

International Civil Aviation Organization

SIP/2012/ASBU/Dakar-WP/23

## **Remotely-Piloted Aircraft Systems**

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Workshop on preparations for ANConf/12 – ASBU methodology (Dakar, 16-20 July 2012)

## Convention on International Civil Aviation



= on board

# Article 8

#### <u>Pilotless aircraft</u>

No aircraft capable of being flown without a pilot shall be flown without a pilot over the territory of a contracting State without <u>special authorization</u> by that State and in accordance with the terms of such authorization. Each contracting State undertakes to insure that the flight of such aircraft without a pilot in regions open to civil aircraft shall be so controlled as to <u>obviate danger</u> to civil aircraft.

#### UASSG



#### TORs:

 ...to assist the Secretariat in coordinating the development of ICAO Standards and Recommended Practices (SARPs), Procedures and guidance material for civil unmanned aircraft systems (UAS), to support a safe, secure and efficient integration of UAS into non-segregated airspace and aerodromes.

# *Unmanned Aircraft Systems (UAS)* (Circular 328)



- Unmanned aircraft are aircraft!
- All aircraft flown without a pilot on board are subject to Article 8
- Licensed remote pilot required for integration



# *Unmanned Aircraft Systems (UAS)* (Circular 328)



- RPA are a subset of UA; remote pilots are new category of pilots
- Fundamental safety requirements are the same, manned or unmanned
- Safety and security integral to data links



## Assembly Resolution A36-13, Appendix G



#### The Assembly resolves that:

pending the coming into force of international Standards respecting particular categories, classes or types of aircraft or classes of airmen, certificates and licences issued or rendered valid, under national regulations, by the Contracting State in which the aircraft is registered shall be recognized by other Contracting States for the purpose of flight over their territories, including landings and take-offs.

## Work in Progress



- Concepts for airworthiness certification
- Operator approval
- Communications requirements (C2, ATC, etc)
- Collision and hazard avoidance / detect and avoid



## Work in Progress



- Remote pilot licensing
- ATM, Annex 2 Appendix to facilitate special authorizations
- Terminology on-going





 Australia, Austria, Brazil, Canada, China, France, Germany, Italy, Netherlands, New Zealand, Norway, Russian Federation, Singapore, South Africa, Sweden, U.K., U.S., CANSO, EASA, EUROCAE, EUROCONTROL, IAOPA, ICCAIA, IFALPA, IFATCA, NATO, UVS Intl.



- Press ahead with bilateral/multi-lateral efforts; BUT
- Continue support to ICAO UAS Study Group with the same talent for continuity with international efforts
- Address regional recognition of national certificates
- Support ICAO position on frequency spectrum for WRC-2012
- Ensure harmonization with SESAR and NextGen



- 12<sup>th</sup> Air Navigation Conference (AN-Conf/12) 19-30 November 2012, Montreal
- RPAS Symposium
  2<sup>nd</sup> quarter 2014, Montreal TENTATIVELY

#### **Bottom Line**



- International Standards are fundamental;
  States and industry are deeply involved in these efforts
- Bilateral/regional efforts can be a first step
- Speed up international efforts by dedicating resources..



# **Uniting Aviation on** Safety | Security | Environment

ICAO SIP 2012 - ASBU workshops

www.