

MEETING NO. 112

AGENDA

AEROSPACE CONTROL AND GUIDANCE SYSTEMS COMMITTEE

Lowes Annapolis Hotel
126 West Street
Annapolis, Maryland 21401
(410) 263-7777

16-18 October 2013

Tuesday **1.0 PLANNING ADVISORY BOARD MEETING**
15-Oct-13 Location – Windmill Point Room
7:00pm

Chairman	Lou Knotts
Vice-Chairman	Phil Hattis
Immediate Past Chairman	Dave Klyde
Treasurer	Stan Pszczolkowski
Secretary	Marge Draper-Donley

Board Members

Gary Balas	Gavin Jenney
Christine Belcastro	Brian Lee
Dave Bodden	Raman Mehra
Jan De Luca	Piero Miotto
Dave Doman	Dave Mitchell
Shawn Donley	Dave Schmidt
Dale Enns	Mark Tischler
Sanjay Garg	Marty Waszak
Irene Gregory	John Weyrauch
Ron Hess	Kevin Wise
Steve Jacobson	

Wednesday **2.0 REGISTRATION AND BREAKFAST**
16-Oct-13 Location – Point Lookout Room
7:00am – 8:30am

8:30am – 9:00am **3.0 GENERAL BUSINESS MEETING**
Location – Point Lookout Room
Lou Knotts – Chairman

9:00am – 12:00pm **4.0 GENERAL COMMITTEE TECHNICAL SESSION**
Christine Belcastro and Dale Enns Co-Chairs

4.1 Research Institutions, Industry, and University Reports

4.1.1 Technical Committee Liaison

4.1.1.1 SAE S-7 HQ Technical Committee – Dick Newman

4.1.2 Universities

4.1.2.1 University of Illinois at Urbana-Champaign – Naira Hovakimyan

4.1.3 Research Institutions and Companies

4.1.3.1 Systems Technology, Inc. – Dave Klyde

4.1.3.2 Scientific Systems Company – Raman Mehra

4.1.3.3 Saab Aircraft – Staffan Bogg

4.1.3.4 Optimal Synthesis – P.K. Menon

4.1.3.5 Mitchell Aerospace Research – Dave Mitchell

4.1.3.6 Calspan – Lou Knotts

4.2 Government Agencies Summary Reports

4.2.1 NASA

4.2.1.1 Langley – Carey Buttrill

4.2.1.2 Glenn – Sanjay Garg

4.2.1.3 Engineering and Safety Center – Neal Dennehy

4.2.1.4 Dryden – John Bosworth

4.2.1.5 Ames – TBD

4.2.2 DLR – Oliver Brieger

12:00pm – 1:10pm

LUNCHEON – Windmill Point Room (Meet in Subcommittees)

Subcommittee chairs, members and attendees will meet for lunch and agenda planning for Meeting No. 113.

1:10pm – 1:50pm

3rd Annual Dave Ward Memorial Lecture

“Modal Isolation and Damping for Adaptive Aeroservoelastic Suppression”, Brian Danowsky, Systems Technology, Inc.

Location – Point Lookout Room

1:50pm – 3:10pm

5.0 SUBCOMMITTEE B – MISSILES AND SPACE

Piero Miotto, Chair

John Weyrauch and Kevin Wise, Vice Chairs

5.1 D'Souza, Chris, “The Design of the Orion On-board Navigation System”, NASA JSC

5.2 Orr, Jeb S., “Augmenting Control Flight Characterization Experiment on an F/A-18”, Draper Laboratory

3:10pm – 3:25pm

BREAK

3:25pm – 4:05pm

5.0 SUBCOMMITTEE B – MISSILES AND SPACE (cont)

Piero Miotto, Chair

John Weyrauch and Kevin Wise, Vice Chairs
5.3 Dennehy, Cornelius J. "AR&D Lidar Sensor Evaluation", NASA GSFC

4:05pm – 5:25pm **6.0 SUBCOMMITTEE C- AVIONICS AND SYSTEM INTEGRATION**

Raman Mehra and Marty Waszak, Co-Chairs
Jan DeLuca, Vice Chair

6.1 " Title, Speaker, Organization"

6.2 " Title, Speaker, Organization"

5:30pm – 6:30pm **SOCIAL HOUR**

Location - Windmill Point Room

Thursday

17-Oct-13

7:00am – 8:00am

BREAKFAST

Location - Point Lookout Room

8:00am – 8:40am **6.0 SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION (cont)**

Raman Mehra and Marty Waszak, Co-Chairs
Jan DeLuca, Vice Chair

6.3 " Title, Speaker, Organization"

8:40am – 10:00am **7.0 SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS**

Ron Hess and Dave Doman, Co-Chairs
Dave Schmidt, Vice Chair

7.1 Emergency Flight Control with Almost No Dynamic Modeling and Totally Unknown Control surface Faults, Dennis Bernstein, University of Michigan.

7.2 Development of a Benchmark Nonlinear Aeroelastic Simulation Model, Dave Schmidt, University of Colorado (retired).

10:00am – 10:20am **BREAK**

10:20am – 11:00am **7.0 SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS (cont)**

Ron Hess and Dave Doman, Co-Chairs
Dave Schmidt, Vice Chair

7.3 AIAA AFM Most Influential Papers of the 1980's:

"A Pilot Modeling Technique for Handling Qualities Research", AIAA Paper 80-1624 and "Cross-Coupling in Pilot/Vehicle Systems", AIAA Paper 85-1787, Ron Hess, University of California, Davis.

11:00am – 11:40am **8.0 SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS**

Sanjay Garg and Irene Gregory, Co-Chairs
8.1 Next Generation Flight Management System (FMS), Mike Jackson, Honeywell

11:50am – 1:10pm

LUNCHEON

Location - Mainsail Room

PAB will meet for lunch and agenda planning for Meeting No. 113.

Meeting attendees have open seating for lunch.

1:10pm – 1:30pm

WALK TO VISITOR CENTER, US NAVAL ACADEMY

1:45pm – 3:00pm

GUIDED HISTORIC TOUR OF USNA ‘YARD’

3:00pm – 4:00pm

PREBLE HALL, USNA MUSEUM

4:00pm – 5:00 pm

RICKOVER HALL, USNA ENGINEERING BUILDING, CAPT ROB NIEWOEHNER

Friday

18-Oct-13

7:00am – 8:00am

BREAKFAST

Location - Point Lookout Room

8:00am – 9:20am

8.0 SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS (cont)

Sanjay Garg and Irene Gregory, Co-Chairs

8.2 TBD Topic, Irene Gregory to confirm

8.3 University of Minnesota UAV Lab: Advancements in Low Cost, Open Source Flight Research, Brian Taylor, University of Minnesota

9:20am – 10:00am

9.0 SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES

Steve Jacobson, Chair

Brian Lee and Dave Mitchell, Vice Chairs

9.1 Recent Tests of the Prandtl Wing, Al Bowers, NASA Dryden

10:00am – 10:20am

BREAK

10:20am – 11:40am

9.0 SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES (cont)

Steve Jacobson, Chair

Brian Lee and Dave Mitchell, Vice Chairs

9.2 UAV Work at the Naval Research Lab, Chris Bovais

9.3 " Title, Speaker, Organization"