UW Collaborative Center for Advanced Manufacturing (CCAM)
-- Aerospace Executives Forum --
January 14, 2016 | University of Washington | HUB Lyceum

Speaker Bios (alphabetical, partial list)

Mark Doroudian, Director of Engineering
ESI North America

Mark Doroudian has an MS in Mechanical Engineering from University of Oklahoma and a BS in Mechanical Engineering from the University of Texas at Austin. He has 20+ years experience as an engineer & consultant on Automotive & Aerospace programs, applying computation fluid dynamics, finite element analysis, and CAE methods in the focus areas of fluid flow, aerodynamics, cooling, heat protection, structural dynamics, loads, & thermal stress. Recent applications include composite manufacturing and performance

Jason Dunn, Co-Founder & CTO
Made In Space, Inc.

Jason founded Made In Space in 2010 as a result of analyzing the best possible approaches to enabling a fully sustainable form of space colonization. With a core focus on space manufacturing, the company has since built, flown, and operated the first 3D printer in space. Installed on the International Space Station, the Made In Space Zero-Gravity 3D printer began space manufacturing in November, 2014. Jason serves as the Chief Technology Officer, overseeing the technical program management on projects and development of the technology roadmap for the company.

Jason holds two degrees in Aerospace engineering, has studied at the Singularity University Graduate Summer Program, and is an internationally recognized speaker on the topics of space exploration and the theory of disruption. In 2014, Jason and his three co-founders were recognized by Forbes on the prestigious 30 under 30 list for manufacturing.

Stephen P. Engelstad, Fellow
Lockheed Martin

is currently a Lockheed Martin Fellow with specialty in Computational Mechanics and Composite Structures. He holds a Ph.D. in Engineering Mechanics from Virginia Polytechnic Institute and State University. He has 28 years experience in the aircraft industry in the areas of structural analysis, composites, aircraft certification, bonded joints, aircraft survivability analysis, optimization, structural dynamics and acoustics, and sonic and high cycle fatigue. He currently serves as Technical Lead for an LM Aero Advanced Development Programs Structures R&D group, and as an LM consultant to aircraft programs for structural analysis. He is a member of the United States Air Force Scientific Advisory Board (SAB), and the NASA Structures Technical Discipline Team.

Ted Hile, Custom Manufacturing Manager
Globe Machine Manufacturing Company

Ted Hile has spent almost three decades in manufacturing industries. His experience ranges from basic materials processing to advanced composite structure production for aerospace and defense companies. In roles with Loctite Corporation, General Plastics Manufacturing Company, Century Design, and now Globe Machine, Ted has engaged in new product design and development, project and program management, manufacturing process innovation, continuous improvement leadership and full-spectrum technical marketing. Ted's current job at Globe Machine involves assembling accelerated process systems for rapid, automated and cost-efficient production of composite structures and assemblies.

Dr. Robert P. Hoyt, President, CEO, & Chief Scientist,
Tethers Unlimited, Inc.

Education: Ph.D. & M.S. Aero/Astro, University of Washington, 1994/92
B.A. Physics, Williams College, 1990, Magna Cum Laude

Dr. Rob Hoyt is a relentlessly inventive Technologist and CEO with expertise in additive manufacturing, space systems, advanced space propulsion, plasma physics, scientific algorithms, and commercial applications of space technologies. He co-founded Tethers Unlimited Inc, and has built it into a multi-$M space and defense R&D firm. He also co-founded ScienceOps Inc., a big-data algorithm and web analytics firm sold to Acquisio in 2012. Over the past twenty years he has pioneered the development of technologies for in-space manufacturing of spacecraft, affordable mitigation of orbital debris and radiation belts, and propellantless propulsion for spacecraft.

Dave Trop, Chief Engineer for BCA Structures- Product Development
The Boeing Company

Dave leads the engineering effort to develop structure for improved airplanes. Dave has spent the majority of his 30-year Boeing career in airplane development in positions of increasing responsibility on the 777, 767, 747, and 787 programs. He has placed special emphasis on development of creative design solutions to improve airplane performance and product integrity. In recent years, Dave led the engineering development of the 787 One-Piece Fuselage Barrel; was Structures Integration Leader for 787, led the Airframe team (wing and fuselage) for 787-9 development, and led the 747-8 Wing Integrated Product Team in developing a new wing for the 747-8. Dave earned an MS in Aeronautics and Astronautics from the Massachusetts Institute of Technology, where he specialized in structural mechanics. His Master's work included research in composite aircraft fuselage damage tolerance.

Dr. Robert Yancey,Vice President , Aerospace & Composites
Altair

Dr. Robert Yancey has a technical background in composite materials, additive manufacturing, design optimization, finite element modeling, and nondestructive evaluation. He holds a B.S. degree in Aeronautics and Astronautics from MIT, an M.S. degree in Engineering Mechanics from Virginia Tech, and a Ph.D. in Materials Engineering from the University of Dayton.

Dr. Mostafa Rassaian, Technical Fellow
The Boeing Company

Dr. Rassaian holds a Ph.D. degree in Applied Mechanics from Illinois Institute of Technology in Chicago and is a Technical Fellow in Boeing Research & Technology, Structures Technology. His field of expertise is computational structural mechanics, specializing in Impact Dynamics. Dr. Rassaian is responsible for leading diverse simulation solutions in the areas of dynamic events covering bird strike, hail, live fire, ballistics, open fan blade-out, and crashworthiness. He was the principal investigator for the crashworthiness certification of 787 analysis supported by testing. He is currently leading the development of composite laminate optimization, with a special interest in non-traditional and steered-fiber laminates. This includes different facets of design rules, ply design for manufacturing efficiency, finite element modeling, optimization, manufacturing and structural testing.