Unmanned Aircraft Systems Standardization Collaborative (UASSC) Kick-off Meeting

REVISED DRAFT AGENDA
Thursday, September 28, 2017, 9:00 am – 4:30 pm EDT (w/reception after)
National Housing Center (part of National Association of Home Builders)
1201 15th Street, NW, Auditorium
Washington, DC 20005
Phone: 800-368-5242, ext. 8429
Dress Code: Business Attire

The UASSC will work to coordinate and accelerate the development of the standards and conformity assessment programs needed to facilitate the safe, mass integration of unmanned aircraft systems (UAS) – commonly known as drones – into the national airspace system (NAS) of the United States. The collaborative will also focus on international coordination and adaptability, with the goal of fostering the growth of the UAS market. The work effort will entail the development of a standardization roadmap to identify existing standards and standards in development, define where gaps exist, and recommend additional work that is needed, along with a timeline for its completion, and organizations that can perform the work. A May 19, 2017 meeting laid the groundwork for the collaborative.

<table>
<thead>
<tr>
<th>Time</th>
<th>Discussion Topic / Speaker</th>
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<tr>
<td>8:00 – 9:00 am</td>
<td>Continental Breakfast and Badge Pick-up</td>
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<tr>
<td>9:00 – 9:10 am</td>
<td>Welcome and ANSI Opening Remarks – Joe Bhatia, President and CEO, ANSI</td>
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<td>9:10 – 9:20 am</td>
<td>Government Perspective – Earl Lawrence, Director, UAS Integration Office, Federal Aviation Administration, and UASSC public-sector Co-chair</td>
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<td>9:20 – 9:30 am</td>
<td>Industry Perspective – Brian Wynne, President and CEO, the Association for Unmanned Vehicle Systems International, and UASSC private-sector Co-chair</td>
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<td>9:30 – 10:00 am</td>
<td>UASSC Organizational Matters – Jim McCabe, Senior Director, Standards Facilitation, ANSI</td>
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<td>10:00 – 10:15 am</td>
<td>UASSC Mission, Objectives, and Deliverable – Brian Wynne Document: UASSC 17-003, Summary 19 May 2017 ANSI UAS Meeting</td>
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Mission
- To coordinate and accelerate the development of the standards and conformity assessment programs needed to facilitate the safe, mass integration of unmanned aircraft systems (UAS) into the national airspace system (NAS) of the United States, with international coordination and adaptability.

Objectives
- To foster coordination and collaboration among industry, standards developing organizations, regulatory authorities, and others on UAS standardization issues, including pre-standardization research and development
- To clarify the current UAS standardization landscape and enable stakeholders to better focus standards participation resources
To provide a basis for coherent and coordinated U.S. policy and technical input to regional and international audiences on UAS standardization
- To support the growth of the UAS market with emphasis on civil, commercial and homeland security applications

**Deliverable**
- A comprehensive roadmap developed over the course of a year describing the current and desired standardization landscape for UAS

| 10:15 – 10:30 am | Break |

**10:30 – 11:45 am**  
**Preparation for Breakout Group Discussion: UASSC Roadmap Organization and Working Group Structure** – Art Hinaman, Manager, Technical Support Branch, Federal Aviation Administration

This will be a discussion of how the UASSC standardization roadmap might be logically organized. The roadmap table of contents or outline will inform how the UASSC organizes itself into working groups to take an inventory of existing and in-development standards and do the gap analysis looking at different topical areas of concern and where there may be a need for additional standards. A few different approaches have been floated as noted below. Questions for discussion follow.

**Airspace-Use Case Approach**
- Low altitude consumer goods / modelers
- Low altitude commercial (e.g., construction, farming)
- "Tweeners" over 10K feet (e.g., larger agricultural, geological surveys)
- Class A airspace (e.g., cargo delivery)
- Class E upper airspace over 60K feet (e.g., Project Loon)

**Risk-Based Regulatory Approach**
- Based on globally proposed risk categories 1 thru 6 (Wes Ryan FAA symposium presentation)

**Topical Areas Approach**

**Airworthiness**
- Classifications / Definitions
  - Types of UAS
- Design / Construction
  - Batteries
  - Fuel Cells
  - Electrical System
- Operational Performance
  - Command and Control Systems
  - Data Handling and Processing
  - Detect (Sense) and Avoid Systems
  - Software Dependability
- Maintenance

**Flight Operations**
- Navigation Safety
  - Launch and Landing Sites
  - Marking / Registration
  - Remote Identification / Tracking
  - Operations Beyond / Extended Visual Line of Sight
Operations Over People
  - Nighttime Operations
  - UAS Traffic Management (UTM)
    - Privacy / Security

Licensing, Training, Qualification & Certification

Questions for Discussion
1. How might a standardization roadmap for UAS be organized?
2. What subtopics should be covered under those broad topical areas?
3. Which subtopics require their own working group?
4. Which working groups would you be interested in participating in?
5. Would you be interested in co-leading a working group; if so, which one?

Most of the UASSC’s work will be done virtually via bi-weekly online meetings. You may participate in as many working groups as you wish.

11:45 am – 2:45 pm

Working Lunch & Concurrent Breakout Groups – All
Lunch will be provided. In addition to the Auditorium, the Atrium and room A-B-C have been reserved for breakout discussion.
Document: UASSC 17-002, ANSI UASSC Standards Landscape updated 8/15/17

Breakout groups will be determined at the meeting. A facilitator will lead the group in answering the discussion questions below. While some questions may lead to longer discussion than others, please avoid getting too far “into the weeds” and allow sufficient time to cover all of them at a high level. The groups should identify a note-taker and someone to make the report back to the full group in the afternoon. Note-takers are asked to provide any notes to Jim McCabe at the conclusion of the meeting.

Questions for Discussion
6. What are the most pressing UAS issues requiring standardization?
7. What UAS standardization issues have not yet been addressed?
8. What if any instances of overlap and/or duplication do you perceive exist in UAS standardization among standards developers?
9. What if any known UAS standardization activities are not reflected on the standards landscape?

The standards landscape spreadsheet lists known published and in development UAS standards, other deliverables and initiatives. Initially, it was compiled by ANSI staff and now includes additional inputs from standards developing organizations (SDOs).

2:45 – 3:00 pm
Break / Return to General Session

3:00 – 3:45 pm
Breakout Group Report Backs to Full Group – Brian Wynne / All

3:45 – 4:15 pm
Open Discussion / Conclusions from Report Back – Art Hinaman / All

4:15 – 4:25 pm
Wrap-Up and Next Steps – Jim McCabe

4:25 – 4:30 pm
Closing Remarks – Joe Bhatia

4:30 – 5:45 pm
Networking Reception – Auditorium

Accommodations Information
There are many hotels near the venue. Options within commuting distance can be found here.