

Democratic Socialist Republic of Sri Lanka



Civil Aviation Authority of Sri Lanka

Directive

(Issued under Sec. 121, Civil Aviation Act No. 14 of 2010)

Title: Certification of Aircraft Welders

Reference No.: CA-Directive-2018-AW-005 S.N. : SLCAD-012 Date: 15th February 2018

Pursuant to Section 121 of the Civil Aviation Act No.14 of 2010, Director General of Civil Aviation shall have the power to issue, such directive for the purpose of giving effect to stated provisions of the Civil Aviation Act, any regulations or rules made thereunder including the Articles of the Convention on International Civil Aviation which are specified in the Schedule to the CA Act.

Accordingly, I, undersigned being the Director General of Civil Aviation do hereby issue the Directives as mentioned in the Attachment hereto (Ref: CA-Directive-2018-AW-005-Att-01) , for the purpose of giving effect to the provisions in the aforementioned Act and Standards & Procedures described under Article 37 of the Convention and Implementing Standards IS -145 which are specified in the Attachment.

This Directive shall come into force with immediate effect and remain in force unless revoked and it will supersede the requirement in Aviation Safety Notice (ASN) 22.

Attention is also drawn to sec. 103 of the Act, which states inter alia that failure to comply with General Direction, issued by DGCA is an offence.

H.M.C. Nimalsiri
Director General of Civil Aviation and
Chief Executive Officer

Civil Aviation Authority of Sri Lanka
152/1, Minuwangoda Road,
Katunayake.

Enclosure: Attachment No. : CA-Directive-2018-AW-005-Att-01

Directive

Title: Certification of Aircraft Welders

1 General

This Directive 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 competency of the operator. Welders will be approved in accordance with the requirements of this Directive.

NOTE: For the purposes of this Directive, 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 employment of the welder. Where a welder is in the employment of an Organisation approved by the DGCA, the DGCA will not undertake direct approval of the welder. The Organisation is required to establish its own effective system for their control. The system shall, as a minimum, include records of all sample tests (and results) and a ready means of establishing the current qualification status of all welders employed. All records shall be available to the CAASL upon request, including details relating to welders who have since left employment of the Organisation. No essential records, e.g. Approval Cards and Test Reports shall be destroyed without the permission of the CAASL. A description of the control system shall be included in the Company MOE/MOM or procedures manual required by DGCA in approval of the system, and 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 CAASL approved Organization, such Organization shall make arrangements to prepare and weld an appropriate test sample(s) to a DGCA approved Test House for examination together with full particulars of the welder concerned, materials used, details of any post-welding treatment (e.g. heat treatment for stress relief), and identification marks on the test sample(s). Upon receipt of an Approved Test Certificate from indicating successful test results for the sample(s), the organization may grant approval to the welder. Only then may the welder be employed on work of significance to airworthiness.
- (b) In the event of a welder leaving the employment of an Organisation approved by the CAASL, the welder may request the DGCA to grant a Welder's Approval Certificate for the welding approvals held while in the employment of that Organisation. It should be noted that grant of such an approval, is conditional upon the availability of evidence of prior qualification status. The CAASL cannot 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 in a different combination (see supplement) than that shown on the Welder's Approval Certificate or documents, the procedure for 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 CAASL, the approved Organisation shall arrange periodic check examinations of the welder's competency. At each periodic check examination an appropriate sample and such other test samples to be decided by the approved Organisation shall be completed, by using techniques and 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 a single test sample provided that the DGCA is satisfied it is representative of the welder's main day-to-day work. However, a separate 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 DGCA approved Test House under arrangements made by the approved Organisation. If the test results of this examination are satisfactory the Welder's Approval document shall be endorsed by the approved organization. Complete records of the periodical check examinations shall be kept at the Organisation. The check test records for each welder must indicate the date for the next check test in advance so that the test can be completed and the within the period of approval of the welder. All records shall be held available to the CAASL.

- (a) The maximum period between check examinations shall be 12 months. Organisations shall arrange for the relevant 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 examinations to be repeated immediately and the samples sent to an approved Test House for examination. During the period between 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 suspended until further training and/or experience has been gained to the satisfaction of the approved Organisation, and a further test has been satisfactorily completed.

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