

MEETING NO. 126 AGENDA
AEROSPACE CONTROL AND GUIDANCE SYSTEMS COMMITTEE
 Remote Meeting
March 2021

Meeting schedule at a glance

March 19, 2021	ACGSC 1st PLANNING ADVISORY BOARD MEETING
March 25-26, 2021	ACGSC MAIN MEETING
April 16, 2021	ACGSC 2nd PLANNING ADVISORY BOARD MEETING

ACGSC 1st PLANNING ADVISORY BOARD MEETING

FRIDAY, 19 March 2021	
2:00 pm-04:00 pm EDT	Pre main meeting PAB coordination meeting (1 week before main meeting)

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

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

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

ACGSC MAIN MEETING

THURSDAY, 25 March 2021 – Day 1	
09:30 am-10:00 am EDT	WebEx Login/troubleshooting
10:00 am -10:30 am EDT	GENERAL BUSINESS MEETING
10:30 am -11:30 am EDT	GENERAL COMMITTEE TECHNICAL (10 minutes presentations) <ol style="list-style-type: none"> 1. Dave Klyde – STI 2. Manoranjan Majji – TAMU 3. Jeb Orr – Mclaurin 4. Dave Doman – AFRL 5. Chris Miller – NASA Armstrong
SUBCOMMITTEE E – FLIGHT, PROPULSION, AND AUTONOMOUS VEHICLE CONTROL SYSTEMS Chair: John Valasek	
11:30 am-12:10 pm EDT	E.1 “Acoustically-aware vehicles: Control driven noise reduction for Urban Air Mobility”, Kasey Ackerman, NASA Langley Research Center, and Andrew Patterson, UIUC
12:10 pm-12:50 pm EDT	E.2 “Safe learning and control with L1 adaptation”, Naira Hovakimyan, UIUC, and Evangelos Theodorou, GaTech
LUNCH BREAK (30 minutes)	
01:20 pm-02:00 pm EDT	E.3 “Challenges in Deploying Trajectory Based Operations in the National Airspace System” Lesley Weitz, MITRE
SUBCOMMITTEE A – AERONAUTIC AND SURFACE VEHICLES Chair: Steven Jacobson	
02:00 pm-02:40 pm EDT	A.1 “Variable-Stability Aircraft Capabilities at International TEDT Pilot School,” Andre Celere, ITPS, Lars Peter, Amazilla Aerospace
02:40 pm-03:20 pm EDT	A.2 “Electrified Aircraft Controls,” Peter Suh, NASA Armstrong Flight Research Center
BREAK (10 minutes)	
03:30 pm-04:10 pm EDT	A.3
SUBCOMMITTEE B – MISSILES AND SPACE Chair: Phil Hattis	
04:10 pm-04:50 pm EDT	B.1 “Advances in Multi-Body Dynamics”, Richard McMonagle of NGC

FRIDAY, 26 March 2021 – Day 2	
9:30 am-10:00 am EDT	WebEx Login/troubleshooting
SUBCOMMITTEE B – MISSILES AND SPACE (cont.)	
10:00 am-10:40 am EDT	B.2 "Camera-in-the-Loop Vision-Aided Inertial Navigation Facilities for Lunar Landing and Orbital Rendezvous", Kevin Duda, Draper
10:40 am-11:20 am EDT	B.3 “Dr. Richard Battin: Inventing and Applying Modern Space Guidance While Also Being a Moral Compass,” by Phil Hattis, Draper
SUBCOMMITTEE C – AVIONICS AND SYSTEM INTEGRATION Chair: Raman Mehra	
11:20 am-12:00 pm EDT	C.1 “Bringing Highly Augmented Controls to a Legacy Helicopter for Degraded Visual Operations,” Matt Rhinehart, NAVAIR

LUNCH BREAK (30 minutes)	
12:30 pm-01:10 pm EDT	C.2 2. "Near Term Commercial SATCOM Trend Implications in the Context of Scalable Conflicts for Unmanned System Flight Control, Telerobotics, and Real Time Sensor Collection," Parker Robinson, Viasat
01:10 pm-01:50 pm EDT	C.3 3. "Future of Aerospace Autonomy: How to Integrate Machine Learning with Guidance, Navigation, and Control," Soon-Jo Chung, Caltech/JPL
SUBCOMMITTEE D – DYNAMICS, COMPUTATIONS, AND ANALYSIS Chair: David Doman	
01:50 pm-02:30 pm EDT	D.1 "Run Time Assurance", John Schierman, AFRL
BREAK (10 minutes)	
02:40 pm-03:20 pm EDT	D.2 "Flight Control Challenges and Technologies for Future Rotorcraft", Mark Tischler, USA Ret.,
03:20 pm-04:00 pm EDT	D.3 "Descent Guidance with State Constraints via a Dual Quaternion Formulation", Behcet Acikmese, University of Washington
04:00 pm-04:30 pm EDT	Adjourn

ACGSC 2nd PLANNING ADVISORY BOARD MEETING

FRIDAY, 16 April 2021	
2:00 pm-04:00 pm EDT	After main meeting PAB coordination meeting (3 weeks after main meeting)