

Hypersonic-Vehicle Flight Prediction Workshop

June 20-22, 2017

Final Agenda

Session	Start Time	End Time	Speaker	Org	Presentation Title / Topic
Day 1 - Tuesday					
1st Bus Pickup at Hotel	7:00?				Coffee at meeting site
Classified Presentations	8:00	8:30	Tom Jackson	USAF/AFRL	Invited - Keynote for Air-breathing Vehicles
	8:30	9:00	Gary Polansky	Sandia NL	Invited - Keynote for Boost-glide Vehicles
	9:00	9:30	Oscar Murillo	NASA/AFRC	NASA Armstrong involvement with HTV-2
2nd Bus Pickup at 9:00	9:30	10:00			Break - Switch to unclassified presentations
Unclassified Presentations	10:00	10:30	Rick Gaffney	NASA/LaRC	Welcome/announcements/Purpose,Scope,Expectations, etc
	10:30	11:00	Joseph Olejniczak	NASA/ARC	Orion Exploration Flight 1 Test
	11:00	11:30	Brandon Oliver	NASA/JSC	Challenges and progress towards reconstruction of EFT-1 heatshield aerothermal environments
	11:30	12:00	Rob Maddock	NASA/LaRC	EDL Flight Mechanics Predictions
	12:00	1:00			Lunch (Catered on site - Boxed Lunch, select on registration web page)
	1:00	1:30	Ken Rock	NASA/LaRC	Hyper-X Program (X-43)
	1:30	2:00	Nick Altobelli	Lockheed Martin	Hypersonic Flight Test Campaign Manifest Planning Observations and Recommendations
	2:00	2:30	Rich Perlman	Orbital ATK	Ground test capabilities and usage, and impact to program uncertainties and risks
	2:30	3:00			Break
	3:00	3:30	Matthew Thomas	CFDRC	Quantifying Hypersonic-Vehicle Flight Behavior Uncertainty Using Ground Test Results
Breakout Session 1	3:30	4:00	Wade Burfitt	OSD/HSST	Flight prediction and uncertainty quantification from a procurement perspective
	4:00	5:00	Moderator - Several		Smaller Group Discussions - Address questions/goals of the workshop
Bus Return to Hotels	5:00				
Optional Group Dinner at local restaurant	6:30				The Warehouse Restaurant
Day 2 - Wednesday					
Bus Pickup at Hotel	7:30				Coffee at meeting site
Unclassified Presentations	8:00	8:30	Anton VanderWyst	Northrop Grumman	Trajectory Optimization
	8:30	9:00	Andy Imbrie	Lockheed Martin	Challenges to Implementation of Parameter Identification Maneuvers
	9:00	9:30	Chris Karlgaard	AMA	Hypersonic Aerodynamic Prediction for Entry, Descent and Landing
	9:30	10:00	Brian Hollis	NASA/LaRC	Aerothermodynamic Modeling Challenges for EDL
	10:00	10:30			Break
	10:30	11:00	Dean Eklund	USAF/AFRL	SED-WR Program (X-51)
	11:00	11:30	Andrea Storch	NASA/LaRC	HIFIRE Flight 2
	11:30	12:00	Clif Mortensen	Lawrence Livermore	Challenges in taking data for Hypersonic BL transition and applying to flight
	12:00	1:00			Lunch (Catered on site - Buffet)
	1:00	1:30	Graham Candler	U. of Minnesota	Next-Generation CFD for Hypersonic Vehicle Aerothermodynamics
	1:30	2:00	Eric Blades	ATA Engineering	Multiphysics CFD/CSM simulations
	2:00	2:30	Thomas Eason	USAF/AFRL	Assessing Structural Margins for Hypersonic Hot Structures Using Ground Test Facilities
	2:30	3:00			Break
	3:00	3:30	Chris Schulz	Lockheed Martin	When Things Go Wrong – Approaches to Hypersonic Post Flight Anomaly Investigations to Identify and Resolve Deficiencies in Ground Based Modeling
	3:30	4:00	Milad Mahzari	NASA/ARC	Mars Entry, Decent and Landing Instrument and data
Breakout Session 2	4:00	5:00	Moderator - Several		Smaller Group Discussions - Address questions/goals of the workshop
Bus Return to Hotels					
Day 3 - Thursday					
Bus Pickup at Hotel	7:30				Coffee
Unclassified Presentations	8:00	8:30	John Bradford	SpaceWorks	Inlet Operability Modeling for Air-Breathing Propulsion Systems to Improve Performance Prediction
	8:30	9:00	Robert Bakos	Innovaveering	Ground and Flight Test Needs for Active Hypersonic Engine Control Development
	9:00	9:30	Mary Bedrick	USAF/AFLCMC	Past, Current and Future Meteorological Support for Hypersonic Vehicle Technologies
	9:30	10:00	Andrew Crow	Lockheed Martin	Capabilities and Gaps of Flight Prediction Tools for Radiative Signature Analysis
	10:00	10:30			Break
Wrap-up activities (Times can shift based on how things go)	10:30	10:45	Morrison & Washburn		Summary of previous and current workshop
	10:45	11:45	Breakout Teams (20 min each)		Final discussion with whole group - things missed, other thoughts
	11:45	12:00	Rick Gaffney		Feedback on workshop
	12:00	1:00			Lunch (Catered on site - Boxed Lunches, select on registration web page)
	1:00	3:30			Tours
	1:00				Bus pick-up for attendees not interested in tour - to be taken back to hotels
	3:30				Bus pick-up for attendees - to be taken back to hotels