



February 5, 2007

Docket Management Facility  
U.S. Department of Transportation  
400 Seventh Street, SW.  
Nassif Building, Room PL-401,  
Washington, DC 20590-0001

*Reference: Docket FAA-2006-25877, Production and Airworthiness Approvals, Part Marking and Miscellaneous 14 CFR Parts 1, 21, 43, and 45*

EAA (Experimental Aircraft Association) is the world leader in recreational aviation. With an international membership of 170,000, EAA brings together aviation enthusiasts, pilots, and aircraft owners who are dedicated to the continued growth of aviation, the preservation of its history, and the advancement of its future. EAA programs, safety initiatives, activities, and events are known throughout the world for supporting aviation safety and promoting personal enjoyment and responsibility in the pursuit of recreational aviation.

Our comments to the proposed regulatory changes focus primarily on the ramifications for vintage, experimental amateur-built, and light-sport aircraft. EAA's objective in filing these comments is similar to the FAA's purpose in proposing new rules: the advancement of flight safety. Accordingly, EAA evaluated the proposed regulatory changes to determine to what degree newly introduced financial burdens on manufacturers and operators would generate unintended safety-reducing consequences, particularly within the existing vintage aircraft fleet. The adverse effect on safety could result from a diminished supply of replacement parts as manufacturers, confronted with increased costs imposed by the new rules, refuse to produce the small quantities of components and parts that the market requires. Similarly, safety could be compromised when owners choose not to incorporate new and improved products and technologies in their older aircraft because the costs of getting such modifications approved would be excessive.

In general, EAA applauds the FAA's efforts under the proposal to standardize the quality system requirements among all design and production approval holders, to adapt the regulations to today's global manufacturing and continued-airworthiness environments, and to reflect the global transfer and acceptance of aircraft products and parts.

#### **Comments by Section:**

##### **21.1(b)(3) - Commercial part**

While EAA supports the addition of this term into the regulations, the definition, as proposed, has a conspicuous shortcoming: It fails to address older type-certificated

aircraft for which there no longer exists a design approval holder who could designate which parts qualify as being commercial and could analyze the safety consequences of those parts' failure, as required under this proposal. Many older aircraft use commercially available parts and, in many instances, these parts are still available today. However, in some cases, the design approval holder, type certificate holder, or production approval holder has not existed for 50 or more years.

EAA requests that a provision be added to this section that gives the FAA or its designees the authority to designate a part as being a "Commercial Part" when the design approval holder is no longer producing the aircraft design at issue. EAA proposes that the FAA revise paragraph (3) to state:

"(3) *Commercial* part means a part that the design approval holder — or the FAA, in cases where a design is no longer covered by a valid production certificate — designates as a commercial part, and that the FAA finds ...."

These terms would allow type certificate holders who maintain a production certificate to manufacture replacement parts and retain the control they rightly possess over their product. At the same time, they would address the safety imperative to have readily available commercial parts for aircraft that are no longer supported by a PC-holder.

#### **21.2(a)(2) – Falsification of applications, reports, or records**

EAA does not object to the spirit and intent of this proposed requirement, but we do have a deep concern for an unintended reduction in safety as a result of the manner in which the NPRM's preamble interprets the term "misleading statement."

Today, greater than 20% of the single-engine aircraft fleet in the US is made up of non-type-certificated aircraft, particularly experimental amateur built aircraft. Because of the large and ever-increasing number of non-type-certificated aircraft, an entire industry has evolved and grown to support them with a wide variety of parts and components that are not intended for use on type-certificated aircraft. However, many of these products and parts are marketed using terminology that is described as unacceptable in the preamble of this proposed rulemaking. EAA requests that, in publishing the final rule, the FAA revise the preamble language to recognize the legal and correct promotion of parts and components intended for use on non-type-certificated aircraft.

Further, EAA points out that one of the goals of this proposed rulemaking is to have regulations that better reflect the global nature of aircraft manufacturing today. This goal reinforces the need to address non-type-certificated aircraft. In many countries around the world, including Canada and Australia, the proportion of non-type-certificated aircraft to type-certificated aircraft is even greater than that of the US, in some cases approaching 50% of the particular country's domestic fleet.

EAA suggests that the FAA revise the preamble discussion for this section so as to allow for the marketing terms and phrases that it currently would prohibit, such as “aviation quality,” “direct replacement for aircraft XX,” “ready for use in your aircraft,” and “fits aircraft model XX,” for non-type-certificated aircraft. For example, specific statements like “fits Lycoming O-320A engines” is entirely appropriate, helpful, and not misleading for the owner of a large percentage of the non-type-certificated fleet that use the Lycoming O-320 engines. Similarly, the use of terms like “direct replacement” for a PMA or TSO part when intended for use on a non-type-certificated aircraft is appropriate, helpful, and not misleading.

EAA asks the FAA to add language in the final rule preamble specifying that these terms are allowable when the statements also specifically indicate “Experimental,” “Non-Type Certificated,” or “Special Light-Sport Aircraft.” For example, “Ready to use in your aircraft,” could be stated as, “Ready to use in your Experimental aircraft.”

The current language of this proposed regulation would greatly exacerbate an existing problem of FAA regulations failing to accommodate the non-type-certificated aircraft. Clarification is needed today under the current regulations as much as under the proposed language. However, under the NPRM, what is unclear today would become patently illegal in the event that the NPRM and its preamble were to be implemented as a final rule without alteration or consideration of this problem.

Many FAA inspectors operate under the false belief that non-PMA or TSO parts are prohibited from being used on components and/or products that were originally of a type-designed source when installed on an experimental aircraft. Any product or component may be altered using non-FAA-approved parts when installed on an experimental amateur-built aircraft. For example, non-PMA aftermarket electronic ignition systems may be installed on an engine that was manufactured under a type-certificated and production certificate when that engine is used on an experimental aircraft. The current language in the proposed rule will result in clarification of what is eligible for installation on type-designed aircraft but will create a huge workload for the agency and result in significant misunderstandings for owners of the large percentage of the world’s fleet of aircraft that are not type-certificated or derived from a military background.

#### **21.9(a) – Replacement and modification parts**

EAA is concerned that this paragraph, combined with the preamble language interpreting how such a regulation would be enforced, could adversely affect legitimate producers of non-PMA or TSO parts and components intended for installation on the large fleet of experimental aircraft in this country and worldwide. As mentioned in our comments to Section 21.1 above, even when a manufacturer produces and markets a part expressly for the experimental marketplace, the manufacturer has no control over an individual who knowingly installs that unapproved part on a type-certificated product. The regulation, as

currently worded, could preclude the manufacturer from producing that part unless it does so under a type certificate or production approval. We strongly urge the FAA to clarify this point for the amateur-built and other experimental-aircraft marketplaces.

### **21.307 – Quality System**

EAA supports the FAA's attempts to reduce the industry perception that PMA manufacturers and their products are somehow deficient or inferior to parts made by type-certificate holders. The general aviation fleet is heavily dependent on PMA parts for its survival — because so many parts are no longer available to maintain older aircraft, or the parts have become so expensive from the type-certificate holder that the marketplace seeks alternatives. Many of the PMA manufacturers are very small businesses that are filling a critical niche in the general aviation parts supply stream. In many instances, they are by default sole source providers. As such, their economic viability is crucial to the support and safety of the general aviation fleet. EAA is concerned that the economic and staffing impact of the proposed quality system could severely damage these small but critical suppliers to the general aviation fleet. We ask you to consider creating an opportunity for PMA holders who produce parts for aircraft under 12,500 pounds to have a quality assurance system that is “accepted” by the FAA, as opposed to the full-blown approval system under the proposal.

### **45.15(a) Identification requirements for parts, appliances and TSO articles.**

The proposed requirement to “legibly mark each part or appliance and each component of each part or appliance...” is an unreasonable burden and largely would not benefit safety or trade and commerce.

EAA specifically supports the extensive comments submitted to the docket by Univair Aircraft Corporation on this section. These comments explain how this requirement would be impractical or impossible in many instances. The proposal, as written, would require the marking of individual components used in the assembly of items such as welded exhaust manifolds — the welding and/or subsequent use of which would remove the component marking entirely. More importantly, the part and all of its components leading to assembly would be properly identified, as proposed in the regulation, as a complete unit at the end of production under the FAA-mandated quality assurance program. In instances such as this, the completed part cannot be disassembled into its components without the final product being destroyed.

EAA does not believe it was the intent of the FAA to require the marking of components of parts or appliances as described here. Accordingly, EAA requests that FAA follow the suggestions of current part manufacturers like Univair.

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We believe that Univair's comments to the docket are reasonable and address our concern. As such, the proposed revised paragraph would state:

“(a) *Parts and appliances.* The manufacturer of a part or appliance must permanently and legibly ink mark each part or appliance. In addition, components of each part or appliance that can be disassembled further by removing reusable fasteners (i.e. screws, bolts and snap rings) must be marked as above, with the following:”

EAA appreciates the opportunity to comment on this proposal and we stand ready to assist the FAA in answering any questions or addressing any concerns on this rulemaking proposal in the future.

Sincerely,

/s/

Earl Lawrence  
Vice President Industry and Regulatory Affairs

/s/

Henry G. Frautschy  
Executive Director, EAA's Vintage Aircraft Association