

LAA/AWA/20/17
6th July 2020

CAA CAP1881 In-Focus Special Are You Breathing Easily?

In March 2020, LAA Engineering published an LAA Airworthiness Alert (LAA/AWA/20/04) offering access to a CAA Safety Notice (SN-2020/003). This Safety Notice offers general advice about how to reduce the potential danger to aircrew of CO poisoning in the cockpit environment.

The June 2020 Safety Spot included a feature where we asked LAA members to write to HQ Engineering, letting us know about their personal experiences with regard to the important issue of Carbon Monoxide (CO). In particular, if they had used a commercially available CO monitor, how they'd got on with it ... both the plusses and the minuses.

In this feature, we also asked members if they would be interested in taking part in a CAA-sponsored trial, where a number of different commercially available CO monitors could be tested in a variety of cockpit environments: the feedback thus far received has been very interesting though, when gathering field data, you can never have enough; so if you feel that you have something to offer, and you haven't yet responded, please get in touch.

With this in mind, and to encourage further responses, the July 2020 Safety Spot carried a CO feature letting members know that the CAA have recently published a new CAP (CAP 1881). This 'In Focus Special', entitled 'Are You Breathing Easily?', begins:

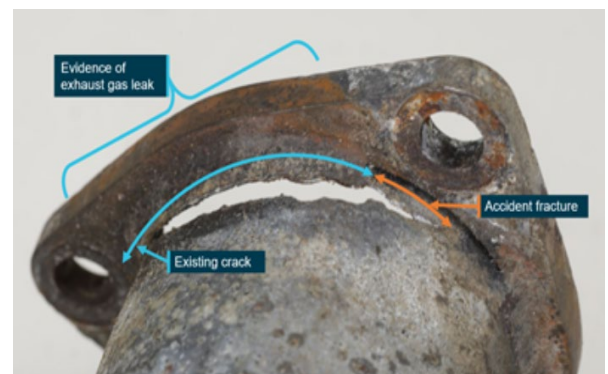
If you've been around flying for a while you might know the story of Dr Robert Frayser — and, if you don't, he's the chap who Lady Luck devoted her biggest smile to one day.... It was a clear, beautiful morning, with the sun just coming up as he flew in his Comanche 400 at 5,500ft. Just after he switched the fuel selector to the auxiliary tank and set up the navigation system for his destination he, in his own words, "lost about an hour and a half of my life".

Intrigued? You can download CAP 1881 [HERE](#).

In December 2017, a DHC-2 (Beaver) floatplane, operating as a water taxi, crashed into a river in New South Wales, Australia; all five passengers and the pilot were tragically killed in the accident. Though the final report into this accident hasn't yet been published, the ATSB have recently issued an interim report highlighting the dangers of CO ingress into a cockpit environment: this interim report may be downloaded [HERE](#).

If you have a tale to tell, where CO is a central player, or you fancy putting your name forward as a potential CO detector 'tester', then please write to us with details:

engineering@laa.uk.com



From the reports received thus far from LAA members, it is clear that most CO 'alarm' events are the result of two engineering/maintenance issues. The first, and by far the most common reason, are problems with an exhaust system. The above picture shows the exhaust flange from the Beaver aircraft discussed in the recent ATSB interim report. The second relates to 'leaky' firewalls. In the harsh environment of an aircraft engine compartment, sealants will degrade and become ineffective in preventing noxious gasses from entering the cockpit. Detailed inspection of the exhaust system and the firewall is therefore an essential element in an annual inspection.