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SECRETARY OF THE AIR FORCE**



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Materiel Management

FUELS MANAGEMENT

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This instruction implements Air Force Policy Directive (AFPD) 23-2, *Management of US Air Force Bulk Petroleum and Related Products*, Department of Defense Directive (DoDD) 4140.25, *Department of Defense (DoD) Management Policy for Energy Commodities and Related Services*, and Defense Logistics Agency (DLA) Energy interim policies and procedures guidance to DoDD 4140.25. This directive sets forth guidance and procedures regarding aviation fuels, ground fuels, cryogenic fluids and missile propellants, pure gases, and chemicals for aerospace weapon systems, equipment energy commodities and related services. This instruction applies to all Active Duty, Reserve, Guard, Contractors, Air Force (AF)/Department of Defense (DoD) Civilians, local national civilians employed by the United States Air Force (USAF), 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. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS). DLA Energy requires Defense Working Capital Fund (DWCF) records be maintained IAW DLA Energy 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. This publication may be supplemented at any level, but all (direct supplements) (Major Command (MAJCOM), Field Operating Agency (FOA), and Direct Reporting Unit (DRU) supplements) must be routed to AF/A4LE for coordination prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, or T-3”) number following the compliance statement. See Air Force Instruction (AFI) 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

(AFRC) This supplement implements and extends the guidance of Air Force Instruction (AFI) 23-201, 20 June 2014. This Supplement applies to Air Force Reservists ONLY of this command, specifically Air Reserve Technicians (ART) and Traditional Reservists (TR); and AFRC civilians and contractors ONLY where [paragraph 7.5.11.6](#) provides instruction regarding RO/FMD course registration. This supplement is not applicable to Air Force Reservists assigned to a deployed location. This supplement describes AFRC procedures to be used in conjunction with the basic instruction. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) afrc.lgswf@us.af.mil using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s through AFRC/SE. 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://www.my.af.mil/gcss-af61a/afirms/afirms/>. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This publication has been significantly revised and updated to reflect changes in guidance and procedures dealing with Fuels Management and must be completely reviewed. Major changes include incorporation of changes outlined in AFI 33-360; identifies tiered waiver authorities for wing/unit level compliance items; realigns the Fuels Management structure, roles, and responsibilities; establishes the Fuels Environmental Safety Office (FESO) and the Fuels Knowledge Operations; includes cryogenic production guidance; implements mandatory usage of the Joint Lessons Learned Information System (JLLIS); revamps all attachments; and updates reference publication dates. In addition, this revision implements roles and responsibilities resulting from the Headquarters Air Force (HAF) Program Action Directive (PAD) 12-02,

Implementation of the Secretary of the United States Air Force and Air Force Chief of Staff Direction to Implement the Air Force Installation Support Centralization (ISC) Vehicle and Fuels Management Initiative.

(AFRC) This supplement is substantially revised and must be completely reviewed. AFI 23-201 basic publication (20 June 2014) was completely overhauled and restructured. The majority of the changes in this supplement were chapter realignment and the application of AFRC requirements where needed and/or the deletion of responsibilities no longer applicable. Notable changes were the addition of a joint review of the Fuels Operator Report between the LRS Commander and the NCOIC; clarification of rain gear purchase and the Improved Rain Suit Parka or equivalent; daily/UTA briefing changes which must include safety, environmental, Back-to-Basics (B2B), and incident summaries briefing(s) occurrence(s); and cryogenic servicing training requirements have been clarified. **Note:** Reservist prerequisite training requirements prior to attending Fuels Laboratory and FMD Accounting courses can be found in **Attachment 8, Table A8.1** Note Section. Additionally, award requirements for SEIs 039 and 040 can be found in **attachment 11, table A11.1** Note section.

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Chapter 1

HQ USAF, DIRECTORATE OF LOGISTICS, LOGISTICS READINESS DIVISION, FUELS MANAGEMENT BRANCH (AF/A4LE)

1.1. AF/A4LE General Responsibilities

- 1.1.1. Establishes/updates AF policy for managing petroleum resources.
- 1.1.2. Develops self-assessment checklists (SACs) IAW AFI 90-201, *The Air Force Inspection System*.
 - 1.1.2.1. Develops and coordinates Special Interest Items (SIIs) for MAJCOM/Inspector General (IG) inspections.
 - 1.1.2.2. Reviews currency and applicability of fuels SAC IAW AFI 90-201.
- 1.1.3. Approves waivers to this instruction for all non-tiered requirements.
- 1.1.4. Provides staff supervision to implement management concepts outlined in this instruction.
- 1.1.5. Develops budget estimates and accomplishes other financial management responsibilities.
- 1.1.6. Provides a standard Fuels Management organizational structure as outlined in Attachment 2, *Fuels Management Organizational Structure*.
- 1.1.7. Manages Logistics Education Advancement Program (LEAP) IAW Attachment 3, *Education and Training Opportunities*.
- 1.1.8. Serves as HAF Functional Area Manager (FAM) for Fuels equipment and personnel unit type codes (UTCs).
 - 1.1.8.1. Publishes Fuels Posturing and Sequencing (P&S) Guidance to support Air & Space Expeditionary Forces (AEF) IAW AFI 10-401, *Air Force Operations Planning and Execution*.
 - 1.1.8.2. Approving authority for new or modified fuels UTCs IAW AFI 10-401.
 - 1.1.8.3. Coordinates and validates the fiscal year (FY) man-month projections supporting Aerial Bulk Fuel Delivery System (ABFDS) requirements towards the Operational Support Flying (OSF) program IAW AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Aviation Badges*.
- 1.1.9. Advisory member for the Joint Petroleum Working Group (JPWG).
- 1.1.10. Reviews Site Surveys, Trip Reports, and After Action Reports in the Joint Lessons Learned Information System (JLLIS) <https://www.jllis.mil/> database following events such as the Installation Planning Review Board (IPRB), Fuels Utilization & Training Workshop (U&TW), and Fuels Support Equipment & Vehicle Working Group (FSEVWG).
- 1.1.11. Issues training waivers for course prerequisites and skill level core tasks, which are submitted IAW AFI 36-2201, *AF Training Program*, and the 2F0X1 Career Field Education Training Plan (CFETP), Part I.

1.1.12. Prescribes the use of Fuels Technical Letters (FTL) for Air Force Petroleum Agency (AFPA) to facilitate interim operational guidance until procedures can be incorporated into applicable AFIs or Technical Orders (T.O.). FTLs expire within one year from date of issue or when policy and guidance incorporating the FTLs have been issued, whichever occurs first.

1.2. Hosting Fuels Career Field Workshops

1.2.1. Chairs the Fuels U&TW. Hosted by Air Education Training Command (AETC) every two years or as directed by the Career Field Manager (CFM) to develop and implement fuels training requirements and material.

1.2.1.1. U&TW Voting Members: AF/A4LE, AFPA, and MAJCOM Functional Managers (MFM).

1.2.1.2. U&TW Contributing Members: AETC Training Manager, 2F0XX Training Manager, and Schoolhouse Superintendent.

1.2.2. Chairs the FSEVWG. Hosted by AF/A4LE annually, or more frequently as determined by the CFM, to review and develop vehicle and equipment policy, Allowance Standards (AS), performance specifications, depot maintenance requirements, and technical development for AF fuels applications.

1.2.2.1. FSEVWG Voting Members: AF/A4LE, AFPA, and MFMs.

1.2.2.2. FSEVWG Contributing Members: Air Force Life Cycle Management Center Support Equipment and Vehicle Division (AFLCMC/WNZ), Schoolhouse Superintendent, and War Reserve Materiel (WRM) Global Force Management (GFM).

1.3. Supporting War Plans.

1.3.1. Fuels Managers (FMs) at all levels are required to be familiar with: AFI 10-201, *Status of Resources and Training System*, AFI 10-244, *Reporting Status of Aerospace Expeditionary Forces*, AFI 10-252, *Defense Readiness Reporting System*, AFI 10-401, *Air Force Operations Planning and Execution*, AFI 10-402, *Mobilization Planning*, AFI 10-403, *Deployment Planning and Execution*, AFI 10-404, *Base Support and Expeditionary (BaS&E) Site Planning*, AFPAM 23-221, *Fuels Logistic Planning*, AFI 25-101, *War Reserve Materiel (WRM) Program Guidance and Procedures*, T.O. 36-1-191, *Technical and Managerial Reference for Motor Vehicle Maintenance*, and *P&S Guidance* when preparing war plans and the Fuels Support Equipment (FSE) Calculator.

Chapter 2

AIR FORCE PETROLEUM AGENCY (AFPA)

2.1. AFPA General Responsibilities

2.1.1. Service Control Point (SCP) for AF fuels quality assurance and product engineering issues.

2.1.1.1. Provides oversight and support for all fuels, lubricants, chemicals, propellants, and gases worldwide.

2.1.1.2. Manages 37 and 42B series T.O.s for fuels and cryogenics quality control guidance and operates worldwide Aerospace Fuels Laboratories.

2.1.2. Coordinates with AF/A4LE prior to releasing interim operational guidance affecting fuels activities; (i.e. T.O.s, FTLs, Defense Logistics Agency (DLA) agreements, and policies).

2.1.2.1. Develops and provides technical support, guidance, and procedures for Fuels Management Flights (FMF).

2.1.3. Prepares T.O.s associated with storage and handling of petroleum and cryogenic products, quality surveillance, space launch system support, and weapon system support.

2.1.4. Serves as AF SCP for fuels Military Construction (MILCON) and Sustainment, Restoration, and Modernization (SRM) process, Centrally Managed Programs (CMP), environmental programs, and infrastructure, procurement contracts.

2.1.5. Chairs AF pre-IPRB annually prior to the DLA Energy IPRB. Reviews and validates MILCON projects, implements fuels infrastructure policy, reviews SRM projects, and prepares AF submissions to the DLA Energy IPRB.

2.1.5.1. AF-IPRB Core Members are: AFPA, AFCEC/COSM, MFMs, and MAJCOM Engineers.

2.1.5.2. Represents the AF on the DLA Energy-chaired IPRB, as a voting member, to prioritize DLA MILCON projects.

2.1.6. Serves as a voting member on the DLA Energy Component Steering Group.

2.1.7. Serves as an advisory member for the JPWG.

2.1.8. Advises DLA Energy on operational and product requirements affecting AF units.

2.1.9. Promotes supply, maintenance, security, and safety discipline in all fuels operations.

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

2.1.11. Supports the AF Inspection System as outlined in AFI 90-201.

2.1.11.1. Performs AF level review of the Management Internal Control Toolset (MICT) monthly and provides assessment results to the Fuels Inspector General Working Group (IGWG).

2.1.11.2. Conducts comprehensive MICT assessment on AF active duty and reserve component locations prior to an IG inspection visit and distributes compliance results to MAJCOM/FAM and IG.

2.1.11.3. Analyzes applicable support systems and metrics to determine Fuels Management compliance.

2.1.11.4. Manages fuels augmentation program to support AF Inspection System (AFIS) requirements. Maintains a list of individuals selected to serve as subject matter experts (SME) for the fuels functional community.

2.1.12. Performs site surveys and technical assistance visits upon request. Qualified Senior Non-Commissioned Officers (SNCO) at bases in the same geographical region may be appointed to augment AFPA as needed to facilitate requests.

2.1.13. Publishes the AF Fuels Directory annually and updates as required.

2.2. AFPA Operations Directorate Current Operations Division.

2.2.1. Advises DLA Energy on all operational and product requirements affecting AF units and provides direct assistance during contingencies/exercises.

2.2.2. Provides SME assistance and technical review during FSE and vehicle contract source selection.

2.2.3. Performs research for AF/A4LE and shares knowledge with MAJCOMs and base level FMFs.

2.2.4. Coordinates HQ requests for DLA Energy optimization studies and base level flights.

2.2.5. Reviews all base fuels service contracts and coordinates with AF/A4LE.

2.2.6. Coordinates with DLA Energy contracting office regarding issues and concerns raised by the Contracting Officer Representative (COR) or Property Administrators (PA) for DLA Energy contracts. Note: For AF contracts, AFPA will provide the same support to MAJCOMs and installations as outlined in paragraph 2.2.6. for DLA Energy contracts.

2.2.7. Provides SME for technical review during contract source selection. Assists AF activities with Performance Work Statement (PWS) development, modification, and validation.

2.2.8. Coordinates PWS through contracting office. For Air Force Reserve Command (AFRC) host base contracts, coordinates PWS with AFRC contracting office (AFRC/A7K) to incorporate requirements into the contract.

2.2.9. Provides technical advice and logistical support to MAJCOMs, Numbered Air Forces (NAF), Air Force Forces (AFFORs), Joint Task Forces (JTFs), and other war fighting activities. Coordinates fuel support requirements with DLA Energy.

2.2.10. Provides AF level coordination on support issues affecting DLA Energy operations to provide assistance to the warfighter.

2.2.11. Reviews Joint Chiefs of Staff (JCS) Bulk Petroleum Contingency Report (REPOL) submissions. Analyzes fuels support capability, providing situational awareness to DLA Energy and HQ.

- 2.2.12. Manages and monitors the Fuels Incident Reporter program.
- 2.2.12.1. Maintains the Fuels Incident Reporter and authorizes user access based on valid need.
 - 2.2.12.2. Provides notification to DLA Energy of reportable fuel spills within 24 hours IAW DLA Energy DESC I-13 *Fuel Spill/Leak Reporting*. (T-0)
 - 2.2.12.3. Coordinates with DLA Energy and Tech Team for on-site visits/investigations related to incidents/fuel releases involving fuel facilities and/or when the incident results in adverse environmental consequences, media coverage, or when assistance is requested.
 - 2.2.12.4. Collects and analyzes fuel incident reports and environmental incidents.
 - 2.2.12.5. Follows-up on open incident reports and validates incident resolution.
 - 2.2.12.6. Maintains master incident database containing all AF fuel related reports.
 - 2.2.12.7. Publishes a monthly summary of incidents reported by FMFs. Incident summaries are posted to the AFPA SharePoint site (<https://cs3.eis.af.mil/sites/OO-LG-WR-14/default.aspx>) no later than the fifth duty day of the month.
 - 2.2.12.8. Provides agenda and holds bimonthly teleconference with HAF and MAJCOMs to discuss incidents/negative trends and other topics affecting the fuels community.
 - 2.2.12.9. Develops monthly metrics on fuels incidents and distributes them to all MAJCOMs and FMTs.
 - 2.2.12.10. Performs trend analysis of incident reports and provides a monthly/annual (calendar year) summary of fuels related incidents to the fuels community, which includes recommended procedural action and/or revised technical data, as necessary.
 - 2.2.12.11. Monitors incidents and directs Deficiency Reports (DR) or Engineering Investigation (EI) submissions on appropriate incidents through the Joint Deficiency Reporting System (JDRS).
- 2.2.13. Ensures DRs or EIs are received by AFLCMC/WNZ and reviewed, information is disseminated to all bases and MAJCOMs are informed as required, depending on the circumstances involved with the DR/EI.
- 2.2.14. Coordinates with equipment specialists, SMEs, and base FMFs on JDRS deficiencies reported on fueling equipment and vehicles. In coordination with AFLCMC/WNZ, analyzes deficiencies to determine scope of the defect (isolated incident or significant equipment failure), which could require a service bulletin or time compliance technical order (TCTO) being issued. Provides recommendations and coordinates a solution strategy to resolve deficiencies.
- 2.2.15. AFPA verifies fix with AFLCMC/WNZ and equipment specialists who then coordinate with Vehicle and Equipment Management Support Office (VEMSO) via JDRS and Consolidated Analysis and Reporting System (CARS).
- 2.2.16. Coordinates on the solution and closure of the DR/EI with AFLCMC/WNZ. The AFLCMC/WNZ AFPA liaison will work with Program Managers and their teams to resolve

all fuels related DRs/EIs. Progress will be provided to the installation as part of the normal JDRS routing process.

2.2.17. Performs site surveys associated with Site Activation Task Force (SATAF) actions or related to other peacetime mission changes. The supported program office will fund AFPA temporary duty costs.

2.2.18. Consolidates support equipment/vehicle requirements and coordinates with item managers on funding/procurement programs.

2.2.19. Coordinates, validates, and certifies vehicle and Hydrant Utilization Goal (HUG) to ensure they are accurate to support mission requirements.

2.2.19.1. Maintains source documents until the completion of the next vehicle validation.

2.2.19.2. Considers refueling authorizations, Hydrant Utilization Strategy (HUS) and applicable variances to support daily or special mission requirements. AFRC refueling vehicle authorizations and variances are required to be coordinated AFRC/A4R.

2.2.19.3. Coordinates FSE requirements with WRM GM, and the MAJCOM Command Equipment Management Office (CEMO)/item managers as applicable.

2.2.19.4. Liaisons directly with Active/AFRC FMTs on all issues affecting fuels operations and maintains a database to track all customer assistance requests.

2.2.19.5. Publishes weekly operational issues report to the AFPA SharePoint site located at <https://cs3.eis.af.mil/sites/OO-LG-WR-14/default.aspx>. Hosts quarterly teleconference with Active/AFRC FMTs to share information and gather customer feedback.

2.3. AFPA Requirements, Equipment, and Automation Division.

2.3.1. Manages the Air Force Fuels and Aerospace Energy requirements programs.

2.3.2. Functions as Air Force lead for Business Systems Modernization-Energy (BSM-E) and all automation and applications software suites supporting fuels operations.

2.3.3. Serves as Air Force SCP to DLA concerning all fuels automated systems and Supervisory Control and Data Acquisition (SCADA) systems.

2.3.4. Performs SCP review of the Inventory Management Plan (IMP) IAW DoD 4140.25-M, *DoD Management of Bulk Petroleum Products, Natural Gas, and Coal*; ensures FMFs are provided access to a current copy of their IMP.

2.3.5. Consolidates AF aviation, ground fuel, liquid nitrogen and aviator's breathing oxygen for inclusion in DLA Energy Program Objective Memorandum (POM).

2.3.6. Validates, consolidates, and coordinates aviation into-plane contract requirements for MAJCOM and DLA Energy every two years.

2.3.7. Validates and coordinates inventory levels with DLA Energy annually. Operating Stock (OS) for overseas locations must be coordinated through the appropriate MAJCOM and Combatant Command (CCMD) Joint Petroleum Office (JPO).

2.3.8. Monitors AF fuels transactions, FMD accounting rejects and Enterprise Business System (EBS).

- 2.3.9. Processes emergency fuel spot-buys through DLA Energy for mission sustainment during disruptions or lapses in contracted fuel supply or during contingency conditions.
- 2.3.10. Coordinates fuel grade changes between FMFs and DLA Energy.
- 2.3.11. Provides oversight for BSM-E Help Desk trouble reporting and facilitates resolutions with applicable agencies.
- 2.3.12. Coordinates capitalization of fuel sites meeting requirements specified in DLA policy, Defense Working Capital Fund Capitalization, through DLA. Processes de-capitalization for locations no longer meeting the requirements as outlined in DLA Energy policies regarding product capitalization.
- 2.3.13. Coordinates draft DLA Energy publications and policy revisions with MAJCOM staffs and support agencies.
- 2.3.14. Serves as AF lead for existing and emerging fuels automation.
 - 2.3.14.1. Provides acquisition, disposition and replacement instructions for fuels Automated Information Technology (AIT) IAW paragraph 6.10.
 - 2.3.14.2. Performs, validates, and consolidates automation data calls.
 - 2.3.14.3. Interfaces with DLA Energy concerning management of AIT.
 - 2.3.14.4. Manages AF testing of new systems and interfaces with other AIT systems.
 - 2.3.14.4.1. AIT systems include:
 - 2.3.14.4.1.1. Automatic Tank Gauging (ATG).
 - 2.3.14.4.1.2. Mobile Automated Fuels Service Station (MAFSS).
 - 2.3.14.4.1.3. Automated Fuels Service Station (AFSS).
 - 2.3.14.4.1.4. Tactical Automated Fuels Service Station (TASS).
 - 2.3.14.4.1.5. Automated Point of Sale Device (APOSD).
 - 2.3.14.4.1.6. Electronic Overfill Prevention Systems.
 - 2.3.14.4.1.7. Pump and valve controls.
 - 2.3.14.4.1.8. Hydrant system automation.
 - 2.3.14.4.1.9. Fuel tank independent alarm systems.
 - 2.3.14.5. Coordinates testing requirements with test locations.
 - 2.3.14.6. Provides test results to DLA Energy with recommended improvements.
 - 2.3.14.7. Administers system change requests and AF recommended system upgrades for all fuels AIT systems.
 - 2.3.14.8. Coordinates FMD communication issues with DLA's information operations Joint Staff Command, Control, Communications, & Computers/Cyber (J6).
- 2.3.15. Provides SME assistance and technical review during vehicle and FSE contract source selection. Proposes and assists AFLCMC/WNZ with product descriptions, service bulletins, and technical order changes.

2.3.16. Coordinates specific vehicle and FSE authorization requirements with AFRC/A4R.

2.3.17. Develops, validates, and coordinates equipment/vehicle allowance standards with VEMSO, AFLCMC/WNZ and item managers.

2.3.17.1. Performs allowance standard reconciliation at a minimum once every two years.

2.3.18. Reviews, validates, and provides updates on applicable vehicle and FSE T.O.s.

2.3.19. Provides AFLCMC/WNZ with detailed customer requirements to include technological advances for consideration on new buy programs.

2.3.20. Performs evaluations using commercial-off-the-shelf (COTS) equipment capabilities and coordinates requirements with VEMSO, FMFs, and MAJCOMs. Coordinate with AFLCMC/WNZ and VEMSO when COTS items are replacing items currently procured by AFLCMC/WNZ.

2.3.21. Assists AFLCMC/WNZ program offices with developing and validating purchase descriptions.

2.3.22. Provides technical assistance to WRM GM for FSE.

2.3.23. Assists FMTs with validating FSE requirements utilizing the FSE Calculator for peacetime authorizations and with the requisition process.

2.3.24. Works with item managers to develop and oversee fuels equipment/vehicle lifecycle replacement programs.

2.3.24.1. Coordinates with VEMSO to advocate replacements for those items extending beyond their operational use life.

2.3.24.2. For AFRC equipment/vehicles AFPA will coordinate with AFRC/A4RM to advocate funding for items beyond their operational use life.

2.4. AFPA Mission Support Directorate Infrastructure Division.

2.4.1. Manages AF wide SRM program for all capitalized fuels infrastructure.

2.4.2. Monitors access to the DLA Energy EBS database; validates roles/responsibilities.

2.4.3. Reviews EBS database records and coordinate with the respective MAJCOM/A7 and the Civil Engineer Squadron at each base to keep the EBS database updated with all deficiencies and supporting information allowing DLA Energy and DLA to properly forecast funding requirements. 2.4.3.1. Validates all corresponding projects, using Automated Civil Engineer System Real Property (ACES RP) module.

2.4.4. Monitors EBS to ensure current information is available regarding emergencies as well as when deficiencies reach the SCP level for review, acceptance, rejections, and comments.

2.4.5. Ensures all FMTs involved in the SRM process obtain an EBS account and use the DLA Energy EBS to monitor deficiencies.

2.4.6. Plans and programs for fuels facilities and equipment required to carry out organizational responsibilities.

2.4.7. Coordinates/approves installation level reviews/planning studies. Validates and consolidates the prioritized list of MAJCOM MILCON projects and forwards packages to AF/A4LE for coordination.

2.4.8. Performs engineering and logistics review of SRM and MILCON projects.

2.4.9. Engages with Execution Agents (EA) on proposed projects and receive updates as needed.

2.4.10. Coordinates with MAJCOM A4 and A7 to prioritize and validate projects. Outside Continental United States (OCONUS) MAJCOMs will send their MILCON projects to their CCMD JPO who will prioritize the projects and submit them to DLA Energy.

2.4.11. Performs, validates, and consolidates SRM, environmental, alternative fuels, and CMP data calls then shares results with MAJCOM A7/base activities.

2.4.12. Coordinates alternative fuel use and provides technical support on infrastructure compatibility to exploit the use of substitute fuels at locations where consumption is justified, ensuring the best interests of the Air Force are met.

2.4.13. Coordinates all alternative fuel infrastructure concerns with MAJCOM, AF/A4LE, and DLA Energy.

2.4.14. Plans and advocates to DLA Energy for SRM, MILCON, CMP, environmental, and alternative funding execution for fuels facilities required to carry out organizational responsibilities.

2.4.15. Maintains submission schedule for AF projects to ensure submissions meet the DLA Energy data call.

2.4.16. Coordinates with AF/A7C/P for MILCON data calls.

2.4.17. Collects and prioritizes Department of Defense (DD) Forms 1391, *Military Construction Project Data*, for IPRB. CCMD and overseas MAJCOMs will continue to prioritize MILCON projects with their respective CCMD JPO. Ensures Installations/MAJCOMs complete DD Form 1391 for MILCON consideration.

2.4.18. Works with base-level and AF Fuels Engineers and Programmers to accurately reflect validated project requirements and documentation.

2.4.19. Provides technical assistance to base/MAJCOM personnel when preparing DD Form 1391s by verifying the following DD Form 1391 information:

2.4.19.1. Is the tank size the minimum required?

2.4.19.2. Storage capacity must be adequate to support OS and Pre-positioned War Reserve Stock (PWRS) requirements. Consideration to mission changes must be included in computation.

2.4.19.3. Does the project fulfill installation mission needs?

2.4.19.4. Does the DD Form 1391 clearly state what the mission is, (e.g. strategic, enroute, or power projection)?

2.4.19.5. How does the project effect the operation?

2.4.19.6. Have better alternatives been considered?

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

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

2.4.19.9. Ensure the DD Form 1391 submitted information is compiled and verified IAW DESC P-12, *SRM Funding Policy for Fixed Petroleum Facilities*.

2.4.20. Ensures each SRM deficiency submitted within the EBS contains a strong descriptive justification, supporting documentation, a facility real property number, and a Base/MAJCOM priority.

2.4.21. Supports fuel facility and equipment modernization programs; reviews construction designs to ensure standardization and modernization consistency.

2.4.22. Approves, coordinates, and champions all SRM requirements submitted by MAJCOMs and places priorities while advocating for SRM funding execution for fuels facilities.

2.4.23. Provides assistance to bases for compliance with all federal, state, local, and/or foreign government environmental laws and regulations.

2.4.24. Approves and coordinates with wing/base site visit requests for various DLA CMPs including spill response training and tank tightness testing.

2.4.24.1. Provides an information copy to MAJCOMs to provide situational awareness on activities within their command.

2.5. AFPA Technical Assistance Division.

2.5.1. Provides quality and technical expertise for Fuel's vehicles, FSE, facilities, infrastructure, and cryogenics. This includes detecting and correcting product quality, handling procedures, and fuel systems deficiencies.

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

2.5.3. Directs actions involving aviation/ground fuel contamination, electrostatic hazards, petroleum product conservation, and reclamation, or matters involving fuel/cryogenic receipt, storage, and mobile/fixed dispensing system deficiencies.

2.5.4. Coordinates with DLA Energy Quality Section and the assigned Quality Surveillance Representative when assisting FMTs with contaminated or off-specification fuel products.

2.5.5. Serves as Air Force representative and functional expert to the Energy Institute on filtration.

2.5.5.1. Oversees Air Force technical guidance on fuels mobile equipment and fixed infrastructure filtration standards.

2.5.6. Coordinates with DLA Energy regarding fuel disposition instructions involving off-specification, contaminated, or products not meeting use limits. Disposition instructions will be provided via written/electronic communication or Air Force Test and Analysis Tool (AFTAT).

2.5.7. Routes copies of pertinent reports, correspondence, studies, and data relating to prevention and correction of fuel contamination problems to the team as information or action items.

2.5.8. Maintains an up-to-date International Certificate of Vaccination and a valid passport for use in meeting requests for assistance from overseas commands.

2.5.9. Receives requests for AFPA assistance using the following:

2.5.9.1. Installation FMTs submit requests for on-site technical assistance through squadron commander or equivalent to AFPA.

2.5.9.2. AFPA's Technical Division responds immediately to requests for assistance from Installations and will be on-site for technical evaluation within three working days, or sooner, as required by the situation.

2.5.9.3. Technical Division Chief provides a written/electronic verification of the assistance response to the requesting organization which includes:

2.5.9.3.1. Estimated team arrival date and duration of the visit.

2.5.9.3.2. Name, rank/grade, title, social security number, and security clearance of each participating team member.

2.5.9.3.3. Required list of organizational or functional point of contacts (POC); provide contact information.

2.5.9.3.4. Support required by the team (transportation, billeting reservations, system briefings, and availability of system as-built drawings).

2.5.10. On-site evaluation objectives:

2.5.10.1. AFPA Technical Division has three basic objectives during each technical assistance visit or investigation.

2.5.10.1.1. First objective is the identification and correction of suspected problem(s) to restore fuels capability back to normal mission activities.

2.5.10.1.2. Second objective is a technical evaluation of base fuels facilities that will encompass the scope of quality and reliability assurance.

2.5.10.1.3. Third objective is to provide technical training and expand the working knowledge of personnel to enhance career field technical proficiency.

2.5.10.2. Where feasible, problem-solving visits also include an overall evaluation of the performance of distribution systems, operating techniques, and facilities. Technical assistance is provided as available to optimize system or facility operations.

2.5.11. Assistance visit out-brief guidelines:

2.5.11.1. The on-site evaluation team provides a summary out-brief to installation and organizational leadership prior to departure. The summary out-brief includes the following:

2.5.11.1.1. Summary of problem(s) found and corrective action(s) taken.

2.5.11.1.2. Summary of corrective action(s) that remain open and required to be completed.

2.5.11.1.3. Summary of recommendation(s) to prevent further occurrences or improve operations.

- 2.5.11.1.4. Summary of observation(s) resulting from a technical evaluation of base fuels facilities that encompass the scope of quality/reliability assurance and as applicable an overall evaluation of the performance of distribution systems, operating techniques, and facilities.
- 2.5.11.1.5. Areas requiring supplemental or further training.
- 2.5.11.2. Generates an After Action Report in the JLLIS (<https://www.jllis.mil/>) database within 30 days following each technical team site visit. Upload/link the associated files to document each category of problem encountered to the After Action Report. (T-2)
- 2.5.11.2.1. Makes a cumulative evaluation of the materiel contained in the files.
- 2.5.11.2.2. Identifies potential problem areas to MAJCOM/base-level activities and provides a copy of all inspection reports/findings to respective MAJCOM.
- 2.5.11.2.3. Identifies areas where studies should be initiated to prevent or correct problems.
- 2.5.11.2.4. Submits recommendations to appropriate action agencies that are responsible for changes to published criteria.
- 2.5.11.3. Recommendations made by the division requiring immediate attention are forwarded to the action agency by written or electronic communication as soon as possible.

2.6. AFPA Product Support Directorate.

- 2.6.1. Coordinates certification efforts for new emerging, alternate, and alternative type fuels.
- 2.6.2. Performs product service engineering and scientific support for petroleum, chemicals, and cryogenics.
- 2.6.3. Provides product and scientific support for Petroleum, Oils, and Lubricants (POL), chemical, and cryogenic life cycle demands.
- 2.6.4. Provides alternative, synthetic, and bio-fuels technical and logistical support.
- 2.6.5. Serves as preparing activity for 67 Military Specifications (MILSPECs); Air Force custodian for 491 military standards.
- 2.6.6. Responsible for the preparation, maintenance, and custodial review of military specifications for procuring fuels, aerospace propellants, lubricants, hydraulic fluids, gases, and chemicals.
- 2.6.7. Supports the North Atlantic Treaty Organization (NATO) Petroleum Handling Working Group to ensure standardization and interoperability of fuels equipment and facilities.
- 2.6.8. Serves as Air Force representative to Aviation Ground Fueling Systems Committee (SAE AE-5C) for mobile refueling equipment and product quality.
- 2.6.9. Partners with other government, industry, and allied nations on POL research and development, standardization, and interoperability issues.

2.6.10. Head of US delegation for Air and Space Interoperability Council (ASIC) and NATO Standardization Agreements (STANAG) for air/ground POL, gases, and chemicals.

2.6.11. AF representative and functional expert to the American Society for Testing and Materials International© (ASTM) and Coordinating Research Council© (CRC) for aviation and ground fuel products.

2.7. Fuels Laboratory Division.

2.7.1. Supports space launch activities, providing quality surveillance testing for gaseous chemicals, and hypergolic products.

2.7.2. Approves fuel analyses performed anywhere other than a qualified base fuels laboratory facility. This does not include field testing in a contingency environment.

2.7.3. Recovers direct costs for laboratory support to commercial launch customers.

2.7.4. Arranges contract fuels and cryogenic testing on an emergency basis at designated locations.

2.7.5. Performs POL packaged products quality and testing support for AF and DLA.

2.7.6. Completes fuels laboratory testing using ASTM Standards, military standards, and T.O. protocols.

2.7.7. Performs investigative/failure analysis of unknown fuel and cryogenic contaminants.

2.7.8. Evaluates and incorporates emerging laboratory testing technologies.

2.7.9. Approves variances to laboratory facility criteria with coordination from HQ AF Safety Center, Ground Safety (HQ AFSEC/SEG), HQ AF Civil Engineer Center (AFCEC).

2.8. Alternative Fuel Strategic Plan (AFSP).

2.8.1. Develops and administers energy conservation strategy to support environmental legislation.

2.8.2. Coordinates with AFELM VEMSO to ensure achievable fuel consumption goals and compliance with the Energy Policy Act, Executive Order, and federal mandates requiring the use of alternative fuels.

2.8.3. Identifies AF locations possessing an alternative fuel dispensing capability as well as pending projects under MILCON and SRM. Analyzes bases with existing alternative fuel infrastructure. Coordinates on alternative fuel vehicle placement with AFELM VEMSO to capitalize on existing infrastructure. Coordinates with the local FMT and Vehicle Management (VM) for recommended changes and compliance with AFPA/VEMSO guidance.

2.8.3.1. Identifies best use/type of alternative fuels and determines shortfalls in storage and dispensing systems to handle alternative fuels.

2.8.4. Targets specific AF locations based on analysis to develop Courses of Action (COA). Outlines COA in AFSP in order to capture the analysis and tracking mechanism through completion and develops justifiable projects IAW MILCON/SRM rules.

2.8.5. Analyzes whether investing in infrastructure realizes a viable and realistic return-on-investment for installations without alternative fuel infrastructure (no capability within 5 miles/15 minutes) IAW 24-302, *Vehicle Management*.

2.8.5.1. Coordinates on alternative fuel 701 waivers prior to AFELM VEMSO's submission to Department of Energy for approval.

2.8.6. Coordinates on 701s; teams with DLA Energy to leverage a capability or explore targets of opportunity that can be used to bring alternative fuels to warranted locations.

2.8.7. Updates governance every year to formalize alternative fuel strategy and process.

2.8.8. Validates against DLA Energy capabilities and coordinates with AF/A4LE for approval.

Chapter 3

MAJCOM FUNCTIONAL MANAGERS (MFMS)

3.1. General Responsibilities.

3.1.1. Management Engineering Program (MEP).

3.1.1.1. Takes a proactive role during the manpower standards development process:

3.1.1.2. Knows the manpower study schedule.

3.1.1.3. Provides recommendations to the function review workshop.

3.1.1.4. Reviews all manpower study documentation such as work center description, measurement plans, and final report for accuracy and provide any corrections.

3.1.1.5. Verifies measurement data accuracy.

3.1.1.6. Coordinates on manpower variances.

3.1.1.7. Assists in developing work center productivity enhancements.

3.1.1.8. Submits Authorization Change Requests (ACR) to local Manpower Office.

3.1.2. National Guard Bureau (NGB) retains MAJCOM responsibilities as prescribed by DoDD 5105.77, *National Guard Bureau (NGB)*.

3.1.2.1. Performs FAM compliance assessments IAW AFI 90-201.

3.1.3. AFRC retains MAJCOM responsibilities as prescribed by DoDI 1225.06, *Equipping the Reserve Forces*. AFPA coordinates with AFRC/A4R on equipment issues to prevent inappropriate transfer of support equipment to include National Guard and Reserve Equipment Account (NGREA) assets.

3.1.4. Forecasts, reports, and submits all hypergolic requirements applicable to each command to Air Force Space Command (AFSPC) for consolidation.

3.1.5. Supports the IG Inspection System IAW AFI 90-201, *The Air Force Inspection System*.

3.1.5.1. Reviews MICT metrics provided by AFPA. Gauges compliance with training and Functional Area Manager (FAM) items.

3.1.5.2. Recommends and coordinates on functional metrics affecting the fuels community.

3.1.5.3. Coordinates corrective actions and determines the effectiveness of the deficiency resolution.

3.1.5.4. Requests AFPA's assistance for technical support and information provided from applicable systems to aid the AFIS.

3.2. Training Responsibilities.

3.2.1. Plans, validates, and forecasts command formal training requirements using course requirements provided by Education and Training Course Announcements (ETCA) website, <https://etca.randolph.af.mil/default1.asp>.

3.2.2. Programs for technical and mission readiness training. Forecasts and obtains training quotas to support MAJCOM mission.

3.2.3. Justifies and requests funded training allocations through DLA Energy for FuelsManager® Defense (FMD) and Joint Terminal Managers (TM) and Responsible Officer (RO) courses.

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

3.2.5. Air Force District of Washington (AFDW) serves as the MFM for personnel assigned to the Air Force Elements (AFELM).

3.3. Executing Functional Area Manager (FAM) Responsibilities.

3.3.1. Performs FAM duties as identified in AFI 10-401. The FAM is responsible for developing and managing all planning and execution requirements to support all possible contingencies.

3.3.1.1. Completes training IAW AFI 10-401.

3.3.1.2. Obtains “R” proficiency prefix.

3.3.1.3. Develops fuels support for theater exercises and/or contingency wartime plans.

3.3.1.4. Serves on AFFOR staff, crisis, or contingency action teams for contingencies, exercises, humanitarian, and wartime support.

3.3.1.5. Performs FAM related site surveys with augmentation as needed from qualified SNCOs identified on the fuels augmentation roster.

3.3.2. Serves as functional lead to MAJCOM Crisis Action Team (CAT) during exercises, wartime, small scale contingencies, humanitarian operations, as well as during natural and environmental disasters.

3.3.2.1. Coordinates with DLA Energy or other logistic support agencies when required to facilitate wartime or emergency response.

3.3.2.2. Coordinates with AFPA for technical assistance and supports information needs pertaining to fuel inventories, facilities, vehicles, and equipment data.

3.3.3. Reviews and validates JCS REPOL web-based reports for applicable bases monthly.

3.3.4. Validates and maintains the War Consumable Distribution Objective (WCDO) document and the Inventory Management Plan (IMP) for each location in their command.

3.3.5. Develops fuels wartime requirements IAW the War & Mobilization Plan (WMP).

3.3.6. Calculates Petroleum War Reserve Requirements (PWRR) in accordance with the WMP, coordinates with CCMD JPO for inclusion in IMP and sends a courtesy copy to AFPA.

3.3.6.1. Computes requirements using the maximum one day (M1D) from the single most stringent operational plan (OPLAN) for each base.

3.3.6.2. Reviews command product levels IAW DoD 4140.25-M, Chapter 11.

3.4. Initiating MILCON and SRM Projects.

3.4.1. MAJCOM Fuels Engineer or Infrastructure Manager (MAJCOM/A7) validates base-level requirements IAW AFI 32-1021, *Planning and Programming Military Construction (MILCON) Projects*. MAJCOM/A4Rs maintain access to the DLA Energy SRM system showing MAJCOM concurrence/non-concurrence for audit purposes.

3.4.2. Validates base-level requirements in accordance with AFI 32-1021, *Planning and Programming MILCON Projects*, for hypergolic fuels and coordinates with AFSPC/A4RE for validation.

3.4.3. AFSPC/A4RE serves as lead for hypergolic missile fuels MILCON and SRM programs and projects.

3.4.4. Coordinates CCMD MILCON priorities with applicable JPO office.

3.5. Implementing Fuels Air & Space Expeditionary Force (AEF) Support.

3.5.1. Air Combat Command (ACC) serves as the AF's force provider for conventional forces.

3.5.1.1. Executes the duties and responsibilities outlined in AFI 10-401, Chapter 12, and the guidance published by the 2FOX1 FAM in the Posturing and Sequencing (P&S) Guidance located at <https://aef.afpc.randolph.af.mil/Team.aspx>.

3.5.1.2. Functions as the Manpower and Equipment Force Packaging System (MEFPAK) Responsible Agency (MRA) for fuels UTC used by conventional forces.

3.5.1.3. Ensures MAJCOMs align UTCs in appropriate AEF Indicator blocks.

3.5.1.4. Reviews functional requirements in OPLAN Time-Phased Force and Deployment Data (TPFDD) for accuracy; and coordinates and reviews reclaims.

3.5.2. WRM GM coordinates with item managers on funding/procurement programs associated with Allowance Standard (AS) 924, *War Readiness Materiel Global Management*, and prepositioned Fuels Operational Readiness Capability Equipment (FORCE).

3.5.2.1. Coordinates with MFMs to determine Fuels Support Equipment (FSE) requirements.

3.5.2.2. Develops wartime refueling vehicle requirements to meet single most stringent OPLAN using FSE Calculator. Coordinates wartime refueling vehicle requirements with AFPA for inclusion in the base vehicle validation.

3.5.2.3. Central management for allocation and storage, maintenance, positioning, and use of AF WRM fuels equipment is managed by the AF WRM GM.

3.5.2.4. Determines, consolidates, and validates all WRM requirements including all FSE and POMs for those requirements and manages storage and inspection programs for WRM assets.

3.5.2.5. Manages POMs for WRM FSE procurement, storage, and maintenance.

3.5.2.6. Coordinates with item manager for final approval/disposal of all WRM FSE assets.

3.5.3. MAJCOMs storing WRM FSE are required to:

3.5.3.1. Designate storage bases, allocate space, prescribe command reporting procedures, and administer a management program.

3.5.3.2. Calculate specific WRM FSE personnel and equipment requirements using the FSE Calculator to support current AF planning guidance. Maintain source documents until completion of the next validation.

3.5.3.3. Ensure all bases storing or using WRM FSE include status information in their monthly Air & Space Expeditionary Force Reporting Tool (ART) report.

3.5.3.4. Program for fiscal year (FY) funding through appropriate agencies.

3.5.3.5. Develop procedures to obtain up-front money for reconstitution.

3.5.3.6. Ensure all bases submit an AFTO Form 375, *Selected Support Equipment Repair Cost Estimate*, to WRM GM when requesting disposition instructions for turning in equipment and bladders to DLA Disposition Services.

3.6. Providing Aerial Bulk Fuel Delivery System (ABFDS) / Forward Area Refueling Point (FARP) Capabilities.

3.6.1. Manages ABFDS and FARP programs as listed in paragraph 5.3 and AFI 11-235, *Forward Area Refueling Point (FARP) Operations*.

3.6.2. MAJCOM FAMs certify FARP program requirements for their respective bases and qualifies the initial cadre, including trainers of personnel prior to teams' initial commitment date.

3.6.2.1. Air Force Special Operations Command, Logistics Readiness Division (AFSOC/A4RE) will certify bases supporting the AFSOC mission.

3.6.3. Projects man-years requirements for ABFDS.

3.6.3.1. Forecasts and submits Airman Operational Support Man-Year Requirements Report every year IAW AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Aviation Badges*.

3.6.3.2. Coordinates with MAJCOM/A3T to validate the request for man-years. AF/A3O-AI approves/disapproves man-year requests and sends response back to MAJCOM A3T and local Host Aviation Resource Management (HARM) Office.

3.7. Role of Hypergolic Management Responsibilities.

3.7.1. AFSPC/A4RE is the lead command for managing hypergolic products.

3.7.1.1. Serves as waiver authority for hypergolic related provisions contained herein and sends an informational copy to AFPA and AF/A4LE.

3.7.2. Provides and develops technical support, guidance, and procedures for FMFs managing hypergolic products.

- 3.7.2.1. Accounts for liquid missile propellants, cryogenics, gases, and hypergolic products; including their receipt, storage, transfer, and delivery control.
- 3.7.2.2. Reviews, validates, and provides updates on hypergolic support equipment/vehicle T.O.s.
- 3.7.2.3. Develops, validates, and coordinates equipment/vehicle AS with item managers.
- 3.7.2.4. Performs site surveys and technical assistance visits upon request for those activities using hypergolic products.
- 3.7.2.5. Provides SME assistance during technical reviews regarding hypergolic products to support contract source selection.
- 3.7.2.6. Promotes supply, maintenance, security, and safety discipline for hypergolic operations.
 - 3.7.2.6.1. Mitigates hazards using the Process Safety Management Program. IAW AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, and the Occupational Safety and Health Administration (OSHA)
 - 3.7.2.6.2. Monitors compliance with environmental requirements.
 - 3.7.2.6.3. Monitors maintenance and handling of Personal Protective Equipment (PPE) and Self-Contained Atmospheric Protective Ensemble (SCAPE) and other hypergolic safety hazards.
 - 3.7.2.6.4. Provides guidance on maintaining training and task qualification for hypergolic unique SCAPE training currency.
- 3.7.3. Coordinates with using activities to forecast, report, and validate hypergolic requirements.
 - 3.7.3.1. Directs using activities on inventory and accountability procedures to manage hypergolic products.
 - 3.7.3.2. Validates, consolidates, and coordinates hypergolic requirements (OS/PWRS) with DLA Energy every year.
- 3.7.4. Reviews and validates peacetime hypergolic vehicle and equipment authorizations.
 - 3.7.4.1. Consolidates and validates equipment/vehicle requirements and coordinates with item managers on funding/procurement programs.
 - 3.7.4.2. Administers the oxidizer and hydrazine vehicle equipment programs for hypergolic products.
- 3.7.5. Monitors maintenance of facilities and equipment supporting DoD modernization programs.
- 3.7.6. Ensures fuels and oxidizers operations used by flights comply with applicable directives.
- 3.7.7. Ensures adequate resource availability for on-base missile and satellite programs.
- 3.7.8. Provides technical expertise/SME support for hypergolic support equipment/vehicles, facilities/infrastructure to include quality and cryogenics.

- 3.7.9. Supports space launch activities and provides quality surveillance testing for gases, chemicals, and hypergolic products.
- 3.7.10. Processes hypergolic fuel emergency spot-buys through DLA Energy for mission sustainment during periods of lapses in contracted supply.
- 3.7.11. Evaluates COTS equipment capabilities and coordinates requirements with FMFs for hypergolic products.
- 3.7.12. Provides item managers with detailed customer requirements to include technological advances for new buy programs.
- 3.7.13. Serves as AF lead for MILCON/SRM supporting hypergolic requirements.
- 3.7.14. Maintains access to the DLA Energy EBS database for hypergolic products.
- 3.7.15. Collects and prioritizes DD Form 1391s for the IPRB for hypergolic products.
- 3.7.16. Approves EBS database records and keep the database updated with all deficiencies and supporting information allowing DLA Energy and DLA to properly forecast funding requirements for hypergolic products.
- 3.7.17. Advises board members on hypergolic facility projects at the DLA Energy IPRB, when necessary.
- 3.7.18. Plans and advocates to DLA Energy for SRM funding execution for hypergolic fuels facilities required to carry out organizational responsibilities.
- 3.7.19. Coordinates with DLA Energy contracting office for hypergolic service contracts. Works closely with CORs, PAs, Functional Area Chiefs (FAC), and Quality Assurance Evaluators (QAE) for contracting issues.
- 3.7.20. Writes and updates PWS for DLA contract solicitation supporting hypergolic products.

Chapter 4

LOGISTICS READINESS SQUADRON (LRS) AND OTHER AGENCIES

4.1. LRS Commander (LRS/CC) General Responsibilities.

4.1.1. Appoints a primary and alternate fuels Responsible Officer (RO); IAW DoD 4140.25-M, *DoD Management of Bulk Petroleum Products, Natural Gas, and Coal*, and DLA Energy P-7, *Accountability and Custodial Responsibilities for Defense Working Capital Fund (DWCF) Inventory and Government Property*. **(T-0)**

4.1.1. **(AFRC)** Applicable at AFRC host bases only. Reservists cannot be appointed as ROs unless activated or deployed because of the day-to-day oversight required.

4.1.1.1. Enlisted members and Department of the AF civilians are to complete the Petroleum Logistics Management Course (PLMC) as well as meet the requirements outlined in DLA Energy P-7 prior to being appointed as a RO.

4.1.1.2. Officers are to complete the 21R course and meet the requirements outlined in DLA Energy P-7 prior to being appointed as a RO.

4.1.2. Budgets for training requirements outlined in the unit's Designed Operational Capability (DOC) statement and those postured as rotationally available in UTC availability in Deliberate and Crisis Action Planning and Execution Segments (DCAPES).

4.1.3. Requests Official Passports for fuels personnel IAW DoD 1000.21-R, *DoD Passport and Passport Agent Services Regulation* and AFI 10-403; coordinates with Force Support Squadron to expedite when mission demands necessitate.

4.1.4. Provides personal protective and safety equipment as required by Bioenvironmental Engineering's (BE) Industrial Hygiene Survey.

4.1.4. **(AFRC)** Additionally, the Improved Rain Suit (IRS) Parka will be issued to personnel as foul weather gear. **(T-3)**. It is comprised of a waterproof outer shell, worn over other clothing and gear; the IRS is similar to APECS, but lightweight. IRS functions strictly as a rain barrier, offering little protection from the cold. In rain, IRS holds up better than the GORE-TEX® jacket. The IRS should be provided in addition to cold weather gear (APECS, etc.). NSNs: 8405-01-542-9631; XX-Small, 8405-01-542-9648; X-Small, 8405-01-542-9649; Small 8405-01-542-9998; Medium, 8405-01-543-0001; Large, 8405-01-543-0003; X-Large, 8405-01-543-0005; XX-Large.

4.1.5. Ensures fuels personnel are not assigned as fuel delivery escorts to areas outside the FMT's span of control. Escorts are assigned IAW AFI 23-204, *Organizational Fuel Tanks*. **(T-3)**

4.1.6. Refers to Attachment 4, *Personal Equipment for Forward Area Refueling Point (FARP) and Aerial Bulk Fuel Delivery System (ABFDS) Specialists*, AS 016, *Special Purpose Clothing and Personal Equipment*, AS 450, *Aircrew Flight Equipment (AFE), Guardian Angel (GA), and Special Tactics (SPT)*, AFI 11-301V1, *Aircrew Flight Equipment (AFE) Program*, and AFI 11-235, *Forward Area Refueling Point (FARP) Operations*, to ensure ABFDS and FARP specialists receive the necessary personal equipment required.

4.1.7. Under no circumstances will agencies outside wing level activities visit, request, or obtain information about an AF fuels operations without prior coordination and approval of AFPA and/or parent MAJCOM. This ensures that AF fuels policies and procedures are safeguarded and protects flights from unauthorized/uncoordinated contact/solicitation from outside agencies. **(T-2)**

4.1.8. Appoints a primary and alternate Airfield Driving Program Managers (ADPM) IAW AFI 13-213, *Airfield Driving*.

4.1.9. At locations with cryogenic production facilities, reinvests product production capital into plant maintenance, spare parts, and training. **(T-2)**

4.1.10. **(Added-AFRC)** With the Fuels Management NCOIC, jointly review the Fuels Operator Activity Report annually from the host FuelsManager® Defense (FMD) system to evaluate training in support of UTC JFABB and JFABC. **(T-2)**. Personnel not filling these UTCs can be excluded from the evaluation. Fuels Operators must repeatedly perform refuels/defuels and cryogenic servicings throughout the year to become proficient and maintain proficiency.

4.1.10.1. **(Added-AFRC)** Evaluate operator qualifications based on task proficiency. Personnel who have not performed aircraft refuel/defuel (R-11/R-12 vehicle servicing units), ground fuel issues (C-300/C-301 vehicle servicing unit), cryogenic servicings (LOX/LIN carts) and/or not a significant amount of servicings as determined by the NCOIC based on mission operation tempo should be considered for decertification on task(s) and entered into remedial training for recertification. Follow task decertification and recertification procedures IAW AFI 36-2201. **Note:** If personnel have not performed these servicing operations at home station but were TDY/deployed and performed these task(s) then they should be exempted from decertification and recertification process if there is documentation (LOE, EPR, etc) that the servicing operations were performed. This is an example of a situation and questions to ask the NCOIC during the joint review; ask questions first before considering task decertification/recertification.

4.2. Defense Logistics Agency Energy (DLA Energy)

4.2.1. Serves as World-wide Integrated Materiel Manager (IMM) for bulk petroleum products IAW DoDD 4140.25, *DoD Management Policy for Energy Commodities and Related Services*, and is the Executive Agent (EA) for Bulk Petroleum IAW DoD Directive 5101.8, *DoD Executive Agent (DoD EA) for Bulk Petroleum*.

4.2.2. Utilizes regional offices to monitor customer activity, capability, and operating practices for both Continental United States (CONUS) and Outside Continental United States (OCONUS) locations.

4.2.3. Provides guidance regarding management of DWCF through DoD 4140.25-M and DLA Energy P-7, *Accountability and Custodial Responsibilities for Defense Working Capital Fund (DWCF) Inventory and Government Property*.

4.2.3.1. Assesses and approves waiver requests to requirements outlined in DoD 4140.25-M, and DLA Energy Interim Policy Implementation and Procedural Guidance.

4.2.4. Works with CCMD JPO to execute IMM responsibilities.

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

4.2.6. Provides Centrally Managed Program (CMP) for capitalized facilities such as:

4.2.6.1. Cathodic protection.

4.2.6.2. Demolition.

4.2.6.3. Dredging.

4.2.6.4. Filter separators American Petroleum Institute© (API) Standard 510, *Pressure Vessel Inspection Code: Maintenance Inspection, Rating, Repair, and Alteration*).

4.2.6.5. Hydrants (maintenance/tune-ups).

4.2.6.6. Marine loading arms.

4.2.6.7. Piers/marine structures.

4.2.6.8. Pipeline integrity management program (API Standard 570, *Piping Inspection Code: Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems*).

4.2.6.9. Railroad track systems.

4.2.6.10. Tanks (API Standard 653, *Tank Inspection, Repair, Alteration, and Reconstruction*). **Note:** DLA Energy inspects, deactivates tanks, and removes tank bottoms and sludge for capitalized tanks under CMPs.

4.2.7. DLA Energy establishes procedures for processing special fuels.

4.3. Base Civil Engineer (BCE) Responsibilities.

4.3.1. Provides 24-hour maintenance support for fuels facilities and associated equipment.

4.3.1.1. Maintains a special inventory level coordinated with FMT for fixed system filter separator elements.

4.3.2. Provides detailed base grid map as requested; consolidated maps/layered must show the following details:

4.3.2.1. Liquid Fuel System layout of all piping and facilities (Tab G-7).

4.3.2.2. Base Disaster preparedness layout with associated cordon plotter (Tab O-3).

4.3.2.3. Flightline layout.

4.3.3. Provides detailed schematic charts and coordinates with FMT for operating checklists on each fuel system.

4.3.4. Provides certified base pipeline inventories and strapping charts for each pipeline/fuel tank on installation and coordinates with FMT to meet requirements IAW DLA Energy P-1, *Recording and Processing Inventory Transactions*.

4.3.5. Paints, marks, and color codes permanently installed fuel facilities to comply with Military Standard (MIL-STD)-101B, *Color Code for Pipelines and for Compressed Gas Cylinders*, MIL-STD-161G, *Identification Methods for Bulk Petroleum Products Systems*

Including Hydrocarbon Missile Fuels, and AFI 91-203, Air Force Consolidated Occupational Safety Instruction.

4.3.6. Provides a list of emergency generators for Fuel's facilities IAW AFI 32-1063, *Electrical Power Systems*.

4.3.7. Initiates DD Form 1391, *Military Construction Project Data*, for DLA Military Construction (MILCON) and SRM projects coordinating with FMT to capture applicable requirements. Forwards to MAJCOM Fuels Engineers or Infrastructure Managers, Programmers, and AFPA using EBS.

4.3.8. MAJCOM Civil Engineers and BCE installation staffs involved in the EBS process are to obtain accounts using Account Management and Provisioning System (AMPS) and maintain user file with all deficiencies and supporting information to allow DLA Energy to properly forecast funding requirements.

4.3.9. Contracts or provides for vegetation control and grass cutting in Fuels Management areas, including dikes and cut and cover fuel storage tanks.

4.3.10. Provides secondary containment that is impermeable to petroleum products at all primary loading and unloading facilities and for all above ground tanks IAW Unified Facilities Criteria (UFC) 3-460-01, *Design: Petroleum Fuels Facilities*, AFI 32-7044, *Storage Tank Compliance*, and with federal, state, and local environmental laws/regulations or Final Governing Standards (FGS).

4.3.11. Ensures collection and storage of used or recoverable fuels IAW AFI 23-502, *Recoverable Fuel*, and in compliance with federal, state, local environmental laws/regulations, AF Policy Directives and Instructions, and/or FGS.

4.3.12. Coordinates with FMT to establish the following services for fuels facilities:

4.3.12.1. Winterization program (snow removal).

4.3.12.2. Water accumulation program to prevent water intrusion into fuel products.

4.3.12.3. Indoor preventive maintenance facility.

4.3.12.4. Covered roof for Liquid Oxygen (LOX) and Liquid Nitrogen (LIN) storage tanks.

4.3.12.5. Security fencing IAW AFI 31-101, *Intergraded Defense (FOUO)*.

4.3.13. Provides resources to inspect, clean, or deactivate tanks and removes tank bottoms and sludge from fuel tanks as required.

4.3.13.1. Fuels personnel are not to 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*.

4.4. Aircraft Maintenance Responsibilities.

4.4.1. Coordinates refueling, ground products, and cryogenic support requirements with Fuels Service Center (FSC) by providing sortie data, accurate quantity estimates, and proper fuel grade requests.

4.4.1.1. Notifies FSC if any contamination is suspected and provides verification of the last fuel grade issued to the aircraft for defuel requests.

4.4.1.2. Provides flying schedules and promptly notifies the FSC of any schedule changes.

4.4.2. Assists in filling cryogenic servicing carts by performing safety person responsibilities outside of established servicing hours.

4.4.3. Coordinates with Airfield Management and FMT to establish aircraft fuel servicing priorities when not outlined in the Base Support Plan (BSP) or Expeditionary Site Plan (ESP).

4.4.4. Institutes a program to recover and reclaim petroleum products IAW AFI 23-502 and T.O. 42B-1-23, *Management of Recoverable and Waste Liquid Petroleum Products*.

4.4.4.1. Coordinates with Fuels Management Flight (FMF) to reclaim petroleum product.

4.5. Wing Safety Office and Bioenvironmental Engineering (BE) Responsibilities.

4.5.1. Conducts required surveys and inspections. Performs safety inspections on the FMF once a year or when requested by FMT.

4.5.1.1. Reviews and approves the selection and use of workplace specific PPE.

4.5.2. Completes evaluations when workplace operations change and/or when new hazardous materials are introduced, processed or procedures are changed or engineering controls are modified or added IAW AFI 91-203.

Chapter 5

REQUIREMENTS FOR THE FMT

5.1. FMT General Responsibilities.

5.1.1. The FMT is comprised of a Fuels Management Flight Commander (FMFC) and a Fuels Manager (FM) or Superintendent. However, at locations that do not earn a Fuels Management Flight Commander as a result of direct workload or scope of responsibility, the FMT may continue to be used as reference to Fuels Management Flight leadership. Additionally, the FMT responsibilities at contracted locations will be met by the contract service provider.

5.1.1. (AFRC) The LRS commander appoints (by memorandum or personnel action) the most qualified NCO in the flight as the NCOIC. (T-3).

5.1.1.1. The duty title of FM is reserved for those individuals in the rank of CMSgt and possessing the Primary Air Force Specialty Code (PAFSC) 2F000.

5.1.1.2. The duty title of Fuels Superintendent is exclusive to those individuals in the grade of SMSgt or MSgt who possess the PAFSC 2F071, has attended the PLMC, or possess the PAFSC 2F091.

5.1.2. FMTs are trained to maintain command and control and charged with the following responsibilities:

5.1.2.1. Provides optimal mission support, foster innovation, and provide quality of life initiatives geared toward building a robust and resilient FMT.

5.1.2.2. Complies with AF inspection program IAW AFI 90-201, *The Air Force Inspection System*.

5.1.2.3. Reviews eligible augmentees and nominates those most qualified to support the AF Inspection System (AFIS).

5.1.2.4. Reviews and manages self-assessment checklist (SAC) for currency and applicability. Changes to compliance status require updating SAC response IAW AFI 90-201.

5.1.2.5. Ensures HAF fuels SAC is the baseline for compliance reporting within MICT.

5.1.2.5. (AFRC) Request unit training assembly (UTA) assistance visits from HQ AFRC/A4RM to assist units in meeting compliance requirements.

5.1.2.6. Ensures cross flow of information using POL Monthly Incident slides and weekly issues report, promotes fuels Back-to-Basics (B2B) campaign, incorporates Higher Headquarters correspondence, and disseminates fuels community information.

5.1.2.7. Follows requirements, procedures, and guidelines as outlined in FTLs, time compliance technical orders (TCTOs), Service Bulletins, Incident Alerts, and other prescribing authoritative directives as required; incorporates applicable guidance into fuels standard operating procedures.

5.1.2.8. Initiates lessons learned reporting to facilitate policy, procedure and strategy changes across the fuels enterprise. Uses the Joint Lessons Learned Information System (JLLIS) Non-secure Internet Protocol Router (NIPR): <https://www.jllis.mil/> and Secret Internet Protocol Router (SIPR): <https://www.jllis.smil.mil/> to record Observations, file Trip Reports, and submit After Action Reports in support of improving Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities (DOTMLPF). The following lessons learned reporting measures will be used to up-channel best practices, shortcomings, and proposed improvements as they relate to day-to-day operations, TDYs and deployments, as well as HAF sponsored fuels conferences and working groups. **(T-2)**

5.1.2.8.1. Observation. Initiates discovery and supports collection efforts regarding inefficiencies, shortcomings, innovations, and best practices relating to the Fuels Management career field.

5.1.2.8.2. Trip Reports. Documents support, feasibility, and feedback during contingency and humanitarian operations, deployments, and major theater exercises. Specific scope of reporting targets fuels-specific joint expeditionary taskings (JET) as well as the JFA9M and JFA7M unit type codes (UTCs) aiding in the validation as well as future training and equipping of fuels capabilities.

5.1.2.8.3. After Action Reports. Captures comments and recommendations in order to assist and benefit future fuels conferences and working groups. Provides recommendations that if implemented can improve future strategy sessions.

5.1.2.9. Provides bulk petroleum forecasts, receipt, storage, issue, quality, and the accounting of cryogenics, gases, additives, and hypergolic products. **(T-1)**

5.1.2.9. **(AFRC)** This paragraph does not apply.

5.1.2.10. Submits all hypergolic requirements to Air Force Space Command (AFSPC). For additional requirements refer to paragraph 3.7.

5.1.2.11. Develops base support plans (BSP) or expeditionary site plans (ESP) as required for the following categories: operational, contingency, and exercises:

5.1.2.11. **(AFRC)** This paragraph does not apply.

5.1.2.11.1. Coordinates updates to BSP/ESP with Logistics Plans when mission or system modifications occur that effect requirements.

5.1.2.12. Establishes an FMF organization email box and forwards it to Air Force Petroleum Agency (AFPA) for incorporation into the AF Fuels Directory. This facilitates the flow of information, eases the dissemination of messages, and provides organizations with an efficient means for routing correspondence.

5.1.2.12. **(AFRC)** This paragraph does not apply.

5.1.2.12.1. Contacts AFPA for support, assistance, questions, tasks, or actions pertaining to any fuels activity.

5.1.2.12.1. **(AFRC)** Contact the host FMT or MFM.

5.1.2.13. Establishes vehicle, equipment, facility, and personnel minimum essential levels (MELs). (T-3)

5.1.2.13. (AFRC) This paragraph does not apply.

5.1.2.13.1. Coordinates fixed systems filter element requirements with BCE.

5.1.2.13.1.1. Funding and/or reimbursement procedures are outlined in DLA Energy I-18, *Instructions for Requisition, Funding Requests, or Reimbursement of Filter/Coalescer Elements*.

5.1.2.13.2. Establishes vehicle filter element special inventory levels with Vehicle Management (VM).

5.1.2.14. Coordinates with BCE, AFPA, and MAJCOM Fuels on scheduled maintenance and tank cleaning.

5.1.2.14. (AFRC) This paragraph does not apply.

5.1.2.15. Directs private and commercial solicitations and requests for trial, testing, and use of new fuels, fuels technology, and aftermarket fuel additives to AFPA.

5.2. Handling Contaminated and Off-Specification Fuel and Cryogenic Products.

5.2. (AFRC) Handling Contaminated and Off-Specification Fuel and Cryogenic Products. Contact the host FMT.

5.2.1. Informs LRS/CC and affected agencies following technical guidance outlined in T.O. 42B-1-1, *Quality Control of Fuels and Lubricants*.

5.2.2. Immediately notifies AFPA Current Operations (within 2 hours of the incident) and submits a follow-up message within 24 hours of occurrence with an info copy to the MAJCOM.

5.2.3. Ensures AFPA and DLA regional quality assurance representatives (QARs) are contacted to facilitate disposition instructions.

5.3. Aerial Delivery Fueling Operations.

5.3.1. Publishes a trip report utilizing the JLLIS (NIPR: <https://www.jllis.mil/> or SIPR: <https://www.jllis.smil.mil/>) post FARP and ABFDS deployment taskings. Notifies parent MAJCOM of reports completion and submission for certification after each TDY or deployment within 10 duty days of return to home station. At MAJCOM discretion, trip reports may be submitted thru MAJCOM FAM prior to loading in JLLIS. (T-2)

5.3.2. Requests and coordinates fiscal year (FY) operational support flight man-year requirements for ABFDS.

5.3.2.1. Submits man-year forecast IAW AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings, and Badges*, to local Host Aviation Resource Management (HARM) office.

5.3.2.2. Routes request through LRS/CC to the Mission Support Group Commander (MSG/CC) for endorsement. **Note:** The local HARM office reviews requests for man-year and forwards the request to the MAJCOM/A3T.

5.3.3. Task Certifier Requirements IAW AFI 36-2201:

- 5.3.3.1. Completes Air Force Training Course (AFTC).
- 5.3.3.2. Possesses a 7-skill level or higher.
- 5.3.3.3. Maintains task qualifications, proficiencies, and special experience identifier (SEI) for which individuals are certified.
- 5.3.3.4. Appointed by the LRS/CC.
- 5.3.4. For ABFDS program:
 - 5.3.4.1. Requests and submits Aeronautical Orders to the local HARM office for ABFDS crews once tasked to support UTC JFABF. Further guidance is provided in AFI 11-402.
- 5.3.5. For FARP program:
 - 5.3.5.1. Ensures MAJCOM FARP programs are implemented and comply with AFI 11-235, *Forward Area Refueling Point (FARP) Operations*.
 - 5.3.5.2. Appoints 2F071 as FARP team chief with 035 SEI. Additional duties will not be assigned to the team chief due to scope of training, management, and operational duties. **(T-3)**
 - 5.3.5.3. Trains and qualifies sufficient personnel to meet mission readiness requirements.
 - 5.3.5.4. Programs and coordinates requests to provide secure storage area for FARP personnel and servicing equipment.
 - 5.3.5.5. Provides reporting MAJCOM a monthly FARP program status report. The report is due the first Thursday of the month and must be certified by the FMT. **(T-3)**
- 5.3.6. Ensures the following operational requirements for ABFDS/FARP operators are met:
 - 5.3.6.1. Holds 5-skill level or higher as a qualified fuels specialist in Air Force Specialty Code (AFSC) 2F0X1. **(T-2)**
 - 5.3.6.2. Holds the rank of MSgt and below. **(T-3)**
 - 5.3.6.3. Be medically qualified according to AFI 44-170 *Preventive Health Assessment* and AFI 48-123 *Medical Examinations and Standards* and complete physiological training and documented on AF Form 702 *Individual Physiological Training Record* and AF Form 1042 *Medical Recommendation for Flying or Special Operational Duty*.
 - 5.3.6.4. Classified with an Aviation Service Code of 9C (active operational support non-crewmember).
 - 5.3.6.5. Completes FARP initial qualification course Phase I, II, and III training as well as recurring training IAW AFI 11-235.
 - 5.3.6.5.1. Possesses 6 months experience (time starts when assigned to the team). **(T-1)**
 - 5.3.6.5.2. Performs a minimum of four (4) FARP missions and hook-ups. **(T-1)**
- 5.3.7. Reoccurring/just-in-time (JIT) training for ABFDS/FARP operators:
 - 5.3.7.1. Physiological training IAW AFI 11-403, *Aerospace Physiological Training Program*.

- 5.3.7.1.1. Initial training will be conducted via altitude chamber.
- 5.3.7.1.2. Refresher training (every 5 years) can be accomplished using Reduced Oxygen Breathing Device (ROBD) or altitude chamber IAW AFI 11-403, *Aerospace Physiological Training Program*.
- 5.3.7.2. Completes weapons training IAW AFI 36-2226, *Combat Arms Program* (performed locally).
- 5.3.7.3. Obtains Life Support Equipment training (for equipment issued/used) (performed locally).
- 5.3.7.4. Accomplishes Aircraft Ground Egress training (performed locally).
- 5.3.7.5. Accomplishes Night Vision Device training (performed locally).
- 5.3.7.6. Completes Survival, Evasion, Resistance, and Escape (SERE) training.
 - 5.3.7.6.1. Initial and refresher training for enlisted and non-rated aircrew IAW AFI 16-1301, *Survival, Evasion, Resistance, and Escape (SERE) Program*. **(T-1)**
 - 5.3.7.6.2. Training for ABFDS is Escape and Conduct After Capture (ECAC) course or an alternate course prescribed by AFI 16-1301.

5.4. Using Fuels Vehicles and Fuels Support Equipment (FSE).

5.4. (AFRC)Using Fuels Vehicles and Fuels Support Equipment (FSE). Follow procedures below and notify host of any discrepancies found.

- 5.4.1. Determines the most efficient and effective use of fueling assets to support operational requirements.
- 5.4.2. Ensures locations storing or issuing more than one grade of aviation or ground fuel color code clipboards IAW Attachment 5 and incorporate product verification procedures in their locally developed checklists. Locations handling fuel such as JP-8, MUR, and LS2/DS2 are not required to color code their aviation fuel clipboards, but are required to color code their ground products clipboards. **(T-3)**
- 5.4.3. Uses fuels assets for their designed mission (R-11 for aviation fuel, C-300/301 for ground fuel, and R-13 for AVGAS). **(T-2)**
 - 5.4.3.1. Prior to converting fuel assets to dispense a product different from its design mission, the FMF requesting a waiver includes the following information in the waiver request:
 - 5.4.3.1.1. Documents the justification for conversion.
 - 5.4.3.1.2. Provides risk mitigation strategy to overt fuel related incident.
 - 5.4.3.1.2.1. Outlines adequate procedures and controls to prevent product comingling or issuing the wrong product.
 - 5.4.3.1.2.2. Defines locally developed controls using T.O. 37-1-1. Procedures include servicing lock controls and appropriate clipboard color coding IAW Attachment 5, *Clipboard Color Scheme*.
 - 5.4.3.1.2.3. Includes fuel asset parking plan to segregate assets from common or

like equipment.

5.4.3.2. Routes waiver requests (HAF and DLA Energy) to AFPA for coordination prior to submitting to the waiver authority.

5.4.3.2. (AFRC) This paragraph does not apply.

5.4.3.3. Uses T.O. 42B-1-1 to convert fuel assets from one grade of product to another. **Note:** Uses T.O. 42B-1-23 when fuel assets are used to reclaim product, to recover petroleum spills or waste products.

5.4.3.3. (AFRC) This paragraph does not apply.

5.4.4. Ensures general/special purpose vehicles use the military service station as the primary method of refueling when practical.

5.4.5. Inspects, stores, and maintains FARP and specialized forward area refueling equipment (SFARE) using the applicable T.O.s and/or manufacturer's maintenance manual.

5.4.6. Provides recurring inspection and maintenance on stored FARP assets. Equipment will be stored ready for deployment. Any deviation or down time is reported to respective MAJCOM.

5.4.7. Implements a foreign object damage (FOD) prevention program IAW AFI 21-101, *Aerospace Equipment Maintenance Management*.

5.4.8. Does not allow refueling vehicles to drive over "FOD shakers".

5.5. Validating Refueling Vehicles.

5.5.1. At the direction of AFPA, FMTs will use the Aircraft Servicing Capability (ASC) program to calculate refueler authorization.

5.5.1.1. Requests refueling vehicle validation when mission changes warrant or as needed. **Note:** Mission changes can include factors affecting Per Accomplishment Times (PATs), loss or gain of aircraft, aircraft reassignment resulting from a Site Activation Task Force (SATAF), and new or moved facilities etc.

5.5.1.2. Uses the ASC User's Guide located on AFPA's SharePoint site <https://cs3.eis.af.mil/sites/OO-LG-WR-14/default.aspx>, under Current Operations/Vehicles, for step-by-step instructions.

5.6. WRM FSE.

5.6.1. Stores all equipment indoors as much as possible. When allocating storage, priority is given to assets with operational plan (OPLAN) requirements. When 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 IAW T.O. 37A-1-101.

5.6.1.1. Prepares/inspects FSE equipment for shipment:

5.6.1.1.1. Prepares equipment IAW AF Inter-service Manual AFMAN 24-204_IP, *Preparing Hazardous Materials for Military Air Shipments*.

5.6.1.1.2. Includes inspection and maintenance records for equipment.

5.6.2. Contacts MAJCOM FAM as needed for assistance.

- 5.6.3. Maintains applicable forms for each item until final disposition.
- 5.6.4. Stores, inspects, and maintains bladders IAW T.O. 37A12-15-1, *Operation, Service, and Repair Instructions - Collapsible Coated Fabric Fuel Tanks*. **Note:** Stencil the bladder serial number and manufacture date on the exterior if crate is used to store bladders. ABFDS Bladder serial numbers and manufacture dates documentation is required on the AFTO Form 95, *Significant Historical Data*.
- 5.6.5. Ensures storage activities request replacement bladders when bladders are initially wetted with fuel as needed.
- 5.6.6. Performs recurring inspection and maintenance for all assigned equipment.
- 5.6.6.1. Uses equipment end item technical data and T.O. 37A-1-101, *USAF Fuel, Water and Lubricant Dispensing Equipment*, for operation, servicing, and maintenance of air transportable fuel systems.
- 5.6.7. FSE set-up.
- 5.6.7.1. Uses AFPAM 23-221, *Fuels Logistics Planning*, for executing fuel support operations particularly at other than main operating bases while considering the following:
- 5.6.7.1.1. The airfield layout and type of aircraft supported.
- 5.6.7.1.2. The resupply source.
- 5.6.7.1.3. Aircraft taxi and/or tow capability.
- 5.6.7.1.4. The layout of roads and water channels.
- 5.6.7.1.5. Other facility limitations (stand-off distance/ammo storage).
- 5.6.8. Site plans the cryogenics servicing area to minimize travel time and distance to the flightline, while maintaining access for tank truck deliveries. Ensure the plan complies with distance criteria outlined in AFMAN 91-201, *Explosives Safety Standards*.
- 5.6.9. Maintains Cryogenic War Reserve Tanks.
- 5.6.9.1. Verifies storage tanks held in war reserve status are completely serviceable.
- 5.6.9.2. Stocks an overboard vent system (OVS) for each mobility cryogenic tank listed on the Status of Resources and Training System SORTS Designed Operational Capability (DOC) statement IAW T.O. 37C2-8-1-127, *Liquid Oxygen/Nitrogen Overboard Vent System*.
- 5.6.9.3. Stores the OVS in a locked box or footlocker and documents inventories based on the short/long term storage requirements IAW Attachment 10. **(T-3)**
- 5.6.10. Prepares air transportable cryogenic storage tanks for shipment.
- 5.6.10.1. Ensures an approved static grounding reel is affixed on each cryogenic tank.
- 5.6.10.2. Consults T.O. 37C2-8-1-127 for OVS instructions for air shipment.
- 5.6.11. Ensures cryogenic storage containers are adequately painted and marked.

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

5.6.11.2. Requisitions decals IAW applicable standards. Locate decal part numbers in the applicable storage container dash 4 T.O. Illustrated Parts Breakdown (IPB).

5.7. Using WRM FSE for Exercise Support.

5.7.1. Prior to requesting use of WRM FSE, submit written request to MAJCOM to determine if an alternative to WRM FSE is available to support the requirement. If no alternative is available, request WRM FSE release.

5.7.1.1. When planning to use FSE for other than OPLAN requirements, use the FSE Calculator as outlined in AFPAM 23-221 to validate equipment requirements as well as follow AFI 25-101, *War Reserve Materiel (WRM) Program Guidance and Procedures*, to justify the use of WRM assets. **(T-3)**

5.7.2. Justifies and uses the following when submitting requests:

5.7.2.1. Provides the scope of use.

5.7.2.2. Uses fuels UTCs to identify equipment and personnel. UTCs may be tailored to suit the using organization's requirements.

5.7.2.3. Provides the Required Delivery Date (RDD) and duration of use.

5.7.2.4. Designates POC, unit of assignment, and Defense Switch Network (DSN) phone number of the person(s) responsible for receiving, maintaining, and returning the equipment.

5.7.2.5. Lists all fund sites for transportation, Fuels Support Equipment (FSE) reconstitution, and TDY of personnel IAW AFI 25-101, when requested.

5.7.2.6. Forwards any special transportation information, as required. **Note:** IAW AFI 25-201, *Support Agreements Procedures*, reconstitution costs include the "up front" expense of associated Mobility Readiness Spares Package (MRSP), fuel bladders, batteries, and any other items that will require maintenance, repair, or replacement.

5.7.2.7. For FARP personnel and/or equipment being utilized more than 24 continuous hours away from home station, units will notify owning MAJCOM within 24 hours of receipt of tasking. **(T-3)**

5.7.3. Maintaining Cryotainers.

5.7.3.1. Ensures cryogenic assets held in WRM status are fully mission capable (FMC) and maintained IAW paragraph 5.6.9 as required. Reports inventory every year and serviceability status as required in FuelsManager® Defense (FMD) for each OVS kit.

5.7.3.2. Ensures documentation is maintained for all WRM cryogenic assets IAW T.O. 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures*.

5.8. Fuels Planning and Programming.

5.8. (AFRC) Fuels Planning and Programming. Utilize host FOIs, policy letters, checklists and lesson plans. Additionally, utilize host Lock-out/Tag-out Program if tasked with UTC JFASL. **(T-2). Paragraphs 5.8.2 - 5.8.9 Do not apply.**

5.8.1. Establishes fuels operating instructions (FOIs) and locally developed checklists. Assigns individual identification numbers to FOIs and checklists. FMT must document review every year. **(T-3)**

5.8.2. Writes FOIs IAW AFI 33-360, *Publications and Forms Management*. The following serves as the minimum operational and procedural requirements for the FOIs.

5.8.2.1. Formulates processes to review FMD modules, i.e. training, dispatch, equipment and facility status, etc. **(T-3)**

5.8.2.2. Establishes JP8+100 handling procedures. **(T-2)**

5.8.2.3. Determines investigation methods for excessive gain/loss. **(T-0)**

5.8.2.4. Outlines tasks/procedures restricting the wear of jewelry IAW AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*. **(T-2)**

5.8.2.5. Establishes storage tank safe fill levels and coordinates approval with Water Fuels System Maintenance (WFSM). **(T-3)**

5.8.2.6. Implements a Quality Control (QC) hold program. Outlines the requirements and procedures to effectively administer the program. **(T-3)**

5.8.2.7. Institutes tool control program with prescribed procedures outline in paragraph 6.8.

5.8.2.8. Documents rotational training program to support upgrade training IAW AFI 36-2201, *AF Training Program*. **(T-3)**

5.8.2.9. Implements procedures to verify product grade and to prevent fuel comingling. **(T-2)**

5.8.2.10. Develops local procedures to ensure compliance with AFI 23-502, *Recoverable Fuel*. **(T-3)**

5.8.2.11. Outlines effective and efficient use of fuel distribution assets leveraging the efficient use of one-time-defuel operations IAW T.O. 42B-1-1.

5.8.2.12. Shapes management and mandatory use standards of fuels Automated Information Technology (AIT) to ensure greatest return on technology investment.

5.8.2.13. Crafts product rotation plan for Fuels Facilities using first in last out stock management practices.

5.8.2.14. Defines procedures used for corrosion control IAW T.O. 36-1-191, *Technical and Managerial Reference for Motor Vehicle Maintenance*, and local directives.

5.8.2.15. Identifies method for processing classified reports (primary/alternate means). **(T-3)**

5.8.2.16. Implements controls for smoking and spark producing items within fuels areas.

5.8.2.17. Defines additional two-person policy requirements over those outlined in paragraph 5.19.

5.8.3. Publishes locally developed checklists (LCL) IAW T.O. 00-5-1, *AF Technical Order System*. (T-2)

5.8.3.1. Develops, approves, and certifies LCLs for operations and maintenance of systems and equipment using a step-by-step sequence deemed most practical.

5.8.3.2. Formats title page with a unique identification number comprised of “LCL” to identify local checklists, originating organization, and designator (i.e. LCL-LGRF-001). In addition, the title page includes the title and date of the affected LCL, the issue date of the local document, List of Effective Pages (LEPs), locally generated pages, and posting instructions.

5.8.3.3. Writes LCLs in a simple, concise, and comprehensive manner. Create bilingual checklists when necessary.

5.8.3.4. Includes emergency action procedures at the beginning of the checklist. As a minimum, include the following:

5.8.3.4.1. Actions or steps to shut-down operation.

5.8.3.4.2. Actions or steps to prevent injury or environmental damage.

5.8.3.4.3. Fuels Service Center (FSC) contact (refer to phone numbers).

5.8.3.4.4. Fire Dept. contact (refer to phone numbers).

5.8.3.5. Loads and manages LCLs in Enhanced Technical Information Management System (ETIMS) IAW T.O. 00-5-1.

5.8.4. Develops fuels lesson plans.

5.8.4.1. Crafts lesson plans utilizing the template located on AFPA’s SharePoint site at <https://cs3.eis.af.mil/sites/OO-LG-WR-14/default.aspx>.

5.8.4.2. Predefined lesson plans are located on AFPA’s SharePoint site and provide standardized core training requirements that can be tailored to publish local lesson plans.

5.8.4.3. At a minimum, the following lesson plans will be developed where assets are assigned:

5.8.4.3.1. Task Qualification Training (TQT).

5.8.4.3.2. Pintle hook IAW AFI 24-301, *Vehicle Operations*.

5.8.4.3.3. Special purpose vehicles operations.

5.8.4.3.4. Fuel systems operations.

5.8.4.3.5. FSE operations.

5.8.5. Develops cryogenic production plant training plan. Coordinates with AFPA Technical Team for assistance and routes to CFM for approval prior to implementation.

5.8.6. Establishes a Cryogenic Conservation Plan. Coordinates plan with using organizations and ensures the conservation plan provides the following at a minimum: (T-3)

- 5.8.6.1. Limits fill periods to minimum number to support mission requirements.
- 5.8.6.2. Designates cryogenic servicing times.
- 5.8.6.3. Identifies minimum cart limit to maximize conservation efforts.
- 5.8.6.4. Determines number of active carts needed to support using organizations while maintaining inactive carts in purge and stand-by status.
- 5.8.6.5. Maintains active tanks as full as economically possible.
 - 5.8.6.5.1. Coordinates storage requirements based on monthly throughput and War Consumable Distribution Objective (WCDO) levels.
- 5.8.6.6. Reports deficient cryogenic tanks unable to efficiently store product to AFPA.
- 5.8.7. Establishes LOTO Program Management IAW AFI 91-203 and in coordination with the wing ground safety office, if needed.
 - 5.8.7.1. Ensures lockout devices comply with AFI 91-203, are maintained separate from the Fuels QC Hold Program locks and be readily identifiable (e.g. POL/LO-1, POL/LO-2, etc.).
- 5.8.8. Maintains a copy of the installation weather support document and weather safety provisions outlined in AFI 91-203 to delineate notification responsibilities during mission limiting weather conditions. **(T-3)**
- 5.8.9. At Joint Base locations, assesses sister service and/or contract support to determine most efficient and effective use of resources to perform the fuels mission. Establish appropriate cross service agreements as required or request contract modifications through the contracting officer.

5.9. Assessing Against Status of Resources and Training System (SORTS) Designed Operational Capability (DOC) Statements.

- 5.9.1. Reviews SORTS DOC statements IAW AFI 10-201, *Status of Resource and Training System*, to ensure the ability to support requirements. Documents review of DOC statement in an official memorandum. FMT should be familiar with current requirements.
- 5.9.2. Refers to AFI 10-401, *Air Force Operations Planning and Execution*, AFI 10-402, *Mobilization Planning*, AFI 10-403, *Deployment Planning and Execution*, on how UTCs are used for planning. **Note:** The Manpower and Equipment Force Packaging System (MEFPAK) Tool contains the most current description for fuels UTCs.
- 5.9.3. **(Added-AFRC)** The NCOIC reviews OPLANS at least annually and ensures the flight is trained to support war tasking(s). **(T-3)**. NCOICs requests the Logistics Plans Office obtain and provide the fuel support plan for the OPLAN tasked location (if site survey has been accomplished). Review of support plans will be documented and also scheduled in the annual training plan.

5.10. Preparing Required Reports.

- 5.10.1. Provides SORTS reporting data for the unit to report.
- 5.10.1. **(AFRC) Preparing Required Reports.** NCOICs will provide SORTS inputs to the SORTS data monitor. **(T-3)**.

5.10.2. Uses Joint Chiefs of Staff (JCS) Bulk Petroleum Contingency Report (REPOL) to report bulk petroleum contingency status for all fuels activities IAW Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3150.14B, *Joint Reporting Structure Logistics*. (T-0)

5.10.2.1. Provides Joint Staff, DLA Energy, CCMD, AF/A4LE, AFPA, and the MAJCOMs with summary information to capture capability, damage, and deficiencies affecting bulk petroleum supplies, storage, and distribution.

5.10.2.2. Completes JCS REPOL familiarization using the JCS REPOL Training Guide and Attachment 6, *Joint Chiefs of Staff (JCS) Bulk Petroleum Contingency Report (REPOL) Users Guide*.

5.10.2.3. JCS REPOLs will be submitted:

5.10.2.3.1. Monthly by the active duty/ANG no later than the first Friday of each month. AFRC will submit quarterly reports for traditional reservists filling JFA7S, JFA7M, and JFA9M UTCs. This requirement is used to support 7-level core task training as prescribed by the 2F0X1 CFETP and submitters will rotate monthly (AFRC quarterly) to ensure proficiency is attained across the FMF. (T-2)

5.10.2.3.2. When directed by Headquarters Air Force (HAF), MAJCOM, Combatant Command (CCMD), or under the authority of CJCSM 3150.14B.

5.10.2.3.3. During IG inspections and/or exercises, when requested.

5.10.3. Defense Readiness Reporting System (DRRS) is an automated, comprehensive readiness assessments network to calculate the capabilities and preparedness of military units to conduct wartime missions and other contingencies. As a capabilities-based system, DRRS indicates what tasks a unit can accomplish based upon the mission(s) for which a unit was organized or designed.

5.10.4. Air Force Common Output Level Standards (AF COLS) is developed to standardize the delivery of installation support services across Fuels Management activities. Fuels support measures are reported IAW with the AF COLS Playbook. The AF COLS Playbook can be accessed through the AF COLS Portal at <https://eis.af.mil/cs/afcols/Playbook/default.aspx>.

5.10.4. (AFRC) This paragraph does not apply.

5.11. Contingency Planning.

5.11.1. Uses AFI 10-401, AFI 10-402, AFI 10-403, AFI 10-404, *Base Support and Expeditionary (BaS&E) Site Planning*, and AFPAM 23-221 as guidance when preparing fuels appendices to the BSPs/ESPs, operation plans, and mobility support plans. Basic references required to prepare a valid support plans include using the following:

5.11.1.1. FSE Calculator.

5.11.1.2. IMP extracts (petroleum) / WCDO levels (cryogenics/deicing fluid).

5.11.1.3. Aircraft parking plan/fueling maximum-on-the-ground (MOG).

5.11.1.4. Maximum one day (M1D) fuel requirement.

5.11.1.5. Air Mobility Command minimum ground times.

5.11.1.6. Time-Phased Force Deployment Data (TPFDD).

5.11.1.7. Utilizes the War & Mobilization Plan (WMP).

5.11.1.7.1. WMP Volume III, *Combat and Support Forces*.

5.11.1.7.2. WMP Volume IV, *Wartime Aircraft Activity*.

5.12. Maintaining Prepositioned War Reserve Stock (PWRS).

5.12. (AFRC)Maintaining Prepositioned War Reserve Stock (PWRS). This paragraph does not apply.

5.12.1. Refers to AFI 25-101 for petroleum WRM requirements.

5.12.2. Reviews IMP IAW DoD 4140.25-M found on the DLA Energy SIPRNET <http://www.dla.smil.mil/desc/plan/index.html>.

5.12.2.1. Submits Storage Tank Worksheets every year to AFPA/JPO to reflect tanks coming into service, out of service, commissioned or decommissioned. **(T-0)**

5.12.2.2. Maintains OS and PWRS prescribed by the IMP.

5.12.3. Reports minimum inventory penetrations IAW DoD 4140.25-M. Forwards an information copy to parent MAJCOM Fuels Office and AFPA. **(T-0)**

5.12.4. Maintains LOX/LIN WCDO levels through in-house production and/or a commercial source(s).

5.12.5. Coordinates with LRS Readiness Flight to provide M1D requirements.

5.13. Selling Aviation Products to Non-DoD Aircraft.

5.13.1. Determines if sale is authorized by following guidance in DoD 4140.25-M and DLA Energy policy DESC-I-21, *Sales and Credit of Defense Working Capital Fund (DWCF) Fuel*. **(T-0)**

5.13.2. Determines authorized customers using procedures outlined in DLA Energy P-6, *Authorized Customers and Cash Sales*. **(T-0)**

5.13.3. Contact AFPA for processing procedures when cash sales transactions are authorized and required.

5.14. Contracting Officer Representative (COR) Managing Contracted Fuel Operations.

5.14. (AFRC)Contracting Officer Representative (COR) Managing Contracted Fuel Operations. This paragraph does not apply.

5.14.1. Ensures contractors maintain fuels accounting records IAW DoD 4140.25-M, DLA Energy Policy P-7, *Accountability and Custodial Responsibilities for Defense Working Capital Fund (DWCF) Inventory and Government Property*, and requirements specified in the contract's Performance Work Statement (PWS).

5.14.2. Facilitates AF requirements determination with AFPA/DLA Energy or AFRC to:

5.14.2.1. Perform a technical review of contracts to ensure quality fuel support is provided.

- 5.14.2.2. Review the service provider's Quality Control Plan (QCP) and recommends changes to the Contracting Officer.
- 5.14.2.3. Provide oversight and quality assurance monitoring of service provider's activities IAW the contractor's PWS and the QCP.
- 5.14.2.4. Enlist the assistance of BCE during COR compliance and surveillance of contract maintenance requirements.
- 5.14.3. Ensures contractor performance is IAW applicable Occupational Safety and Health Administration (OSHA), AFIs, DoDs, T.O.s, and publications prescribed in the PWS.
- 5.14.4. Recommends changes and coordinates with AFPA/DLA Energy or AFRC for respective service contracts. **(T-1)**
- 5.14.5. Verifies the contract specifies the following:
 - 5.14.5.1. Employee training and qualification meets AFSC 2F0X1 CFETP requirements for each duty position.
 - 5.14.5.2. The requirement for and approval of a QCP.
 - 5.14.5.3. Performance requirements outlined in the PWS comply with applicable sections in this instruction, DoD 4140.25-M, DLA Energy policy and AFI 31-601, *Industrial Security Program Management*.
 - 5.14.5.4. The use of Green Procurement Program (GPP) language.
 - 5.14.5.5. Ensures customer requirements are fulfilled in a timely manner. Includes safeguards to prevent off-specification fuel or wrong product grade from being issued to aircraft, equipment or vehicles.
 - 5.14.5.6. Ensures evaluation and inspection provisions outlined in AFI 90-201, Attachment 2, *List of Authorized Inspections*, Attachment 3, *Air Force Inspection Requirements*, and Higher HQ team visits are incorporated into the PWS.
- 5.14.6. Personnel filling COR or PA positions (military or civilian equivalents) will be qualified to AFSC 2F071 or higher and complete all required training outlined in the Federal Acquisition Regulations (FAR) 1.602-2 prior to appointment to include annual training requirements for AF/DLA Energy contracts. **(T-0)**
- 5.14.7. Understands the responsibilities of the COR, TMs and PAs as outlined in DLA Energy Policy P-7. Provides diligent care, custody and protection of government property. If the COR is also a PA, he or she will attend the formal in-residence DLA Energy Responsible Officer course and complete PLMC. **(T-0)**
- 5.14.8. Develops and uses a Quality Assurance Surveillance Plan (QASP) to evaluate contract performance and reports findings IAW AFI 63-138, *Acquisition of Services*. **(T-0)**
- 5.14.9. Ensures contractor's command and control, information and decisions support fuel quality standards and physical controls exist to prevent use of unserviceable equipment or product.
- 5.14.10. Conducts surveillances on the service provider IAW Air Force/Defense Logistics Agency Performance Based Agreement (PBA) or approved performance plan. **(T-1)**

5.14.11. Contracted FMFs require the involvement of CORs when handling fuel issues prior to seeking the advice from AFPA. Conflicts involving procedural issues and not contractual, which cannot be resolved locally will be forwarded to AFPA.

5.14.12. DLA Energy appointed CORs will provide a monthly COR report to AFPA via email at afpa.af1@dla.mil no later than the 10th of each month. Additionally, forward monthly COR reports to the Contracting Officer using the Contracting Officer Representative Tracking (CORT) tool located at <https://wawf.eb.mil/>. (T-0)

5.15. Providing Personal Protective Equipment (PPE) and Clothing.

5.15.1. Submits budget requests for inclement weather gear and PPE to the LRS Resource Advisor (RA).

5.15.1.1. Refers to AS 016, *Special Purpose Clothing and Personal Equipment*, for authorized inclement weather gear.

5.15.1.2. Consults the installation Ground Safety office and Bioenvironmental Engineering (BE) for required PPE IAW AFI 91-203. **Note:** Fall protection equipment is used IAW safety guidance and task performance. Consider examples where such equipment is required: confined spaces, aboveground storage tank (AST) gauging, etc.

5.15.1.2. (AFRC) Utilize guidance from host.

5.15.1.3. (Added-AFRC) Budgets for Improved Rain Suit (IRS) Parka for rain/foul weather gear or equivalent (rubberized). (T-3).

5.15.2. Coordinates with Ground Safety, BE, and Test, Measurement, & Diagnostic Equipment (TMDE) for equipment needed to enter toxic environments, e.g., permit required confined spaces, proper equipment to use for fuel vapor detection.

5.15.2. (AFRC) Utilize guidance from host.

5.15.3. Consults with BE on all matters regarding the provision of or changes to PPE for workers covered under this instruction.

5.15.3. (AFRC) Utilize guidance from host.

5.16. Fuels Personnel Safety.

5.16.1. Complies with all applicable OSHA, AFI, and DoD instructions to protect the health of personnel exposed to fuel hazards.

5.16.2. Follows Attachment 7, *Fuels Incident Reporting Procedures*, for incident reporting and ensures the following:

5.16.2. (AFRC) Notify host FMT for Incident Reporting.

5.16.2.1. PPE is used, inspected, maintained, and worn.

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

5.16.2.3. Personnel receiving, storing, issuing, and sampling petroleum and cryogenic products wear PPE per AFI 91-203 and T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*. Items are authorized in AS 016, *Special Purpose Clothing and Personal Equipment*.

5.16.2.4. Emergency showers and/or eyewashes are available and maintained IAW AFI 91-203.

5.16.2.5. Adequate spill clean-up material is available, according to Spill Prevention Control and Countermeasures (SPCC); additional measures may be determined by FMT.

5.16.2.6. Safety Data Sheets (SDS) are available for all chemicals used by fuels personnel.

5.16.2.7. Safety observers working in the cryogenics area wear the same level of PPE worn by the fuels specialist performing the task. **Note:** Commercial drivers delivering receipts are required to don PPE IAW OSHA requirements.

5.16.2.8. Compliance with environmental, safety and occupational health standards to improve performance and enhance personnel effectiveness.

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

5.16.3. Applies Risk Management (RM) techniques IAW AFI 90-802, *Risk Management*, to identify and manage risks.

5.16.4. Strictly monitors individuals for alertness and situational awareness while performing fuel and/or cryogenic handling operations, especially when mission requirements require personnel to work more than 12 continuous hours.

5.16.5. Does not allow untrained personnel to perform fuels or cryogenics operations without task-qualified supervision and meet certification requirements outlined in AFI 36-2201 and outlined in CFETP 2FOX1.

5.16.6. All Special Purpose Vehicles will be chocked when unattended. **(T-3)**

5.16.7. Ensures fall protection measures are used IAW AFI 91-203.

5.17. Controlling Static Electricity.

5.17.1. Ensures personnel are familiar with AFI 91-203 regarding the hazards of static electricity and that they adhere to safety requirements outlined in T.O.s 00-25-172 and 42B-1-1 to prevent static build-up and accidental discharge.

5.18. Communication during Fuel Transfers.

5.18.1. Ensures two-way communication is maintained between pumping and receiving stations for all fuel transfers.

5.18.2. Uses dedicated circuits (hot lines), extra telephone circuits, or outgoing call restrictions to ensure telephone contact in an emergency.

5.18.3. Provides a loud bell, ring tone, horn or other signaling device outside and in high noise areas; additionally maintain radio contact, if possible.

5.19. Two-Person Policy.

5.19.1. Ensures contractor employees, aircraft maintenance technicians, or other individuals acting as a second person during fuel or cryogenic operations know the associated hazards involved with the operation and the corrective actions they are required to take in an

emergency. If augmented safety personnel are not available, the task will require a qualified 2FOX1 or be suspended pending availability of safety personnel.

5.19.2. Ensures two people are present when: **(T-1)**

5.19.2.1. Servicing aircraft.

5.19.2.2. Issuing fuel to organizational tanks.

5.19.2.3. Entering confined spaces IAW AFI 91-203.

5.19.2.4. Gauging and sampling above ground tanks and bladders. (Exception: aboveground low profile tanks less than 10 feet do not require second person).

5.19.2.5. Hydrant servicing using the Type III/IV/V system requires one person at the pumphouse and one person at the refueling equipment. Requires two 2FOX1 personnel.

5.19.2.5.1. At locations where FMD Hydrant Automation/Hydrocarbon Detection (HA/HD) is available, hydrants may be unmanned IAW T.O. 37-1-1.

5.19.2.6. 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. Personnel must use a self-contained breathing apparatus when descending onto floating roof tanks with geodesic domes.

5.19.2.7. Receiving, issuing, generating, or transferring cryogenic fluids.

5.19.2.8. Transferring or filling high-pressure gases including cylinders.

5.19.2.9. Off-loading tank cars, rail car, or tank trucks. Requires two 2FOX1 personnel.

5.19.2.10. Filling trucks or performing RTB operations under the following conditions:

5.19.2.10.1. Fillstand not equipped with a deadman control system or Scully® overfill prevention system is inoperable or not available. Requires two 2FOX1 personnel.

5.19.2.10.2. Fuel storage tank has an inoperable automatic high-level shut-off valve or the trucks deadman control system is inoperable. Requires two 2FOX1 personnel.

5.19.2.11. Transferring and receiving fuel requires one person at the transfer point and one person at the receiving point. Requires two 2FOX1 personnel.

5.19.2.12. Collecting fuel samples from fixed fuel systems requires one person to take the sample and the second person is the safety observer. Requires two 2FOX1 personnel.

5.19.2.13. Testing fuels in the laboratory, whereby one of the individuals is a fully qualified lab technician. Requires two 2FOX1 personnel.

5.19.2.14. Collecting fuel samples from pressurized refueling vehicles and equipment. A safety observer is needed; however, need not be in the immediate area, but in the vicinity. Example: Two lab technicians sampling different refueling vehicles with both knowing the others whereabouts and status. Requires two 2FOX1 personnel.

5.19.2.15. Refueling vehicles and FSE sampling requires one fully qualified lab technician to take the sample. Notify a second person in the immediate vicinity (refueler parking area) to serve as a safety person. Requires two 2FOX1 personnel.

5.20. Managing Personnel.

5.20.1. Interviews newly assigned personnel IAW AFI 36-2201, to include a review of qualifications, past experience, and future training needs using the 2FOX1 CFETP as a guide.

5.20.1. (AFRC) NCOIC interviews all newly assigned personnel as soon as possible, but no later than two unit training assemblies (UTA) after arrival. Document this initial evaluation in TBA. (T-3).

5.20.2. Reports any training or qualification deficiency/discrepancies to the Unit Training Manager (UTM).

5.20.3. Ensures only task-qualified personnel with AFSC 2FOX1, US Civil Service, US contract employees, Host National military/civilian, or sister service equivalent are permitted to perform fuels or cryogenics operations. Non-fuels personnel may augment as the second person for safety oversight only after receiving fuels workplace specific briefing regarding their responsibilities.

5.20.4. Establishes guidance and implements a formal rotational training plan to maintain a balance of skills within the flight.

5.20.5. Prepares an alert recall roster IAW local Intergraded Defense Plan (IDP). Ensures the plan remains current at all times. Ensures the recall roster is distributed monthly to all flight members. (T-3)

5.20.6. Ensures all prerequisites are met prior to attending fuels courses as listed in Attachment 8, *Fuels Specialty Courses Prerequisite*.

5.20.7. Staffs the FSC with a minimum of two personnel with SEI 040. Contracted, Air National Guard (ANG), and Air Force Reserve Command (AFRC) fuels operations may staff the FSC with one person with SEI 040. (T-0)

5.20.7. (AFRC) As a minimum, ensure one member is fully trained/qualified to perform FSC operations, regardless of UTC tasking. This member is not required to obtain formal training or SEI 040 unless UTC tasked. (T-2).

5.20.7.1. Contracted and civilian operated FSCs are required to be staffed by at least one graduate of a DLA Energy FMD course.

5.20.8. Staffs the fuels Laboratory with a minimum of one person awarded the SEI 039. (T-2)

5.20.8. (AFRC) Paragraph does not apply unless tasked with UTC JFASL.

5.20.8.1. Contract and civilian operated fuels Laboratories require at least one graduate of the Fort Lee Fuels Quality Control Course.

5.20.9. Submits requests for Fuels SEIs IAW AFI 36-2201 utilizing criteria listed in Air Force Enlisted Classification Directory (AFECD).

5.20.10. **(Added-AFRC)** The NCOIC should make every effort to ensure UTC members train together on UTAs and annual tours.

5.20.11. **(Added-AFRC)** Jointly review the Fuels Operator Activity Report annually from the host BSM-E/EBS system with the squadron commander to evaluate training in support of UTC JFABB and JFABC. This report must be maintained in the file plan. **(T-2)**. Personnel not filling these UTCs can be excluded from the evaluation. Fuels Operators must repeatedly perform refuel/defuels and cryogenic servicings throughout the year to become proficient and maintain proficiency.

5.20.12. **(Added-AFRC)** As a minimum, personnel filling UTC JFATG will process/submit transactions from FMD accounting module into EBS once each UTA. Additionally, JFATG assigned personnel will perform FSC duties and back-up operations once each UTA. **(T-2)**.

5.20.13. **(Added-AFRC)** As a minimum, personnel filling UTC JFASL will sample one mobile refueling unit and one fixed system once each UTA. Input lab results into the BSM-E/EBS quality control module and AFTAT. **(T-2)**.

5.20.14. **(Added-AFRC)** Submit a training request letter to the host unit 30 days prior to the scheduled UTA. **(T-3)**. The goal is to maintain proficiency to ensure all UTCs are trained each UTA.

5.20.15. **(Added-AFRC)** UTCs JFABB and JFABC will, as a minimum, fill one LOX/LIN cart every quarter to maintain proficiency. **(T-2)**. Simulated servicing with LOX/LIN cart present is acceptable; however, every effort should be made to coordinate/schedule servicing with FSC and/or MOCC 30 days prior UTAs.

5.21. Management Engineering Program (MEP) Process.

5.21.1. MEP provides analytical assistance for FMs/superintendents to improve productivity and determine standardized manpower requirements.

5.21.2. Understands AF Manpower Standard (AFMS) 41D100, *Fuels Management*.

5.21.3. Evaluates the number of personnel assigned to the FMF and reconciles the grade distribution with the Manpower Table (MANTAB) outlined in AFMS 41D100.

5.21.4. Takes action to identify personnel overages, shortages, or grade imbalances.

5.21.5. Advocates for manpower to accomplish the mission as necessary.

5.21.6. Monitors the Unit Manpower Document (UMD) and Unit Personnel Management Roster (UPMR).

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

5.21.8. Reviews the UPMR to ensure it reflects the people assigned against the number of positions authorized on the UMD. Provides oversight of the individuals serving outside the flight and advises the CC in cases of mission impact.

5.21.9. Coordinates with the local Manpower Office to correct errors. Refer to AFI 38-208V1, *Air Force Management Engineering Program (MEP) - Processes*, for more information.

Chapter 6

FMT REQUIREMENTS FOR FUELS FACILITIES, TOOLS, AND EQUIPMENT ITEMS

6.1. Facility Management.

6.1. (AFRC)Facility Management. This paragraph does not apply.

6.1.1. Refers to AFMAN 32-1084, *Facility Requirements*; UFC 3-460-01, *Design: Petroleum Fuels Facilities*, and other applicable references to determine requirements needed to develop/construct new or existing fuel facilities.

6.1.1.1. Submits work requests for Base Civil Engineer (BCE) to provide facilities IAW AFMAN 32-1084 or applicable references.

6.1.1.2. Clearly highlights/color codes base grid map(s) provided by BCE in paragraph 4.3.2, IAW Attachment 5, *Clipboard Color Scheme*, and plainly mark aircraft parking locations.

6.2. Securing Facilities and Equipment.

6.2.1. Ensures proper security and storage of flight assets and secures entry gates to areas within Fuels Management Flights (FMFs) span of control IAW AFI 31-101, *Integrated Defense*.

6.2.2. Locks and secures all access/dispensing points for the following when not located within a secure area: **(T-3)**

6.2.2.1. Ground fuel equipment.

6.2.2.2. Fuel bowsers and collection container areas.

6.2.2.3. Fuel dispensing pump nozzles with the exception of automated dispensing pumps.

6.2.2.4. Gauging hatches and other access points on all storage and hydrant tanks.

6.2.2.5. Off-loading headers.

6.2.2.6. All electrical control panels and bulk fuel off-loading systems.

6.2.2.7. Cryogenic tanks, tools and maintenance equipment.

6.2.3. Establishes key control procedures.

6.2.3.1. The number and types of locks used requires the approval of the Resource Protection Committee. **Note:** Magnetic locks are preferred for areas where climatic conditions are severe.

6.3. Emergency Power.

6.3. (AFRC)Emergency Power. This paragraph does not apply.

6.3.1. Identifies, coordinates, and establishes emergency power requirements with BCE IAW Engineering Technical Letter (ETL) 13-4, *Standby Generator Design, Maintenance, and Testing Criteria*. **Note:** Only BCE personnel are authorized to verify proper generator

connections. Use only qualified personnel to operate generators after connections are complete.

6.4. Fuels Laboratory.

6.4.1. Maintains base fuels Laboratory function to perform sampling requirements IAW T.O.42B-1-1, *Quality Control of Fuels and Lubricants*.

6.4.1.1. Performs tests specified by 42-Series T.O.s for all products handled and ensures the quality, cleanliness, and proper operation of fuel-handling systems and equipment.

6.4.2. Furnishes fuels Laboratory with authorized equipment prescribed in AS 460, *Quality Control Laboratories*.

6.4.2.1. Uses UFC 3-460-01, AFMAN 32-1084, and AFI 91-203 to identify fuels Laboratory criteria.

6.4.3. Leverage cross utilization support with the host FMF or through Total Force Integration (TFI) for co-located units where the Lab capability does not exist under each activities' function to assure Laboratory technician training and proficiency are maintained.

6.5. Fuel Spill Prevention and Containment.

6.5.1. Ensures all FMF fuel tanks are maintained and meet the requirements outlined in UFC 3-460-03 and T.O. 37-1-1, *General Operation and Inspection of Installed Fuel Storage and Dispensing Systems*.

6.5.1. (AFRC) This paragraph does not apply.

6.5.1.1. Coordinates with BCE to establish and document safe fill levels for all storage tanks.

6.5.2. Programs inventory alarms in FuelsManager® Operate to alert users and record alarm activity. (T-2)

6.5.2. (AFRC) This paragraph does not apply.

6.5.2.1. Set the FMD High Level Alarm to each tank's established Safe Fill Level

6.5.2.2. Set the FMD High-High Level Alarm between the system's audible alarm and the mechanical High Level Control Valve Shutoff.

6.5.3. Ensures fuels personnel understand responsibilities as outlined in the base SPCC Plan IAW AFI 32-7044, *Storage Tank Environmental Compliance*, and the base's hazardous material emergency planning and response plan (Hazardous Materials (HAZMAT) plan), which addresses federal, state, and local spill prevention and response requirements.

6.5.3. (AFRC) SPCC training is an annual requirement and shall be included as part of the annual training plan. (T-2). If needed, request host unit support for training at least 30 days prior to scheduled UTA.

6.5.3.1. Ensures each fuels facility has the applicable section of the SPCC printed and readily available for use in the event of an emergency.

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

6.5.4. (AFRC) Notify the host FMT of any changes in fuels operations that may require an amendment to the HAZMAT plan.

6.5.5. Ensures spill prevention and clean-up material are readily available as identified by the SPCC.

6.5.5. (AFRC) This paragraph does not apply.

6.5.6. Ensures any chemicals or additives injected into DLA Energy fuel is approved and documented IAW T.O. 42B-1-1.

6.5.7. Ensures operator training is provided on installed leak detection systems.

6.5.8. Manages water from petroleum operations.

6.5.8.1. Coordinates with BCE to establish procedures for the proper operation, inspection, and maintenance of oil/water separators.

6.5.8.1. (AFRC) This paragraph does not apply.

6.5.8.2. Coordinates with the base environmental manager to sample and properly dispose of tank dike drainage, tank water bottoms, and water containing residual petroleum IAW approved base policy.

6.5.8.2. (AFRC) This paragraph does not apply.

6.5.8.3. Establishes procedures to prevent unauthorized discharge of water containing residual petroleum products.

6.5.8.3. (AFRC) This paragraph does not apply.

6.5.8.4. (Added-AFRC) Immediately notify the host FSC or FMT of any product found contaminated/comingled and/or off-specification.

6.6. Efficient use of Hydrant Systems and Fuel Distribution Resources.

6.6. (AFRC)Efficient use of Hydrant Systems and Fuel Distribution Resources. This paragraph does not apply.

6.6.1. Advocates for the use of hydrant systems, which are designed to be flexible/efficient modes of aircraft fueling. Use hydrant systems to the greatest extent possible.

6.6.1.1. Ensures installed hydrant and product recovery tanks are not used to collect or store waste fuels. (T-1)

6.6.1.2. Recover and dispose of waste fuels IAW T.O. 42B-1-23, *Management of Recoverable and Waste Liquid Petroleum Products*, and AFI 23-502.

6.6.2. Establishes a Hydrant Utilization Strategy (HUS) to ensure the effective use of hydrant systems, determine optimum hydrant-to-mobile refueler use ratio and validate/support Military Construction (MILCON) requirements.

6.6.2.1. At a minimum, the HUS determination includes:

6.6.2.1.1. Usage statistics (refueling vehicles, pantographs, hose carts, etc.).

6.6.2.1.2. Aircraft servicing locations.

6.6.2.1.2.1. Hydrant eligible locations.

6.6.2.1.3. Manpower requirements and impacts.

6.6.2.1.3.1. Distance from aircraft servicing locations to refueling vehicle fillstands.

6.6.2.1.3.2. Qualifications and proficiency requirements for hot/cold pit refueling.

6.6.2.1.3.3. Analyze aircraft fuel loads to determine optimum fuel support using AFPAM 23-221, *Fuels Logistics Planning*.

6.6.3. Uses the HUS to define the Hydrant Use Goal (HUG). (T-2)

6.6.3.1. Defines a HUG every 3 years or when directed by AFPA.

6.6.3.2. Coordinates the HUG with the Operations Group (OG), Maintenance Group (MXG), and Airfield Management to determine optimum use of the hydrant system.

6.6.3.3. Routes the HUG package with HUS supporting documentation to AFPA for validation and approval. AFPA will analyze, coordinate, and return the package to the requesting unit.

6.6.3.4. Submits final package to the Mission Support Group (MSG) for approval.

6.6.4. The HUS and HUG can be used to justify facility/personnel adjustments when mission changes justify. Mission changes include factors affecting PAT times, loss or gain of aircraft, and new or relocated facilities.

6.6.5. Calculates the Hydrant Utilization Rate (HUR) and compares it to the HUG using the following equation: $X = (A/B) * 100$. (T-3)

6.6.5.1. **A** = Actual Hydrant Gallons; the total gallons refueled/defueled from aircraft using hydrant pits/outlets (defuel gallons are included with refuel gallons as a positive number). Utilize Table A9.2 to determine hydrant vehicle/equipment issue points to support FMD query.

6.6.5.2. **B** = Total Gallons; the total gallons refueled/defueled from aircraft using mobile refuelers, hydrant systems, and other FSE. Utilize Table A9.2 to determine vehicle/equipment issue points to support FMD query.

6.6.5.3. Use FMD 20-L Code to capture these instances when hydrant system was not utilized, but was capable.

6.6.6. Submits HUR to AFPA monthly for metrics reporting and provide rationale for instances where the HUR fell short of achieving the HUG.

6.7. Cryogenic Facilities.

6.7. (AFRC)Cryogenic Facilities. Report deficiencies/noncompliance with this paragraph to host.

6.7.1. Provides the following to ensure a safe, functional, and secure cryogenic facility:

6.7.1.1. Electrical power for production operations and maintenance equipment. Electrical power must be 3 phase, 220/480 volts, 50/60 cycle.

6.7.1.2. Indoor/outdoor lighting for storing, receiving, and servicing areas.

6.7.1.3. Concrete foundations for storage, receiving, servicing, and servicing cart parking areas. All joints will be fully filled with non-petroleum based sealant between joints to prevent the accumulation of dirt/hazards associated with cryogenics.

6.7.1.4. Area and accessibility that is capable of supporting commercial cryogenics delivery vehicles and maintenance vehicles.

6.7.1.4.1. Clear exit readily available and maintained during cryogenic product movement.

6.7.1.4.2. Utilize a spotter and chocks to ensure safety when backing any vehicle in the cryogenics area. **(T-2)** Chocks will be prepositioned to prevent vehicle from striking equipment/tanks while backing.

6.7.1.5. A telephone connected to an external system with a visual indicator capable of being clearly seen from the servicing/production locations or an audible tone with the ability of being heard above the noise of the cryogenic operation. In the event telephone capability is disrupted, a radio may be used on a temporary basis.

6.7.1.6. Grounding points for all storage tanks and servicing units. Permanently ground production plants.

6.7.1.7. Permanent overhead structure for cryogenic storage facilities(s) to protect cryogenic storage tanks, ensure cryogenic conservation, and maintenance support equipment from the elements.

6.7.1.8. Facilities(s) with roll up style doors must ensure doors remain fully open during receipt, servicing, transferring of cryogenic products or when using maintenance support equipment.

6.7.1.9. Snow removal prior to performing receipt, servicing, and transfer operations.

6.7.1.10. Uses Cryogenic Inspection Guide when inspecting LOX/LIN facilities.

6.8. Tool Management Program.

6.8.1. Establishes a Tool Management Program and defines flight requirements in FOI. Designates primary and alternate Tool Kit (TK) custodians in writing. **(T-3)**

6.8.1. **(AFRC)** Utilize host provided tools and comply with host tool control program measures. Reserve units will not establish independent tool accounts. **(T-2)**.

6.8.2. Implements procedures outlining the control, security, and accountability of all tools and limits the number of personnel authorized to procure tools.

6.8.2.1. Standardizes and assigns a unique identification number to each TK and Expediter Tool Kit (ETK).

6.8.2.2. Includes actions for lost or missing tools using applicable guidance provided in AFI 21-101, *Aircraft and Equipment Maintenance Management*.

6.8.2.3. Outlines tool disposition instructions, the exchange of tools under warranty and when replacing tools and/or other items contained in the TK/ETK.

6.8.2.4. Establishes procedures for transfer of TKs/ETKs when custodians change. Custodians involved in the transfer are to accomplish a joint inventory and document accordingly.

6.8.3. Develops a Master Inventory List (MIL), identifying all tools for each TK/ETK.

6.8.3.1. Identifies tools on the MIL by name, location (marked container), and quantity of items. **Note:** List the total number of small tools, (e.g. drill bits, Allen wrenches, etc.) including their marked container, on the MIL.

6.8.4. Ensures only tools controlled through TK/ETK are authorized for use on the flightline.

6.8.5. Establishes inventory and inspection procedures to document TK/ETK use in a locally determined manner.

6.8.6. TK custodians are responsible for managing an effective tool management program to include the following: **(T-3)**

6.8.6.1. Completes and documents a full inventory of all tool kits every three months and once a year.

6.8.6.2. Assigns a location for tools, equipment, or consumables contained in a TK/ETK. Identifies their location by the use of inlay cutouts, shadowed layouts, labels, or silhouettes.

6.8.6.2.1. Ensures no more than one item per cutout, shadow, or silhouette except for tool sets.

6.8.6.2.2. Consumables placed in TKs/ETKs will be identified on the MIL as consumables (e.g. safety wire, bonding plug, etc.).

6.8.6.2.3. Marks tools, non-CA/CRL equipment and TKs/ETKs by means of etching, stamping, labeling or affixing a tag.

6.8.6.2.3.1. Fiberglass handled hammers are etched IAW TO 32-1-101, *Use and Care of Hand Tools and Measuring Tools*.

6.8.6.2.3.2. Labels storage locations, cabinets, and drawers to identify contents.

6.8.6.2.3.3. Small tools or items that cannot be marked with an identification number are to be maintained in a container. Mark container with the TK/ETK unique identification number and the number of tools enclosed. The container is counted as one of those items.

6.8.6.3. Ensures tools and TKs utilized for cryogenic maintenance are specified for LOX use only in addition to marked identification number.

6.8.6.4. Establishes safeguards to keep LOX tools hydrocarbon free at all times.

6.9. Managing Base FSE.

6.9. (AFRC)Managing Base FSE. This paragraph does not apply

6.9.1. Identifies requirements for new or replacement equipment items annually. Validates authorizations using the AF Equipment Management System (AFEMS).

6.9.1.1. Initiate requisitions for new equipment using AF Form 2005, *Issue/Turn-In Request*, IAW AFMAN 23-122, *Materiel Management Procedures*.

6.9.1.2. Prior to equipment turn-in, inspect the asset and complete the appropriate serviceability tag. Request turn-in and disposition approval from AFPA Current Ops prior to initiating action with the LRS Equipment Accountability Element. Approval requests to AFPA will include an assessment of the state and status of equipment, pictures and supporting documentation (AFTO Form 95, et. al). AFPA will provide disposition instructions and information to support initiating the AF Form 2005 using the turn-in Transaction Identification Code (TRIC).

6.9.2. AS 488, *Fuel Storage and Gas Generating Equipment/Storage Tanks and Maintenance Support Equipment*, and AS 460 *Quality Control/Spectrographic Oil Analysis Program (SOAP) Laboratories*, provide authorizations for FMT procurement. FMT will use AS authorizations to provide capability and capacity for preventive maintenance, operations, and fuels lab functions. **Note:** FMTs are encouraged to cross utilize equipment assets, which reside within the LRS.

6.10. Automated Information Technology (AIT).

6.10.1. Ensures assigned AIT equipment properly functions and provides accurate data to the FSC.

6.10.2. Use of fuels AIT equipment is mandatory to enhance operational safety, accounting accuracy and timeliness while enabling centralized command and control. **(T-3)**

6.10.3. Performs and documents an inventory of all assigned AIT property once every year.

6.10.3. **(AFRC)** This paragraph does not apply.

6.10.3.1. Accomplishes and documents a joint inventory with incoming and outgoing custodian and certifies accurate and complete inventory records prior to relinquishing custodial responsibilities.

6.10.4. Reports hardware and software problems to the Business Systems Modernization-Energy (BSM-E) Help Desk.

6.10.4. **(AFRC)** Report problems to host FSC supervisor or FMT.

6.10.4.1. Submits trouble tickets via telephone; Commercial 1-800-446-4950, DSN 312-697-4950, or email bsme.helpdesk@dla.mil.

6.10.5. Coordinates requests for procurement, replacement, or upgrade of AIT with AFPA.

6.10.5. **(AFRC)** This paragraph does not apply.

6.10.6. AIT equipment disposition guidance includes:

6.10.6. **(AFRC)** This paragraph does not apply.

6.10.6.1. Remove the following AIT equipment from servicing vehicles and FSE when sent for depot maintenance or to DLA Disposal Services:

6.10.6.1.1. FuelMaster® Automated Point of Sale Device (APOS) truck cradle, printer, Truck Identification Module (T.I.M.™) and associated cables/equipment.

- 6.10.6.1.2. Maintain removed APOSD and Scully® equipment at the base as spares. Contact AFPA for further guidance.
- 6.10.6.1.3. Remove the T.I.M.™ located inside the Duocept™ when transferring refueling vehicles to another location. These modules are programmed to base specific fillstand(s) to prevent commingling of products. Maintain the removed T.I.M.™ until needed.
- 6.10.6.1.4. Upon receipt of a transferred refueling vehicle, replace T.I.M.™ (if equipped) with spare module to ensure operational integrity, prevent product commingling and avoid Intellitrol® reprogramming.
- 6.10.7. Refer to AFPA's SharePoint site for additional information at: <https://cs3.eis.af.mil/sites/OO-LG-WR-14/Automation%20Information/Forms/AllItems.aspx>.

Chapter 7

FUELS INFORMATION SERVICE CENTER (FISC) REQUIREMENTS

7.1. Fuels Information Service Center.

7.1.1. Manages product resources, provides flight support, product accounting, and laboratory analysis of fuel, cryogenics, and hypergolic products as required.

7.1.1. (AFRC) This paragraph does not apply.

7.1.2. Supervises the Fuels Service Center (FSC), Support, and Laboratory functions.

7.1.2.1. Reviews applicable inspection reports and validates corrective actions.

7.1.3. Reviews flying schedules and coordinates with Fuels Operations to meet mission requirements.

7.1.4. Familiarizes fuels controllers with Defense Working Capital Fund (DWCF) principles and procedures set forth in DoD 4140.25-M, *DoD Management of Bulk Petroleum Products, Natural Gas, and Coal*.

7.1.5. Submits request for operating a fuels radio net; preferably a separate radio net for Fuels Management.

7.1.5. (AFRC) Use host flight's radio net.

7.1.6. Ensures accessibility and availability of a classified computer system.

7.1.7. Establishes FSC relocation procedures to ensure uninterrupted fuel support is maintained.

7.1.7. (AFRC) Use host relocation procedures.

7.1.8. Ensures FSC personnel verify grade of fuel and tank custodian prior to each fuel delivery provided by FMF.

7.1.8. (AFRC) This paragraph does not apply.

7.1.9. Obtains detailed base "Liquid Fuel System" schematics from BCE and color codes active facilities by product IAW clipboard color scheme described in Attachment 5, *Clipboard Color Scheme*. Identifies all FMF facilities by name on the schematic (e.g. Laboratory, Cryogenics, Hydrants, etc.).

7.1.10. Reviews Air Force Test and Analysis Tool (AFTAT) Laboratory reports to ensure fuel meets quality standards. Identifies negative trend patterns while providing recommended changes to FMT to improve product quality.

7.2. Fuel Service Center.

7.2.1. Coordinates fuels operations and maintains all product accounts according to this AFI and DLA Energy Policies.

7.2.2. Accounts for all products stored, issued and received IAW DLA Energy Policies.

7.2.3. Uses FuelsManager® Defense (FMD) to collect, store, monitor, and process:

- 7.2.3.1. All product accounting transactions.
- 7.2.3.2. Product inventory management.
- 7.2.3.3. Vehicle and Fuels Support Equipment (FSE) status.
- 7.2.3.4. Flightline activity using FMD 20-Codes found in Attachment 9, *FuelsManager® Defense (FMD) Codes*, Table A9.1, *Memo Block 20-Codes*.
- 7.2.3.5. Issue point codes of fuel vehicles and equipment based on mode of operation (hydrant use/mobile refueler) using the FMD Issue Point Codes and definitions located in Attachment 9, *FuelsManager® Defense (FMD) Codes*, Table A9.2, *Fuel Vehicle and Equipment Issue Point Codes*.
- 7.2.3.6. Reconcile transactions daily and submit data IAW DLA Energy P-1.
- 7.2.3.6. (AFRC) This paragraph does not apply.
- 7.2.3.7. Maintain a list of FMF emergency power generator locations and trained operators.
- 7.2.3.7. (AFRC) This paragraph does not apply.
- 7.2.3.8. Monitor and provide current inventory status of all products and pertinent information in regards to receipts, storage, issue transactions, and Minimum Essential Level/Inventory Management Plan/War Reserve Materiel (MEL/IMP/WRM).
- 7.2.3.8. (AFRC) This paragraph does not apply.
- 7.2.3.9. Perform back-up of the BSM-E system(s) IAW DLA Energy P-3, *Document/Data Control and Retention*.
- 7.2.3.9. (AFRC) This paragraph does not apply.
- 7.2.4. Coordinates with using organizations every year to forecast fiscal year (FY) product requirements.
- 7.2.4. (AFRC) This paragraph does not apply.
- 7.2.5. Monitors aircraft sortie generation status.
- 7.2.6. Acts as the single point of contact for the FMF. FMTs may designate a point of contact to facilitate reporting, notification, and response during other than normal duty hours.
- 7.2.7. Ensures procedures are in place to provide pertinent information between shift controllers, FISC, Fuels Operations (Ops), FMT, and supporting agencies.
 - 7.2.7.1. Informs FISC, Ops, FMT, Water Fuels System Maintenance (WFSM) and/or Vehicle Management (VM) whenever in-commission rates fall below MEL.
- 7.2.8. Maintains a document control function for fuels documents and transactions processed IAW DLA Energy P-3.
- 7.2.8. (AFRC) This paragraph does not apply.
- 7.2.9. Communicates using radios and telephones. Radios are the primary means of communication between FSC and personnel performing fuel operations. The FSC must maintain positive control over all fuels facilities and flightline operations.

7.2.10. Ensures the following are maintained:

7.2.10. (AFRC) This paragraph does not apply. Notify host of discrepancies.

7.2.10.1. Class A, Class C, and a direct phone line to Maintenance Operations Center (MOC), see AFMAN 33-145, *Collaboration Services and Voice Systems Management*.

7.2.10.2. Ability to receive crash net emergency notifications.

7.2.10.3. Liquid Fuel System and flightline layout of all piping/facilities and servicing locations (Tab G-7).

7.2.10.4. Base Disaster preparedness layout with associated cordon plotter (Tab O-3).

7.2.10.5. Alert recall roster and flight key personnel listing.

7.2.10.6. Disaster/emergency checklists and operating instructions.

7.2.10.7. Alternate parking plan to relocate vehicles/FSE.

7.2.11. Provides fuel inventory and equipment status to the Installation Control Center (ICC) as requested.

7.2.12. Documents all delivery refusals in writing within 24 hours IAW DoD 4140.25-M and provides information copy to Air Force Petroleum Agency (AFPA), DLA Energy, and/or DLA Energy Regional Offices. **(T-0)**

7.2.13. Requisitions cryogenics products according to DLA Energy interim ordering instructions and accounts for LOX and LIN.

7.2.14. Clipboards are comprised of the following:

7.2.14. (AFRC) This paragraph does not apply. Notify host of discrepancies.

7.2.14.1. Marked with vehicle/FSE registration number and color coded IAW Attachment 5, *Clipboard Color Scheme*, and paragraph 5.4.2.

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

7.2.14.3. DD Form 1898, *Energy Sale Slip*.

7.2.14.4. AF Form 1807, *Operator's Inspection Guide and Trouble Report (Fuel Servicing Vehicles)*/AF Form 4427, *Operator's Inspection Guide and Trouble Report* and waiver card if applicable.

7.2.14.5. Locally generated dispatch form as needed.

7.2.15. Provides operator(s) with the following when dispatched:

7.2.15.1. Servicing location.

7.2.15.2. Applicable checklist.

7.2.15.3. Clipboard matching FMD dispatch.

7.2.15.4. Aircraft type and tail number, vehicle/equipment type, or facility number.

7.2.15.5. Estimated fuel quantity, reason, and if contamination is suspected (for defuels only).

7.2.16. Verifies fuel grade, organizational tank, and tank custodian prior to fuel delivery.

7.2.17. Weather notification procedures consist of the following:

7.2.17.1. Notify all applicable fuels personnel and terminate those operations outlined in AFI 91-203, *Air Force Consolidated Occupational Safety Instruction* to include: commercial cryogenics receipts, cryogenic issues performed outdoors, and bare base cryogenic operations.

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

7.2.17.3. Record all pertinent information associated with weather conditions.

7.2.18. Key control measures: **(T-3)**

7.2.18.1. Maintain spare keys for fuels equipment, facilities, and access points. Coordinate the control of spare vehicle keys with the Vehicle Management Flight.

7.2.18.2. Inspect and validate all spare keys retained for fuels operations and correct deficiencies every six months. Route completed inspection report through FMT for review, corrective actions, and signature.

7.2.18.2. **(AFRC)** This paragraph does not apply.

7.2.18.3. Request and replace keys or locks as required.

7.2.18.3. **(AFRC)** This paragraph does not apply. Notify host of discrepancies.

7.2.18.4. Keep fuel servicing vehicles keys in the ignition at all times.

7.2.18.5. Ensure keys issued for operational use over extended periods of time are signed for using the AF Form 1297, *Temporary Issue Receipt*.

7.2.19. Vehicle Identification Link (VIL) Management

7.2.19.1. Encode VIL keys for alternative flex fuel vehicles with the appropriate fuel grade when available on base or within the local area as prescribed by AFI 24-302, *Vehicle Management*.

7.2.19.2. Require organizations whose mission requires them to frequently travel off base to have their VIL key encoded with sufficient grade codes to prevent mission impact. Justify, coordinate, and approve requests for multiple grade codes programmed on VIL keys on the VIL key request form.

7.2.19.3. Coordinate with Vehicle Management & Analysis (VM&A) to reconcile the Master Vehicle List quarterly. **(T-3)**

7.2.19.3.1. Reconcile the Master Vehicle List with DoD FuelMaster® Advanced Enhanced (DoDFM AE). Vehicles identified as transferring off-base or to another unit need to be recoded.

7.2.19.3.2. Provide the unit Vehicle Control Noncommissioned Officer/Resource Advisor (VCNCO/RA) with the effected VIL Key Encode Letters for correction or disposition.

7.2.19.4. Reconcile VIL Key Encode Letters every year IAW DLA Energy P-5, *Vehicle Identification Link (VIL) Key Encoding, Accountability, and Control*. (T-0)

7.3. Fuels Support.

7.3. (AFRC) Fuels Support. The NCOIC or an appointed 2F071 will perform these duties. (T-3). Do not duplicate tasks already being performed by the LRS.

7.3.1. Coordinates supply and equipment transactions with LRS Equipment Accountability Element (EAE).

7.3.2. Identifies FY supply and equipment budget requirements and submits them to FMT and the squadron RA as required.

7.3.2.1. Provides budget estimates for needed parts, tools, and equipment.

7.3.2.2. Programs for annual laboratory supplies to meet product quality requirements.

7.3.2.3. Forecasts replenishment and resupply of Personal Protective Equipment (PPE).

7.3.2.4. Identifies advanced, specialized fuels training to meet the minimum requirements prescribed by this AFI, which do not receive Air Education Training Command (AETC) funding.

7.3.2.5. Forecasts spares and routine maintenance requirements authorized and approved as outlined in AFI 25-101, *War Reserve Materiel (WRM) Program Guidance and Procedures*.

7.3.2.5. (AFRC) This paragraph does not apply.

7.3.3. Monitors equipment authorizations assigned to the fuels Laboratory and Custodian Authorization/Custody Receipt Listings (CA/CRLs).

7.3.3. (AFRC) This paragraph does not apply.

7.3.3.1. Coordinates with AFPA to remedy excess or unserviceable equipment items and identifies the appropriate condition code prior to requesting disposition instructions from the item manager. AFPA coordinates with MAJCOM(s) to determine inter-command or intra-command transfers for assets identified as serviceable.

7.3.3.1. (AFRC) This paragraph does not apply.

7.3.4. Understands the unit Status of Resources and Training System (SORTS) Designed Operational Capability (DOC) statement, unit type code (UTC) posturing, coding procedures, and status of all flight UTCs presented in the Air & Space Expeditionary Force Reporting Tool (ART).

7.3.5. Knowledgeable of Installation Deployment Officer (IDO) roles and Unit Deployment Manager (UDM) Guide.

7.3.6. Uses FMD to identify personnel qualified as trainers and as task certifiers meeting the requirements of AFI 36-2201, *Air Force Training Program*.

7.3.6. (AFRC) NCOIC will coordinate with host to ensure qualifications are updated in FMD. (T-3).

7.3.7. Ensures flight personnel are awarded the appropriate special experience identifier (SEI) and recommends candidates for the award IAW AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, and the Air Force Enlisted Classification Directory (AFECD).

7.3.8. Manages the Government Purchase Card (GPC) Program IAW AFI 64-117, *AF Government-Wide Purchase Card Program*.

7.3.8.1. Must complete training through the Defense Acquisition University on-line course, *CLC 046 Green Procurement, CLG001 DoD GPC*, and *CLG004 DoD GPC Refresher Training* as these also satisfy the GPC holder training requirements. **(T-0)**

7.4. Fuels Mobility.

7.4. (AFRC) Fuels Mobility. The NCOIC or an appointed 2F071 will perform these duties. **(T-2)**. Do not duplicate tasks already being performed by the LRS.

7.4.1. At the FMT's discretion, a Fuels Mobility Element can be created for locations storing and/or using fuels support equipment (FSE).

7.4.1. **(AFRC)** This paragraph does not apply.

7.4.2. Ensures storage, inspection, and operator maintenance is performed on FSE IAW applicable equipment technical order for day-to-day use and refer to Attachment 10 when maintaining FSE in short or long term storage.

7.4.2. **(AFRC)** This paragraph does not apply.

7.4.3. Identifies fiscal year mobility support funding requirements to the FMT so it can be included in the LRS/WRM annual budget.

7.4.3. **(AFRC)** This paragraph does not apply.

7.4.4. Maintains an operational library for T.O.s IAW T.O. 00-5-1, *Air Force Technical Order System*, and records for all assigned equipment and FSE.

7.4.4. **(AFRC)** This paragraph does not apply.

7.4.5. Prepares and processes equipment, with associated Readiness Spares Packages (RSPs) and fuel kits for each UTC when tasked.

7.4.5. **(AFRC)** This paragraph does not apply.

7.4.6. Coordinates with transportation, supply, and personnel functions to meet MAJCOM deployment time frames. Transfers accountability of CA/CRL items to a deployed supply account if deployment time period exceeds initial requirements. **(T-3)**

7.4.6. **(AFRC)** This paragraph does not apply.

7.4.7. Maintains records of all equipment and FSE transactions (i.e. movement, maintenance, inspection, salvage, and transfer of equipment, etc.).

7.4.7. **(AFRC)** This paragraph does not apply.

7.4.8. Coordinates with Unit Deployment Manager to ensure personnel documentation is maintained to meet training and deployment requirements.

7.4.8. **(AFRC)** This paragraph does not apply.

7.4.8.1. Evaluates and reports the overall FFM mobility status to FMT monthly.

7.4.8.1. (AFRC) This paragraph does not apply.

7.4.8.2. Provides recommended updates to ART status IAW AFI 10-244, *Reporting Status of Aerospace Expeditionary Force*.

7.4.8.2.1. (Added-AFRC) The NCOIC will provide UTC status to the ART monitor and verify UTC status is correct in the ART each UTA. (T-3).

7.4.8.3. Schedules personnel for training who require special qualifications or training.

7.4.8.4. Ensures members assigned to UTCs are fully trained and qualified to meet Mission Capability (MISCAP) statement requirements. If refresher OJT is required, coordinates with FMT to ensure training is accomplished prior to deployment.

7.4.9. Must be familiar with Air & Space Expeditionary Force (AEF) on-line resources and references.

7.4.10. Task Qualification Training (TQT). Training and certification of TQT will be accomplished IAW AFI 10-401, *Air Force Operations Planning And Execution*, AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*, AFI 36-2201, *Force Training Program*, and AEF Online Tier 2A, *Expeditionary Skills (ES) Proficiency Training/Tier 2B, Home Station Pre-Deployment Training*.

7.4.10.1. Task standardization is key to TQT, ensuring readiness while in a Chemical, Biological, Radiological, and Nuclear (CBRN) environment. Utilizing the concept of “everyone’s a driver” the tasks personnel will be trained and certified on aircraft fuel servicing (issue/defuel) using the R-11 or R-12. These operations will be incorporated into the flight’s TQT Lesson Plan IAW paragraph 5.8.4.

7.4.10.2. Prerequisites. CBRN Defense Awareness Course (CBT) and CBRN Defense Survival Course (Hands-on).

7.4.10.3. Target Audience. Deployers, personnel departing for Permanent Change of Station (PCS) or Temporary Duty (TDY) for more than 20 days, to a Medium Threat Area (MTA) or High Threat Area (HTA) listed in AFI 10-2501, Table 4.1 or Threat Compendium, *Worldwide Threat to Airbases*. Individuals must be current in CBRN Defense Awareness/Survival at the time of departure and will be considered current for the duration of the assignment (less than 24 months) or TDY/Deployment (regardless of length). They will receive local conditions training when they arrive at the PCS or TDY/Deployment location within 30 days of arrival.

7.4.10.4. TQT Training Frequency. Complete 30 days after CBRN Defense Survival Course (Hands-on).

7.4.10.5. Exercises. Ensure training is provided for individuals participating in exercises where operating in CBRN environment will be expected and not falling under the criteria outlined above.

7.4.10.6. Full Credit Requirements. Individuals successfully complete the demonstrated-performance objective.

7.4.10.7. Documents completed training in FMD. (T-3)

7.4.11. Maintains current listing of all flight personnel that hold SEIs, have completed flight physicals, physiological training and any other unique training requirements for all UTC requirements outlined in the AFECD and UTC MISCAP.

7.4.12. Schedules personnel selected by FMT, with at least two years' retainability to attend ABFDS and FARP training as outlined in Attachment 11, *Fuels Special Experience Identifier (SEI) Matrix*, and Attachment 8, *Fuels Specialty Courses Prerequisite*. **(T-3)**

7.4.13. Schedules flight physicals and physiological training at least 45 days before due date.

7.4.14. Maintains copies of AF Form 702, *Individual Physiological Training Record*, and AF Form 1042, *Medical Recommendation for Flying or Special Operational Duty*, records for ABFDS qualified personnel.

7.4.15. Identifies mobility support funding requirements to the squadron UDM and LRS RA in support of SORTS DOC tasked UTC requirements.

7.4.16. Prepares and processes equipment tasked for deployment.

7.4.17. Completes Trip Report in the Joint Lessons Learned Information System (JLLIS) (<https://www.jllis.mil/>) database post Joint Expeditionary Team (JET) taskings and JFA9M/JFA7M deployments. **Note:** Flight Mobility requirements do not apply to contracted fuels operations.

7.5. Fuels Training

7.5. (AFRC) Fuels Training. The Fuels Training Monitor should possess AFSC 2F071.

7.5.1. Coordinates with the Unit Training Manager (UTM) for upgrade training programs IAW AFI 36-2201, *Air Force Training Program*.

7.5.2. Maintains personnel qualifications and training in FMD. Captures and links critical tasks associated with fuels and cryogenic operations to operator qualifications as determined by FMT.

7.5.3. Familiarizes fuels personnel on controlled or restricted area procedures IAW AFI 31-101, *Integrated Defense (FOUO)*.

7.5.4. Provides fuels personnel with security training upon arrival and annually thereafter IAW AFI 31-601, *Industrial Security Program Management*, and captures completion and due dates in FMD.

7.5.5. Develops training programs as determined by the FMT for all assigned equipment and systems used by the FMF IAW AFI 36-2201.

7.5.5. **(AFRC)** Use host flight's training program for assigned equipment and systems. **(T-2).**

7.5.5.1. Include applicable servicing operations; hot refueling, concurrent servicing, sortie generation, and rapid defuel.

7.5.6. Coordinates flight training program with UTM.

7.5.6. **(AFRC)** Do not duplicate training or documentation performed by the LRS.

7.5.7. Synchronizes fuels vehicle operator training with Distribution and VCNCO schedules.

7.5.8. Coordinates Vehicle Lesson Plans with VCNCO and routes IAW AFI 24-301, *Vehicle Operations*. Standardized vehicle lesson plans are maintained on the AFPA SharePoint sit at <https://cs3.eis.af.mil/sites/OO-LG-WR-14/default.aspx>.

7.5.9. Schedules generator training and ensures fuels personnel are ready to operate emergency power generators IAW AFI 32-1063, *Electric Power Systems* and documents accordingly.

7.5.10. Inspects and documents all training records within the Training Business Area (TBA) every six months and coordinates with sections for corrective actions. **(T-3)**

7.5.11. Implements the FMT's rotational training program utilizing appropriate core tasks identified in the Master Training Plan (MTP). Uses the following guidelines and MTP as a template:

7.5.11. **(AFRC)** The annual training plan serves as the formal rotational program, regardless of the number of personnel assigned.

7.5.11.1. 5-Skill Level: Experience with task completion in fuels Facilities, Mobile Distribution, Hydrants, Preventive Maintenance, and Laboratory functions.

7.5.11.2. 7-Skill Level: Revisit areas necessary for the 5-Skill Level plus task completion in Preventive Maintenance, FSC, and Cryogenics.

7.5.11.3. A formal rotational program is not required at locations with fewer than 20 military personnel and those with less than 15 month tour lengths.

7.5.11.4. **(Added-AFRC)** Develop an annual training plan for each calendar year NLT November and forward to the host flight and HQ AFRC/A4RM. Use the CFETP to ensure all core task areas are covered each year. **(T-2)**. Develop the plan to keep personnel current on UTC skills and to complete core tasks for the applicable skill level.

7.5.11.5. **(Added-AFRC)** The NCOIC should coordinate off-station annual tours with the deployed location. Include training needs, objectives and information concerning special requirements. For example, determine flight line training or security/access requirements that can be accomplished before arrival to reduce loss of valuable hands-on training time.

7.5.11.6. **(Added-AFRC)** /CIVILIANS/CONTRACTORS: To schedule/register for RO/FMD courses, coordinate with HQ AFRC/A4RM. Coordinate AETC formal course designator such as Fuels Apprentice, Cryogenic Maintenance, Petroleum Logistics Management, and Fuels Quality Control with the unit/wing Formal Training Manager.

7.5.12. Establishes a tank custodian training program IAW AFI 23-204, *Organizational Fuel Tanks*.

7.5.12. **(AFRC)** This paragraph does not apply.

7.6. Fuels Laboratory.

7.6.1. Ensures provisions outlined in AFI 91-203 regarding Laboratory safety and internal and external safety inspections are accomplished and documented.

7.6.2. Schedules and administers fuels quality control program IAW T.O. 42B-1-1.

7.6.3. Observes, maintains, and tracks the condition and performance of the installed filters and separators.

7.6.4. Ensures FMD is up to date and reflects current and accurate samples and due dates to include all fuel and cryogenic sample results.

7.6.4.1. Only qualified personnel assigned to the Laboratory input sample data into FMD. Record visual fuel samples from vehicles, FSE, and facilities at discretion of FMT for trend analysis of water accumulation or removal from fuel systems. **(T-3)**

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

7.6.6. Administers the Quality Control (QC) hold program and accounts for assets used to identify and isolate fuels and cryogenics storage and dispensing equipment. **(T-2)**

7.6.6. **(AFRC)** Personnel filling UTC JFASL shall be qualified to place caution tags. **(T-2)**.

7.6.6.1. Ensures isolation devices (locks) are maintained separate from the LOTO devices and be readily identifiable (e.g. LGRF-1, LGRF-2, etc.).

7.6.6.2. Assigns caution tag(s) IAW the fuels operating instruction (FOI).

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

7.6.6.4. Records caution tag actions in FMD.

7.6.6.5. Places an AF Form 980 and lock on assets that are overdue for Laboratory sampling.

7.6.6.6. Notifies FSC, Ops, and FMT immediately and removes overdue asset from service and secures the corresponding clipboard in the QC hold box.

7.6.6.7. Ensures only the Laboratory maintains keys and locks used for the Fuels QC Hold Program. **(T-3)**

7.6.7. Ensures AFTAT accounts have been established for all Laboratory personnel. Removes access to AFTAT when personnel no longer perform Laboratory functions.

7.6.7.1. Ensures all product samples are processed in AFTAT and submitted to an Aerospace Fuels Laboratory.

7.6.7.2. Includes FMT's email addresses in AFTAT report automated distribution.

7.6.8. Establish sampling requirements schedule and Laboratory correlation program IAW T.O. 42B-1-1, *Quality Control of Fuels and Lubricants*.

7.6.9. Notifies FSC, Ops, and FISC immediately of any suspected contaminated or off-specification products for fuel, cryogenic, gases and hypergolic products.

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

7.6.9.2. Place corresponding clipboards into QC hold box until samples have been analyzed and a root cause has been identified.

7.6.10. Ensures a Test, Measurement, & Diagnostic Equipment (TMDE) account is established and monitored IAW T.O. 33K-1-100-1, *Calibration Procedure for Maintenance Data Collection Codes and Calibration Measurement Summaries*.

7.6.11. Provides FSC with a monthly standby roster.

7.6.11. (AFRC) This paragraph does not apply.

7.6.12. Maintains aircraft crash kit IAW T.O. 42B-1-1.

7.6.12. (AFRC) This paragraph does not apply.

7.6.12.1. Inspects and inventories crash kit every six months for serviceability and documents inspections in FMD. Uses tamper-proof seal(s) to prevent equipment removal. Re-inspect kit if there is any evidence of tampering. (T-3)

7.6.12.1. (AFRC) This paragraph does not apply.

7.6.12.2. Only qualified fuels Laboratory personnel are authorized to draw and submit fuel samples associated with aircraft incidents IAW T.O. 42B-1-1.

Chapter 8

FUELS ENVIRONMENTAL SAFETY OFFICE (FESO) REQUIREMENTS

8.1. Fuels Environmental Safety Office.

8.1. (AFRC) Fuels Environmental Safety Office. Units shall designate a 7 skill-level supervisor in writing as the Fuels Environmental/Safety NCO. **(T-3)**. Do not duplicate tasks already being performed by the host base. Report all environmental issues and facility discrepancies to host FMT.

8.1.1. Charged with the management of environmental programs, safety programs and fuels Military Construction (MILCON) and Sustainment, Restoration, and Modernization (SRM) projects.

8.1.2. Provides daily safety and weekly environmental briefing topics. Incorporates monthly Back-to-Basics (B2B) and Incident summaries, which are maintained on AFPA's SharePoint site at <https://cs3.eis.af.mil/sites/OO-LG-WR-14/default.aspx>. **(T-3)**

8.1.2. **(AFRC)** Provides safety briefings each day during UTA and annual tour. As a minimum, briefings must relate to the annual training plan. **(T-2)**. For example: if the annual training plan covers fixed facilities, then a briefing of notes, cautions, and warnings from T.O. 37-1-1 is appropriate. Briefings should also include information received through the host or command channels that relates to accidents, mishaps, safety hazards. can use host safety briefings.

8.1.2.1. **(Added-AFRC)** Provides environmental briefing, Back-to-Basics (B2B) briefing and incident summaries once during UTAs and annual tours. **(T-2)**. can use host environmental briefings. Units can combine this briefing with the daily safety brief as stated above (8.1.2 AFRC).

8.1.3. Remains current on emergency funding reimbursement procedures for spill cleanup actions IAW DoD 4140.25-M and DLA Energy Policy DESC I-13, *Fuel Spill/Leak Reporting*.

8.1.4. Assists Base Civil Engineer (BCE) with environmental cleanup efforts and supports the justification for reimbursable fuel spill cleanup expenses.

8.1.5. Coordinates with BCE Environmental office to determine environmental compliance actions. Initiates environmental projects during DLA Energy's annual request for action.

8.1.6. Responds to and investigates fuel spills under FMF's purview.

8.1.6.1. Coordinates fuel incident reports with potential release to waters with BCE Environmental IAW AFI 90-803, *Environmental, Safety, and Occupational Health Compliance Assessment and Management Program*.

8.1.7. Initiates incident reporting via the Incident Reporter using guidance outlined in Attachment 7, *Fuels Incident Reporting Procedures*.

8.1.8. Manages Initial Accumulation Points (IAPs) or Satellite Accumulation Points (SAPs) for environmental compliance IAW CE Environmental requirements.

8.1.9. Coordinates with Unit Safety Representative to implement and oversee requirements IAW AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*.

8.1.10. Creates a Job Safety Training Guide (JSTG) IAW AFI 91-202, *The US Air Force Mishap Prevention Program*.

8.1.11. Prepares for Environmental, Safety, and Occupational Health Compliance Assessment and Management Program (ESOH CAMP) inspections IAW AFI 90-803 and AFI 90-201, *The Air Force Inspection System*.

8.1.12. Develops Work Area Specific Hazard Communication (HAZCOM) Program IAW AFI 90-821, *Hazard Communication (HAZCOM) Program*.

8.1.13. Coordinates new work orders and projects with BCE. Closely monitors and tracks the status through completion.

8.1.14. Serves as MILCON/SRM project monitor. Provides centralized management and oversight of fuels projects.

8.1.15. Coordinates with BCE to reconcile the MILCON/SRM Real Property Index with BCE's Automated Civil Engineering System Real Property (ACES RP) for those facilities handling DLA Energy capitalized product. **(T-3)**

8.1.16. Obtains DLA Energy BSM-E and EBS accounts to monitor facility deficiencies and project status.

8.1.16.1. Validates the operational requirements of each project.

8.1.16.2. Reviews the DD Form 1391, *Military Construction Project Data*, for DLA MILCON projects and reviews SRM projects prior to BCE submission and forwarding to MAJCOM Fuels Engineers, programmers, and AFPA staffs. Ensures the DD Form 1391 satisfies the requirements in paragraph 2.4.19 of this instruction.

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

Chapter 9

FUELS OPERATIONS REQUIREMENTS

9.1. Fuels Operations.

9.1. (AFRC) Fuels Operations. Units shall designate in writing a fully qualified 7 skill-level operations supervisor. **(T-3)**.

9.1.1. Manages product servicing resources, Fuels Support Equipment (FSE), flightline support, fuels preventive maintenance, product movement, and storage of bulk petroleum, cryogenic, and hypergolic products as required.

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

9.1.3. Submits requests for facility and equipment changes.

9.1.3. **(AFRC)** This paragraph does not apply.

9.1.4. Manages assigned vehicles IAW AFI 24-302, *Vehicle Management*.

9.1.4. **(AFRC)** This paragraph does not apply.

9.1.5. Establishes product rotation procedures for hydrant and fuel storage facilities IAW DoD 4140.25-M and T.O. 37-1-1, *General Operation and Inspection of Installed Fuel Storage and Dispensing Systems*.

9.1.5. **(AFRC)** This paragraph does not apply.

9.1.6. Ensures Water Fuels System Maintenance/Vehicle Management (WFSM/VM) maintains adequate mobile and fixed facility filter elements on hand for routine and emergency element replacements.

9.1.6. **(AFRC)** This paragraph does not apply.

9.1.6.1. Minimum number of elements is dependent on mission criticality, resupply reliability, and past use history. Coordinate the filter element mission essential level (MEL) with BCE and VM. **(T-3)**

9.1.7. Uses all serviceable tanks, transfer pipelines, pumps, meters, filter separators, and fillstands on a rotational, routine basis to prevent deterioration of pumps, seals, and gaskets.

9.1.7. **(AFRC)** This paragraph does not apply.

9.1.8. Validates alternate resupply capability:

9.1.8. **(AFRC)** This paragraph does not apply.

9.1.8.1. Tests resupply capability once every year or when system modifications alter capability. **(T-2)**

9.1.8.1.1. Accomplishes alternate mode of resupply in order to test proof of concept as well as determine the ability to meet Base Support Plan (BSP)/wartime requirements (i.e. maximum 1 Day of most stringent operational plan).

9.1.8.1.2. Performs test to validate DLA Energy support, maintain training proficiency, and exercise receipt system capabilities.

9.1.8.1.3. Coordinates with Air Force Petroleum Agency (AFPA) to develop alternate resupply capability by improving existing system capabilities and/or introducing new receipt capabilities utilizing SRM or MILCON programs.

9.1.8.1.4. Initiates feasibility analysis with AFPA to determine best, most efficient means of resupply. This ensures funding and construction are not committed to provide a resupply capability where commercial markets are able to fulfill.

9.1.8.2. Bases whose resupply capability is solely accomplished via tank truck do not require exercising their alternate receipt capability. Additionally, bases that receive via railcar and use the same off-loading headers during alternate mode of receipt do not require retesting of their receipt capability.

9.2. Fuels Distribution.

9.2.1. Supervises Mobile Distribution and Preventive Maintenance elements.

9.2.2. Assists fuels operations with requirements listed in paragraph 9.1. and ensures actions directed by the Fuels Service Center (FSC) are accomplished in a safe and efficient manner.

9.2.3. Coordinates with VM to de-conflict scheduled maintenance and deficiency repairs.

9.2.4. Reviews flying schedules to ensure resources are available to meet mission requirements.

9.2.5. Monitors personnel performing fuel servicing operations, preventive maintenance functions, and flightline operations.

9.2.6. Performs Vehicle Control Noncommissioned Officer (VCNCO) duties IAW AFI 24-302 and base VCNCO handbook. Duties may be delegated in writing to a subordinate NCO.

9.2.6. (AFRC) This paragraph does not apply.

9.3. Mobile Distribution.

9.3.1. Maintains close liaison with the FSC to report progress of operations and coordinates changes in scheduled work plans.

9.3.2. Ensures personnel are trained on equipment as outlined in FMF's Master Task List (MTL).

9.3.3. Trains personnel on radio operation, discipline, and use of radio transmission codes listed in Attachment 12, *Radio Transmission Codes*.

9.3.4. Familiarizes servicing vehicle operators with flightline safety, aircraft parking ramps, runway crossings, aircraft taxiways, and control tower signals. Conducts familiarization on infrequently used routes or infrequently performed operations.

9.3.5. Initiates disqualification action when an individual's attitude, mental, or physical state are potentially unsafe for operating vehicles.

9.3.6. Ensures Airfield Driving Program Manager (ADPM) training for the primary and alternate ADPMs has been completed IAW AFI 13-213, *Airfield Driving*.

9.3.6. (AFRC) This paragraph does not apply.

9.3.7. Supervises the following Flightline Expediter responsibilities:

9.3.7.1. Maintains communication with FSC and coordinates hydrant, storage, and fuels servicing operations as needed. **Note:** An expediter is not required for ground fuel operations, but one should be available if assistance is required.

9.3.7.2. Monitors fuel servicing operations, corrects deficiencies, terminates unsafe operations, and reports discrepancies.

9.3.7.3. Maintains a spill response kit in the expediter vehicle for containment and clean-up of small leaks or spills.

9.3.7.4. Supplies foreign object collection containers and adheres to foreign object damage (FOD) prevention measures outlined in AFI 21-101, *Aerospace Equipment Maintenance Management*.

9.3.7.5. Ensures an expediter tool kit (ETK) is available to facilitate on-the-spot repairs. ETK includes the following items: **(T-3)**

9.3.7.5. (AFRC) Utilize host expediter tool kit (ETK). **(T-2)**.

Table 9.1. Recommended ETK Inventory.

Quantity	Recommended ETK Inventory
1 each	Multimeter
1 each	Adjustable open end wrench
1 each	Wire stripper pliers
1 each	Locking pliers
1 each	Twisting (Spindle) wire pliers
1 roll	Safety Wire (.032)
1 each	Phillips & Flat screwdriver
1 each	Allen wrench (for ground clamp)
1 tube	RTV/Silicone or equivalent
1 each	Single point receptacle gap gauge
1 each	Ground clamp & Bonding plug

9.4. Preventive Maintenance

9.4.1. Inspects, documents, and maintains vehicles and FSE IAW T.O. 36-1-191 and applicable T.O.s.

9.4.2. Trains personnel to inspect, perform operator maintenance, and record inspection results on appropriate forms.

9.4.3. Uses T.O. checklists to perform daily and monthly checks of vehicles and FSE. **Note:** Vehicle checkpoint is not required at non-flying activities.

9.4.3.1. Ensures vehicles are inspected using the daily checklist. All vehicles are inspected every 30-days IAW paragraph 9.4.5.

9.4.4. Conducts daily checkpoint inspection on vehicles and FSE required to meet the mission. Inspection team will consist of two personnel using the AF Form 1807, Operator’s Inspection Guide and Trouble Report (Fuel Servicing Vehicles)/AF Form 4427, *Operator’s Inspection Guide and Trouble Report (Fuel Servicing Vehicles & Equipment)* and approved T.O. checklists. Vehicles and FSE may be inspected on-the-spot or moved to a designated location if required to ensure spill containment is in place. **(T-3)**

9.4.4. **(AFRC)** Perform checkpoint inspections on at least three R-11s (one R-11 may be substituted by an HSV if assigned) and one C-300/C-301 (if assigned) as a minimum each day during UTAs and annual tours regardless of flying schedule. During flying operations, inspect the number of refueling units to meet mission requirements. **(T-2).**

9.4.5. A three person Preventive Maintenance Team (PMT) will conduct a monthly (every 30 days) vehicle/FSE inspections using the approved monthly checklists. **(T-3)**

9.4.6. Provides or requests for a covered shelter for preventive maintenance operations. Note: Consider co-location of Preventive Maintenance and VM as an option at locations where facilities and space are limited.

9.4.7. Operationally checks vehicles/FSE and reviews inspection forms prior to returning assets to service.

9.4.7.1. Use applicable forms as prescribed in Attachment 13, *Approved Fuels Support Equipment (FSE)/Vehicle Forms*, to annotate discrepancies.

9.4.7.2. Remove unsafe or inoperable vehicle/FSE from service and turn in to appropriate maintenance activity for corrective action.

9.4.8. Initiates vehicle modification requests and routes through FMT and VM for approval. Approved modifications are maintained in the vehicle’s historical record IAW AFI 24-302.

9.4.9. Coordinates with VM to ensure all required vehicles/FSE are turned in on time for scheduled and unscheduled maintenance inspections.

9.4.10. Updates vehicle/FSE status in FuelsManager® Defense (FMD).

9.4.11. Ensures Preventive Maintenance is equipped with the following:

9.4.11.1. Personal Protective Equipment (PPE) as outlined in paragraph 5.15.

9.4.11.2. Spill cleanup material and environmental safeguards (e.g. buckets, spill pans, etc.).

9.4.11.3. Equipment and tools required to maintain the fuels fleet: **(T-3)**

9.4.11.4. **(Added-AFRC)** Utilize host provided tools and comply with host tool control program measures. **(T-2).** Reserve units will not establish independent tool accounts.

Table 9.2. Recommended Equipment and Tool Inventory.

	Recommended Equipment and Tool Inventory
Quantity	

1 set each	Standard open/closed wrench set 3/16" to 1" (6/12 point box end)
1 set each	1/2 drive ratchets (standard w/extension set)
1 set each	1/2 drive standard sockets 1/4" - 1 5/8" in deep and shallow (6/12 point)
1 set each	1/2 drive metric sockets 8mm - 19mm deep and shallow (6/12 point)
1 each	Tire inflation air gauge
2 each	Long neck air pressure gauge
1 each	Impact wrench 1/2" drive w/ male airline connection
1 set	Impact socket set, 1/2" drive, (Must have 1 15/16" and 1 1/4" sizes)
1 set	Impact extension set 1/2" drive
1 each	Dead blow rubber mallet (3 lb.)
1 each	Ball peen hammer, 16oz
1 Set	Adjustable plier set
1 each	Wire stripper/cutter set
2 each	Locking pliers
1 each	Twisting wire pliers (spindle pliers)
1 each	Screwdriver set includes flat/Phillips, from stubby to long
1 set	Standard & Metric Allen, small set
1 each	Torque wrench 1/2" drive (0-150 ft. lbs.)
1 each	Multimeter

9.5. Cryogenic Production.

9.5.1. Establishes cryogenic production plants as authorized in Allowance Standard (AS) 488, *Fuel Storage and Gas Generating Equipment/Storage Tanks and Maintenance Support Equipment*, and coordinates approval, location, and requirements with the BCE and AFPA.

9.5.2. FMT initiates requisitions for plants or tanks on AF Form 601, *Equipment Action Request*, for items not already authorized in applicable AS.

9.5.3. Establishes a supply account for cryogenics operations.

9.5.3.1. Manages production plant's financial accounts to include, forecasting/managing budgets, monitoring funds account/processing, overseeing plant Government Purchase Card (GPC) accounts, and coordinating with unit Resource Advisors (RAs) concerning funding issues.

9.5.3.1.1. Directs plant maintenance actions and manages parts inventory.

9.5.4. Coordinates with DLA Energy to ensure commercial sources are available in the event of plant outage.

9.5.5. Assigns a MSgt with 036 SEI to manage cryogenic production operations. **(T-3)**

9.5.6. Manages inventory levels and designates production requirements. Stores, transfers, inventories, and documents transactions of LOX, LIN, and gaseous cylinders. Stores and issues gas cylinders according to 42B-series T.O.s and applicable supply manuals.

9.5.7. Ensures all cryogenics sampling and gaseous cylinders are hydrostatically compliant and performs corrective actions to maintain them in ready state IAW T.O. 42B5-1-2, *Gas Cylinders (Storage Type) Use, Handling, and Maintenance*, 49 CFR 173.34(e),

Qualifications, Maintenance, and Use of Cylinders, and or European Union Council Directive 1999/36/EC, Transportable Pressure Equipment.

9.5.8. Ensures assigned personnel do not operate production plant equipment for longer than 8 hours at any given time without supervisory oversight. Personnel will not operate production plant equipment for longer than 12 hours at any given time. **(T-2)**

9.5.9. Coordinates with BCE to provide the following:

9.5.9.1. Maintenance of facility, installed property, and required utilities.

9.5.9.2. Blow down/condensation traps for each generating plant that complies with base ecology program and Environmental Protection Agency (EPA) requirements.

9.5.9.3. Base projects pertaining to cryogenic products.

9.5.9.4. Sealed LOX production area floors with compatible epoxy sealant. **Note:** Do not paint liquid oxygen storage and cylinder charging floors.

9.5.9.5. Paint cryogenic facilities IAW T.O.35-1-3, *Corrosion, Prevention, Painting and Marking of USAF Support Equipment (SE)*. Refer to cryogenic plant color scheme in Attachment 14, *Cryogenic Plant Color Scheme*.

9.5.10. Maintains equipment and performs corrosion control IAW T.O. 35-1-3 and T.O. 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures*.

9.5.11. Inspects production plants according to applicable 36G1-series T.O.s and records maintenance on an AFTO Form 244, *Industrial Support Equipment Record* according to T.O.s 00-20-1.

9.5.11.1. Reflect condition status for inspections due or completed, items due for replacement, and discrepancies noted with corrective actions taken.

9.5.11.2. Use published checklists or work cards where applicable.

9.5.11.3. Record hourly plant readings on plant log sheet and review daily.

9.5.11.4. Use T.O. 00-20-1 to define status symbols.

9.5.12. Accomplishes required production plant product tests/odor/purity samples and record results on production forms IAW applicable plant T.O.s.

9.6. Fuels Facilities.

9.6.1. Supervises cryogenic, hydrants, bulk storage, and military service station operations under FMF's span of control. At locations with AF or DLA Energy contracted functions, the Contracting Officer Representative (COR) provides the necessary contract oversight.

9.6.1. **(AFRC)** This paragraph does not apply.

9.6.2. Coordinates receipt, storage, transfer, and inventory of all products used and supported.

9.6.3. Informs Laboratory of receipts to ensure required samples are taken.

9.6.4. Oversees inspection and maintenance of all hydrant and bulk storage facilities, and associated equipment.

9.6.4. (AFRC) Perform inspections on fixed facilities and/or cryogenic storage (if assigned) according to this paragraph each day during UTAs regardless of flying schedule. During flying operations, facilities/systems will be inspected prior to use to meet mission requirements. Inspect one fixed facility as a minimum. (T-2). This task should not be performed by only a few designated personnel, but performed equally by all JFABB and JFABC assigned personnel throughout the year.

9.6.5. Uses AFTO Form 39, *Fuel System Inspection and Discrepancy Report*, IAW T.O. 37-1-1 to record deficiencies. Reviews AFTO Form 39 monthly (every 30 days) prior to routing to FMT. (T-3)

9.6.6. Ensures tank trucks/cars are inspected for evidence of theft, tampering, sabotage, leaks, or other obvious safety or quality discrepancies IAW DoD 4140.25M, DLA Energy policies and/or locally developed checklist(s) before off-loading. (T-0)

9.6.6.1. Determine if hazardous conditions exist and perform the following:

9.6.6.1.1. Notify the FMT, who in-turn coordinates with the Quality Assurance Representative (QAR), MAJCOM, and AFPA.

9.6.6.1.2. Notify FSC of circumstances resulting in delivery refusal.

9.6.7. Maintains base service station(s) and bulk storage to provide automotive gasoline, diesel fuel, and approved alternative fuels for all authorized vehicles and equipment.

9.6.7.1. Equip service station(s) with a phone for customer use and for emergency reporting.

9.6.7.2. Ensure spill kit/absorbent materials are available and ready for use.

9.6.8. Updates facility and equipment status in FMD.

9.6.9. Monitors product inventories IAW DoD 4140.25-M and/or DLA Energy Policy.

9.7. Cryogenics.

9.7. (AFRC)Cryogenics. Paragraphs 9.7.1 through 9.7.7.1 do not apply.

9.7.1. Maintains all AFTO Form 95, *Significant Historical Data*, for generation and support equipment.

9.7.2. Designates in writing personnel authorized to clear "Red X" conditions.

9.7.3. Calibrates temperature and pressure gauges IAW Test, Measurement, & Diagnostic Equipment (TMDE) schedule.

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

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

9.7.4. Cryogenics equipment maintenance guidelines:

9.7.4.1. Monitor required forms to include AFTO Form 244, ensure T.O. compliance, and take necessary corrective action.

9.7.4.2. Accomplish required and periodic maintenance.

- 9.7.4.3. Complete scheduled inspections, lubrications, and routine adjustments of equipment.
- 9.7.4.4. Perform maintenance of all production plants and equipment to include repair or replacement of major assemblies and components.
- 9.7.5. Obtains authority for depot maintenance:
 - 9.7.5.1. Consider contract maintenance when equipment maintenance requirements exceed the base capability.
 - 9.7.5.1.1. Contact AFPA to determine course of action if contract maintenance is unavailable.
 - 9.7.5.2. As a last resort, request a depot maintenance assistance site visit through AFPA IAW T.O. 00-25-107, *Maintenance Assistance*.
- 9.7.6. Only qualified maintenance personnel are authorized to: **(T-3)**
 - 9.7.6.1. Modify equipment when permitted by time compliance technical orders (TCTO) or Item Managers.
 - 9.7.6.2. Perform required/periodic maintenance, corrosion control, and submit work requests for painting when needed.
 - 9.7.6.3. Submit requests to modify storage containers to AFPA prior to submitting request through the Equipment Accountability Element (EAE). AFPA will coordinate with MAJCOM/Command Equipment Management Office (CEMO) and item manager for approval.
 - 9.7.6.4. Maintain vacuum on all storage tanks IAW T.O. 37C2-8-1-116 WC-1, *Vacuum Limits*.
 - 9.7.6.5. Complete all periodic inspections IAW T.O. 37C2-8-1-116 WC-1 to ensure loss rates are minimized.
 - 9.7.6.5.1. Document vacuum/meter readings and date on AFTO Form 95. Request for repair and/or replacement of tanks that develop a history of poor vacuum performance.
 - 9.7.6.6. Report tanks that cannot efficiently store product to AFPA who in-turn will coordinate with the MAJCOM and item manager.
- 9.7.7. Servicing cart operation and maintenance guidance:
 - 9.7.7.1. Servicing carts are maintained by using organization to include purging and pulling vacuum.
 - 9.7.7.2. Verify AFTO Form 244 to ensure carts meet safe operating conditions. Do not fill carts that do not meet safe operating conditions.
 - 9.7.7.3. Inspect 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. Refer to 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.

9.7.8. Cryogenic conservation measures include:

9.7.8. (AFRC) Comply with host conservation program.

9.7.8.1. Limit fill periods to the minimum number required for mission support.

9.7.8.2. 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.

9.7.8.3. Keep active tanks as full as economically possible.

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

9.7.10. Coordinates with lab personnel to ensure scheduled tests are taken and ensure results are entered in FMD.

9.8. Hydrants.

9.8.1. Promotes an effective/efficient use of hydrant systems and ensures operator maintenance is accomplished.

9.8.2. Establishes a hydrant system flushing program IAW T.O. 37-1-1.

9.8.2. (AFRC) This paragraph does not apply.

9.8.3. Updates hydrant status in FMD.

9.8.4. Coordinates all fuel transfer operations with the FSC.

9.8.5. Adheres to approved local checklists and T.O. 37-1-1 for fuel movement actions.

9.8.6. Ensures communication is maintained during fuel movement IAW paragraph 5.18 of this instruction.

9.8.7. Monitors progress during fuel transfer/receipt operations using FuelsManager® when installed.

9.9. Military Service Station.

9.9.1. Ensures AFTO Form 39 is used to record deficiencies IAW T.O. 37-1-1.

9.9.2. General purpose vehicles are refueled at the base service station, local vendor, organizational issue tank, or by mobile refueling unit when approved by the FMT IAW paragraph 5.4.4.

9.9.3. Special purpose vehicles and Material Handling Equipment (MHE) that cannot easily access or travel to the base service station due to body design or propulsion method may be refueled by a fuel servicing vehicle.

9.10. Forward Area Refueling Point (FARP) Program.

9.10.1. Monitors FARP personnel and equipment to ensure all training is accomplished, qualifications are maintained, and readiness status meets mission requirements.

9.10.2. Briefs FARP personnel on all policies issued by AFSOC/A4RE or ACC/A4RE.

9.10.3. Provides FMT with weekly status updates.

- 9.10.4. Provides the FSC with a recall roster of primary and alternate team members on standby.
- 9.10.5. Coordinates with the flying squadron's planners/schedulers to ensure personnel availability for training and mission requirements.
- 9.10.6. Submits the FARP budget to reporting MAJCOM/A4RE by 1 April each year.
- 9.10.7. Ensures FARP operations are conducted as outlined in AFI 11-235, *Forward Area Refueling Point (FARP) Operations*.
- 9.10.8. Provides a trip report to reporting MAJCOM/A4RE after each FARP TDY or deployment within five duty days upon return to home station.
- 9.10.9. Ensures each FARP program maintains the required amount of equipment to perform DOC tasked/UTC requirements; equipment must be available at all times.
- 9.10.10. Tracks forward area manifold cart maintenance and reports discrepancies IAW T.O. 36-1-191.
- 9.10.11. Ensures all operators remain current by performing at least 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).

Chapter 10

FUELS KNOWLEDGE OPERATIONS REQUIREMENTS

10.1. Knowledge Operations.

10.1.1. Assigns the Knowledge Operations section with the management of the technical order (T.O.) library, Enhanced Technical Information Management System (ETIMS), Air Force Records Information Management System (AFRIMS), DLA Energy file plans, FuelsManager® Defense (FMD) accounts, and DLA Energy Automated Information Technology (AIT) systems.

10.1.2. Ensures records are properly scheduled using the AF RDS, DLA Directive 5025.3Q, *DLA Records Retention Schedule*, and DLA Energy P-3, *Document/Data Control and Retention*.

10.2. Information Manager.

10.2.1. Maintains all publications, directives, locally developed checklists (LCLs), and creates T.O. Distribution Account (TODA) as listed in Attachment 1, *Glossary of References and Supporting Information*, for all major publications, T.O.s and Allowance Standards related to the fuels career field. Ensure sufficient capability exists to support on-the-job training and deployments.

10.2.2. Establishes TODA access with the base Technical Order Distribution Office (TODO) IAW T.O. 00-5-1. For smaller flights such as Air National Guard (ANG) units, establish a sub-account from an existing Squadron T.O. account. ETIMS shall be used IAW T.O. 00-5-1 and T.O. 00-5-3, *Air Force Technical Manual Acquisition Procedures*.

10.2.2.1. Manages FMT Publication Familiarization Program and advises users of publication changes or updates.

10.2.2.1. (AFRC) The NCOIC should ask the host for publication changes since the last UTA to brief all personnel on significant changes.

10.2.2.2. Provides flight personnel (military, civilian, and contracted) access to T.O.s.

10.2.2.3. Maintains LCLs and coordinates with FMT to review and recertify every year.

10.2.2.4. LCLs will be loaded in ETIMS as “private T.O.s” using ETIMS Software User’s Manual. **Note:** The use of electronic versions of T.O.s is acceptable. If used, they must be kept up-to-date.

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

10.2.4. Manages flight documents and records IAW AFI 33-322, *Records Management Program*.

10.2.4.1. Documents review of flight’s file plan for accuracy and completeness every year. Record Custodian coordinates changes with Chief of the Office of Record and responsible Functional Area Records Manager (FARM).

10.2.4.1. (AFRC) May file required records to the LRS file plan. Review files annually for proper disposition, accuracy and completeness. Document the file plan review. (T-3).

10.2.5. Assists users to remedy identified errors, contradictions, procedures requiring clarification, and material deficiencies when found using procedures in T.O. 00-5-1, *AF Technical Order System*. Submit AFTO Form 22, *Technical Manual Change Recommendation and Reply*, or AF Form 847 *Recommendation for Change of Publication*, as needed.

10.2.5.1. AFTO Form 22 submittals pertaining to the 42B series, T.O. 37A-1-101, and T.O. 37-1-1 are initiated at flight level, then forward to AFPA Current Operations Division, for coordination to AFPA/PTPT office for disposition.

10.3. Base-Level Support Application (BLSA) Custodian.

10.3.1. Develops backup procedures and maintains backup media IAW DoD 4140.25-M and DLA Energy P-3. (T-0)

10.3.1. (AFRC) This paragraph does not apply.

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

10.3.1.1. (AFRC) Units assigned UTC JFATG (Fuels Accounting) must have one assigned accountant proficient at completing backup operations. Utilize FMD user's guide and DLA-Energy Interim Instructions and host lesson plans/checklist for training and performing backup operations. (T-2).

10.3.2. Maintains DLA Energy provided Uninterruptible Power Source for the FMD server(s).

10.3.2. (AFRC) This paragraph does not apply.

10.3.3. Performs FuelsManager® Defense custodial responsibilities outlined in DLA Energy DESC-I-23, *Base Level Support Application (BLSA) Administrator Procedures*.

10.3.3. (AFRC) This paragraph does not apply.

10.3.4. Maintains all AIT systems specified in paragraph 2.3.15.4.1. and performs AIT functions outlined in paragraph 6.10.

10.3.4. (AFRC) This paragraph does not apply.

10.3.5. Coordinates with Communications Squadron to assist in analyzing program and network responsiveness. Coordinates actions with BSM-E Help Desk (Commercial 800-446-4950, DSN 697-6733/34/35/36/37/38, or BSME.HelpDesk@DLA.Mil) for DLA Energy systems.

10.3.5. (AFRC) This paragraph does not apply.

10.3.6. Provides assistance with software/hardware problems and facilitates resolution. Reports all known or suspected errors to the appropriate organization/help desk support.

10.3.6. (AFRC) This paragraph does not apply.

JUDITH A. FEDDER, Lt Gen, USAF
DCS/Logistics, Installations & Mission Support

(AFRC)

GARY C. BLASZKIEWICZ, Brig Gen, USAFR
Director of Logistics

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

- AFI 10-201, *Status of Resources and Training System*, 19 April 2013
- AFI 10-206, *Operational Reporting*, 06 September 2011
- AFI 10-244, *Reporting Status of Aerospace Expeditionary Forces*, 15 June 2012
- AFI 10-252, *Defense Readiness Reporting System*, 09 August 2012
- AFI 10-401 *Air Force Operations Planning and Execution*, 07 December 2006
- AFI 10-403, *Deployment Planning and Execution*, 20 September 2012
- AFI 10-404, *Base Support and Expeditionary (BaS&E) Site Planning*, 11 October 2011
- AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*, 24 January 2007
- AFI 11-235, *Forward Area Refueling Point (FARP) Operations*, 15 December 2000
- AFI 11-301V1, *Aircrew Flight Equipment (AFE) Program*, 25 February 2009
- AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Aviation Badges*, 13 December 2010
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- AFI 20-112, *Logistics Readiness Squadron Quality Assurance Program (LRS QA)*, 19 October 2010
- AFI 21-101, *Aircraft and Equipment Maintenance Management*, 26 July 2010
- AFI 23-101, *Air Force Materiel Management*, 08 August 2013
- AFI 23-204, *Organizational Fuel Tanks*, 24 July 2012
- AFI 23-502, *Recoverable Fuel*, 25 August 2011
- AFI 24-301, *Vehicle Operations*, 01 November 2008
- AFI 24-302, *Vehicle Management*, 26 June 2012
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- AFI 31-101, *Integrated Defense (FOUO)*, 08 October 2009
- AFI 31-401, *Information Security Program Management*, 01 November 2005
- AFI 31-601, *Industrial Security Program Management*, 29 June 2005

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AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*, 18 July 2011

AFI 40-102, *Tobacco Use in the Air Force*, 26 March 2012

AFI 44-170, *Preventive Health Assessment*, 30 January 2014

AFI 48-123, *Medical Examinations and Standards*, 05 November 2013

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AFI 90-802, *Risk Management*, 11 February 2013

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AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, 15 June 2012

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Threat Compendium, *Worldwide Threat to Airbases*

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DLA Energy (NIPR) - <https://east.esps.disa.mil/dod/dla/dlaenergy/SitePages/Home.aspx>

DLA Energy (SIPR) - <http://www.dla.smil.mil/desc/plan/index.html>

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Fuels SharePoint (NIPR) - <https://cs3.eis.af.mil/sites/OO-LG-AF-56/default.aspx>

Fuels SharePoint (SIPR) - <http://intelshare.intelink.sgov.gov/sites/fuels/SitePages/Home.aspx>

Joint Deficiency Reporting System (JDRS) - <http://www.jdrs.mil/>

Joint Lessons Learned Information System (JLLIS) (NIPR) - <https://www.jllis.mil/USAF/>

Joint Lessons Learned Information System (JLLIS) (SIPR) - <http://www.jllis.smil.mil/USAF>

Adopted Forms

AF Form 847, Recommendation for Change of Publication

AF Form 1807, Operator's Inspection Guide and Trouble Report (Fuel Servicing Vehicles)

AF Form 4427 Operator's Inspection Guide and Trouble Report (Fuels Support Equipment)

AF Form 601, Equipment Action Request

AF Form 702, Individual Physiological Training Record

AF Form 1042, Medical Recommendation for Flying or Special Operational Duty

AF Form 1098, Special Task Certification and Recurring Training

AF Form 979, Danger Tag

AF Form 980, Caution Tag

AF Form 2005, Issue/Turn-In Request

AF Form 1297, Temporary Issue Receipt

AF Form 457, USAF Hazard Report.

AFTO Form 22, Technical Manual (TM) Change Recommendation and Reply

AFTO Form 781F, Aerospace Vehicle Identification Document

AFTO Form 39, Fuel System Inspection and Discrepancy Report

AFTO Form 134, Aviator Breathing Oxygen Servicing Trailer Log (Liquid/Gaseous)

AFTO Form 244, Industrial/Support Equipment Record

AFTO Form 95, Significant Historical Data

AFTO Form 375, Selected Support Equipment Repair Cost Estimate

AFTO Form 422, Differential Pressure Log

AFTO Form 150, Base Fuels Sampling and Testing Record

DD Form 1391, FY__ Military Construction Project Data

DD Form 448, Military Interdepartmental Purchase Request

DD 1898, Energy Sale Slip

(DD Form 2005, Privacy Act Statement - Health Care Records Serves)

Abbreviations and Acronyms

ABFDS—Aerial Bulk Fuel Delivery System

ACC—Air Combat Command

ACES RP—Automated Civil Engineering System Real Property

ACR—Authorization Change Request

ADPM—Airfield Driving Program Manager

AEF—Air & Space Expeditionary Force

AETC—Air Education Training Command

AF—Air Force

AF COLS—AF Common Output Level Standards

AFDW—AF District of Washington

AFECD—AF Enlisted Classification Directory

AFELM—AF Elements

AFFOR—AF Forces

AFIS—AF Inspection System

AFLCMC/WNZ—AF Life Cycle Management Center Support Equipment & Vehicle Division

AFMAN—AF Manual

AFMS—AF Manpower Standard

AFPA—AF Petroleum Agency
AFPD—AF Policy Directive
AFRC—AF Reserve Command
AFRIMS—AF Records Information Management System
AFSC—AF Specialty Code
AFESC/SEG—AF Safety Center, Ground Safety
AFSPC—AF Space Command
AFSS—Automated Fuel Service Station
AFTAT—AF Test and Analysis Tool
AFTC—AF Training Course
AIT—Automated Information Technology
AMPS—Account Management and Provisioning System
ANG—Air National Guard
API—American Petroleum Institute
APOSD—Automated Point of Sale Device
ARC—Air Reserve Component
ART—Air & Space Expeditionary Force Reporting Tool
AS—Allowance Standard
ASC—Aircraft Servicing Capability
ASIC—Air and Space Interoperability Council
AST—Aboveground Storage Tank
ASTM—American Society for Testing and Materials International©
ATG—Automatic Tank Gauging
BCE—Base Civil Engineer
BE—Bioenvironmental Engineering
BLSA—Base-Level Support Application
BSM—E—Base System Modernization-Energy
BSP—Base Support Plan
B2B—Back-to-Basics
CA/CRL—Custodian Authorization/Custody Receipt Listing
CAF—Combat Air Force
CARS—Consolidated Analysis and Reporting System

CAT—Crisis Action Team

CBRNE—Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives

CC—Commander

CCDR—Combatant Commander

CCMD—Combatant Command

CEMO—Command Equipment Management Office

CFETP—Career Field Education and Training Plan

CFM—Career Field Manager

CJCSM—Chairman of the Joint Chiefs of Staff Manual

CMP—Centrally Managed Program

COA—Courses of Action

COCOM—Combatant Command (command authority)

CONUS—Continental United States

COR—Contracting Officer Representative

CORT—Contracting Officer Representative Tracking

COTS—Commercial-Off-The-Shelf

CRC—Coordinating Research Council

DCAPES—Deliberate and Crisis Action Planning and Execution Segments

DESC—Defense Energy Support Center

DLA Energy—Defense Logistics Agency Energy

DLA—Defense Logistics Agency

DOC—Design Operational Capability

DoD—Department of Defense

DoDD—Department of Defense Directive

DOTMLPF—Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities

DR—Deficiency Report

DRRS—Defense Readiness Reporting System

DRU—Direct Reporting Unit

DVB—Data Verification Brief

DWCF—Defense Working Capital Fund

EA—Execution Agents

EAE—Equipment Accountability Element

EBS—Enterprise Business System
ECAC—Evasion Conduct after Capture
ECS—Expeditionary Combat Support
EI—Engineering Investigation
EPA—Environmental Protection Agency
EPR—Enlisted Performance Report
ESOHCAMP—Environmental, Safety, and Occupational Health Compliance Assessment and Management Program
ESOHTN—Environmental, Safety and Occupational Health Training Network
ESP—Expeditionary Site Plan
ETCA—Education and Training Course Announcements
ETIMS—Enhanced Technical Information Management System
ETL—Engineering Technical Letter
FACs—Functional Area Chiefs
FAM—Functional Area Manager
FAR—Federal Acquisition Regulations
FARM—Functional Account Records Manager
FARP—Forward Area Refueling Point
FGS—Final Governing Standards
FISC—Fuels Information Service Center
FM—Fuels Manager
FMC—Fully Mission Capable
FMD—FuelsManager® Defense
FMF—Fuels Management Flight
FMFC—Fuels Management Flight Commander
FMT—Fuels Management Team
FOA—Field Operating Agency
FOD—Foreign Object Damage
FOI—Fuels Operating Instruction
FORCE—Fuels Operational Readiness Capability Equipment
FSC—Fuels Service Center
FSE—Fuels Support Equipment
FSEVWG—Fuels Support Equipment & Vehicle Working Group

FTL—Fuels Technical Letter
FY—Fiscal Year
GM—Global Force Management
GOCO—Government Owned Contract Operated
GPC—Government Purchase Card
GPP—Green Procurement Program
HAF—Headquarters Air Force
HA/HD—Hydrant Automation/Hydrocarbon Detection
HARM—Host Aviation Resource Management
HAZCOM—Hazard Communication
HAZMAT—Hazardous Materials
HUG—Hydrant Utilization Goal
HUR—Hydrant Utilization Rate
HUS—Hydrant Utilization Strategy
IAP—Initial Accumulation Point
IAW—In Accordance With
IDO—Installation Deployment Officer
IDP—Intergraded Defense Plan
IG—Inspector General
IGWG—Inspector General Working Group
IMM—Integrated Materiel Manager
IMP—Inventory Management Plan
IPRB—Installation Planning Review Board
ITRO—Interservice Training Review Organization
JCS—Joint Chiefs of Staff
JDRS—Joint Deficiency Reporting System
JET—Joint Expeditionary Team
JIT—Just-In-Time
JLLIS—Joint Lessons Learned Information System
JPO—Joint Petroleum Office
JPWG—Joint Petroleum Working Group
JSTG—Job Safety Training Guide

JTF—Joint Task Forces
LCL—Locally Developed Checklists
LEAP—Logistics Education Advancement Program
LIN—Liquid Nitrogen
LOTO—Lockout/Tagout
LOX—Liquid Oxygen
LRS—Logistics Readiness Squadron
LRS/CC—Logistics Readiness Squadron Commander
M1D—Maximum One Day
MAJCOM—Major Command
MAFSS—Mobile Automated Fuels Service Station
MANTAB—Manpower Table
MEFPAK—Manpower and Equipment Force Packaging
MEL—Minimum Essential Levels
MEP—Management Engineering Program
MFM—MAJCOM Functional Manager
MHE—Material Handling Equipment
MICT—Management Internal Control Toolset
MILCON—Military Construction
MILSPEC—Military Specifications
MIL—STD—Military Standard
MIPR—Military Interdepartmental Purchase Request
MISCAP—Mission Capability
MOC—Maintenance Operations Center
MOG—Maximum On the Ground
MRA—MEFPAK Responsible Agency
MRSP—Mobility Readiness Spare Packages
MSG—Mission Support Group
MTL—Master Task List
MTP—Master Training Plan
MXG—Maintenance Group
NAF—Numbered Air Forces

NATO—North Atlantic Treaty Organization
NGB—National Guard Bureau
NGREA—National Guard and Reserve Equipment Account
NIPR—Non-secure Internet Protocol Router
NLT—No Later Than
NVG—Night Vision Goggles
OCONUS—Outside Continental United States
OG—Operations Group
OPLAN—Operations Plan
OPR—Office of Primary Responsibility
OS—Operating Stock
OSF—Operational Support Flying
OSHA—Occupational Safety and Health Administration
OVS—Overboard Vent System
P&S—Posturing and Sequencing
PA—Property Administrator
PAFSC—Primary Air Force Specialty Code
PAT—Per Accomplishment Time
PLMC—Petroleum Logistics Management Course
PMT—Preventive Maintenance Team
POC—Point of Contact
POL—Petroleum, Oil, & Lubricants
POM—Program Objective Memorandum
PPE—Personal Protective Equipment
PQDR—Product Quality Deficiency Report
PWRR—Petroleum War Reserve Requirement
PWRS—Prepositioned War Reserve Stock
PWS—Performance Work Statement
QAE—Quality Assurance Evaluator
QAR—Quality Assurance Representative
QASP—Quality Assurance Surveillance Plan
QCP—Quality Control Plan

RA—Resource Advisor
RDS—Air Force Records Disposition Schedule
REPOL—Bulk Petroleum Contingency Report
RM—Risk Management
RO—Responsible Officer
ROBD—Reduced Oxygen Breathing Device
RSP—Readiness Spares Packages
SAC—Self-Assessment Checklists
SAP—Satellite Accumulation Point
SATAF—Site Activation Task Force
SCADA—Supervisory Control and Data Acquisition
SCAPE—Self-Contained Atmospheric Protective Ensemble
SCP—Service Control Point
SDS—Safety Data Sheet
SEI—Special Experience Identifier
SERE—Survival, Evasion, Resistance, and Escape
SFARE—Specialized Forward Area Refueling Equipment
SII—Special Interest Items
SIPR—Secret Internet Protocol Router
SME—Subject Matter Expertise
SNCO—Senior Non Commissioned Officers
SORTS—Status of Resources and Training System
SPCC—Spill Prevention Control and Countermeasures
SRM—Sustainment, Restoration, and Modernization
STANAG—NATO Standardization Agreements
TAFMS—Total Active Federal Military Service
TASS—Tactical Automated Service Station
TBA—Training Business Area
TCTO—Time Compliance Technical Orders
TFI—Total Force Integration
T.I.M.TM—Truck Identification Module
TM—Terminal Managers

TMDE—Test, Measurement, & Diagnostic Equipment
T.O.s—Technical Orders
TODA—T.O. Distribution Account
TODO—Technical Order Distribution Office
TPFDD—Time-Phased Force Deployment Data
TQT—Task Qualification Training
TRIC—Transaction Identification Code
UMD—Unit Manpower Document
UPMR—Unit Personnel Management Roster
USAF—United States Air Force
UTA—Unit Training Assembly
UTC—Unit Type Code
UTM—Unit Training Manager
U&TW—Utilization & Training Workshop
VCNCO—Vehicle Control Non-Commissioned Officer
VEMSO—Vehicle and Equipment Management Support Office
VIL—Vehicle Identification Link
VM—Vehicle Management
VM&A—Vehicle Management & Analysis
WAA—Wartime Aircraft Activity
WCDO—War Consumable Distribution Objective
WFSM—Water and Fuels System Maintenance
WMP—War and Mobilization Plan
WRM—War Readiness Materiel

Terms

Aerospace Fuels Laboratory—Is a laboratory that provides 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.

AFPA Technical Division—Is assigned to the Operations Support Directorate of AFPA, and is the SCP for AF fuel quality issues. The Technical Division has worldwide responsibility to identify, investigate, and correct problems involving aviation/ground fuel contamination, fuel electrostatic hazards, conservation and reclamation of petroleum products, and fuel/cryogenic receipt, storage, and mobile/fixed dispensing system deficiencies.

Automated Information Technology (AIT)—A suite of tools for facilitating total asset visibility source data capture and transfer. Automated identification technology includes a variety of devices, such as bar codes, magnetic strips, optical memory cards, and radio frequency tags for marking or “tagging” individual items, multi-packs, equipment, air pallets, or containers, along with the hardware and software required to create the devices, read the information on them, and integrate that information with other logistic information.

Bulk Petroleum Products—Are petroleum products delivered in volumes greater than 208 liters (55 US gallons) such as tank trucks/cars, pipelines, coastal barges, and ocean tankers. This term can apply to several DLA Energy 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 US 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 DLA Energy.

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

Confined Space—Is a space that meets the following criteria:

1. Is large enough and configured so a worker can bodily enter and perform assigned work.
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).
3. Is not designed for continuous human occupancy.

Cryogenics—Is the science of refrigeration, with reference to methods for producing very low temperature products.

Cryogenics/Equipment—Items used in cryogenics areas:

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. One purge unit per FP account storing cryogenics is authorized.

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.

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.

4. Cryogenics Samplers—Samplers are portable containers used to draw and transport cryogenic samples. Samplers do not require periodic maintenance record documentation, but they must be hydrostatically tested every five years.

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

DLA Energy Region—Is a management component of the DLA Energy with a geographic area of responsibility to monitor DLA Energy 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)—Is the DoD revolving a fund 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.

Designed Operational Capability (DOC) Statement—Summary of a unit's mission and resources for which it has been organized, designed, and equipped.

Expediter Tool Kit (ETK)—A Small issued tool kit that contains the inventory of items and is capable of being used on a check out/check in method. All tools are accountable and will be documented when used. Because of the nature of this kit the contents or type of container is exempt from shadowing or silhouetting, given an accurate and current inventory is maintained.

Forward Area Refueling Point (FARP)—Fuel's operations used to hot refuel aircraft in areas where fuel is otherwise not available. Fuel is transferred from a source aircraft's (C-130, C-17, or C-5) internal tanks to receiver aircraft while both aircraft's engines are running. Missions typically accomplished at remote locations under blackout conditions.

Fuels Operational Readiness Capability Equipment (FORCE)—Capability to receive store, transfer, and issue petroleum products or support aircraft generation where fixed systems do not exist or require augmentation. FORCE is characterized by transportability, and is primarily employed for wartime missions. However, it can be used to support peacetime/humanitarian operations as required. Primary equipment items are R-18, R-19, R-20, and R-21.

Fuel Sample—Is a small part of a quantity of product representative of the entire quantity, used for inspection or to determine the quality of the product.

Fuels Support Equipment (FSE)—Are fuels and cryogenic related support equipment assets required to support/sustain base operations. (See Attachment 13, *Approved Fuels Support Equipment (FSE)/Vehicle Forms*, for associated forms)

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

Hydrant System—Is 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)—Defines military specification fuel management by product type on a terminal and regional basis. The completed plan provides a basis to support the budget allocation for appropriated, stock funded fuel, and CCMD requirement support plan.

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

Off-Specification Fuel—Is Fuel that has more than one specification. Off-specification fuel can be blended as regraded fuels. Off-specification fuel is not identified as waste/hazardous waste fuel.

On-Specification Fuel—Is fuel that has a suitable quality to be returned to the base inventory. T.O. 42B-1-23, Table 3-1, *Management of Recoverable and Waste Liquid Petroleum Products*, sets the criteria for suitable quality.

Organizational Fuel Tank—Is any fuel tank 55 gallons or larger that store petroleum products, other than integral vehicle tanks or hand-carried safety cans, not under exclusive Fuels Management control.

Operating Stock (OS)—Fuel required to sustain daily operations and ensure fuel availability to support US military forces world-wide. OS was formerly known as peacetime operating stock.

Prepositioned War Reserve Stocks (PWRS)—Are the assets that are designated to satisfy the pre-positioned war reserve materiel requirement.

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

Recyclable Fuel—Is fuel that does not meet its original specification, but which through processing can be recovered to its original grade or a lower grade without reprocessing.

Responsible Officer (RO)—Is 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 all accountable records are maintained and required reports are generated.

Unit Manning Document (UMD)—Is 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 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 WMP, Volume IV.

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

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

Attachment 2

FUELS MANAGEMENT FLIGHT STRUCTURE

A2.1. Fuels Management Teams (FMTs) will staff the below functions utilizing flight personnel based on individual experience, leadership potential, and workload. Functions may be consolidated to gain efficiencies as well as to adequately distribute workload; however, the requirements outlined in this Instruction will continue to be met. (T-3)

A2.2. Locations with a Cryogenic Production function will report to Fuels Operations, while Cryogenics performing the storage and issue function will report to Fuels Facilities.

Figure A2.1. Functions.

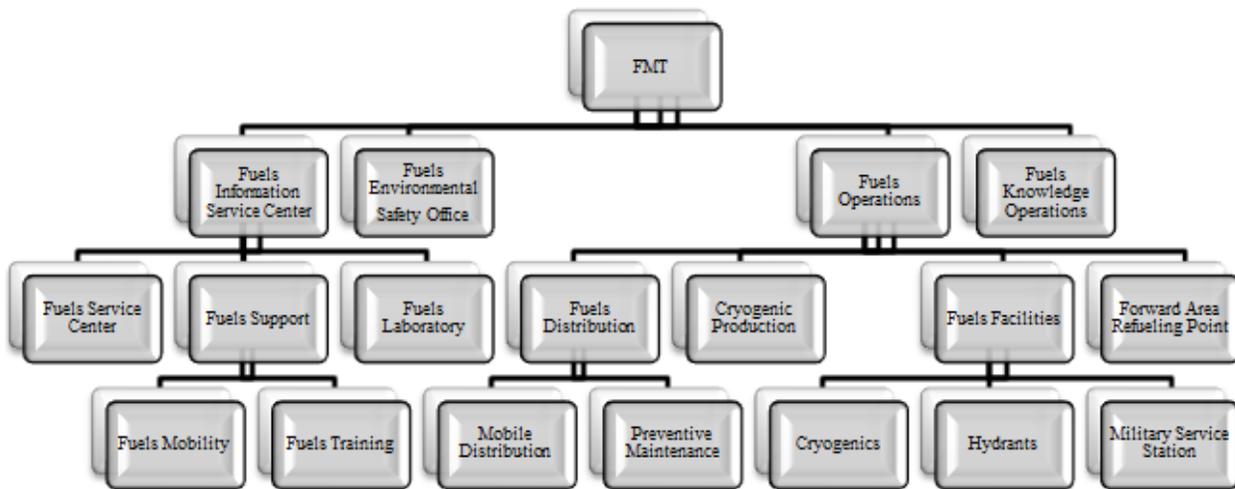


Table A2.1. Standard Office Symbols.

LGRF	Fuels Management Team
LGRFI	Fuels Information Service Center
LGRFIR	Fuels Service Center
LGRFIS	Fuels Support
LGRFIL	Fuels Laboratory
LGRFE	Fuels Environmental & Safety Office
LGRFK	Fuels Knowledge Operations
LGRFO	Fuels Operations
LGRFOD	Fuels Distribution
LGRFOC	Cryogenic Production
LGRFOF	Fuels Facilities
LGRFOP	Forward Area Refueling Point

Note:

1. The only approved office symbols are listed above.
2. The ANG workforce utilizes duty titles during UTA only, with the ability to assign personnel multiple roles.
3. Government Owned Contract Operated (GOCO) Fuels Operations are authorized to deviate from this structure. QAEs will update the Statement of Work (SOW) to ensure all necessary FM functions are met. QAEs are not positioned to establish policy over contracts but rather ensure contractors comply with SOW and Performance Work Statements (PWS).

Attachment 3**EDUCATION AND TRAINING OPPORTUNITIES****A3.1. Logistics Education Advancement Program (LEAP.)**

A3.1.1. 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 three year minimum assignment. **Note:** Those currently in the program and those who have been out of the program for three years or less are prohibited from voluntary cross training and are exempt from involuntary cross training programs.

A3.2. The five LEAP positions are:

A3.2.1. Two positions assigned to the Pentagon, Washington D.C. Will start at AF/A4LE and then moves on to the Joint Staff to finish their tour. Person must be a MSgt prior to being assignment to the Joint Staff (JS). **Note:** LEAP NCO must be eligible/initiate Top Secret security clearance upon assignment to the AF/A4LE.

A3.2.2. Two positions located at Fort Belvoir, VA. Both start at AFPA and move throughout the organization and then they move on to work in the DLA Energy Operations Center and thereafter each commodity business unit within DLA Energy.

A3.2.3. One position located at Wright-Patterson AFB, OH. Will start at the AF Tech Team, then go to Wright Patterson Aerospace Fuels Laboratory, deploy to Area Lab, and then go to the AFMC Fuels Staff.

A3.2.4. AF/A4L chairs a LEAP selection panel.

A3.2.5. Applicants must meet the following mandatory prerequisites:

A3.2.5.1. Hold the grade of E6 or E7.

A3.2.5.2. Completed 8-14 years total active federal military service (TAFMS) as of 1 October in the year considered for assignment.

A3.2.5.3. Have CCAF Degree.

A3.2.5.4. Possess a 2F071 AFSC.

A3.2.5.5. Have at least a "Secret" security clearance.

A3.2.5.6. Eligible for reassignment.

A3.2.6. FMTs submit nominee's package to their respective MAJCOM; packages consist of:

A3.2.6.1. One-page nomination letter from the unit commander or equivalent.

A3.2.6.2. Copies of last five Enlisted Performance Reports (EPRs).

A3.2.6.3. Data Verification Brief (DVB) obtained through virtual Military Personnel Flight (vMPF).

A3.2.6.4. Applicants provided a prioritized assignment preference list in vMPF and it must reflect LEAP position preferences in the DVB.

A3.2.7. MAJCOMs consolidate and forward their nominee's packages to the AF/A4LE Fuels Box at AF_Fuels@Pentagon.AF.Mil. A board comprised of the Fuels CFM, AFPA Chief Enlisted Manager, and MAJCOM Functional Managers (MFMs) will grade/evaluate LEAP candidates to help determine LEAP selects.

Attachment 4

**PERSONAL EQUIPMENT FOR FORWARD AREA REFUELING POINT (FARP) AND
AERIAL BULK FUEL DELIVERY SYSTEM (ABFDS) SPECIALISTS**

Table A4.1. Equipment.

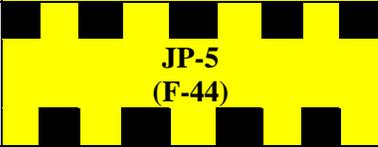
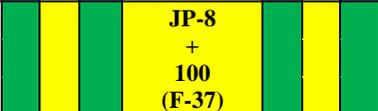
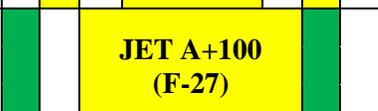
EQUIPMENT	JUSTIFICATION	U/I	FARP	ABFDS
Flight suit/coveralls	AS 016	ea.	4	2
Flight gloves	AFI 11-235	pr.	3	2
Flight jacket	AS 016	ea.	1	1
Aircrew boots	AS 016	pr.	2	1
Thermals	AS 016	pr.	2	2
Dust goggles	AFI 11-235	ea.	1	1
Official or Tourist passport	DoD 1000.21-R	ea.	1	1
*Helmet	AS 450	ea.	1	1
*Helmet bag	AS 016	ea.	1	1
*Oxygen mask	AS 450	ea.	1	1
*CRU-60 adapter	AS 450	ea.	1	1
*Last resort belt		ea.	1	N/A
*Backpack	AS 016	ea.	1	N/A
*Knife (Survival)		ea.	1	N/A
*Multiplier tool		ea.	1	1
*Carabineer/Snaplink		ea.	2	1
*Flashlight		ea.	1	1
*Knee pads		pr.	1	N/A
*Wrist watch		ea.	1	N/A
PATCHES	JUSTIFICATION	U/I	FARP	ABFDS
American Flags	AFI 36-2903	ea.	6	3
Nametags	AFI 36-2903	ea.	6	3
MAJCOM	AFI 36-2903	ea.	6	3
UNIT	AFI 36-2903	ea.	6	3

Note:

1. Refers to reporting instructions, AS 016/450, local Life Support, AFI 11-301v1, *Aircrew Flight Equipment Program*, and AFI 11-235, *Forward Area Refueling Point (FARP) Operations*, to ensure FARP and ABFDS specialists receive the required personal equipment.
2. All items marked with an asterisk (*) are required to be turned in upon PCS or termination of specialty requirements. Exception: Helmet liners may be retained by the individual.
3. List of required items may be supplemented by the Combatant Command or MAJCOM-specific reporting instructions.
4. ABFDS personnel do not require equipment to be issued prior to attending formal training. Equipment will only be issued to those tasked to support an ABFDS UTC.
5. Work with local Life Support section to store and accomplish required inspections on applicable equipment.

Attachment 5
CLIPBOARD COLOR SCHEME

Table A5.1. Products.

PRODUCT (NATO SYMBOL)	BACKGROUND COLOR	STRIPES	EXAMPLE
AVIATION			
AVGAS (F-18)	Blue	N/A	AVGAS (F-18)
JP-4 (F-40)	Yellow	N/A	JP-4 (F-40)
JP-5 (F-44)	Yellow	Black Dashes	 JP-5 (F-44)
JP-8 (F-34)	Yellow	Blue	 JP-8 (F-34)
JP-8+100 (F-37)	Yellow	Green	 JP-8 + 100 (F-37)
JPTS	Yellow	Black	 JPTS
JET A (F-24) (additive package)	Yellow	White	 JET A (F-24)
JET A+100 (F-27) (additive package)	Yellow	Green & White	 JET A+100 (F-27)
TS1	Yellow	Red	 TS1
Note: Additive package includes Corrosion Inhibitor/Lubricity Improver (CI/LI), Fuel System Icing Inhibitor (FSII), and Static Dissipater Additive (SDA).			
PRODUCT (NATO SYMBOL)	BACKGROUND COLOR	STRIPES	EXAMPLE
DIESEL			
Diesel, Low Sulfur	Brown	N/A	Diesel Low Sulfur

Diesel, High Sulfur (Includes JP-8 when used as Diesel)	Brown	Blue		Diesel High Sulfur	
Diesel, Ultra Low Sulfur (F-54)	Brown	Yellow		Diesel Ultra Low Sulfur (F-54)	
Diesel, Biodiesel Blend (Referred to as B20)	Brown	Green		BDI B20	
Kerosene (F-58) F-58 only applies to Grade 1-K)	Brown	Red		Kerosene (F-58)	
AUTOMOTIVE GASOLINE					
Unleaded (F-67) (F-67 only applies to Premium Grade)	Red	Green		Unleaded (F-67)	
Ethanol Fuel Blends (Referred to as E85)	Red	Blue		E85	
Gasohol (Contains 10% Ethanol)	Red	Black		Gasohol	
PROPELLANTS					
UDMH (P-922) Unsymmetrical Dimethyl hydrazine	Red	Yellow		UDMH (P-922)	
Nitrogen Tetroxide	Brown	White		Nitrogen Tetroxide	
Liquid Oxygen	Green	Yellow		LOX	
Liquid Nitrogen	Gray	Yellow		LIN	
Note: Unless otherwise noted, products not identified with a NATO symbol do not have a current NATO designation and do not required NATO markings.					

Attachment 6

**JOINT CHIEFS OF STAFF (JCS) BULK PETROLEUM CONTINGENCY REPORT
(REPOL) FUNCTIONALITY AND FIELD DEFINITIONS****A6.1. Product Tab.**

A6.1.1. *Previous Day Physical Inventory*: Consists of previous day's (24 hours) physical inventory as of closeout, which represents physical inventory reported on DD Form 2921, *Physical Inventory Petroleum Products*. Total includes storage tanks, pipelines/manifolds, and rolling stock. Once an initial REPOL is created, the previous day's "On-Hand Physical Inventory" from the most recent REPOL will auto populate the "Previous Day Physical Inventory" field on the current REPOL being created (FMD book inventory).

A6.1.2. *Issues Last 24 Hours*: Total of all issues within the last 24 hours as of closeout. Issues are fuel transactions made to customers (FMD sales). Do not include fuel shipments.

A6.1.3. *Receipts Last 24 Hours*: Total amount of fuel received within the last 24 hours as of closeout (FMD receipts).

A6.1.4. *Ordered*: The quantity of fuel "Ordered" from a supply source, which is expected to be received in the next fuel delivery (Enterprise External Business Portal (EEBP)).

A6.1.5. *Defuels*: The total gallon amount of fuel defueled from aircraft, browsers, etc., within the past 24 hours (FMD defuels).

A6.1.6. *Shipments*: Transfer of product from one Defense Fuel Support Point (DFSP) to another and the transfer of responsibility/accountability for the product shipped from one Responsible Officer (RO) or Terminal Manager (TM) to another (FMD shipments).

A6.1.7. *Stockage Objective (SO)*: The SO is widely used by the Combatant Command (CCMD) Joint Petroleum Office (JPO) to establish inventory levels within their Area of Responsibility (AOR). The SO value, usually set by the CCMD JPO, is the inventory the JPO feels is necessary to maintain at all times in order to ensure mission requirements are supported. For locations where the SO has not been established by the CCMD JPO, MAJCOMs or HQ USAF in coordination with the MAJCOMs will establish a SO and request the COCOM REPOL administrators update the SO in the JCS REPOL. Elements contributing SO establishment include Safe Fill, War Reserve Materiel (WRM), Economic Resupply Quantity (ERQ), and/or any other value deemed necessary to support mission demands.

A6.1.8. *Total Capacity*: The amount of storage space available to hold product, which is readily available for issue to customers for consumption. It is calculated as the system maximum fill (total safe fill) minus unobtainables. This amount can also be determined by taking the total safe fill capacity minus the tank bottom inventory.

A6.1.9. *On-Hand Physical Inventory*: Total amount of fuel on hand and recorded on the DD Form 2921, *Physical Inventory Petroleum Products*.

A6.1.10. *Remarks*: Due to limited space, briefly explain out of tolerance gains/losses in this section. **Note:** All limiting factors including fuel inventories affected by additive types,

tanks going out of/into service, and quantities will be documented in the LIMFAC/COCOM summary.

A6.2. Fuel Forecast Tab.

A6.2.1. Receipts Next 24 Hrs: Expected receipts prior to the following day's closeout.

A6.2.2. Receipts Next 96 Hrs: Expected receipts within the next four days' closeout.

A6.2.3. BRAG: BRAG stands for Black, Red, Amber, and Green. The color code gives a quick reference of a location's available tactical fuel system storage based on a service's policy concerning age and condition of tactical collapsible fuel tanks and is CCMD directed (monthly reporting BRAG based off varying standards).

A6.2.4. Ullage: The volume of available space in a container unoccupied by contents (Equal to current fuel level to the container's/tank's established safe fill).

A6.2.5. Enroute: Amount of product currently in-transit; normally, it is the amount of product in fuel tank trucks, tank cars, or ocean tanker enroute from a supply terminal to a military site.

A6.2.6. Remarks: Any pertinent information regarding fuel forecasts and BRAG standards.

A6.3. Personnel Tab.

A6.3.1. Skill level and Special Experience Identifiers (SEIs). Personnel manning shall be based on Primary Air Force Specialty Code (PAFSC) as well as the special experience of individuals possessing SEIs. SEI values (Authorized, Assigned, and Available) are not computed in the overall manning totals.

A6.3.2. Assigned: Number currently assigned to the flight.

A6.3.3. Available: Total personnel ready and available to perform fuel related duties. Deduct available personnel for persons who are away from the base e.g. TDY, deployed, etc.

A6.3.4. Authorized: Total personnel authorized according to the Unit Manpower Document (UMD).

A6.3.5. Remarks: Whenever the number of available personnel differs from number assigned, use this section to identify variances. Also include any other pertinent information regarding personnel.

A6.4. Equipment Tab.

A6.4.1. Authorized: Total amount of authorized equipment.

A6.4.2. Assigned: Total amount of equipment currently assigned to the flight.

A6.4.3. Mission Essential List (MEL): Minimum amount of equipment required to meet the mission. Established by FMT and coordinated with Vehicle Management (VM).

A6.4.4. Mission Capable (MC): Amount of equipment that is serviceable.

A6.4.5. Not in Use: Equipment currently not in use.

A6.4.6. Estimated Time in Commission (ETIC). Estimate the date when non-mission capable (NMC) vehicles/FSE are expected to return to service (MC). Only one ETIC can be used in this field; therefore, use the ETIC of the asset with the earliest ETIC. This field will

automatically be color coded as “Red” if the ETIC date has passed or “Green” if the date has not yet been reached. Detail all pertinent ETIC information in the remarks section such as registration of NMC equipment and applicable ETIC.

A6.4.7. *Capacity*: Total amount of fuel held within equipment storage tanks (e.g. R-11 capacity of 6,000). The total capacity is auto calculated for each type of equipment that contains a storage tank.

(Example: For six R-11s with a 6,000 gallon capacity, the total gallons will be auto calculated at 36,000 gallons).

A6.4.8. *Remarks*: List registration number(s), ETIC, and a brief description of the discrepancy for all assets that are not MC.

A6.5. Facility Tab.

A6.5.1. *On Hand*: Total number of each facility type.

A6.5.2. *Mission Capable*: Number of facilities that are operational.

A6.5.3. *ETIC*: Input the estimated time of completion for each facility that is out of service. This field will automatically be colored coded “Red” if the ETIC date has passed or “Green” if the date has not yet been reached. Detail all pertinent ETIC information in the remarks section.

A6.5.4. *Capacity*: Total amount of fuel storage capacity for each type of facility.

A6.5.5. *Remarks*: List the building number, ETIC, and a brief description of the discrepancy.

A6.6. Limiting Factors (LIMFAC) Tab.

A6.6.1. Detailed explanation of any limiting factors, shortfalls, and/or mission impact statements; to include get well dates. This section encompasses those LIMFACs spanning across the Product, Fuel Forecast, Personnel, Equipment, and Facility tabs.

Attachment 7**FUELS INCIDENT REPORTING PROCEDURES**

A7.1. The Fuels Incident Reporter provides timely notification, tracking and resolution of events as they occur within the fuels community and lends to pinpoint systemic problems with equipment, vehicles, facilities and/or training and guidance.

A7.2. Incident reports are for trend analysis and informational purposes only and not to be used for disciplinary actions, or as a substitute for Joint Chiefs of Staff (JCS) Bulk Petroleum Contingency Report (REPOL)/readiness reporting.

A7.3. Reports generated in the Fuels Incident Reporter may be used for local environmental reporting.

A7.4. Reports must include the most current and accurate data available at the time of reporting to help target possible incident trigger points. Do not enter or store Personally Identifiable Information (PII) in the Fuels Incident Reporter and the use of individual names is strictly prohibited.

A7.4.1. Use “Pending Investigation” only when an initial investigation provides no definitive answer as to why the incident has occurred. Update the report with the final investigation causes.

A7.4.2. Use “Estimated Gallons Recovered” to specify the gallon amount of on-specification fuel returned to operating storage. Specify the reason for Fuel that cannot be reclaimed.

A7.4.3. Photos may be sent to the Incident Reporter email box at: afpamishapreporter@dla.mil.

A7.5. Airman designated by the FMT to report incident are required to first submit the DD Form 2875, *System Authorization Access Request*, to AFPA by emailing afpamishapreporter@dla.mil. AFPA approves valid requests for user IDs, but may deny requests if the requester is not a member of the FMF or belongs to an organization with multiple users. With approved access, the Air Force Test and Analysis Tool (AFTAT) will need to be installed on user’s workstation. Instructions for installing AFTAT are located on AFPA’s SharePoint.

A7.6. A minimum of two personnel must have access to the Fuels Incident Reporter.

A7.7. Contact AFPA for reporting or user assistance by emailing afpamishapreporter@dla.mil.

A7.8. Include as many detailed facts as possible within the report (i.e. training, registration numbers, experience of personnel involved, was proper equipment used, newly developed procedure, checklist associated, and does this issue require a Product Quality Deficiency Report (PDQR) or Engineering Investigation (EI) submission?).

A7.8.1. Incidents warranting a PQDR or EI must be submitted by FMT to the Joint Deficiency Reporting System (JDRS) at https://jdrs.mil/DR_Initiate.cfm?service=AF.

A7.8.2. Initiate an EI deficiency listing a primary or secondary cause as “Defect in Equipment”.

A7.9. Incident reports must be forwarded to the NAF and/or Joint Petroleum Office/Sub-area Petroleum Office, as required.

A7.10. FMT incident reporting requirements are as follows:

A7.10.1. Notify the Chain of Command.

A7.10.2. Submit a Fuels Incident Report.

A7.10.3. Forward completed reports involving capitalized product to the respective DLA Energy Regional office IAW DLA Energy policy.

A7.10.4. DLA Energy Regional offices:

A7.10.4.1. Americas - DESC-AM.spillreports@dla.mil

A7.10.4.2. Pacific - DESC-PAC.spillreports@dla.mil

A7.10.4.3. Europe - DESC-EU.spillreports@dla.mil

A7.10.4.4. Middle East - DESC-ME.spillreports@dla.mil

A7.11. Incidents involving vehicles, facilities or fuel contamination/comingling events require the following information as a minimum:

A7.11.1. Vehicle accidents:

A7.11.1.1. What was the experience of the operator? How many hours was member on shift?

A7.11.1.2. Did environmental factors (weather, darkness, etc.) contribute to the cause?

A7.11.1.3. Describe what caused the vehicle accident and sequence of events.

A7.11.1.4. Did the vehicle recently return from maintenance?

A7.11.1.5. Is this a highly traveled area or are there any previous accidents at this location?

A7.11.2. Facility damage:

A7.11.2.1. Was the system signed off for the day?

A7.11.2.2. How was it damaged?

A7.11.2.3. Did Water Fuels System Maintenance (WFSM) recently release the system from maintenance?

A7.11.2.4. What are the cost estimates?

A7.11.2.5. Was the Lockout/Tagout (LOTO) program correctly applied?

A7.11.3. Fuel contamination/comingling incidents:

A7.11.3.1. Were local procedures followed?

A7.11.3.2. How much fuel was involved?

A7.11.3.3. Was the Aerospace Fuels Laboratory notified?

A7.11.3.4. What are the base sample results?

A7.11.3.5. Was the Fuels QC Hold Program correctly applied?

A7.11.3.6. Were positive servicing controls established and in place to prevent comingling?

A7.12. Fuel spills are classified based on their size and continuing duration and are defined as follows: Class I spills involve an area less than two feet in any plane dimension (direction). Class II spills involve an area not over 10 feet in any plane dimension (direction), or not over 50 square feet and not of a continuing nature. Class III spills involve an area over 10 feet in any plane dimension (direction) or over 50 square feet in total area or of a continuing nature. Once fuel spill classification has been determined, the FMT then categorizes mishaps as either: Category I (Minor), Category II (Moderate) or Category III (Severe).

A7.12.1. Category I:

A7.12.1.1. Class I fuel spills

A7.12.1.2. Repair, value of lost/unrecoverable fuel and/or cleanup cost less than \$100

A7.12.1.3. Any individual seen by Medical Treatment Facility (MTF) and released back to duty with no restrictions

A7.12.2. Category II:

A7.12.2.1. Class II fuel spill

A7.12.2.2. Repair, value of lost/unrecoverable fuel and/or cleanup cost valued at \$101 to \$1,000

A7.12.2.3. Any individual seen/treated by a MTF and restricted to light duty

A7.12.3. Category III:

A7.12.3.1. Class III fuel spills or any class of fuel spill that reached ground water and/or navigable water ways.

A7.12.3.2. Any individual seen/treated by MTF and lost duty days.

A7.12.3.3. Any mishap requiring environmental remediation.

A7.12.3.4. Any mishap resulting in Aircraft being grounded.

A7.12.3.5. Any mishap resulting in a fire and/or explosion. **Note:** Cleanup costs of fuel spills should be minimal to a FMF; however, include costs of spill pads purchased by DLA Energy or local CE environmental flight associated with cleanup cost.

Attachment 8

FUELS SPECIALTY COURSES PREREQUISITE

Table A8.1. Fuels Specialty Courses Prerequisite.

Course	Skill Level	Experience	Rank	Note
FORCE (J3AZR2F051 05AB)	2F051	N/A	N/A	Must complete the following CBTs prior to attending class: FORCE Part 1, FORCE Part 2, MRSP, & TASS under the AFCESA portion of ADLS and have printed certificates for first day of class.
ABFDS (J3AZR2F051 02AA)	2F051	N/A	MSgt and below	Must have signed AF Form 702 and be physically cleared on AF Form 1042. Recommend watching ABFDS refresher video prior to course.
Cryo Maintenance (J3AZR2F051 04AA)	2F051	30 Days OJT in Cryo	N/A	During OJT personnel should be familiar with principles, components, and inspection of cryotainers and cryogenic maintenance equipment.
PLMC (J3AZR2F091 00AB)	2F071	N/A	MSgt	Exception: MSgt selects filling JFA7M UTC; TSgts or above filling LEAP, QAE, MAJCOM, AFPA, or HQ positions may attend. Completed Command Level NCO Academy (NCOA) in residence or by correspondence. FORCE Part 1, MRSP, & TASS under the AFCESA portion of ADLS and have printed certificates for first day of class.
ITRO				
Fuels Quality Control (J9AZA2F051 01AA)	2F051	30 Days OJT in LAB	N/A	During OJT personnel should be familiar with types of tests, test sets, safety principles, sampling equipment, and sampling requirements.
BSM-E				
Basic	2F051	30 Days OJT in FSC	N/A	During OJT personnel should be familiar with their fuels accounts, DLA Energy Policy, and FMD responsibility/use.
Responsible Officer (RO)	2F071	N/A	MSgt	Must complete DLA Energy RO CBT prior to course, Fuels Superintendents, Fuels MAJCOM or higher Staff positions, and TSgts filling LEAP, QAEs may attend IAW DLA Energy Policy.
Note: Civilians must have equivalent qualifications to attend.				

Table A8.1. (AFRC) Fuels Specialty Courses Prerequisite.

Note: Complete at least three consecutive UTAs or an annual tour of hands on training prior to attending formal fuels laboratory or fuels accounting training. (T-2)

Attachment 9

FUELSMANAGER® DEFENSE (FMD) CODES

Table A9.1. Memo Block 20-Codes.

CODES	MEANING	EXAMPLES
20-A	Errors	Operator, wrong unit, 2 unit sent
20-B	Refueler 10-5 (standing by)	Acft 10 minutes out/quick turn
20-C	Cancellations	Cancelled by MOC (name of individual)
20-D	Delays in response	Not enough resources for fuel requests
20-E	Custodian verified (tank/grade/location)	Name of custodian; TK 9, DL2, Bldg 85
20-F	Refueling unit multi-dispatched	3 x F-16s
20-G	Acft multi-trucked	1 of 4
20-H	Hot pits (open/closed)	Open (name/location)
20-I	IFE/GE/Weather hold	IFE (landing gear, 15-mins out)
20-J	Diverted to higher priority acft	NAOC arrival
20-K	Multi-source refuel	Pantograph, R-11
20-L	Hydrant pit not utilized	Acft on pit lid; hydrant eligible but not used
20-M	Top off	1K (gallon amount)
20-N	RTB	TK 14 (location)
20-O	All refueling/defueling assets utilized	C-17 defuel in progress, no units available
20-P	All personnel utilized	6 acft diverted, standby personnel called in
20-Q	Vehicles/equipment below MEL	4 refuelers out for maintenance, ETIC
20-R	Facilities below MEL	No power available, ETIC
20-S	Hydrant system check	Systems in automatic mode and unmanned
20-T	Late aircraft take-off	Acft missed fly time
20-U	Cart fill outside servicing hours	Emergency cart fill
20-V	One time defuel	Vehicle configured for refuel used to defuel
20-W	Water release log	Start/stop time (release contained water)
Note:		
1. Use 20-Codes to aid in controlling flightline operations and to quickly document events/actions.		
2. Additional information concerning each specific event can be added at FMT discretion to further capture details or unique situations.		
3. FMTs may add additional codes to facilitate local requirements.		
4. Used as a data marker to capture standard, like items of interest across the AF. Codes can be used as standalone or include clarifying information. Not all codes apply to all locations.		

Table A9.2. Fuels Vehicle and Equipment Issue Point Codes.

CODES	MEANING	EXAMPLES
RU	R-11/HYMORE/LCRV	Without the use of hydrants
RH	R-12/Hosecart	Hydrant use
PT	Pantograph	Hydrant use
HY	HYMORE/LCRV	Hydrant use
Note:		
1. Issue point codes are essential to properly categorize peak workload during the vehicle and		

equipment validation process.

2. Ensure issue point code corresponds to correct mode of delivery during a given fuels operation.

Attachment 10

FUELS SUPPORT EQUIPMENT STORAGE AND INSPECTION REQUIREMENTS

A10.1. Fuels Support Equipment (FSE) will be maintained in either short term or long term storage in order to meet deployment readiness timelines and to minimize operational costs associated with storing equipment. MAJCOMs will determine the classification of storage at the time of assignment and reevaluate annually.

A10.1.1. Short term storage is defined as temporary storage where the equipment is anticipated to be used within 18 months. Short term storage classification can be extended by the storing MAJCOM.

A10.1.2. Long term storage is classified as deep storage where equipment is prepared, stored, and maintained for an extended period of time.

A10.2. The number of each type of FSE maintained in short term or long term storage will be determined by storing MAJCOMS.

A10.3. FSE should be stored indoors if possible to minimize exposure to weather and associated deterioration. Equipment maintained in long term storage will be stored indoors. **(T-1)** Equipment maintained in short term storage must be provided some type of cover, which may be a fixed sunshade structure or individually fitted covers. Rubber-based products and filter separator elements should be given priority storage indoors.

A10.4. Inspection Documentation:

A10.4.1. The AF Form 4427, AFTO Forms 244/95 or AFTO Form 260 will accompany each piece of equipment IAW AFI 23-201, Attachment 13. Document the category of storage in the date block for reference (short/long term storage) and maintain the form until such time as the equipment storage classification changes or the available fields are filled warranting the forms replacement. The equipment's inspection guide and trouble report will be used to document discrepancies, corrective, and reportable maintenance actions to facilitate the work order process. Document acceptance and interval inspections on the applicable form.

A10.5. Inspection Intervals:

A10.5.1. Acceptance inspection (initial/redeployment) will be accomplished IAW AFI 25-101, *War Reserve Materiel (WRM) Program Guidance and Procedures*. An operational inspection and function check will be performed prior to storage and use. **(T-3)**

A10.5.2. FSE will be visually inspected quarterly once accepted. **(T-3)**

A10.5.3. Locations storing FSE in short term storage with MAJCOM approved extensions will perform an operational inspection and function check (OI/FC) every 12 months or more frequently at the direction of approving MAJCOM. **(T-3)**

A10.5.4. FSE in long term storage requires an OI/FC once every 18 months IAW applicable technical orders for the specific equipment. **(T-2)**

A10.5.5. Cryotainers will be prepared for storage IAW applicable equipment T.O. Once in storage status, inspect cryotainer as prescribed by T.O. 37C2-8-1-116WC-1-WA-1, *Periodic Inspection Work Cards Non-Powered Aerospace Ground Equipment, Liquid Oxygen, Liquid Nitrogen, Liquid Argon, Liquid Air Storage and Transfer Tanks, 50, 150, 400, 500, 1700,*

2000, 5000 Gallon, 160 Liters (FSC 3655). Stagger the inspection schedule so all cryotainers do not become due during the same month.

A10.5.6. FSE Mobility Readiness Spares Packages (MRSPs) will be inspected and inventoried at the prescribed intervals outlined in AFI 25-101, *War Reserve Materiel (WRM) Program Guidance and Procedures*, and verify that all assets are inventoried and inspected once every 12 months.

A10.5.7. MRSPs containing shelf-life items require 100% inspection quarterly to substantiate usability or replacement IAW AFI 23-101, *Materiel Management*.

A10.5.8. The R-21 Tricons will be inspected and major components (i.e. injector, meter, etc.) operationally checked every 12 months at short term storage locations and every 36 months for long term storage using the inventory outlined in T.O. 37A9-3-5-61, *Operation and Maintenance Instructions with Illustrated Parts Breakdown Intermediate/Depot Fuels Operational Readiness Capability Equipment (FORCE) PART NO. 0417-00-1000*, in conjunction with the OI/FC outlined in paragraphs A10.5.3 and A10.5.4. **(T-3)**

A10.5.9. FSE with discrepancies will be documented on the applicable inspection guide and trouble report, and turned into maintenance for repair or service.

A10.6. Operational Inspection and Function Check (OI/FC) Requirements.

A10.6.1. FSE operational inspection and function checks will be accomplished on equipment as complete unit type codes (UTCs) to ensure the system's operability. **(T-3)** Refer to AFPAM 23-221, *Fuels Logistics Planning*, to determine the number and types of equipment associated with the fuels UTC.

A10.6.2. Follow the equipment specific T.O.s preparation guidance to setup equipment for operation. Filter separator elements are not required to be installed to complete an operational inspection and function check. **Note:** If no T.O. guidance exists for OI/FC, perform a pre-operational inspection consisting of fluid levels, general condition, leaks, and damage. Correct any discrepancies prior to operating the equipment.

A10.6.2.1. Recirculate fuel and operate pumping systems in all modes to verify operability and functions for a minimum of 20 minutes. Larger support equipment components (i.e. R-18, R-19, R-20, and R-21 Tricon), which make up a system will require longer run times to perform air elimination and to thoroughly check hoses and components. High flashpoint fuels (JP-8, JP-5, Jet A, Jet A1, and JPTS) are to be used for OI/FCs for systems designed for aviation fuel. Water will not be used.

A10.6.2.2. Attach an AF Form 980, *Caution Tag*, to the control panel or other conspicuous location annotated with fuel type used and date the function check was performed.

A10.6.2.3. Prepare equipment for storage by draining all fuel from hoses, manifold, and system piping and drain fuel from unit's engine fuel tank. Ensure filter separator(s) are stenciled "NO FILTER ELEMENTS INSTALLED" IAW T.O. 37A-1-101, *USAF Fuel, Water, and Lubricant Dispensing Equipment*, if filter separator elements have not been installed. Document applicable forms IAW paragraph A10.4.1. and follow T.O. 36-1-191 or specific equipment T.O. to prep for storage.

A10.6.2.4. Disconnect and remove batteries from FSE. Store batteries as outlined in T.O. 36-1-191.

A10.7. FSE intended to support AVGAS requirements will be OI/FC using guidance outlined in T.O. 42B1-1-22, *Quality Control of Aviation Gasoline*, and the applicable equipment T.O.

A10.8. Tactical Automated Service Station (TASS) units will undergo an OI/FC in the generator (GEN) mode. Aviation fuel may be used as a substitute for diesel to perform the required function check.

A10.9. Hoses will be inspected and stored IAW T.O. 37A-1-101.

A10.10. Bladders accompanying FSE will be stored IAW T.O. 37A12-15-1, *Operation, Service, and Repair Instructions - Collapsible Coated Fabric Fuel Tanks*.

Attachment 11

FUELS SPECIAL EXPERIENCE IDENTIFIER (SEI) MATRIX**A11.1. Minimum SEI Refresher Training Requirements.**

A11.1.1. Refresher training consists of a review and task performance designed to keep a SEI holder abreast of changes to a specialized fuels capability.

A11.1.2. Specific training requirements are determined by the FMT unless specifically required via UTC or other training methods as they become available.

A11.1.3. SEI holders are required to be fully trained and qualified in order to meet current Mission Capability (MISCAP) statement requirements. Qualitative requirements for training are to the 3c level as prescribed by 2FOX1 Career Field Education and Training Plan (CFETP).

A11.1.4. FMT ensures refresher training is administered to individuals possessing respective SEIs six months prior to entering their deployment window or when tasks associated with specialized experience undergo substantial changes.

A11.1.5. At a minimum, the training plan will include tasks outlined in the SEI refresher training table below.

A11.1.6. Document refresher training in FMD with a corresponding entry in TBA IAW AFI 36-2201.

A11.1.7. When specialized fuels capability equipment is not available and refresher training cannot be accomplished, document TBA IAW AFI 36-2201.

Table A11.1. Fuels Special Experience Identifier (SEI) Matrix.

SEI	Course Name / Code	Minimum Skill Level	Minimum Experience	Recommendation		Approval	
				FMT	MFM	CC	CFM
035	FARP	2F051	6 Months	X		X	
036	Cryogenics Maintenance J3AZR2F051 04AA	2F051	3 Months	X		X	
039	Fuels Quality Control J9AZA2F051 01AA	2F051	6 Months	X		X	
040	Accounting Joint BSM-E Course	2F051	6 Months	X		X	
041	FORCE J3AZR2F051 05AB	2F051	N/A	X		X	

369	ABFDS J3AZR2F051 02AA	2F051	N/A	X		X	
537	Fuels Functional Headquarters Staff	2F071	6 Months		X		X
6AG	Aviation Fuels Quality Monitor	2F071	039 SEI 4 Months Performing Area Lab	X		X	

Note:

1. Award of SEI requires 100% qualification/certification of proficiency tasks outlined; with the exception of ABFDS/FARP.
2. Factors for FMT to consider when selecting personnel to attend specialized fuels courses:
 - a. Select the most qualified
 - b. Return on Investment
 - c. Retainability
 - d. Career potential
3. Specific refresher training requirements are listed in Table A11.2., *Minimum SEI Refresher Training Requirements*.

Table A11.1. (AFRC) Fuels Special Experience Identifier (SEI) Matrix.

Note: For award of SEI 039 and 040, personnel will complete at least 37 days of training. The preferred method for this training is utilization of the AFRC seasoning program or RPA Mandays; however, if necessary, annual tour and 11 UTAs can meet this requirement. (T-2)

Table A11.2. SEI Refresher Training Table.

SEI 035 FARP			
TASK NUMBER	TASK NAME	TASK NUMBER	TASK NAME
n/a	Phase I & II	n/a	Phase III
SEI 036 Cryogenic Maintenance			
TASK NUMBER	TASK NAME	TASK NUMBER	TASK NAME
4.2.1.	Inspect Cryogenics Storage Areas	4.2.3.1.4.	Maintain Vacuum Pump
4.2.2.1.	Cryotainer Components	4.2.3.2.3.	Operate Purge Unit
4.2.2.2.	Inspect Cryotainers	4.2.3.2.4.	Maintain Purge Unit
4.2.2.3.	Perform Operator Maintenance on Cryotainers	4.2.4.1.	Document forms for Receipt
4.2.2.4.1.	Operate Cryotainers to Receive	4.2.4.2.	Document forms for Issue
4.2.2.4.2.	Operate Cryotainers to Issue	4.2.4.3.	Document forms for

			Inventory
4.2.2.5.1.	Perform Odor Test	4.2.4.4.	Document forms for Inspection / Maintenance
4.2.2.5.2.	Perform Particulate Test	4.2.4.5.	Document forms for Historical Data
4.2.3.1.3.	Operate Vacuum Pump	4.2.2.5.3.	Draw Cryogenics Samples
SEI 039 Fuels Quality Control			
TASK NUMBER	TASK NAME	TASK NUMBER	TASK NAME
6.3.1.	Draw Fuel Samples	6.3.5.4.	Fiber Detection
6.3.2.1.	Prepare Lab Samples for Shipment	6.3.5.5.	Conductivity
6.3.2.3.	Use AFTAT to Document Shipping of QC Samples	6.3.5.6.	FSII Content
6.3.5.1.	API Gravity	6.3.5.7.	Flashpoint
6.3.5.2.1.	Bottle Method	6.3.6.1.	Record/Review Test Results
6.3.5.3.	Water Content	6.3.6.2.	Record Lockout/Tagout (Caution Tag) Placement
SEI 040 Accounting Joint BSM-E			
TASK NUMBER	TASK NAME	TASK NUMBER	TASK NAME
6.2.1.1.	Verify Accuracy of Documentation for Receipt	6.2.3.4.	Use BSM-E to Input Transactions
6.2.1.2.	Verify Accuracy of Documentation for Inventory	6.2.3.5.	Use BSM-E to Generate Queries
6.2.1.3.	Verify Accuracy of Documentation for Issue	6.2.3.6.	Use BSM-E to Clear Transaction Rejects
6.2.1.4.	Verify Accuracy of Documentation for Defuel	6.2.3.7.	Use BSM-E to Reconcile Accounts
6.2.1.5.	Verify Accuracy of Documentation for Return to Bulk	6.2.6.1.	Use FM to Monitor Levels / Movement
6.2.1.6.	Verify Accuracy of Documentation for Transfer	6.2.8.	Investigate Fuels Gains or Losses
6.2.2.	Prepare REPOL Reports	6.2.9.	Monitor IMP / WCDO / MEL Levels
6.2.3.1.	Use BSM-E to Complete Logs	6.2.11.	Maintain DLA Energy Files
6.2.3.2.	Use BSM-E to Maintain / Update Status	6.2.13.	Determine Authorizations for Sales to Non-DoD Aircraft
6.2.3.3.	Use BSM-E to Dispatch and Control Operations	6.2.17.	Initiate Emergency Response Procedures
SEI 041 FORCE			
TASK NUMBER	TASK NAME	TASK NUMBER	TASK NAME

n/a	FORCE CBT Part 1	n/a	TASS CBT
n/a	FORCE CBT Part 2	n/a	MRSP CBT
SEI 369 ABFDS			
TASK NUMBER	TASK NAME	TASK NUMBER	TASK NAME
n/a	Video	n/a	Test

Attachment 12

RADIO TRANSMISSION CODES

Table A12.1. Radio Transmission Codes.

CODE	MEANING
10-1	Radio receiving poorly
10-2	Radio receiving well
10-3	Radio check
10-4	Acknowledged, will comply
10-5	Standby
10-6	Say again, poor reception
10-7	Location out-of-service
10-8	Location in-service
10-9	What is your location
10-10	Return to FSC
10-11	Departing parking area
10-12	How many gallons are out of unit
10-13	Proceed to fillstand
10-14	Arriving at fillstand
10-15	Departing fillstand with full unit
10-16	Request another unit at location
10-17	Request supervisor at location
10-18	Request fire truck at location
10-19	Fuel spill, request assistance at location
10-20	Entering parking area
10-21	Unit requires maintenance, discrepancy
10-22	Ready to receive, valves open
10-23	Ready to start transfer, valves open
10-24	Start servicing
10-25	End servicing
10-26	Pumps stopped/off
10-27	Transfer complete, valves closed
10-28	Servicing canceled
10-29	Call FSC via telephone
10-31	Distinguished visitor in area
10-36	What is the correct time
10-87	Fire, request immediate assistance
10-97	Arrived at scene/location
10-98	Finished with last assignment
<p>Note: Use the modified 10-series radio transmission code list to maintain radio discipline. FMTs may add other call signs to meet any local requirements.</p>	

Attachment 13

APPROVED FUELS SUPPORT EQUIPMENT (FSE)/VEHICLE INSPECTION FORMS

Table A13.1. Approved Fuels Support Equipment (FSE)/Vehicle Inspection Forms

FSE & VEHICLES	FORM(s) USED / MAINTAINED
GOVs	AF Form 1800
Low Speed Vehicles (LSVs)	
R-5	AF Form 1807/AF Form 4427
R-9	
R-10	
R-11	
R-12	
R-13	
Large Capacity Refueling Vehicle (LCRV)	
Hosecart	
C-300 / 301	
R-14	
R-18	
R-19	
R-20	
R-22	
PMU-27	
FFU-15E Filter Separator	
Additive Injector	
Tactical Automated Service Station (TASS)	
Pantographs / High reach / Defuel Carts Multiple	AF Form 4427 / (AFTO Form 39 for non-mobile pantographs attached to fixed system)
Bladders	AFTO Form 95 / AFTO Form 39
Cryotainers	AFTO Forms 95 / 244 / 245
Bowsers	AFTO Form 244 / 245
Purge Unit	
R-21 Equipment / Tricons	
Vacuum Pumps	AFTO Form 260 / AFTO Form 95
Aerial Bulk Fuels Delivery Systems (ABFDS) & Bladders	

Attachment 14

CRYOGENIC PLANT COLOR SCHEME

Table A14.1. Cryogenic Plant Color Scheme.

ITEM	COLOR	SECONDARY WARNING COLOR
PLANTS		
Liquid oxygen discharge port	Green #14260	
Liquid nitrogen discharge port	Brown #20219	
Safety valve	Do Not Paint	
FACILITIES		
Electrical 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 & Black (Cross hatched)	
Floor	Do Not Paint	
Building interior	Light color	
<p>Note:</p> <ol style="list-style-type: none"> 1. Do not paint LOX storage or cylinder charging floors. 2. Do not paint LIN discharge port couplers brown. 3. Seal floors around the Cold Box area with epoxy sealant. 4. Paint the building interior a light color to provide a bright working area. 5. Mark all gauges on the lens "ONLY" (pressure, liquid level, and flow) in the following manner: <ol style="list-style-type: none"> a. Green - normal operating range. b. Yellow - caution range. c. Red - danger/over pressure range.. 		