



Withdrawal of UL1093 Impact

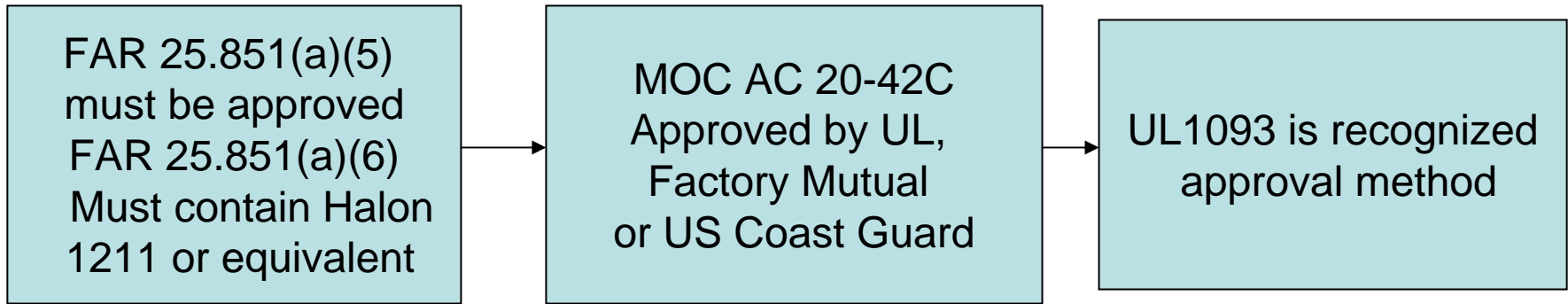
Hand Held Requirements

- FAA regulation FAR 25.851 requires a minimum number of Hand Held Fire Extinguishers in the Flight Deck and Passenger Cabin.
- Extinguishers must be Halon 1211
UL 5 B:C or equal
per AC 20-42C

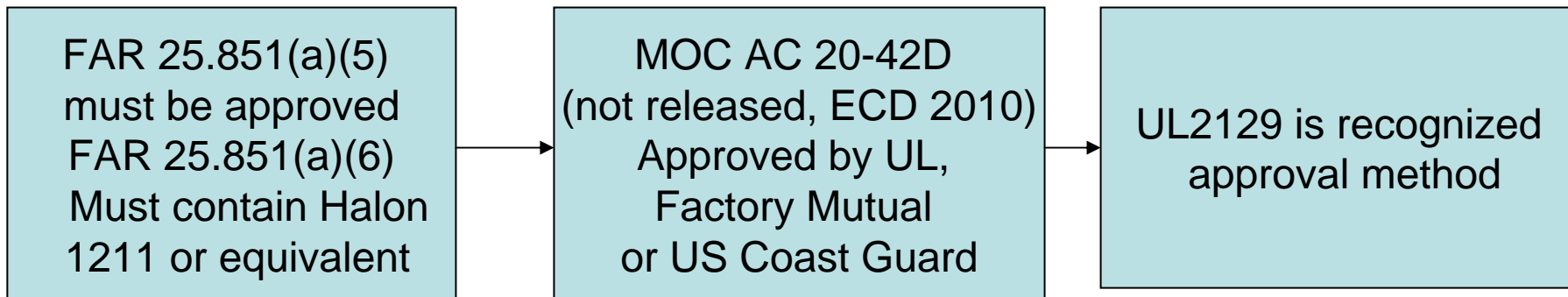


Hand Held Requirements

Halon 1211



Non Halon



Reasons to Keep UL1093 active

1. UL1093 is the only performance standard available to meet FAR 25.851
2. FAA Guidance Material for replacements will not be released until late 2009/early 2010.
3. No viable drop-in replacements for Halon 1211 extinguishers available
4. Replacement agents subject to other environmental regulatory restrictions (either as ODPs or GWPs).
5. Significant Installation Issues (weight and size increase) would requires a minimum of three years to install on airplane.
6. Alternative agents are not an environmental improvement due to increased fuel burn leading to increased CO2 emissions , plus they have higher GWP than 1211.
7. Halon 1211 extinguisher discharges in airplanes are a rare event
8. Plenty of Halon 1211 reserves to support continued use in critical/essential fire equipment (34,000 metric tons in 2020)
9. Halon 1211 may lose market value and may result in illegal discharge
10. May require Airline Training for flight crew will be required due need for additional firefighter technique
11. Spares would be impacted since replacements are not drop-in
12. Requirements should be set through global standards. ICAO has already started working with industry and other stakeholders to develop such standards
13. Industry Resources are better spent working to develop a drop-in replacement to reduce overall impact of the change

Boeing Goal

- Boeing's goal is to pursue an alternative that is more compatible with installation and operational requirements while meeting long-term environmental requirements.
- To pursue this goal, Boeing released an RFI (over 30 suppliers) for the replacement of Halon Hand Held Fire Extinguishers in June, 2007.
- Boeing is working with Suppliers to evaluate proposals and develop a drop-in replacement. This includes visits and demonstrations.