Continuing Airworthiness Notice – 05-017



Airworthiness Directive Compliance

25 August 2025

Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91.

CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

All aircraft operators and maintenance engineers.

Purpose:

The purpose of this Continuing Airworthiness Notice (CAN) is to provide guidance for aircraft operators and maintenance engineers regarding compliance with Airworthiness Directives.

Background:

Airworthiness Directives (AD's) are issued by National Airworthiness Authorities (NAA) when an <u>unsafe condition*</u> is identified in an aircraft or <u>aeronautical product**</u>, and the condition is likely to develop in other products of the same type design. AD's are intended to notify aircraft owners and operators of the presence of an unsafe condition, and to require mandatory actions to resolve the unsafe condition.

Civil Aviation Rule (CAR) Part 39 requires every operator of an aircraft to comply with every applicable AD issued by the Director in accordance with section 429(1) of the Civil Aviation Act.

Operators of aircraft whose MCTOW exceeds 5700Kg must comply with every AD issued by the Director <u>and</u> every AD issued by the state of design of the aircraft, and any aeronautical product used on the aircraft.

Where a New Zealand AD conflicts with a state of design AD, the New Zealand AD prevails.

An aircraft which does not comply with all applicable AD's must only be operated under the authority of a special flight permit issued by CAA.

Typical contents of New Zealand Airworthiness Directives

1. Applicability

Each AD will specify the aircraft, engine, propeller or aeronautical product to which it applies. It is the responsibility of the operator to assess the applicability of AD's issued, and to ensure that appropriate records are kept of their determination in the relevant logbook.

CAA 1464 AD Logbook section 1 uses the following abbreviations:

E – (Embodied) AD is applicable and has been embodied following an assessment by the operator

FE – (Found Embodied) AD is applicable, but the necessary requirements of the AD have been previously embodied

NA – (Not Applicable) The AD is not applicable

Where an AD is determined to be not applicable, the reason why it is not applicable should form part of the record of assessment for future reference.

Where an aircraft is to be modified, it is vital that the changes to the aircraft are considered against all relevant AD's. It is possible that a modification to an aircraft or component during its service life causes the aircraft to become affected by an AD, which had previously been assessed as being not applicable.

The operator remains responsible for ensuring that their aircraft complies with all applicable AD's. It may be necessary to seek guidance from someone familiar with the continued airworthiness requirements of the aircraft type, to ensure the appropriate determination of applicability is made.

2. Requirement

The requirements of the AD are written to address the unsafe condition. They must be complied with, without deviation. If the AD requirements refer to another document, such as a manufacturer's service bulletin, or service letter etc, the AD requirements must be complied with in accordance with the instruction in the referenced document without deviation.

Where it is not possible to comply explicitly with any requirement of an AD or a referred document, an application for alternate means of compliance (AMOC) must be submitted to CAA for approval.

Where any part of an AD conflicts with any other maintenance data, the requirement specified in the AD prevails.

3. Compliance

The compliance section of the AD specifies the dates, operating hours, etc before which the requirements of the AD must be completed. Where a repetitive requirement is deemed necessary it will also be detailed in the compliance section of the AD.

CAR 39.55 allows the operator to extend the compliance time of a repetitive inspection requirement detailed in an AD by 10% of the compliance time to allow for maintenance scheduling purposes. This allowance does not apply to the initial AD requirement (the initial compliance requirement), nor does it apply where the AD itself states that the repetitive requirement cannot be deferred.

Deferral of the repetitive requirements of an AD should be detailed in the aircraft tech-log or equivalent.

4. Effective date

The effective date of the AD is the date after which compliance with the requirements of the AD are mandatory. Operators should make an assessment of applicability, and plan for completion of any maintenance requirements with sufficient time prior to the compliance date.

Once the effective date is reached, the corrective actions detailed in the AD become mandatory as soon as the unsafe condition is identified. For example, after the AD effective date, if the operator identifies the defect detailed in the AD regardless of the compliance date/time not yet being reached, they must comply with the corrective action detailed in the AD.

Continued compliance with AD's

AD's remain in force unless cancelled by the CAA or NAA, with the purpose fulfilled. AD's which have been in force for a significant period carry the same safety significance, and mandatory status as AD's which have been recently issued.

It is vital that aircraft operators understand the requirements of AD's which are determined to be applicable to their aircraft, so that any repairs, modifications, configuration changes etc. comply with all applicable AD's.

For example, if an older AD mandates a specific aircraft configuration requirement, the operator must ensure that any maintenance undertaken on the aircraft complies with that requirement (i.e. maintains the mandated specific aircraft configuration requirement).

An AD repetitive inspection requirement is intended to detect the presence of an unsafe condition which either develops or occurs during the life of the aircraft or component. Repetitive inspection requirements are not included in an AD as a prompt to operators to ensure the configuration requirements of the AD continue to be met.

For example, when an AD mandates the installation of a placard, the inspection of this placard for legibility will not typically be the subject of an AD-mandated repetitive inspection. Responsibility for ensuring that the placard remains in place and is legible in this example rests with the operator under their overarching responsibility for airworthiness.

AMOC Approvals

AD applicability and requirements are based on the type design of the aircraft or component. They do not typically consider design changes or configuration changes for example.

In instances where the operator's aircraft have been modified from the type design to the point that they cannot explicitly comply with the requirements of the AD, compliance can only be achieved via an approved AMOC.

Where a New Zealand registered aircraft operator requires an AMOC to satisfy a foreign AD, they must apply to CAA for that AMOC. Only the Director may issue an AMOC for a New Zealand registered aircraft.

Use of an AMOC in complying with an AD must be recorded in the aircraft logbook or equivalent.

An operator can apply for an AMOC by using the Part 39 Application for alternate means of compliance form on the CAA website.

Recommendation:

Operators must ensure:

- that their aircraft, its components and installed equipment complies with all applicable AD's, at all times.
- appropriate records of AD assessment for applicability are entered in the aircraft logbook or equivalent.
- maintenance actions which are called up in an AD are appropriately recorded in the aircraft logbook and an appropriate release to service certified.
- AD repetitive inspection requirements are appropriately scheduled, their completion recorded, and an appropriate release to service certified.
- any deviation from the requirements of an AD must be approved by an AMOC issued by CAA.

Maintenance providers must ensure:

- that the maintenance they perform complies with the requirements of all applicable AD's.
- that they are familiar with the maintenance actions required for the continued airworthiness of the aircraft or component (including airworthiness directives) before commencing maintenance.

*Unsafe condition

An unsafe condition exists if there is factual evidence (from service experience, analysis or tests) that:
(a) An event may occur that would result in fatalities, usually with the loss of the aircraft, or reduce the capability of the aircraft or the ability of the crew to cope with adverse operating conditions to the extent that there would be:

- (i) A large reduction in safety margins or functional capabilities, or
- (ii) Physical distress or excessive workload such that the flight crew cannot be relied upon to perform their tasks accurately or completely, or
- (iii) Serious or fatal injury to one or more occupants unless it is shown that the probability of such an event is within the limit defined by the applicable certification specifications, or
- (b) There is an unacceptable risk of serious or fatal injury to persons other than occupants, or
- (c) Design features intended to minimise the effects of survivable accidents are not performing their intended function.

**Aeronautical product

Aeronautical product means anything that comprises or is intended to comprise any part of an aircraft or that is or is intended to be installed in or fitted or supplied to an aircraft, including fuel and other similar consumable items necessary for the operation of the aircraft – Civil Aviation Act 2023.

Enquiries:

Enquiries regarding this CAN should be made to the CAA at: Airworthiness.directives@caa.govt.nz