

SOARING

OFFICIAL PUBLICATION

of

THE SOARING SOCIETY OF AMERICA, INC.

Volume 5

September-October, 1941

Number 9-10

N. C. LICENSING

of Individual Gliders

The following information originally contained in a letter from Mr. M. P. Crews, Chief, Aircraft Airworthiness Section, Civil Aeronautics Administration to Dr. W. B. Klemperer, Chairman, Scientific Committee. Southern Cal. Soaring Association, Inc., is published in an effort to acquaint such home builders as would like to N.C. license their ships, with a possible procedure for so doing.

Dr. W. B. Klemperer
Chairman, Scientific Committee
Southern California Soaring Association, Inc.
738 South Bristol Avenue
Los Angeles, California

Dear Dr. Klemperer:

This is in reference to your letter of March 23 regarding the "third party" procedure of certification (with NC designation) of gliders, having particular applicability to cases of individual gliders where the question of production is not involved.

We regret to advise that a review of the legislative history of the Civil Aeronautics Act of 1938 indicates that no provision for the original certification of aircraft on the basis of approval by a "third party" has been made, and that we therefore cannot make full use of this method.

We believe, however, that some intermediate course involving the extensive use of reputable "third parties" in the preparation and checking of the necessary technical data could be worked out by your organization. These data may be comparatively brief consisting of a few drawings showing the general layout of the structure with dimensions and material of the primary structural elements and a brief structural analysis of the primary structure to show that the basic loadings of CAR 05 (reference Certificate and Inspection Division Release No. 12—May 31, 1940) have been met. The drawings and the title page (s) of the analysis should bear the signature of a delegated representative of the S. C. S. A., or other party. These data should then be submitted to the Administration in the normal manner for our review. This review would be quite objective and brief if we were familiar with the capabilities and acceptability of previous work of the person or persons that have prepared the data.

Careful consideration of the detailed design features of the glider would be made during a comprehensive

visual inspection of the glider, and the amount of static testing if any would be determined by the results of the inspection. After satisfactory completion of these phases of the approval, official flight tests would of course also be necessary.

While we believe this approach to the problem of certification of individual gliders is sound and will materially reduce the time involved in obtaining approval, it is of course difficult to see what shortcomings and complications may arise in applying this method to actual cases. It is therefore suggested that your organization arrange to select a typical actual glider and make a "test case" of this handling. As the result of the experience gained in the specific case, we believe a very workable arrangement can be devised to attain the basic objective of simplifying the certification procedure.

Suitable information and instructions regarding this matter are being forwarded to our branch offices who of course would handle the actual cases arising. In the case of West Coast projects, contact should be made with the West Coast Branch of the Aircraft Airworthiness Section, P. O. Box 1010, Santa Monica, California.

We regret that under the present policies of the Civil Aeronautics Administration, we are unable to make use of the "third party" method of certification; however, at such time as these policies change, we will be pleased to further exploit this certification method. In the meantime, we believe the compromise proposal contained in this letter constitutes a workable solution. Your comments on this proposal or any further suggestions that you may have in regard to this general subject would be appreciated.

A copy of this letter is being forwarded to the Soaring Society of America, Elmira, New York, for its information.

Very truly yours,

s/ MARION P. CREWS,
Chief, Aircraft Airworthiness Section.

Whereas the above may sound a bit complicated to the layman it is really very conservative when compared with the more complete standard practice. If Dr. Klemperer or anyone else does take advantage of this proposed procedure we hope that the Soaring Society of America will have the pleasure of publishing the results.