

Preliminary Agenda

MEETING No. 105

AEROSPACE CONTROL AND GUIDANCE SYSTEMS COMMITTEE

**Harrah's/Harvey's Lake Tahoe Hotel
Highway 50 at Stateline
Lake Tahoe (Stateline), NV 89449
March 3-5, 2010**

Tuesday **1.0 PLANNING ADVISORY BOARD MEETING**
2-March-10 **Location: Fallen Leaf**
7:30 p.m.

Chairman	Gary Balas
Vice-Chairman	Dave Ward
Immediate Past Chairman	Dave Bodden
Treasurer	Stan Pszczolkowski
Secretary	Jan De Luca

BOARD MEMBERS

G Jenney	L Knotts	M Steinberg
D Doman	B Lee	M Draper-Donley
S Donley	R Mehra	M Tischler
S Garg	J Paduano	J Weyrauch
P Hattis	D Klyde	K Wise
R Hess	H Rediess	D Schmidt

Wednesday **2.0 REGISTRATION & Breakfast**
3-March-10 **Location : Sand Harbor I Room**
7:30-8:30 a.m.

Wednesday **3.0 GENERAL COMMITTEE BUSINESS MEETING**
3-March-10 **Location: Sand Harbor I Room**
8:30-9:00 a.m. Gary Balas, Chairman

Wednesday **4.0 GENERAL COMMITTEE TECHNICAL SESSION**
3-March-10 Marge Draper Donley and Dave Schmidt, Co-Chairs
9:00 a.m. -

12:00 p.m. **4.1 Research Institutions, Industry, and University Reports**

4.1.1 Universities

- 4.1.1.1 University of California, Davis – Ron Hess
- 4.1.1.2 University of Minnesota – Gary Balas

4.1.2 Research Institutes and Companies

- 4.1.1.1 Aurora Flight Sciences – Jim Paduano
- 4.1.1.2 Barron Associates – David Ward

- 4.1.1.3 Impact Technologies – Carl Byington
- 4.1.1.4 Systems Technology Inc. – David Klyde
- 4.1.1.5 Rockwell Collins Control Technologies (formerly Athena) – Michael Piedmonte
- 4.1.1.8 Calspan – Eric Ohmit

4.2 Government Agencies Summary Reports

4.2.1 FAA

- 4.2.1.1 Tech Center - Stanley Pszczolkowski

4.2.2 US Army

- 4.2.2.1 Aeroflightdynamics Directorate - Mark Tischler

4.2.3 US Air Force

- 4.2.3.1 AFRL – Dave Doman

4.2.4 US Navy

- 4.2.4.1 NAVAIR – Shawn Donley
- 4.2.4.2 China Lake – Doug Philbrick

4.2.5 NASA

- 4.2.5.1 Dryden – Steve Jacobson
- 4.2.5.2 Glenn – Sanjay Garg
- 4.2.5.3 Langley – Marty Waszak

4.2.6 German Aerospace Center

- 4.2.6.1 DLR – Klaus-Uwe Hahn (abstract, presentation)

Wednesday Luncheon – Tahoe A-B

3-March-10
12:00-1:30p.m

Wednesday 5.0 SUBCOMMITTEE D–DYNAMICS, COMPUTATIONS, AND ANALYSIS

3-March-10
1:30-3:30 p.m. Ron Hess and Dave Doman, Co-Chairmen

- 5.1 “Analysis and Design of Flapping Wing Vehicles,” Dave Doman, AFRL (abstract, presentation)
- 5.2 “The DARPA Vulture Project,” Chris Martin, Institute for Defense Analysis (abstract, presentation)
- 5.3 “Transport Aircraft Rudder Force/Feel System Piloted Simulations,” Roger Hoh, Hoh Aeronautics (abstract, presentation)

Wednesday Break

3-March-10
3:30-3:45 p.m.

Wednesday

3-March-10 **5.0 SUBCOMMITTEE D–DYNAMICS, COMPUTATIONS, AND ANALYSIS cont'd**
3:45-4:25 p.m. Ron Hess and Dave Doman, Co-Chairmen

5.4 "Out-of-Tolerance Structural Characteristics of Aging Aircraft," Cindy Roman and LCDR Jessica Herman, NAVAIR (abstract, presentation)

Wednesday 6.0 SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS

3-March-10
4:25-5:05 p.m. Marc Steinberg, Chairman
Sanjay Garg & Jan DeLuca, Vice Chairmen

6.1 "The Flying Fish Persistent Ocean Surveillance Platform," Ella Atkins, University of Michigan (abstract, presentation)

Wednesday Mandatory Event: Social Hour

3-March-10
6:00 – 7:00 p.m. **Tahoe C-D**

Thursday Breakfast – Sand Harbor I

4-March-10
7:30 – 8:30 a.m.

Thursday 6.0 SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS

4-March-10
8:00 – 10:00 a.m. Marc Steinberg, Chairman
Sanjay Garg & Jan DeLuca, Vice Chairmen

5.3 " Aircraft Engine Model Based Performance and Health Assessment for Control and Diagnostics," Don Simon and Sanjay Garg , NASA Glenn (abstract, presentation)

5.4 "Active Stick Technology," Dennis Messenger, Stirling Dynamics Glenn (abstract, presentation)

5.5 "Aerospace Recommended Practices for UAV Flight Control," TBD

Thursday Break

4-March-10
10:00-10:20 p.m.

Thursday 7.0 SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES

4-March-10
10:20-12:20 p.m. Dave Klyde, Chairman,
Lou Knotts & Brian Lee, Vice Chairmen

7.1 "NASA Loss of Control Review," Steve Jacobson, NASA Dryden (abstract, presentation)

7.2 "Flying the Ikhana UAV at NASA Dryden," Mark Pestana, NASA Dryden (abstract, presentation)

7.3 "F-35B STOVL Envelope Expansion," Stefanie Bartley, JSF Vehicle Control & Integration Group, NAVAIR Flight Dynamics (abstract, presentation)

Thursday
4-March-10
12:30–2:00 p.m.

Luncheon - Tahoe A-B

PAB will meet for lunch & agenda planning for Meeting No. 106
Meeting attendees have open seating for lunch

Thursday
4-March-10
2:00 – 2:40 p.m.

7.0 SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES cont'd

Dave Klyde, Chairman,
Lou Knotts & Brian Lee, Vice Chairmen

7.4 "F-35B STOVL Flying Qualities Flight Test Continuation Criteria," A Jenkins, F-35 Flying Qualities Lead, JSFPO, VCIG, NAVAIR Flight Dynamics (abstract, presentation)

Thursday
4-March-10
2:40 – 3:20 p.m.

8.0 SUBCOMMITTEE B-- MISSILES AND SPACE

Phil Hattis, Chairman
John Weyrauch & Kevin Wise, Vice Chairmen

8.1 "Draper Laboratory Overview of Rendezvous and Proximity Operations," Piero Miotto, Draper Laboratory/Houston (abstract, presentation)

Thursday
4-March-10
3:20 – 3:40 p.m.

Break

Thursday
4-March-10
3:40 – 5:00 p.m.

8.0 SUBCOMMITTEE B-- MISSILES AND SPACE cont'd

Phil Hattis, Chairman
John Weyrauch & Kevin Wise, Vice Chairmen

8.2 "Placing People on the Moon: A Look at the Technical and Political Contexts," Phil Hattis, Draper Laboratory (abstract, presentation)

8.3 "Perspectives of German Space Research and Space Activities in the Next Decade," Andreas Wolke, DLR, Germany (abstract, presentation)

Friday
5-March-10
7:30 – 8:30 a.m.

Breakfast – Sand Harbor I

Friday **8.0 SUBCOMMITTEE B-- MISSILES AND SPACE cont'd**
5-March-10 Phil Hattis, Chairman
8:00 – 8:40 a.m John Weyrauch & Kevin Wise, Vice Chairmen

8.4 "Weapon Design Considerations for Small UAVs," Doug Storsved,
ATK (abstract, presentation)

Friday **9.0 SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION**
5-March-10 Stan Pszczolkowski and Raman Mehra, Co-Chairme
8:40 – 11:40 a.m

9.1 "Distributed Data Fusion for Autonomous Searching by Multiple
UAV's" – Karl Hedrick, University of California, Berkeley (abstract,
presentation)

9.2 "New Mexico State University UAS Test Range" – Stephen
Hottman, New Mexico State University, Physical Science
Laboratory, Associate Dean for R&D/Deputy Director (abstract,
presentation)

9.3 "Safety in Complex Systems" – Amy Pritchett, Georgia Tech
(abstract, presentation)

9.1 TBD, Shidhar Banavar