

Air Transport Association

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FAA-2000-7623-238

March 29, 2001

U.S. Department of Transportation Dockets
Docket No. FAA-2000-7623
400 Seventh Street, SW
Room Plaza 401
Washington, DC 20590

Subject: Review of Existing Regulations, Notice at 65 Fed. Reg. 43265,
July 13, 2000

Dear Sir/Madam:

The Air Transport Association of America¹ ("ATA") submits the following comments for the subject docket, responding to the comments filed jointly by United Technologies Corporation ("UTC") and The General Electric Company ("GE") on October 11, 2000.

The UTC and GE comments to the subject docket address FAR Section 21.303, *Replacement and modification parts*, which governs approval of the manufacture of replacement and modification parts for sale for installation on FAA-certified aircraft, engines and propellers. UTC and GE have asked FAA to, among other things:

- (a) impose regulations to require that PMA applications for parts such as HPC and HPT airfoils be reviewed by the FAA directorate most knowledgeable about the product on which the part is to be installed;
- (b) require PMA applicants to have systems in place to gather relevant service information so that adequate field support can be rendered; and
- (c) deny the issuance of PMA approvals for rotating and/or hot section engine parts on the basis of "identity".

^{1/} ATA's members are Airborne Express, Alaska Airlines, Aloha Airlines, America West Airlines, American Airlines, American Trans Air, Atlas Air, Continental Airlines, Delta Air Lines, DHL Airways, Emery Worldwide, Evergreen International Airlines, Federal Express, Hawaiian Airlines, Midwest Express Airlines, Northwest Airlines, Polar Air Cargo, Southwest Airlines, Trans World Airlines, United Airlines, United Parcel Service and US Airways. Our associate members are Aeromexico, Air Canada, KLM Royal Dutch Airlines and Mexicana.

As a first issue, we feel that the UTC/GE response to docket FAA-2000-7623 was inappropriate and unsolicited. The notice states that the "... agency's goal is to identify regulations which impose unjustified regulatory burdens or are no longer necessary." (Notice, p. 43265) The UTC/GE response fails to identify any unjustified or unnecessary regulations, and in fact proposes that FAA add regulations that would apply to PMA manufacturers. Many PMA manufacturers are small entities, a class of regulated party from which FAA seeks to remove unnecessary regulatory burdens.

We believe that PMA manufacturers should be subject to appropriately demanding regulatory requirements. We do not see, however, how the current regulatory structure for such manufacturers is deficient. More specifically, the UTC/GE response does not demonstrate that existing regulatory requirements provide insufficient discipline or oversight of the PMA process.

ATA disagrees with the UTC/GE response on several key points:

1) UTC/GE state: "(T)he current regulatory scheme applies different testing, design, record keeping, sustaining engineering, product support and quality standards to non-OEM replacement part makers."

ATA response: This statement is made in the context of high pressure compressor and high pressure turbine airfoils, for which certain PMA holders have recently announced new replacement products. While these parts can be technically complex, not all of them are. UTC/GE alleges that the non-OEM parts put airlines at greater risk, but there is no explanation of how or why the risk is greater. We are unaware of instances where properly certificated PMA parts have led to system failures that pose a greater risk to operating integrity.

In addition, it is not clear how UTC/GE arrives at the conclusion that different criteria are applied to PMA holders. Section 21.303(d) states, for example, that:

"An applicant is entitled to a Parts Manufacturer Approval for a replacement or modification part if -
(1) The Administrator finds, upon examination of the design and after completing all tests and inspections, that the design meets the airworthiness requirements of the Federal Aviation Regulations applicable to the product on which the part is to be installed;"

Our experience has been that the interpretation of this paragraph by the FAA during PMA part certification is that all applicable regulations must be met. Test procedures may and often do vary from original certification to certification of PMA parts; however, the original tests not only certify a given part within the engine, but the engine or module as a whole system. It has also been our experience in most cases that the PMA part design data is exhaustively generated, researched, tested, compared to the original product, tested again, and re-reviewed before it is offered to users.

2) UTC/GE state: The FAA should "Eliminate 'Identicality' ... except where an applicant has access to OEM type design data pursuant to a license or other agreement with the OEM..." because PMA producers "...cannot obtain this know-how merely by copying the OEM drawings and specifications," that such producers "rely upon a truncated analysis" and do not have the advantage of an "institutional memory, formed through decades of design and operational experience."

ATA response: The term "institutional memory" is a concept that may exist, but it is very hard to quantify. Moreover, it is an asset not residing exclusively in the possession of the OEMs. Much of it lies within the operators and PMA manufacturers. Some of it comes, in the transient society which America has become, from ex-employees of OEMs that have chosen to go to work for airlines and PMA manufacturers.

The direct operational experience of the airline is significant in this regard, as it is the data from such experience that flows to manufacturers so that airworthiness and reliability can be maintained through Service Bulletins and other maintenance instructions. Likewise, repair facilities have accumulated a lot of related experience, and it is from this base of experience that airlines and repair facilities often conceive and justify proposed new PMA authority.

The experience of the airlines when they participate in PMA applications is that there is no such thing as a truncated process. Dimensional analyses, material testing, design, production testing and quality control are exhaustive, and appear to be far superior in many cases to the processes under which the engine parts were originally certificated.

3) UTC/GE state: The FAA should require "design review by appropriate FAA Office/Directorate for these rotating parts, with enforceable regulation."

ATA response: Airline experience validates abundant coordination between local ACOs and the ECO. In fact, this coordination involves not only the complex issues, but also extends to very simple reviews of major repairs. Order 8110.42A and *How ACOs Will Work with Other ACOs* (FAA ACO Guide, July 1998) adequately address the issue of coordination and design review.

4) UTC/GE state: The FAA needs to "Require full OEM-level continuing engineering support, ICA, maintenance data, and field support."

ATA response: FAR Section 21.3 and Order 8110.42A provide requirements addressing the need for PMA holders to develop instructions for continued airworthiness, receive adequate feedback, and maintain complete records. In addition, airlines insist that adequate reviews of ICAs be included in PMA packages provided by vendors.

Moreover, airlines collect the field experience information that is transferred to OEMs and PMA holders alike so that continuing surveillance, corrections and improvements can be maintained.

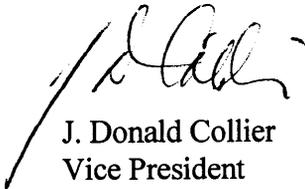
5) UTC/GE state: FAA should require PMA holders to have "full OEM-level substantiation."

ATA response: Once a part has received its original type certification, there is no amount of additional data that could be supplied by a PMA applicant that would render the identical part any more or less airworthy than the original. The PMA applicant must demonstrate compliance with the applicable airworthiness requirements, i.e., the airworthiness requirement applicable to the product on which the part is installed. (Preamble to Amendment 21-38). As long as the PMA applicant can show compliance with this expectation, there should be no need for a duplication of the original substantiation.

In conclusion, we see no merit in the claims by UTC and GE that the regulatory system today fails to provide ample assurance of replacement part safety and quality. There has been no documentation of quality issues provided by UTC/GE. One consequence is clear: if the FAA adopts the UTC/GE proposal, the ability of PMA holders to compete in the marketplace would be greatly undercut by regulatory action. Moreover, the UTC/GE response, if favorably acted upon by FAA, would increase unnecessary regulation, not decrease it - which is the objective of the FAA notice.

For the reasons stated above, we urge that the FAA deny the request of UTC and GE.

Sincerely,



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Vice President
Engineering, Maintenance & Materiel

cc: Thomas E. McSweeney, AVR-1, Federal Aviation Administration
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