

Address by the Secretary General of the International Civil Aviation Organization Mr. Juan Carlos Salazar to the ICAO RPAS 2022 Symposium

(Montréal, 7 November 2022)

- 1. It is my great pleasure to open this year's Remotely Piloted Aircraft Systems Symposium (RPAS 2022), our first fully in-person global event since the start of the pandemic.
- Our aim at this symposium is to exchange information regarding regulatory developments for remotely piloted aircraft systems, particularly those that are intended to integrate into the conventional air traffic management system.
- 3. We will take an initial look at what certification might mean for some unmanned aircraft that will operate internationally without fully integrating into the conventional system. We will also cover some of the new entrants heading into the certification process.
- 4. There will surely be many lessons learned to share.
- 5. I am certain that the networking opportunities available during session breaks will also be useful in this regard.
- 6. When we think about current and future RPAS capabilities, whether they be cargo deliveries, humanitarian operations, border, fisheries or other monitoring operations, it is important to periodically take a pause to consider if, and how, the regulatory needs are being met.
- 7. We can all see the inspiring technological advancements being realized by industry. So what about the regulatory framework? Can we certify RPAS? And the operators? Can we license the remote pilots? What else is needed? C2 Link, and detect and avoid technologies, are critical; vertiports will

be essential for some new entrants; and of course automation is advancing in spectacular fashion. How will each of these be certified?

- 8. All of these questions will be addressed, and in some cases answered, this week. You will hear from subject matter experts, many of whom are working as part of the ICAO "voluntary workforce" experts nominated by States, international organizations, standards-making organizations, industry, academia and research facilities all of whom contribute to the development of ICAO provisions, as well as external experts who are directly involved in the industry.
- 9. It is important to have clarity on where we are collectively, when it comes to building the regulatory framework for RPAS. It is equally important to understand how the developments are being made, who the stakeholders are that are doing the work, and the objectives they are working to achieve.
- 10. Our first priority at this symposium will be to carry forward the integration of RPAS into the conventional ATM system. ICAO's mission is to ensure that a safe, secure and efficient framework is put forward for this purpose, without disrupting current operations, and contributing to the long-term global aspirational goal of net-zero carbon emissions by 2050, our new LTAG. Given the speed of industry development activities and the number of stakeholders involved, this mission is more important than ever. This framework needs to support global harmonization and accommodate international operations cross-border and in high seas, in a manner that is consistent with conventional aviation.
- 11. Our last RPAS symposium was held in Chengdu, China, in September 2018. During the intervening four years, the 40th and 41st sessions of the ICAO Assembly have been held, as well as the 13th Air Navigation Conference and the High Level Conference on COVID-19. Each of these events highlighted the importance States are placing on the introduction and integration of unmanned aircraft, from small drones to large, fully certificated, RPAS.
- 12. There were a large number of working papers regarding topics of unmanned aircraft systems (UAS), UAS traffic management (UTM), advanced air mobility (AAM), and RPAS at these events, which resulted in a resounding call for ICAO to continue its leadership role in developing operational solutions and guidance to support the safe and coordinated integration of pilotless aircraft, UTM and, the newest addition, AAM. Accordingly, cementing ICAO's role as the global platform for regulatory cooperation in this area, should be a key priority for delegates here.

- 13. ICAO has heard the requests from States. The impact of the newest set of requests will be considered by the Air Navigation Commission followed by the Council over the next few months. In the meantime, the RPAS Panel has continued its efforts to develop SARPs, procedures, and guidance material for international operations, while the UAS Advisory Group has undertaken work on UTM and an initial scoping look at AAM.
- 14. Model UAS regulations have been developed and published on our public website, accompanied by guidance material on humanitarian operations and our UTM framework. Courses addressing many of these topics have been developed and are available from our Global Aviation Training and education directory.
- 15. ICAO is also providing support to Member States in the form of an implementation package, an iPack, on *Establishing a Regulatory Framework for Unmanned Aircraft Systems (UAS)*. This iPack supports States to be able to implement regulations for smaller, uncertificated UAS, in a manner that will be consistent with the much more stringent SARPs focus on RPAS.
- 16. As a result of the recent Assembly's deliberations, ICAO will continue developing the regulatory framework necessary to support the integration of remotely piloted aircraft, and facilitate related implementation roll-out activities.
- 17. The ICAO UAS Advisory Group continues its mission of "looking outside the box" with regards to developing guidance materials as well as innovative solutions to support this rapidly evolving sector of the aviation industry.
- 18. One example of these latter efforts has been the publication of key UTM guidance material "A Common Framework with Core Principles for Global Harmonization". Edition 4 of this document will be published shortly on the ICAO Unmanned Aviation webpage.
- 19. This UTM Framework was a direct result of outstanding collaboration and work conducted by States, industry and international organizations at the first four DRONE ENABLE symposia.
- 20. In addition to the work already completed on Annexes 1, 2, 7 and 13 to the Chicago Convention, the draft Part IV *International Operations Remotely Piloted Aircraft Systems Annex 6 Operation of Aircraft*, has been circulated for State review and comment. A thorough analysis of the comments will be conducted next year, with the results presented to the Air Navigation Commission for action.

- 21. Other work underway in the RPAS Panel are additional amendment proposals to Annex 8—

 Airworthiness of Aircraft, along with supporting guidance material, and draft SARPs for Annex 10

 Aeronautical Telecommunications, Volumes IV and VI related to Detect & Avoid, and C2 Link, respectively, as well as Annex 11 Air Traffic Services and others. Many more proposed SARPs will be forthcoming during the next few years as the RPAS Panel and other expert groups progress material for the complete regulatory framework.
- 22. This week, we will be joined by experts from various sectors of the aviation ecosystem to discuss developments made by RPAS, UAS, AAM, and vertiport organizations. The symposium will explore the work they have accomplished in research, development, certification, operation, and integration into States' national aviation systems.
- 23. This event will attempt to answer critical technical questions, explore ways to streamline the inclusion of the new entrants, discover what can be an enabler versus what may be a roadblock, and hear the feedback from all of you on the work underway to make RPAS a full member of the conventional aviation system. In addition to the other two priorities I have mentioned, this finally is the ultimate objective of RPAS 2022.
- 24. In closing, I would like to take this opportunity to express ICAO's commitment to supporting the safe and secure development of a regulatory framework for remotely piloted aircraft systems.
- 25. The potential for development in the RPAS realm is considerable, and the challenges to be addressed will require our collective efforts. As always, the continued cooperation of all stakeholders, including regulators and industry, will be essential to ensure that this emerging activity yields its full benefits. ICAO recognizes and continues to affirm its role to facilitate the harmonization of global activities.
- 26. I am convinced that the ideas shared and generated during this Symposium, will play a key role in shaping the very promising future of RPAS, and I look forward to the innovative outcomes that will result from the work you do over the next three days.

Thank you.