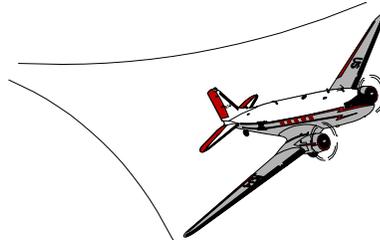


SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department
of Transportation

**Federal Aviation
Administration**

No. CE-03-02
October 8, 2002

Aircraft Certification Service
Washington, DC

We post SAIBs on the internet at "av-info.faa.gov"

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you, a registered owner of a Piper Model PA-18 "150" Airplane, of an amendment to Supplemental Type Certificate (STC) No. SA02183AK for the fabrication and installation of Leading Edge Exhaust Systems, LLC, replacement engine exhaust system (P/N PA18ESA). The amendment clarifies the applicability of the STC to airplanes with Textron Lycoming Model O-320-A2A and O-320-A2B 150 horsepower engine installations only.

Background

The Anchorage Aircraft Certification Office (ACO) issued Supplemental Type Certificate (STC) No. SA02183AK on December 4, 2001, to Mr. Dane Wagner, Sr., Proprietor of Leading Edge Exhaust Systems, LLC, Anchorage, Alaska. The STC approves the fabrication and installation of Leading Edge Exhaust Systems, LLC, replacement engine exhaust system assembly (P/N PA18ESA) on Piper Model PA-18 "150", PA-18A "150", PA-18S "150" and PA-18AS "150" airplanes. The approval was based upon successful demonstration of compliance with the pertinent paragraphs of the Federal Aviation Regulations (FAR) pertaining to aircraft noise and instructions for continued airworthiness, as well as with the pertinent paragraphs of the Civil Air Regulations (CAR) for powerplant cooling, and induction system deicing and anti-icing provisions.

Since the issuance of the original STC in December 2001, there have been several instances where the LEES, LLC, P/N PA18ESA exhaust system has been installed on Piper Model PA-18 "150" series airplanes with FAA approved 160 and 180 horsepower engines. **These installations are inappropriate, unauthorized, and potentially unsafe.** Adequate powerplant cooling and induction system deicing have **not** been demonstrated for the LEES, LLC exhaust system on 160 horsepower engines, and adequate induction system deicing has **not** been demonstrated on 180 horsepower engines. Therefore, **the potential exists for engine overheating, loss of power, or engine stoppage in flight.** Concerns about adequate powerplant cooling and induction system deicing and anti-icing on these higher horsepower engines led the FAA to amend STC No. SA02183AK on August 16, 2002, to clarify that the STC was applicable to installations of the LEES, LLC, P/N PA18ESA exhaust system assembly on Piper Model PA-18 "150" series airplanes with Textron Lycoming Model O-320-A2A and O-320-A2B 150 horsepower engine installations only.

Recommendation(s)

The FAA recommends immediate removal of the LEES, LLC, exhaust system and replacement with an FAA approved exhaust system on Piper Model PA-18 “150” series airplanes equipped with 160 and 180 horsepower engines which have been modified by the installation of the LEES, LLC, P/N PA18ESA exhaust system. This recommendation will remain in effect until adequate engine cooling and induction system deicing have been demonstrated for the LEES, LLC, P/N PA18ESA exhaust system and STC approval is granted for installations on 160 and 180 horsepower engines.

For Further Information Contact

FAA, Anchorage Aircraft Certification Office, 222 W. 7th Ave., #14, Room 128, Anchorage, AK 99513-7587; Attention: Steven A. Mangiapane, ACE-115N; phone: (907) 271-2671; fax: (907) 271-6365; email: steven.mangiapane@faa.gov