

**MEETING NO. 129 AGENDA**  
**AEROSPACE CONTROL AND GUIDANCE SYSTEMS COMMITTEE**  
**October 2022**  
**Colorado Springs, CO**

<b>TUESDAY, 25 October 2022</b>	
8:30 am - 4:00 pm	LECTURE: NASA's First Hypersonic Research Aircraft: The X-15's Lessons for GN&C, Safety, and Systems Engineering. – Room Carson
07:00 pm -9:00 pm	PLANNING ADVISORY BOARD MEETING – Room Carson

<b>Chairman</b>	Miotto, Piero
<b>Vice-Chairman</b>	Orr, Jeb
<b>Immediate Past Chairman</b>	DraperDonley, Marge
<b>Treasurer</b>	Pszczolkowski, Stan
<b>Secretary</b>	Duda, Kevin

<b>Planning Advisory Board Members</b>		
Bolender, Mike Ridgely, Brett Brieger, Oliver De Luca, Jan Doman, Dave Enns, Dale Grauer, Jared	Gregory, Irene Hattis, Phil Jacobson, Steve Klyde, Dave LeTron, Xavier Mehra, Raman Lee, Brian	Mitchell, Dave Paduano, James Valasek, John Wise, Kevin Yucelen, Tansel Miller, Chris

<b>PAB Emeritus</b>				
Donley, Shawn	Hess, Ron	Knotts, Lou	Jenney, Gavin	Schmidt, Dave

<b>WEDNESDAY, 26 October 2022 – Day 1</b>	
07:00 am-8:30 am	Registration – Room East Pre-Function
07:00 am-8:30 am	Breakfast – Room South Pre-Function
8:30 am – 9:00 am	GENERAL BUSINESS MEETING – Room Heritage A, B, & C Piero Miotto – Chairman
9:00 am -12:00 pm	GENERAL COMMITTEE TECHNICAL SESSION – Room Heritage A, B, & C <ul style="list-style-type: none"> <li>• Schmidt Dave, A Brief History of Colorado Springs</li> <li>• Klyde Dave, Systems Technology Inc.</li> </ul>
12:00pm – 1:00 pm	LUNCHEON – (Meet in Subcommittees) – Room Fremont
<b>SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS</b> <b>Chair: David Doman</b> <b>Room: Heritage A, B, &amp; C</b>	
1:10 pm – 1:50 pm	D.1 Jeffry Walker, Birhle Applied Research, "Identification and Optimized Control Design of a Sub-Scale Flybarless Helicopter"
1:50 pm – 2:30 pm	D.2 Amanda Lampton, Systems Technology Inc. "Exploring the Relationship Between Pilot Handling Qualities Ratings and Workload"
2:30 pm – 2:40 pm	Break
2:40 pm – 3:20 pm	D.3 Michael Oppenheimer, AFRL, " Multi-scale Physics-Informed Artificial Intelligence"
<b>SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS</b> <b>Chair: John Valasek</b> <b>Room: Heritage A, B, &amp; C</b>	
3:20 pm – 4:00 pm	E.1
4:00 pm – 4:40 pm	E.2
6:00 pm – 9:00 pm	RECEPTION – Room Fremont

<b>THURSDAY, 27 October 2022 – Day 2</b>	
07:30 am-8:30 am	Breakfast – Room South Pre-Function
8:30 am – 9:10 am	E.3
<b>SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES</b> <b>Chair: Mitchell, Dave</b> <b>Heritage A, B, &amp; C</b>	
9:10 am – 9:50 am	A.1 Dr. J. Schwithal and J.-P. Buch, DLR, "Simulator Studies on Handling Qualities of Flexible Passenger Aircraft"
9:50 am – 10:00 am	Break
10:00 am – 10:40 am	A.2 Dick Newman , "Cockpit Evaluations: The Search for the Elusive Average Pilot"
10:40 am – 11:20 pm	A.3
<b>SUBCOMMITTEE B – MISSILES AND SPACE</b> <b>Chair: Phil Hattis</b> <b>Room: Heritage A, B, &amp; C</b>	
11:20 am – 12:00 pm	B.1 Jing Pei, NASA Langley, "Dynamic Rollover for Lunar Landing Vehicles,"

12:00 pm – 1:30 pm	LUNCHEON – Room Fremont EXECUTIVE LUNCH – Room TBD
1:30 pm – 5:30 pm	TOUR – Air Force Academy
<b>FRIDAY, 28 October 2022 – Day 3</b>	
07:00 am-8:00 am	Breakfast – Room South Pre-Function
8:00 am – 8:40 am	B.2 Chris Fergusson, Boeing, “Boeing CST-100 Program Status”
8:40 am – 9:30 am	B.3 Torin Clark of the University of Colorado, “Predicting Impaired Human Performance in Aerospace Environments Using an Estimation Theory-Based Computational Mode”
<b>SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION</b>	
<b>Chair: Raman Mehra</b>	
<b>Room: Heritage A, B, &amp; C</b>	
9:30 am – 10:10 am	C.1 Rob Fuentes, Raytheon, “The Differential and Riemannian Geometry of Guidance”
10:10 am – 10:20 am	Break
10:20 am – 11:00 am	C.2
11:00 am – 11:40 am	C.3
11:40 am – 12:00 pm	Adjourn