generated.

Sample—A small part of a quantity of product representative of the enter quantity, used for inspection or to determine the quality of the product.

Unit Manning Document (UMD)—A computer product which lists manpower authorizations. It reflects how many people are authorized to accomplish the mission. MAJCOMs use this document to show allocated resources, and as the baseline for portraying the impact of application of new or reapplication of existing manpower standards. The UMD contains: 1. The position number 2. AFSC. 3. Functional account code (work center). 4. Authorized grade. 5. Number of authorizations. 6. A summary of authorizations for officers, enlisted, and civilians assigned to each unit by work centers.

Unit Manpower Personnel Roster (UMPR)—A computer product which identifies people assigned to the unit, by section or functional account code (FAC). The UPMR identifies assignments and indicates the month and year of departures.

Unit Type Code (UTC)—Identifies a specific capability of personnel and/or equipment to be deployed in support of various operations.

Wartime Aircraft Activity (WAA) Report—Provides planners with such information as sortie rates, sortie duration, gallons per sortie. Published as the War and Mobilization Plan (WMP), Vol. IV.

War and Mobilization Plan (WMP)—The AF takes the Joint Strategic Capabilities Plan (JSCP), translates this into AF operational and logistics planning guidance, and publishes this in five volumes known collectively as the War and Mobilization Plan (WMP). The Wartime Aircraft Activity (WAA) listing is published as WMP, Vol. IV. The WAA lists line entries for each JCS-approved OPLAN.

War Consumable Distribution Objective (WCDO)—Document prepared by MAJCOMs to identify authorized quantities of war consumables to support AF wartime missions.

Attachment 2

RADIO TRANSMISSION CODES

A2.1. Radio Transmission Codes.

Figure A2.1. Radio Transmission Codes.

Code	Meaning
10-1	Receiving poorly.
10-2	Receiving well.
10-3	Radio Check.
10-4	Acknowledge, will comply.
10-5	Standby.
10-6	Repeat, reception poor.
10-7	Out of service location.
10-8	In service location.
10-9	What is location?
10-10	Return to FSC.
10-11	Departing parking area.
10-12	How many gallons out of unit?
10-13	Proceed to fill stand.
10-14	Entering fill stand area.
10-15	Leaving fill stand with full unit.
10-16	Request another unit-location.
10-17	Request supervisor at location.
10-18	Request standby fire truck at location.
10-19	Fuel spill, request assistance.
10-20	Entering the parking area.
10-21	Unit requires maintenance (discrepancy).
10-22	Valves open; ready to receive.
10-23	Valves open; ready to start transfer.
10-24	Start pumping.
10-25	Stop pumping.
10-26	Pumps stopped.
10-27	Transfer complete; valves closed.
10-28	Servicing canceled.
10-31	Distinguished visitor in area.
10-36	Correct time.
10-97	Arrived at scene.
10-98	Finished with last assignment.

Note: Use the following modified 10-series radio transmission code list. Add other call signs to meet any local requirements.

Attachment 3

EDUCATION AND TRAINING OPPORTUNITIES

A3.1. Logistics Education Advancement Program (LEAP). LEAP is a career broadening education program designed to provide selected NCOs with on-the-job experience and training in special fuels logistics areas. The objective is to provide LEAP NCOs with a broader experience background. Each position is a 3-year minimum assignment. Note: Those currently in the program and those who have been out of the program for 3 years or less are prohibited from voluntary cross training and are exempt from involuntary cross training programs. There are five LEAP positions which include:

A3.1.1. Two positions at the Pentagon, Washington D.C. Start at the Air Staff and move to the Joint Staff to finish the tour. Person must be an E-7 prior to assuming Joint Staff duties.

A3.1.2. Two positions at Fort Belvoir, Virginia. Start in the Operations element of AFPET and move throughout the organization and then move over to the DESC to work in the DESC Operations Center and each commodity business unit.

A3.1.3. One position at Wright-Patterson AFB, Ohio. Time will be spent with the AF Tech Team, Wright Patterson Fuels Area Lab, and HQ AFMC Fuels Staff.

A3.1.4. HQ AF/A4L chairs a LEAP selection panel composed of 2F Functional managers.

A3.1.5. Applicants must meet the following mandatory prerequisites:

A3.1.5.1. Hold a grade of E6 or E7.

A3.1.5.2. Completed 8 - 14 years total active federal military service as of 1 October in the year considered for assignment.

A3.1.5.3. Possess a control 2F071 AFSC.

A3.1.5.4. Completed required PME.

A3.1.5.5. Have at least a "Secret" security clearance.

A3.1.5.6. Eligible for reassignment.

A3.1.6. Volunteers submit a package to their respective MAJCOM consisting of:

A3.1.6.1. A one-page nomination letter from the unit commander or equivalent.

A3.1.6.2. A copy of the last five Enlisted Performance Reports (EPR).

A3.1.6.3. A copy of the "Career Brief" obtained through the host Military Personnel Flight (MPF).

A3.1.6.4. A prioritized assignment preference list.

A3.1.7. MAJCOMs consolidate and forward nominee packages to the AF/A4LF ENLISTED FORCE DEVELOPMENT ORG BOX at A4.Enlisted@pentagon.af.mil. A board comprised of the Fuels Career Field Manager, AFPET Chief Enlisted Manager, and MAJCOM Fuels Chief Enlisted Managers will determine the final LEAP selection.

A3.2. Petroleum Logistics Management Course (PLMC):

A3.2.1. Located at the Sheppard AFB Technical Training Center.

A3.2.1.1. Holds a formal fuels career broadening course, J3AZR2F091-00AA, for grades Master Sergeant through Chief Master Sergeant, LEAP selectees, and Quality Assurance Evaluators (QAEs).

A3.2.1.2. Provides fuels operation training in quality surveillance, war planning, expeditionary fuel systems, and logistics management areas.

A3.2.2. MAJCOM/FMT:

A3.2.2.1. Select PLMC attendees.

A3.2.2.2. Maintain waiver authority for Technical Sergeants filling the fuels superintendent position or other Staff positions.

A3.3. Fuels Management Professional Enhancement Program (PEP). The Office of the Secretary of Defense Deputy Under Secretary of Defense for Logistics (DUSD (L)) provides a hands-on managerial development program in fuels management for mid-level logistics readiness officers (Senior Captains through Lieutenant Colonel).

A3.3.1. HQ AFPC/DPASL advertises the PEP program and forwards names to HQ AF/A4LE.

A3.3.2. HQ AF/A4LE provides nominees to DUSD (L) for final selection.

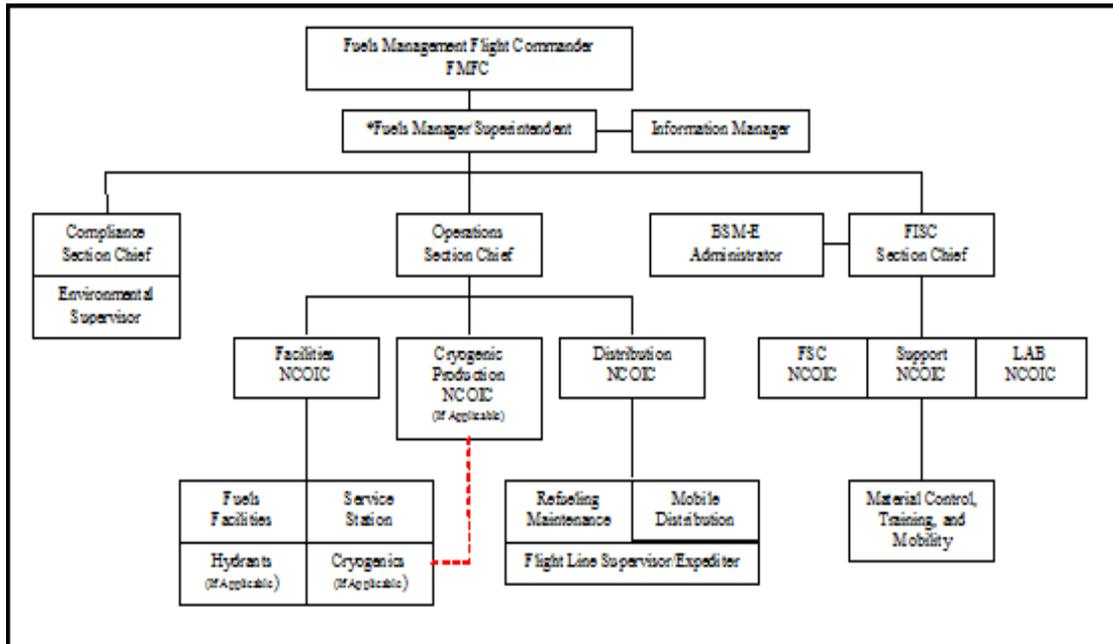
A3.3.3. Assignment will rotate with DUSD (L), JCS/J4, and HQ AF/A4LE.

Attachment 4

FUELS MANAGEMENT STRUCTURE

A4.1. Remove This.

Figure A4.1. Fuels Management Structure.



Note:

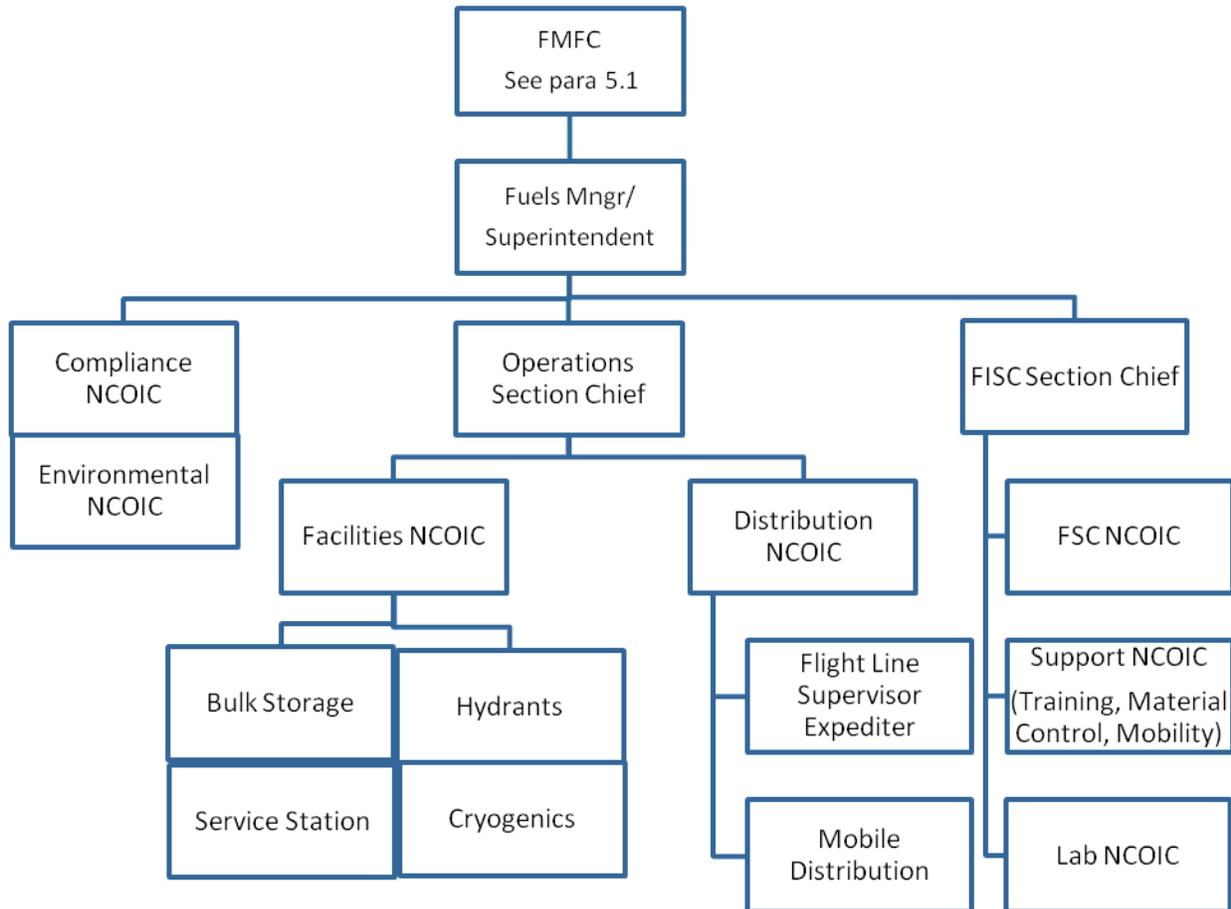
Fuels Manager title reserved for CMSgt

Fuels Superintendent title reserved for SMSgts and MSgts

Figure A4.2. Standard Fuels Flight Office Symbols.

LGRF	Fuels Management
LGRFC	Fuels Compliance and Environmental
LGRFP	Cryogenic Production
LGRFI	Fuels Information Service Center
LGRFIB	Fuels BSM-E Administration
LGRFIS	Fuels Service Center
LGRFIL	Fuels Laboratory
LGRFIT	Fuels Support
LGRFO	Fuels Operations
LGRFOD	Fuels Distribution
LGRFOF	Fuels Facilities
LGRFOT	Fuels Terminal Operations

Figure A4.3. (Added-ANG) ANG Fuels Management Structure.

**NOTES:**

1. BSM-E Administrator is not designated on this chart; however, FMT will assign this responsibility to a position of their choice.
2. FMT may assign all facility responsibilities to one or more individuals due to manpower limitations.

Attachment 5

CRYOGENIC EQUIPMENT AND FACILITY REQUIREMENTS

A5.1. Equipment.

A5.1.1. **Purge Unit.** The GSU-62/M Air Purging Unit is a portable electric motor-driven blower and heater unit used to purge storage containers with heated air. Record purge unit inspections, maintenance, and conditions on AFTO Form 244, **Industrial/Support Equipment Record**. One purge unit per FP account storing cryogenics is authorized.

A5.1.2. **Vacuum Gauge.** The vacuum gauge is a hand-held battery powered unit. Use this unit to monitor, in microns, the vacuum reading of the annular space of a cryotainer. Use the gauge in conjunction with a thermocoupler for an accurate reading.

A5.1.3. **Vacuum Pump.** The PMU-4/E Vacuum Pump is a portable, explosion-proof electric-driven, oil free-air pumping unit which draws and maintains the insulating vacuum in storage containers. Record vacuum pump inspection, maintenance, and conditions on AFTO Form 244. One vacuum pump per FP account is authorized.

A5.1.4. **Cryogenics Samplers.** Sample cylinders are portable containers used to draw and transport cryogenics product samples. Samplers do not require periodic maintenance record documentation, but they must be hydrostatically tested every five years.

A5.1.5. **Portable Dual Efficiency Meter.** The Portable Dual Efficiency Meter checks the storage container vacuum by measuring the product boil-off rate.

A5.2. Facility Requirements. The FMT provides the following to ensure a safe, functional, and secure facility:

A5.2.1. Protective fencing to enclose storage and generation facilities. Designate cryogenics facilities as controlled areas according to AFI 31-101.

A5.2.2. Adequate electrical power for production operation and auxiliary equipment. Adequate indoor and outdoor lighting to include receiving and servicing areas. Electrical power should be 3 phase, 220 volts, 50/60 cycle.

A5.2.3. A concrete foundation with non-petroleum based sealant between joints for storage tanks, receiving, and servicing area and servicing cart parking areas. Completely fill the joints with the sealer to prevent the accumulation of dirt.

A5.2.4. A paved road to and from the facility, capable of supporting commercial cryogenics delivery vehicles and maintenance vehicles, as well as a drive-through capability to permit receipt and issue without requiring the vehicle to backup.

A5.2.5. A telephone with a bell capable of being heard above the noise of the operating production, and within the tank storage area. Intrinsically safe radios may be used in lieu of telephone at cryogenic facilities that are low use and small in nature.

A5.2.6. Adequate grounding points for storage tanks and servicing units. Permanently ground fixed production plants.

A5.2.7. Provide blowdown/condensate traps for each generating plant to comply with the base ecology program and environmental protection agency requirements.

A5.2.8. In cold weather climates/heavy snowfall areas cryogenic storage facilities will be enclosed with roll-up style doors. Note: In operations involving nitrogen ensure the doors remain open during servicing.

A5.2.9. In cold climate locations ensure snow is removed.

A5.2.10. Do not document general cryogenic system area inspection items such as fencing, drip pans, lighting, safety equipment etc., on the AFTO Form 244. Each FMT prepares a locally developed inspection checklist applicable to their LOX/LIN facilities.

Attachment 6

COLOR CODES FOR CRYOGENICS PLANTS

A6.1. Color Codes For Cryogenics Plants.

Figure A6.1. Color Codes For Cryogenics Plants.

Item	Color	Secondary Warning Color
PLANTS:		
Liquid oxygen discharge port	Green #14260	
Liquid nitrogen discharge port	Brown #20219	
Safety valve	Do not paint	
FACILITIES:		
Electric conduit	Gray #16187	Red
Electrical control center interior doors	Orange #12197	
Electrical control center and remote switch boxes	Gray #16187	Red
Caution areas and safety shields	Yellow and black (Cross hatched)	
Floor *	Do not paint	
Building interior	Light color	
Seal floors in the production area with epoxy sealant. Do not paint liquid oxygen storage and cylinder charging floors.		

Note:

Mark all gauges (pressure, liquid level, and flow) in the following manner:

Green - normal operating range.

Yellow - caution range.

Red - danger/over pressure range.

Paint the building interior a light color to provide a bright working area.

Attachment 7

FUELS SPECIAL EXPERIENCE IDENTIFIER (SEI) MATRIX

Figure A7.1. Fuels Special Experience Identifier (SEI) Matrix.

SEI	28	35	36	39	40	369
Course	Refueling Equip/Maint	FARP	CRYO Maintenance	Fuels Quality Control	ACCT	ABFDS
	J3AZR2F051-03AA		J3AZR2F051-04AA	J9AZA2F051-01AA (ITRO portion) J3AZP2F051-01AA (AF Fuels portion)	Joint BSM-E Three Week Basic Course	J3AZR2F051-02AA
PDS	O5O		DDG	OYY	N/A	GOO
AFSC	2F051	2F051	2F051	2F051	2F051	2F051/71
OJT required for course attendance	30 days	N/A	N/A	30 days	30 days	N/A
Minimum Experience	1 year	6 months	3 months	6 months	6 months	N/A
*Plus 100% Task Qualification						
Clearance	Secret	Secret	Secret	Secret	Secret	Secret
FMT Recommends	X	X	X	X	X	X
Commander Approves	X	X	X	X	X	X

Notes:

1. FMT will evaluate personnel and select the most qualified to attend specialized fuels courses. Consider return on investment, such as retainability and career potential.
2. Refresher training is required when personnel fill UTCs requiring the SEI. It is highly recommended that members receive 30 days refresher OJT prior to filling the UTC.
3. Refresher training is given at the time intervals mentioned below.
 - a. SEI 028 - Every two years from initial training or last assignment in Refueling Maintenance.
 - b. SEI 035 - Every year from initial training or last mission flight (Phase1).
 - c. SEI 039 - Every year from initial training or last assignment in a fuels laboratory.
 - d. SEI 040 – Every year from initial training or last assignment reconciling the fuels account in BSME.
 - e. SEI 369 - Every two years from initial training or last mission flight.
5. The specific refresher training required is determined by the FMT unless specified by other training methods as they become available.

Attachment 8

PERSONAL EQUIPMENT FOR FARP AND ABFDS SPECIALISTS

Figure A8.1. Personal Equipment For FARP And ABFDS Specialists.

EQUIPMENT	U/I	FARP	ABFDS
Flight Suit	ea	4	2
Flight Gloves	pr	3	2
Flight Jacket (Summer)	ea	1	N/A
Flight Jacket (Winter)	ea	1	1
A-3 Bag or Equivalent	ea	1	N/A
Boots, Flyers, All Leather	pr	2	1
Patches			
MAJCOM	ea	N/A	3
Unit	ea	6	3
AFSOC	ea	6	N/A
American Flag	ea	6	3
Rain Suit	ea	1	1
Flyers Thermal Top	ea	2	2
Flyers Thermal Bottom	ea	2	2
Prescription Glasses	pr	2	2
Sunglasses	pr	1	1
Dust Goggles	pr	1	1
Poncho Liner, Camouflaged	ea	1	N/A
Official Passport	ea	1	1
* Helmet (HGU-26P or 55P)	ea	1	1
* Oxygen Mask	ea	1	1
*CRU-60 Adapter	ea	1	1
*Helmet Bag	ea	1	1
*Web Belt w/Suspenders	ea	1	1
*Canteen w/cover and cup	ea	1	1
*Flack Vest	ea	1	N/A
*Sleeping Bag	ea	1	N/A
*Sleeping Bag Pad	ea	1	N/A
*Butt Pack	ea	1	N/A
*First Aid Kit, Individual	ea	1	N/A
*Survival Knife (M-9)	ea	1	N/A
*Multiplier Tool	ea	1	1
*Mini Mag Light or Equivalent	ea	1	1
*Mini Mag Light Holder	ea	1	1
*Waterproof Clothing Bag	ea	2	1
*Snaplink	ea	2	N/A
*Backpack, Large (Two Pieces)	ea	1	N/A
*Knee Pads	pr	1	N/A
*Last Resort Belt	ea	1	N/A
*Wrist Watch	ea	1	1
*Holster, 9MM	ea	1	N/A

Attachment 9
CLIPBOARD COLOR SCHEME

Figure A9.1. Clipboard Color Scheme.

PRODUCT	COLOR	STRIPES
AVGAS	Blue	
JP4	Yellow	
JP5	Yellow	Black Checks
JP7	Yellow	Red
JP8	Yellow	Blue
JP8 + 100	Yellow	Green
JPTS	Yellow	Black
Jet A	Yellow	White
Diesel, Low Sulfur	Brown	
Diesel, High Sulfur (Includes JP8 when used as Diesel)	Brown	Blue
Diesel, Ultra Low Sulfur	Brown	Yellow
Diesel, Biodiesel	Brown	Green
Automotive Gasoline		
Leaded	Red	
Unleaded	Red	Green
E85 (Ethanol)	Red	Blue
UDMH (Unsymmetrical Dimethylhydrazine)	Red	Yellow
Nitrogen Tetroxide	Brown	White
Liquid Oxygen	Green	Yellow
Liquid Nitrogen	Gray	Yellow
Waste Fuel	Red w/Yellow Outer Border	Black

Attachment 10

MANAGEMENT ENGINEERING PROGRAM

A10.1. Key Management Engineering Program (MEP) Organizations.

A10.1.1. The MEP provides analytical assistance for functional (fuels) Superintendents to improve productivity and determine standardized manpower requirements.

A10.1.2. The AF Manpower and Innovation Agency (AFMIA) and MAJCOM Directors of Manpower and Organization administer the MEP through a dual concept of operation.

A10.1.2.1. AFMIA provides analytical services to AF functional managers for core processes that are common to each command.

A10.1.2.2. MAJCOMs, through the MAJCOM/A1 offices and base-level Manpower and Organization Office (MO), provides analytical services to functional managers within respective MAJCOMs.

A10.2. Location of Manpower Agencies.

A10.2.1. HQ USAF/A1, as part of the Air Staff, is located in the Pentagon.

A10.2.1.1. AFMIA is a Field Operating Agency (FOA), headquartered at Randolph, AFB TX.

A10.2.1.2. MAJCOM/A1 is located at headquarters locations for each command.

A10.2.1.3. MO is located on a host or main operating base.

A10.3. MEP Duties Assigned to AF Manpower and Innovation Agency (AFMIA).

A10.3.1. Provides analytical services (Process Improvement Program, Continuous Process Improvement through Enterprise Reengineering), Benchmarking, Costing, Facilitation, Integrated Resource Management, Organization, Performance Measures, and Standards and Variances that apply to more than one MAJCOM or for organizations with no management engineering capability.

A10.3.2. Provides technical guidance and support to functional OPRs, MAJCOMs, FOAs, and DRUs.

A10.3.3. Publishes all manpower standards.

A10.3.4. Serves as point of contact for all AF management engineering procedural matters.

A10.3.5. Develops and implements training on the latest MEP technologies. Implements the MEP as directed by Air Staff.

A10.4. Duties of the Installation Manpower and Organization Office (MO). The Manpower and Organization Office manages manpower for Commercial Activities (CA) which includes fuels management, aircraft maintenance, civil engineering, etc. The local MO:

A10.4.1. Provides analytical services (Continuous Process Improvement, Benchmarking, Costing, Facilitation, Integrated Resource Management, Organization, Performance Measures, and Standards and Variances that apply to wing functions (fuels).

A10.4.2. Advises wing commanders and functional (fuels) managers on effective resource management.

A10.4.3. Provides management engineering services in support of inputs to MAJCOM and AF process management studies.

A10.4.4. Assists base functional managers with BSM-E Payback Capital Investment Program (BSM-ECAP), Productivity Investment Fund (PIF) proposals, and Component Sponsored Investment Program (CSIP).

A10.4.5. Validates workload exceptions submitted by commanders and functional managers.

A10.4.6. Assists commanders and functional managers in the development of performance work statements (PWS).

A10.5. Variances to Manpower Standards. To increase the applicability of manpower standards and still be responsive to unique requirements at each location, the MEP recognizes work variations due to mission, technology, or environment. These variations are identified as either plus or minus variances to the basic standard. The fuels community identifies the requirements for exceptions to the local Manpower and Organization Office. HQ AF/A4LE recommends final approval or disapproval for fuels manpower determinant.

Attachment 11

MISHAP REPORTING FORM

A11.1. Mishap Reporting Form.

Figure A11.1. Mishap Reporting Form.

Mishap Report	
DATE:	
BASE DETAILS	
MAJCOM:	POC Name:
Base:	DSN:
Email:	
Additional POC (Fire Dept., Environmental, Bio Environmental, etc): (as required)	
MISHAP DETAILS	
<u>Additional Information</u>	
Mishap Date:	Manufacturer:
Mishap Time:	Part Number:
Mishap Type:	Reg Number:
Operation Type:	Personnel Injured:
Equipment Type:	MDR/QDR:
Equipment Category:	Lockout/Tagout:
Equipment Detail:	RAC:
Equipment Other:	Bladder Wet Date:
Primary Cause:	Secondary Cause:
Spill Class:	Product:
Estimated Gallons Spilled:	Estimated Gallons Recovered:
MISHAP COMMENTS	
Mishap Description: (How, What, When, Where, Why, and Who-Include Environment Impact, etc)	
<p>When mishaps do occur, the Air Force must learn the causes and take steps to ensure that those mishaps are not repeated. However, safety mishap reports, their attachments, and information extracted from them will not be used as evidence for punitive, disciplinary, or adverse actions. They will not be used as evidence in determining the misconduct or line-of-duty status of any personnel.</p>	

Note: AFPET will formally advise DESC and AF/A4LE of fuel related mishap with corrective action being taken, precautions to prevent future occurrence and trend analysis. This will allow follow-up actions by AFPET as well as lessons learned to the field.

Attachment 12

AIR FORCE POL TECHNICAL ASSISTANCE TEAM

A12.1. AF POL Technical Assistance Team. The AF POL Technical Assistance Team is assigned to the Operations Division of AFPET, which is the service control point for AF fuel quality issues. The Tech Team has worldwide responsibility to identify, investigate, and correct problems involving aviation and ground fuel contamination, fuel electrostatic hazards, environmental controls, conservation and reclamation of petroleum products and oils, and fuel receipt, storage, and dispensing system deficiencies.

A12.2. Responsibilities:

A12.2.1. AF fuels activities will coordinate with the AF POL Technical Assistance Team on actions involving aviation fuel contamination, electrostatic hazards, conservation and reclamation, or environmental matters.

A12.2.2. Copies of pertinent reports, correspondence, studies, and data relating to prevention and correction of fuel contamination problems will be routed to the team as information or action items.

A12.2.3. Members of the team will maintain an up-to-date International Certificate of Vaccination and a valid passport for use in meeting requests for assistance from overseas commands.

A12.3. Request for Assistance:

A12.3.1. The AF POL Technical Assistance Team will respond immediately to requests for assistance from MAJCOMs and will be on-site for technical evaluation within three working days, or sooner, as required by the situation.

A12.3.2. A reply to the request for assistance will be prepared for the Technical Division Chief's signature and will contain: (1) Estimated team arrival date and duration of the visit; (2) Name, rank or grade, title, SSAN, and security clearance of each participating team member; and (3) Support required by the team (transportation, billeting reservations, system briefings and availability of system as-built drawings).

A12.4. On-Site Evaluation. The AF POL Technical Assistance Team has two basic objectives during each investigation.

A12.4.1. The first is the correction of suspected problems.

A12.4.2. The secondary objective will be a technical evaluation of base fuels facilities that will encompass the scope of quality and reliability assurance.

A12.4.3. Where feasible, problem-solving visits will also include an overall evaluation of the performance of distribution systems, operating techniques, and facilities.

A12.5. Reports of Visit:

A12.5.1. The AF POL Technical Assistance Team will issue a written report of each visit not later than 30 days after completion of the investigation.

A12.5.2. The report will be forwarded to the applicable MAJCOM and action agencies by cover letter prepared for the Technical Division Chief's signature.

A12.5.3. Recommendations made by the team requiring immediate attention will be forwarded to the action agency by letter, message, or email as soon as possible.

A12.6. Report Evaluation. The AF POL Technical Assistance Team will:

A12.6.1. Maintain a case file for each visit made and subjective files for each category of problem encountered.

A12.6.2. Make a cumulative evaluation of the materiel contained in the files.

A12.6.3. Identify potential problem areas to MAJCOM/base-level activities.

A12.6.4. Identify areas where studies should be initiated to prevent or correct problems.

A12.6.5. Submit recommendations to appropriate action agencies that are responsible for changes to published criteria.

Attachment 13

FUELS PERSONNEL UNIT TYPE CODES

A13.1. Fuels Personnel Unit Type Codes.

Figure A13.1. Fuels Personnel Unit Type Codes. NOTE: All personnel may be substituted IAW AFI 10-401.

STANDARD FUELS PERSONNEL UNIT TYPE CODES														
AFSC	SEI	JFABA	JFABB	JFABF	JFASA	JFAFT	JFA7S	JFA7M	JFA9M	JFACF	JFACM	JFARC	JFARP	JFARM
2F031		1	2											
2F051		2	3									2		
2F051	035												3	
2F051	036									1				
2F051	039				1									
2F051	040				1									
2F051	369			2										
2F051	028													1
2F051	387					2								
2F071							1E-6	1E-7						
2F071	039													
2F071	387					1								
2F091									1					
021R3										1				
TOTAL		3	5	2	2	3	1	1	1	1	1	2	3	1

Note: SEI 387 is no longer being awarded. However, those personnel who maintain SEI 387 and are qualified will be used to fill the JFAFT UTC. JFAFT (SEI 387) UTCs are geared primarily for bare base FMSE set up operations and are not for static FMSE operations. We will continue to use the JFAFT UTC until there is a sufficient number of FORCE trained set-up teams available in the career field.

Attachment 14

AUTOMATED INFORMATION TECHNOLOGY (AIT) EQUIPMENT

A14.1. Responsibilities:

A14.1.1. FMT will ensure that all AIT equipment properly functions and provides accurate data to the Fuels Service Center (FSC).

A14.1.2. Activities will report hardware and software problems to the DESC Help Desk. Submit trouble tickets via telephone, email, or directly using [Help Desk website](#).

A14.1.3. Activities will coordinate requests for procurement, replacement or upgrade of AIT with the AFPET.

A14.2. Disposition of AIT Equipment

A14.2.1. When refueling vehicles are sent for depot maintenance or to the Defense Reutilization and Marketing Office (DRMO) the following AIT equipment will be removed.

A14.2.1.1. Automated Data Collection (ADC) equipment User Interface Terminal (UIT) and Truck Interface Module (TIM)

A14.2.1.2. Automated Point of Sale Device (APOSD) truck cradle, printer, TIM, and associated cables.

A14.2.1.3. All functioning Scully overfill protection equipment except the Advanced Interface Module (AIM).

A14.2.2. When refueling units are shipped to depot or DRMO; removed APOSD and Scully equipment will be maintained at the base as spares. Removed ADC equipment may be shipped back to the manufacturer for refurbishment or maintained as spares. If UITs are kept at the base, every effort should be made to keep them operational by periodic charging and/or rotational use in assigned vehicles. Contact the AFPET for further guidance.

A14.2.3. When a refueling unit is transferred to another location, the TIM located inside the Duocept will be removed. These modules are base programmed to a specific base fillstand(s) to prevent commingling of products. Once removed the TIM should be bench stocked until needed. After receiving a replacement vehicle, replace it's TIM (if equipped) with the one removed from the vehicle that left the base to ensure operational integrity, prevent product commingling and avoid Intellitrol reprogramming.

A14.3. AIT Inventory

A14.3.1. Bases shall maintain a current inventory of all assigned AIT equipment. FMT will ensure an annual inventory of all assigned AIT property is performed and documented. Relinquishment of custodial responsibilities occurs only after a joint inventory is conducted and documented, with incoming FMT, certifying accurate and complete inventory records.