NTSB Public Forum  
April 11-12, 2013

DAY ONE

Opening Remarks from Chairman Deborah Hersman
9:00 a.m. – 9:10 a.m.

Overview of Forum Format and Housekeeping
9:10 a.m. – 9:15 a.m.

Panel 1: Design, Development, and Use of Lithium Ion Battery Technology

Technical Panel: John Vorderbrueggen – Chair, Jennifer Morrison, Matt Nicholson, Carl Schultheisz

Objective: This panel will discuss the design, development, and performance of lithium ion batteries. The design and development discussion will focus on battery configurations; advantages and disadvantages based on chemistry, power stability, and energy density; physical and electrical protective devices; manufacturing procedures and best practices; and quality assurance. The battery performance discussion will explore failure modes and other performance issues. Discussions will also include the range of lithium ion battery manufacturing processes.

Anticipated Schedule:

- 9:15 a.m. – 10:15 a.m.: Presentations from panelists (10 minutes each)
- 10:15 a.m. – 10:45 a.m.: Break
- 10:45 a.m. – 11:25 a.m.: Q&A with technical panel
- 11:25 a.m. – 12:05 p.m.: Q&A with NTSB Board Members

Panelists:

- Dr. M. Stanley Whittingham, PhD  
  Binghamton University

- Dr. Yet-Ming Chiang, PhD  
  Massachusetts Institute of Technology

- Dr. Daniel Doughty, PhD  
  Battery Safety Consulting, Inc.

- Dr. Judy Jeevarajan, PhD  
  NASA
Lunch (12:05 p.m.-1:30 p.m.)

**Panel 2: Regulations and Standards for Lithium Ion Batteries**

**Technical Panel:** Paul Stancil – Chair, Muhamed El-Zoghbi, John Lovell, Tom Barth

**Objective:** This panel will provide an overview and update of domestic and international regulatory requirements and standards associated with manufacturing, consumer and industry use, and transportation of lithium ion battery cargo. Topics will also include current and future lithium ion battery safety challenges for regulatory agencies and standard setting organizations.

**Anticipated Schedule:**

- 1:30 p.m. – 2:30 p.m.: Presentations from panelists (10 minutes each)
- 2:30 p.m. – 3:00 p.m.: Break
- 3:00 p.m. – 3:40 p.m.: Q&A with technical panel
- 3:40 p.m. – 4:20 p.m.: Q&A with NTSB Board Members

**Panelists:**

- Mr. George Kerchner
  Portable and Rechargeable Battery Association
- Ms. Janet McLaughlin
  Federal Aviation Administration
- Mr. Duane Pfund and Mr. Kevin Leary
  Pipeline and Hazardous Materials Safety Administration
- Ms. Laurie B. Florence
  Underwriters Laboratories, Inc.
- Mr. Keith Wilson
  SAE International
- Ms. Margaret Jenny
  RTCA

**Day One Closing Remarks**
4:20 p.m. – 4:30 p.m.
DAY TWO

Opening Remarks from Chairman Deborah Hersman
9:00 a.m.-9:05 a.m.

Reminder of Forum Format and Housekeeping
9:05 a.m.-9:10 a.m.

Panel 3: Lithium Ion Battery Applications and Safety in Transportation

Technical Panel: Tom Barth – Chair, Paul Schuda, Eric Stolzenberg , Tim LeBaron, Nancy McAtee

Objective: This panel will discuss the application and safety aspects of lithium battery technology in various transportation modes. The integration of the technology into existing designs will be explored including design standards, advantages and risks associated with use, reliability and failure; and what future use is planned. The panel will also discuss safety management considerations and strategies for first responders.

Anticipated Schedule:

- 9:10 a.m. – 10:10 a.m.: Presentations from panelists (10 minutes each)
- 10:10 a.m. – 10:40 a.m.: Break
- 10:40 a.m. – 11:20 a.m.: Q&A with technical panel
- 11:20 a.m. – 12:00 p.m.: Q&A with NTSB Board Members

Panelists:

- Mr. Jeff Dermott
  EaglePicher
- Ms. Celina Mikolajczak
  Tesla Motors
- Mr. Patrick Davis
  U. S. Department of Energy
- Mr. Steve Summers
  NHTSA
- Mr. Kevin Cook
  NAVSEA
- Mr. Ken Willette
  National Fire Protection Association

Day Two Closing Remarks
12:00 p.m.-12:15 p.m.