

## EASA Considerations Related to PMA Components and DER Repairs on Leased Aircraft

### Introduction

Lessors try to avoid the use of PMA parts in their aircraft. Primarily because the presence of non-OEM aircraft components could artificially deflate aircraft value, potentially delay redelivery, and restrict the transferability of an otherwise airworthy aircraft.

Parts Manufacturer Approval. (PMA) is both a design and production approval issued by the FAA.

Basically, the FAA permits the manufacture of replacement parts for aircraft if the part has been tested and meets FAA standards for airworthiness and the part is manufactured in accordance with FAA approved procedures.

In 2011, FAA Part 21 regulations were revised. PMA is identified as a special type of production certificate, eliminating differences between OEM and PMA manufacturing. PMA regulations reference FAA regulation 21.137 (defining the elements of a quality system for all production approval holders).

The FAA approves these parts as being at least equivalent in quality to OEM components. PMA parts are legal for use in the U.S. and accepted by EASA as part of the Bi-lateral arrangements.

In addition, engine manufacturers have endeavoured to focus on aftermarket replacement parts and in some cases by placing some restrictions on the use of PMA parts in the form of either voided warranties, reduced levels of support or both.

The same issues surround the concept of designated engineering representative (DER) repairs.

The FAA allows airlines and MROs to develop fixes for what would otherwise be unserviceable parts.

### DER Repairs

Once these repairs are validated and deemed safe by an FAA DER, the operator or MRO can employ these procedures to render aircraft airworthy. DER repairs may save an operator a considerable sum of money, however, whilst DER repairs are acceptable under the oversight of the FAA. (and acceptable in this case by EASA) they do create certain challenges!

\*Note – A DER may recommend or approve technical data to the FAA. Technical data developed under an EASA Part 21J DOA is considered accepted or approved by the FAA. Repairs performed at US repair stations under DER are accepted by EASA.

## **The Leasing Dilemma**

The presence of PMA parts or a history of DER repairs can significantly impact aircraft valuation because it could render the aircraft much harder to place with another operator.

Leasing companies tend to avoid both FAA PMA components and DER repairs. Claiming they create a situation where the aircraft may not be readily redeliverable to a customer on the other side of the world without significant additional costs and regulatory issues.

Despite bilateral agreements (in particular between the FAA and EASA,) they do not typically meet the objectives of the leasing companies' needs.

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