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Aeroprakt owners around the country were galvanised into action, ordering new windscreens after the CAA issued a CAN – continuing airworthiness notice – highlighting the possibility of catastrophic windscreen failure.

What is a CAN?

When CAA Aviation Safety Advisor John Keyzer presents an airworthiness and maintenance workshop, he says to the participants: "Let's say you're the owner of an aircraft and you have a problem with it. On the other side of the room, someone has the same aircraft. Do you think they would want to know that you have this problem?"

"That," says John, "is the basis for continuing airworthiness notices. It's the CAA's way of saying, 'Heads-up – there might be a problem here you may want to check'."

The CAA issues a continuing airworthiness notice about a concern that *doesn't* meet the threshold of an 'unsafe condition'. An unsafe condition would warrant an airworthiness directive, or AD, and complying with one is mandatory.

A CAN alerts, educates, recommends and guides. Sometimes, it gives options to address the issue. And, unlike an AD, it's up to the operator to decide if they'll carry out any of the CAN's recommendations.

A continuing airworthiness notice should also not be confused with a CAA Notice. That relates to rules and compliance with it is mandatory.

And a continuing airworthiness notice differs from manufacturer's service information in that, typically, a CAN alerts operators and maintenance providers of an airworthiness concern identified by operators in this country, rather than overseas.

// It's up to the operator to decide if they'll carry out any of the CAN's recommendations. Complying with an airworthiness directive is mandatory. //

Getting the message out

Continuing airworthiness notices have featured in several campaigns to alert the New Zealand aviation community of a possible concern.

"In April 2020," says Matt Harris, a former CAA safety investigator, "we published a CAN after receiving participant reports of inflight occurrences of the folding ring becoming detached from the fasteners on certain monsoon buckets." (CAN 05-012).

Initial information indicated that the affected buckets had been used for years.

"Engaging with the manufacturer about the concerns raised meant the CAA could alert operators, and those responsible for maintaining the monsoon buckets, that the manufacturer had provided important safety information," says Matt.

The manufacturer also improved later models of the monsoon bucket.

Another CAN, published in August 2016, related to a spark plug fitted to a Cabri G2 helicopter.

The CAN was issued after it was found by a maintenance provider that the spark plug "may have been defective and contributed to an inflight fire which subsequently destroyed the aircraft shortly after landing" (CAN 74-002).

The CAN strongly recommended that, before an aircraft's next flight, affected operators/maintenance providers inspect the spark plugs already installed on the engine, inspect new spark plugs for defects, and replace them if any defects were found.

"No further instances of defective spark plugs were found," says Matt. "But the CAN meant people could be vigilant to the possibility of off-the-shelf parts being defective."

More recently, in August 2020, CAN 27-017 was issued after cracks were found in the brackets attached to the elevator bellcrank of two separate Cessnas.

The CAN strongly recommended an "intensive examination" of the affected parts, in the affected area under good light and, if necessary, with a magnifying glass. \gg



// Continuing airworthiness notice 27-014 was issued in February 2020 to "bring attention to a defect reported to the CAA of finding a severely cracked pilot to co-pilot tail rotor torque tube on a Hughes 369FF".



// A Taranaki engineer found this cracking in the Aeroprakt windscreen he was about to replace. The CAA was able to warn the rest of the Aeroprakt community with a continuing airworthiness notice, after the engineer reported it as a defect.

» The CAN and the windscreen

John Keyzer says the recent instance of a CAN raising awareness in the Aeroprakt-owning community about possible issues with windscreens is also a good example of its value.

"The manufacturer had issued a service bulletin in December 2019 regarding the windscreens. In February 2020 there was a catastrophic windscreen failure near Mercer aerodrome.

"Later in the year, an engineer in Taranaki was about to install a new windscreen – as a result of the service information from the manufacturer – when he noticed cracking in the original.

"Both the pilot in the Mercer incident and the engineer in the New Plymouth situation filed reports with the CAA, and the result was CAN 56-001 issued soon after.

"I understand a number of the 24 Aeroprakt owners in New Zealand have now ordered new windscreens from the manufacturer.

"I know at least five of them got together to order new windscreens and share shipping costs which reduced the price for each owner," says John.

A trigger for sharing intel

John and Matt say publishing a CAN will often elicit even more information being shared with the CAA, and thus, the wider aviation community.

"People will read a CAN and say, 'I've got the same problem' and they let us know," says John.

"This information-sharing is gold for safety."

A CAN may request participants' findings be reported to the CAA via the Part 12 process. This was the case with CAN 27-017.

Those findings might indicate the concern is more widespread and possibly more serious than first thought and an AD might be issued.

Matt says while some manufacturers are quite proactive, they're often not on the ground in the New Zealand.

"So participants' reports are vital – for the CAA, for other operators, and for the manufacturer." \succeq