

AWB 02-5 Issue 1 - Administration and Control of Aircraft Welding and Non - Destructive Testing

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Administration and Control of Aircraft Welding and Non - Destructive Testing

Background

The subject of administration and control of aircraft welding and non-destructive testing (NDT) activities are aspects of maintenance that are not clearly understood by many people.

Who can perform welding / non-destructive testing?

Welding and NDT maintenance functions are required to be physically performed by a person who has been trained, examined, and checked for competency in the welding or NDT method and/or particular task. The person must also be authorised by CASA or an Authorised Person to perform the maintenance.

The authorisation normally takes the form of a Welding or Airworthiness Authority or it may be an internal company authorisation issued by a person who has a CASA authorisation for that purpose under CAR 42ZC (6). Welding and NDT Authorities issued by CASA are granted to individual persons and they are normally transportable. Transportable means that the person can use the CASA issued Authority in any Approved Maintenance Organisation (AMO) or in a few limited circumstances for welding, under the control of a LAME. Authorisations issued by an Authorised Person under CAR 42ZC (6), i.e. not CASA, are normally only valid when used within a particular maintenance organisation.

Note: It should be noted that the limitations placed on carrying out maintenance under CAR 42ZC(4) are detailed in schedule 7 of the regulations. These prohibit most welding and NDT tasks that are not performed under the control of a CAR 30 Certificate of Approval holder.

Welding and NDT authorities and authorisations do not in themselves give the person the authority to make a final certification of the maintenance, only to physically perform and certify for that particular aspect of the maintenance that was carried out under the control of the AMO or LAME. It is the responsibility of the AMO or supervising LAME to ensure that their Certificate of Approval or Licence privileges cover the maintenance that the Welder or NDT person is performing.

Tools, Equipment and Data

The AMO or LAME must also ensure that any person under their control, including a Welder or NDT

specialist, has the qualifications, training and experience to perform any maintenance that is carried out. They must also ensure that these persons have, or are provided with, the appropriate tools, approved maintenance data, facilities and equipment.

Procedures

All AMOs that carry out any welding or NDT tasks, even if only from time to time, must have procedures within their CAR 30(2D) written system of quality control that show how the processes are controlled. If they do not have these procedures they must not carry out the maintenance.

Approved Maintenance Data

Welding and NDT must be carried out in accordance with approved maintenance data as defined in CAR2A. Where new welding or NDT procedures are produced, or equipment that is different from that recommended by the aircraft or component manufacturer is to be used, written approval from CASA or an Authorised Person is required.

Contractors

Like any other form of maintenance, welding and NDT can be carried out by a third party for an AMO. This may be:

- Another AMO that issues a release document or, certifies for the maintenance under it's own certificate. or

- An organisation that may have the qualified staff and facilities to be able to physically carry out the maintenance but not have a CAR 30 Certificate of Approval covering the maintenance.

In either case the AMO's system of quality control procedures must indicate how it controls the welding and/or NDT when carried out under an agreement.

Recommendation

It is recommended that all persons carrying out or controlling welding or NDT ensure that their Certificate of Approval issued under CAR 30, and the associated system of quality control, covers any aircraft welding or NDT they intend to carry out and that the welding and NDT is performed by appropriate persons holding Authorities or authorisations.

LAME's certifying for maintenance outside an approved maintenance organisation that has included welding or NDT must also ensure that the welding and NDT has been performed by persons holding

appropriate Authorities or authorisations.

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If you require more information on this issue, please contact CASA by email

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