



# AIRWORTHINESS BULLETIN

AWB 02-060 Issue 1 – 18 September 2017

NDT data - The use of during the course of maintenance

## 1. Effectivity

All Aircraft and aeronautical products maintained in accordance with the 1988 Civil Aviation Regulations (CAR).

## 2. Purpose

This AWB clarifies:

- approval of Non Destructive Testing (NDT) data,
- different ways NDT data can be presented,
- precedence of different NDT data approvals, and
- control of NDT data to ensure its proper use.

## 3. Background

CASA has identified cases of NDT inspection data being used for purposes other than that for which it was approved. Additionally, some NDT data has been identified which is lacking appropriate documentation necessary to allow the end user to determine whether the data is approved.

### Approval of NDT data

Approved data can be generated and approved from various sources as detailed in CAR 2A. These include:

- Type Certificate (TC) holders,
- Supplemental Type Certificate (STC) Holders,
- Designers of modifications and repairs,
- Data approved under CASR 21.470, and
- CASA.

### Presentation of NDT data

NDT data may be contained in a stand-alone document or contained as a sub-task within a larger task.

A stand-alone procedure may be one where the modification or repair refers to another document. In this case the stand-alone procedure may need to be approved in its own right.



An NDT inspection which is included as a sub-task may be included within the data which forms part of the modification or repair. In this case, the NDT inspection forms part of the repair data and can be approved as part of the modification or repair. The inspection in this case is only applicable to the referenced modification or repair.

NDT inspections referred to by, or are included in an Airworthiness Directive (AD) are considered approved data. In this case the approval of the AD only extends to the requirements detailed in the AD and cannot be used as approved data for other purposes. The data in this case has only taken into account the conditions within the specified AD.

### **Precedence of different NDT data approvals**

Where there is inconsistency in the data, maintainers can refer to CAR 50E which provides an order of precedence in relation to its applicability. Furthermore, CAR 50E explains how to manage inconsistencies which may exist within the regulations. This will allow the maintainer to make an appropriate determination of what is to be used at the time of the maintenance being conducted.

Some examples include:

- Data included in an AD. As an AD is an instrument issued under CASR Part 39, this data has precedence over:
  - data issued by TC,
  - data issued by STC, and
  - data approved by CASA under CAR2A(4).
- CAR 2A(4) Data approval by CASA. This is a common form of data approval, however it should be noted that this data approval is at the bottom of the list in CAR 50E.

At the time of approval, CASA takes into account all other sources of data to avoid inconsistency. It also takes into account whether other approvals are required to allow that data to be used. However, it is possible that at a future date, other data may be released that takes precedence.

*Note: Whilst there may be inconsistency between data sets, it is not inferred that data previously approved is incorrect. Approved data within an existing approval may still be relevant, but the need to ensure that each task/inspection is carried out within the context of the approved data will ensure that compliance is being met.*



## 4. Recommendations

When considering whether data is approved, maintainers are reminded that the information detailed in CAR 2A provides the basis for the maintainer to determine whether the source of data is appropriate for the maintenance being carried out and that CAR 50E provides an order of precedence if there is any inconsistency.

Where NDT data is provided, and it is determined that further development of NDT procedure is required, then additional approvals of any data generated may be required. This may require approval by CASA or the original source.

### Control of NDT data

Maintainers are reminded that data must be controlled to ensure that the data is:

- still current,
- at the latest revision, and
- is approved.

When considering documents issued as separate procedures, the maintainer needs to ensure that the data is supported by appropriate approvals such as an approval letter or those provided on the document by the CASA delegate.

Prior to use, the maintainer needs to consider what they may need to do to ensure that they are holding the latest revision.

Unlike scenarios where the OEM data may be available on line etc., standalone approvals need to be controlled in a manner that allows the maintainer to have confidence that they are using a document that is approved, and remains current. Options for confirming this may include contacting the holder of the approved data or contacting CASA.

## 5. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link email address:

[AirworthinessBulletin@casa.gov.au](mailto:AirworthinessBulletin@casa.gov.au)

or in writing, to:

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