Aerospace Control and Guidance Systems Committee Meeting No. 132
Spring 2024
Salt Lake City, UT

FINAL AGENDA (4/17/24)

TUESDAY, 16 April 2024

07:00 pm -9:00 pm	**PLANNING ADVISORY BOARD MEETING** - Dining Room

Chairman	Jeb Orr
Vice-Chairman	John Valasek
Immediate Past Chairman	Piero Miotto
Treasurer	Stan Pszczolkowski
Secretary	Kevin Duda

Planning Advisory Board Members		
Mike Bolender	Philippe Goupil	Raman Mehra
Oliver Brieger	Irene Gregory	Chris Miller
Dave Doman	Phil Hattis	Dave Mitchell
Marge Draper-Donley	Dave Klyde	Kevin Wise
Jared Grauer	Brian Lee	Tansel Yucelen

PAB Emeritus				
Shawn Donley	Ron Hess	Lou Knotts	Gavin Jenney	Dave Schmidt

WEDNESDAY, 17 April 2024 – Day 1

7:00 am – 8:00 am	**REGISTRATION & BREAKFAST** - Cottonwood Foyer

8:00 am – 8:30 am	**GENERAL BUSINESS MEETING** – Cottonwood Jeb Orr – ACGSC Chair
8:30 am –10:00 am	**GENERAL COMMITTEE TECHNICAL SESSION** – Cottonwood ● Stan Pszczolkowski, FAA (Retired) - *Special Topic* ● Philip Goupil, Airbus ● Brian Lee, Boeing ● Randy Christensen, Blue Origin ● John Valasek, Texas A&M University

10:00 am – 10:20 am	Break - Cottonwood Foyer

SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES (Session 1 of 2) - Cottonwood
Co-Chairs: Dave Mitchell, Oliver Brieger, and Chris Miller

10:20 am – 11:00 am	A.1 "A 2-D Static Margin For 3-D Aircraft," Dave Schmidt (DK Schmidt and Associates); Derek Lisoski and Brian Danowsky (AeroVironment)
11:00 am – 11:40 am	A.2 "EU Project SENS4ICE Hybrid Ice Detection Architectures Demonstration Results," Carsten Schwarz, DLR

11:50 am – 1:20 pm	**LUNCHEON** – (Meet in Subcommittees) – Restaurant Patio

2023 Dave Ward Memorial Lecture

1:30 pm – 2:10 pm	"Advanced Guidance & Control for Future Concepts," Heather Hussain, Boeing

SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES (Session 2 of 2) - Cottonwood

2:20 pm – 3:00 pm	A.3 "12 Years of Experience at EASA," Cédrik Harang, Airbus
3:00 pm – 3:20 pm	Break - Cottonwood Foyer
3:20 pm - 4:00 pm	A.4 "A New Theory of Lift: What Does Nature Minimize in Every Incompressible Flow?" Haithem Taha, University of California, Irvine

SUBCOMMITTEE B – MISSILES AND SPACE (Session 1 of 2) - Cottonwood
Co-Chairs: Phil Hattis and Kevin Wise

4:00 pm – 4:40 pm	B.1 "Orion's Powered Flight Guidance Performance During Artemis I," Tom Fill, Draper

6:00 pm – 9:00 pm	**RECEPTION** – Cottonwood

THURSDAY, 18 April 2024 – Day 2

07:00 am – 8:00 am	**BREAKFAST** - Cottonwood Foyer

7:50 am – 8:00 am	**Day 2 Introduction** Jeb Orr – ACGSC Chair

SUBCOMMITTEE B – MISSILES AND SPACE (Session 2 of 2) - Cottonwood
Co-Chairs: Phil Hattis and Kevin Wise

8:00 am – 8:40 am	B.2 "Closed-Loop Flight Testing on Astrobotic Reusable Rocket Testbeds," Sean Bedford, Astrobotic
8:40 am – 9:20 am	B.3 "A Benchmark Model for Launch Vehicle Flight Control," Jeb Orr, NASA Engineering and Safety Center (NESC)

9:20 am – 9:30 am	Break - Cottonwood Foyer

SUBCOMMITTEE C – AVIONICS AND SYSTEMS INTEGRATION - Cottonwood
Co-Chairs: Raman Mehra and Jared Grauer

9:30 am – 10:10 am	C.1 "Informative Path Planning for Cooperating Autonomous Vehicles", Cammy Peterson, Brigham Young University
10:10 am – 10:50 am	C.2 "Sustainability and Future Mobility," Kevin Wise, Boeing
10:50 am - 11:30 am	C.3 "An Alternate Perspective on Aircraft Handling Qualities," Ben Moulton, Utah State University

11:40 am – 1:00 pm	**LUNCHEON** – Restaurant Patio **PAB LUNCHEON** – Dining Room

1:15 pm – 5:00 pm	**Hill Air Museum Tour -** Meet in Lobby at 1:15 PM

FRIDAY, 19 April 2024 – Day 3

07:00 am – 8:00 am	**BREAKFAST** - Cottonwood Foyer

7:50 am – 8:00 am	**Day 3 Introduction** Jeb Orr – ACGSC Chair

SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS - Cottonwood Co-Chairs: Dave Doman, Mike Bolender, Dave Klyde, and Brian Lee	
8:00 am – 8:40 am	D.1 "Alternative Swarm Architectures: Insect Navigation and Control in Group Flight," Imraan Faruque, Oklahoma State University
8:40 am – 9:20 am	D.2 "Machine Learning for Air Data Systems," Zach Meves, Boeing
9:20 am – 10:00 am	D.3 "Connecting Higher Level AI Decision-Making and Flight Control," Dakota Evans, AFRL

10:00 am – 10:20 am	Break - Cottonwood Foyer

SPECIAL SEMINAR	
10:20 am – 11:20 am	*Engineering Analysis Using the Julia Programming Language* - JuliaHub

11:20 am – 11:30 am	**Concluding Remarks**
11:30 am	Adjourn