

JUNEAU INTERNATIONAL AIRPORT



FUEL HANDLER TRAINING COURSE

I. PURPOSE

The purpose of this study guide is to provide the standardized requirements for safety and fueler training at the airport. Further training must be provided by the tenant fueling agent, per FAA (Federal Aviation Administration) Part 139 requirements. This study guide is for all fuel handlers at the airport.

For commercial fuel handlers, Part 139.321 requires at least one supervisor with each fueling agent shall have completed an aviation fuel training course approved by the FAA. Each fuel handler must have completed or enrolled in an authorized aviation fuel training course that will be completed within 90 days of initiating duties, and recurrent training at least every 24 consecutive calendar months. In addition, commercial fuel providers must submit training records to the airport by December 31st or as requested.

All other employees who fuel aircraft, accept fuel shipments, or otherwise handle fuel must receive at least initial on-the-job training and recurrent instruction every 24 consecutive calendar months in fire safety from a trained supervisor.

Juneau International Airport has requirements for anyone handling fuel or fueling aircraft. All persons fueling aircraft are required to have fuel handler training annually and have a **FUELING** endorsement on their JNU Personal Identification Media or security badge.

Prior to being approved for a fueling endorsement, you must successfully pass the Airfield Driver Course. Airport Security Badges can be renewed up to 30 days prior to expiration.


Example of Fuel Handler Endorsement



Anyone fueling an aircraft or handling fuel without training and endorsement may be cited, be subject to badge revocation and receive denial of access privileges. In addition to providing safety and environmental considerations, this study guide emphasizes the importance of handling fuel safely. Many fuel truck drivers forget the extreme ramifications of even the smallest accident. It is extremely important to remember to follow the safety rules and airport guidelines while driving and handling fuel.

The information provided in this study guide is in accordance with:

- CFR Part 139.321 Handling and Storage of Hazardous Substances and Materials
- National Fire Protection Association 407 Standards for Aircraft Servicing
- International Fire Code
- Advisory Circular 150/5230-4 Aircraft Fuel Storage, Handling and Dispensing on Airports

 U.S. Department of Transportation Federal Aviation Administration	<h1>Advisory Circular</h1>
Subject: Aircraft Fuel Storage, Handling, Training, and Dispensing on Airports	Date: 9/28/2012 AC No: 150/5230-4B Initiated by: AAS-300 Change:

This study guide is designed as a supplement to the hands-on training personnel should receive from a qualified supervisor in fire safety, fuel handling, and fueling aircraft.

II. PERSONAL SAFETY

When working with any hazardous material, training is the greatest asset to ensure safety. With proper initial and recurrent training, fuel handlers will be able to react properly to any situation that arises. Before every operation, all fuel handlers should ensure they have the proper personal protective equipment. Some of this equipment may consist of safety goggles, face mask, gloves, and foot wear. It is also recommended to wear clothes that do not generate a static electrical charge, which can ignite the fuel being dispensed. Some types of clothing material that are not recommended to wear are polyester, nylon, wool, and Dacron.

Fuel handlers shall not smoke near fuel as fumes can ignite easily. Therefore, no fuel handler may carry matches, cigarette lighters, or any type of igniting device within 50 feet of any fueling equipment, facilities, storage tanks or aircraft. Smoking is strictly prohibited on all airfield ramps.

Cell phone usage while operating fuel trucks is prohibited on the airport grounds. Furthermore, the use of cell phones is prohibited while dispensing or handling fuel.

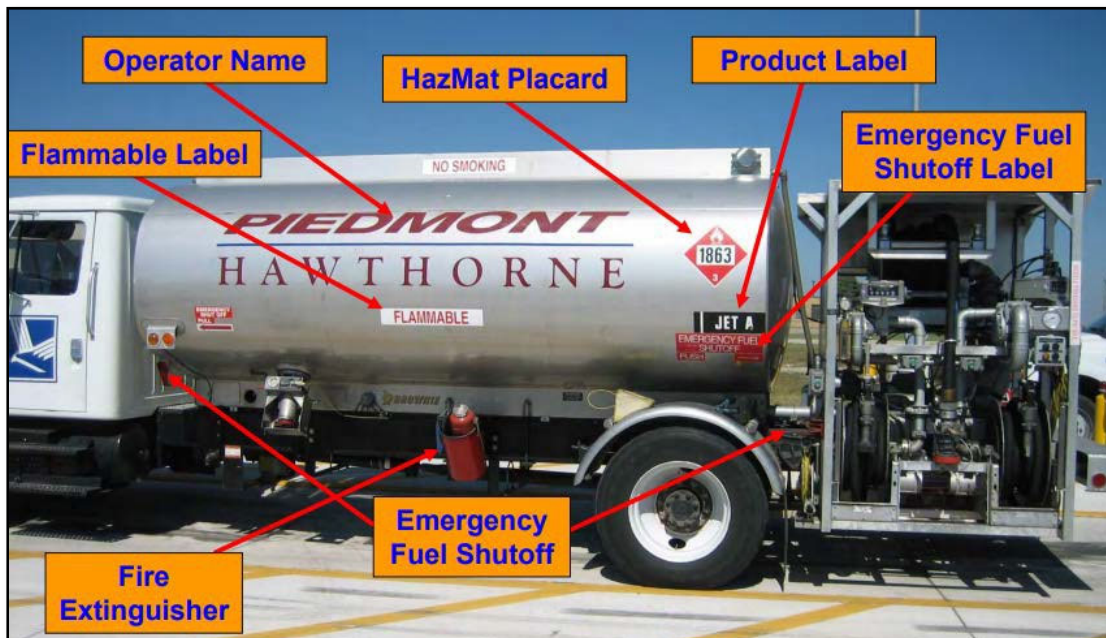
III. FUEL TRUCK

There are many fire safety requirements for fuel trucks. To ensure your equipment is ready for operations, a cursory walk-around is strongly encouraged. Some of the things to look for are:

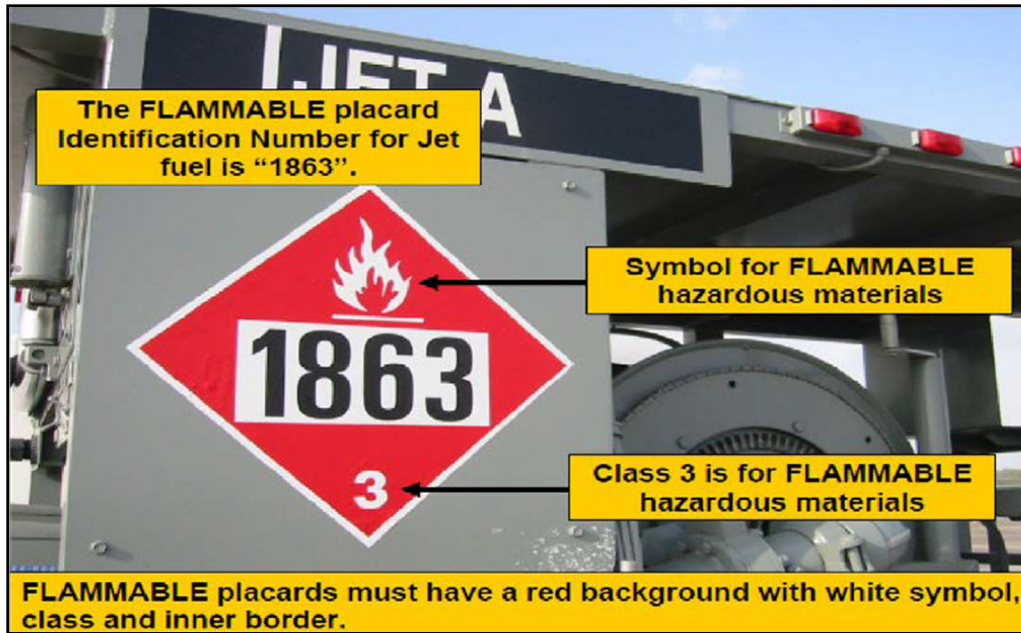
- “NO SMOKING” signs should be displayed in the cab, and on all sides of the vehicle. Smoking equipment, such as cigarette lighters and ashtray, should be removed or made inoperable.
- Rotating, strobe or LED flashing amber beacon is required on fuel trucks that is 360° visible when operating the vehicle or fueling an aircraft.



- Fueling company or air carrier name and contact phone number are displayed on both sides of the vehicle.
- There are at least two emergency fuel shut off and they are clearly labeled.
- Placards and required decals/labels should be visible and not faded.



- The required hazmat placard should be appropriate for the type of fuel in the truck.



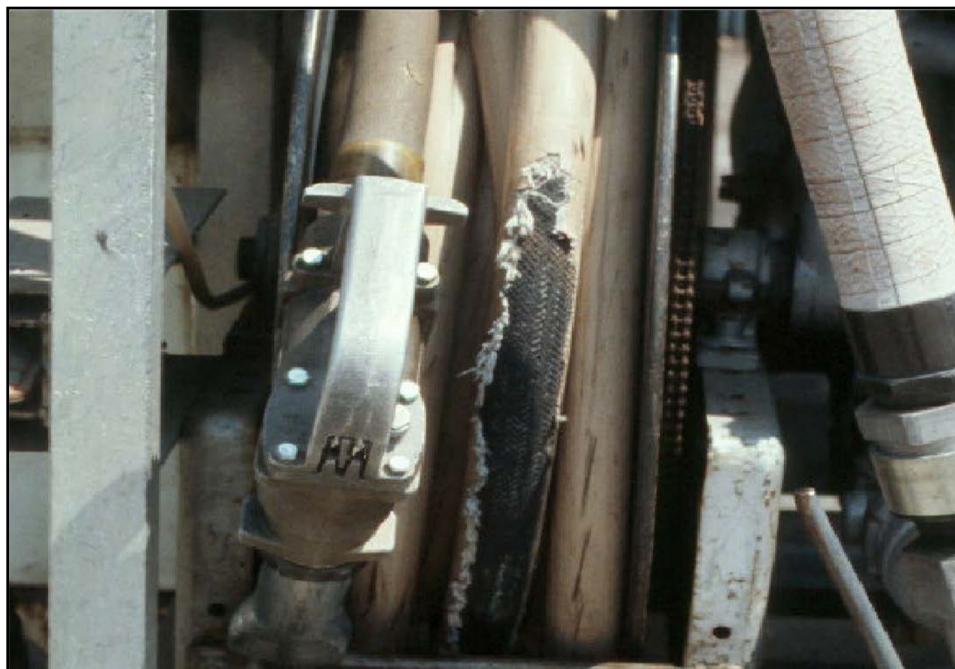
- Ensure two 20 lbs. Class B/C High-Volume fire extinguishers are readily accessible on both sides of the fuel truck.
- The extinguishers should be protected with a weather covering.
- Ensure fire extinguishers are charged and monthly inspections are up to date.
- Fire extinguishers must be clearly marked with at least two-inch lettering.



- Fuel trucks are required to have a spill kit. Ensure it is fully stocked and easily accessible for an emergency.



- Hoses should not have any blistering, saturation, cuts, or nicks. Example below is a damaged fuel hose.



- Inspect vehicle equipment and ensure it is free from accumulation of oil and grease and all light fixtures are in good repair. Example below shows a missing and damaged truck light lens that could provide potential ignition sources.



- Check under and around the vehicle and ensure there is no fuel, oil, or hydraulic leaks.



- Ensure Grounding/Bonding cables are free from damage, frays, kinks, and are stored properly. Example below of properly stored cables.



IV. AIRFIELD DRIVING

Fuel trucks pose a potential danger to drivers and people in the immediate vicinity. Many drivers who handle fuel sometimes forget how dangerous their cargo is. Before fuel handlers may drive on the airfield, they must satisfactorily complete the Ramp Vehicle Driving Course.

The following specific regulations apply directly to fuel truck operators:

- SMOKING is **NOT** permitted in or near fuel trucks.
- Before driving the fuel truck, ensure your beacon is operable and **ON** at all times while operating on the airfield and while refueling aircraft.
- Fuel trucks are more difficult to come to an abrupt stop, due to the weight of the liquid cargo shifting. Speed limit on the ramp is 20 MPH (unless posted otherwise).



- While driving on the airfield, stay in the vehicle service lanes until you arrive at your destination.



- Fuel trucks must come to a complete stop at all stop bars.
- Before proceeding, look around the area for aircraft and moving helicopter rotor blades.
- Stop bars are located at intersections and areas of high traffic, particularly around helicopter operations.
- At yield signs, **USE CAUTION** ... fuel trucks can slow, look and proceed if no aircraft or other vehicles are crossing.



- Transiting near helicopter operations areas:
 - Be aware of the helicopter operation areas. Make sure to look around (and listen) for incoming/departing helicopters.
 - Only approach an operating aircraft (moving propeller, running jet engine or spinning helicopter rotors) when directed by the aircraft pilot or ground crew.
 - Conduct “HOT” refueling only if it is absolutely necessary and only if authorized by aircraft commander and the air carrier.



- Fuel trucks, whether loaded or empty, shall **not**:
 - ✓ Enter or refuel aircraft in hangars.
 - ✓ Be stored inside any building or structure.
 - ✓ Be parked within 10 feet of any other vehicle or equipment.
 - ✓ Be parked within 50 feet of any building, unless attended temporarily for vehicle maintenance.





GA Movement Area = Blue
 Main Ramp Movement Area = Red (135-BOA & SIDA)
 -(Must have DL Designation)
 Authorized East/West Transit = Yellow
 Helicopter Landing Area = Green Checkered Areas

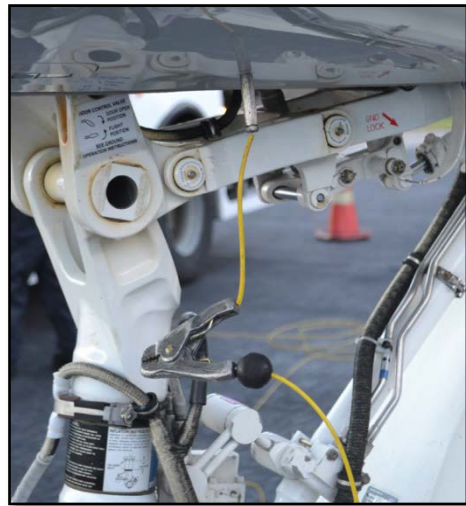
JNU Airfield Drive Routes



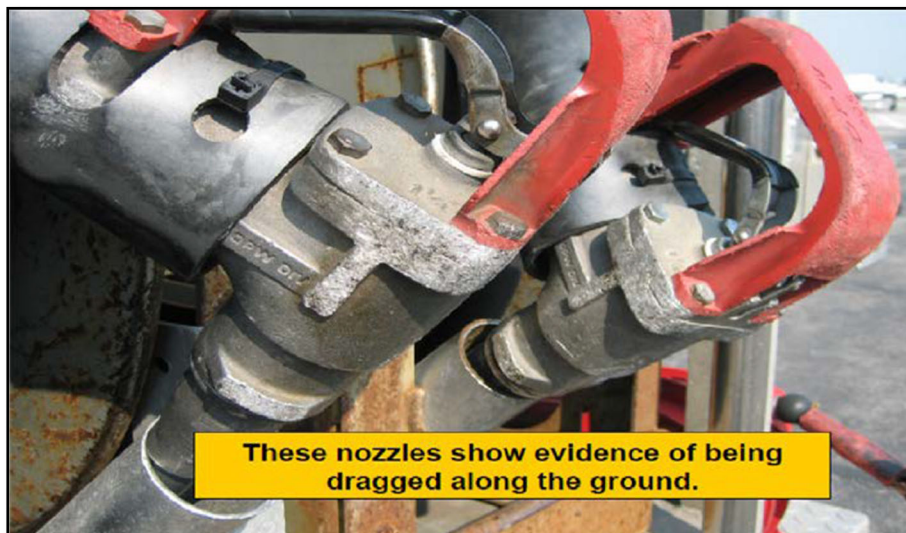
V. FUELING OPERATIONS

Each fueling tenant will have their own fueling operating procedures. Regardless of tenant specific fueling procedures, safety is always the priority. The following are airport required fueling operation safety procedures:

- Remove ignition keys from parked and unattended fuel trucks.
- When parking the fuel truck, park it so that it may evacuate the area quickly in an emergency. Never park under an aircraft's wing or near a building.
- Emergency brake must be set before leaving the vehicle.
- Chock the wheels (with approved wheel sized chocks) immediately after parking the fuel truck.
- Before dispensing fuel, attach the grounding/bonding cable to the aircraft.



- Use fuel handle when pulling the hose, try to prevent the hose from dragging on the ground. Examples below show nozzles that have been dragged on the ground rather than carried.



These nozzles show evidence of being dragged along the ground.

- Never rest the hose or nozzle directly on the aircraft skin.



- Fuel hose should not touch or hang into the water while fueling aircraft at the float pond.
- Never block or disable the dead-man control in the open position. A dead-man control is any device that will stop the flow of fuel when released by the operator.
- Examples below depict non-compliant latches that can bypass and hold open the dead-man control.



- Upon completion of fueling operation, properly stow all hoses and materials used during fueling.
- Before and after fueling, make sure to check your truck, aircraft, and the surrounding area for any spills (fuel, oil, hydraulics, etc.).
- **REMINDER** - fueling companies and air carriers are responsible for:
 - ✓ Ensuring all fuel trucks, personnel training and ancillary equipment (chocks, spill prevention, fire extinguisher, placards, etc.) meet current requirements. Failing to meet requirements will result in immediate suspension of fueling operations, removal of fuel truck from the airport grounds and possible endorsement sanctions.

VI. SPILL PREVENTION, CONTROL AND CLEAN- UP

ALL SPILLS, REGARDLES OF SIZE, AMOUNT OR LOCATION ARE TO BE REPORTED TO THE AIRPORT AUTHORITY and ALASKA DEPARTMENT OF ENVIORNMENTAL CONSERVATION IMMEDIATELY!!!

It is a requirement that all fuel spills, regardless of size, amount and location, are reported to the Airport's Airfield Maintenance Division (907-321-3807) so that the spill can be contained in a safe and expeditious manner. Your company is REQUIRED BY LAW to notify the Alaska Department of Environmental Conservation (DEC), regardless of the amount, size or extent of the spill.

Fuel spills can degrade asphalt pavement, contaminate the local environment, and cause fire, which is a hazard to life and property. Fuel handlers should follow safety procedures to ensure spills and leakage do not happen.

Fuel handlers should inspect that all equipment is in order before operating. **ENSURE** your spill kit is fully stocked and readily available.

If you encounter a fuel spill:

- Stop the flow of fuel with the emergency fuel shut off.
- Pull out a fire extinguisher and place it upwind of the spill.
- Evaluate the extent of the spill.
- If the spill is more than you can handle, call **911 immediately**,
- Notify your supervisor of severity of the spill.
- Notify the Airport's Airfield Maintenance Division.
- If you can handle the clean-up proceed to start absorbing the fuel.
- If you cannot handle the clean-up alone, stand with the fire extinguisher in an upwind location, pointed at the spill and direct people away from the area.
- Wait for the fire department and airport personnel to respond.
- **AGAIN, ALL FUEL SPILLS MUST BE REPORTED TO THE AIRPORT**



Alaska Department of Environmental Conservation placard must be visibly posted at all fuel tenant offices.

IT'S THE LAW!
AS 46.03.755, 18 AAC 75.300, 75.325 and 18 AAC 78.200

REPORT OIL AND HAZARDOUS SUBSTANCE SPILLS

During Normal Business Hours

call the nearest response team office:

Central Alaska: Anchorage	(907) 269-3063 Fax: (907) 269-7648
Northern Alaska: Fairbanks	(907) 451-2121 Fax: (907) 451-2362
Southeast Alaska: Juneau	(907) 465-5340 Fax: (907) 465-5245
Alaska Pipeline: Fairbanks	(907) 451-2121 Fax: (907) 451-2362

Outside Normal Business Hours

Toll Free	1-800-478-9300
International	1-907-269-0667

Hazardous Substance

Any hazardous substance spill, other than oil, must be reported immediately.

Oil – Petroleum Products

To Water

- ◆ Any amount spilled to water must be reported immediately.

To Land

- ◆ Spills in **excess of 55 gallons** must be reported immediately.
- ◆ Spills in **excess of 10 gallons, but 55 gallons or less**, must be reported within 48 hours after the person has knowledge of the spill.
- ◆ Spills of **1 to 10 gallons** must be recorded in a spill reporting log submitted to ADEC each month.


To Impermeable Secondary Containment Areas

- ◆ Any spills in **excess of 55 gallons** must be reported within 48 hours.


Additional Requirements for Underground Storage Tank Spill Reporting

Regulated Underground Storage Tank (UST) systems are defined at 18 AAC 78.005. Releases at heating oil tanks must be reported.

- ◆ You must report a suspected belowground release from a UST system, in any amount, **within 24 hours** (18 AAC 78.220(c)).
- ◆ You must report if your release detection system indicates two consecutive months of invalid or inconclusive results.
- ◆ If you observe unusual operating conditions, sudden loss, erratic dispensing (slow flow/no flow) or discharge to soil or water, **report it to the UST Unit:**
907-269-3055 or 269-7679



Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
www.dec.alaska.gov/spar/ppr/spill-information/reporting



rev. July/2018

VII. ENVIRONMENTAL PROTECTION AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Fueling tenants should have an environmental protection plan in place for spills and preventing fuel from entering storm drains, waterways and soil bodies. If a spill does occur and is safely contained, measures need to be taken to protect the environment. If the fuel cannot be contained in a certain area, absorbent booms and pads should be placed around drains and along the soil line of the contaminated area, while clean-up is under way.



DON'T HESITATE TO CALL FOR ASSISTANCE

Fuel or petroleum products may only be discharged and stored in airport and fire code approved containers. Deliberately discharging or dumping fuel or petroleum products into any drain system, waterway or soil body is a violation of state and federal law under the Environmental Protection Act of 1970.

