



ASN No 022

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Department of Civil Aviation – Sri Lanka .
Aviation Safety Notice

Subject: Certification of Aircraft Welders

NATURE: **ADVISORY**

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OBJECTIVE: **TO INFORM OPERATORS PROCEDURES TO BE ADOPTED TO APPROVE AIRCRAFT WELDERS**

Background **Published information is not available on Certification of Aircraft Welders**

Recipients: All Opeartors

Effective Date: 08. 04.2002

Validity: Until further notice

Contact person: Airworthiness Division of the Department of Civil Aviation

Availability: A copy of this document is available for reference at the Communication Centre, Department of Civil Aviation, 64, Galle Road, Colombo 3.

CONCEPT

INTRODUCTION This ASN is applicable to persons who weld metallic parts which are essential to the airworthiness of aircraft where the making of a sound joint by oxy-acetylene or arc-fusion welding techniques depends largely on the competence of the welder operator. Welders will be approved in accordance with the requirements of this ASN.

NOTE: For the purposes of this ASN, the term arc-fusion welding includes:-

- (a) Manual metal-arc (MMA) welding,
- (b) Metal inert gas (MIG) welding, and
- (c) Tungsten inert gas (TIG) welding

2. GRANT OF APPROVAL The procedures for the issue and control of welding approval are dependent upon the circumstances of the employment of the welder. Where a welder is in the employ of an Organisation approved by the DCA the DCA will not require direct approval of the welder. The Organisation is required to establish its own effective system for their control. The system, at a minimum, include records of all sample tests (and results) and a ready means of establishing the current qualifications of welders employed. All records shall be available to the DCA upon request, including details relating to welders who have been in the employ of the Organisation. No essential records, e.g. Approval Cards and Test Reports shall be destroyed without the permission of the DCA. A description of the control system shall be included in the Company Maintenance Control Manual required by the DCA. DCA approval of the system will be indicated by inclusion of the control of welders in the Schedule of Approval.

2.1 The procedures for obtaining welder's approval are as follows:-

- (a) Where the welder is employed by a DCA approved Organization, such Organization shall make arrangements to prepare and weld an appropriate test sample(s) to a DCA approved Test House for examination together with the particulars of the welder concerned, materials used, details of any post-welding treatment (e.g. heat treatment or stress relief), and identification marks on the test sample(s). Upon receipt of an Approved Test Certificate from the Test House indicating successful test results for the sample(s), the organization may grant approval to the welder. Only welders who have been approved may be employed on work of significance to airworthiness.
- (b) In the event of a welder leaving the employ of an Organisation approved by the DCA, the welder may request the Organisation to grant a Welder's Approval Certificate for the welding approvals held while in the employ of that Organisation.

noted that grant of such an approval, is conditional upon the availability of evidence of prior qualification and the DCA can not accept responsibility for a previous employer's failure or inability to provide the evidence.

3. MAINTENANCE OF APPROVAL

3.1 The validity of a welder's approval may be maintained by the procedures detailed in paragraphs 3.1.1. Should approval be granted in a different combination (see supplement) than that shown on the Welder's Approval Certificate or documents, then the grant of approval as prescribed in paragraph 2.1 must be followed.

3.1.1 Where the welder is employed by an Organisation approved by the DCA, the approved Organisation shall arrange for periodic check examinations of the welder's competency. At each periodic check examination an appropriate test sample and such other test samples to be decided by the approved Organisation shall be completed, by using the same material used in standard work practices appropriate to the maintenance of approval. For welders holding approval for more than one configuration (i.e. sheet to sheet, sheet to tube to tube) it will normally only be necessary to provide one test sample provided that the DCA is satisfied it is representative of the welder's main day-to-day work. However, an initial test sample will be required for each technique and material group specified in the welder's approval. Test samples shall be sent to a DCA approved Test House under arrangements made by the approved Organisation. If the results of this examination are satisfactory the Welder's Approval document shall be endorsed by the approved Organisation. Complete records of the periodical check examinations shall be kept at the Organisation. The check rest record for each welder must indicate the date for the next check test in advance so that the test can be completed and the welder's approval maintained within the period of approval of the welder. All records shall be held available to the DCA.

(a) The maximum period between check examinations shall be 12 months. Organisations shall arrange for a check test within the period of validity of the previous test period to ensure continuity of approval.

(b) If the test results are unsatisfactory the approved Organisation shall arrange for the check examination to be repeated immediately and the samples sent to an approved Test House for examination. During the period of a check test which proved unsatisfactory and the result of the next check test, the welder shall not weld parts essential to the airworthiness of an aircraft. If the test results are again unsatisfactory the welder's approval shall be suspended until further training and/or experience has been gained to the satisfaction of the approved Organisation. A further test has been satisfactorily completed.

3.2 The DCA may select samples of an approved welder's work at any time for additional check examination purposes.

Lal Liyanaarachchi
Director General of Civil Aviation