hoto courtesy of Graeme Gale/HeliOtago NZ.

Installing Avionics – What's Acceptable Technical Data?

The Advisory Circular that provides acceptable technical data for some avionics modifications which are not classified major, has been updated to ensure greater accountability.

C43-14 Avionics, Installations – Acceptable Technical Data has been around for some years, but its latest revision has been designed to make it more streamlined.

The Advisory Circular provides the acceptable technical data people need when they are installing selected avionics equipment to specific aircraft types that is not deemed major, without going through a lengthy process. It applies to unpressurised aircraft of less than 5700 kg MCTOW and less than 10 passenger seats.

"The AC is an important tool for simple installations instead of having to apply for a major modification every time you want to do something small," says Danni Higgins, from Avionics Hawke's Bay.

But the CAA's Team Leader Avionics, Andrew Rooney, says some people haven't been using it properly.

"We've gone through and cleaned it up, we've taken out some of the repetition and introduced a new form (CAA043-01) that's tailored just for this."

He says none of the technical requirements have changed but it's been simplified to make sure people use it correctly.

"Some people are getting confused thinking we've introduced all these new requirements, where in actual fact, they've always been there. Now we've got a mechanism and a form that is fit for purpose.

"But what we are insisting on is that when people use this AC, they use it properly and in its entirety.

"We were finding that a lot of people were just writing in the aircraft logbook that they had installed so-and-so in accordance with AC43-14. There was no paperwork, or we got the paperwork and it would just say 'in accordance with ...' and that would be it."

Andrew says the first step is to determine your eligibility to use AC43-14.

"Read the whole AC and the entire applicable appendix. Follow all the requirements, don't just pick parts out of it. Update the aircraft documentation, and submit the form back to the avionics team in the Aircraft Certification Unit. We will be able to make sure the requirements have been met."



He says it's about tidying up the use of AC43-14 and making sure any modifications are recorded.

"When the other CAA units are doing their audits and see entries in the logbook where it's got 'used AC43-14', they can come back to us and say 'hey have you seen this?' and we'll have the form saved here."

Danni Higgins says they do see cases of equipment being installed incorrectly.

"For instance, we'll investigate a radio installation, and we look behind the panel and you see the wires are not in accordance with the installation instructions from the manufacturer. None of this is in accordance with any AC, any installation instruction, any rule in any way, shape, or form.

"It's quite nice to know that it is actually being cracked down on and that if you're going to use this AC then you better prove that you've got the correct installation, and so forth."

Andrew Rooney says no one should be fitting items to an aircraft that are unsafe, not fit for purpose, or fitting them in an incorrect manner.

"That has always been the case, it's just that people have moved away from following this in total." ■