

RPAS 2022

RECAP

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Keynote & Annex 6 Part IV

- Humanitarian and international operations
- Harmonized UAS regulations including BVLOS

- Certified category
- Similarities and differences between conventional aviation and RPAS
- Safety oversight of RPAS operations



Critical systems & Certifying RPAS and their components

• C2 Link

- spectrum: scarce resource
- Safety
- Certainty in Standards (ie. Annex 10) helps to build industry
- Certification of RPAS is a story of great progress and great distance still to go
- Technology rules the day and governs the pace and the conversation regarding certification



Day 2 keynote

- Future of aviation will be :
 - digital
 - sustainable
 - autonomous
- Autonomy
- SMS
- Level of safety



Why certify, for what purpose and standards?

- Chicago Convention = the trust framework
 - Annex 8 and Art 33
- Risk-based & Performance-based approaches
- Autonomy
- Human Factors/performance : part of certification
- SDOs role



Fit-for-purpose

- UAS are not only domestic OPS
- Essentials in a fit-for-purpose framework :
 - risk-based & performance-based
 - legal framework
 - principles/definitions
- Direct Submission for fit-for-purpose



Certification of "flying taxis" and automation to autonomy

Certification

- Harmonization of standards and flight rules
- Change of airworthiness provisions anticipated

Automation to autonomy

- Certification of autonomy = ongoing challenge for industry
- Building trust is a key component of the path to autonomy
- Key ICAO role for global harmonization



RPAS Panel Lessons Learned

Lessons Learned:

- We cannot boil the ocean
- Every work item thread that is identified led to more threads
- Robust and open discussion
- Carry over to AAM activities

Future work:

- There is still a lot more work for RPASP
- The most important lesson learned will help to address those questions: We listen



Vertiports: where are we?

- Vertiports Multimodal concepts
 - Urban Environment
 - Airport Environment
- Key considerations
 - Governance and Stakeholder engagement
 - Capacity Management
 - Integration and Safety Risk Management
 - Environmental aspects / societal acceptance
 - Cost-recovery



Standards Development Activities

- Industry standards in support of ICAO Standards and national regulations
- Gigantic amount of work by SDO
- Wide array of topics in the UAS domain
- Critical for States and industry
- Work ahead
- SDO established cooperation mechanism among them
- Cooperation and collaboration and with ICAO
- Lack of an AAM CONOPS to pursue the standardization work



Aviation research contribution

- New collaboration with ICAO
- UAM Scientific Assessment
 - Detailed analysis in various fields
 - A key information for ICAO to kick start AAM activities
- Neutral assessment
- IFAR
 - platform to consolidate research
 - to investigate/research



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