Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2014–0603; Directorate Identifier 2013–CE–026–AD]

RIN 2120–AA64

Airworthiness Directives; Meggitt (Troy), Inc. Combustion Heaters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (SNPRM); reopening of comment period.

SUMMARY: We are revising a notice of proposed rulemaking (NPRM) for certain Meggitt (Troy), Inc. (previously known as Stewart Warner South Wind Corporation and as Stewart Warner South Wind Division) Model Series (to include all the variants) 921, 930, 937, 940, 944, 945, 977, 978, 979, 8240, 8253, 8259, and 8472 combustion heaters that proposed to supersede airworthiness directive (AD) 81–09–09. The NPRM proposed to retain most actions from AD 81–09–09, add a calendar time to the repetitive inspections, add more detailed actions to the inspections, and add a pressure decay test. The NPRM was prompted by an airplane accident and reports we received of the heater malfunctioning. This action revises the NPRM by adding combustion heater models series to the applicability and modifying the compliance times. We are proposing this SNPRM to correct the unsafe condition on these products. Since these actions impose an additional burden over that proposed in the NPRM, we are reopening the comment period to allow the public the chance to comment on these proposed changes.

DATES: The comment period for the NPRM published in the **Federal Register** on August 20, 2014 (79 FR 49249) is reopened. We must receive comments on this SNPRM by December 19, 2016.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov*. Follow the instructions for submitting comments.
- *Fax:* 202–493–2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Meggitt Control Systems, 3 Industrial Drive, Troy, Indiana 47588; telephone: (812) 547–7071; fax: (812) 547–2488; email: *infotroy@meggitt.com;* Internet: *www.stewart-warner.com.* You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2014–0603; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800–647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Chung-Der Young, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, Small Airplane Directorate, 2300 East Devon Avenue, Des Plaines, IL 60018–4696; telephone (847) 294–7309; fax (847) 294–7834 email: *chung-der.young@faa.gov.*

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2014–0603; Directorate Identifier 2013–CE–026–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On April 16, 1981, we issued AD 81–09–09, Amendment 39–4102 (46 FR 24936, May 4, 1981) (''AD 81–09–09''), for certain Meggitt (Troy), Inc. (previously known as Stewart Warner South Wind Corporation and as Stewart Warner South Wind Division) Model Series 8240, 8253, 8259, and 8472 combustion heaters. AD 81–09–09 resulted from a hazardous condition caused by deterioration of the combustion heater. AD 81–09–09 currently requires repetitive inspections of the combustion heater; repetitive installation inspections of the combustion heater; and, for combustion heaters having 1,000 hours or more time-in-service (TIS), overhaul of the combustion heater.

We issued a notice of proposed rulemaking (NPRM) to supersede AD 81–09–09 on August 13, 2014, which published in the **Federal Register** on August 20, 2014 (79 FR 49249). The NPRM was prompted by an airplane accident and reports we received of the heater malfunctioning. The NPRM proposed to retain most actions from AD 81–09–09, add a calendar time to the repetitive inspections, add more detailed actions to the inspections, and add a pressure decay test.

Actions Since the NPRM Was Issued

Since we issued the NPRM, we received comments from the public during the comment period that resulted

in our decision to issue this SNPRM. This SNPRM proposes to increase the applicability and modify the compliance time. We also completed an initial regulatory flexibility analysis to determine the impact of the proposed AD on small entities (this was at the request of one of the comments received on the NPRM). Adopted on September 5, 2014, the National Transportation Safety Board issued the probable cause for the airplane accident that initiated this investigation. The probable cause was identified as malfunction of the cabin heater, which resulted in an inflight fire and smoke in the airplane.

Comments

We gave the public the opportunity to comment on the NPRM. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request To Allow Repair of the Combustion Tube

James W. Tarter Jr. from Meggitt (Troy), Inc. identified that the Meggitt Inspection Procedure, Document No. IP–347, dated May 17, 2014, allows repair of combustion tubes that do not pass the pressure decay test (PDT); however, the proposed AD required a combustion tube replacement. We infer that the commenter wants to allow the repair of the combustion tube when it fails the PDT.

We disagree with allowing repair of the combustion tube when it fails the PDT. The cracked combustion tube metal wall becomes oxidized and the cross-section of the crack is contaminated by combusted fuel residuals; therefore, there is no way to make a reliable repair. The welding will crack again in an unpredictable period of service time.

We did not make any changes to this SNPRM as a result to this comment.

Request To Delay Issuance of AD Until PDT Procedure Is Publically Available

Anthony Saxton requested we delay the issuance of the final rule until the PDT procedure is publicly available. He stated that he had a difficult time getting a copy of the procedure.

We do not agree with the commenter about delaying the rule. By policy, the FAA cannot post to the public docket service information that is part of the proposed action until the publication of the final rule unless there is written permission from the design approval holder. The FAA does not currently have such written permission. We encourage the commenter to obtain a copy of this document from the design approval holder. After the final rule is published in the **Federal Register**, the PDT procedure will be readily available to the public in the docket.

We did not make changes to this SNPRM based on this comment.

Request To Change Number of Airplanes Affected and Number of Labor Hours Required To Comply

Anthony Saxton commented that the number of airplanes affected was too low and the labor cost was too low.

We partially agree with the commenter. We agree the number of airplanes affected was not complete, but was the FAA's best estimate at the time. We obtained our initial information from the FAA aircraft registry, and the registry does not identify which airplanes have combustion heaters. An FAA economist has completed a more complete assessment of the number of affected aircraft during the development of the initial regulatory flexibility analysis. The estimated number of affected airplanes has been modified based on the initial regulatory flexability analysis.

We disagree with modifying the labor hours to perform the labor without more substantive information to support a different number.

Request To Withdraw the NPRM

William West commented that AD action is not needed. He requested we withdraw the NPRM and provide guidance to owners/operators reminding them that if the heater malfunctions to not use it until it has been properly inspected.

We disagree with this comment. We completed a review of the accident/incident data as well as service difficulty reports over several years. The level of risk identified in the data review shows that we should address this unsafe condition through mandatory action rather than guidance. This proposed AD action is consistent with AD actions taken against other similar products. We have no way of assuring that the unsafe condition has been mitigated through voluntary guidance action.

We did not make changes to this SNPRM based on this comment.

Request To Allow Limited Decay in the PDT

Harold Haskins commented that we should do a PDT that allows some leakage as per AD 2004–21–05 (69 FR 61993, October 22, 2004). He commented that the test identified in the Meggitt (Troy), Inc. procedure is not really a pressure decay test because no decay is allowed. Allowing a certain amount of decay/leakage is consistent with other AD actions.

We agree with the commenter that there are other ADs where the required pressure decay tests allow a certain amount of leakage; however, we disagree with modifying the SNPRM because Meggitt (Troy), Inc., as the design approval holder, has the responsibility to develop what they believe is appropriate procedures to maintain their combustion heaters. Owners/operators may provide substantiating data and request approval of an alternative method of compliance (AMOC) using the procedures found in 14 CFR 39.19 and specified in paragraph (m) of this SNPRM.

We did not make changes to this SNPRM based on this comment.

Request To Change the Listing of the Part Numbers or Model Numbers Affected

Sin Kwong Chew, Anthony Saxton, and the National Transportation Safety Board (NTSB) commented that we should use the part numbers or more detailed model numbers for the affected heaters. Another commenter suggested we use the four upper level model series number.

We agree with changing how the model and series numbers are listed in the Applicability, paragraph (c) of this proposed AD. We want to ensure that the applicability of the proposed AD will address all affected model/part number heaters.

We modified the Applicability, paragraph (c) of this proposed AD, to state the upper level model number of the heaters and to specify that all the part number heaters and dash numbers are included under that higher level designation.

Request Change to Procedures

William Sandmann requested we change the heater disconnect procedures to cap off the fuel supply as near to the fuel source as possible to reduce the possibility that fuel may leak from the fuel line.

We disagree with this comment. The manufacturer's instructions are FAA approved and acceptable. The commenter's suggestion may be an improvement on the manufacturer's instructions, but it is not required and is too detailed a level to include in this proposed AD.

We did not make changes to this SNPRM as a result of this comment.

Request Change to Credit for Previous Inspections

Chris (no last name or company affiliation given) requested we allow

credit for PDTs previously done using the manufacturer's instructions within the last 2 years/250 hours. The commenter also requested that we do not allow credit for the general inspection of the combustion heater because previous instructions are not sufficient to meet the new inspection criteria.

We agree with the commenter's suggestions. The proposed AD contains the language ''unless already done'' in paragraph (f) Compliance. That language allows credit for any of the actions required by the AD that were performed before the effective date of the AD using the instructions required by the AD. That language does not allow credit for the previous instructions in AD 81–09–09 since we agree that they are not sufficient to meet the inspection criteria.

We did not make changes to the SNPRM based on this comment.

Request Replacement of Combustion Heater Instead of Overhaul

Anthony Saxton and the Aircraft Owners and Pilot's Association (AOPA) requested we require replacement of the combustion heater tube instead of an overhaul of the combustion heater if a combustion heater fails the PDT. An overhaul is a costly requirement that adds no additional safety benefit.

We agree with the commenters' suggestion. Additional inspections in the proposed AD would require inspection and possible replacement of individual components of the combustion heater. Therefore, if the heater fails the PDT, replacement of the combustion heater tube would be a better option rather than heater overhaul.

We have modified the corrective action language for a PDT failure to replacement, disable, or remove the combustion heater.

Request Removal of Combustion Heater Model 8248

Harold Haskins and William Sandmann commented they were unaware of a Model 8248 combustion heater.

We agree with this comment. The Model 8248 was included based on the FAA technical standard order (TSO) database. After further research, Meggitt (Troy), Inc. verified that the Model 8248 was included in the database in error and did not exist.

We have removed the Model 8248 combustion heater from the Applicability, paragraph (c) of this proposed AD.

Request the Addition of Service Information

Harold Haskins requested we add the service information for the Model 8240 and 8259 combustion heaters.

We agree with the commenter's suggestion.

We have added South Wind Service Manual for Stewart Warner South Wind Aircraft Heaters 8240–A, 8240–C, 8259–A, 8259–C, 8259–DL, 8259–FL1, 8259–GL1, 8259–GL2, Form No. 09–998 (Rev. 12–69) to the service information required for this proposed AD.

Request To Delete Piper From Possible Combustion Heater Installation

Harold Haskins requested that we delete Piper Aircraft, Inc. (Piper) airplanes from possible airplanes that may have the affected combustion heaters installed. He does not know of any Piper airplanes that have the affected heaters installed.

We disagree with this comment. The proposed AD addressed the combustion heaters at the component level, and they have the potential for installation on various airplanes. Also, this AD as proposed in this SNPRM would expand the applicability to include combustion heaters that are installed on Piper airplanes as well as any other airplanes not listed, thus the reason for the phrase ''are installed on, but not limited to'' in the applicability.

Request Increasing the Time Allowed for Initial Compliance Time

Anthony Saxton and AOPA requested modifying the initial compliance time to provide a longer period of time to comply. Two commenters suggested modifing the compliance time to better coincide with a normal maintenance schedule—within the next 10 hours of time-in-service of the combustion heater or at the next scheduled 100-hour inspection, annual inspection, or phase inspection. This would allow maintenance shops to better accommodate owners/operators in complying with the AD.

We agree with the commenters. Since the NPRM, this SNPRM adds combustion heater models to the Applicability, paragraph (c) of this proposed AD. It would be appropriate to allow more time to assure that maintenance facilities are able to support doing the work required by the AD.

We have modified the wording for the initial inspection compliance times for the combustion heater inspection, combustion heater installation inspection, and the PDT to better coincide with regularly scheduled maintenance.

Request Adding Document Number to Service Information

James W. Tartar Jr. and Meggitt (Troy), Inc. requested adding the document number for the Meggitt (Troy), Inc. inspection procedure for the PDT for clarity.

We agree with this comment. In this proposed AD, we cite the Meggitt (Troy), Inc. inspection procedure for the PDT as Meggitt Inspection Procedure, Document No. IP–347, dated May 17, 2014.

Request the AD Include an Analysis of the Impact on Small Businesses

Anthony Saxton requested that we include in the AD an analysis of the AD's impact on small businesses. The commenter stated they are aware of a number of small businesses that operate the affected airplanes.

We agree with this comment. The commenter has a good understanding of the usage of the airplanes affected by this SNPRM. Also, this proposed AD adds combustion heater models to the Applicability, paragraph (c) of this proposed, that will affect additional airplanes over that affected in the proposed rule.

We have completed an initial regulatory flexability analysis that we have included in its entirety in this SNPRM.

Support of Proposed AD

AOPA, NTSB, William Sandmann, and Anthony Saxton all supported the general intent of the proposed AD action.

Related Service Information Under 1 CFR Part 51

We reviewed the following service information that applies to this proposed AD:

—Stewart-Warner South Wind Corporation South Wind Service Manual for Stewart Warner South Wind Aircraft Heaters 8240–A, 8240–C, 8259–A, 8259–C, 8259–DL, 8259–FL1, 8259–GL1, 8259–GL2, Form No. 09–998, revised: December 1969;

—South Wind Division Stewart-Warner Corporation Service Manual Beech Aircraft Corporation PM–20688, Part No. 404–001039 Heater Assy. (SW 8253–B), revised: April 1965;

—South Wind Division Stewart-Warner Corporation Service Manual South Wind Aircraft Heater 8472 Series, Form No. 09–1015, issued: April 1975; and

The service information above describes procedures for inspection of the combustion heater and inspection of the installation of the combustion heater for the applicable heater models.

We also reviewed Meggitt Inspection Procedure, Pressure Decay Test, Aircraft Heaters, dated May 17, 2014. This service information describes procedures for the PDT for airplane combustion heaters for all heater models.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

FAA's Determination

We are proposing this SNPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design. Certain changes described above expand the scope of this rulemaking. As a result, we have determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this SNPRM.

Proposed Requirements of This SNPRM

This SNPRM would require repetitive inspections of the combustion heater and repetitive general inspections of the combustion heater installation, replacing any parts or components as necessary. This SNPRM would also require repetitive PDTs, with replacement of the combustion heater tube, disabling, or removal of the combustion heater in the event of PDT failure. This SNPRM also modifies the inspection and PDT compliance times allowing for the inspections to coincide with regularly scheduled maintenance. This SNPRM would not allow repair of the combustion heater tube.

For combustion heater models other than Models 8240, 8253, 8259, and 8472, this SNPRM does not have referenced service information associated with certain required inspections and the PDT and, if necessary, any replacement(s) that may be required. Appendix 1 of this SNPRM contains a listing of service information that provides specific instructions, for certain inspections and replacements, that may be used to apply for an AMOC. However, the listing in appendix 1 to this SNPRM does not include any instructions for the required PDT because these procedures do not exist. If you are unable to obtain instructions for the PDT, you must disable or remove the combustion heater.

The service information listed in appendix 1 of this SNPRM did not meet Office of the Federal Register regulatory requirements for incorporation by reference approval due to the condition of the documents.

We are evaluating the actions required in AD 69–13–03 (38 FR 33765, December 7, 1973) and may take further AD action in the future.

Differences Between This SNPRM and the Service Information

The proposed AD would prohibit repair of any defective combustion tube while the service information does not specify this.

Costs of Compliance

We estimate that this proposed AD affects 6,300 combustion heaters installed on, but not limited to, certain Beech, Britten-Norman, Cessna Aircraft Company, and Piper Aircraft, Inc. airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections and pressure decay test of the combustion heater.	7 work-hours × $85 per hour = $595.	Not applicable	$595	$3,748,500

We estimate the following costs to do any necessary combustion heater disable/removal/related replacement that would be required based on the results of the proposed inspections/test. We have no way of determining the number of aircraft that might need a combustion heater disable/removal/related replacement:

ON-CONDITION COSTS

Action	Labor cost	Parts cost	Cost per product
Replace combustion heater tube	8 work-hours × $85 per hour = $680	$3,900	$4,580
Replace temperature switches	1 work-hour × $85 per hour = $85	$320	405
Repair pump	2 work-hours × $85 per hour = $170	$470	640
Disable heater	2 work-hours × $85 per hour = $170	Not Applicable	170
Remove heater	3 work-hours × $85 per hour = $255	Not Applicable	255

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. ''Subtitle VII: Aviation Programs'' describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: ''General requirements.'' Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Initial Regulatory Flexibility Analysis

This section presents the initial regulatory flexibility analysis (IRFA) that was done for this action. We have reworded and reformatted for **Federal Register** publication purposes. The IRFA in its original form can be found in the docket at *http://www.regulations.gov.*

Introduction and Purpose of This Analysis

The Regulatory Flexibility Act of 1980 (Pub. L. 96–354) (RFA) establishes ''as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation.'' To achieve this principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are seriously considered.'' The RFA covers a wide-range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare an initial regulatory flexibility analysis (IRFA) as described in the RFA. The FAA finds that the proposed AD would have a significant economic impact on a substantial number of small entities. Accordingly, in the following sections we discuss the compliance requirements of the proposed AD, the cost of compliance, and the economic impact on small entities.

Section 603(a) of the RFA requires that each initial regulatory flexibility analysis contain:

—A description of the reasons action by the agency is being considered;

—A succinct statement of the objectives of, and legal basis for, the proposed rule;

—A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;

—A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record; and to the extent practicable, an identification of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule; and

—A description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statues and which minimize any significant economic impact of the proposed rule on small entities.

1. Objectives of, and Legal Basis for, the Proposed Rule

Title 49 of the U.S. Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the FAA's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, ''General requirements.'' Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on the airplanes identified in this proposed AD.

2. A Description of the Reasons Action by the Agency Is Being Considered

This proposed AD stems from the crash of a Cessna 401 near Chanute, Kansas, on May 11, 2012, killing the pilot and three of the four passengers aboard, and seriously injuring the fourth passenger. According to the NTSB report, the crash occurred after dark smoke emanated from the cabin heater and entered the cabin obscuring the occupants' vision. According to the Report: ''The smoke likely interfered with the pilot's ability to identify a safe landing site.'' When the pilot attempted an emergency landing in a field, the airplane's wing contacted the ground and the airplane cartwheeled.

The NTSB determined the probable cause of the accident to be:

> The malfunction of the cabin heater, which resulted in an inflight fire and smoke in the airplane. Contributing to the accident was the pilot's lack of understanding concerning the status of the airplane's heater system following an earlier overheat event and the risk of its continued use. Also contributing were the inadequate inspection criteria for the cabin heater.

As result of this accident, the FAA is proposing this AD to detect and correct a hazardous condition caused by deterioration of the combustion heater, a condition that could lead to ignition of heater components and result in smoke and fumes in the airplane cabin.

3. A Description of and an Estimate of the Number of Small Entities To Which the Proposed Rule Will Apply

This proposed AD would supersede AD 81–09–09, which applies to 8000 series Meggitt combustion heaters installed on certain twin-engine piston airplanes, primarily Cessna 300 and 400 series airplanes, but also installed on the Beech D18S twin-engine airplane and some Britten Norman twin-engine piston airplanes. The proposed AD would extend applicability to 900 series Meggitt combustion heaters installed on certain Cessna single-engine piston airplanes, Cessna 310 twin-engine airplanes, Lake LA–4 and LA–250 airplanes, certain Ryan Navion single-engine piston airplanes and certain Piper PA–23 and PA–30 airplanes. The FAA estimates that there are 4,121 airplanes equipped with 8000 series Meggitt combustion heaters, and 2,123 airplanes equipped with 900 series Meggitt combustion heaters. Since many of these airplanes are registered to Limited Liability Companies (LLCs), Limited Liability Partnerships (LLPs) and other company forms typically suited for single proprietors, small partnerships, etc., we conclude that the proposed rule would affect a substantial number of small entities.

4. Duplicative, Overlapping or Conflicting Federal Rules

The FAA is unaware of any Federal rules that duplicate, overlap, or conflict with this proposed AD.

5. Significant Alternatives to the Proposed Rule

Because of an unsafe condition that is likely to exist or develop on the airplanes identified in this proposed AD, there is no feasible significant alternative to requiring the actions of this proposed AD. The FAA invites public comment on this determination.

The FAA considered allowing more flight hours or calendar time before requiring compliance, but this alternative would increase the risk of another fatal accident. This proposed AD allows the combustion heater to be disconnected or removed, but, as noted above, operating without a heater is unlikely to be viable.

6. Reporting, Recordkeeping, and Other Compliance Requirements of the Proposed Rule

Small entities would incur no new reporting and recordkeeping requirements as a result of this rule.

Compliance Requirements

This proposed AD would carry over the following requirements from AD 81–09–09:

—Conduction of the 250-hour heater inspection every 250 hours of heater operation, in accordance with the manufacturer's service manual. We estimate the labor cost of this action to be 2 hours × $85 = $170.

—General inspection of the heater installation at the same time as the 250-hour inspection. We estimate the labor cost of this action to also be 2 hours × $85 = $170.

Since the proposed rule would extend applicability to 900 series heaters Meggitt combustion heaters, which are installed on certain airplanes, there is an incremental cost associated with the existing requirement for these two inspections. There is no incremental cost associated with applicability to 8000 series heaters, installed on certain airplanes, as the current rule already applies to these heaters.

This proposed AD would add the following new provisions, which will apply to both 900 and 8000 series heaters installed on certain airplanes:

—During each 250-hour inspection more detailed actions would be required, namely inspection of the thermostat and upper limit switches, and inspection of the solenoid valve and fuel pump. In conjunction with the 250-hour and installation inspections already required, the labor cost of these more detailed actions would be one hour of labor at $85. ''On-condition'' costs to replace the temperature switches would be an additional hour of labor ($85) and $320 in materials cost, for a total of $405. On-condition costs to repair/overhaul the pump would be an additional two hours of labor ($170) and $470 in materials cost for a total of $640.

—Operators would be required to replace defective combustion tubes with new tubes as repair of combustion tubes would be prohibited. We estimate the cost of prohibiting repair of combustion tubes to be minimal as industry reports that the Meggitt heater combustion tubes are effectively non-repairable.

—At the same time as the 250-hour and installation inspection, a combustion heater pressure decay test (PDT) would be required. The PDT would cost $170. If the combustion heater fails the PDT, the operator would be required to replace the combustion tube at an installed cost of $4,580.

—Operators have the options of disabling the heater at an estimated cost of $170 or removing it at estimated cost of $255.

Cost of Compliance

In calculating the cost of compliance, we assume that operating without a heater is unlikely to be viable. We estimate the ten-year cost of the proposed rule. Based on data in the 2014 GA Survey, we can somewhat conservatively assume that average flight hours per airplane per year are about 100 hours. We estimate heater time to be 50 percent of airplane flight hours so, on average, flight hours will accumulate to about 1,000 hours in ten years and heater time will accumulate to about 500 hours. Since requirements for inspection internals are ''250 hours of combustion heater operations or two years, whichever occurs first,'' we expect inspections to usually occur every two years. As will be seen below, compliance costs are dominated by the almost immediate requirement for the PDT test.

Pressure Decay Test

The FAA estimates that 90 percent of combustion tubes tested will fail the first PDT test. Since replacing the combustion tube, like an overhaul, requires complete disassembly of the combustion heater, we somewhat conservatively assume that operators will overhaul their combustion heaters at $4,580, rather than simply replace the combustion tube, at $4,900. Major components such as the combustion tube, fuel pump, and temperature switches that are typically replaced or overhauled in a combustion heater overhaul have service lives of 750 heater hours, equivalent to about 1,500 flight hours or 15 years. Therefore, we assume that once replaced or overhauled, these components will not need to be replaced during our 10-year period of cost estimation. So aside from the initial tube replacement, we estimate that, for inspections required by this proposed AD, ''on-condition'' costs would be minimal.

Table 1 below shows our calculation of compliance cost for airplanes with the affected Meggitt combustion heaters. We assume the rule to be effective in 2017 and, as discussed above, in the first year we assume the combustion heater fails the PDT resulting in a subsequent overhaul. For the 8000 series heaters note that the $935 labor cost for 2017 includes three hours of labor ($255) for the detailed inspection and the PDT in addition to eight hours of labor for the overhaul ($680).

As the table shows, we estimate the present value cost of compliance to be $6,020 for airplanes equipped with 8000 series Meggitt combustion heaters and $7,514 for airplanes equipped with 900 series Meggitt combustion heaters. The lower cost for airplanes with 8000 series combustion heaters reflects the previously noted fact that 8000 series heaters are currently subject to the 250-hour inspection and installation inspection requirements, and, therefore, the incremental cost would be correspondingly less for airplanes with 8000 series combustion heaters compared to airplanes with 900 series heaters.

Economic Impact on Small Entities

If the cost of compliance is greater than 2 percent of the value of an operator's airplane, the FAA considers the cost impact to be significant. So if the value of an airplane equipped with an affected Meggitt combustion heater is less than 50 times the cost of compliance, we consider that the operator of the airplane would incur a substantial economic impact. With a present value cost of about $6,000 for airplanes equipped with 8000 series Meggitt combustion heaters, the FAA considers the cost impact to be significant for all such airplanes with values below about $300,000. With a present value cost of about $7,500 for airplanes equipped with 900 series Meggitt combustion heaters, the FAA considers the cost impact to be significant for all such airplanes with values below about $350,000. The airplanes equipped with the affected heaters are single- and twin-engine piston airplanes that, for the most part, were manufactured from the 1940s to the 1980s, and range in price from about $350,000 for a Cessna 221C Golden Eagle down to a price as low as $30,000 for a Piper 23–150 Apache. Accordingly, most of the 6,244 airplanes equipped with Meggitt combustion heaters have values low enough to consider that the airplane operators would incur a significant economic impact. As noted above, many of these airplanes are registered to LLCs and other small companies.

The FAA therefore concludes that this proposed AD would have a significant economic impact on a substantial number of small entities.

TABLE 1—COSTS OF COMPLIANCE

Year	Materials cost	Labor cost	Mtls + labor cost	Actions	Discount factor (@7%)	PV Cost
Airplanes with 8000 Series Meggitt Combustion Heaters						
2017	$4,220	$935	$5,155	Detailed inspection (1 hr labor), PDT (2 hrs labor)—Overhaul after assumed failure (8 hrs labor, $4,220 materials).	1.000	$5,155
2019		255	255	Detailed inspection (1 hr labor), PDT inspection (2 hrs labor).	0.873	223
2021		255	255	Detailed inspection (1 hr labor), PDT inspection (2 hrs labor).	0.763	195
2023		255	255	Detailed inspection (1 hr labor), PDT inspection (2 hrs labor).	0.666	170
2025		255	255	Detailed inspection (1 hr labor), PDT inspection (2 hrs labor).	0.582	148
2027		255	255	Detailed inspection (1 hr labor), PDT inspection (2 hrs labor).	0.508	130
Total PV Cost						6,020
Airplanes with 900 Series Combustion Meggitt Heaters						
2017	4,220	1,275	5,495	250-hr inspection (2 hrs labor), installation inspection (2 hrs labor), detailed inspection (1 hr labor), PDT (2 hrs labor)—Overhaul after assumed failure (8 hrs labor, 4,220 materials).	1.000	5,495
2019		595	595	250-hr inspection (2 hrs labor), installation inspection (2 hrs labor), detailed inspection (1 hr labor), PDT (2 hrs labor).	0.873	520
2021		595	595	250-hr inspection (2 hrs labor), installation inspection (2 hrs labor), detailed inspection (1 hr labor), PDT (2 hrs labor).	0.763	454
2023		595	595	250-hr inspection (2 hrs labor), installation inspection (2 hrs labor), detailed inspection (1 hr labor), PDT (2 hrs labor).	0.666	396
2025		595	595	250-hr inspection (2 hrs labor), installation inspection (2 hrs labor), detailed inspection (1 hr labor), PDT (2 hrs labor).	0.582	346
2027		595	595	250-hr inspection (2 hrs labor), installation inspection (2 hrs labor), detailed inspection (1 hr labor), PDT (2 hrs labor).	0.508	302
Total PV Cost						7,514

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD 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.

For the reasons discussed above, I certify this proposed regulation:

(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),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by removing AD 81–09–09, Amendment 39–4102 (46 FR 24936, May 4, 1981) and adding the following new airworthiness directive (AD):

Meggitt (Troy), Inc.: Docket No. FAA–2014–0603; Directorate Identifier 2013–CE–026–AD.

(a) Comments Due Date

We must receive comments by December 19, 2016.

(b) Affected ADs

This AD replaces AD 81–09–09, Amendment 39–4102 (46 FR 24936, May 4, 1981).

(c) Applicability

(1) This AD applies to Meggitt (Troy), Inc. (previously known as Stewart Warner South Wind Corporation and as Stewart Warner South Wind Division) Models (to include all dash number and model number variants) 921, 930, 937, 940, 944, 945, 977, 978, 979, 8240, 8253, 8259, and 8472 combustion heaters that:

(i) Are installed on, but not limited to, certain Beech, Britten-Norman, Cessna Aircraft Company, and Piper Aircraft, Inc. airplanes; and

(ii) certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2140; Heating System.

(e) Unsafe Condition

This AD was prompted by an airplane accident and reports we received that the combustion heater was malfunctioning. We are issuing this AD to detect and correct a hazardous condition caused by deterioration of the combustion heater, which could lead to ignition of components and result in smoke and fumes in the cabin.

(f) Compliance

Comply with this AD by doing one of the actions in paragraphs (f)(1), (2), or (3) of this AD at the compliance times indicated, unless already done. If the hours of combustion heater operation cannot be determined, use 50 percent of the airplane's hours time-in-service (TIS):

(1) Perform the actions specified in paragraphs (g) through (j) of this AD;

(2) Disable the heater following the instructions in paragraph (k)(1) of this AD; or

(3) Remove the heater following the instructions in paragraph (k)(2) of this AD.

(g) Inspections and Pressure Decay Test (PDT) of the Combustion Heater

Within the next 10 hours TIS of the combustion heater after the effective date of this AD or the next scheduled 100-hour inspection, annual inspection, or phase inspection that occurs 30 days after the effective date of this AD, whichever occurs first, and repetitively thereafter at intervals not to exceed 250 hours of combustion heater operation or two years, whichever occurs first, do the following inspections and PDT listed in paragraphs (g)(1) through (4) of this AD. You may do one of the actions in paragraph (k)(1) or (2) of this AD in lieu of doing the inspections required by paragraph (g).

(1) Inspections using the instructions in paragraph (i)(1) or (j) of this AD, as applicable.

(2) Inspections using the steps listed in paragraphs (g)(2)(i) through (v) of this AD:

(i) Inspect the thermostat switch (external from heater) and upper limit switch (located on the heater). In cold static condition, both switches should be in closed position; in operation (hot) condition, both switches should regulate their sensed temperatures within +/−10 degrees F.

(ii) Inspect the solenoid valve and fuel pump for fuel leak, corrosion, diaphragm crack, metal shavings, and excess grease.

(iii) With the heater operating, inspect the fuel pump output pressure for proper gauge hook up and pressure range readings.

(iv) Inspect the combustion heater's fuel pump operating pressure to assure it is not affected by other on-board pumps.

(v) Inspect the heater to assure it instantly responds to the on/off switch.

(3) Installation inspections and checks using the steps listed in paragraphs (g)(3)(i) through (iv) of this AD:

(i) Inspect ventilating air and combustion air inlets and exhaust outlet correcting any restrictions and ensure attachment security.

(ii) Inspect drain line and ensure it is free of obstruction.

(iii) Check all fuel lines for security at joints and shrouds, correcting/replacing those showing evidence of looseness or leakage.

(iv) Check all electrical wiring for security at attachment points, correcting conditions leading to arcing, chafing or looseness.

(4) Pressure decay test using the instructions in paragraph (i)(2) or (j) of this AD, as applicable.

(h) Replacement of the Heater Tube and/or Correct or Replace Other Assemblies

If any discrepancies are found during any of the inspections/tests required in paragraphs (g)(1), (2), (3), and/or (4) of this AD, before further flight, replace the defective heater tube and/or correct or replace other defective assemblies as necessary. You must use the instructions in paragraph (i) or (j) of this AD, as applicable, to do any necessary replacements. This AD does not allow repair of the combustion tube. You may do one of the actions in paragraph (k)(1) or (2) of this AD in lieu of doing the replacements required by paragraph (h).

(i) Procedures for Inspection, PDT, and Replacement for Models 8240, 8253, 8259, and 8472

(1) For the inspections required in paragraph (g)(1) of this AD and the replacement(s) that may be required in paragraph (h) of this AD, use the service information listed in paragraphs (i)(1)(i) through (iii) of this AD, as applicable, or do one of the actions in paragraph (k)(1) or (2) of this AD.

(i) Stewart-Warner South Wind Corporation South Wind Service Manual for Stewart Warner South Wind Aircraft Heaters 8240–A, 8240–C, 8259–A, 8259–C, 8259–DL, 8259–FL1, 8259–GL1, 8259–GL2, Form No. 09–998, revised: December 1969;

(ii) South Wind Division Stewart-Warner Corporation Beech Aircraft Corporation Service Manual PM–20688, Part No. 404–001039 Heater Assy. (SW 8253–B), revised: April 1965; or

(iii) South Wind Division Stewart-Warner Corporation Service Manual South Wind Aircraft Heater 8472 Series, Form No. 09–1015, issued: April 1975.

(2) For the pressure decay test (PDT) required in paragraph (g)(4) of this AD, use Meggitt Inspection Procedure, Pressure Decay Test, Aircraft Heaters, IP–347, dated May 17, 2014, or do one of the actions in paragraph (k)(1) or (2) of this AD.

(j) Procedures for Inspection, PDT, and Replacement for Models Other Than Models 8240, 8253, 8259, and 8472

This AD does not have referenced service information associated with the mandatory requirements of this AD for models other than Models 8240, 8253, 8259, and 8472. For the required inspections and PDT specified in paragraphs (g)(1) and (4) of this AD and, if necessary, any replacement(s) specified in paragraph (h) of this AD, you must contact the manufacturer to obtain FAA-approved inspection, replacement, and PDT procedures approved specifically for this AD and implement those procedures through an alternative method of compliance (AMOC) or do one of the actions in paragraph (k)(1) or (2) of this AD. You may use the contact information found in paragraph (n)(2) to contact the manufacturer. Appendix 1 of this AD contains a listing of service information that provides specific instructions, for certain inspections and replacements, that you may use to apply for an AMOC following paragraph (m) of this AD. The service information listed in appendix 1 of this AD did not meet Office of the Federal Register regulatory requirements for incorporation by reference approval due to the condition of the documents. However, the listing in appendix 1 to this AD does not include any instructions for the PDT required in paragraph (g)(4) because these procedures do not exist.

(k) Disable or Removal of the Combustion Heater

As an option to the inspection and replacement actions specified in paragraphs (g) and (h) of this AD, within the next 10 hours TIS of the combustion heater after the effective date of this AD or the next scheduled 100-hour inspection, annual inspection, or phase inspection that occurs 30 days after the effective date of this AD, whichever occurs first, do one of the following actions:

(1) *Disable the heater by the following actions:*

(i) Disconnect and cap the heater fuel supply;

(ii) Disconnect circuit breakers;

(iii) Tag the main switch ''Heater Inoperable''; and

(iv) The ventilation blower can stay functional.

(v) If you re-enable the combustion heater, you must perform one of the actions in paragraphs (f)(1) through (3) of this AD.

(2) *Remove the heater by the following actions:*

(i) Disconnect and cap the heater fuel supply;

(ii) Disconnect/remove circuit breakers;

(iii) Remove exhaust pipe extension;

(iv) Cap the exhaust opening;
(v) Remove the heater; and
(vi) Do weight and balance for the aircraft.
(vii) If you install an applicable combustion heater, you must perform one of the actions in paragraphs (f)(1) through (3) of this AD.

(l) Special Flight Permit

Special flight permits are permitted in accordance with 14 CFR 39.23 with the following limitation: Use of the heater is not allowed.

(m) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Chicago Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (o)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) AMOCs approved for AD 81–09–09 (46 FR 24936, May 4, 1981) are not approved as AMOCs for this AD.

(n) Related Information

(1) For more information about this AD, contact Chung-Der Young, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, Small Airplane Directorate, 2300 East Devon Avenue, Des Plaines, IL 60018–4696; telephone (847) 294–7309; fax (847) 294–7834 email: *chung-der.young@faa.gov*.

(2) For service information identified in this AD, contact Meggitt Control Systems, 3 Industrial Drive, Troy, Indiana 47588; telephone: (812) 547–7071; fax: (812) 547–2488; email: *infotroy@meggitt.com;* Internet: *www.stewart-warner.com*. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

Appendix 1 to Docket No. FAA–2016–0603

The following service information applies to certain combustion heater models affected by this AD, but the service information can not be required by the AD. You may use this service information for procedural guidance when applying for an alternative method of compliance.

—South Wind Service Manual P.M. 35710 Aircraft Heaters 8240–E, 8259–HL1, HL2, -L, supplements attached HR2.JR2.M;
—South Wind Service Manual PM35710 Aircraft Heaters
—Stewart-Warner Corporation South Wind Division Service Manual South Wind Aircraft Heaters Series 921 and 930, Ind-506, Revision 4–53;
—Stewart-Warner Corporation South Wind Division Service Manual SouthWind Series 940 Heater, PM–10035, Revision 3–82;
—Stewart-Warner Corporation South Wind Division Service Manual South Wind Model 978 Personal Heater, Form No. PM6348 (12–56);
—South Wind Service Manual Model 979–B1 Aircraft Heater, South Wind Division of Stewart-Warner Corporation, (3–51);
—Navion Model 977–B Installation Manual Section I, Section II, Section III, and Section IV.

Issued in Kansas City, Missouri, on October 27, 2016.

Pat Mullen,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2016–26428 Filed 11–2–16; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2015–0165; Directorate Identifier 2015–NE–02–AD]

RIN 2120–AA64

Airworthiness Directives; General Electric Company Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede airworthiness directive (AD) 2015–15–03, which applies to all General Electric Company (GE) GEnx turbofan engine models. AD 2015–15–03 precludes the use of certain full authority digital engine control (FADEC) software on GEnx turbofan engines. Since we issued AD 2015–15–03, GE implemented final design changes that remove the unsafe condition. This proposed AD would require removing a specific part and replacing it with a part eligible for installation and specifying the FADEC software version for the affected GEnx turbofan engines. We are proposing this AD to prevent engine failure, loss of thrust control, and damage to the airplane.

DATES: We must receive comments on this proposed AD by January 3, 2017.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov*. Follow the instructions for submitting comments.
- *Fax:* 202–493–2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact General Electric Company, GE Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215; phone: 513–552–3272; email: *geae.aoc@ge.com*. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2015–0165; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800–647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Christopher McGuire, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781–238–7120; fax: 781–238–7199; email: *chris.mcguire@faa.gov*.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2015–0165; Directorate Identifier 2015–NE–02–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this NPRM.