



## AERO-FLITE, INC.

### Q400 AT Simultaneous Aircraft Fueling and Retardant Loading Procedures

Fueling of any aircraft is not inherently hazardous, but caution should always be used to account for static electricity dis-charge and potential spills. Loading retardant onto airtankers is also not inherently hazardous, but caution is needed because of aircraft equipment, other aircraft in the ramp movement area and spills making it slippery around equipment. If both operations are conducted simultaneously, however, then the risk of the operation is notably elevated.

The following procedures will be adhered to with simultaneous fueling and retardant loading of Aero-Flite, Inc. Q400 airtankers to properly mitigate the risks. These procedures will be placed in the aircraft's Standard Operating Procedures (SOPs).

#### **Procedures:**

1. All flight crews and base personnel will be briefed and trained on simultaneous fueling and loading of the Q400 airtanker before operations will proceed. Fueling personnel will be briefed prior to each operation because of inconsistent personnel operating fuel equipment. Aero-Flite, Inc. has prepared a Risk Assessment for simultaneous fueling and retardant loading. The flight crew and associated Aero-Flite, Inc. ground crew will be briefed on this assessment before starting any simultaneous fueling/loading operations. Note: both engines on the Q400 will be shut down to conduct simultaneous fueling and retardant loading operations.
2. The flight crew will request an agency ramp manager supervise the entire operation. The ramp manager has full authority to stop each operation at any time because of safety concerns.
3. If at any time personnel are unwilling to perform simultaneous fueling and loading of retardant, those operations will be performed separate from each other.
4. A flight crew member or company ground support person must be outside and monitoring the operation for quality assurance and to help ensure all safety procedures are adhered to.
5. All appropriate grounding procedures will be used to minimize static dis-charge. Loading pump pressure (pump speed) should be reduced to also minimize static dis-charge.
6. Minimum personnel should be in the fueling and retardant loading area to minimize congestion (tripping over retardant loading hoses, fueling hoses, grounding wires and having better situational awareness of the personnel needed in the area).
7. Suggest that a cabin entrance be opened opposite of the fuel operation to help ensure there are no fumes in the cabin area.
8. There needs to be a communication link established between the fueling operation and loading of retardant personnel.



9. If the retardant loading and fueling operation are on opposite sides of the aircraft, there should be no crossing of the centerline of the aircraft of personnel. This procedure will eliminate congestion and keep situational awareness at a maximum.
  
10. If retardant loading and fueling operations are conducted on the same side (right), additional caution must be exercised to avoid over-congesting the area and degrading overall situational awareness. The Q400 refueling port is located on the aft portion of the right engine nacelle. In this situation, fuel truck placement and associated fuel hose and retardant hose routing is essential to deconflict. The retardant loading hose should run behind the right-side landing gear so as not to interfere with refueling operation. Clear lines of communication must be established between both loading parties to properly manage the risk.
  
11. Caution must be used to minimize and spills in the fueling and loading area. If any spills are caused, immediate action is required to contain the spills and operations to stop until the situation is eliminated.
  
12. Once each operation is safely completed, care must be exercised to allow for the free movement of personnel and equipment, especially when both operations take place on the same side of aircraft. Flight crew member or associated ground support personnel will inspect loading and fueling area for spills and assure all loading and fueling compartments are closed and secured. Note: the retardant loading valve cam-lock levers that protrude external to the body of the aircraft need to be properly secured to prevent inadvertent opening in flight.
  
13. Flight crew members or ground support crewmembers will make positive contact with the ramp manager to complete the operation and receive permission to proceed with next activity.