



Aviation Fuel Technical Services Scope of Work

COMMERCIAL AVIATION FUEL HANDLING AND INTO-PLANE OPERATIONS

PART A: BASIC SERVICES:

1. Operational Services
2. Technical Manuals
3. Audits and Inspection
4. Fuel Testing and Interpretation
5. Training and Certification

PART B: ADDITIONAL SERVICES:

6. Design Review of New Fuel Facilities
7. Technical Appraisal of Fuel Facilities Upgrade Projects
8. Insurance Negotiation – JVs and JUHI Operations
9. Accident/Incident Investigation
10. Litigation Support

PART A: BASIC SERVICES

Operational Services

- a) 24/7 Troubleshooting, Problem Investigation and Advice
- b) Tank Farm Operations – Quality Control
- c) Into-Plane Fuelling Operations – Quality Control
- d) Service Life Appraisal of existing Fuelling Equipment
- e) New Fuel Equipment Specifications, Tendering and Evaluation
- f) Notify changes to International Aviation Fuels Specifications, use of additives, and new requirements for safety and quality control
- g) Technical Bulletins issued on a quarterly basis notifying changes in aviation fuel specifications, standards and handling procedures
- h) Access to Latest Aviation Bulletins from ASTM, JIG, IATA and EI

2. Technical Manuals

AFSI will provide all relevant technical publications, guidelines and data for a safe, efficient and environmentally sound aviation fuelling operations on a continuous basis.

Mandatory publications:

- a) Airport Operations Manuals /Airport Operations Work Procedures
- b) Aviation Fuel Quality Assurance Manual
- c) Aircraft Fuelling Information Manual / Aircraft Handling Guidelines
- d) Tank Farm & Hydrant System Maintenance Manual
- e) Emergency Procedures & Apron Safety Manuals

Additional publications:

- a) Aircraft Refuelling Data Manuals
- b) Environmental Protection Manual
- c) Hazard and Operability Study
- d) Risk and Consequence Analysis
- e) Equipment Maintenance Manuals

3. Audits and Inspections

AFSI Technical Fuel Consultants will conduct inspections and audit of customer facilities both at the Tank Farm and on the apron during Into-plane fuelling operation. AFSI Consultants will use standardized Checklists and Procedures approved by the Aviation and Oil industry (IFQP and JIG) and submit findings. They will assist in the development and monitoring of a Corrective Action Plan (CAP) for closure of Audit Findings

4. Fuel Testing and Interpretation

AFSI works with independent fuel testing laboratories like Intertek and SGS to validate Certificate of Quality and Recertification tests results when in doubt about the quality of a particular batch. This facility is provided on an as and when basis and results are communicated within 48 hours of performing the tests and analysis.

When dealing with fuel contamination, AFSI will facilitate filter element testing with filter manufacturers like Velcon using analysis methods like Microscopic and Scanning Electron Microscope (SEM) examination and Infrared spectroscopy (FT-IR) for chemical elemental analysis/structure of the contamination.

5. Training and Certification

AFSI will conduct Training Needs Analysis (TNA) at Superintendent, Supervisory and Operative levels; identifying the gaps in knowledge and skills; designing and developing the course material and the method of assessment; conducting training and certifying staff proficiency. Courses will not only cover fuelling operations and quality control, but will also include health safety & environmental (HSE) requirements. Refresher training will be provided on a continuous basis

PART B – ADDITIONAL SERVICES

6. Design Review of new Fuel Storage and Handling Facilities

AFSI will provide technical expertise to review all designs for construction of new facilities to ensure compliance with international aviation fuelling standards and procedures.

If required **AFSI** will conduct feasibility studies, provide preliminary and detailed designs, preparation of detailed engineering drawings, material & equipment specifications and tender documents for specific projects.

7. Upgrading and Construction of Fuel Handling Facilities

Similar to 6 above, **AFSI** will provide technical expertise and guidance in the upgrading of fuel facilities to ensure compliance with international aviation fuelling standards and best-practice with minimal disruption to Operations.

8. Insurance Negotiation

AFSI Risk Specialists will assist in proper risk quantification and the preparation of documentation and material for insurance negotiation with brokers and underwriters. Using the Tarbox Agreement provisions, **AFSI Risk Specialists** will manage complex liability apportionment between parties within JUHIs and JVs to ensure optimal cover at least cost to customer.

9. Accident/Incident Investigation

AFSI Inspectors will conduct studies and investigate fuel related incidents including fuel contamination occurrences resulting in the clogging of filter elements in ground fuel equipment and on-board aircraft. **AFSI Inspectors** will use established IATA protocol for sampling fuel from ground installation or aircraft affected and subsequent examination of contaminants in specialized laboratories.

10. Litigation Support

Should the need arise, **AFSI Specialists** will provide all necessary assistance to support the customer in the case of litigation. This includes the preparation and compilation of comprehensive dossiers, gathering of factual evidence, and testifying in court.



COMMITMENT