



**VFS Development, Qualification and Affordability of
Complex Systems Technical Meeting Agenda
Sept 14–15, 2022
Radiance Technologies, Huntsville, AL**

Wednesday, Sept 14, 2022	
0700-1200	Attendee Badge Pick-up
0700-1200	Presentation Material Drop-off for Authors
0800-0815	Welcome by Redstone Chapter President – Mr. Bill McCandless, US Army FLRAA Program Office
	Meeting Objectives by General Chair – Mr. Eric Grigorian, GTRI
0815-0900	Opening Keynote: MG Robert Barrie, PEO AVN
	Session I – Safety & Certification Session Chair: Dave Cripps, US Army CCDC AvMC, SRD
0900-0910	Safety and Certification Initial Comments: Dave Cripps
0910-0930	Session Invited Topic: <i>IFR & IMC Qualification</i> , Mel Johnson, US Army CCDC AvMC
0930-0955	<i>Certification Considerations for Flight Critical Complex Non-traditionally Developed Software</i> , Jason Rupert, Modern Technology Solutions
0955-1010	Break
1010-1035	<i>Validation of Mission Performance Calculator (MPC) for Airworthiness Applications of Future Vertical Lift Platforms (Presentation Only)</i> , John Sims, US Army DEVCOM AvMC
1035-1100	<i>Safety and Product Robustness in the Air Vehicle Design Process</i> , Barton Hainsworth, Ide Ehigiato, Pete Barner, Sikorsky, a Lockheed Martin Co.
1100-1145	Questions and Roundtable Discussion
1145-1230	Lunch
	Session II - Modeling and Simulation Session Chair: Alex Boydston, US Army CCDC AvMC
1230-1240	Modeling and Simulation Initial Comments: Alex Boydston
1240-1300	Session Invited Topic: <i>SCADE/Transitioning to MBSE & Understanding ROI</i> , Justin Pearson, US Army CCDC AvMC
1300-1325	<i>Modern Aircraft Flight Control Design and Bare Aircraft Sizing: an Integrated Model-Based Approach</i> , F.D. Amato, N. Cortigiani, D. Del Gobbo, L. Belluomini, D. King, Leonardo Helicopters
1325-1340	Break
1340-1405	<i>Leveraging Digital Engineering to Reimagine Computational Analyses</i> , Dave O'Brien, US Army DEVCOM AvMC
1405-1430	<i>Analyzing Mechanical Systems Using 3DX Design Tables, Kinematic Simulations, and Dynamic Simulations</i> , Jack Faysash, Sikorsky, a Lockheed Martin Co.
1430-1515	Questions and Roundtable Discussion
1515-1600	<i>Development, Qualification and Affordability of Complex Multicore Systems (Presentation Only)</i> , John Warther, Green Hills Software
1600-1730	Social



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0700-1200	Attendee Badge Pick-up
0700-1200	Presentation Material Drop-off for Authors
0800-0815	Welcome by General Chair: Mr. Eric Grigorian, GTRI
0815-0900	Opening Keynote: Mr. Dan Bailey, Deputy Director, Future Vertical Lift CFT
	Session III – Complex Design & Control Session Chair: David O’Brien, US Army DEVCOM AvMC
0900-0910	Complex Design & Control Initial Comments: David O’Brien
0910-0930	Session Invited Topic: <i>ERDC, HPC-enabled Design and Analyses</i> , Dr. Ian Dettwiller, U.S. Army Engineer Research & Development Center (ERDC)
0930-0955	<i>Multidisciplinary Design of a Complex Tiltrotor Morphing Wing System</i> , D. Rogers, C. Punzi, A.A. Trezzini, P. Abdel Nour, Leonardo Helicopters
0955-1010	Break
1010-1035	<i>Verification of Electric Aircraft during Steady State Operation and Fault Conditions (Presentation Only)</i> , Mitchell Marks, HBK
1035-1100	<i>Simulation and Integration Laboratory (SAIL) Testing of Integrated Cockpit and Fly By Wire</i> , Luca Belluomini and Sid Xiao, Leonardo Helicopters
1100-1145	Questions and Roundtable Discussion
1145-1230	Lunch
	Session IV – Lifecycle Digital Engineering Session Chair: TBD
1230-1240	Digital Engineering Initial Comments: TBD
1240-1300	<i>A Missing Piece of PEO Enterprise Architectures: The Assured Infrastructure Model</i> , M. Brown, D. Walsh, S. Nagel, H. Tiedeman, Collins Aerospace
1300-1325	<i>Component Specification Model</i> , Dr. Jon Fox, GTRI
1325-1340	Break
1340-1405	<i>Measuring Power Losses in Motors and Inverters (Presentation Only)</i> , Mitchell Marks, HBK
1430-1455	<i>Oil Debris Monitoring: Advanced Analytics Enabling Maintenance Efficiencies (Presentation Only)</i> , Adam Oszmian, Gastops
1455-1530	Questions and Roundtable Discussion
1530-1600	Closing – Bill McCandless

