

Exemption No. 1163

UNITED STATES OF AMERICA
FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
WASHINGTON, D. C. 20591

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In the matter of the petition of *
*
GREAT LAKES AIRCRAFT COMPANY * Regulatory Docket No. 10376
*
for an exemption from Section *
21.17 the Federal Aviation *
Regulations *
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GRANT OF EXEMPTION

By letter dated 15 May 1970, Mr. Harry R. Swack, on behalf of the Great Lakes Aircraft Company, requested an exemption from the pertinent rules to permit the limited production of the Great Lakes Sport Trainer 2T-1A.

The records available to the FAA indicate that the Great Lakes Aircraft Corporation began operation on January 2, 1929, and was issued an Approved Type Certificate 228 (ATC-228) covering the 2T-1A airplane on September 17, 1929, under the airworthiness requirements of Air Commerce Regulations, Aeronautics Bulletin 7a. During the period of time that the Great Lakes Aircraft Corporation was in operation, 204 airplanes of the 2T-1 type were built. The Corporation subsequently ceased production and the records show that future correspondence concerning ATC-228 was addressed to the referee in bankruptcy.

Under the requirements of Bulletin 7, the validity of an ATC for production purposes was dependent upon the holder maintaining suitable manufacturing facilities. However, the type approval portion of the ATC continued to be used for the purpose of the renewal or reissuance of airworthiness certificates for 2T-1A airplanes. In this connection, it should be noted that a substantial number of the Great Lakes Sport Trainer 2T-1A airplanes are still in service and continue to be issued airworthiness certificates on a showing of compliance with the type approval portion of ATC-228 based on the 1929 airworthiness standards.

With the adoption of the Civil Air Regulations in 1937, type certificates (TCs) for aircraft were made effective indefinitely and separate production certificates were issued. At that time new TCs were issued to the holders of ATCs who were producing under those ATCs. Subsequently, all ATC holders were given an opportunity to exchange the ATCs for TCs. The records available to the FAA indicate that letters were sent to the referee in bankruptcy of the Great Lakes Aircraft Corporation inviting him to exchange ATC-228 for a permanent TC. However, it does not appear that the letters were answered, if in fact they were received. Administrative action was subsequently taken to terminate ATC-228 for what now appears to have been an oversight or a lack of knowledge on the part of the referee in bankruptcy. Petitioner now requests that a type certificate be issued

covering the type approval portion of ATC-228.

Section 21.17 of the Federal Aviation Regulations provides, in pertinent part, that an applicant for a type certificate must show that the aircraft meets the applicable airworthiness requirements that are effective on the date of application for that certificate. Thus, an exemption from Section 21.17 is necessary before a type certificate can be issued based on the type design of the Great Lakes Sport Trainer 2T-1A and on the standards in effect on the date that ATC-228 was issued. Petitioner has requested such an exemption and has submitted detailed data in support of its petition which is summarized as follows:

(1) Over 39 years of field experience with the 2T-1A airplane show it to be remarkably strong, easy and very inexpensive to maintain, and still very desired for use as an advanced acrobatic trainer and for use as a competition type aircraft for national and international contests.

(2) Statements from qualified organizations and individuals attest to a need in the public interest for an American airplane that would be capable of being used for advanced acrobatic training and for national and international contests.

(3) There are only four aircraft certificated in the acrobatic category, in production in the United States, none of which is capable of being used for advanced acrobatic training or national and international competitions.

(4) The 2T-1A airplane has been out of active production since 1932, but is still the most sought-after biplane in the United States and is still flown strenuously in air shows.

(5) The 2T-1A airplane was used by members of the United States Aerobatic team for the International Competition and scored very highly in this competition as late as 1964.

(6) A number of requests have been received from flight schools desiring an aircraft capable of teaching advanced acrobatic flying.

(7) Data presented to the FAA substantiates the fact that the 2T-1A airplane has never had a service bulletin or advisory note issued against the aircraft itself.

(8) Of the original 204 airplanes, approximately 30 percent still exist and most of the 55 remaining airplanes are in flying status or are being rebuilt to fly once again.

(9) Engines of various horsepower up to and including 165 hp. have been used for the 2T-1A airplane successfully over the years, and an STC now exists for the Warner 185-200 hp. engine which is the horsepower most desired by the public and recommended by the professional acrobatic pilots and instructors.

(10) Building the 2T-1A airplanes under Bulletin 7a requirements, the way it was originally certificated, would surpass Part 23 structural strength requirements (the high incidence load factor is 6.92).

A substantial number of the 2T-1A airplanes built under

ATC-228 are still on flying status and continue to be issued standard airworthiness certificates based on a showing of compliance with the Bulletin 7a standards incorporated in the type design of those airplanes. The structural strength requirements under which the 2T-1A airplanes were built exceed the present structural strength requirements of Part 23. Moreover, they are being used as advanced acrobatic trainers and in national and international acrobatic competitions and have an excellent safety record. Thus, while the grant of the relief requested would permit the issuance of a type certificate under which airplanes could be built in accordance with the type design of record when ATC-228 expired, the service experience of the 2T-1A airplanes clearly indicates that the grant of this exemption should have no adverse effect on safety.

In addition to the foregoing, the FAA recognizes the need for an acrobatic aircraft of the Great Lakes 2T-1A type, and is aware that the production of such aircraft would encourage the development of a significant segment of civil aviation in the United States. Moreover, had it not been for the fact that the referee in bankruptcy failed to request that ATC-228 be converted to a permanent type certificate in accordance with the administrative policy of the CAA, the predecessor agency to the FAA, to convert ATCs to TCs, the 2T-1A airplane could now be in production under the TC based on ATC-228.

However, the FAA believes that, in the interest of safety, an exemption permitting the issuance of a type certificate based on the type design of the 2T-1A airplane and the airworthiness requirements of Bulletin 7a must limit the type certificate to the type design which was incorporated into ATC-228. Any major change to that type design would have to be made by an amendment to that type certificate or by a Supplemental Type Certificate under the provisions of Subpart D of Part 21.

In consideration of the foregoing, I find that it is in the public interest and will not adversely affect safety to grant the required exemption. Therefore, pursuant to the authority contained in sections 313(a) and 601(c) of the Federal Aviation Act of 1958, that has been delegated to me by the Administrator (14 CFR 11.53), Great Lakes Aircraft Company is hereby granted an exemption from Section 21.17 of the Federal Aviation Regulations to the extent necessary to permit the issuance of a type certificate incorporating the type design portion of ATC-228 applicable to the Great Lakes 2T-1A airplane and the applicable airworthiness requirements of Bulletin 7a that were incorporated in ATC-228, provided that the Great Lakes Aircraft Company shows that it is the owner of the type design which is part of ATC-228.

/s/ R. S. Sliff
Acting Director
Flight Standards Service

Issued in Washington, D. C., on
July 29, 1970.