ENVOY

Maintenance Safety and Compliance



FUELING NEWSLETTER #10

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Bonding During Fueling

All Fuelers!

In the month of June we have found three vendors not using correct procedures while fueling planes.

This results in Class A Findings

If need any help please email msc.support@aa.com or call 972-374-9376

(A4A) ATA Spec 103:

ATA Spec 103 provides recommended specifications, mainly because the majority of all USA Airlines agree on some parts of their specifications. Some Airlines has found it easier to adopt ATA Spec 103 into their Fueling Operations Manual in lieu of writing their own specifications.

However, the FAA requires all USA Airlines to have a Fuel Operations Manual.

ATA Spec 103 have a set Maintenance Frequency in which Bonding Cables / System Continuity shall be check. Which is Monthly.

And the maximum electrical resistance the equipment shall not exceed. Which is 25 ohms.

This is an audit check and must be noted.

NFPA 407:

NFPA 407 provides recommended practices and guidelines through a consensus standards development process approved by the American National Standard Institute, to achieve consensus on fire and other safety issues.

STATIC (FSPM 02-04)

- 1. During fuel servicing operation, there are several possible sources of **static.**
- a) The aircraft may be charged.
- b) Fuel through the hose may generate static.
- c) Servicing truck may be electrified.
- 2. The presence of flammable vapors creates a fire hazard. This hazard primarily exists when draining flammable liquids.

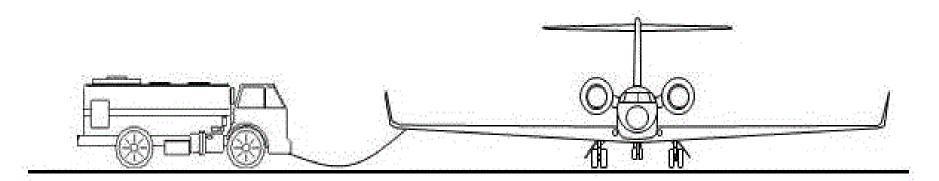


Safety against fires from static spark ignition depends upon preventing a difference of potential at any point where a spark gap might exist in the presence of flammable vapors therefore, fueling equipment must achieve proper bonding as required by this section.

BONDING (FSPM 02-04 & NFPA 407)

Prior to making any fueling connection to the aircraft, the fueling equipment **Shall Be Bonded** to the aircraft by use of a cable, thus providing a conductive path to equalize the potential between the fueling equipment and the aircraft.

The Bond Shall Be Maintained until fueling connections have been removed, thus allowing separated charges that could be generated during the fueling operation to reunite.



Envoy Checklist Questions:

- Check that a distance of at least five feet is maintained between the fuel servicing vehicle and any part of the aircraft at all times.
- Check that the fuel servicing vehicle is not positioned within 10 feet of aircraft fuel system vent openings

BONDING (FSPM 02-04)

C. BONDING BETWEEN FUSING EQUIPMENT AND AIRCRAFT



1. Bond the fueling equipment to the aircraft bonding point prior to connection of fueling hoses using any servicing bonding points illustrated in the manual. Refer to FSPM Chapter 5 for specific aircraft servicing bonding point locations.

CAUTION

Bonding/Grounding clamps must never be attached to any part of an aircraft, except to the bonding/grounding points provided. Using the bond/ground points prevents scratches or damage to highly stressed aircraft components such as landing gear, which can cause landing gear failure.

HYDRANT SERVICING (NFPA 407)

When a hydrant servicer or cart is used for fueling, the hydrant coupler shall be connected to the hydrant system prior to bonding the fuel equipment to the aircraft.





Hydrant coupler and aircraft fueling nozzle swivel retention devices must be equipped with at least two levels of redundancy, such as collar lock rings and collar retention screws secured by safety wire.

Conductive hose shall be used to prevent electrostatic discharge but shall not be used to accomplish required bonding.





Bonding and fueling connections shall be disconnected in the reverse order of connection.

- NO Pulling
- NO Jerking
- NO Yanking
- NO Tugging
- NO Snatching
- No Wrenching

