- **Personnel** (training, qualification, certification)
  - Manufacturing

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- Quality Assurance Personnel
  - InternalExternal
    - External
      - Aviation safety inspectors
  - Production Personnel
    - Internal review
      - Self-declaration of conformance
    - Production certificate (external)
- Reporting
- o Maintenance/Continued airworthiness
  - Aircraft system
    - Airframe
    - Powerplant
    - Ground control station
    - Communications systems
  - Other technologies
    - Mobile GBDAA?
  - Record keeping (logs, etc.)
  - Repair
    - Field repair
    - Depot repair
  - Inspection
    - Internal
      - o Inspection Authorization (or the like)
      - Specialty trained
      - Private 3rd party
    - Government/Aviation safety inspectors
- o Operations

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Pilots

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- Payload operators
- Other flight crewmembers
  - Radar operator, etc.
- Observers
  - Airborne
    - Ground-based
  - Dispatchers
- Air Traffic Control
- Network systems operator
- Accident/incident investigator/Analysts
  - Self-reporting and internal
  - Private 3<sup>rd</sup> party
  - NTSB/Government
- Airspace/Infrastructure

- Commented [BM1]: Consider a 3-tier approach to all
- standards: 1.Internal
- 2.Performance based standards
- 2.Performance b 3.Government

- o Technology/Product
  - Telecom hardware/software
  - SATCOM hardware/software
  - Real-Time Kinematic (RTK)/High Precision Location (HPL) base stations
  - Micro-weather stations
  - ADS-B
  - Radar
  - Wide-Area Augmentation System (WAAS) ground stations
- o Communications

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- Spectrum
  - Licensed
  - Unlicensed
- Software-defined airspace
- Data exchange protocols
- Facilities
  - Towers
  - Antennas
- o Security
  - Remote ID and tracking?
  - Data
  - Infrastructure
- Collision avoidance
  - GBDAA/GBSAA
  - Onboard sensors
  - Decentralized collision avoidance
- o Airports/Vertiports
  - Design and construction
  - Markings
  - Interoperability of hardware
  - Ground handling
  - "TERPing" of airports

#### Additional Notes

### **Overall discussion – Personnel**

- Columns should be 4 topics ID'd during full group discussion
- Risk Classes should come into play at some point
- Should personnel be divided down by Risk Class or Job Task?
- Risk Matrix across topics
- Living in IFR Structure, type certificate

Standards will impact training, qualification and certification Programs would be built off of standards Pilots are certified by end to end requirements – FAA structure has end to end with privileges (endorsements)

Regulations for UAS pilots is sounds like FAA Sport pilot rule, will this be applicable? Largest area of damage to UAS is transportation of system from location to location System integration – payload specific needs

Manufacturing vs home built / modified

Don't reinvent the wheel - FAA covers pilots, A&P, mechanic, repairman, what is missing?

## **ANSI Agenda Questions**

- 2. What should the subtopics be?
  - o Manufacturing
  - o Maintenance / Continued Airworthiness
  - o Operations
- 3. Which subtopics require their own working group?
  - a. Leave to full group or personnel TG to decide

### Overall Discussion - Airspace and Infrastructure

- Does this require it's own working group? Or belong in Operations
- Think broadly on infrastructure, not aviation specific, such as communications
- CTIA using LTE for aviation
- Not utilization of drones, integration drones
- Scenarios to meet building codes Deferred to Operations group, such as first responders, fire response.
- Building codes what you have to meet and how you say you meet it is infrastructure but using drones to demonstrate the "meeting" should be deferred to operations

# ANSI Agenda Questions

- 2. What should the subtopics be?
  - Technology / Products
  - o Communications
  - o Security
  - o Collision Avoidance
  - o Airports / Vertiports
- 3. Which subtopics require their own working group?
  - a. Deferred to full group