

Heads up (or down) for Unmanned Air Vehicles

By Kevin Psutka, November 3, 2014

In our October 30 edition of eFlight <http://www.multibriefs.com/briefs/COPA/COPA103014.php> we highlighted Transport Canada's initiative, brought on in part by COPA's call for action, to educate the public on the safe use of UAVs.

In recognition of the fact that the proliferation and sophistication of UAVs is taxing Transport Canada's ability to ensure the safety of the public, including those who fly, Transport Canada called key stakeholders, including COPA, to a meeting on October 31, to announce an internally developed way forward.

COPA has been extensively involved on several industry/government working groups in recent years to develop regulations that would eventually permit UAVs to access unrestricted airspace. This has proven to be a time-consuming task and we are still years away from enacting these extensive regulations.

In the meantime, use of UAVs for work related activities continues to accelerate and in there is an increasing number of small aircraft being purchased for recreational use, whose operators have no idea what limits apply.

Transport Canada has coped by issuing Special Flight Operations Certificates for some operations, developing restricted areas (southern Alberta and near Lac St. Jean, Quebec) for dedicated UAV testing and most recently embarking on a public education program. However, this is proving to not be sufficient.

For example, in 2010 Transport Canada issued 66 SFOCs for UAV operations and so far in 2014 there have been 914, with projections well over 1,000 for next year.

An SFOC is required anytime a UAV is used for other than recreational purposes or when they are of a size and type of operation that falls outside of what is considered a model aircraft, which is limited to 35 kg.

With the proliferation of very small UAVs and relatively limited operations at low altitude and within line of site, requiring an SFOC for every one of these operations is taxing Transport Canada's inspectors, not only creating backlogs of approvals but making them less able to spend sufficient time examining requests for more complex and larger UAV operations that pose a much higher risk.

In light of these challenges, Transport Canada has decided to take a bold step and permit certain non-recreational UAV operations to occur outside of restricted airspace through two exemptions to the requirement for an SFOC. The exemptions are based on weight. For UAVs weighing less than 2kg, a limited number of conditions will apply and other than a requirement to notify Transport Canada that an operation will occur, those who comply with the conditions will be able to fly without any approval.

Some basic conditions include remaining below 300 feet AGL, within line of site and at least 5nm from an aerodrome unless the aerodrome operator approves.

For UAVs weighing between 2 and 25 kg, there will be in excess of 30 conditions that have to be met, including notification, in order for an operation to occur without approval. UAVs weighing more than 25 kg will require SFOCs as has always been the case.

Work will continue to develop regulations that will eventually permit most UAVs to operate in unrestricted airspace, including yet-to-be developed sense and avoid technology, a long-standing insistence of COPA, and COPA will remain engaged in the working groups developing these regulations.

As of the date of this article, details of the conditions have not been released and COPA as well as most others from the aviation industry were not invited to participate as Transport Canada decided unilaterally to take this action.

At the October 30 meeting, Director General Civil Aviation Martin Eley said that extensive additional educational materials will be developed and released following a UAV conference in Montreal during the first week of November, at which the initiative is being publicly announced. The materials will be aimed at those who wish to conduct UAV operations.

I strongly recommended at the meeting that in addition to developing materials for the UAV users to understand the limitations to operate without an SFOC, it is equally important to inform pilots, including our sector, of what this means for their safety. Transport Canada agreed but it is unknown at this time when such information will be available.

Until more is known about the impact (pardon the pun) on our sector of aviation and guidance material is available, please keep your head up for UAVs (or down toward the ground because they should be operating below you if everyone is staying within their respective airspace).

Uncertainties exist, for example, regarding how to ensure that UAVs will remain below 300 feet or whether or not 5nm from aerodromes can legally apply to non-registered aerodromes when UAV operators may have no way of knowing the aerodromes exist. And of course there will be rogue operators who either do not know or care about the restrictions or requirements that are applicable to UAV operations.

While these issues are being sorted out, be mindful of the rules concerning minimum altitudes that apply to our sector and provide a wider margin whenever possible.

Also, if you see something dangerous occurring, there is action you should take. COPA Director Tim Cole's article on page B10 of the November 2014 *COPA Flight* newspaper explained that damaging or endangering an aircraft is a criminal offence and the police is the appropriate agency to contact in the event that you are aware of such illegal activity.

COPA will remain engaged in this rapidly developing sector of aviation.