



October 13, 2017

Canadian Aviation Regulation Advisory Council
Transport Canada
Via email: carrac@tc.gc.ca

RE: Unmanned Aerial Systems Stakeholder Engagement Submission

Ms Marie-Anne Dromaguet
Chief, Regulatory Affairs
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Ottawa, Ontario K1A 0N5

On behalf of COPA's 17,000 members and the broader Canadian general aviation community, we are pleased to provide commentary on the proposed UAS regulations published in the *Canada Gazette, Part I*, on July 15, 2017. COPA has been monitoring the development of UAS policy both in Canada and abroad with keen interest and we look forward to assisting in crafting a framework that ensures safe and responsible use of Canada's domestic airspace. At the outset let me say that we are pleased with the majority of measures proposed by the regulator that will help UAS operators understand the different environments in which they are operating, and create certainty for pilots and the traveling public. In that light, we wish to draw to your attention certain concerns we have with the regulations as proposed, and we are willing to assist as needed in resolving these issues.

I. Licensing

We are very happy to see Transport Canada propose a system of licensing or permitting for UAS operators. This will help educate operators as to the expectations and obligations around safe use of their UAS. In our opinion, a system similar to the Pleasure Craft Operator Card is an excellent template through which to certify the public, recreational users of UAS. Moreover, adopting the PCOC template would be a fairly simple process as the systems are already in place. We strongly recommend that holders of the UAS certificate be required to present their certificate at point of purchase in order to complete the sale. This ensures that at time of acquisition, individuals have a demonstrated understanding of the obligations involved with operating their UAS in a safe and legal manner.

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We also recommend that for the purposes of required training/permitting, Limited Operations and Complex Operations of UAS in the 1kg-25kg categories be considered synonymous. In our view, any person engaged in Limited Operations has the potential to enter in to Complex Operations, much the same as any manned-aircraft pilot has the potential to do the same – i.e. fly from Class G airspace into Class E or Mode C-required airspace. As in the case of pilot training, a pilot's license of any sort authorizes VFR operations in all classes of eligible airspace, and the same should be required of UAS operators' permits. While this may increase upfront resources, we feel it will streamline the licensing process and ultimately reduce the long-term enforcement requirements while improving safety.

II. Proximity to Aerodromes

The regulations as proposed in *Gazette I* include the caveat that operations of Very Small UAS (250g-1kg) and Limited Operations of larger UAS (1kg-25kg) can be conducted within as little as 1 nautical mile of an uncontrolled aerodrome. In our opinion, this is wholly inadequate. Moreover, this is contrary the best practices and legal requirements set forth by Transport Canada in TP312 and TP1247. Allowing operations within 1 nautical mile of an uncontrolled aerodrome is a serious and unacceptable safety risk. Many aerodromes would be severely impacted by this regulation, both registered and unregistered. In all cases, a 1nm radius will place UAS within the circuit pattern, and lessen the vertical distance between aircraft and UAS to an unacceptable margin, particularly at aerodromes with reduced or non-standard circuit heights. In many other instances, this would allow UAS operations to dangerously interfere with IFR approaches. For example, in the case of a non-precision approach, this potentially enables UAS to operate at the Minimum Decision Altitude or Height (MDA/H), at or in close vicinity to the Missed Approach Point (MAP).

We strongly encourage the regulator to amend the proposal such as to extend the minimum distances for non-Complex UAS operation around all aerodromes (including water aerodromes) to be:

- In the case of an uncontrolled aerodrome with an Advisory Traffic Frequency (ATF): not less than 3 nautical miles from the Aerodrome Reference Point, at an altitude not to exceed 300 feet AGL.
- In the case of an uncontrolled aerodrome with a Mandatory Frequency (MF): not less than 3 nautical miles from the Aerodrome Reference Point in any circumstances and not less than the published boundary of the Mandatory Frequency Area unless in compliance with CARs 602.97, 602.98 and 602.103, at an altitude not to exceed 300 feet AGL.
- In the case of a controlled aerodrome, not within the boundary of the control zone.

This will reduce the risk of collision and ensure an adequate margin of safety for aircraft operating in the aerodrome traffic pattern or on an IFR approach.

III. Detect and Avoid

Technology is rapidly changing and advancing in ways difficult to predict. As UAS operations become more commonplace in Canadian airspace, we foresee a need to require UAS to be equipped with traffic detection and avoidance capability. Much of the aeronautical industry is concerned with potential mandates for ADS-B equipment, and it is our position that at such time that the technology is available, UAS be required to incorporate such equipment as well.

IV. Conclusion

As representatives of the Canadian general aviation community, we understand that UAS present a new age in air traffic and aeronautical regulation. We know Transport Canada (TC) has many challenges to successfully incorporate safe, legal UAS operations into the national air transportation system and the Canadian economy. We feel that the concerns we have raised through this letter can be mitigated through sensible, reasoned measures. We look forward to collaborating further with Transport Canada on the development of air policy as we collectively advance, promote, and preserve the Canadian freedom to fly.

Regards,

A handwritten signature in black ink, appearing to read 'Bernard Gervais', written over a horizontal line.

Bernard Gervais
President and CEO