MEETING AGENDA

America Makes & ANSI Additive Manufacturing Standardization Collaborative (AMSC)

Design for Additive Manufacturing (AM) Virtual Event

Wednesday, March 31, 2021, 11:00 am – 4:00 pm Eastern

Advance Registration Required (Link to Register)

*This virtual event brings together subject matter experts from industry, government, and academia for a discussion that will help to lay the groundwork for further development/refinement of the AMSC **Standardization Roadmap for Additive Manufacturing**, last published in June 2018. This includes discussion of the following:*

- *Standards that have been published or that are in development to fill gaps identified in the roadmap*
- *Potential focus areas for standards development based on new technology developments and applications*

***Speaker biographies** are provided separately.*

Time	Discussion Topic and Speaker
10:00 – 11:00 am	**Registration and Networking**
11:00 – 11:10 am	**Welcome** • Jim McCabe, Senior Director, Standards Facilitation, ANSI • Brandon Ribic, Ph.D., Technology Director, America Makes
11:10 am – 1:10 pm	**Session 1: Development of Industry Standards and Guidance Documents** This session will feature presentations on AM design-related work in ASTM F42/ISO TC 261, NIST, ASME, MMPDS, and CMH-17, followed by Q&A • Moderator: Jim Williams, President, All Points Additive, and AMSC chair • David W. Rosen, Ph.D., Professor, George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology o Overview of joint work between ASTM F42 and ISO/TC 261: - AM file format - General design requirements and guidelines - process-specific design guides (e.g., PBF for both metals and polymers, DED, binder jetting, material extrusion) - design for post-processing - complex structures: simulation and modeling • Paul Witherell, Ph.D., Mechanical Engineer, National Institute of Standards and Technology o ASTM F42/ISO TC 261 JG 73 on design for data packages o NIST work on common data dictionary for AM data • George Rawls, P.E., Senior Fellow Engineer, Savannah River National Laboratory o ASME work on boilers & pressure vessels • Darrell Wallace, Ph.D., Deputy Director and Chief Technology Officer, SecureAmerica Institute, Texas A&M University o ASME work on product definitions for AM (Y14.46)

	• Doug Hall, MMPDS Program Manager, Sr. Mechanical Engineer, Battelle Memorial Institute
	  o MMPDS work on design allowables/material properties for metals
	• Curtis Davies, Senior Research Engineer, Federal Aviation Administration
	  o CMH-17 work on design allowables/material properties for polymers

1:10 – 1:45 pm	**Lunch / Networking Break**
1:45 – 3:30 pm	**Session 2: End User Perspectives on Design for AM Considerations** This session will be a panel discussion featuring industry and government representatives from the aerospace, defense, and medical sectors. • Moderator: Lauralyn McDaniel, Industry Events Manager, ASME, AMSC vice chair • Jesse Boyer, Fellow, Additive Manufacturing, Pratt & Whitney • John Schmelzle, P.E., NAWC Lakehurst Additive Manufacturing and Model Based Definition Initiative Lead, Support Equipment Dept., Naval Air Warfare Center Aircraft Division Lakehurst, NAVAIR • Steven Floyd, Space Additive Manufacturing Engineering Lead, Northrop Grumman • Douglas N. Wells, NESC Deputy Technical Fellow for Materials, Damage Tolerance Assessment Branch, NASA MSFC • Ryan O'Hara, Ph.D., Technical Director for Aerospace and Defense, nTopology • Laura Gilmour, Senior Healthcare Development Manager, EOS North America • James Coburn, CDR, USPHS, Senior Advisor for Emerging Technologies, Food and Drug Administration • Michael Gorelik, Ph.D., Chief Scientist, Fatigue and Damage Tolerance, FAA
3:30 – 3:40 pm	**Closing Remarks** • Brandon Ribic and Jim McCabe
3:40 – 4:00 pm	**Networking**