

Incidents and Recalls

- FAA records indicate consistent increase in lithium battery incidents
- CPSC recalled more than 9 million laptop computers worldwide

DOT & Industry Response

- PHMSA safety advisory
- ALPA safety alert
- FAA information for operators
- PHMSA final rule on lithium batteries

Remaining Issues

- Incident reporting
- Analysis of specific risks
- Remaining exemptions
- Involvement in in-flight fires

Incident Reporting

- FAA maintains record of reported battery incidents
- Final rule on lithium batteries did not eliminate exemption
- Unlikely that FAA record provides accurate account

Analysis of Specific Risks

- Secondary batteries
 - Failure modes not well understood
 - Proper evaluation not always performed
 - Failed batteries prematurely disposed
- Primary batteries
 - Impact of clustering not yet considered

Remaining Exemptions

- Small secondary batteries
 - Exempt from packaging and identification requirements
 - Cargo shipments permitted on cargo and passenger flights

Involvement in In-Flight Fires

- Halon is effective in suppressing secondary battery fires
 - Suppression systems not yet required
- Halon is not effective in suppressing primary battery fires
 - Additional safety measures needed