

**MEETING NO. 121**

**Draft AGENDA OUTLINE**

**AEROSPACE CONTROL AND GUIDANCE SYSTEMS COMMITTEE**

DoubleTree Suites  
Williams Center  
5335 East Broadway Blvd.  
Tucson, AZ 85711  
**10-13 April, 2018**

**Tuesday**                    **Short Course: Flight Control Design: Tony Lambregts**  
10-April-18                Katchina/Saguaro  
8:00am

**Tuesday**  
10-April-18  
7:00pm                    **1.0 PLANNING ADVISORY BOARD MEETING**  
Katchina/Saguaro

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

**Board Members**

Christine Belcastro	Sanjay Garg	Piero Miotto
Riccardo Bevilacqua	Irene Gregory	Dave Mitchell
Oliver Brieger	Steve Jacobson	James Paduano
Jan De Luca	Gavin Jenney	Mark Tischler
Dave Doman	Dave Klyde	Kevin Wise
Shawn Donley	Raman Mehra	Lou Knotts
Dale Enns	Niara Hovakimyan	Tansel Yucelen

<b>Wednesday</b> 11 April, 2018 7:00am – 8:00am	<b>2.0 REGISTRATION AND BREAKFAST</b> Katchina/Saguaro/Catalina
8:00am – 8:30am	<b>3.0 GENERAL BUSINESS MEETING</b> Katchina/Saguaro/Catalina Brian Lee – Chairman

<p><b>Wednesday</b> 11 April, 2018 8:30am – 12:00pm</p>	<p><b>4.0 GENERAL COMMITTEE TECHNICAL SESSION</b> Dale Enns and Tansel Yucelen Co-Chairs Katchina/Saguaro/Catalina</p>
	<p><b>(This is the list from a previous Meeting as a placeholder)</b></p> <p><b>4.1 Government Agencies Summary Reports</b></p> <ul style="list-style-type: none"> <li>4.1.1 AFRL – Dave Doman</li> <li>4.1.2 DLR - Dominik Niedermeier</li> <li>4.1.3 NASA <ul style="list-style-type: none"> <li>4.1.3.1 Armstrong – Steve Jacobson</li> <li>4.1.3.2 Glenn – Sanjay Garg</li> <li>4.1.3.3 Langley – Irene Gregory</li> <li>4.1.3.4 Marshall – John Ottander</li> </ul> </li> </ul> <p><b>4.2 Research Institutions, Industry, and University Reports</b></p> <ul style="list-style-type: none"> <li>4.2.1 Research Institutions and Companies <ul style="list-style-type: none"> <li>4.2.1.1 Systems Technology, Inc. - Dave Klyde</li> <li>4.2.1.2 Calspan Flight Research Group - Lou Knotts</li> <li>4.2.1.3 Scientific Systems Company - Raman Mehra</li> <li>4.2.1.4 Barron &amp; Associates – Nate Richards</li> <li>4.2.1.5 Mitchell Aerospace Research - Dave Mitchell</li> <li>4.2.1.6 Aurora Flight Sciences – Jim Paduano</li> <li>4.2.1.7 Crew Systems – Dick Newman</li> </ul> </li> <li>4.2.2 Technical Committee Liaison <ul style="list-style-type: none"> <li>4.2.2.1 SAE S-7 Committee – Brian Lee</li> </ul> </li> </ul>
<p>12:00pm – 1:30pm</p>	<p><b>LUNCHEON – Los Arboles (Meet in Subcommittees)</b> Subcommittee chairs, members and attendees will meet for lunch and agenda planning for Meeting No. 122.</p>
<p>1:30pm – 2:10 pm</p>	<p><b>5.0 SUBCOMMITTEE C – Avionics and System Integration</b> Katchina/Saguaro/Catalina Raman Mehra, Chair Jan De Luca and Jim Paduano, Vice Chairs</p> <p>5.1 “Recent Advances in Relative Navigation of Aerospace Systems,” Manoranjan Majji, Texas A&amp;M University</p>
<p>2:10pm – 2:50pm</p>	<p>5.2 “Machine Learning in Aerospace,” Kendel McCarley and Matt Young, Raytheon</p>
<p>2:50pm – 3:30pm</p>	<p>5.3 “Investigation of Formal Methods as Applied to Cooperative UAV Systems”, Derek Kingston, AFRL</p>

<b>Wednesday</b> 11 April, 2018 3:30pm – 3:50pm	<b>BREAK</b>
3:50pm – 4:30pm	<b>6.0 SUBCOMMITTEE D – Dynamics, Computations, and Analysis</b> Dave Doman and Dave Klyde, Co-Chairs <b>Katchina/Saguaro/Catalina</b> 6.1 “UAS Shipboard Landing Flight Test Results”, Buddy Denham, NAVAIR
4:30pm – 5:10pm	6.2 “Recent NASA Research on Multi-Rotor Vehicle Dynamics in Off-Nominal Conditions”, John Foster, NASA LaRC
5:30	<b>Reception</b> <b>Los Arboles / Back Patio</b>
<b>Thursday</b> 12 April, 2018 7:00am – 8:00am	<b>BREAKFAST – Hotel restaurant</b>
8:00am – 8:40am	<b>6.0 SUBCOMMITTEE D - Dynamics, Computations, and Analysis</b> Dave Doman and Dave Klyde, Co-Chairs <b>Katchina/Saguaro/Catalina</b> 6.3 “Parameter ID on Flexible Aircraft”, Brian Danowsky, STI
8:40am – 9:20am	<b>7.0 SUBCOMMITTEE E – Flight, Propulsion, and Autonomous Vehicle Control Systems</b> <b>Katchina/Saguaro/Catalina</b> Sanjay Garg, Chair Irene Gregory and Lou Knotts, Vice Chairs 7.1 “The Pitfalls of Autonomy – Current State of Science in Autonomy”, Mark Balas, Embry Riddle Aeronautical University
9:20am – 10:00am	7.2 “Piloted Flight Test Evaluation of Robust Upset-Recovery Guidance”, Nathan Richards, Barron Associates
10:00am – 10:20am	<b>Break</b>
10:20am – 11:00am	<b>7.0 SUBCOMMITTEE E– Flight, Propulsion, and Autonomous Vehicle Control Systems</b> Sanjay Garg, Chair Irene Gregory and Lou Knotts, Vice Chairs <b>Katchina/Saguaro/Catalina</b> 7.3 “UAV Situational Awareness for Off-Nominal Events (USA1)”, George Hunter, Mosaic ATM
11:00am – 11:40am	<b>8.0 SUBCOMMITTEE A – Aeronautic and Surface Vehicles</b> Steven Jacobson, Chair Dave Mitchell and Oliver Brieger, Vice Chairs <b>Katchina/Saguaro/Catalina</b> 8.1 “Control of Flexible Structures Flight Research on X56”, Steve Jacobson
11:40-1:00	<b>Luncheon –Back Patio</b>

	<b>PAB Luncheon – Los Arboles</b>
1:00pm	<b>Depart for Pima County Aviation Museum – tour and dinner</b>
~7:30pm	<b>Return to hotel</b>
<b>Friday</b> 13 April, 2018 7:00am – 8:00am	<b>BREAKFAST – Hotel Restaurant</b>
8:00am – 8:40am	<b>8.0 SUBCOMMITTEE A– Aeronautic and Surface Vehicles</b> Steven Jacobson, Chair Dave Mitchell and Oliver Brieger, Vice Chairs <b>Katchina/Saguaro/Catalina</b> 8.2 “Flutter Prediction on a G550”, Oliver Brieger, DLR
8:40am – 9:20am	8.3 “Tuning of Fly-by-Wire Feel Systems for Aircraft”, Ruben deValloi
9:20am – 10:00am	<b>9.0 SUBCOMMITTEE B – Missiles and Space</b> Piero Miotto, Chair Riccardo Bevilacqua and Kevin Wise, Vice Chairs <b>Katchina/Saguaro/Catalina</b> 9.1 “Vision Nav on JDAM and SDB”, TBD from SSCI
10:00am – 10:20am	Break
10:20am – 11:00am	<b>9.0 SUBCOMMITTEE – Missiles and Space</b> Piero Miotto, Chair Riccardo Bevilacqua and Kevin Wise, Vice Chairs <b>Katchina/Saguaro/Catalina</b> 9.2 “ETA”, TBD, Sierra Nevada
11:00am – 11:40am	9.3 “Boeing Battle Management Optimization Services”, Joe Brinker
11:40am Adjourn	