



Aerospace Control and Guidance Systems Committee Meeting No. 132

Spring 2024

Salt Lake City, UT

DRAFT AGENDA (4/12/24)

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 - Blue Spruce
8:00 am – 8:30 am	GENERAL BUSINESS MEETING – Blue Spruce Jeb Orr – ACGSC Chair
8:30 am – 10:00 am	GENERAL COMMITTEE TECHNICAL SESSION – Blue Spruce <ul style="list-style-type: none"> ● Stan Pszczolkowski, FAA (Retired) - <i>Special Topic</i> ● Philip Goupil, Airbus ● Brian Lee, Boeing ● Randy Christensen, Blue Origin ● John Valasek, Texas A&M University
10:00 am – 10:20 am	Break
SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES (Session 1 of 2) - Blue Spruce Co-Chairs: Dave Mitchell, Oliver Brieger, and Chris Miller	
10:20 am – 11:00 am	A.1 “Method for Predicting Multi-Axis Task Performance and Handling Qualities Rating for a Coaxial-Compound and Tiltrotor Rotorcraft with Validating Data,” Ed Bachelder, San Jose State University
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) – Aspen
2023 Dave Ward Memorial Lecture	
1:30 pm – 2:10 pm	“Advanced Guidance & Control for Future Concepts,” Heather Hussain, Boeing
2:10 pm – 2:20 pm	Break
SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES (Session 2 of 2) - Blue Spruce	
2:20 pm – 3:00 pm	A.3 “A 2-D Static Margin For 3-D Aircraft,” Dave Schmidt (DK Schmidt and Associates); Derek Lisoski and Brian Danowsky (AeroVironment)
3:00 pm - 3:40 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) - Blue Spruce Co-Chairs: Phil Hattis and Kevin Wise	
3:40 pm – 4:20 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 - Blue Spruce
7:50 am – 8:00 am	Day 2 Introduction Jeb Orr – ACGSC Chair
SUBCOMMITTEE B – MISSILES AND SPACE (Session 2 of 2) - Blue Spruce 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
SUBCOMMITTEE C – AVIONICS AND SYSTEMS INTEGRATION - Blue Spruce Co-Chairs: Raman Mehra and Jared Grauer	
9:30 am – 10:10 am	C.1 "12 Years of Experience at EASA," Cédrik Harang, Airbus
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 – Aspen 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 - Blue Spruce
7:50 am – 8:00 am	Day 3 Introduction Jeb Orr – ACGSC Chair

SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS - Blue Spruce
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 “Cognitively Enhanced Complex Event Processing,” Dakota Evans and Scott Douglas, AFRL

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

SPECIAL SEMINAR

10:20 am – 11:20 am	<i>Engineering Analysis Using the Julia Programming Language</i> - JuliaHub
---------------------	---

11:20 am – 11:30 am	Concluding Remarks John Valasek – ACGSC Chair
---------------------	---

11:30 am	Adjourn
----------	---------