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**Subject: Canada Gazette I – Emergency Locator Transmitters (ELT)**

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On behalf of Canada's general aviation community, and as the largest aviation association in Canada, we are pleased to provide comment on the government's latest iteration of a mandate for 406 MHz ELT systems in Canadian aircraft.

As noted, these proposed new regulations are the latest in a string of NPAs through which Transport Canada has attempted to achieve consensus with industry on this subject. We note that nothing in this latest version is materially different from previous proposals, excepting the proposed 5-year implementation period for general aviation versus one year for commercial and CARs 604 operators, as well as the proposed double standard exempting foreign aircraft from equipping. We also note that technological advances since the last NPA have not been taken into account and that TC has not consulted with industry on finding a performance-based solution rather than the same prescriptive approach, as we recommended in our submission of Sept. 11 2015.

On effectiveness and reliability, the government has not provided any new information that would cause COPA to change its position regarding this mandate. Transport Canada admits in its own justification that there was no work done to examine, or improve, the reliability or crash survivability issues plaguing ELT systems. The Transportation Safety Board's statistics show a failure rate of ELT systems close to 40%, largely due to the inherent weaknesses of the system's design, namely the components outside of the ELT unit itself. Without any supporting data or evidence, the government's claim that "conversion to the new frequency would make ELT systems significantly more effective" is tenuous at best. When aircraft go down, pilots, passengers and their families expect to be found, and found quickly. ELT systems of either frequency do not reliably provide that certainty.

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On applicability, COPA has long maintained that for recreational pilots, the best investment in safety is anything that can be done before the crash. This is why we partnered with the regulator on the General Aviation Safety Campaign to look at voluntary and non-regulatory approaches to safety within General Aviation, including the adaptation of new, safety-enhancing technologies. New regulations that mandate equipage with a technology with such a high failure rate is nonsensical when there are other new and emerging technologies that can do the same, or better in terms of improving survivability, as well as contrary to the spirit of collaboration instigated by the regulator through the Campaign. In an area of the industry already burdened with redundant regulations that do not improve safety, adding another prescriptive expense to the already-high cost of flying will do nothing more than force pilots to reduce their number of annual flying hours and divert monies that would otherwise be spent on currency and proficiency.

COPA recognizes that Canadians enjoy a robust Search and Rescue regime, supported by taxpayers and reasonable, effective efforts should be made to minimize reaction times and search operations when aircraft are in distress. The government notes in its proposal that other countries have examined this issue and have decided against similar mandates for equipage. In fact, Transport Canada is proposing to go one-step further and allow foreign pilots not required to equip to fly in Canadian airspace with 406MHz-capable Personal Locator Beacons (PLBs), without automatic alert activation.

Thus, this question is plain and simple:

*Why is the government proposing a double standard that unfairly forces Canadian pilots to equip with something that often does not work (38% of crashes) as intended, while allowing foreign-registered aircraft to conduct the same flights from the same airports with different, lesser equipment?*

More importantly, we are very disappointed to see the government's dismissal of new and emerging technologies that might help fulfill what ought to be a performance-based requirement for Search and Rescue alerting rather than prescriptive.

The rationale put forth in the proposal concerning ADS-B is flawed but mostly outdated, as it does not take into account the constellation of 75 satellites (66 operational and 9 spares) that were not there when the first series of NPAs came out. Yes, ADS-B is still line of sight, but from space-based satellites, not the ground as Transport Canada implies. This is no different from what the government proposes with the COSPASS-SARSAT satellites. As the government is aware, ADS-B has proven to be a lot more than just an air traffic control system with a tracking function - offering complete coverage of not just Canadian territory, but the whole world. In recent months, Transport Canada's own Minister and other senior officials were quick to highlight publicly the speed and effectiveness with which they were able to make decisions regarding the dual 737 Max accidents due to the immediate availability of ADS-B track and location data from the respective flights of those aircraft.

Technologies such as ADS-B offer infinitely more improved tracking capability than outdated and ineffective ELTs ever can. While an automatic alert activation capability has yet to be developed, there is little doubt that if Canada were to take a leading role in such an initiative, industry would respond quickly and ably, given the pace of technological development already occurring. Third-party providers such as Spidertracks offer minute-by-minute tracking as well as instant alert notification in the event of a communications loss, not just to Search and Rescue but also to Responsible Persons and anyone else whom the user configures.

COPA believes that this proposal misses the mark, at the expense of Canadians' safety. Mandating this ELT technology, with its 62% success rate, is a Band-Aid solution that will not adequately improve chances of post-crash survival.

Lastly, we note that the government did issue a global exemption allowing installers of TSO C126 406MHz ELT systems (NCR014-2014) to install certain units without an AMO. COPA submitted comments on the original PICA, participated in the focus group, and ultimately supported the issuance of this exemption to ease the compliance burden for operators. We are pleased to see the renewal of this exemption after it expired in March 2019, and that the government is moving to make this measure permanent.

## **Recommendations**

COPA recommends that:

1. The Government of Canada improve aircraft safety for passenger, commercial and general aviation through the installation of a performance-based technology that is not relying on outdated mechanical technology, the orientation of the distressed aircraft once it comes to rest, or the ability of the ELT system as a whole to survive the crash;
2. Canada adopt a leading role in developing a more robust and, ultimately, foolproof emergency alert standards that would include the periodic broadcast or pinging of the aircraft's position, as well as the ability to remotely detect an accident, should the transmitter be disabled in a crash;
3. The Government of Canada take a leading role in pursuing the tracking and automatic alerting functions by satellite navigation for space-based ADS-B;
4. The Government of Canada setup a forum of industry, subject matter experts and research councils to find solutions to the point above along with Aireon and NAV CANADA;
5. Until then, for Transport Canada to exempt all private aircraft engaged in non-commercial, recreational operations from mandatory installation of a 406 MHz ELTs and let the attrition of the older generation of 121.5MHz ELT not being produced, not necessarily repairable and not listened to anymore, be gradually replaced by 406 MHz.

COPA appreciates having the opportunity to voice the concerns of Canada's General Aviation community on this topic. We are more than willing to work together and look for the best solutions for our members and the aviation community at large, safeguarding the safety of flight for all in our skies.

Regards,



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President and CEO

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