



Erickson Aero Tanker Hazard Index & Risk Register

Identified		Concurrent Loading of Retardant & Fuel for MD-87 Fire Fighting Tanker			Pre-Mitigation		
No.	Hazards	Cause	Potential Effects	Existing Safety Controls	Likelihood	Severity	Outcome
1	Static Electrical Discharge	Fluid dynamic loading; multiple fluids going in to the aircraft	Fire, Shock, Potential Explosion	Aircraft loading hose is bonded & grounded; fuel equipment always grounded	Remote	Catastrophic	High
2	Fuel Spill	Improper fuel loading procedures	Ignition, fire, explosion	Existing physical safe guards on service equipment and aircraft fire extinguishing system	Remote	Hazardous	High
3	Retardant Spill	Improper retardant loading procedures	Contaminated ramp area	Standardized procedures for tanker bases; availability of clean u equipment	Remote	Minor	Low
4	Area Crowding	Personnel actively loading retardant & fuel	FOD damage to personnel or aircraft, tripping potential, more potential victims present	Ramp safety observer, physical location of loading ports	Remote	Minor	Low
5	Crew Fatigue	Crew confined to cockpit for extended periods	Performance degradation due to physiological demands	CRM (Crew Resource Management)	Remote	Hazardous	High
6	Operating Culture	Improper educational foundation or experience	Conflict; resistant	Procedural governance and structure	Frequent	Major	High



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Identified		Concurrent Loading of Retardant & Fuel for MD-87 Fire Fighting Tanker		Post-Mitigation		
No.	Hazards	Mitigation Activity	Projected Outcome	Likelihood	Severity	Outcome
1	Static Electrical Discharge	Training procedures; grounding of fueling equipment	Properly trained personnel, significantly decreased static discharge potential	Remote	Major	Medium
2	Fuel Spill	Training procedures; cockpit indications and service equipment gauges	Properly trained personnel, decreased potential of fuel spill; greatly reduced probability for an explosion, fire, loss of life, injury to personnel, damage to equipment, or air tanker	Remote	Major	Low
3	Retardant Spill	Educate and train flight crews and tanker base personnel; service loader lights, indications, and gauges; flight crew oversight of operations	Properly trained personnel, reduced potential of retardant spill, injury to personnel, damage to equipment, or air tanker	Remote	Minor	Low
4	Area Crowding	Educate and train applicable flight crew members and tanker base personnel	Decreased potential for trips, falls, accidents, and/or damage to ground equipment and air tanker	Remote	Minor	Low
5	Crew Fatigue	Training procedures; open fuselage door opposing fueling operation	Circulate outside air through air tanker interior, reduced degree of fatigue to flight crew	Remote	Minor	Low
6	Operating Culture	Educate and train flight crew and tanker base personnel	Properly trained personnel; improved acceptance of process change based on factual and statistical evidence	Remote	Minor	Low