Working Groups

Participants may sign up for one or more WGs using the sign-up sheet. Normal meeting times are noted below. In some cases, alternate dates will be selected, such as when scheduling conflicts arise because of holidays and the like. Check with staff. NOTE: WG/SGs are currently on hiatus until further notice.

Design WG
Meets: 1st and 3rd Tuesdays of every month from 9:30-11:00 am Eastern.
Co-Chairs: John Schmelzle, NAVAIR; Lynne Webster, MITRE
- Design guides
- Design tools
- Design for specific applications
- Design for assembly
- Design for printed electronics
- Design for medical
- Design documentation
- Design verification and validation
- Design for anti-counterfeiting

Precursor Materials WG
Meets: 2nd Monday of every month from 3:00-4:00 pm Eastern. Co-Chairs: Jim Adams, MPIF; Justin Whiting, NIST
- Storage, handling and transportation
- Characterization of powders
- Characterization of material extrusion feedstock (filaments & pellets)
- Characterization of liquid feedstock

Process Control WG (includes NDE for process monitoring)
Meets: 1st and 3rd Tuesdays of every month from 2:00-3:30 pm Eastern. Co-Chairs: Susan Hovanec, NAVSEA; Justin Rettaliata, NAVSEA
- Digital format and digital system control
- Machine calibration and preventative maintenance
- Machine qualification
- Parameter control
- Adverse machine environmental conditions: effect on component quality
- Precursor material handling: use, re-use, mixing, and recycling feedstock
- Precursor material flow monitoring
- Environmental health and safety: protection of machine operators
- Configuration management: cybersecurity
- In-Process monitoring
- Anti-counterfeiting

Post-processing WG
Meets: 3rd Monday of every month from 11:30 am-12:30 pm Eastern. Co-Chairs: Jason Fox, NIST; Jing Zhang, Indiana University-Purdue University Indianapolis
- Heat treatment (metals, polymers)
- Hot isostatic pressing (HIP) (metals)
- Surface finish (surface texture) (metals, polymers)
- Machining (metals, polymers)
- Post curing methods (polymers)

Finished Material Properties WG
Meets: 4th Tuesday of every month from 3:00-4:30 pm Eastern. Co-Chairs: Mohsen Seifi, ASTM International; Roger Narayan, UNC/NCSU
- Material properties
- Component testing
- Bio-compatibility & cleanliness of medical devices
- Chemistry
- Design allowsable
- Microstructure

Qualification and Certification WG
Meets: 1st and 3rd Wednesday of every month from 2:00-3:30 pm Eastern. Co-Chairs: Rachael Andrunonis, Wichita State Univ-NIAR; Jessica Coughlin, Naval Nuclear Laboratory
- Identified guidance documents (FDA Guidance, Lockheed Martin AM Supplier Quality Checklist, Nadcap program, Aerospace Corp MAIW, CMH-17 and MMPDS Handbooks, AWS D20, NASA MSFC Standard, ASME Y14.46, Underwriters Laboratories)
- User-group/industry perspectives on Q&C

Nondestructive Evaluation (NDE) WG (of Finished Parts)
Meets: 3rd Friday of every month from 11:00 am-12 noon Eastern. Co-Chairs: Patrick Howard, GE Aviation; Steve James, Aerojet Rocketdyne
- Common defects catalog using a common language for AM fabricated parts
- Test methods or best practice guides for NDE of AM parts
- Dimensional metrology of internal features
- Data fusion
- NDE of polymers and other non-metallic materials
- NDE of counterfeit AM parts
- NDE acceptance criteria for fracture critical AM parts

Maintenance WG
Meets: 4th Monday of every month from 2:00-3:00 pm Eastern. Co-Chairs: David Coyle, NAVSUP WSS; Carlo Canetta, MITRE
- Maintenance and sustainment of machines
- Standard repair procedures
- Standard technical inspection processes
- Model-based inspection standards
- Standards for tracking maintenance operations
- Cybersecurity for maintenance
- Surface preparation for additive repair
**Polymers WG.**
Meets: 2nd and 4th Wednesdays of the month from 9:30–11:00 am Eastern
Co-Chairs: Jim Williams, All Points Additive; Doug Greenwood, NAVAIR
A new "Polymers" WG is enhancing content on polymers across the AMSC roadmap. New text or gaps identified by the Polymers WG will be shared with the applicable WG(s) above.

**Medical WG.**
Meets: 1st and 3rd Mondays of the month from 2:00–3:30 pm Eastern
Co-Chairs: Lauralyn McDaniel, SME, and Dan Fritzinger, DePuy-Synthes Division of Johnson and Johnson
Because of resource considerations, the medical sector determined during phase one to meet as a sector to look at horizontal topics across the WGs. It continues to do so.

**Industry-Sectors**
A suggestion from the September 7, 2017 phase 2 kick-off meeting was that an appendix listing issues/gaps of particular interest to individual sectors potentially could be appended to the main roadmap document as a navigational tool. Indicating your sector on the sign-up sheet will make it easier to discuss the roadmap from a sector perspective should that be deemed desirable. As noted, medical already is meeting as a sector.

<table>
<thead>
<tr>
<th>Aerospace/Defense</th>
<th>Medical</th>
<th>Ground Vehicle/Heavy Equipment</th>
<th>Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft manufacturers</td>
<td>Clinicians</td>
<td>Commercial/personal ground transportation manufacturers/suppliers</td>
<td>Nuclear energy providers</td>
</tr>
<tr>
<td>Commercial airline and</td>
<td>Medical device</td>
<td></td>
<td>Oil and gas companies</td>
</tr>
<tr>
<td>general aviation suppliers</td>
<td>manufacturers</td>
<td></td>
<td>Renewable energy suppliers</td>
</tr>
<tr>
<td>Government agencies</td>
<td>Technology providers</td>
<td></td>
<td>Government agencies</td>
</tr>
<tr>
<td>Military personnel and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>suppliers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Industrial & Commercial Machinery**
Manufacturers of machines that make production parts/components for other end users/systems

**Electronics**
Electrotechnology companies

*Stakeholder examples in the Sectors are meant to be illustrative, not comprehensive.