

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056

In the matter of the petition of

Rogerson ATS

for an exemption from SFAR No. 88 of Title
14, Code of Federal Regulations

Regulatory Docket No. FAA-2002-14094

PARTIAL GRANT OF EXEMPTION

By letter dated October 31, 2002, Mr. Douglas P. Gondela, Rogerson Aircraft Corporation, 2201 Alton Ave., Irvine, California, 92606, petitioned for an exemption from the requirements of Special Federal Aviation Regulation (SFAR) No. 88, "Fuel Tank System Fault Tolerance Evaluation Requirements" of Title 14, Code of Federal Regulations (14 CFR). This exemption, if granted, would allow Rogerson ATS, as the holder of Supplemental Type Certificate (STC) No. SA4053WE for Boeing Model 707-123B airplanes, to substantially meet the intent of SFAR No. 88 without conducting a safety review of the airplane fuel tank system, as required by SFAR No. 88.

The petitioner requests relief from the following regulations:

Part 21, SFAR No. 88, requires each supplemental type certificate (STC) holder to develop a report no later than June 6, 2003, that must:

- (a) Provide a fuel tank system safety review that contains substantiation that the airplane fuel tank design, including all necessary design changes, meets the requirements of §§ 25.901 and 25.981(a) and (b) as amended by Amendment 25-102; and
- (b) Contain all maintenance and inspection (M&I) instructions established by the fuel tank system safety review. The instructions are necessary to maintain the fail-safe design features required to preclude the existence or development of an ignition source within the fuel tank system throughout the operational life of the affected airplanes.

Operators are obligated by the amendments to parts 91, 121, 125, and 129 of the operating rules to have an approved maintenance program for the fuel tank systems on their affected airplanes by December 16, 2008. That maintenance program will incorporate the M&I instructions created by the affected type certificate (TC) and STC holders from their SFAR No. 88 fuel tank system safety review(s), as well as address the actual configuration of the airplane.

The petitioner's supportive information is as follows:

Background Information

The above referenced STC No. SA4053WE has been installed on one Boeing Model 707 aircraft. The aircraft serial number modified with the STC is 17634 and registration number N960CC.

“Public Interest Considerations

“Compliance with SFAR No. 88 is not in the public interest of the United States of America. Only one aircraft was modified with this STC and it is no longer registered in the United States. Rogerson ATS does not know its whereabouts.

“Safety

“The safety of the flying public would not be enhanced by the performance of a fuel system safety analysis for this STC, as only one aircraft was modified, this aircraft is no longer registered in the United States of America and the whereabouts of this aircraft is not known. If the aircraft were to be returned to civil operations, SFAR No. 88 safety requirements would need to be complied with. As a result, these aircraft are prohibited from returning to civil operations without SFAR 88 compliance.”

Summary

Rogerson ATS petitions for exemption from the requirements of 14 CFR Part 21 SFAR No. 88 for Rogerson ATS STC No. SA4053WE. The STC has been installed on only one Boeing Model 707 aircraft.

“Rogerson ATS recommends that a limitation be placed on STC SA4053WE to prevent further use of the STC, unless a satisfactory SFAR No. 88 safety assessment has been accomplished.”

A summary of the petition was published in the Federal Register on August 4, 2004 (69 FR 47205). No comments were received.

The FAA’s analysis/summary is as follows:

The FAA has considered the information provided by the petitioner, and has determined that there is sufficient merit to warrant a grant of exemption. The petitioner requests an exemption from the requirements of part 21 SFAR No. 88 for STC No. SA4053WE, which authorizes the installation of an auxiliary fuel tank system on Boeing Model 707–123B airplanes.

SFAR No. 88 requires certificate holders to conduct a safety assessment, develop M&I instructions, and make design changes necessary to correct any unsafe conditions identified in the safety assessment. Further, the intent of SFAR No. 88 requires the certificate holder to develop maintenance and inspection instructions for the operators to implement on their existing fleet of transport category airplanes.

Rogerson ATS, as the holder of the STC, installed the auxiliary fuel tanks on one Boeing Model 707-123B airplane, serial number 17634. The October 31, 2002, petition for exemption incorrectly identified the airplane as serial number 17696. Rogerson ATS informed the FAA of the error in an electronic mail dated November 22, 2004.

The FAA has learned that Boeing model 707-123B, serial number 17634 has been dismantled for spare parts.

Public Interest

It would not be in the public interest for Rogerson ATS to incur the cost of compliance with SFAR No. 88 when the only airplane modified by STC No. SA4053WE has been dismantled.

In consideration of the foregoing, I find that a partial grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. 40113 and 44701, delegated to me by the Administrator, Rogerson ATS is granted a partial exemption from 14 CFR, part 21, SFAR No. 88 to the extent necessary to allow Rogerson ATS, as the supplemental type certificate holder of STC No. SA4053WE, to meet the obligations of SFAR No. 88 without conducting a fuel tank safety review, and without developing the necessary design changes required by that safety review. The partial exemption is granted with the following restrictions and limitations:

1. Within 90 days after the issuance of this exemption, Rogerson ATS must apply for an amendment to the STC to:
 - a. Prohibit the exercise of the privileges of an STC holder defined in 14 CFR, part 21, unless the STC holder has complied with SFAR 88, and
 - b. Revise the Airplane Flight Manual (AFM) supplement to state that

STC No. SA4053WE has not been shown to comply with SFAR 88, and that a fuel tank system M&I program for compliance with §§ 91.410(b), 121.370(b), 125.248(b), or 129.32(b) has not been developed.

2. This exemption is contingent upon the approval of the amended STC and the revised AFM supplement.

Issued in Renton, Washington, on September 16, 2005.

signed by Ali Bahrami

Ali Bahrami

Manager, Transport Airplane Directorate
Aircraft Certification Service