

Lithium Battery Air Safety Advisory Committee Meeting Minutes

April 20, 2023

I. Call to Order

Chairman Bob Brown called the sixth meeting of the Lithium Battery Air Safety Advisory Committee to order at 9:07 AM EDT on April 20th. The meeting was held in Washington, DC at DOT Headquarters with virtual attendance via Microsoft Teams. Duane Pfund from PHMSA served as the Designated Federal Officer (DFO), and Richard Hill from FAA served as the Alternate Designated Federal Officer (ADFO),

II. Quorum

Chairman Brown surveyed those in attendance to determine the presence of a quorum. Twenty-one of the twenty-two Committee members were in attendance:

BOB BROWN, Chairman, Coalition of Airline Pilots Associations

DOUGLAS CARR, National Business Aviation Association

JAMES DAVIS, AccuFleet Testing

RAJU DESAI, Apple

DOUG FERGUSON, Boeing

MIKE HENISSE, Amazon – for MARIANNA PATTERSON

LINDA GABOR, Ca112Recycle

GEORGE KERCHNER, PRBA - the Rechargeable Battery Association

JENNIFER LITTENBERG, Hawaiian Airlines

TODD MACKINTOSH, General Motors

BRANDON MARTIN, Outdoor Power Equipment Institute

ROBERT McCLELLAND, UPS Airlines

DINKAR MOKADM, Association of Flight Attendants- CWA

KATHLEEN O'SHEI, Integer

BILL REESE, Commercial Vehicle Safety Alliance

STEPHANE ROSSETTI, Medtronic

SCOTT SCHWARTZ, Airline Pilots Association, Int'l

TIM SHEPPARD, Samsung Electronics America

MIKE TOBIN, Alaska Airlines

VERONICA WILSON, Walmart

DAVID WROTH, Underwriters Laboratories

III. Opening Remarks

Opening remarks were provided by William Schoonover, Associate Administrator, Office of Hazardous Materials, PHMSA, and Ben Supko, Executive Director, FAA Office of Hazardous Materials. Associate Administrator Quade noted encouraged the Committee to continue supporting the work to inform the ICAO Energy Storage Device Working Group members as they perform their risk assessments on lithium batteries contained in and packed with equipment. Additionally, he noted recent PHMSA initiatives to provide outreach information to stakeholders, particularly concerning damaged and defective lithium batteries. Executive Director Supko provided an update on lithium battery air transportation incidents collected by the FAA and their work to make the information more visually appealing and accessible. Mr. Supko stressed his appreciation for the efforts of the Committee and his hope that it might result in actionable recommendations and continued collaboration.

IV. Previous Meeting Minutes and Agenda Adoption

Chairman Brown noted that the minutes from the previous meeting and the agenda for this meeting were provided to all and made available on the Committee's webpage and asked for a motion to adopt the agenda. A motion was received from member Tobin and a second from member Kerchner. The agenda was adopted as provided. Chairman Brown then asked for a motion to adopt the previous meeting minutes. Member Schwartz and a second from member Wilson provided a motion to adopt the minutes. Noting no objections to the agenda or minutes as presented, the agenda and previous meeting minutes were approved.

V. State of Industry

Chairman Brown provided a presentation highlighting the last meeting of the Committee and a discussion on what progress the Committee is making. Chairman Brown highlighted two portions of the last meeting: a third-party certification program to review a company's systems and processes leading to a safer supply chain and the continued increased utilization of the Thermal Runway Incident Program (TRIP) program. Additionally, Chairman Brown updated the Committee on the Integrity, Notification, and Fairness in Online Retail Marketplaces for Consumers Act (INFORM Consumers Act). He indicated that part of the INFORM Consumers Act provides a mechanism for consumers to report counterfeit products and an enforcement mechanism for the Federal Trade Commission.

Ben Supko provided a presentation on the FAA Cargo Safety Executive Committee and their priorities. The Cargo Safety Executive Committee consists of FAA executives from aircraft certification, flight standards, the technical center, and hazardous materials. Mr. Supko noted the following lithium battery and cargo fire related priorities for the Executive Committee; cargo safety risk management, development of standardized tests for cargo containment devices to withstand battery fires, cargo package vulnerability research specifically related to unmanned aircraft systems and addressing Commercial Aviation Safety Team recommendations related to cargo compartments.

VI. Sub-Committee Reports & Next Steps

The Sub-Committee Chairs provided the Committee with an update on work undertaken by their groups since the last Committee meeting.

- a. A Data Collection & Analysis Sub-Committee update was provided by its Chair David Wroth. Mr. Wroth discussed an original recommendation of the Committee was to establish an enhanced battery incident reporting system and indicated that his work has essentially been completed by the TRIP program and that its data is being shared with the Committee and other key organizations. Mr. Wroth also noted the second recommendation to create a process for forensic evaluation of lithium battery events and provided the Committee with an update of the work in this area. Additionally, Mr. Wroth provided updated TRIP statistics and analysis for 2022 data and noted the onboarding of one additional carrier in the program.

Stephane Rossetti provided a presentation that discussed an analysis of DOT F 5800.1 hazardous materials incident reports. The goal of this analysis was to look at what information is contained in the 5800 and how it correlates with data found in other data sets concerning lithium battery incidents in transportation. Mr. Rossetti noted, that per the analysis of the 5800 data lithium battery incidents as a proportion of both total and serious reported incidents are very low.

- b. A Regulations and Gap Analysis Sub-Committee update was provided by its Co-Chairs George Kerchner and Scott Schwartz. Mr. Kerchner noted ongoing discussions within the Sub-Committee on the issue of a reduced state of charge (SOC) for lithium batteries packed with or contained in equipment. Mr. Schwartz noted that while discussions were ongoing there was no consensus on how to address potential SOC requirements for these shipments.

Duane Pfund provided a presentation outlining work at ICAO to consider potential mitigation measures for lithium batteries contained in and packed with equipment. Mr. Pfund noted that the Committee has agreed to provide U.S. stakeholder inputs on the issue. Mr. Pfund provided the background for the current work concerning SOC for batteries packed with and contained in equipment, an update on the work completed so far, and expected next steps including a potential timeline for consideration of possible mitigation measures. This update included a discussion on the bowtie analysis and the system theoretic process analysis method being utilized to examine the issue.

- c. A Supply Chain Safety and Integrity Sub-Committee update was provided by its Chair, Bob McClelland and several Sub-Committee members. This update discussed the Sub-Committee's continuing work to refine their existing life cycle spreadsheet, identify life cycle activities that presented the most risk for air transportation and set priorities within the Sub-Committee on the targeted areas of focus. It was noted that TRIP data shows a large proportion of incidents on passenger planes involve passenger personal electronic devices. Possible safety awareness campaigns and passenger awareness and education were discussed as methods to effect change. Mr. McClelland also discussed certification programs for shippers and their continued discussion regarding this topic.

Member Kerchner provided a presentation on repair, reuse, and repurposing of lithium batteries and various legislation at local, state, and federal levels. Mr. Kerchner noted ongoing work at the UN Sub-Committee of Experts on the Transport of Dangerous Goods (UN SCOE TDG) to define repurpose, reuse within the UN on regulations and how it affects compliance with UN 38.3 testing requirements and work in the European Union in this area.

- d. Chairman Bob Brown introduced the Hazard Analysis Sub-Committee and the associated presenter. Ms. Jamie Lessard with the FAA's Fire Safety Branch gave a presentation Special Airworthiness Bulletin 2023-06, Risk of Uncontrolled Fire Incidents Caused by Aircraft Cargo. Ms. Lessard noted that the bulletin was released to reiterate the risk of uncontrollable.

VII. International Update

DFO Duane Pfund provided an update on lithium battery related proposals to be considered at the 62nd session of the UN SCOE TDG. Additionally, Mr. Pfund provided an update on battery papers submitted to the ICAO DGP-WG/23. Comments from interested Committee members were noted for use in ongoing discussions and consideration of these proposals.

VIII. Future of Work

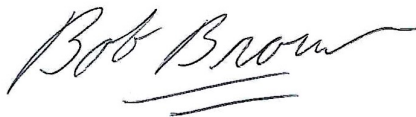
The Committee discussed the topics currently being discussed under the existing Sub-Committee structure, and based on discussions had during their Sub-Committees and during this meeting of the Committee agreed to establish the following three working groups

1. 30% State-of Charge led by Doug Ferguson
2. Medical Devices led by Stephane Rossetti
3. Education & Outreach led by Linda Gabor

IX. Adjournment/Closing Remarks

Chairman Bob Brown thanked everyone for a productive meeting and particularly for their commitment to collaborative work. Chairman Brown noted that the next meeting would be in approximately six months. The meeting was adjourned at 4:25 PM EDT.

At this moment, I certify that the preceding minutes are accurate and complete to the best of my knowledge.



Bob Brown
Chairman
Lithium Battery Air Safety Advisory Committee

Date: October 24, 2023