

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

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

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

Planning Advisory Board Members		
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

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

WEDNESDAY, 30 March 2022 – Day 1	
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 - Dave Klide, Systems Technology Inc. - John, Valasek, TAMU - Philippe Goupil, Airbus Commercial Aircraft -
12:00pm – 1:30 pm	LUNCHEON – (Meet in Subcommittees) – Niagara Falls
SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION 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
3:10 pm – 3:50 pm	C.3 John Tylko, Aurora Flight Sciences, “Calspan’s Role in the History of Flight Simulation”
SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS Chair: David Doman Room Erie	
3:50 pm – 4:30 pm	D.1 Jeb Orr, McLaurin Aerospace, “Adaptive Control for Man-Rated Rockets”
4:30 pm – 5:10 pm	D.2 Haithem Taha, U. California Irvine, “Novel Nonlinear Roll Control”
6:00 pm – 9:00 pm	RECEPTION – Niagara Falls Room

THURSDAY, 31 March 2022 – Day 2	
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”
SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS 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”
SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES Chair: Mitchell, Dave	

Room Erie	
11:30 am – 12:10 pm	A.1 Advanced Handling Qualities Aircraft – Vincent Clementi, International Test Pilots School
12:10 pm – 1:30 pm	LUNCHEON – Niagara Falls Room EXECUTIVE LUNCH – Erie Room
1:30 pm – 5:30 pm	CALSPAN Facilities Tour
FRIDAY, 1 April 2022 – Day 3	
SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES	
Chair: Mitchell, Dave	
Room Erie	
07:00 am-8:00 am	Breakfast – Niagara Falls Room
8:00 am – 8:40 am	A.2 Dr. Chris Cotting from USAF Test Pilot School, X-62 (formerly VISTA F-16), Calspan
8:40 am – 9:20 am	A.3 Eurofighter TBD – Oliver Brieger POC
SUBCOMMITTEE B – MISSILES AND SPACE	
Chair: Phil Hattis	
Room Erir	
9:20 am – 10:00 am	B.1 Dr. Hyeongjun Park (New Mexico State University): G&C for a hypersonic glide vehicle.
10:00 am – 10:20 am	Break
10:20 am – 11:00 am	B.2 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.3 Colter Russell (Mclaurin/NASA) or John Wall (DCI/NASA): Modeling and Hot Fire Test Validation of Space Launch System Thrust Vector Control Friction Effects.
1:40 am – 12:00 am	Adjourn