

CFM-DE-06 Fire suppression systems do not function or are inadequate - design fault

Caused by:

- Fire suppression system design cannot easily extinguish a vertical fire
- Lack of volume fuel source cannot be isolated, ignition source cannot be cooled
- Poor positioning of pyro-tubes or suppression nozzles
- Automatic deployment of fire suppressions or shut-down system does not trigger when required
- Fire suppression does not enunciate requirement for deployment (no voice command or other notification system)
- Vehicle is in upset state (e.g. rollover)

Credible Failure mode is addressed by:

- 🛡️ BI-01.43 Required system health checks before mobile equipment operation - information for operator by vehicle type specifying: access and escape, alarms, fire suppression, auto shutdowns and other relevant protective systems
- 🛡️ BI-01.52 Skilled and experienced personnel are accountable for selection of mobile equipment
- 🛡️ BI-01.53 Skilled and experienced personnel are accountable for maintaining fire detection and suppression systems on mobile equipment
- 🛡️ BI-02.08 Fire suppression system is integrated into machine operation
- 🛡️ BI-02.51 Agreed review hold points during OEM equipment builds and refurbishment
- 🛡️ BI-02A.01 Fit for purpose equipment selection processes - General
- 🛡️ BI-02A.30 OEM Designs provide for installation of fire detection and suppression systems
- 🛡️ BI-02A.46 Fire suppression specification for mobile equipment
- 🛡️ BI-02A.49 Fuel shut off specifications are detailed for mobile equipment
- 🛡️ BI-02A.53 Operator display specifications are detailed for mobile equipment