

**ANSI Unmanned Aircraft Systems
Standardization Collaborative (UASSC)**

2018 Plenary Meeting

100
ANSI

1918 - 2018

September 20, 2018

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- ◆ Associate Partner DroneScape, PLLC



Welcome / Opening Remarks

Public-sector Co-Chair

- ◆ Earl Lawrence
Director, UAS Integration Office
Federal Aviation Administration

Private-sector Co-Chair

- ◆ Brian Wynne
President and CEO
Association for Unmanned Vehicle Systems International

Today's Agenda - Review the Draft Roadmap

- ◆ **WG3 review (Chapter 8)** - 9:15 – 10:30
Flight Operations Standards: Critical Infrastructure Inspections and Commercial Services
- ◆ Morning Break - 10:30 – 10:45
- ◆ **WG1 review (Chapter 6)** - 10:45 -12:15
Airworthiness Standards
- ◆ Buffet Lunch - 12:15 – 1:15
- ◆ **WG2 review (Chapters 7 and 10)** - 1:15 – 2:45
Flight Operations Standards: General & Personnel Training, Qualifications, and Certification Standards
- ◆ Afternoon Break - 2:45 – 3:00
- ◆ **WG4 review (Chapter 9)** - 3:00 – 4:15
Flight Operations Standards: Public Safety
- ◆ **Open Discussion** - 4:15 – 4:45
- ◆ **Next Steps/Closing Remarks** - 4:45 – 5:00
- ◆ **Reception** - 5:00 – 6:00

Questions for Each Working Group

- 1) Is the presentation of issues, gaps, and recommendations for new or revised standards clearly stated?
- 2) What could be improved?
- 3) Is there any content that conflicts with or should be consolidated with another section?
- 4) Are there any issues or gaps that have been overlooked?

Let's focus on answering these questions and identifying areas needing our attention

Let's avoid wordsmithing – there will be a comment period in October for that

Let's avoid trying to formulate solutions to the issues that have been identified (i.e., stay out of the weeds)

Please speak into the mic on your table.

Flight Operations Standards: Critical Infrastructure Inspections and Commercial Services (Chapter 8) – WG3

Co-Chairs

- ◆ Brian Daly
Assistant Vice President, Standards & Industry Alliances
AT&T
- ◆ Philip Hall
Founding Director & CEO
RelmaTech Ltd (UK)

Flight Operations Standards: Critical Infrastructure Inspections and Commercial Services (Chapter 8) – WG3

- ◆ Vertical Infrastructure Inspections
 - Boilers & Pressure Vessels
 - Cranes
 - Building Facades
 - Low-Rise Residential and Commercial Buildings
 - Communications Towers
- ◆ Linear Infrastructure Inspections
 - Bridges
 - Railroads
 - Power Transmission Lines
- ◆ Wide Area Environment Infrastructure Inspections/ Precision Agriculture
 - Environmental Monitoring
 - Pesticide Application
 - Livestock Monitoring and Pasture Management
- ◆ Commercial Package Delivery

Morning Break



Airworthiness Standards (Chapter 6) - WG1

Co-Chairs

- ◆ Phil Kenul
Senior Vice President, Aviation and Operations
TriVector Services, Inc.

- ◆ Mark DeAngelo, PhD
Aerospace Standards Engineer
SAE International

Airworthiness Standards (Chapter 6) - WG1

- ◆ Design and Construction
- ◆ Safety
- ◆ Quality Assurance/Quality Control
- ◆ Avionics and Subsystems
- ◆ Command and Control Link
- ◆ Navigational Systems
- ◆ Detect and Avoid Systems
- ◆ Software Dependability and Approval
- ◆ Crash Protected Airborne Recorder Systems
- ◆ Cybersecurity
- ◆ Electrical Systems
- ◆ Power Sources and Propulsion Systems
- ◆ Noise, Emissions, and Fuel Venting
- ◆ Mitigation Systems for Various Hazards
- ◆ Parachutes for sUAS
- ◆ Maintenance and Inspection

Lunch - Buffet Outside



Flight Operations Standards: General (Chapter 7) and Personnel Training, Qualifications, and Certification Standards (Chapter 10) – WG2

Co-Chairs

- ◆ Jon Gustafson, PS, CFedS, PMP, GISP
Consultant, Civil Integrated Management
Research and Innovation Solutions
Advisory Services, U.S.
WSP USA
- ◆ Joe Valasquez
Founder and Chief Flight Engineer
DroneScape, LLC

Flight Operations Standards: General (Chapter 7) and Personnel Training, Qualifications, and Certification Standards (Chapter 10) – WG2

- ◆ Privacy
- ◆ Operational Risk Assessment
- ◆ Beyond/Extended VLOS
- ◆ Operations Over People
- ◆ Weather
- ◆ Data Handling & Processing
- ◆ UAS Traffic Management
- ◆ Remote ID & Tracking
- ◆ Geo-fencing
- ◆ Terminology
- ◆ Manuals
- ◆ UAS Flight Crew
- ◆ Additional Crew Members
- ◆ Maintenance Technicians
- ◆ Compliance/Audit Programs
- ◆ Human Factors in UAS Operations

Afternoon Break



Flight Operations Standards: Public Safety (Chapter 9) - WG4

Co-Chairs

- ◆ Christine DeJong
Director of Business Development
ASTM International
- ◆ Kristy Kiernan, PhD
Assistant Professor, Program Chair MS in Unmanned
Systems, College of Aeronautics, Worldwide
Embry-Riddle Aeronautical University

Flight Operations Standards: Public Safety (Chapter 9) - WG4

- ◆ sUAS for Public Safety Operations
- ◆ Hazardous Materials Incident Response and Transport
- ◆ Forensic Investigations Photogrammetry
- ◆ UAS Payloads in Public Safety Operations
- ◆ sUAS Drop Control Mechanism
- ◆ Search and Rescue
 - sUAS FLIR Camera Sensor Capabilities
 - sUAS Automated Waypoint Missions
- ◆ Response Robots
- ◆ Law Enforcement Tactical Operations
- ◆ Counter UAS

Open Discussion – Representatives of UASSC Leadership

Public Sector

- ◆ Art Hinaman, Manager, Technical Support Branch
Office of UAS Integration
Federal Aviation Administration
(on behalf of UASSC Co-Chair Earl Lawrence)

Private Sector

- ◆ Tracy Lamb, BA, Avn. MBA, Avn. ATPL
VP of Regulatory and Safety Affairs & Chief Pilot
Association for Unmanned Vehicle Systems International
(on behalf of UASSC Co-Chair Brian Wynne)

Open Discussion

- ◆ Revisit anything already discussed?
- ◆ Comments not previously raised?
- ◆ Comments on sections 1-5, 11 of the roadmap?

Next Steps / Closing Remarks

- ◆ **9/25 – 30-day comment period**
 - 9/27 – Steering Committee call (3-4 pm Eastern)
- ◆ **10/29 – WGs reconvene to review comments, make revisions**
 - 11/1 - Steering Committee call (3-4 pm Eastern)
- ◆ **12/3 – Finalize roadmap for publication**
 - 12/6 - Steering Committee call (3-4 pm Eastern)

Reception - On 3rd Floor



For More Information

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