

**MEETING NO. 128 AGENDA**  
**AEROSPACE CONTROL AND GUIDANCE SYSTEMS COMMITTEE**  
**HYATT PLACE NIAGARA FALLS, NY**  
**March 2021**

<b>TUESDAY, 29 March 2022</b>	
07:00 pm -9:00 pm	1.0 PLANNING ADVISORY BOARD MEETING - Erie Room

<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, 30 March 2022 – Day 1</b>	
07:00 am-8:30 am	2.0 Registration and Breakfast – Niagara Falls Room
8:30 am – 9:00 am	3.0 GENERAL BUSINESS MEETING - Erie Room Piero Miotto – Chairman
9:00 am -12:00 pm	4.0 GENERAL COMMITTEE TECHNICAL SESSION - Erie Room <ul style="list-style-type: none"> <li>- Dave Klyde, Systems Technology Inc.</li> <li>- John, Valasek, TAMU</li> <li>- John Fristachi, Calspan's VSS Update</li> <li>- Philippe Goupil, Airbus Commercial Aircraft</li> <li>- Lee, Brian, Flight Deck and Handling Qualities Standards for Transport Aircraft</li> <li>- Orr, Jeb S, McLaurin Aerospace</li> <li>- Stan Psczolkowski, "The Federal Aviation Administration Technical Center".</li> <li>- Faruque, Imraan, AIAA SciTech Award</li> <li>- Goupil, Philippe, Airbus</li> </ul>
12:00pm – 1:30 pm	LUNCHEON – (Meet in Subcommittees) – Niagara Falls
<b>SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION</b>	
Chair: Raman Mehra	
Room Erie	
1:30 pm – 2:10 pm	C.1 Kevin Granger, Georgia Tech PhD candidate, “Configuration Optimization of Modular Aerospace Robotic Systems”
2:10 pm – 2:50 pm	C.2. Marc Steinberg, ONR, “ONR Science of Autonomy Program”
2:50 pm – 3:10 pm	Break
<b>SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS</b>	
Chair: David Doman	
Room Erie	
3:10 pm – 3:50 pm	D.1 Jeb Orr, McLaurin Aerospace, “Adaptive Control for Human-Rated Launch Vehicles”
3:50 pm – 4:30 pm	D.2 Haithem Taha, U. California Irvine, “Novel Nonlinear Roll Control”
6:00 pm – 9:00 pm	RECEPTION – Niagara Falls Room

<b>THURSDAY, 31 March 2022 – Day 2</b>	
07:30 am-8:00 am	Breakfast – Niagara Falls Room
8:00 am – 8:40 am	D.3 John Crassidis, SUNY Buffalo, “Novel Methods for Satellite Attitude Maneuver Detection”
<b>SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS</b>	
Chair: John Valasek	
Room Erie	
8:40 am – 9:20 am	E.1 Garrett Jares, PhD Candidate, Texas A&M University “Flight Demonstration and Validation of Malware-in-the-Loop Attack for Controller Acquisition”
9:20 am – 10:00 am	Break
10:10 am – 10:50 am	E.2 Agamemnon Crassidis, Professor, Rochester Institute of Technology “Model-Free Nonlinear Control with Applications to an Unmanned Aircraft Quadcopter System”

10:50 am – 11:30 am	E.3 John L. Crassidis, Professor, University and Buffalo “Cislunar Space Domain Awareness & Challenges and Obstacles”
<b>SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES</b>	
<b>Chair: Mitchell, Dave</b>	
<b>Room Erie</b>	
11:30 am – 12:10 pm	A.1 Dr. Chris Cotting from USAF Test Pilot School, X-62 (formerly VISTA F-16), Calspan
12:10 pm – 1:30 pm	LUNCHEON – Niagara Falls Room EXECUTIVE LUNCH – Erie Room
1:30 pm – 5:30 pm	CALSPAN Facilities Tour
<b>FRIDAY, 1 April 2022 – Day 3</b>	
<b>SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES</b>	
<b>Chair: Mitchell, Dave</b>	
<b>Room Erie</b>	
07:00 am-8:00 am	Breakfast – Niagara Falls Room
8:00 am – 8:40 am	A.2 B. Peter Suh, MIMO and SISO Margins on X-56.
8:40 am – 9:20 am	A.3 Robert Osterhuber, Eurofighter Presentation – Airbus
<b>SUBCOMMITTEE B – MISSILES AND SPACE</b>	
<b>Chair: Phil Hattis</b>	
<b>Room Erir</b>	
9:20 am – 10:00 am	A.4 Advanced Handling Qualities Aircraft – Vincent Clementi, International Test Pilots School
10:00 am – 10:20 am	Break
10:20 am – 11:00 am	B.1 Kevin Duda (Draper): The Human Side of Space Exploration: A Summary Based on: Duda, Kevin R., D. J. Newman, J. Zhang, N. Meirhaeghe, and H. L. Zhou (2021) “Chapter 56: Human Side of Space Exploration” in Handbook of Human Factors and Ergonomics. 5th Edition. G. Salvendy and W. Karwowski (Eds.) pp. 1480-1511.
11:00 am – 11:40 am	B.2 Colter Russell (Mclaurin/NASA) or John Wall (DCI/NASA): Modeling and Hot Fire Test Validation of Space Launch System Thrust Vector Control Friction Effects.
11:40 am – 12:00 pm	Adjourn