

will address the unsafe condition. We concur with the commenters' request and have delayed issuance of this final rule until now. Testing was performed on a Model MD-11 airplane to measure the temperature of the dimmer control unit in the existing and new locations. The dimmer control unit had been modified to incorporate the new capacitor. Internal and external temperatures of the dimmer control unit, including temperature of the new capacitor, were recorded every 10 seconds for an hour and forty minutes. Analysis of the test results revealed that the capacitor in the dimmer control unit was heated to approximately 90 percent of its temperature rating in its old location versus approximately 60 percent of its temperature rating in the new location. These results support the hypothesis that the lack of heat dissipation in the existing location of the dimmer control unit contributes to the overheating condition and capacitor failure; moving the dimmer control unit to the new location should correct this unsafe condition. No change to the final rule is necessary in this regard.

Another commenter states that it does not agree that relocating the dimmer control unit will be effective in preventing the overheating condition. The commenter states that increased ventilation may "fan the flames." The commenter states that it has developed and tested a modified model of the dimmer control unit, for which the FAA has granted a Parts Manufacturing Approval (PMA). The commenter states that redesign of the circuitry in this modification eliminates the possibility of capacitor overheating. The commenter requests that we consider its modified dimmer control unit as a proposed corrective action.

We do not concur. Testing has shown that, rather than "fanning the flames," relocating the dimmer control unit to a better ventilated area will ensure that airflow is increased and heat is dissipated more effectively, which will alleviate the overheating condition. The testing described previously supports this action. Further, we recognize that, in order to obtain a PMA to replace or modify a type certificated product, a part is required to meet the airworthiness requirements of the Federal Aviation Regulations (FARs) applicable to the airplane model on which the part is to be installed. The part approved by the PMA must have been subjected to all necessary tests and computations as one method of showing compliance with the applicable airworthiness requirements. However, the airworthiness requirements approval for installing a part approved by a PMA

may not address unsafe conditions that are likely to be encountered in service operations. In addition, we require the holder of the type certificate for the subject airplane model to make the necessary design changes to correct an unsafe condition by submitting appropriate design changes for approval and, upon the approval of the design changes, make available the descriptive data covering the changes to all operators of airplanes previously certificated under the type certificate. For these reasons, we cannot mandate a part approved by a third-party PMA to correct an unsafe condition. However, per the provisions of paragraph (b) of this AD, an operator may submit a request for approval of the installation of a modified dimmer control unit, such as the one to which the commenter refers, as an alternative method of compliance (AMOC) with this AD. The request should include adequate data to justify that installation of the modified dimmer control unit will provide an acceptable level of safety. No change to the final rule is necessary in this regard.

#### **Request To Consider Parallel Rulemaking for Other Airplanes and Other Areas**

One commenter is concerned that the overheating condition and capacitor failures in the dimmer control unit may also occur on other airplane models, such as McDonnell Douglas Model MD-10 and DC-10 airplanes, or on other dimmer control units installed in locations other than the overhead area. The commenter notes that capacitor failures within the dimmer control units on other airplane models have been observed and tracked for identification of the cause. The commenter provides data on these other occurrences.

We have reviewed the data provided by the commenter. These data reveal that capacitor failures in the overhead dimmer control unit on other airplanes do not represent systemic failures, and capacitor failures at other locations on the airplane are not related to overheating and are not systemic failures. No change to the final rule is necessary in this regard.

#### **Conclusion**

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 as proposed.

#### **Changes to 14 CFR Part 39/Effect on the AD**

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the

FAA's airworthiness directives system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. However, for clarity and consistency in this final rule, we have retained the language of the NPRM regarding that material.

#### **Change to Labor Rate Estimate**

After the proposed AD was issued, we reviewed the figures we use to calculate the labor rate to do the required actions. To account for various inflationary costs in the airline industry, we find it appropriate to increase the labor rate used in these calculations from \$60 per work hour to \$65 per work hour. The economic impact information, below, has been revised to reflect this increase in the specified hourly labor rate.

#### **Cost Impact**

There are approximately 195 airplanes of the affected design in the worldwide fleet. The FAA estimates that 74 airplanes of U.S. registry will be affected by this AD, that it will take approximately 4 work hours per airplane to accomplish the actions, and that the average labor rate is \$65 per work hour. Required parts will cost approximately \$101 per airplane. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$26,714, or \$361 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

#### **Regulatory Impact**

The regulations adopted herein will 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

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 DOT