Discuss possible changes to the industry due to COVID-19 (i.e. new normal)

• Air traffic returning to fuller capacity after COVID-19. How do you see COVID impacting airline and airport operations?

• COVID affecting aerospace and technology advances: Are there any technology plans being postponed or accelerated? What is being done to prepare for these advances?

• Remaining globally competitive How can the aviation industry restore public confidence? What planning is occurring for potential future global disruptions (e.g., pandemic, volcano, cyber incident)?
Discuss Aviation Industry Direction and Challenges

- Research Landscape
  - New Vehicles and New Missions
  - Technology and Materials
  - Data and Processing Power
  - System Wide Advancements and Improvements

- Update drivers by identifying
  - Emerging Challenges/Drivers – near (0-3 yr), mid (3-5 yr), and far (5-10 yr) term
  - Known non-federal work in any of the challenge/driver areas (i.e. potential partners)
Advances in New Vehicles and New Missions

- Non-Traditional NAS Access Points
- Routine Small Unmanned Aircraft Systems (UAS) Operations Beyond Visual Line of Sight (BVLOS)
- Space Operations
- Autonomous Ground Service Equipment at Airports
- Growth of Mixed Operations (Piloted, Autonomous, Unmanned)
- New Mission Types
- Supersonic Flight
- Urban Air Mobility
Advances in Technology and Materials

- Aircraft Command and Control Using Automation and Remote Sensing Technologies
- Certification using New Technologies, Standards, or Processes
- Future Fuel Technologies
- Infrastructure Resiliency and Continuity of Operations
- New Medical Technologies and New Medications
- New Vehicles or Components Which Make Use of New Technologies, Software, or Materials
- Position, Navigation, & Timing (PNT) Technologies
- Remote and Virtual Technologies
- New Technologies for Airport Pavement Infrastructure and Design
Advances in Data and Processing Power

- Big Data Analytics and Techniques
- Crowd Sourcing Weather Data
- Increased Connectivity by Cyber-Physical Systems (Internet of Things [IoT])
- Information Assurance and Cybersecurity for All Operations
- Risk-Based Decision-Making Techniques and Analytics
- Artificial Intelligence (AI)
- Human-Machine Teaming and New Technology Interfaces
System Wide Advancements and Improvements

- New Methods and Technologies (Air Traffic Safety, Efficiency, Noise, Emissions, Fuel Use, and Airport SurfaceMovements)
- Methods for Increased Flexibility of Operators
- Performance-Based Capabilities
- Advancement of Global Standards or Requirements
- Human Response to Traffic and Congestion Management
- Development of the Workforce of the Future
- Advances in Aeromedical Certification
- Changing Public Demographics and Requirements