

**MEETING NO. 123 AGENDA**  
**AEROSPACE CONTROL AND GUIDANCE SYSTEMS COMMITTEE**

Eldorado Hotel & Spa  
309 West San Francisco St.  
Santa Fe, NM 875011  
505-995-4560

**27-29 March 2019**

**Tuesday**

26 March 2019

7:00pm - 9:00pm

**1.0 PLANNING ADVISORY BOARD MEETING**

Zia B

<b>Chairman</b>	Marge Draper-Donley
<b>Vice-Chairman</b>	Piero Miotto
<b>Immediate Past Chairman</b>	Brian Lee
<b>Treasurer</b>	Stan Pszczolkowski
<b>Secretary</b>	Jeb Orr

**Planning Advisory Board Members**

Riccardo Bevilacqua	Irene Gregory	Raman Mehra
Mike Bolender	Phil Hattis	Dave Mitchell
Oliver Brieger	Steve Jacobson	James Paduano
Jan De Luca	Dave Klyde	John Valasek
Dave Doman	Lou Knotts	Kevin Wise
Dale Enns	Xavier Le Tron	Tansel Yucelen

**PAB Emeritus**

Shawn Donley	Ron Hess	Gavin Jenney	Dave Schmidt
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**Wednesday**

27 March 2019

7:00am – 8:30am

**2.0 REGISTRATION AND BREAKFAST**

Anasazi South

8:30am – 9:00am

**3.0 GENERAL BUSINESS MEETING**

Anasazi South

Marge Draper-Donley – Chairman

**Wednesday**

27 March 2019

9:00am – 12:00pm

**4.0 GENERAL COMMITTEE TECHNICAL SESSION**

Dale Enns and Tansel Yucelen Co-Chairs

*NOTE: LISTED GENERAL SESSION BRIEFINGS ARE STILL PLACE HOLDERS  
BASED ON ACTUAL PRESENTERS AT MEETING 122*

9:00am - 9:50am

**4.1 Government Agencies Summary Reports**

4.1.1 DLR - Dominik Niedermeier

4.1.2 NASA

4.1.2.1 Langley -

4.1.2.2 Armstrong – Steve Jacobson

**4.2 Research Institutions, Industry, and University Reports**

4.2.1 Research Institutions and Companies

4.2.1.1 Systems Technology, Inc. - Dave Klyde

9:50am – 10:10am

**BREAK**

10:10am – 12:00pm

4.2.1.2 Calspan Flight Research Group - Lou Knotts

4.2.1.3 Scientific Systems Company - Raman Mehra

4.2.1.4 Aurora Flight Sciences – Jim Paduano

4.2.1.5 Mitchell Aerospace Research - Dave Mitchell

4.2.2 Technical Committee Liaison

4.2.2.1 SAE S-7 Committee – Brian Lee

4.1.3 Universities

4.2.3.1 Texas A & M University – John Valasek

4.2.3.2 Technical University Munich - Florian Holzapfel

12:00pm – 1:30pm

**LUNCHEON – Anasazi North (Meet in Subcommittees)**

Subcommittee chairs, members and attendees will meet for lunch and agenda planning for Meeting No. 124.

1:30pm – 2:10pm

**9.0 SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS**

John Valasek Chair

Irene Gregory, Vice Chair, Lou Knotts, Vice Chair

1:30pm – 2:10pm

9.1 “Aerial Co-Robots of the Future”, Dr. Naira Hovakimyan, U. of Illinois, Urbana-Champaign

2:10pm – 5:10pm

**5.0 SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES**

Steve Jacobson, Chair

Oliver Brieger, Xavier Le Tron and Dave Mitchell, Vice Chairs

2:10pm – 2:50pm

5.1 “MIL-STD-1797C Update”, Will Thomas

2:50pm – 3:10pm

**BREAK**

Wednesday  
27 March  
3:10pm – 3:50pm 5.2 “Control Law Testing at TPS”, Chris Cotting, USAF Test Pilot School  
3:50pm - 4:30pm 5.3 “X-56 Flight Test”, TBD  
4:30pm -5:10pm 5.4 “X-56 Modern Control Laws”, TBD  
6:00pm – 9:00pm **RECEPTION - Cava West**

**Thursday**  
28 Mar 2019  
7:00am – 9:00am **BREAKFAST – Anasazi South**

8:00am – 11:00am **6.0 SUBCOMMITTEE B – MISSILES AND SPACE-** Anasazi South  
TBD, Chair  
Riccardo Bevilacqua, Vice Chair; Kevin Wise, Vice Chair

8:00am – 8:40am 6.1 “Dominator UAS Research and Development”, Jeremy Clark, Boeing

8:40am – 9:20am 6.2 “Spacecraft Collisions and Fragmentation”, Norman Fitz-Coy, University of Florida

9:20am – 10:00am 6.3 “TBD Space Topic”, Zachary Putnam, University of Illinois

10:00am- 10:20am **BREAK**

10:20am – 11:00am 6.4 “STS/ISS On-orbit Flight Control: A Historical Perspective”, Rob Hall, NASA

11:00am – 12:20am **7.0 SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION**  
Raman Mehra, Chairman  
Jan DeLuca, Vice Chair; James Paduano, Vice Chair

11:00am – 11:40am 7.1 “ FLA Program”, Neil Johnson, SSCI

11:40am – 12:20am 7.2 “ TBD”

12:20pm – 2:00pm **LUNCHEON**  
PAB will meet for lunch and agenda planning for Meeting No. 124 in Agave Room.  
Other attendees have open seating for lunch in Anasazi North

2:00p m – 3:20pm **7.0 SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION (cont)**  
Raman Mehra, Chairman  
Jan DeLuca, Vice Chair; James Paduano, Vice Chair

2:00pm – 2:40pm 7.3 “TBD topic”, Randy Beard, Brigham Young University

2:40pm – 3:20pm 7.4 “Learning-Based Flight Control and Swarm Autonomy”, Sun-jo Chung, Caltech and JPL

3:20pm - 3:40pm **BREAK**

3:40pm – 5:00pm **8.0 SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS**  
Dave Doman, Chair  
Dave Klyde, Vice Chair, Mike Bolender, Vice Chair

3:40pm – 4:20pm 8.1 “Intersections between Machine Learning and Adaptive Control”, Anu Annaswamy, MIT

4:20 pm – 5:00 pm 8.2 “X-56 Control of Flexible Structures”, Jeff Ouellette, NASA AFRC

**Friday**

29 March 2019 **BREAKFAST** – Anasazi South

7:00am – 9:00am

8:00am – 9:20am **8.0 SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS (cont)**

Dave Doman, Chair

Dave Klyde, Vice Chair, Mike Bolander, Vice Chair

8:00am - 8:40am **8.3 “Bringing Aerial Refueling to the E-2D”**, Joe Allen, Naval Air Warfare Center

8:40am – 9:20am 8.4 “TBD”

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

John Valasek Chair

Irene Gregory, Vice Chair, Lou Knotts, Vice Chair

9:20am – 10:00am 9.2 “NUAIR NYS Unmanned Air Vehicle Test Range”, Dr. Ray Young, Chief Integration Officer NUAIR

10:00am – 10:20am **BREAK**

10:20am – 11:00am 9.3 “Updates and Capabilities of a FAA UAS Test Site”, Nicholas T. Flom, Northern Plains UAS Test Site

11:00am – 11:40am 9.4 “Urban Air Taxi talk - title to be sent soon, by Dr. Evangelos Theodorou, Georgia Tech University

11:40 am **ADJOURN**