



United States Department of the Interior
Office of Aviation Services
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DOI OPERATIONAL PROCEDURES MEMORANDUM (OPM) - 20

Subject: Drum Fuel Management

Effective Date: January 1, 2022

Last Updated: January 1, 2015

Expiration Date: December 31, 2022

1. Summary of Changes.

No changes.

2. Purpose. The purpose of this OPM is to provide aviation fuel drum management guidance. The following procedures, when implemented, enhance fuel quality and personnel safety during aircraft refueling operations using drum fuel.

3. Policy. Department of Interior bureaus shall use the following procedures when using drummed aviation fuel.

4. Procedures.

A. Procurement: Bureau personnel responsible for procuring drummed aviation fuel must include the following requirements in specification language:

- 1) Specify new drums when procuring (JET A & AVGAS).
- 2) Specify the drum bungs be sealed with tamper proof seals.
- 3) Specify the drums be marked with the fill date, fuel grade, and supplier identification (name & address).
- 4) Specify filtered fuel when possible. The following vendors in Fairbanks, Alaska, provide filtered fuel: Petroleum Sales, Service Oil & Gas, Inlet Petroleum, Alaska Aerofuel and Interior Fuels Company. Service Oil & Gas in Anchorage supplies filtered fuel.

B. Storage: Bureau personnel responsible for storing drummed aviation fuel must take the following actions when storing drums.

- 1) Store drums in secondary containment when possible.
- 2) Store drums on their sides with bungs level (when possible) or if positioned upright, must be blocked to allow water run-off from the drumhead.
- 3) Store drums on dunnage with proper blocking and bracing when possible.
- 4) Separate drums by fuel grade. (Recommend 50' geographical separation)
- 5) Ensure drums are dated to ensure fuel can be used on a first in first out basis.

- 6) Ensure drums are marked with the project ID & party chief name.
 - 7) Ensure stored drums do not exceed established shelf life (Two years for JET A & one year for 100 LL). Shelf life extensions can be obtained through fuel sample submittal and laboratory analysis. Contact Office of Aviation Services, Alaska Region Office for assistance.
- C. Dispensing: Bureau personnel responsible for dispensing aviation fuel from drums must take the following actions/precautions to maintain fuel quality and fire safety during dispensing operations:
- 1) When possible, allow adequate settling time after movement (1 hour per foot) before drum is put into service.
 - 2) Drums positioned upright for aircraft refueling must be blocked to allow water run-off from the drumhead. The blocking must prevent water accumulation at the bungs.
 - 3) Inspect each drum's contents prior to use. The visual inspection of the drum's interior, performed with an explosion-proof flashlight (preferred), must reveal clear & bright fuel to be considered satisfactory for use. Fuel that appears cloudy or obstructs the drum bottom should be rejected for use.
 - 4) In service drums must be closed up (pump removed and bung re-installed) during inclement weather (snowstorms, thunderstorms, etc.) and extended periods of refueling inactivity (overnight, weekends, etc.).
 - 5) Drums must be bonded to the aircraft prior to pump activation. Recommend a static bonding wire (50') with clips be used to equalize static electricity potential.
 - 6) Fuel issued from drums must be filtered through filters meeting Energy Institute standards for water and particulate removal.
 - a) Fuel filters must be changed out yearly.
 - b) A reduction in dispensing flow rate is also cause for filter change.
 - c) Examples of filtration meeting Energy Institute standards manufactured by Parker Hannifin: ACO 21001K, ACO 51201K, ACO 60901K, ACO 40501SPK, and ACO 40901SPK.
 - 7) Fuel dispensing nozzles must be inspected before each use. Nozzle barrels must be clean (free of dirt, wasp nests, etc.). Recommend nozzle dust caps whenever feasible.
- D. Reutilization: Drum reuse is limited to a field season in which a new drum is opened. Drums may not be reused once the field season is completed.

Bureau party chiefs must designate personnel responsible for project/field season drum management. Personnel must be briefed on their responsibilities pertaining to drum fuel management. Policies and procedures contained in this OPM should be explained to designated personnel.

Bureau personnel requiring drum reuse during the field season must comply with CFR 49 hazardous materials regulations. Some critical considerations stipulated in 49 CFR 173.28 are as follows:

- 1) Ensure drum condition (integrity) is unchanged.
- 2) Ensure drum is refilled with the same fuel.
- 3) Ensure the custodian (designated by project manager) refills the drum.
- 4) The custodian (designated by project manager) is responsible for drum transport.

Bureau personnel must perform the following actions to ensure custody and fuel quality is maintained when drums are reused:

- 5) Clearly identify the project, project dates, and drum's custodian on each drum used in support of specific projects.
 - 6) Maintain user custody throughout the project/field season.
 - 7) Perform visual inspections of drum interiors prior to each refilling. Reject for further use if corrosion, leaks, water, debris, etc. is detected.
- E. Environmental: Bureau personnel shall take special precautions to preserve the environment when using drummed aviation fuel. In addition to storing drums in lined (secondary containment) when possible the following actions should be taken to preserve the environment:
- 1) Maintain a spill kit at each drum storage/dispensing location (if available).
 - 2) Physically inspect each storage/dispensing site daily.
 - 3) Take immediate corrective actions to eliminate leaks.
 - 4) Clean up fuel spills immediately.
 - 5) Report all spills.

5. Deviations. The Director, Alaska Region must approve deviations to the OPM.

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