

# Is that AD *really* signed off?

ADs address serious safety issues, so sloppy wording could end in disaster.

“Way back,” says the engineer, “when I was working in Taiwan, I was involved in bringing a Robinson R44 into New Zealand.

“And I looked at the maintenance records, and in particular the applicability of the service bulletins.

“These were recorded in Chinese, but the service bulletin number was in English and someone had written ‘yes’ against the service bulletin.

“So I assumed that meant ‘yes, compliance had been carried out’. But what it actually meant was, ‘yes, compliance has yet to be carried out’.

“So I see this ‘yes’. And I go, ‘okay it’s been done’, and I sign off the New Zealand airworthiness directive as ‘found embodied’ – based only on that ‘yes’ on the service bulletin.”

## The terms to use

As per the AD logbook, there are just three terms that certify an airworthiness directive.

The first – ‘embodied’ – means you’ve assessed the AD and actioned its requirement(s).

‘Embodied’ also certifies you’ve checked that it’s recorded as such in the appropriate maintenance logbook.

The second – ‘found embodied’ – means you’ve assessed the AD, and found that its requirements have previously been carried out and certified. No further work is needed to comply.

And ‘not applicable’ means you’ve assessed the AD and have determined the airworthiness directive does not apply to the aircraft, or the affected aeronautical component is not installed.

## Almost disaster

“This particular service bulletin,” says the engineer, taking up his story again, “was about replacing the V-belt restraint panel assembly with a heavier gauge panel because the previous, light ones were cracking.

“Some time later, during a frost control operation here in New Zealand, the panel broke off and went through the belt drive system of the helicopter.

“It was only then that I realised ‘yes’ on that service bulletin did not mean ‘yes, it had been done’.

“Even though the belt drive system was damaged the aircraft landed okay.

“Still, when I talk to people about it even today, I can get quite emotional about what could have happened, and that it would have been my fault.”



// ...it's going to end badly if the AD is not certified correctly. //

## // FIND OUT MORE

For service bulletin compliance refer to Continuing Airworthiness Notice (CAN) 05-002, available on the CAA website at [aviation.govt.nz](http://aviation.govt.nz) > aircraft > airworthiness > airworthiness directives > continuing airworthiness notices.

CAN 05-002 provides guidance for aircraft operators and maintenance engineers regarding the assessment of, and their decision as to whether they need to comply with, manufacturers' service information.

### Confusion reigns

The issue has been recently highlighted by a nose wheel collapse landing in Gisborne. On examining his own books the operator found somebody had written 'not applicable' in the AD logbook.

"In a situation similar to the R44 helicopter example," says CAA Aviation Safety Advisor John Keyzer, "the person who wrote 'not applicable' on that AD did so because somebody else had certified the service bulletin as 'found embodied'. This was again due to confusion in the transfer of records from the aircraft's foreign logbook.

"The truth of the matter was, it was never done."

### What the law says

The Civil Aviation Act 1990 states that "where the Director believes on reasonable grounds that an unsafe condition exists in any aircraft or aeronautical product; and that condition is likely to exist or develop in any other aircraft or aeronautical products of the same design, the Director may, by notice in writing, issue an airworthiness directive..." s72I (3A).

John Keyzer says an airworthiness directive is issued because a serious safety concern has been identified here in New Zealand, or internationally.

"So if you get it wrong," says John, "the consequences are usually going to be bad."

The aircraft operator is ultimately responsible for making sure ADs are complied with, and certified appropriately.

It's not the responsibility of your maintenance provider.

You might arrange for them to receive AD notifications and to carry out the necessary work on the aircraft, but you're the one the buck stops with!

It's still the person who can certify release-to-service, however, who signs off the ADs.

"It's important that if there's more than one part to the AD," says John, "the engineer individually lists the parts of the AD, and certifies and signs them off separately. If you just write 'embodied' once on the AD, which part are you certifying is embodied?"

"I like to think that it's not a widespread problem, but it does exist," he says, "and it's going to end badly if the AD is not certified correctly.

"It's really important to be 100 percent sure in your determination of an AD, and in communicating that properly by using the 'remarks' column in the AD logbook."

### Shifting blame won't make you feel better

The engineer says his almost-disaster happened because of simple assumption.

"I never checked. I guess I could have said, 'well, it's not really my fault. The operator never checked either, and he was ultimately responsible for making sure ADs were complied with.

"But that's not really going to keep me off the hook. I'm still going to have an accident, maybe worse, on my conscience." 🙄