ICAO

SUMMARY

Here is how the ICAO legal framework for drones is developed.

The development of the legal framework for international civil aviation started with the **Paris Convention** of 13 October 1919.

The **Protocol of 15 June 1929** amending the Paris Convention refers to pilotless aircraft in a subparagraph of Article 15 as follows: "No aircraft of a contracting State capable of being flown without a pilot shall, except by special authorization, fly without a pilot over the territory of another contracting State".

The **Chicago Convention** of 7 December 1944 replaced the Paris Convention. Article 8 of the Chicago Convention entitled "Pilotless aircraft".

To understand the implications of Article 8 and its incorporation from the Paris Convention of 1919 (Article 15) into the Chicago Convention of 1944, the intent of the drafters must be considered. Remotely controlled and uncontrolled (autonomous) aircraft were already in existence at the time of the First World War, operated by both civil and military entities. "Aircraft flown without a pilot" therefore refers to the situation where there is no pilot on board the aircraft.

The **Eleventh Air Navigation Conference** (ANConf/11), Montr éal, 22 September to 3 October 2003) endorsed the global air traffic management (ATM) operational concept which contains the following text: "[a]n unmanned aerial vehicle is a pilotless aircraft, in the sense of Article 8 of the Convention on International Civil Aviation, which is flown without a pilot in-command on-board and is either remotely and fully controlled from another place (ground, another aircraft, space) or programmed and fully autonomous." This understanding of unmanned aerial vehicles (UAVs) was endorsed by the **35th Session of the ICAO Assembly** in 2004. As a consequence, any unmanned aircraft is a "pilotless" aircraft, consistent with the intent of the drafters of Article 8.

Emphasis was placed on the significance of the provision that aircraft flown without a pilot on board "should be so controlled as to obviate danger to civil aircraft", indicating that the drafters recognized that "pilotless aircraft" must have a measure of control applied to them in relation to a so-called "due regard" obligation, similar to that of State aircraft.

On 12 April 2005, during the first meeting of its 169th Session, the Air Navigation Commission (ANC) requested the Secretary General to consult selected States and international organizations with respect to present and foreseen international civil unmanned aerial vehicle (UAV) activities in civil airspace; procedures to obviate danger to civil aircraft posed by UAVs operated as State aircraft; and procedures that might be in place for the issuance of special operating authorizations for international civil UAV operations.

Subsequently, a first ICAO exploratory meeting on UAVs was held in Montr éal on 23 and 24 May 2006. Its objective was to determine the potential role of ICAO in UAV regulatory development work.

The second informal ICAO meeting (Palm Coast, Florida, 11 and 12 January 2007) concluded that work on technical specifications for UAV operations was well underway within both RTCA Inc. and the European Organization for Civil Aviation Equipment (EUROCAE) and was being adequately coordinated through a joint committee of their two working groups. The main issue for ICAO was, therefore, related to the need to ensure safety and uniformity in international civil aviation operations. In this context, it was agreed that there was no specific need for new ICAO SARPs at that early stage. However, there was a need to harmonize notions, concepts and terms. The meeting agreed that ICAO should coordinate the development of a strategic guidance document that would guide the regulatory evolution. Finally, it was concluded that ICAO should serve as a focal point for global interoperability and harmonization, to develop a regulatory concept, to coordinate the development of UAS SARPs, to contribute to the development of technical specifications by other bodies, and to identify communication requirements for UAS activity.

In order to assist ICAO in fulfilling the identified aims, the ANC, at the **Second Meeting** of its 175th Session on 19 April 2007, approved the establishment of the Unmanned Aircraft Systems Study Group (UASSG).

The UASSG first considered introducing the term "remotely piloted" at its third meeting, 15 to 18 September 2009, after reaching the conclusion that only unmanned aircraft that are remotely piloted could be integrated alongside manned aircraft in non-segregated airspace and at aerodromes. The study group therefore decided to narrow its focus from all UAS to those that are remotely piloted.

The UASSG developed the **Unmanned Aircraft Systems** (**UAS**) (**Cir 328**) which was published in March 2011. The circular provided States with an overview of issues that would have to be addressed in the Annexes to ensure remotely piloted aircraft system(s) (RPAS) would be compliant with the provisions of the Chicago Convention. In March 2012, the first significant package of SARPs related to RPAS was adopted for **Annex 2** — **Rules of the Air** and **Annex 7** — **Aircraft Nationality and Registration Marks**. The UASSG then turned its attention to the development of the first edition of **Manual on Remotely Piloted Aircraft Systems** (**RPAS**).

I. Convention on International Civil Aviation (Chicago Convention)

- Annex 14 to the Convention on International Civil Aviation -Aerodromes
- Annex 19 to the Convention on International Civil Aviation Safety
 Management

Notes

Only Article 8 mentioned rules and regulations on pilotless aircraft; Annex 14 discussed the rules on dividing clearance zone; Annex 19 mentioned safety management of civil aviation.

- II. Global Air Traffic Management Operational Concept (Doc 9854)
- III. Manual on Remotely Piloted Aircraft Systems (RPAS) (Doc 10019)

IV. Circular 328 - Unmanned Aircraft Systems (UAS)

Notes

- Cir 328 is ICAO's explanation and clarification on UAV-related law framework, standard, operation etc. It is an early management code on global UAV and has a nature of top-level design.
- © UAV-related Standards and Recommended Practices (SARPs) of ICAO will hopefully released in 2018.
- Do In Doc 9854 of 2005, UAVs have been listed as supervised target.