

Final Agenda

MEETING No. 108

AEROSPACE CONTROL AND GUIDANCE SYSTEMS COMMITTEE

Eisenhower Hotel and Conference Center
2634 Emmitsburg Road
Gettysburg, PA 17325
717.334.8121

October 11 – 14, 2011

Tuesday **1.0 SHORT COURSE: FLIGHT DYNAMICS OF RIGID AND FLEXIBLE
11-Oct-11** **AIRCRAFT – Dr. David Schmidt**
8:00am-5:00pm Location – Stillwell

Tuesday **2.0 PLANNING ADVISORY BOARD MEETING**
11-Oct-11 Location – Stillwell
7:00pm

Chairman	David Klyde
Vice-Chairman	Lou Knotts
Immediate Past Chairman	Gary Balas
Treasurer	Stan Pszczolkowski
Secretary	Jan De Luca

Board Members

C. Belcastro	P Hattis	D Schmidt
D Bodden	R Hess	M Steinberg
D Doman	S Jacobson	M Tischler
S Donley	G Jenney	M Waszak
M Draper-Donley	B Lee	J Weyrauch
S Garg	R Mehra	K Wise
I Gregory	D Mitchell	

Wednesday **3.0 REGISTRATION AND BREAKFAST**
12-Oct-11 Location – Bradley/Nimitz
7:00 am – 8:30 am

Wednesday **3.5 OVERVIEW OF THE BATTLE OF GETTYSBURG**
12-Oct-11 Location – Bradley/Nimitz
8:15 am – 8:30 am David Klyde

Wednesday **4.0 GENERAL BUSINESS MEETING**
12-Oct-11 Location – Bradley/Nimitz
8:30 am – 9:00 am David Klyde - Chairman

Wednesday **5.0 GENERAL COMMITTEE TECHNICAL SESSION**
12-Oct-11 Marge Draper-Donley and Christine Belcastro Co-Chairs
9:00 am – 12:00 pm

5.1 Research Institutions, Industry, and University Reports
5.1.1 Research Institutions and Companies

Final Agenda

- 5.1.1.1 Systems Technology, Inc. – Tom Myers
- 5.1.1.2 Optimal Systems – P.K. Menon
- 5.1.1.3 Mitchell Aerospace Research – Dave Mitchell
- 5.1.1.4 Calspan – Lou Knotts

5.1.2 Universities

- 5.1.2.1 Penn State – Joe Horn
- 5.1.2.2 Moscow Aviation Institute – Alexander Efremov
- 5.1.2.3 University of Minnesota – Gary Balas
- 5.1.2.4 Georgia Tech – Eric Feron
- 5.1.2.5 Drexel University – Jin Kang
- 5.1.2.6 UC Davis – Ron Hess

5.2 Government Agencies Summary Reports

5.2.1 NASA

- 5.2.1.1 Dryden – Steve Jacobson
- 5.2.1.2 Glenn – Sanjay Garg
- 5.2.1.3 Langley – Marty Waszak

5.2.2 FAA – Bill Wanner

5.2.3 DLR – Klaus-Uwe Hahn

5.2.4 DoD

- 5.2.4.1 ONR – Marc Steinberg
- 5.2.4.2 NAVAIR – Shawn Donley
- 5.2.4.3 AFRL – Dave Doman

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| <p>Wednesday
12-Oct-11
12:00 pm – 1:30 pm</p> | <p>LUNCHEON – MACARTHUR (meet in Subcommittees)
Subcommittee chairs, members and attendees will meet for lunch and agenda planning for Meeting No. 109.</p> |
| <p>Wednesday
12-Oct-11
1:30 pm – 2:10 pm</p> | <p>6.0 1st ANNUAL DAVE WARD MEMORIAL LECTURE
“An Integrated Approach to the Dynamic Analysis of Flexible Launch Vehicles,”
Jeb Orr, NASA Marshall Space Flight Center</p> |
| <p>Wednesday
12-Oct-11
2:10 pm – 3:30 pm</p> | <p>7.0 SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES
Steve Jacobson, Chair
Brian Lee and Dave Mitchell, Vice Chairs
7.1 “Flying the Boeing 787,” Mike Carriker, Boeing, (abstract) (presentation)
7.2 “Control Methods for Quadrotor Helicopters,” Daniel Mellinger, University of Pennsylvania (abstract) (presentation)</p> |
| <p>Wednesday
12-Oct-11
3:30 pm – 3:50 pm</p> | <p>Break</p> |
| <p>Wednesday
12-Oct-11
3:50 pm – 4:30 pm</p> | <p>7.0 SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES (cont)
Steve Jacobson, Chair
Brian Lee and Dave Mitchell, Vice Chairs
7.3 “HTV-2 Vehicle Overview and Flight Test Results,” Lockheed Martin</p> |

Final Agenda

(abstract) (presentation)

- Wednesday**
12-Oct-11
4:30 pm – 5:10 pm
- 8.0 SUBCOMMITTEE B – MISSILES AND SPACE**
Phil Hattis, Chair
John Weyrauch & Kevin Wise, Vice Chairs
- 8.1 “Artillery at Gettysburg: The July 3rd Cannonade,” David Klyde, Systems Technology, Inc. (abstract) (presentation)
- Wednesday**
12-Oct-11
6:00 pm – 7:00 pm
- SOCIAL HOUR – TBD**
- Thursday**
13-Oct-11
7:00 am – 8:00 am
- BREAKFAST – LOCATION – BRADLEY/NIMITZ**
- Thursday**
13-Oct-11
8:00 am – 9:10 am
- 8.0 SUBCOMMITTEE B – MISSILES AND SPACE (cont)**
Phil Hattis, Chair
John Weyrauch & Kevin Wise, Vice Chairs
- 8.2 “High-Gain Adaptive Control from the Era of X-15, and Some Lessons for Today,” Mike Ruth, Orbital Sciences (abstract) (presentation)
- 8.3 “Some New Inertial Instrument Technologies and Applications,” Stephen Smith, Draper Lab (abstract) (presentation)
- Thursday**
13-Oct-11
9:10 am – 9:50 am
- 9.0 SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION**
Raman Mehra and Marty Waszak, Co-Chairs
- 9.1 “NextGen Airspace Concepts and Technology Development Program Overview,” Rudy Aquilina, Deputy Project Manager, NASA Ames Research Center (abstract) (presentation)
- Thursday**
13-Oct-11
9:50am – 10:10am
- Break**
- Thursday**
13-Oct-11
10:10am – 11:30am
- 9.0 SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION (cont)**
Raman Mehra and Marty Waszak, Co-Chairs
- 9.2 “Knowledge-based Engineering of Actuation Concepts for Flight Control Systems,” Frank Thielecke, Technical University of Hamburg (abstract) (presentation)
- 9.3 “Automated Air Refueling of UAVs,” Jake Hinchman, AFRL (abstract) (presentation)
- Thursday**
13-Oct-11
11:30am – 12:10pm
- 10.0 SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS**
Ron Hess and Dave Doman, Co-Chairs
Dave Schmidt, Vice Chair
- 10.1 “Aerovironment Global Observer,” Derek Lisoski, Aerovironment (abstract) (presentation)

Final Agenda

- Thursday**
13-Oct-11
12:15 pm – 2:00 pm
- LUNCHEON – MACARTHUR**
PAB will meet for lunch & agenda planning for Meeting No. 109.
Meeting attendees have open seating for lunch.
- Thursday**
13-Oct-11
2:30 pm – 5:00 pm
- PRIVATE GETTYSBURG BATTLEFIELD TOUR**
For those who have signed up, meet at buses in front of hotel.
- Friday**
14-Oct-11
7:00 am – 8:00 am
- BREAKFAST – LOCATION – BRADLEY/NIMITZ**
- Friday**
14-Oct-11
8:00 am – 8:10 pm
- 5.0 GENERAL COMMITTEE TECHNICAL SESSION**
Marge Draper-Donley and Christine Belcastro Co-Chairs
- 5.1 Research Institutions, Industry, and University Reports**
- 5.1.2 Universities
 - 5.1.2.7 University of Illinois - Naira Hovakimyan
- Friday**
14-Oct-11
8:10 am – 9:20 pm
- 10.0 SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS (cont)**
Ron Hess and Dave Doman, Co-Chairs
Dave Schmidt, Vice Chair
- 10.2 “Inflight Simulation and Handling Quality Examination of a Flying Wing,”
Dominik Niedermeier and Jana Ehlers, DLR, Germany (abstract) (presentation)
- 10.3 “High Altitude Airship Research,” Thomas Myers, Systems Technology, Inc.
(abstract) (presentation)
- Friday**
14-Oct-11
9:20 am – 11:20am
- 11.0 SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS**
Marc Steinberg, Chair
Sanjay Garg and Irene Gregory, Vice Chairs
- 11.1 “Coordinated road search using multiple UAVs,” Naira Hovakimyan,
University of Illinois (abstract) (presentation)
- 11.2 “X-47B Flying Qualities and Autonomy Design and Flight Test Results,”
Chris DeWitt and Rylan Jager, Northrop Grumman Corporation, El Segundo, CA
(abstract) (presentation)
- 11.3 “Integrated Adaptive Guidance and Control for Future Responsive Access
to Space Technology,” Dale F. Enns, Honeywell Systems Research Center,
Minneapolis, MN (abstract) (presentation)