

Economic Analysis Recommendations

One commenter requests that the Economic Analysis be changed to more accurately reflect the number of engines affected and associated cost. The commenter states that the NPRM did not accurately account for the number of affected engines per the service bulletins.

The FAA agrees that the service document and NPRM do not agree. The service bulletins did not account for the entire population of suspect parts. However, the spare parts listed in CFM International service bulletins CFM56-5 S/B 77-0020, dated March 4, 2002, and CFM56-5B S/B 77-0008, dated March 4, 2002, are more critical than the remaining population because they will be installed on engines with lower EGT margins. The number of affected engines worldwide remains the same as the NPRM. The number of U.S. operated engines requires a change in the final rule.

Another commenter requests that the economic analysis be changed to reflect work required to determine the serial numbers of the parts. The commenter states that an additional two hours per engine or a total of 520 person-hours of work, will be required for one operator to determine the serial numbers of EGT harnesses and couplings.

The FAA does not agree. Research of logbooks and paperwork are not used to determine the economic analysis figure.

Another commenter requests a change to the economic analysis to reflect an additional 3 person hours for replacement time. The commenter states that it will take more time to accomplish replacement than stated in the NPRM.

The FAA partially agrees. Most of the work could be done during scheduled maintenance (the FAA has attempted to facilitate this in the AD), which would provide an opportunity to remove and replace hardware, when it is already exposed. Some operators indicate that their current system will not allow this advantage consistently; however, per accepted FAA practice, the figure is based on replacement of accessible hardware. No change is required in the final rule.

Engines Which Have Accumulated More Than 3,000 Flight Hours

One commenter states that engines which have accumulated more than 3,000 flight hours since part installation are not defective. The commenter believes that this problem exhibits infant mortality. If false readings are not registered after 3,000 hours, parts are not defective. The commenter asks that the rule be changed accordingly.

The FAA agrees. The final rule reflects this change.

Allow Two Week Waiting Period for Failure Confirmation

One commenter requests that the AD provide for a two week waiting period after the temperature shift of 20°C in order to confirm that an EGT harness failure is the cause and not some other anomaly.

The FAA partially agrees. Sufficient evidence must be provided to assure that a shift in EGT reading is caused by defective EGT hardware/harnesses, and not some anomaly. However, a 30°C shift will be the criteria, not 10°C or 20°C. This should provide sufficient margin to assure that the reading does not indicate some other cause.

AD Not Needed

One commenter states that an AD is not needed for this problem. The commenter feels that current industry practice will suffice.

The FAA does not agree. Industry practice is not mandatory; therefore, there is no requirement for all operators to comply.

Specify Terminating Action

Two commenters state that the NPRM does not specify any terminating action and request that the FAA specify a terminating action.

The FAA agrees. Terminating action is included in the final rule.

Reidentify Reworked Harnesses

One commenter requests that the manufacturer reidentify reworked harnesses for traceability.

The FAA agrees. The manufacturer has added the letter "W" following the part serial number to reidentify reworked harnesses and couplings. The addition of the letter "W" following the part serial number is addressed in the final rule in (a)(3).

Monitoring Shifts From the Current EGT Trend

One commenter requests monitoring shifts from the current EGT trend rather than an arbitrary baseline. As engines degrade, there may not be an appreciable change in other parameters but normal (within 10°C) degradation in EGT, forcing unnecessary removal.

The FAA agrees. The final rule reflects this change.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will

neither increase the economic burden on any operator nor increase the scope of the AD.

Economic Analysis

There are approximately 886 CFM International CFM56-5 and -5B series turbofan engines of the affected design in the worldwide fleet. The FAA estimates that 562 engines installed on airplanes of U.S. registry would be affected by this AD. The FAA also estimates that it would take approximately one work hour per engine to do the actions, and that the average labor rate is \$60 per work hour. Required parts would cost approximately \$15,645 per engine. Based on these figures, the total cost of the AD on U.S. operators is estimated to be \$8,826,210. CFMI has indicated that this figure may be reduced depending upon warranty agreements.

Regulatory Analysis

This final rule does not have federalism implications, as defined in Executive Order 13132, because it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, the FAA has not consulted with state authorities prior to publication of this final rule.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows: