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WORKING PAPER

LEGAL COMMITTEE－37TH SESSION

(Montreal, 4 to 7 September 2018)

Agenda Item 2: Consideration of the General Work Programme of the Legal Committee

STUDY OF LEGAL ISSUES RELATING TO REMOTELY PILOTED AIRCRAFT

(Presented by the United Arab Emirates)

1. INTRODUCTION

1.1 The introduction of a new mode of transportation, in the form of unmanned aerial taxis, has become imminent due to the rapid development of new technologies. In the recent past, some States have developed advance plans to introduce this mode of transportation in the near future as a form of public transportation[1].

1.2 As this will be introducing a new form component of transportation, there is a growing need for the aviation community to understand and to define this new concept with a view to ensure its integration in the existing transport systems.

2. DISCUSSION

2.1 Some States, in collaboration with aircraft manufacturers, are at advance stages of developing and introducing unmanned aerial taxis. This comes at a stage when the aviation community is engaged with enhancing its systems with a view to introducing new regulatory framework for the integration of remotely pilot aircraft systems (RPAS).

2.2 This transport innovation, however, will bring along some legal and technical issues. The first issue is the determination of whether this vehicle falls squarely within the definition of aircraft. A myriad of literature has been written on the definition of aircraft, more particularly on the question of whether RPAS fall under this definition[2]. Conclusions from this literature have been reached that an unmanned aerial vehicle is an aircraft as envisaged in the ICAO Annexes.

[1] The United Arab Emirates, through its Roads Transport Authority, had conducted a test of the unmanned aerial taxi in September 2017. The "taxi" was powered by electricity and had a cruise speed of 50km/hour and a maximum airspeed of 100km/hour.

[2] This Paper is not intended to delve much into the concept of definition of aircraft, as this subject has been dealt with in the past by this Committee.

2.3 There is no doubt that the envisaged unmanned aerial taxi falls within the ambit of a RPA. The ICAO Assembly[3] did endorse an acceptable definition of an unmanned aerial vehicle as "[a] 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). Whilst it is envisaged that the unmanned aerial taxi will be semi-autonomous, the full autonomy thereof cannot be ruled out as technology advances in future.

2.4 Whilst the unmanned aerial taxi is likely to share some certain degree of similarities with the remotely piloted aircraft[4], there are major differences between the two. Unlike the remotely piloted aircraft which does not carry any passengers, the main aim of the unmanned flying taxi is the transporting passengers without human intervention, which makes it slightly similar to a small version of helicopter. The regulatory provisions introduced by States until now in relation to RPAS precludes the carrying of passengers therein. The concept of carriage of passengers in an unmanned aerial vehicle is relatively new and as such, there is no regulatory framework to cover such.

2.5 Be that as it may, the issues of liability and insurance, which are currently under review in relation to the UAS, are likely to equally arise with regards to the unmanned aerial taxis, more so as the liability extends, not only to persons or property on the ground, but also to the passenger(s) on board. It may be considered imperative, therefore, that the scope of the study relating to UAS be extended to include the unmanned aerial taxis.

3. ACTION BY THE LEGAL COMMITTEE

3.1 The Committee is invited to review this working paper and consider including in its current or future work, the study relating to the operation of unmanned aerial taxis.

— END —

[3] In its 35th session

[4] The main similarities are with regards to the fact that both are operated remotely and at low altitude.