

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF TRANSPORT

AIRWORTHINESS DIRECTIVE GLIDERS

G.F.A./AD 110 Schleicher TN2.

GLIDER TYPE AFFECTED: All ASW19 gliders with rudder without upper horn type mass balance(S/N 19019 through 19037, 19040 and 19042 through 19044.

ACCOMPLISHMENT: By September 1978. Prior to modification, Airworthiness directive LTA76-258(max speed reduced to 230 km/h must be observed.

REASON: Oscillations of the rudder control circuit have been noticed at about maximum speed on days with very high temperatures. The airflow passing over the rudder surfaces induced "panel flutter" of the rudder surface panels.

PROCEDURE: According to drawing 190.38.S1 with amendment dated 2/Sep. 76, two stringers made of F.R.P. are glued to the inside of the rudder panels. The rudder is opened at its forward glue joint by use of a metal saw blade between the hinges. It can now be opened so far that the glue joints for the stringers can be sanded. Remove the Nylon "tear off cloth" off the glue joint area of the prefabricated stringers and glue these to the inside of the rudder using the following mixture:-

100 parts in weight EPICOTE 162
38 parts in weight EPIKURE 113
15 parts in weight AEROSIL

The same mixture is used to glue the saw blade cut together again. Make provision(by use of small wood pieces) that the glue gap will be neither narrower or wider than the saw blade cut. Prior to rigging of the rudder to the fin the static balance of the rudder(see pages 29 and 34 of the Operations Manual) must be checked. If necessary the maximum allowed value or less must be obtained by sanding off surplus paint at the trailing edge or mass balance has to be increased at the nose. In any case a carefull use of the glue for the stringers is recommended.

MATERIAL: Prefabricated F.R.P. stringers 190.38.0152 and 190.38.0153 obtainable from the Schleicher Company. Glue mixture as specified above.

WEIGHT AND BALANCE: The influence of the increase in weight (about 60 grams) to the Cof G of the whole sailplane is negligible, whereas the determination of the static balance of the rudder is very important.

REMARKS: The modification according to this AD must be performed by an approved person.

It is possible to order a modified rudder from the manufacturer. The execution of the modification is to be entered up in the aircraft's log book and duly signed.

Airworthiness Directive LTA76-258 is no longer valid after the modification has been carried out.

DRAWINGS: 190.38.S1 amendment dated 2nd Sep. 1976 obtainable from Manufacturer.

COMPLIANCE:- This directive is mandatory and is issued pursuant to Air Navigation Regulations under the delegated authority of the Secretary of the Department of Transport.

Date of issue: 5/7/78



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