

ASTM INTERNATIONAL CONFERENCE ON ADDITIVE MANUFACTURING Research To Application Through Standardization

October 31 – November 4, 2022 | Orlando, FL
JW Marriott Orlando Bonnet Creek Resort & Spa

Submit an Abstract at www.amcoe.org/icam2022

Additive Manufacturing Applications in Aviation

The aerospace industry is one of the primary sectors which leverages additive manufacturing (AM) to its fullest extent. Cost savings, weight reduction, functional improvements, and schedule optimization are key drivers which can be achieved through the redesigning of existing components, new design concepts, and through part consolidation. On the other hand, new materials with superior or similar properties, capable process controls, process stability, and novel design methodologies are the key enablers. However, related standards, as well as qualification and certification (Q&C) practices, may need to be re-evaluated/updated for additively manufactured products.

This symposium covers the following topics relative to the application of AM in Aviation:

- General discussions on topics such as airworthiness of AM parts, specific AM applications in aviation, MRO, etc.
- Testing and quality assurance of AM parts, processes and feedstock materials
- Acceleration of AM adoption across the lifecycle through the application of computational approaches
- Recognized regulatory requirements and Q&C strategies
- Qualification of AM process with a process parameter window as an enabler for geometry specific process parameters
- Introducing new materials (alloy modifications, novel materials, functional grading)
- Role of public standards in Q&C framework
- Aerospace business cases
- AM supply chain for aerospace
- Industrialization of AM in Aerospace



Symposium Organizers

- Thomas Broderick, USAF, USA
- Jim Dobbs, Boeing, USA
- Michael Gorelik, FAA, USA
- Mikkel Pedersen, Oerlikon AM, Germany



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Research to Standards
ADDITIVE MANUFACTURING