



Mission Statement

Provide profitable, quality aviation services

***Provide opportunity for challenging
and competitive employment***

***Be economically, socially and
morally responsible***

Set # _____

This is a controlled ***EMPIRE AIRLINES*** Publication.

Do Not Duplicate

Please contact the Technical Publications Department
for additional copies in whole or in part.

Address your request to:

Technical Librarian
Empire Airlines — COE
11559 N Atlas Road
Hayden, ID 83835
(208) 292-3850

Ensure manual is current before printing.



Ensure manual is current before printing.

Revision Instructions/Highlights

Revision: 23 – Fueling Manual

Revision Date: January 31, 2024

DOM or Rep. Chris Leard

DQA or Rep. [Signature]

Director of Operations R. [Signature]

VP Mx [Signature]

SRM# 449

Review this revision and file in your manual in accordance with the following instructions:

Where **REP** is shown in the Action column, remove the sheet in your manual and replace it with the enclosed page of the same page number; otherwise, Add (**ADD**) or Delete (**DEL**) pages as indicated.

File Revision Instructions/Highlights in the front of your manual.

Action	Page(s)	Highlights
REP	LEP-1 – LEP-2	Updated List of Effective Pages.
REP	9-01-1	Updated Chapter 9 Table of Contents
REP	9-01-3 — 9-01-4	Updated Training paragraph.

Ensure manual is current before printing.



Ensure manual is current before printing.

LEP-1	
Date:	01/31/24
Revision:	23

LIST OF EFFECTIVE PAGES

Page	Revision	Date	Page	Revision	Date
LEP-1	23	01/31/24	6-02-2	21	05/22/20
LEP-2	23	01/31/24	6-02-3	21	05/22/20
			6-02-4	21	05/22/20
GTOC-1	22	12/23/22	6-02-5	21	05/22/20
GTOC-2	21	05/22/20	6-02-6	21	05/22/20
1-01-1	21	05/22/20	7-01-1	22	12/23/22
1-01-2	21	05/22/20	7-01-2	22	12/23/22
1-01-3	21	05/22/20	7-01-3	22	12/23/22
1-01-4	22	12/23/22	7-01-4	22	12/23/22
1-01-5	22	12/23/22	7-01-5	22	12/23/22
1-01-6	22	12/23/22	7-01-6	22	12/23/22
2-01-1	21	05/22/20	8-01-1	22	12/23/22
2-01-2	21	05/22/20	8-01-2	22	12/23/22
2-01-3	21	05/22/20	8-01-3	22	12/23/22
2-01-4	21	05/22/20	8-01-4	22	12/23/22
2-01-5	21	05/22/20	8-01-5	22	12/23/22
2-01-6	21	05/22/20	8-01-6	22	12/23/22
			8-01-7	22	12/23/22
3-01-1	21	05/22/20	8-01-8	22	12/23/22
3-01-2	21	05/22/20	8-01-9	22	12/23/22
3-01-3	21	05/22/20	8-01-10	22	12/23/22
3-01-4	21	05/22/20	8-01-11	22	12/23/22
			8-01-12	22	12/23/22
4-01-1	21	05/22/20	9-01-1	23	01/31/24
4-01-2	21	05/22/20	9-01-2	22	12/23/22
4-01-3	21	05/22/20	9-01-3	23	01/31/24
4-01-4	21	05/22/20	9-01-4	23	01/31/24
4-01-5	21	05/22/20			
4-01-6	21	05/22/20			
5-01-1	21	05/22/20			
5-01-2	21	05/22/20			
5-01-3	21	05/22/20			
5-01-4	21	05/22/20			
6-01-1	21	05/22/20			
6-01-2	21	05/22/20			
6-01-3	21	05/22/20			
6-01-4	21	05/22/20			
6-01-5	21	05/22/20			
6-01-6	21	05/22/20			
6-01-7	21	05/22/20			
6-01-8	21	05/22/20			
6-02-1	21	05/22/20			

FUELING MANUAL

LEP-2

Date: 01/31/24

Revision: 23

Ensure manual is current before printing.



LIST OF EFFECTIVE PAGES

Page	Revision	Date	Page	Revision	Date
------	----------	------	------	----------	------

This Page Intentionally Left Blank



Ensure manual is current before printing.

GTOC-1	
Date:	12/23/22
Revision:	22

INTRODUCTION

General Table of Contents

Chapter One — Introduction	
Table of Contents	1-01-1
Chapter Two — Safety	
Table of Contents	2-01-1
Chapter Three — Jet Fuels	
Table of Contents	3-01-1
Chapter Four — Fuel Spills	
Table of Contents	4-01-1
Chapter Five — Standards for Jet Fuel Quality Control	
Table of Contents	5-01-1
Chapter Six — ATR Fuel Servicing	
Table of Contents	6-01-1
Chapter Seven — Cessna 208 Fuel Servicing	
Table of Contents	7-01-1
Chapter Eight — Cessna 408 Fuel Servicing	
Table of Contents	8-01-1
Chapter Nine — Fuel Vendors – Part 121/135 Operations	
Table of Contents	9-01-1

GTOC-2

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



INTRODUCTION

This Page Intentionally Left Blank



Ensure manual is current before printing.

1-01-1	
Date:	05/22/20
Revision:	21

INTRODUCTION
Chapter 1
Table of Contents

Preface.....1-01-3

Personnel and Responsibilities1-01-3

 Director of Quality Assurance1-01-3

 Quality Auditor1-01-4

 Lead Mechanic1-01-4

1-01-2

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



INTRODUCTION

This Page Intentionally Left Blank



INTRODUCTION

Preface

A. General

- (1) This manual describes, in accordance with 14 CFR 121.135 (b)(19), procedures for refueling aircraft, eliminating fuel contamination, protection from fire (including electrostatic protection), and supervising and protecting passengers during refueling.
- (2) 14 CFR 135 Operations are specifically noted as required.
- (3) Personnel servicing and handling Empire aircraft should be aware that safety of personnel and protection of equipment from damage are of the greatest importance. Safety considerations are the dominant factor in policies, decisions, interpretation and administration of provisions in this manual. Always use caution to ensure that correct safety procedures are employed when handling or servicing aircraft.
 - (a) The interface symbol for the Fueling Manual is ▲. Reference the PPM Ch 2-01 for Interface details.
- (4) For problems relating to fuel servicing, vendors should contact local Empire Airlines personnel. Empire personnel should contact Maintenance Control.
- (5) Most Empire stations use outside vendor refueling. All vendor refueling contracts and administration are handled through Empire Fuel Accounting.

Personnel and Responsibilities

14 CFR: 121.105, 121.123, 121.135(b)(2), Part 135 Operations.

A. General

- (1) This section lists the Empire employees who have fueling responsibilities and describes the nature of those obligations. The description is not a complete outline of the responsibilities of the positions but is intended as a brief summary. The procedures described in this section are binding on all personnel who perform fueling operations on any Empire aircraft.
- (2) The Director of Quality Assurance is responsible for, and has the authority to cause, changes to the contents and procedures as presented in this manual. Revisions will be accomplished in accordance with procedures outlines in the Maintenance Policies and Procedures Chapter 2-01.

✎ **Note:** As described in 14 CFR 119.69, the Chief Inspector/Director of Quality Assurance position is not required for 14 CFR 135 Operations. For 14 CFR 135 Operations, the Director of Maintenance (DOM) will serve in the Director of Quality (DQA) capacity and assume such responsibilities as called out in this manual.

B. General Responsibilities

- (1) For Part 121 operations the determination of the fuel load requirement is made by Dispatch personnel and approved by the Captain. If possible, the fuel order should be made two hours before the scheduled departure time. The local agent communicates this information to the fueler. For Part 135 operations the Captain determines the fuel requirement and will advise the fuel vendor. Some local conditions may require a deviation from the above time frame.

C. Duties and Responsibilities

- (1) Empire is responsible for the proper servicing of all Company operated aircraft. This means that even though fueling is usually performed by an outside vendor, Empire is still responsible. Empire's training of the vendor is necessary in order to assure that the vendor follows the

INTRODUCTION

procedures as referenced within this manual. Empire will provide the fuel vendor and fuel servicing personnel a current revision of the Company's Fueling Manual prior to the start of services.

(a) Director of Quality Assurance (DQA)

(1) The DQA or delegate will be responsible for ensuring training verification is complete and documented for newly opened station inspections including fuel vendor training, manual receipt and training records.

✎ **Note:** This requirement does not apply to charter operations, to stations where fueling is not regularly scheduled or where the length of the contract is so short as to preclude the scheduling of an audit.

(b) Quality Auditor

14 CFR: 121.373

(1) The Quality Auditor, as qualified per Empire's PPM Chapter 5, is responsible for conducting new station opening inspections including the verification of complete and documented fuel vendor training, manual receipt, and training records. Audits will be conducted in accordance with the requirements discussed in Empire's Maintenance Policies and Procedures Manual.

(c) Lead Mechanic

(1) The Lead Mechanic may be asked to ensure that the required fuel/vehicle inspections are accomplished by the fuel vendor. This will not be considered a QA audit, but may supplement quality assurance of fueling operations.

D. Fuel Vendors (Part 135 Operations Only)

(1) The Cessna 208B is a general aviation designed aircraft and uses over the wing refueling. This aircraft uses standard techniques to complete refueling. The vendor is responsible to dispense clean contamination-free fuel and to have trained, qualified, and competent personnel to safely dispense fuel. Fueling procedures are located in the aircraft POH and Chapter 7 of this manual.

(2) The Cessna 408 SkyCourier aircraft incorporates both an over-the wing refueling system and a single point pressure refueling system as standard equipment. The single point refueling/defueling system, also known as (SPR) is considered the primary means of refueling and defueling the aircraft.

(a) A fuel filler cap and adapter on each outboard wing near the leading edge provide the means to manually fill each wing tank with fuel. Electrical grounding provisions are provided near each of the wing fuel filler ports for grounding fueling equipment.

(b) The single point refueling/defueling (SPR) adapter assembly is a fuel coupling which connects the refueling/defueling equipment to the aircraft fuel system. The fuel coupling is installed aft of the right engine on the single-point refueling control panel located behind a nacelle access panel and the (SPR) door at approximately BL 116.68 and FS288.71.

(c) Fueling procedures for the Cessna 408 can be found in Chapter 8 of this manual.

(3) If the need would arise for individual or vendor requested training, the aircrew or Empire based maintenance may conduct the fueling training utilizing the Fueling Manual and the Cessna POH.

(4) Training may also be requested through Empire Maintenance Control who will relay information to the Fleet Manager. The Fleet Manager will make the appropriate training arrangements.



1-01-5	
Date:	12/23/22
Revision:	22

INTRODUCTION

- I (5) The Fleet Manager will assure fueling vendors are issued an electronic or paper version of Empire's Fueling Manual as well as a copy of the manual being carried aboard each aircraft. The Fleet Manager will review the "All Jet Fuel Contacts Report" at each revision, against the Library's Fueling Manual distribution list to ensure all vendors have been issued a Fueling Manual. In addition, any new station start-up vendor will be issued a manual at that time.
 - I (6) The DOM will ensure adequate financial and human resources are provided for the safety and quality performance of aircraft fueling.
- E. Risk Analysis (Part 135 Operations Only)
- (1) Audits will be solely based on operational risk analysis and shall be conducted under Audit Requirements of Chapter 9 of this manual.

1-01-6

Date: 12/23/22

Revision: 22

Ensure manual is current before printing.



INTRODUCTION

This Page Intentionally Left Blank



Ensure manual is current before printing.

2-01-1	
Date:	05/22/20
Revision:	21

SAFETY

Chapter 2 Table of Contents

Fueling Safety Requirements.....	2-01-3
General.....	2-01-3
Safety Precautions	2-01-3
Personal Protection	2-01-4
Fuel Vapor.....	2-01-4
Photographs	2-01-4
Precautions during Inclement Weather	2-01-5
Precautions for the Operation of Equipment	2-01-5
Oxygen Servicing	2-01-6
Radar.....	2-01-6

2-01-2

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



SAFETY

This Page Intentionally Left Blank

SAFETY

Fueling Safety Requirements

14 CFR: 121.135(b)(19), Part 135 Operations

A. General

- (1) This section describes safety procedures and considerations that must be observed when fueling Empire aircraft. Safety of people, equipment and facilities is Empire's primary concern. The procedures described in this section apply to personnel who perform fueling operations on Empire aircraft.
- (2) It is not possible to develop a safety regulation for every situation that might arise. Therefore all personnel should conduct themselves at all times with reasonable regard for their own safety and welfare as well as that of other employees, company equipment and cargo.

B. Safety Precautions

⚠ Warning: Handling of aircraft fuels and fueling equipment is extremely hazardous. Misuse of equipment or failure to follow prescribed procedures can result in fires or explosions that can destroy ground equipment and aircraft and can cause bodily harm to personnel in the area. Follow fueling procedures carefully and observe all safety rules.

- (1) The following procedures are standard for Empire. The only exception is when there is a conflict with local airport or Port Authority regulations in which case the local regulations will take precedence.
- (2) Personnel should not depend entirely on mechanical safeguards built into the equipment. Thorough training, extreme care and good judgement are essential for safe operation.
- (3) Smoking or open flames are strictly forbidden in fuel storage areas, in or around fuel trucks and within 50 feet of fueling operations.
- (4) Fueling and defueling operations must be conducted in open air. Under no circumstances is an aircraft to be fueled or defueled while in a hangar.
- (5) Before handling fuel at any storage or dispensing facility, at least two 20-pound B:C dry chemical fire bottles for each truck and one for each hydrant cart should be readily available to the servicing crew. Each fire bottle must be fully serviceable and have a valid inspection tag. Personnel involved with aircraft refueling should be familiar with the types, location and operation of fire extinguishers.
- (6) If the open hose discharge capacity is more than 350 gallons per minute, at least two listed, wheeled fire extinguishers (each having a rating of at least 80-B:C and a minimum capacity of 125 lb. of agent) should be provided.
- (7) Operate fuel dispensing equipment with all due caution to prevent injury to personnel or damage to aircraft and ramp equipment. The individual operator is held responsible for any carelessness or lack of forethought in operating equipment.
- (8) There is a possibility of fuel spilling whenever maintenance is being performed on fueling equipment. Except for emergency maintenance, no maintenance shall be performed on any fueling equipment within 50 feet of an aircraft.
- (9) When possible, aircraft should be positioned 25 feet or more from terminal buildings, hangars, service buildings, or enclosed passenger concourses other than loading walkways to prevent ignition of fumes during fueling.

SAFETY

(10) Wipe spilled fuel off aircraft and equipment.

☞ **Caution:** Do not shut down an operating APU if spillage occurs during fueling.

(11) When servicing or checking any fuel tank on aircraft, trucks, or ground installations, the operator or mechanic should make sure his or her breast pockets do not contain any objects such as tools, pencils, cigarettes, lighters or matches that could fall into a fuel tank.

☞ **Note:** If a foreign object is inadvertently dropped into a fuel tank, the fuel equipment must be removed from service and the person in charge must be notified immediately so that steps may be taken to remove the object and return the unit to service as quickly as possible.

(12) Five feet minimum clearance will be maintained between the aircraft and the refueling unit.

(13) No fueling or defueling will be conducted while an aircraft equipped with a prop brake is being operated in HOTEL mode.

C. Refueling/Defueling with Passengers Boarding, Onboard, or Deplaning

(1) Personnel performing aircraft fueling will comply with the following:

(a) If over wing fueling is necessary, NO passengers will be allowed to board or be on board.

(b) If a fuel spill occurs that:

- Requires significant clean up measures,
- The source of the spill cannot not be stopped,
- The size and location of the spill is determined to be dangerous, or
- The fuel spill ignites

The flight crew shall have the passengers deplane the aircraft immediately and move to a safe area, such as back to the terminal.

(Also refer to the section by the same title found in the Flight Operations Manual)

D. Personal Protection

(1) All fueling personnel must take care to prevent fuel from coming into contact with the skin. Special care must be taken to prevent fuel contact with open cuts, mouth and eyes.

(a) If fuel comes into contact with skin, wash thoroughly with soap and water.

(b) If fuel gets into open cuts, mouth, ears or eyes, immediately wash or rinse the affected parts freely with clear water and obtain medical attention as soon as possible.

(c) If fuel is swallowed, obtain medical or first aid attention as quickly as possible.

(d) If clothing is saturated with fuel, remove clothing as soon as possible and wash the affected skin with soap and water.

E. Fuel Vapor

(1) Fuel vapor is hazardous. Maintain constant vigilance against fuel leakage—either liquid or vapor—in buildings, pump houses, enclosed sumps and refueling pits. Whenever leakage is discovered, stop it promptly and provide ample ventilation. Notify the manager.

(2) Prolonged breathing of fuel vapor, even in nonexplosive concentrations, produces an exhilaration (naphtha jag) followed by dizziness and nausea. In heavier concentrations, prolonged inhalation produces unconsciousness and even death.

SAFETY

- (3) Fuel vapors can be dangerous even in the open air. They are heavier than air, spread out along the ground and are easily carried along by air movement. They can be ignited by automotive exhaust, automotive ignition systems or by any open flame even at a considerable distance from the source of the vapor. This may result in a flashback to the source of the vapor, causing a serious fire. Often the vapor cloud can be seen. Maintain constant vigilance.
- (4) Whenever fuel is being handled, make sure appropriate regulations on adequate bonding are observed.

F. Photography

- (1) Photography using flashbulbs is extremely uncommon. However, flashbulb photography is not permitted within 50 feet of the aircraft during refueling.
- (2) Use of electronic flash photography equipment is allowed except directly below the wing of an aircraft during fueling.

G. Precautions during Inclement Weather

⚡ Warning: Take precautions if strong wind gusts create movement of aircraft wings to the extent that injury to personnel or damage to equipment might result.

- (1) During inclement weather when metal surfaces become wet and slippery, or whenever wind velocity is over 25 mph, extreme care and good judgement must be exercised when over-wing fueling is being accomplished.
- (2) Fueling activities when lightning is present within five miles of the airport requires extreme caution. Follow the local airport and fire codes.

H. Precautions for the Operation of Equipment

- (1) The following types of units and systems must not be operated during the refueling operation:
 - (a) Heat guns and similar devices used for thawing water service panels.
 - (b) Do not operate the APU if over-the-wing fueling is in progress.
- (2) Observe the following precautions relating to aircraft fueling equipment during the refueling operation:
 - (a) Do not use aircraft fueling equipment of any type to service ground equipment while the fueling equipment is connected to the aircraft.
 - (b) Do not leave fuel trucks unattended while the trucks are connected to the aircraft.
 - (c) Do not transfer fuel from one fuel truck to another while either is connected to the aircraft.
- (3) Do not connect or disconnect the ground power unit or aircraft batteries during the fueling operation.
- (4) Before connecting hoses to the aircraft, if ground power is plugged into the aircraft or if the APU is operating, the fueler must alert maintenance personnel (if present) that fueling is about to take place. It is then the mechanics responsibility to see that tools or equipment that may cause an unsafe operation are not operated during fueling.
- (5) During fueling operations, if it becomes necessary to perform service or maintenance work on automotive or electrical equipment, move such equipment a safe distance from the aircraft to preclude the possibility of fire or damage to the aircraft (except for emergency maintenance).
- (6) The following units may be operated during fueling operations provided that all safety precautions listed here for the operation of each unit are complied with:

2-01-6

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



SAFETY

- (a) Ground air conditioning units may be operated for the purpose of air conditioning the aircraft during fueling or defueling.
- ✂ **Note:** During fueling or defueling, it is prohibited to operate any combustion chamber heating unit such as the Herman-Nelson unit, which is primarily an engine heating unit.
- ⚠ **Warning: Starting or stopping the GPU during fueling or defueling is prohibited.**
- (b) The ground power unit (GPU) may be left running and connected.
- (c) The APU may continue operation during pressure fueling or defueling provided it is already in operation.
- (d) Vacuum cleaners may be operated, turned on or off with the switch in the unit and extension cords connected or disconnected in the aircraft. It is not permissible to connect or disconnect extension cord plugs with another cord, an external power supply or an outlet outside of the aircraft without checking first to see that the vacuum cleaner switch is in the OFF position.
- (e) Cargo handling equipment necessary for loading and unloading the aircraft may be operated during fueling.

I. Oxygen Servicing

- (1) Oxygen systems should not be serviced during fueling operations.

J. Radar

- (1) Follow these restrictions where radar is operated:
 - (a) **Airport Surface Detection Radar** – Do not fuel within 100 feet of radar equipment or antennas.
 - (b) **Surveillance Radar** – Usually found on military aircraft and at some airports. Do not fuel within 500 feet.
 - (c) **Ground Control Approach Radar** – Do not fuel within 300 feet of radar equipment or antennas.



Ensure manual is current before printing.

3-01-1	
Date:	05/22/20
Revision:	21

JET FUELS

Chapter 3

Table of Contents

Jet Fuel Designations 14 CFR 121 and 14 CFR 135 Operations.....	3-01-3
General.....	3-01-3
Jet Fuel Color Identification	3-01-3
Jet Fuel Designations	3-01-3
Jet Fuel Color Code	3-01-3
Jet Fuel Tagging and Banding.....	3-01-4

3-01-2

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



JET FUELS

This Page Intentionally Left Blank

JET FUELS

Jet Fuel Designations 14 CFR 121 and 14 CFR 135 Operations

A. General

- (1) This chapter describes the color identification, designations, color codes and labeling, and tagging specifications for fuel used in Empire aircraft, and the procedures that must be followed to ensure safety in handling alternate fuels. Safety procedures described in this chapter are binding on all personnel who perform refueling operations on Empire aircraft.

B. Jet Fuel Color Identification

- (1) Jet Aviation Turbine Fuel Color is colorless to straw-colored. Exceptions should be noted and reported to the person in charge.

C. Jet Fuel Designations

- (1) The following grade classifications are acceptable for use in Empire aircraft:

(a) “Jet A” as listed in ASTM D 1655 Standard specification for aviation turbine fuels and IATA Guidance material for aviation turbine fuel specifications.

(b) “Jet A” as listed in ASTM D 1655 Standard specification for aviation turbine fuels.

(c) JP-5, RT, and TS1 fuels are acceptable alternates.

















✘ **Note:** Jet B or JP-4 are NOT AUTHORIZED for use on the ATR42, ATR72, or C208 aircraft.

✘ **Note:** Empire Airlines has not authorized use of Jet Biofuels.

(d) Jet Fuel Color Code

The labels for jet fuel grades are printed in white letters and numbers on a black background. Black is used because it offers a distinct difference from the red used for Avgas grades.

Airport equipment marking for fuel identification recommendations for airport fuel storage installations and Terminals with dedicated fuel storage handling facilities

Product	Colour Code	Piping and Misc. Equipment	Banding	Labelling
Aviation Gasoline Grades				
Avgas 80	Red	White*		
Avgas 82UL	Purple	White		
Avgas 100	Green	White*		
Avgas 91	Brown	White		
Avgas 100LL	Blue	White*		
Aviation Turbine Fuels				
Jet A	Black	White*		
Jet A-1	Black	White*		
Jet B	Yellow	White*		

* Aluminium is equally suitable, or if piping is all the colour shown for the colour code no banding is necessary.

JET FUELS

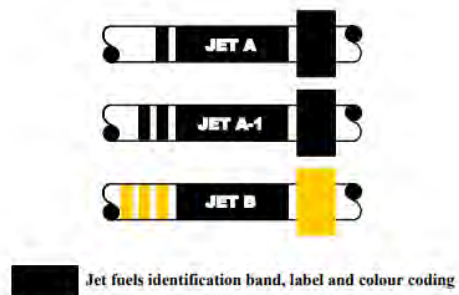
(e) Jet Fuel Tagging and Banding

If product tags are required, they shall be a rectangular metal strip of appropriate size that shall contain the grade label in a legible display.

The tag shall be attached using a durable material. The product tag for Jet A and Jet A-1 shall have a black background with the fuel grade in white lettering. The product tag for Jet B shall have a yellow background with the fuel grade in black lettering.

Jet A Pipelines are marked with one black band.

Jet A-1 pipelines are marked with two black bands. Jet B lines are marked with three yellow bands. If the pipeline is painted the grade-identifying color, no banding is required.





Ensure manual is current before printing.

4-01-1	
Date:	05/22/20
Revision:	21

FUEL SPILLS

Chapter 4 Table of Contents

Fuel Spills	4-01-3
General	4-01-3
Fuel spills during refueling or maintenance of aircraft.	4-01-3
Absorbing fuel spills.....	4-01-3
Size of Spills.....	4-01-3
Small Spills.....	4-01-4
Medium Spills	4-01-4
Large Spills.....	4-01-4

4-01-2

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



FUEL SPILLS

This Page Intentionally Left Blank

FUEL SPILLS**Fuel Spills Part 121/135 Operations****A. General**

- (1) A fuel spill is an accidental and/or abnormal release of fuel from the system. Any normal or usual release of a few drops of fuel associated with a disconnect or other normal fueling operation should not be classified as or called a spill. Any time an amount of fuel must be cleaned up and removed from the area, it is by definition a spill.
 - (2) This section describes the procedures that must be followed in the event of a fuel spill to clean up the spilled fuel and eliminate the danger of fire or fume inhalation. Safety of people, equipment and facilities is of primary concern and the procedures set forth in this section are binding on all personnel who perform fueling operations on any Empire aircraft.
 - (3) Spilled fuel creates a major threat to people, equipment, facilities and cargo. Fuel must therefore always be handled with care. All personnel must regard a fuel spill as a hazard to be eliminated immediately.
 - (4) Every possible precaution should be taken by fueling and maintenance personnel to prevent fuel spills and eliminate the danger these spills present.
- ☠ **Warning:** Under no circumstances is fuel ever to be pumped or drained directly onto the ground, ramp or floor. Fuel must be dispensed into a container.

B. Fuel spills during refueling or maintenance of aircraft.

- (1) If a spill occurs, the person in charge of the fueling or maintenance operation must take the precautionary and cleanup measures specified in this section.
- ☠ **Warning:** If a fuel spill occurs while boarding, deplaning or maintenance operations are underway, that operation should be suspended until safe conditions are reestablished.

C. Absorbing fuel spills.

- (1) Many airports do not allow fuel spills to be flushed away for environmental reasons. Where Empire personnel are under such restrictions, the procedure specified below is substituted for the flushing process.
- ✂ **Note:** Under circumstances where regulations disagree, local regulations prevail. If airport regulations are more stringent than Empire policy, comply with airport regulations. However, in cases where Empire policies are more stringent, the directions in this chapter prevail.
- (2) Absorb the spill using one of the following: Oil dry, absorbent pads or blankets.
 - (3) If using oil dry, apply from the bag, holding it close to the surface to minimize wind loss. Spread to a thickness necessary to blanket the fuel spill. Agitate with a broom to speed absorption. Sweep up the absorbent and dispose of it in the manner approved by local regulations.
 - (4) If using pads, blankets or a similar product, spread the blankets over the spill and leave a minimum of three to five minutes. Fuel will be absorbed from hard surfaces or from standing water. After fuel is picked up, dispose of blankets in the manner approved by local regulations. Materials for absorbing spills should be readily available in fueling areas.

D. Size of Spills

- (1) The fire hazard of fuel spills varies according to the exposed vapor surface. Therefore, spills are classified as small, medium or large depending on the major dimension of the area covered by the spilled fuel. Large and medium spills are classified further as gasoline or kerosene (due to the

FUEL SPILLS

lower vapor hazard of kerosene under normal conditions). If a spill of JP-4 or gasoline occurs, treat it as a gasoline spill. Spills are classified as follows:

- (a) **Small Spill** - Major dimension 18 inches or under. This is the most frequent type of spill, which may occur through minor leakage.
- (b) **Medium Spill** - Gasoline - Major dimension less than 6 feet but more than 18 inches.
- (c) **Medium Spill** - Kerosene - Major dimension less than 15 feet but more than 18 inches.
- (d) **Large Spill** - Gasoline - Major dimension exceeds 6 feet.
- (e) **Large Spill** - Kerosene - Major dimension exceeds 15 feet.

E. Small Spills

- (1) Use the procedure described in “Absorbing Fuel Spills,” or approved local practice. No other special actions are required.

F. Medium Spills

- (1) Stop ground equipment engines within 50 feet of the spill. When necessary, move non-motorized ground equipment to a safe location.
- ⚠ **Warning:** Do not change the status (start or stop) of equipment sitting in a fuel spill.
- (2) Move portable fire fighting equipment into position for immediate use. Under normal circumstances, this provides ample protection. The person in charge of the operation, at his or her discretion, may summon the assistance of local non-Empire Airlines facilities — such as the fire department — and evacuate the aircraft.
- (3) Appoint one person to establish a restricted area around the spill and keep out any unauthorized personnel until all spilled fuel is completely dissipated.
- (4) Clean up spilled fuel using the approved procedure.
- (5) Normal operations may resume when, in the opinion of the person in charge of the operation, no hazard exists to the airplane, ground equipment or people.

G. Large Spills

- (1) If the spill is within five feet of the airplane or, if in the opinion of the agent in charge of the operation, the spill presents a serious fire hazard to the aircraft or refueling vehicle, customers and crew should be evacuated immediately.
- (2) Slowly throttle down and stop the engines of all ground equipment within 50 feet of the spill and turn off the airplane ground blower if one is being operated. Some units of ground equipment contain electrical contacts – motors, etc. – which are potential fuel vapor ignition hazards. Such units must not be operated and if necessary should be moved manually.
- ⚠ **Warning:** Do not change the status (start or stop) of equipment sitting in a fuel spill.
- (3) Move portable fire extinguishing equipment into position for immediate use.
- (4) Obtain assistance from the fire department and other appropriate local facilities.
- (5) Appoint an agent to establish a restricted area around the spill. He or she must restrict the affected area from any operations by any unauthorized persons until all fuel is completely dissipated.
- (6) Clean up spilled fuel using the approved procedure described in this section.
- ⚠ **Warning:** Personnel not involved in cleanup must not enter the spill area until all fuel has been rendered safe.



Ensure manual is current before printing.

4-01-5

Date: 05/22/20

Revision: 21

FUEL SPILLS

- (7) Check area for any residual fuel and repeat application as necessary.
- (8) Normal operations may resume when, in the opinion of the person in charge of the operation, no hazard exists to the airplane, ground equipment and people.

4-01-6

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



FUEL SPILLS

This Page Intentionally Left Blank



Ensure manual is current before printing.

5-01-1	
Date:	05/22/20
Revision:	21

STANDARDS FOR JET QUALITY CONTROL

**Chapter 5
Table of Contents**

Introduction.....5-01-3
General.....5-01-3

5-01-2

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



STANDARDS FOR JET QUALITY CONTROL

This Page Intentionally Left Blank

STANDARDS FOR JET QUALITY CONTROL

Introduction

- A.** This chapter is intended to provide guidance to the user covering the safe storage and distribution of quality jet fuel at airports as currently practiced in the commercial aviation industry. Due to the wide diversity of airport fueling operations, it is not intended to be all-inclusive. Technical information, along with competent judgment, should be considered and followed at all times when overseeing aviation fueling operations. In addition, Empire Airlines and its fueling vendors should comply with all applicable rules, regulations, restrictions, ordinances, and other laws of federal, state, local, and airport entities relating to fuel storage and distribution.
- B.** Empire Airlines and member airlines of Airlines for America (A4A) recognize the importance of using quality jet fuel for ensuring the highest degree of flight safety. To achieve this goal, ATA Specification 103, entitled “Standards for Jet Fuel Quality Control at Airports,” was developed by member airlines to cover fuel distribution facilities and fuel quality control procedures at airports servicing airline operations.
- C.** This standard identifies commonly recognized industry inspection procedures and safety checks of jet fuel storage and distribution facilities at airports that will help minimize introduction of contaminated or unacceptable jet fuel form being delivered to airline aircraft. It is important to note that additional facilities and testing procedures may be required at individual airports based on fuel system complexity and local operating conditions. Alternative procedures and use of non-standard facilities and equipment may also be recognized and determined acceptable for achieving the above safety requirements based on extenuating circumstances.
- D.** Empire Airlines has incorporated provisions of ATA Specification 103 into the Fueling Manual. ATA Specification 103 does not, in itself, impose any performance obligation on any fuel supplier, fuel storage facility, fuel transporter, or any other entity. ATA Specification 103 is effective only the extent it is adopted by other airlines and fueling vendors and incorporated into the operating manuals.

General

This chapter covers jet fuel handling issues and procedures that are general in nature and are applicable to all facets of jet fuel handling at airports. Empire Airlines shall use the ATA 103 Specification (as revised) to cover Standards for Jet Fuel Quality Control.

- A.** Chapter 1 of ATA Specification 103 (as revised) will serve as Empire policy for the following:
 - (1) Scope
 - (2) Fueling Records
 - (3) Notification of New or Modified Equipment
 - (4) Variances and Waivers
 - (5) Fuel Contamination
 - (6) Diesel Exhaust Fluid (DEF) Contamination
 - (7) Additives and Additive Handling
 - (8) Prevention of Mis-fueling
 - (9) Defueled Product
 - (10) Inoperative Systems
 - (11) Training and Qualifications
 - (12) Deficiency Reporting

5-01-4

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



STANDARDS FOR JET QUALITY CONTROL

(13) Tool Calibrations

(14) Operations and Maintenance Manuals

(15) Aviation Fuel Regulatory Bulletins and Directives

B. Chapter 2 of ATA Specification 103 (as revised) will serve as policy for:

(1) Jet Fuel Specification and Quality Requirements for Acceptance

(2) Fuel Receipts into Airport Storage

(3) Fuel Storage Facility Requirements

(4) Fuel Facility Checks

(5) Hydrant Systems Requirements and Checks

(6) Aircraft Fueling Equipment Requirements and Checks

(7) Refueling Truck Loading

C. Chapter 3 of ATA Specification 103 (as revised) will serve as policy for fuel procedures and testing:

(1) Including appearance tests

(2) Membrane Color Filtration Tests

(3) Free Water Tests

(4) Fuel Density Testing (API Gravity)

(5) Water Separation Testing (MSEP or WSI)

(6) Fuel Odor

(7) Detection of Microorganisms

(8) Sampling Procedures and Sample Containers

(9) Filter Vessel Differential Pressure

(10) Bonding Equipment Checks and Maintenance

(11) Fuel Storage Tank Inspection and Cleaning

(12) Water Defense Systems

(13) Filter Element Changes, Replacement Criteria

(14) Flushing Standards and Specifications

(15) Overwing Fueling and Mis-fueling Prevention

(16) Aircraft Fueling Nozzle Strainer Cleaning Procedure for Fueling Equipment with Filter Monitors

(17) Best Practices for Handling/Use of DEF on Airport

D. Chapter 4 of ATA Specification 103 (as revised) will serve as policy for

(1) Terms and Definitions used associated with Fueling

E. Chapter 5 of ATA Specification 103 (as revised) will serve as policy for

(1) Waiver and Variance requests and granting of such requests

F. Chapter 6 of ATA Specification 103 (as revised) will serve as policy for

(1) Use of Forms



Ensure manual is current before printing.

6-01-1	
Date:	05/22/20
Revision:	21

ATR FUEL SERVICING

Chapter 6

Table of Contents

Section 1 ATR42 Fuel Servicing

General	6-01-3
Fuel	6-01-4
Refueling	6-01-4
Defueling	6-01-6

Section 2 ATR72 Fuel Servicing

General	6-02-1
Fuel	6-02-1
Refueling	6-02-1
Defueling	6-02-4

6-01-2

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



ATR FUEL SERVICING

This Page Intentionally Left Blank

6-01-3	
Date:	05/22/20
Revision:	21

ATR42 FUEL SERVICING

14 CFR: 121.135(b)(19)

General

A. Servicing/Bonding Points

(1) Servicing points are illustrated on Figure 1.

Caution: During fuel servicing operations:

- Make sure aircraft is electrically safe.
- Check servicing equipment is clear of aircraft movable surfaces.
- Check servicing equipment will not interfere when aircraft lowers during refueling.

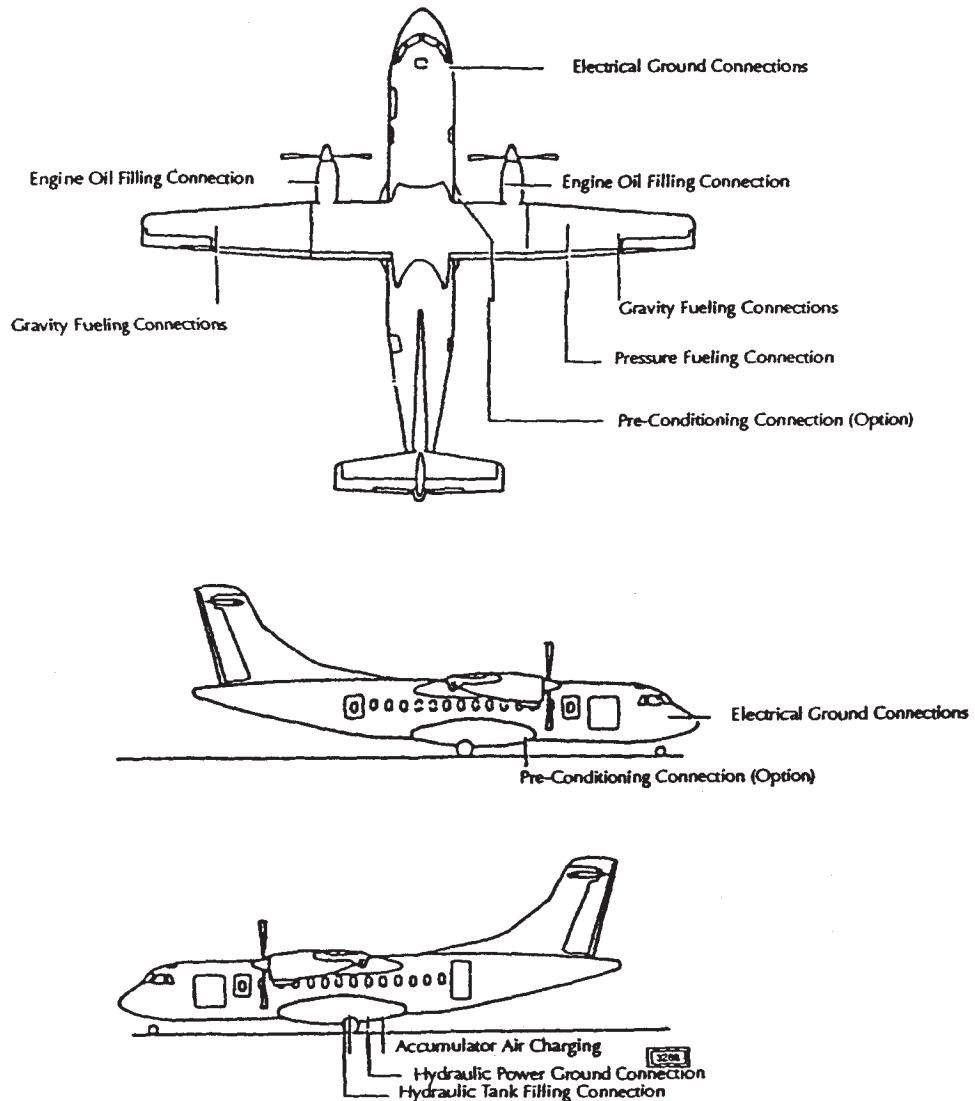


Figure 1

ATR42 FUEL SERVICING

Fuel

A. Data

- (1) Wing tank capacities are shown in Table 1. A single-point refuel/defuel coupling is located on the outboard leading edge of the right wing. The refuel/defuel panel is located in the right landing gear fairing. Overwing refueling capability is provided by tank filler receptacle on the top outboard end of the left and right wing. Refer to figure 1. Fuel must conform to the specifications below.
- (2) The following table shows usable fuel tank capacities and fuel weights at sea level and standard temperature and pressure.

Location	US Gallons	Pounds
Left Wing	756.6	4960
Right Wing	756.6	4960

Table 1

B. Approved Fuel Specifications

(1) Approved fuels:

- (a) Jet A
- (b) Jet A1
- (c) JP-5 (alternate)
- (d) RT (alternate)
- (e) TS1 (alternate)

C. Approved Anti-Ice Fuel Additives.

- (1) Anti-icing additives must be used on FedEx-owned aircraft unless specifically omitted at the direction of the Director of Quality Assurance.
- (2) Empire (Ohana) operations in Hawaii are exempt from the requirements of Empire Fueling Manual 6-01-4 C. (3), and do not require fuel anti-icing additives.
- (3) Anti-icing fuel additives meeting MIL-DTL-27686E, MIL-DTL-85470A, or Phillips PFA 55MB may be used in a concentration not to exceed .15 percent by volume.

Refueling

A. Precautions:

- (1) When refueling do not position any ground equipment under the aircraft (aircraft will settle during refueling).
- (2) Check that the aircraft is electrically bonded. Bonding must be carried out before any fueling operation to prevent fire or explosion due to static discharge. Bonding is normally accomplished to the grounding lug located on the right main landing gear.

B. Pressure refueling

⚠ Warning: Observe all necessary safety precautions and practices during any fueling operation.

- (1) Check that only approved fuel is to be used (reference B(1)).
- (2) Check that the electrical bonding connection is made. Standard bonding location for the ATR42 aircraft is the grounding lug on the right main gear.

ATR42 FUEL SERVICING

⚠ Warning: Aircraft and fueling facility must be correctly bonded before any fueling operation to prevent fire or explosion due to the discharge of static electricity.

(3) Connect DC external power to the aircraft, if available.

(4) Open the REFUEL/DEFUEL control panel access door located on the right main gear fairing.

(5) Check the quantity gauges at the control panel to determine the fueling requirements.

(6) Remove the coupling cap from the fueling connection and connect the fueling hose.

(7) Select the required amount of fuel using the pre-select thumbwheel.

🔧 **Note:** If pre-select system is used, set 100 lbs. less than the total quantity desired.

(8) Place REFUEL/OFF/DEFUEL switch in the REFUEL position.

(9) Place REFUEL VALVE switches in NORM position.

🔧 **Note:** When refueling only one tank, or for partial servicing of only one tank, select SHUT on the valve for the tank not to be fueled. The associated tank valve light should go out.

(10) To test high level sensors, press FQI test (this is done when complete fueling is being accomplished). A complete test is indicated by all digits showing an “8” on the quantity indicator.

👉 **Caution:** Maximum delivery pressure during refueling operations is 50 PSI.

(11) REFUELING/LH and RH/VALVE/OPEN indicator lights come on when refueling is in progress. Nozzle pressure should not exceed 40 psig under conditions of constant flow.

(a) Pressure in excess of 40 psig, but less than 50 psig, indicates an out of adjustment or malfunctioning primary pressure control. Investigate and correct, as necessary.

(b) Immediately remove fueling unit from service if pressure exceeds 50 psig.

🔧 **Note:** If pre-select system is used, use normal pressure until cut out.

(12) Monitor fueling until complete.

(13) When fueling is complete select REFUEL/OFF/DEFUEL switch to OFF.

(14) Disconnect fuel hose from aircraft. Reinstall coupling cap.

(15) Disconnect bonding connection.

(16) Return all panels to the closed position.

B. Gravity Refueling

👉 **Caution:** Before placing servicing mats over wing skins, ensure that wing skins are dry, and mats are dry and uncontaminated. Do not leave servicing mats in position on completion of work as this could result in surface corrosion.

⚠ Warning: Observe all necessary safety precautions and practices during any fueling operations.

⚠ Warning: Aircraft and fueling facility must be correctly bonded before any fueling operation to prevent fire or explosion due to discharge of static electricity.

(1) Ensure that the servicing mat is free from contamination (metal shavings, etc.), and install servicing mat over refueling area.

ATR42 FUEL SERVICING

- (2) Servicing mats should be thick enough and large enough to prevent damage to the wing and painted surface surrounding the fuel opening.
- (a) Check that only approved fuel is to be used (reference B(1)).
 - (b) Observe safety precautions in this manual.
 - (c) Check that the electrical bonding connection is made. Standard bonding location for the ATR42 aircraft is the grounding lug on the right main gear.
 - (d) Connect DC external power to the aircraft, if available.
 - (e) Open the refuel/defuel control panel access door located on the right main gear fairing.
 - (f) Using a step ladder, bring the refueling hose over the wing leading edge. Remove filler cap(s) from tanks to be refueled. connect refueling hose bonding lead to bonding socket outboard of filler cap.
 - (g) Remove overwing refueling protective cap and insert fuel nozzle insuring not to damage the filter inside the wing structure.
 - ☝ **Caution:** Do not use screwdrivers, etc. to remove the caps. This results in damage to the caps.
 - (h) Monitor the fueling at the refuel/defuel control panel.
 - (i) When fueling is complete, remove the fueling nozzle and reinstall the overwing refueling cap insuring that the cap has a positive lock.
 - (j) Remove the servicing mat.
 - ⚠ **Warning:** *Any damage incurred to the wing during overwing refueling (such as dropping the fuel nozzle on the wing, or scratching the painted surface) must be reported to Empire Maintenance Control immediately.*
 - (k) Close REFUEL/DEFUEL control panel door.
 - (l) Alternate means of verifying fuel contents can be checked by using manual magnetic indicators located under each wing.

Defueling

- ⚠ **Warning:** Observe all necessary safety precautions and practices during any fueling operation.
- A. Check that the aircraft is electrically bonded. Bonding must be carried out before any fueling operation to prevent fire or explosion due to static discharge. Bonding is normally accomplished to the grounding lug located on the right main gear.
 - B. Pressure defueling.
 - ⚠ **Warning:** Aircraft and fueling facility must be correctly bonded before any fueling operation, to prevent fire or explosion due to the discharge of static electricity.
 - (1) Connect DC external power to the aircraft, if available.
 - (2) Open the REFUEL/DEFUEL control panel coupling access doors located on the RH outboard leading edge.
 - (3) Remove the coupling cap and connect the fuel hose to the aircraft.

ATR42 FUEL SERVICING

- (4) Place the REFUEL/OFF/DEFUEL switch in the DEFUEL position.
- (5) Lift guards on the refuel valves and place switches in the OPEN position.
 - ✎ **Note:** When defueling only one tank, or for partial defueling of only one tank, select SHUT on the valve for the tank not to be defueled. The associated tank valve light should go out.
- (6) Begin defueling. Verify the tank indicator lights open. Maximum defueling pressure is 11 psi.
- (7) When defueling is complete, place the REFUEL/OFF/DEFUEL switch in the OFF position.
- (8) Place refuel valves in the NORM position. Replace the guards.
- (9) Disconnect the fuel hose from the aircraft.
- (10) Replace the coupling cap and close all refueling panel doors.
- (11) Shut off electrical power to aircraft.

6-01-8

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



ATR42 FUEL SERVICING

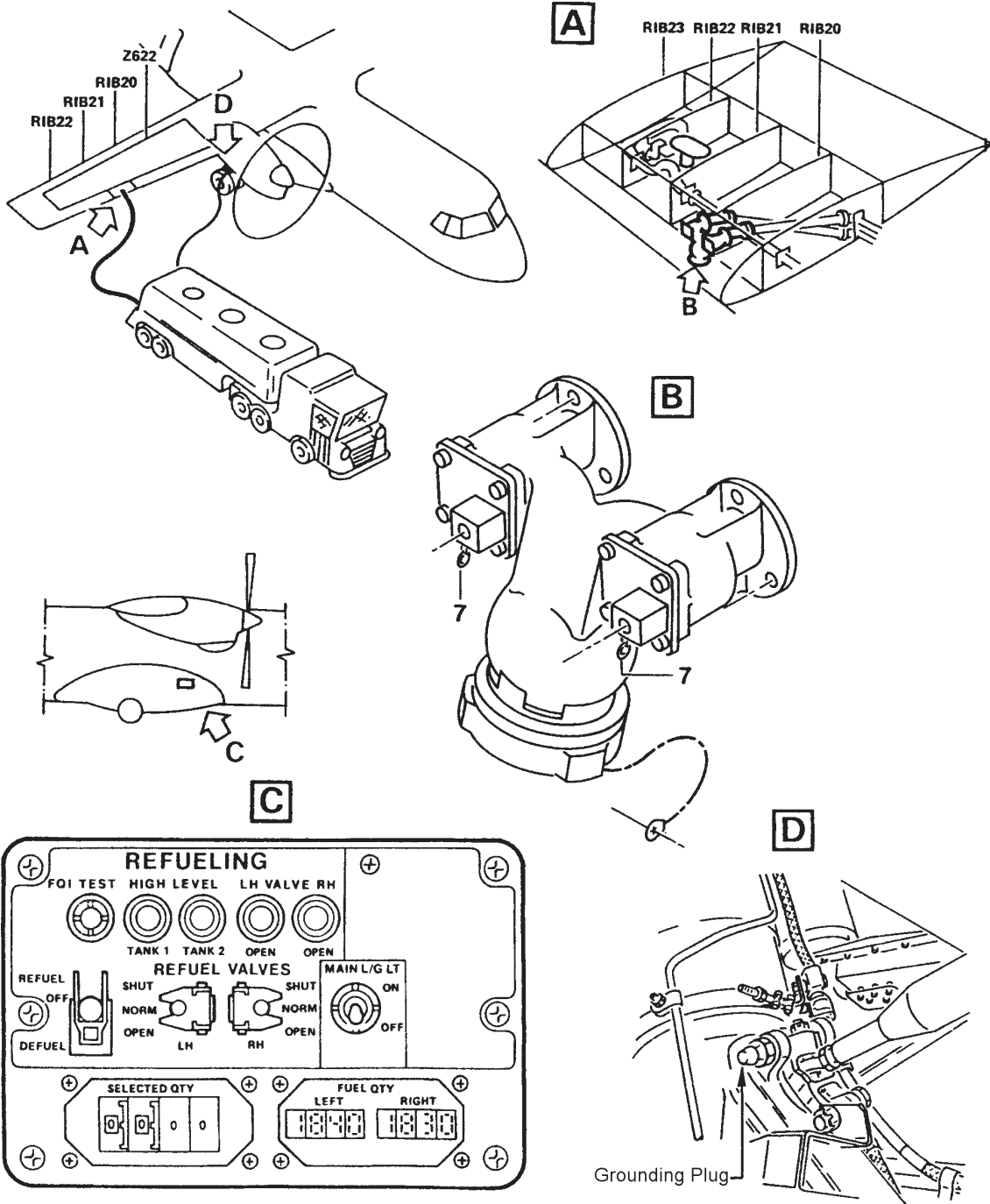


Figure 2 Refueling/Defueling

ATR72 FUEL SERVICING

14 CFR: 121.135(b)(19)

General

A. Servicing/Bonding Points

(1) Servicing points are illustrated on Figure 1.

☝ **Caution:** During fuel servicing operations:

- Make sure aircraft is electrically safe.
- Check servicing equipment is clear of aircraft movable surfaces.
- Check servicing equipment will not interfere when aircraft lowers during refueling.

Fuel

A. Data

(1) Wing tank capacities are shown in Table 1. Pressure refueling facilities are provided by single-point pressure refueling receptacle and a refuel/defuel panel located in the RH MLG fairing. Overwing refueling capability is provided by tank filler receptacle on the top outboard end of the left and right wing. Refer to figure 1. Fuel must conform to the specifications below.

(2) The following table shows usable fuel tank capacities and fuel weights at sea level and standard temperature and pressure.

Location	US Gallons	Pounds
Left Wing	840.0	5500
Right Wing	840.0	5500

Table 1

B. Approved Fuel Specifications

(1) Approved fuels: fuels which conform to PWC 204 (SB PW20004) including the following:

- (a) Jet A
- (b) Jet A1
- (c) JP-5 (alternate)
- (d) RT (alternate)
- (e) TS1 (alternate)

C. Approved Anti-Ice Fuel Additives.

- (1) Anti-icing additives must be used on FedEx-owned aircraft unless specifically omitted at the direction of the Director of Quality Assurance.
- (2) Empire (Ohana) operations in Hawaii are exempt from the requirements of Empire Fueling Manual 6-02-1 C. (3), and do not require fuel anti-icing additives.
- (3) Anti-icing fuel additives meeting MIL-DTL-27686E, MIL-DTL-85470A, or Phillips PFA 55MB may be used in a concentration not to exceed .15 percent by volume.

Refueling

A. Precautions:

- (1) When refueling do not position any ground equipment under the aircraft (aircraft will settle during refueling).

6-02-2

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



ATR72 FUEL SERVICING

- (2) Check that the aircraft is electrically bonded. Bonding must be carried out before any fueling operation to prevent fire or explosion due to static discharge. Bonding is normally accomplished to the grounding lug located on the right main landing gear.

B. Pressure refueling

- ⚠ **Warning: Observe all necessary safety precautions and practices during any fueling operation.**

- (1) Check that only approved fuel is to be used (reference B(1)).
- (2) Check that the electrical bonding connection is made. Standard bonding location for the ATR72 aircraft is the grounding lug on the right main gear.

- ⚠ **Warning: Aircraft and fueling facility must be correctly bonded before any fueling operation to prevent fire or explosion due to the discharge of static electricity.**

- (3) Connect DC external power to the aircraft, if available.
- (4) Open the REFUEL/DEFUEL control panel access door located on the right main gear fairing.
- (5) Check the quantity gauges at the control panel to determine the fueling requirements.
- (6) Remove the coupling cap from the fueling connection and connect the fueling hose.
- (7) Select the required amount of fuel using the pre-select thumbwheel.
 - 🔍 **Note:** If pre-select system is used, set 100 lbs. less than the total quantity desired.
- (8) Place REFUEL/OFF/DEFUEL switch in the REFUEL position.
- (9) Place REFUEL VALVE switches in NORM position.
 - 🔍 **Note:** When refueling only one tank, or for partial servicing of only one tank, select SHUT on the valve for the tank not to be fueled. The associated tank valve light should go out.
- (10) To test high level sensors, press FQI test (this is done when complete fueling is being accomplished). A complete test is indicated by all digits showing an "8" on the quantity indicator.

- 👉 **Caution:** Maximum delivery pressure during refueling operations is 50 PSI.

- (11) REFUELING/LH and RH/VALVE/OPEN indicator lights come on when refueling is in progress. Nozzle pressure should not exceed 40 psig under conditions of constant flow.
 - (a) Pressure in excess of 40 psig, but less than 50 psig, indicates an out of adjustment or malfunctioning primary pressure control. Investigate and correct, as necessary.
 - (b) Immediately remove fueling unit from service if pressure exceeds 50 psig.

- 🔍 **Note:** If pre-select system is used, use normal pressure until cut out.

- (12) Monitor fueling until complete.
- (13) When fueling is complete select REFUEL/OFF/DEFUEL switch to OFF.
- (14) Disconnect fuel hose from aircraft. Reinstall coupling cap.
- (15) Disconnect bonding connection.
- (16) Return all panels to the closed position.
- (17) Shut off electrical power to aircraft.

ATR72 FUEL SERVICING**C. Gravity Refueling**

- ⚠ Caution:** Before placing servicing mats over wing skins, ensure that wing skins are dry, and mats are dry and uncontaminated. Do not leave servicing mats in position on completion of work as this could result in surface corrosion.
- ⚠ Warning:** Observe all necessary safety precautions and practices during any fueling operations.
- ⚠ Warning:** Aircraft and fueling facility must be correctly bonded before any fueling operation to prevent fire or explosion due to discharge of static electricity.
- (1) Ensure that the servicing mat is free from contamination (metal shavings, etc.), and install servicing mat over refueling area.
- (2) Servicing mats should be thick enough and large enough to prevent damage to the wing and painted surface surrounding the fuel opening.
- (a) Check that only approved fuel is to be used (reference B(1)).
- (b) Observe safety precautions in this manual.
- (c) Check that the electrical bonding connection is made. Standard bonding location for the ATR72 aircraft is the grounding lug on the right main gear.
- (d) Connect DC external power to the aircraft, if available.
- (e) Open the refuel/defuel control panel access door located on the right main gear fairing.
- (f) Using a step ladder, bring the refueling hose over the wing leading edge. Remove filler cap(s) from tanks to be refueled. Connect refueling hose bonding lead to bonding socket outboard of filler cap.
- (g) Remove overwing refueling protective cap and insert fuel nozzle insuring not to damage the filter inside the wing structure.
- ⚠ Caution:** Do not use screwdrivers, etc. to remove the caps. This results in damage to the caps.
- (h) Monitor the fueling at the refuel/defuel control panel.
- (i) When fueling is complete, remove the fueling nozzle and reinstall the overwing refueling cap insuring that the cap has a positive lock.
- (j) Remove the servicing mat.
- ⚠ Warning:** Any damage incurred to the wing during overwing refueling (such as dropping the fuel nozzle on the wing, or scratching the painted surface) *must be reported to Empire Maintenance Control immediately.*
- (k) Close REFUEL/DEFUEL control panel door.
- (l) Alternate means of verifying fuel contents can be checked by using manual magnetic indicators located under each wing.

6-02-4

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



ATR72 FUEL SERVICING

Defueling

⚠ Warning: Observe all necessary safety precautions and practices during any fueling operation.

A. Check that the aircraft is electrically bonded. Bonding must be carried out before any fueling operation to prevent fire or explosion due to static discharge. Bonding is normally accomplished to the grounding lug located on the right main gear.

B. Pressure defueling.

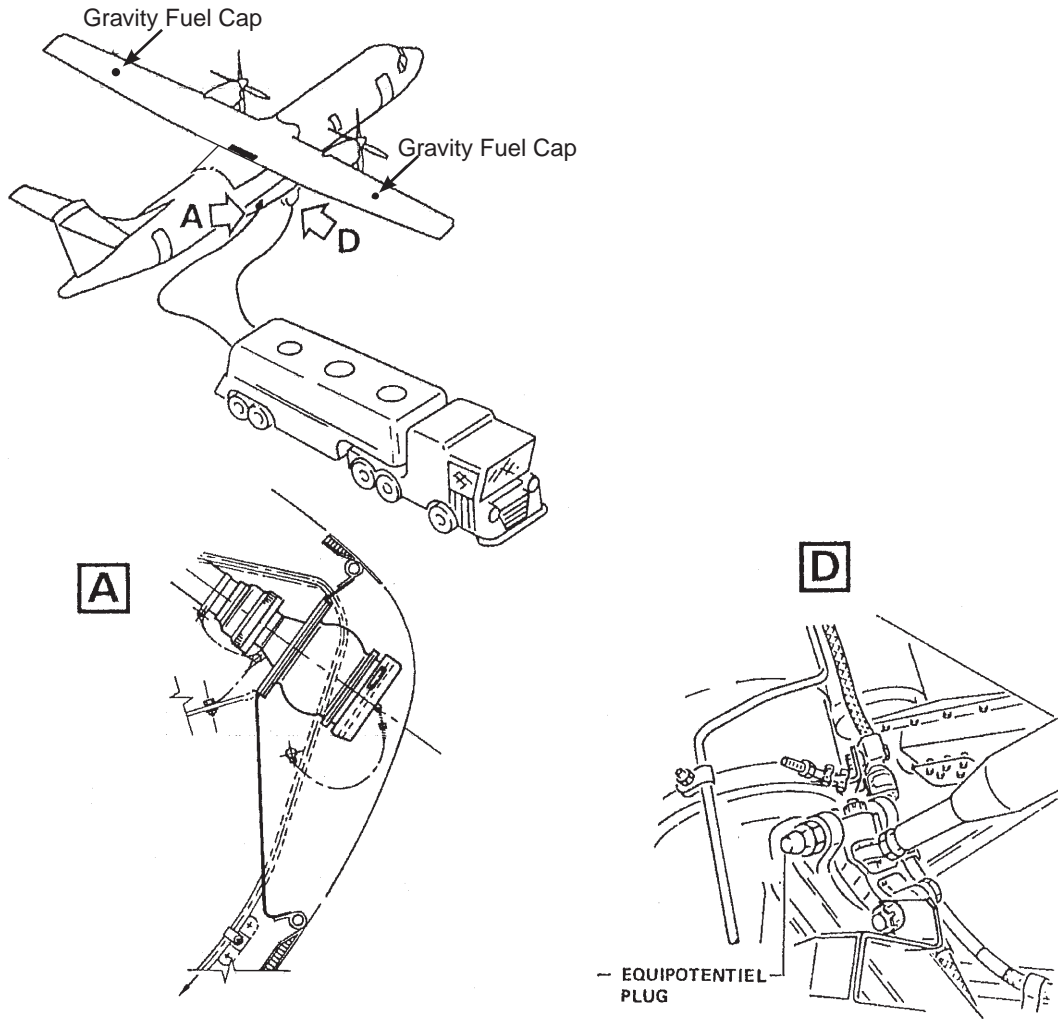
⚠ Warning: Aircraft and fueling facility must be correctly bonded before any fueling operation, to prevent fire or explosion due to the discharge of static electricity.

- (1) Connect DC external power to the aircraft, if available.
- (2) Open the REFUEL/DEFUEL control panel coupling access doors located on the right main gear fairing.
- (3) Remove the coupling cap and connect the fuel hose to the aircraft.
- (4) Place the REFUEL/OFF/DEFUEL switch in the DEFUEL position.
- (5) Lift guards on the refuel valves and place switches in the OPEN position.

🔍 Note: When defueling only one tank, or for partial defueling of only one tank, select SHUT on the valve for the tank not to be defueled. The associated tank valve light should go out.

- (6) Begin defueling. Verify the tank indicator lights open. Maximum defueling pressure is 11 psi.
- (7) When defueling is complete, place the REFUEL/OFF/DEFUEL switch in the OFF position.
- (8) Place refuel valves in the NORM position. Replace the guards.
- (9) On refuel/defuel panel, place the Surge/Valve switch in OPEN position.
- (10) Perform draining operation using fuel truck suction.
- (11) Place the Surge/Valve switch in CLOSED position
- (12) Disconnect the fuel hose from the aircraft.
- (13) Replace the coupling cap and close all refueling panel doors.
- (14) Shut off electrical power to aircraft.

ATR72 FUEL SERVICING



5004VU

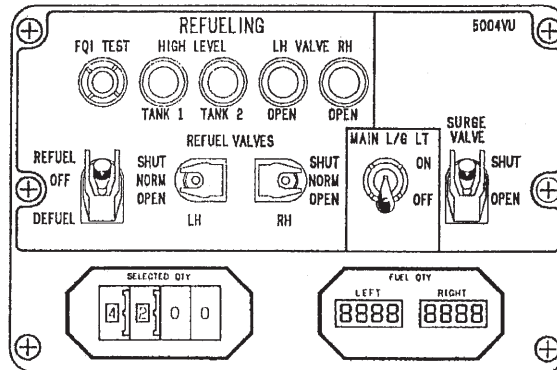


Figure 1 Refueling/Defueling

6-02-6

Date: 05/22/20

Revision: 21

Ensure manual is current before printing.



ATR72 FUEL SERVICING

This Page Intentionally Left Blank



Ensure manual is current before printing.

7-01-1	
Date:	12/23/22
Revision:	22

CESSNA 208 FUEL SERVICING

Chapter 7

Table of Contents

General.....	7-01-3
Fueling Procedures.....	7-01-4
Checking Fuel in Wing Tank.....	7-01-5
Defueling.....	7-01-5

7-01-2

Date: 12/23/22

Revision: 22

Ensure manual is current before printing.



CESSNA 208 FUEL SERVICING

This Page Intentionally Left Blank

CESSNA 208 FUEL SERVICING

General

A. Fuel

(1) The fuel used in the airplane must have an anti-icing additive incorporated, or must be added to the fuel when the tanks are filled. The fuel may contain anti-icing and biocidal additives, if desired.

⚠ **Caution:** Lack of anti-icing additive may cause fuel filter or line icing and subsequent engine flameout. Lack of anti-icing may also cause growth of fungi in the fuel tank.

B. Fuel Tanks.

(1) The fuel filler caps are located on top of the wing, forward of the spoilers. See Figure 1.

C. Fuel Drains

(1) Fuel drains are provided at various locations throughout the fuel system for drainage of water and sediment from the fuel system. See Figure 1.

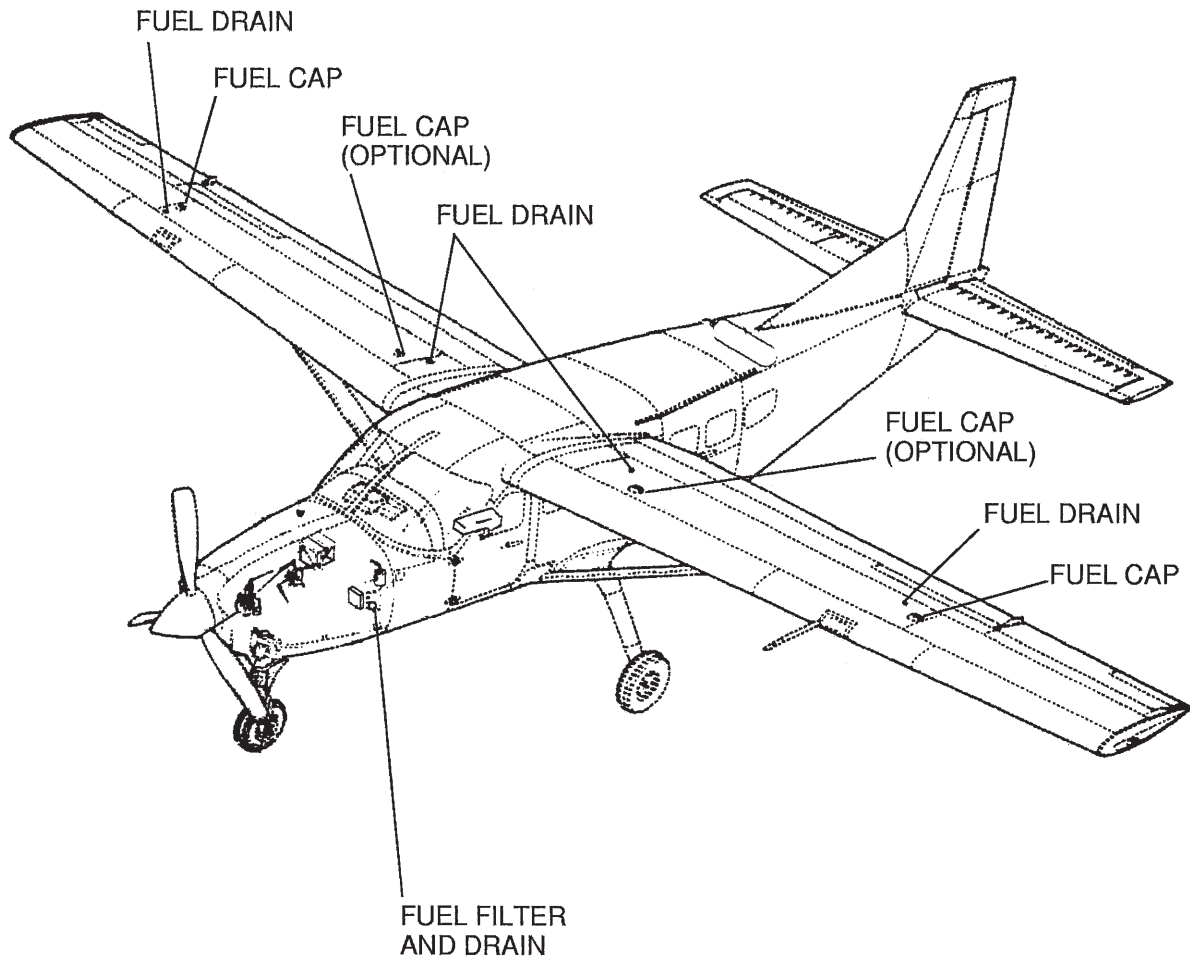


Figure 1

7-01-4

Date: 12/23/22

Revision: 22

Ensure manual is current before printing.



CESSNA 208 FUEL SERVICING

D. Fuel Capacity

System	US	Imperial	Metric
Fuel Capacity (beginning with airplanes 20800130 and 208B0089 when modified per SK208-52)	335.6 Gallons	279.45 Gallons	1270.3 Liters
Fuel Capacity (airplanes through 20800129 and 208B0088 when not modified per SK208-52)	335.0 Gallons	278.95 Gallons	1268.0 Liters
Usable Fuel	332.0 Gallons	276.25 Gallons	1257 Liters

E. Approved Fuels

(1) The following table lists approved fuels for use in the airplane.

⚠ Caution: Aviation gasoline may be used for a maximum of 150 hours between engine overhauls; or a mixture of one part aviation gasoline and three parts of Jet A, Jet A-1 or JP-5 may be used for a maximum of 450 hours between engine overhauls.

🔍 Note: Fuels must comply with Pratt & Whitney Engine Service Bulletin number 1244 and all supplements and revisions.

Type of Fuel	Specification	Type
Jet A	ASTM-D-1655	
Jet A-1	ASTM-D-1655	
Jet B	ASTM-D-1655	
JP-1	MIL-L-5616	
JP-4	MIL-T-5624	(NATO F-40)
JP-5	MIL-T-5624	(NATO F43 or F44)
JP-8	MIL-T-83133A	(Russian Type)
RT	GOST-10227-86	(Russian Type)
TS-1	GOST-10227-86	(Russian Type)
Alternate Emergency Fuel (Refer to caution)	All grades of military and commercial aviation gasoline.	

🔍 Note: Fuel used must contain anti-icing fuel additive in compliance with MIL-DTL-27686 (EGME), MIL-DTL-85470, (DIEGME), or Phillips PFA 55 MB.

Fueling Procedures

⚠ Warning: Ensure that fuel supply unit is bonded to airplane.

A. Position the fueling vehicle in front of the nose of the aircraft. Set the parking brake and apply chocks to the wheels.

🔍 Note: Electrical equipment, switches and wiring must be of a type or design approved for use in hazardous locations.

B. Bond the fueling vehicle to either one of the two wing tiedown lugs at the wing strut.

C. Use a ladder of sufficient height to safely access the fuel filler port.

D. Empire Airlines prefers the use of protective wing mats to prevent damage to the wing surface during fueling.

CESSNA 208 FUEL SERVICING

- E. Deliver the required fuel load while maintaining contact of the fueling nozzle to the fill port.
- F. After fueling is complete, install and close the fuel tank cap.
- G. Remove the fueling mat, remove the ladder, and refuel the opposite wing if required.
- H. Remove all the equipment in reverse order as installed.

✎ **Note:** Verify that the fueling caps are installed correctly before removing the fueling truck.

✎ **Note:** Each wing can be filled to capacity before filling the opposite wing.

Checking Fuel in Wing Tank

A. Fuel Samples

- (1) Sampling of fuel, and checking and draining sediment from the tanks, are the main purposes of the poppet-type drain valves installed on the lower side of the fuel tank. The valves are installed mainly in the vicinity of the fuel tank sump area.
- (2) The poppet-type valve is a spring-loaded poppet, housed in the drain valve body. The poppet is spring-loaded in the closed position. The slot in the end of the poppet allows for screwdriver operation. To operate the valve, depress the slot end to open the valve being careful not to rotate the valve slot. Release the slot end to return the valve to the closed position.
- (3) The fuel must be drained into a clear, clean container suitable to permit a careful visual examination for water and other contaminants. To aid in distinguishing water from fuel, one or two drops of soluble food coloring may be added to the container prior to draining fuel samples. The food coloring readily mixes with the water but not with fuel making water-detection easier.

Defueling

A. Defueling fuel bays

- (1) Ground airplane to suitable ground or stake.
- (2) Ensure battery switch is turned OFF.
- (3) Turn fuel selector valves OFF.
- (4) Remove filler cap(s) from tank(s) to be defueled; insert defueling nozzle.
- (5) Remove as much fuel as possible with defueling nozzle.
- (6) Remove drain valves from bottom of fuel tank and drain remaining fuel.

7-01-6

Date: 12/23/22

Revision: 22

Ensure manual is current before printing.



CESSNA 208 FUEL SERVICING

This Page Intentionally Left Blank



Ensure manual is current before printing.

8-01-1	
Date:	12/23/22
Revision:	22

CESSNA 408 FUEL SERVICING

Chapter 8

Table of Contents

General.....	8-01-3
Fuel	8-01-3
Fuel Tanks	8-01-4
Approved Fuel Types and Fuel Tank Temperature Limits (Table 3)	8-01-4
Fueling Procedures.....	8-01-5
Single-Point Refueling (SPR).....	8-01-5
Overwing Refueling.....	8-01-9
Fuel Level Check	8-01-10
Defueling.....	8-01-12

8-01-2

Date: 12/23/22

Revision: 22

Ensure manual is current before printing.



CESSNA 408 FUEL SERVICING

This Page Intentionally Left Blank

CESSNA 408 FUEL SERVICING

General

A. Fuel

For fuel replenishing, refer to Table 2

Note: For data about the fuel types and specifications to use the Model 408, refer to the Model 408 Approved Airplane Flight Manual.

Tank	Overwing Volume	Overwing Weight	Single Point Volume	Single Point Weight
Left Wing	354 gallons (1340 L)	2371 pounds (1075 kg)	354 gallons (1340 L)	2371 pounds (1075 kg)
Right Wing	354 gallons (1340 L)	2371 pounds (1075 kg)	354 gallons (1340 L)	2371 pounds (1075 kg)

(1) The aircraft incorporates both over-the-wing refueling ports and a single point pressure refueling system as standard equipment. The single point refueling/defueling system is considered the primary means for refueling and defueling the aircraft (Figure 1&2 of this section). However, each fuel tank may be fueled via a gravity filler port located on the outboard side of each main tank (Figure 3 of this section). The fuel fill cap and adapter on each wing provide the means to manually fill each wing tank with fuel. The fuel system is configured to eliminate the need to use fuel anti-icing additives in normal operations however, fuel anti-icing additives are required by Empire Airlines. An electric sensor is used for cockpit indication of a primary fuel filter impending bypass.

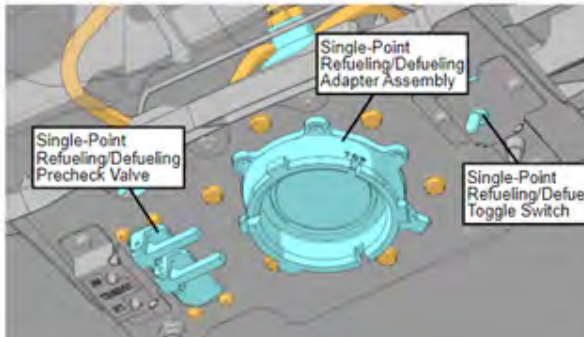


Figure 1

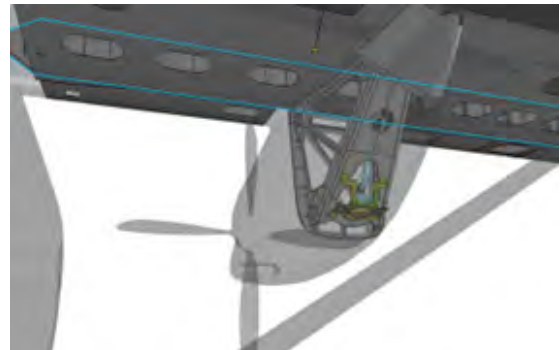


Figure 2



Figure 3

CESSNA 408 FUEL SERVICING

B. Fuel Tanks

- (1) The total fuel capacity is 4,740 lbs. There are two separate fuel tanks (one vented integral tank in each wing formed by the front and rear spars). Flapper valves throughout the tank prevent the flow of fuel outboard during roll maneuvers. Each independent wing tank system includes an integral hopper tank. Each hopper tank contains a main ejector pump, an electric boost pump and a defuel valve.
- (2) Fuel drain valves are located on the lower skin of each wing with two per side (Figure 4 of this section) inboard of each engine.

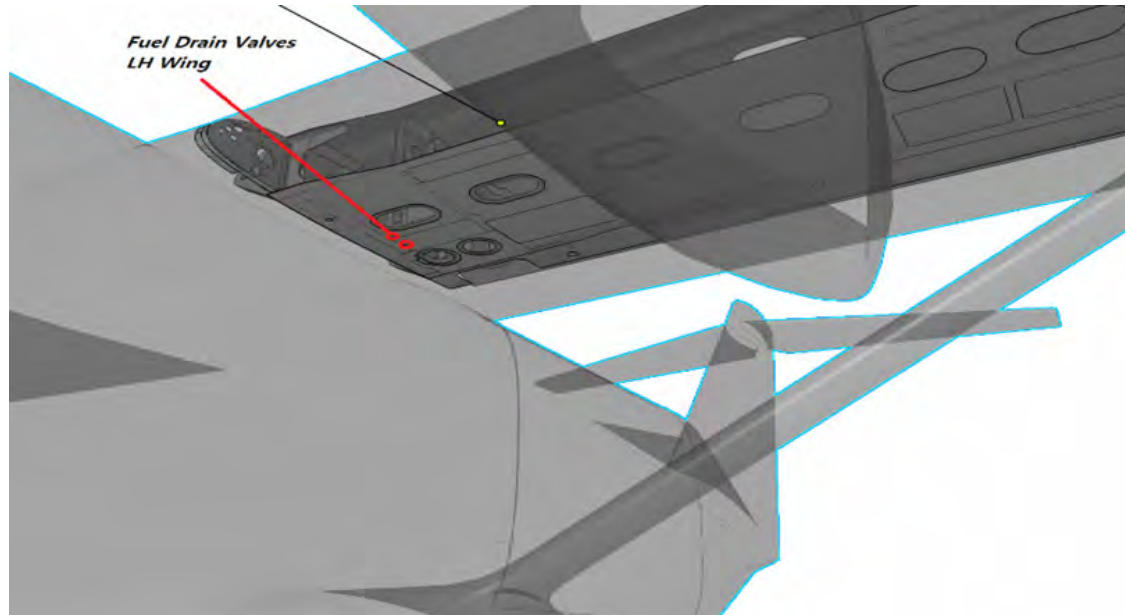


Figure 4

C. Approved Fuel Types and Fuel Tank Temperature Limits (Table 3)

Approved Fuel Type	Specification	Minimum Fuel Tank Temperature	Minimum SAT for Continuous Operations	Maximum Fuel Tank Temperature
JET A	ASTM D1655	-37°C	-40°C	57°C
JET A-1	ASTM D1655	-44°C	-47°C	57°C
TS-1	GOST 10227 GSTU 320.00149943.011	-44°C	-47°C	57°C
RT	GOST 10227 GSTU 320.00149943.007	-44°C	-47°C	57°C
Chinese No. 3	GB 6537	-44°C	-47°C	57°C
JP-8	MIL-DTL-83133	-44°C	-47°C	57°C

CESSNA 408 FUEL SERVICING

D. Fueling Procedures

Maintenance Precautions

- (1) Use the correct equipment to do the fuel servicing to prevent contamination.
- (2) Ground the airplane and refuel/defuel equipment (vehicle or hose cart) as follows. Reference Figure 1:
 - (a) Bond the refuel/defuel equipment to the airplane.
 - (b) Bond the fuel nozzle to a ground near the fuel filler on the airplane. Reference Figure 1 of this section.

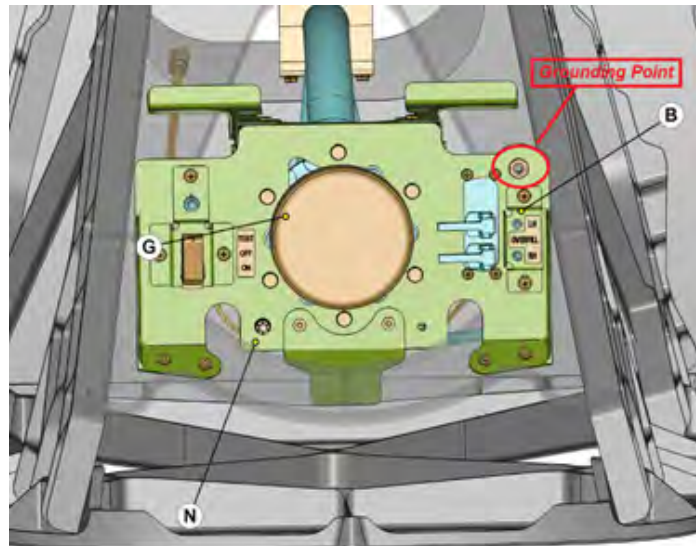


Figure 1

- (3) Do not operate avionics equipment that transmits high-power pulses near the refuel/defuel operation.

E. Single-Point Refueling (SPR)

- (1) Prepare the Airplane for the Single-Point Refueling (SPR).
 - (a) Open the Single-Point Refueling/Defueling Door.
 - (b) Open the switch guard for the monitor switch. Reference Figure 1 of this section.

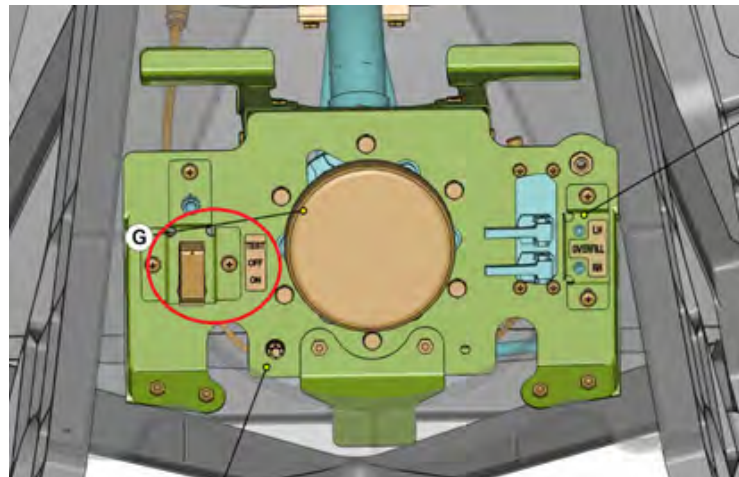


Figure 1

CESSNA 408 FUEL SERVICING

- (c) Hold the monitor switch in the TEST position.
- Make sure that the two amber monitor light emitting diodes (LEDs) come on.
- (d) Release the monitor switch.
- Make sure that the two amber monitor LEDs go off.
- (e) Set the monitor switch to the ON position.
- (f) Ground the airplane and the single-point refuel/defuel (SPRD) equipment
- (g) Remove the cap from the SPRD adapter.
- (h) Connect the SPRD equipment to the SPRD adapter.
- (i) Make sure that the two pre-check valve levers are closed. Reference Figure 2 of this section.

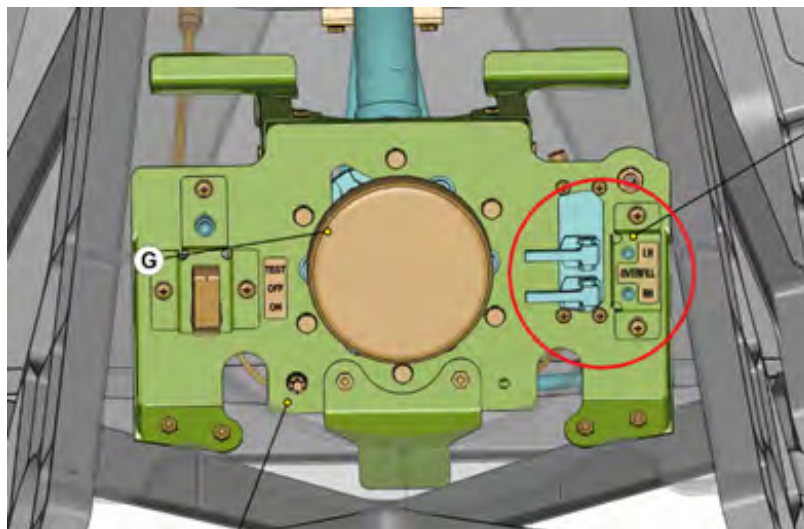


Figure 2

- (j) Make sure that the below wing vent scoops are open and are free and clear of foreign object debris (FOD). Ref Figures 3 and 4 of this section.

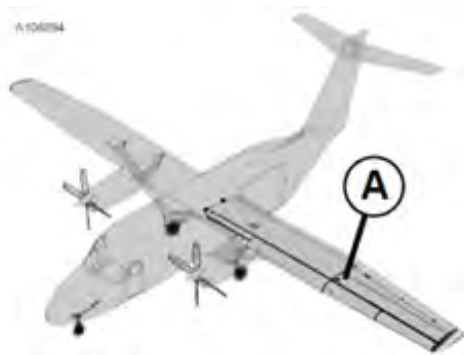


Figure 3

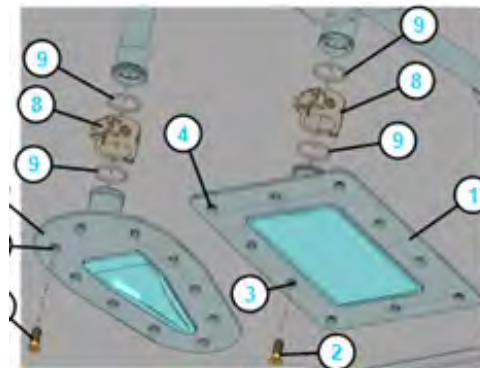


Figure 4

CESSNA 408 FUEL SERVICING

- (k) Visually check the positive and the negative relief fuel valve ports are free and clear of FOD. Reference Figures 5 and 6 of this section.

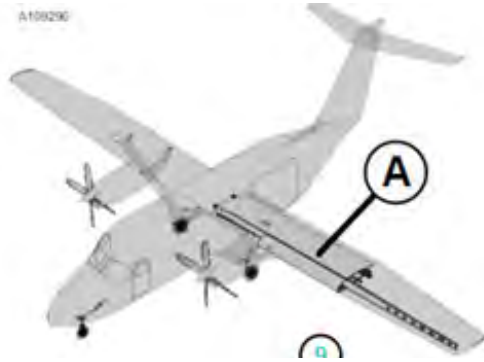


Figure 5

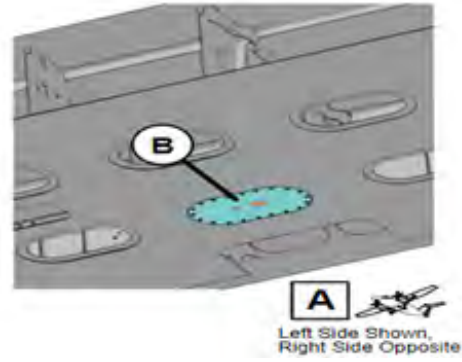


Figure 6

- (l) Make sure that all the drain valves are closed. Reference Figure 7.

Note: Left hand and right hand wings are similar in location

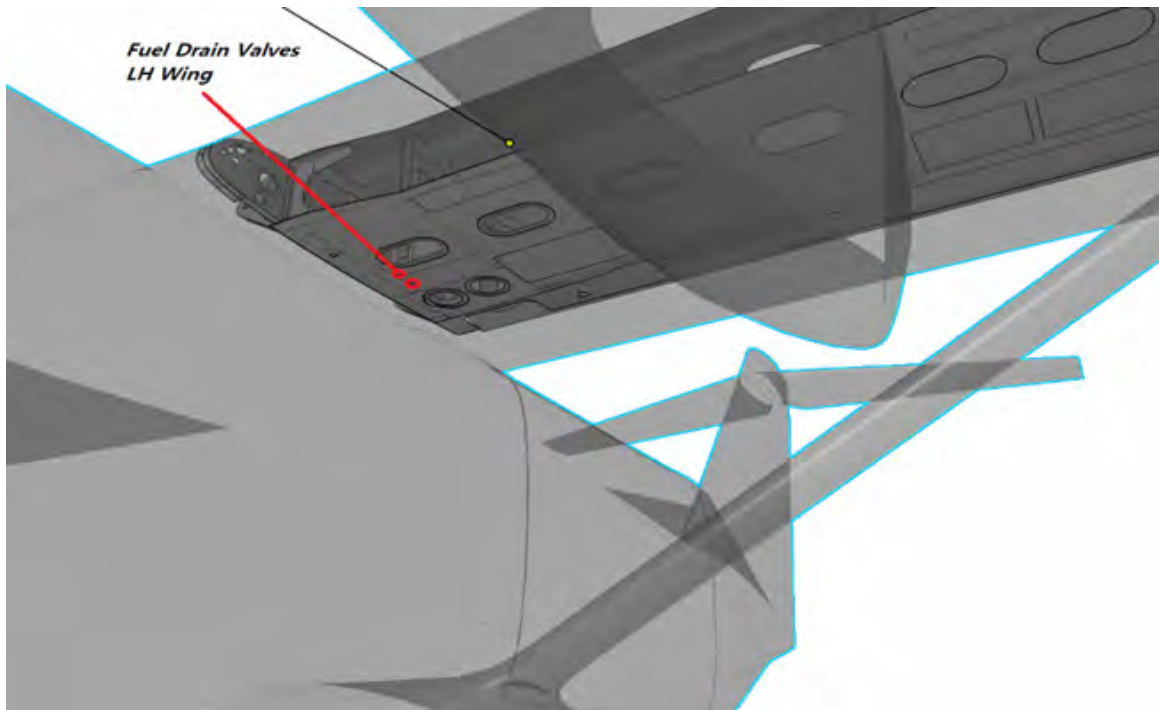


Figure 7

CESSNA 408 FUEL SERVICING

(m) By appropriate means, visually check that the above wing fuel filler caps are installed.
Reference Figure 8.

✎ **Note:** Left hand and right hand wings are similar in location

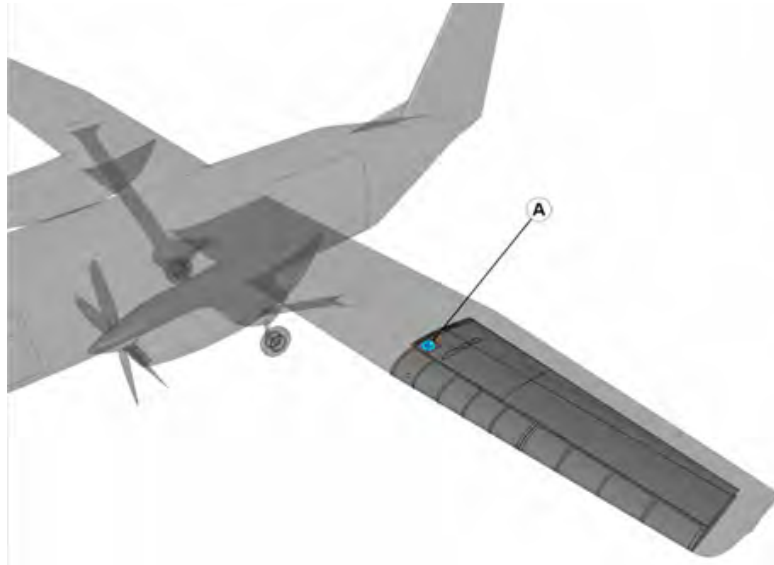


Figure 8

(2) Do the Single-Point Refueling (SPR)

(a) Start the single-point refueling/defueling (SPRD) equipment.

- Make sure that the fuel supply pressure is between 10 and 55 psi (68.9 and 379.2 kPa).

(b) Open the pre-check valve levers for the left and the right wing tanks. Refer back to Figure 2 of this section.

- Make sure that the fuel flow for the left and the right wing tanks stops.
- Make sure that the maximum fuel flow rate for the left and the right wing tanks is 4 gallons per minute (15.1 liters per minute).

(c) Close the pre-check valve levers for the left and the right wing tanks.

✎ **Note:** Closing the pre-check valve levers for the left and the right wing tanks will restart the fuel flow into the left and the right wing tanks. This checks the function of the valves.

✎ **Note:** When the airplane fuel reservoirs are full, the high-level pilot valves cause the fuel shutoff valves to close. This causes the fuel flow to stop automatically.

✎ **Note:** When fueling the aircraft to a level below max, it is up to the individual to conduct the proper steps to obtain the desired fuel load. This aircraft does not stop the fueling process unless high level float(s) are activated. Caution must be used to not over-service the level requested by Empire Dispatch or Crew(s).

(d) When the airplane is fueled to the necessary level, stop the SPRD equipment. If the aircraft is being serviced to max fuel load, the high level float and pilot valves will automatically stop fuel flow.

(e) Conduct Fuel Level Check to make sure that the tanks are filled to the necessary level. Refer to section “G” of this Chapter.

CESSNA 408 FUEL SERVICING

F. Overwing Refueling

- (1) Prepare the Airplane for the Overwing Refueling.
 - (a) Ground the airplane and the overwing refuel equipment.
 - ✎ **Note:** The SPR fuel panel has a probe-type grounding location within its access panel. There is also another probe-type grounding location located on the lower left-hand wing towards wing end.
 - (b) Connect the fuel nozzle ground to the airplane ground receptacle on the wing next to the fuel filler cap assembly.
 - (c) If available, put a protective pad on the wing surface next to the fuel filler cap assembly to protect the wings surface.
 - (d) Remove the fuel filler cap assembly. Reference Figures 1 and 2 of this section.
 - ✎ **Note:** The left wing and right wing overwing refueling points are similar locations.

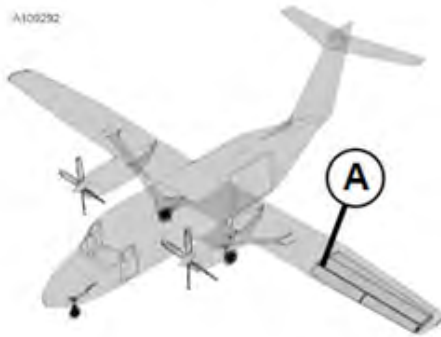


Figure 1

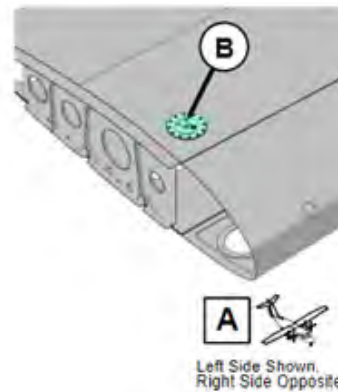


Figure 2

- (2) Do the Overwing Refueling
 - (a) Put the fuel nozzle in the fuel filler opening.
 - (b) Start the overwing refuel equipment.
 - (c) When the fuel tanks are full or when the airplane is fueled to the necessary level, stop the overwing refuel equipment.
 - ✎ **Note:** During overwing refueling, high-level pilot valves do not stop the potential over servicing of the wings exceeding their fuel capacity.
 - (d) Do the Fuel Level Check to make sure that the tanks are filled to the necessary level. Refer to section "G" of this Chapter.
 - (e) Remove the fuel nozzle from the fuel filler opening.
- (3) Put the airplane back to its initial condition.
 - (a) Install the fuel filler cap assembly and check for security.
 - (b) If used, remove the protective pad from the wing surface.
 - (c) Repeat steps(2)(a) through (3)(b) as needed for opposite wing, if required.
 - (d) Remove all grounding cables from the overwing refuel equipment and/or the airplane as necessary.
 - (e) Move the overwing refuel equipment away from the area as necessary.

CESSNA 408 FUEL SERVICING

G. Fuel Level Check

(1) Prepare the Airplane for the Fuel Level Check

- ✎ **Note:** Aircraft fuel level check can be conducted without GPU power.
 - (a) Open the ground power door.
 - (b) Make sure that the external power circuit breaker (HN901) in the ground power door compartment is engaged.
 - (c) If available, connect the External Electrical Power.
 - (d) Connect the ground power unit (GPU) electrical connector to the external power receptacle.
 - (e) Make sure that the GPU electrical connector is fully connected to the external power receptacle.
- ✎ **Note:** The external power receptacle has a sensing (SEN) pin that is shorter and smaller than the other pins. If the GPU electrical connector is not fully connected to the external power receptacle, the SEN pin will not make contact with the GPU electrical connector and the external electrical power cannot be connected to the airplane.
 - (f) Adjust the GPU to 28 VDC, +0.5 or -0.5 VDC.
 - (g) Set the BATTERY toggle switch to the ON position
 - (h) On the Center Multifunction Display (MFD), select a soft key to pass the Navigation Data Base Page after system boot-up..

(2) Do the Fuel Level Check

- (a) Check the fuel level of the tanks shown on the engine indicating system (EIS/MFD). Reference to Figure 1 of this section.



Figure 1

- (b) If Necessary, Refuel or Defuel the airplane to reach the necessary fuel level.

CESSNA 408 FUEL SERVICING

(3) Fuel Transfer Wing to Wing

⚠ **Note:** This task is to be conducted only by Empire Employees.

There is one transfer valve installed on the airplane accompanied with a selector switch within the cockpit on the Captain's side of the tilt panel (Figure 2 of this section). If a fuel imbalance is present by more than 200lbs, an amber "FUEL IMBALANCE" displays on both Primary Flight Displays (PFDs). When the fuel transfer is being used, a white CAS message will appear on both PFDs for crew alerting stating "FUEL TRANSFER". During the fuel transfer function, the same white CAS message will turn amber when the amount of fuel transferred causes another imbalance of 60lbs or more. Amber "FUEL TRANSFER" is also visible if the transfer has been selected ON L-R longer than 600 seconds.

- Make sure FUEL BOOST L-R toggle switches are set to the NORM positions. Reference Figure 3 of this section.
- Rotate selector to desired wing to transfer fuel to. Reference Figure 2 of this section.
- Ensure that white CAS message "FUEL TRANSFER" shows on PFDs.
- Monitor fuel level indication changes from feeding tank to desired tank via Multi-function Display (MFD). Reference Figure 1 of this section.
- Once desired balance is achieved, move FUEL TRANSFER selector to OFF.
- Ensure white CAS message "FUEL TRANSFER" no longer indicates on the PFDs.

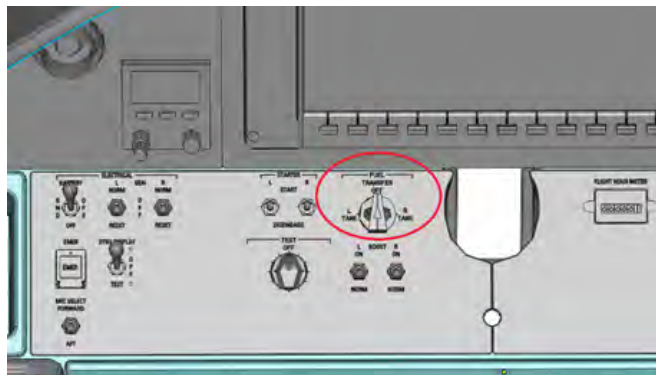


Figure 2

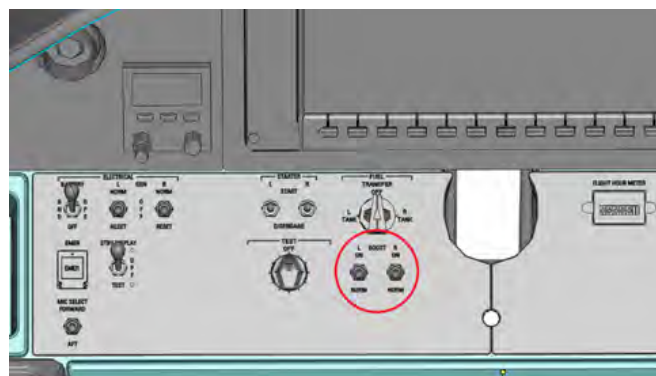


Figure 3

(4) Put the airplane back to its initial condition

- Set the BATTERY toggle switch to the OFF position
- Disconnect external electrical power from the airplane, if used.

8-01-12

Date: 12/23/22

Revision: 22

Ensure manual is current before printing.



CESSNA 408 FUEL SERVICING

H. Defueling

- (1) Prepare the Airplane for the Single-Point Defueling (SPD).
 - (a) Open the Single-Point Refueling/Defueling Door.
 - (b) Ground the airplane and the single-point refuel/defuel (SPRD) equipment
 - (c) Remove the cap from the SPRD adapter.
 - (d) Connect the SPRD equipment to the SPRD adapter.
 - (e) Make sure that the two pre-check valve levers are closed.
 - (f) Visually check that the wing vent scoops are open and are free and clear of foreign object debris (FOD).
 - (g) Visually check that the positive and the negative relief fuel valve ports are free and clear of FOD.
 - (h) Make sure that all the drain valves are closed.
 - (i) By appropriate means, check that the fuel filler caps are installed.
- (2) Do the Single-Point Defueling (SPD)
 - (a) Open the two pre-check valve levers.
 - (b) Start the single-point refueling/defueling (SPRD) equipment.
 - ✘ **Note:** When the defuel procedure is completed, the system will automatically stop.
 - ✘ **Note:** Fuel Defueling Pressure should be -10 psi (-69kPa)
 - (c) When the fuel flow automatically stops, or when the airplane is defueled to the necessary level, stop the SPRD equipment.
 - ✘ **Note:** The SPD method will leave about 90 pounds (40.8 kilograms) of fuel remaining in the fuel tanks. If it is necessary to fully defuel the airplane, fuel sump defueling can be used to remove the remaining fuel after the SPD is completed.
 - (d) If necessary, do the Fuel Level Check in this section to help make sure that the tanks are defueled to the necessary level. Refer back to section "J" of this Chapter.
- (3) Put the airplane back to its initial condition
 - (a) Disconnect the single-point refueling/defueling (SPRD) equipment from the SPRD adapter.
 - (b) Install the cap on the SPRD adapter.
 - (c) Close the two pre-check valve levers.
 - (d) Close the Single-Point Refueling/Defueling Door.
 - (e) If necessary, do the fuel sump defueling to fully defuel the airplane through the fuel drain valves.
 - (f) Remove all grounding cables from the SPRD equipment and/or the airplane as necessary.
 - (g) Move the SPRD equipment from the area as necessary.



Ensure manual is current before printing.

9-01-1	
Date:	01/31/24
Revision:	23

FUEL VENDORS — PART 121/135 OPERATIONS

Chapter 9 Table of Contents

Introduction.....	9-01-3
Training.....	9-01-3
Empires Quality Standard.....	9-01-3
Audit Requirements	9-01-3
Corrective Action.....	9-01-3

9-01-2

Date: 12/23/22

Revision: 22

Ensure manual is current before printing.



FUEL VENDORS — PART 121/135 OPERATIONS

This Page Intentionally Left Blank



FUEL VENDORS — PART 121/135 OPERATIONS

Introduction

- A. Empire Airlines purchases Jet A/A1 fuel for its fleet.
- B. Empire Airlines requires that fuel meets ASTM’s Standard – Specification for Aviation Turbine Fuels (D 1655) from each. Fuel will be properly stored and be free of particulate matter and water. Each fuel vendor must demonstrate safe operational practices that will prevent damage to Empire aircraft and injury to Empire crewmembers and employees.

Training

14 CFR: 121.105, 121.123, Part 135 Operations

- A. For 14 CFR 121 & 135 Operations, Empire trains fuel vendor management personnel in accordance with Empire procedures. This training will be given to the designated trainer or supervisory personnel of the 14 CFR 121 & 135 fuel vendor providing the services.
- B. Empire trained vendor management personnel will be responsible for training their employees to Empire’s procedures and maintaining documentation of such training on employee training records.
- C. Each fuel vendor is expected to provide classroom and on-the-job training for its employees. This training should include quality control procedures for handling and testing jet fuel. It should also cover safe operational procedures that are to be employed when handling jet fuel in storage and delivering fuel to the aircraft. It is our expectation that this training will be done at time of hire and on an annual recurrent basis.
- D. Each vendor is expected to maintain training records on each of its operational personnel to establish employee participation and make them available for review by Empire Airlines staff upon request.

Empires Quality Standard

- A. Empire Airlines has adopted the Air Transport Association Specification 103 (Standards for Jet Fuel Quality Control at Airports) as its quality standard.
- B. In addition to the Company’s Fuel Manual, each vendor is expected to have a copy of the ATA Specification and aspire to compliance with it.
- C. Fuel vendor size and the sophistication of operations vary greatly throughout the Empire Airlines route structure. Empire Airlines does not expect each vendor to be able to meet all the standards described in the Specification, as such waivers may be provided in accordance with applicable sections of this manual.

Audit Requirements

- A. For 14 CFR 121 Operations, Empire Airlines will arrange to perform an on-site audit of each vendor’s quality control system, fuel storage, and into-plane fueling operations at a frequency specified in the Empire Airline Maintenance Policies and Procedures Manual (PPM).
- B. As stated in Chapter 1 of this manual, vendor audits for 14 CFR 135 Operations are solely based on operational risk.
- C. The audit will be conducted using an Empire-accepted checklist.
- D. A copy of the checklist will be provided to the vendor prior to the audit to allow a review of the vendor’s polices and procedures, and to make any corrections that may be necessary.
- E. Audits will generally be announced in advance. However, the Director of Quality Assurance and the Director of Maintenance reserve the right to direct that an unannounced audit be performed at any-time they deems it necessary to ensure the quality and safety of a fueling operation.

Corrective Action

- A. The results of on-site audits will be reported to you in writing. Findings (or discrepancies) are items that do not meet our quality standard will result in a Corrective Action Response form A104R.

9-01-4

Date: 01/31/24

Revision: 23

Ensure manual is current before printing.



FUEL VENDORS — PART 121/135 OPERATIONS

This Page Intentionally Left Blank