

THE NATIONAL ACADEMIES

Advisers to the Nation on Science, Engineering, and Medicine

AERONAUTICS AND SPACE ENGINEERING BOARD

Fall 2012 Meeting

Huntington Room, NRC Beckman Center, 100 Academy, Irvine CA

November 8-9, 2012

DRAFT AGENDA

THURSDAY, NOVEMBER 8TH, 2012

Breakfast available at the Beckman Center from 7:30 am

EXECUTIVE SESSION (ASEB MEMBERS ONLY)

8:30 am	<i>Introductions, Opening Remarks, and Review of Agenda</i>	<i>Les Lyles, ASEB Chair</i>
8:40 am	<i>State of the Board Presentation and Discussion</i>	<i>Michael Moloney, ASEB Dir.</i>
9:15 am	<i>Short Break</i>	

OPEN SESSION FOCUS SESSION ON ALTERNATE FUELS

9:30 am	<i>Introductions and Opening Remarks</i>	<i>Amy Buhrig, ASEB Vice Chair</i>
9:40 am	<i>Session 1: Alternative Jet Fuels – Government Perspective</i> <ul style="list-style-type: none">• Nate Brown, FAA Office of Environment and Energy (confirmed)• Kevin Geiss, Air Force Office of Installations, Energy, Environment (confirmed)	<i>Each speaker has 15 minutes for individual remarks, followed by 45 minutes of session discussion. Speakers will be participating remotely via videoconference.</i>
10:55 am	<i>Break</i>	
11:15 am	<i>Session 2: Alternative Jet Fuels—Industry Perspective</i> <ul style="list-style-type: none">• Steve Csonka, GE Aviation (confirmed)• Darrin Morgan, Boeing Commercial Airplanes (confirmed)	<i>Each speaker has 15 minutes for individual remarks, followed by 45 minutes of session discussion.</i>
12:30 pm	<i>Lunch</i>	
1:30 pm	<i>Session 3: The Transition from Leaded Avgas</i> <ul style="list-style-type: none">• Randy Jenson, Lycoming Engines (confirmed)• Mark Rumizen, FAA Office of Certification (confirmed via Webex)	<i>Each speaker has 15 minutes for individual remarks, followed by 30 minutes of session discussion.</i>
2:30 pm	<i>Summary of what we have heard</i>	<i>Amy Buhrig, ASEB Vice Chair</i>
2:40 pm	<i>Future Board Activities in this Area and close of focus session</i>	<i>All</i>
3:00 pm	<i>Break</i>	

OPEN SESSION
ONGOING AND FUTURE ASEB ACTIVITIES IN AERONAUTICS

3:30 pm	Report on Activities of Aeronautics Research and Technology Roundtable and Future Plans (10 mins) and Discussion (20 mins)	Dwayne Day, ASEB Staff
4:00 pm	Discussion on new ASEB study on a National Civil Aeronautics Research Agenda on Automation	Introduction by Michael Moloney followed by a discussion between Jaiwon Shin and the Board.
5:15 pm	Final remarks of the day	Les Lyles, ASEB Chair
5:30 pm	<i>Reception Beckman – Center</i>	
6:30 pm	<i>Dinner (90-120mins) – Beckman Center Dining Room</i>	

FRIDAY, NOVEMBER 9TH, 2012

Breakfast available at the Beckman Center from 7:00 am

EXECUTIVE SESSION (ASEB MEMBERS ONLY)		
8:00 am	<i>Opening Remarks, and Review of Agenda</i>	Les Lyles, Chair
8:05 am	Progress report on Strategic Directions and Human Spaceflight Studies	Michael Moloney, ASEB Dir.
8:25 am	Scope of Defense Science Board Study on Technology and Innovation Enablers for Superiority in 2030	Les Lyles, Chair
8:50 am	Short Break	
OPEN SESSION		
9:00 am	Report Brief: Reusable Booster Study	David Van Wie, Cttee Chair
FOCUS SESSION ON TECHNOLOGY DEVELOPMENT ON ISS		
	Key Results to Date, Ongoing Activities, and Future Plans	
9:45 am	Introductions and Opening Remarks	Les Lyles, ASEB Chair
9:50 am	Overview of ISS Utilization and Technology Development	J. Robinson, NASA ISS
10:30 am	Human Health and Performance Systems	
	• Radiation	Bobby Gail Swan, NASA JSC
	• Countermeasures (long-duration crew health)	David Baumann, NASA HRP
11:20 am	Spacecraft Systems	
	• Power (photovoltaic and solar thermal power)	Charles Taylor, NASA
	• Propulsion (electric propulsion)	Charles Taylor, NASA
12:00 pm	Lunch	
1:00 pm	Focus Session Resumes: Spacecraft Systems (continued)	
	• Thermal Management (active thermal control of cryogenic systems)	Ryan Stephan, NASA
	• Environmental Control and Life Support System	Robyn Carrasquillo, NASA
	• Space Communications and Navigation	Steve Townes, JPL
1:50 pm	Roundtable Discussion	Les Lyles, ASEB Chair
2:30 pm	Summary of What We Have Heard	Les Lyles, ASEB Chair
2:40 pm	Future Board Activities in this Area and Close of Session	All
3:00 pm	Report on Release of <i>Continuing Kepler's Quest</i>	Dwayne Day, Study Director
3:20 pm	<i>Break</i>	
EXECUTIVE SESSION (ASEB MEMBERS ONLY)		
3:40 pm	<i>Discussion</i>	Les Lyles, ASEB Chair
4:30 pm	<i>Adjourn</i>	