

»» **Service Letter**

Technical Aspects are FAA Approved

Number: L86-02 B
Replaces L 86-02A

Date: 3/7/2018

Subject: Recommended time between overhaul periods (TBO) for engines using replacement parts manufactured by Superior Air Parts, Inc.

Application: All engines manufactured by Lycoming or Continental Motors in which parts manufactured by Superior Air Parts, Inc. are installed

Compliance: Service life periods have been established by airframe and component manufacturers to give aircraft owners, operators, and mechanics a guideline as to how long their products may be operated between replacement or overhaul periods. This period is known as Time-Between-Overhaul (TBO) when referring to engine service life.

In some cases, such as aircraft operating under FAR part 135 or under foreign air regulations, these recommended periods have become the maximum allowable period between overhauls.

This overhaul period is a recommendation only and is dependent on compliance with all applicable Service Bulletins and Airworthiness Directives, as well as all required preventative maintenance, periodic inspections and determination by qualified maintenance personnel that the engine is operating normally and is airworthy.

To clear up any misunderstanding concerning the use of FAA-PMA parts and TBO, Superior Air Parts, Inc. provides the following, which is approved by the Federal Aviation Administration:

Engines using Superior Air Parts, Inc. FAA-PMA parts which are interchangeable with recommended original equipment manufactured parts may be run to the same specified Time Between Overhaul established by the original equipment manufacturer for that make and model of engine.

See the following Special Airworthiness Information Bulletin (SAIB NE-08-40) regarding the use of PMA parts in OE Manufacturer's TC/PC engines:



FAA
Aircraft Certification Service

**SPECIAL AIRWORTHINESS
INFORMATION BULLETIN**

SUBJ: Powerplant - Original Type and Production Certificate Holder Parts and Aftermarket Modification and Replacement Parts

SAIB: NE-08-40

Date: August 8, 2008

This is information only. Recommendations aren't mandatory.

This Special Airworthiness Information Bulletin (SAIB) alerts owners, operators, and certificated repair and maintenance providers of the **responsibilities of type and production certificate (TC/PC) holders, supplemental type certificate (STC) holders, and the parts manufacturer approval (PMA) holders** to support the continued operational safety (COS) of their product or part design.

Background

Producers of aircraft, aircraft engines, propellers, and replacement parts comprise an elite segment of a global industry that has produced some of the safest aviation products in the world. The FAA recognizes that this is due to many factors including advanced design tools, testing and analysis techniques, materials, early fault detection capability, and the regulatory certification environment that the industry operates in.

In today's competitive market, owners and operators are continuously searching for ways to reduce costs while maintaining safety. One way is to reduce maintenance expenses by finding alternative sources of replacement parts. This naturally created new markets for replacement parts.

Recently, some engine manufacturers responded to the FAA's approval of PMA and STC for parts involving their type design engine models by telling customers that support of their products could be limited if such parts are installed, since they do not have data on these PMA and STC parts and the effect these parts may have on the overall system. Some TC/PC holders have included language in the FAA-approved airworthiness limitation section (ALS) of their engine instructions for continued airworthiness (ICA) stating that the ICA was developed only for use with their parts.

The FAA understands that the TC/PC holder has no knowledge or data about the PMA and STC parts installed in the product and, therefore, can only assess the airworthiness and systems effects of their parts installed in the product.

PMA and STC parts are thoroughly evaluated for compliance with respect to any changes they introduce and their effect on the original type design. The need for supplemental ICAs, new airworthiness limitations, and other conditions is established by the FAA to ensure the safe integration of the PMA and STC parts into the product.

Recommendations

The following information is provided to assist the aviation community with regard to the installation of FAA-approved replacement parts –

- 1) FAA-approved TC/PC holder, PMA, and STC parts are interchangeable within the certificated product since they are approved only after a full demonstration of compliance to the applicable requirements of Title 14 of the Code of Federal Regulations (14 CFR). A PMA or STC part, when FAA-approved for installation on a certificated product, is a valid replacement part to the TC/PC holder part according to 14 CFR;

- 2) Unless stated otherwise as a limitation to an STC, the FAA has determined and the applicant has shown that FAA-approved life limits established for the TC/PC holder parts remain unchanged for those TC/PC holder parts when PMA or STC parts are installed elsewhere within the product. For example, the life limit for a TC/PC holder disk is unchanged and remains in effect when PMA blades are installed in that disk;
- 3) The FAA approves the content of an ALS and ICA based upon its review of the substantiating data provided by an applicant. Applicants for PMA or STC parts are required to assess the ICA requirements. A PMA or STC applicant either shows and states that the product's ICA are still valid with their part installed or provides a supplemental ICA for any differences; and
- 4) TC/PC holders, PMA holders, and STC holders are responsible for the COS support in accordance with the applicable standards for their parts and products which they have designed and produced.

Owners and operators are ultimately responsible for the safety and airworthiness of the product, which includes being responsible for the configuration control of the product. Owners and operators must ensure that any replacement part installed in the product is approved for that installation and further, they must also ensure that they follow any supplemental ICA that may have been developed for that part.

For Further Information Contact

Thomas A. Boudreau, Manager, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; phone: (781) 238-7140; fax: (781) 238-7199; e-mail: thomas.boudreau@faa.gov; or Antonio Cancelliere, Aerospace Engineer; FAA, 12 New England Executive Park, Burlington, MA 01803; phone: (781) 238-7751; fax: (781) 238-7199; e-mail: antonio.cancelliere@faa.gov.