

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

**SMALL AIRPLANES, ROTORCRAFT, GLIDERS,  
BALLOONS, & AIRSHIPS**

**BIWEEKLY 2017-07**

*3/20/2017 - 4/2/2017*



Federal Aviation Administration  
Continued Operational Safety Policy Section, AIR-141  
P.O. Box 25082  
Oklahoma City, OK 73125-0460

## CHANGE OF ADDRESS NOTICE

Any change of address regarding the biweekly service must include the mailing label from a recent issue or your name and address printed exactly as they appear on the mailing label (including the computer number above the address).

Please allow one month for an address change.

MAIL YOUR ADDRESS CHANGE TO:

Superintendent of Documents  
Government Printing Office  
Mail List Branch SSOM  
Washington, DC 20402

Telephone: (202) 512-1806  
Facsimile: (202) 512-2250

**SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS**

AD No.	Information	Manufacturer	Applicability
--------	-------------	--------------	---------------

Information Key: E - Emergency; COR - Correction; S – Supersedes; R - Replaces

**Biweekly 2017-01**

2016-24-51		Sikorsky Aircraft Corporation	S-92A
2016-25-13	S 2016-04-12	Safran Helicopter Engines, S.A.	Arriel 2B, 2B1, 2C, 2C1, 2C2, 2D, 2E, 2S1, and 2S2
2016-25-14		Airbus Helicopters Deutschland GmbH	BO-105LS A-3
2016-25-19	S 2010-21-07	Airbus Helicopters	AS350B3 and EC130B4
2016-25-20		Airbus Helicopters	EC130B4, EC130T2, AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP
2016-25-28		Airbus Helicopters	AS355NP
2016-26-01		AGUSTAWESTLAND S.P.A.	AB139 and AW139
2016-26-04		Robinson Helicopter Company	R44 and R44 II; R66
2016-26-08	R 2014-22-01	PILATUS AIRCRAFT LTD.	PC-12, PC-12/45, PC-12/47, and PC-12/47E
2016-26-09	S 2016-06-01	B-N Group Ltd.	BN-2, BN-2A, BN-2A-2, BN-2A-3, BN-2A-6, BN-2A-8, BN-2A-9, BN-2A-20, BN-2A-21, BN-2A-26, BN-2A-27, BN-2B-20, BN-2B-21, BN-2B-26, BN-2B-27, BN-2T-4R, BN-2T, BN2A MK. III, BN2A MK. III-2, and BN2A MK. III-3

**Biweekly 2017-02**

2017-01-12		Diamond Aircraft Industries GmbH	DA 42 airplanes
2017-02-51		Sikorsky Aircraft Corporation	S-92A helicopters

**Biweekly 2017-03**

No ADs

**Biweekly 2017-04**

2016-26-08	COR	PILATUS AIRCRAFT LTD.	PC-12, PC-12/45, PC-12/47, and PC-12/47E airplanes
2017-02-06		Piper Aircraft, Inc.	PA-31T, PA-31T1, PA-31T2, PA-31T3, and PA-31P-350 airplanes
2017-02-07		Airbus Helicopters Deutschland GmbH	MBB-BK 117 C-2, and Model MBB-BK 117 D-2 helicopters
2017-02-11		Alexander Schleicher GmbH & Co.	ASK 21 gliders
2017-04-51		Safran Helicopter Engines, S.A.	Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S and 1S1 turboshaft engines

**Biweekly 2017-05**

2017-02-51		Sikorsky Aircraft Corporation	S-92A helicopters
2017-03-01	S 2014-05-06	Airbus Helicopters Deutschland GmbH	EC135 P1, P2, P2+, T1, T2, and T2+ helicopters
2017-04-03		Pilatus Aircraft Limited	PC-6, PC-6-H1, PC-6-H2, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/C1-H2 airplanes
2017-04-06		United Instruments, Inc.	5934 series altimeters
2017-04-14		Textron Aviation Inc.	560XL airplanes
2017-04-15		Learjet Inc.	36A airplanes
2017-05-03		Airbus Helicopters Deutschland GmbH	BO-105C, BO-105LS A-3, and BO-105S helicopters
2017-05-04		Bell Helicopter Textron Canada Limited	206A, 206B, 206L, 206L1, 206L3, and 206L4 helicopters
2017-05-51		Bell Helicopter Textron Canada	429 helicopters

**Biweekly 2017-06**

2017-05-08		Safran Helicopter Engines, S.A.	Arriel 2B turboshaft engines
2017-04-51		Safran Helicopter Engines, S.A.	Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines

**Biweekly 2017-07**

2017-07-02		Sikorsky Aircraft Corporation	269D and Model 269D Configuration A helicopters
------------	--	-------------------------------	---

**SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS**

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes; R - Replaces			
2017-07-01		M7 Aerospace LLC	SA226-T, SA226-AT, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), and SA227-TT airplanes
2017-06-03	R 81-09-09	Meggitt (Troy), Inc.	921, 930, 937, 940, 944, 945, 977, 978, 979, 8240, 8253, 8259, and 8472 combustion heaters



---

**2017-07-02 Sikorsky Aircraft Corporation (Sikorsky):** Amendment 39-18840; Docket No. FAA-2016-9291; Directorate Identifier 2016-SW-004-AD.

**(a) Applicability**

This AD applies to Sikorsky Model 269D and Model 269D Configuration A helicopters with a KAflex engine side drive shaft part number (P/N) SKCP2738-7 and KAflex pulley side drive shaft P/N SKCP2738-5 installed, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as failure of a drive shaft. This condition could result in loss of rotor drive and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective April 11, 2017.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

(1) Before further flight:

(i) For Model 269D helicopters, remove from service any KAflex engine side drive shaft P/N SKCP2738-7 and any KAflex pulley side drive shaft P/N SKCP2738-5 that has 6,000 or more hours time-in-service (TIS). Thereafter, remove from service any KAflex engine side drive shaft P/N SKCP2738-7 and any KAflex pulley side drive shaft P/N SKCP2738-5 before accumulating 6,000 hours TIS.

(ii) For Model 269D Configuration A helicopters, remove from service any KAflex engine side drive shaft P/N SKCP2738-7 and any KAflex pulley side drive shaft P/N SKCP2738-5 that has 1,200 or more hours TIS. Thereafter, remove from service any KAflex engine side drive shaft P/N SKCP2738-7 and any KAflex pulley side drive shaft P/N SKCP2738-5 before accumulating 1,200 hours TIS.

(iii) If interchanged between Model 269D and Model 269D Configuration A helicopters, remove from service any KAflex engine side drive shaft P/N SKCP2738-7 and any KAflex pulley side drive shaft P/N SKCP2738-5 that has 1,200 or more hours TIS. Thereafter, if interchanged between Model 269D and Model 269D Configuration A helicopters, remove from service any KAflex engine side drive shaft P/N SKCP2738-7 and any KAflex pulley side drive shaft P/N SKCP2738-5 before accumulating 1,200 hours TIS.

(2) Within 25 hours TIS:

(i) Remove the drive shaft to adapter bolt and inspect the drive shaft alignment. Engage and disengage the splines a minimum of 3 times by sliding the engine power output shaft in and out of the

engine. Inspect the alignment at each 90° interval by rotating the lower pulley with the power shaft disengaged. Determine whether the adapter slides on and off the drive shaft splines without spline engagement interference or resistance along the entire length of movement. If there is any spline engagement interference or resistance, before further flight, replace both the engine side and pulley side drive shafts.

(ii) Inspect each drive shaft for a crack, any corrosion or pitting, a nick, a dent, and a scratch. If there is a crack, any corrosion or pitting, a nick, a dent, or a scratch that exceeds allowable limits, before further flight, replace both the engine side and pulley side drive shafts.

(iii) Remove the engine side drive shaft and pulley side drive shaft and perform the following:

(A) Inspect each flex frame (frame) bolted joint (joint) for movement by hand. If there is any movement, before further flight, replace both the engine side and pulley side drive shafts.

(B) Visually inspect each joint for fretting corrosion (which might be indicated by metallic particles) and each frame and mount bolt torque stripe for movement. If there is any fretting corrosion or torque stripe movement, before further flight, replace both the engine side and pulley side drive shafts.

(C) Using a 10x or higher power magnifying glass, visually inspect each joint for fretting and for a crack around the bolt head and washer side, and around the nut and washer side. Also inspect both sides of each frame for a crack on the inside and outside corner radii and radii edge (four). If there is any fretting, a crack at any point over the full circumference (360°) of the bolt head and washer side or the nut and washer side, or a crack in any of the corner radii edges, before further flight, replace both the engine side and pulley side drive shafts.

(iv) Using a belt drive alignment tool 269T3303-003, inspect the lower pulley to engine alignment by engaging the tool on the drive shaft and inserting in the lower pulley bore. Rotate the tool 360° around the drive shaft and inspect for interference. If there is any interference with the rotation of the tool, before further flight, adjust the engine elevation alignment to eliminate the interference.

(3) Thereafter, at intervals not to exceed 25 hours TIS, repeat the actions specified in paragraph (e)(2)(iv) of this AD.

(4) As an optional terminating action to the repetitive inspections in this AD, you may install KAflex engine side drive shaft P/N SKCP2738-9 and KAflex pulley side drive shaft P/N SKCP2738-101.

#### **(f) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Boston Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Schwetz, Aviation Safety Engineer, Boston Aircraft Certification Office, Engine & Propeller Directorate, FAA, 1200 District Avenue, Burlington, Massachusetts 01803; telephone (781) 238-7761; email michael.schwetz@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

#### **(g) Additional Information**

Sikorsky 269D Helicopter Alert Service Bulletin DB-052, Basic Issue, dated January 16, 2014; Appendix B of Sikorsky S-330 Model 269D Helicopter Basic Handbook of Maintenance Instructions, No. CSP-D-2, dated February 1, 1993, and revised October 15, 2014; and Appendix B of Sikorsky S-330 Model 269D Config. "A" Helicopter Basic Handbook of Maintenance Instructions, No. CSP-D-9, dated July 20, 2001, and revised October 15, 2014; which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact Sikorsky Aircraft Corporation, Customer Service Engineering, 124 Quarry Road,

Trumbull, CT 06611; telephone 1-800-Winged-S or 203-416-4299; email: wcs\_cust\_service\_eng.gr-sik@lmco.com. You may review this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 6310, Engine/Transmission Coupling.

Issued in Fort Worth, Texas, on March 20, 2017.

Scott A. Horn,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



---

**2017-07-01 M7 Aerospace LLC:** Amendment 39-18839; Docket No. FAA-2016-9531; Directorate Identifier 2015-CE-011-AD.

**(a) Effective Date**

This AD is effective May 5, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to M7 Aerospace LLC SA226-T, SA226-AT, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), and SA227-TT airplanes; all serial numbers, certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 61, Propellers/Propulsors.

**(e) Unsafe Condition**

This AD was prompted by detachment of the power lever linkage to the TPE331 engine propeller pitch control (PPC). We are issuing this AD to prevent detachment of the power lever linkage to the TPE331 engine PPC, which could result in uncommanded change to the engine power settings with consequent loss of control.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Applicable M7 Aerospace LLC Service Bulletins**

Use the applicable service bulletins as listed in paragraph (g)(1), (2), or (3) of this AD as reference to complete the actions in paragraph (i)(1) or (2) of this AD:

- (1) M7 Aerospace LLC SA226 Series Service Bulletin 226-76-012, dated March 17, 2015;
- (2) M7 Aerospace LLC SA227 Series Service Bulletin 227-76-007, dated March 17, 2015; or
- (3) M7 Aerospace LLC SA227 Series Commuter Category Service Bulletin CC7-76-004, dated March 17, 2015.

**(h) PPC Lever Installation**

(1) Within 100 hours time-in-service (TIS) after May 5, 2017 (the effective date of this AD) and repetitively thereafter at intervals not to exceed 100 hours TIS, visually inspect the PPC lever to assure the attachment is properly installed following the applicable service information listed in paragraph (h)(1)(i), (ii), or (iii) of this AD, as applicable.

(i) For Models SA226 Series: M7 Aerospace SA226 Series Maintenance Manual Temporary Revision 71-02, dated March 15, 2016.

(ii) For Models SA227 Series: M7 Aerospace SA227 Series Maintenance Manual Temporary Revision 71-03, dated March 15, 2016.

(iii) For Models SA227 Series Commuter Category: M7 Aerospace SA227 Series Commuter Category Maintenance Manual Temporary Revision 71-02, dated March 15, 2016.

(2) The rework/replacement required by paragraph (i) of the AD and the installation of the secondary retention device required in paragraph (j) of this AD terminate the repetitive visual inspections of the PPC lever attachment required by paragraph (h)(1) of this AD.

**(i) Replace or Rework the Propeller Pitch Assembly**

Within the next 600 hours TIS after May 5, 2017 (the effective date of this AD) or within the next 12 months after May 5, 2017 (the effective date of this AD), whichever occurs first, do the actions in either paragraph (i)(1) or (2) of this AD following the Accomplishment Instructions in Honeywell International Inc. Service Bulletin TPE331-72-2190, dated December 21, 2011, as referenced in the applicable service information listed in paragraph (g)(1), (2), or (3) this AD.

(1) Replace the PPC. Remove the PPC assembly and replace with the applicable new design PPC using the part numbers listed in table 1 to paragraph (i)(1) of this AD.

**Table 1 to Paragraph (i)(1) of This AD—Part Number PPC Assemblies**

<b>Part No. PPC assembly to remove</b>	<b>Part No. PPC assembly to install</b>
869130-11	70000295-11
869130-12	70000295-12
869130-13	70000295-13
869130-14	70000295-14
869130-16	70000295-16
869130-17	70000295-17
869130-18	70000295-18
869130-19	70000295-19
869130-30	70000295-30
895481-1	70000298-1
895481-2	70000298-2
895481-4	70000298-4
895481-5	70000298-5
895481-6	70000298-6
895481-7	70000298-7

895481-17	70000298-17
895481-18	70000298-18
895481-19	70000298-19
895481-20	70000298-20
895481-22	70000298-22

(2) Rework the PPC assembly. Inspect the splined end of the shouldered shaft for the presence and good condition of a threaded hole, repairing or replacing the cam assembly, and reworking the PPC assembly as necessary.

#### **(j) Secondary Retention Feature**

(1) Before further flight after the replacement or rework of the PPC assembly required in paragraph (i)(1) or (2) of this AD, install the secondary retention feature on the PPC assembly following the applicable service information listed in paragraph (j)(1)(i), (ii), or (iii) of this AD.

(i) For Models SA226 Series: M7 Aerospace SA226 Series Maintenance Manual Temporary Revision 71-02, dated March 15, 2016.

(ii) For Models SA227 Series: M7 Aerospace SA227 Series Maintenance Manual Temporary Revision 71-03, dated March 15, 2016.

(iii) For Models SA227 Series Commuter Category: M7 Aerospace SA227 Series Commuter Category Maintenance Manual Temporary Revision 71-02, dated March 15, 2016.

(2) The rework/replacement required by paragraph (i) of this AD and the installation of the secondary retention device required by paragraph (j) of this AD terminate the requirement for the repetitive inspections of the PPC lever torque required in paragraph (h) of this AD.

#### **(k) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Fort Worth Airplane 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, mail it to the attention of one of the people identified in paragraph (l), Related Information, of this AD or email the request to 9-asw-FWACO@faa.gov.

(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.

#### **(l) Related Information**

For more information about this AD, contact one of the following people:

(1) Justin Carter, ASW-142, Aerospace Engineer, Fort Worth Airplane Certification Office (ACO), FAA, 10101 Hillwood Parkway, Fort Worth, Texas 76177-1524; telephone: (817) 222-5146; fax: (817) 222-5960; email: justin.carter@faa.gov; or

(2) Kristin Bradley, ASW-143, Aerospace Engineer, Fort Worth ACO, FAA, 10101 Hillwood Parkway, Fort Worth, Texas 76177-1524; telephone: (817) 222-5485; fax: (817) 222-5960; email: kristin.bradley@faa.gov.

**(m) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) M7 Aerospace LLC SA226 Series Service Bulletin 226-76-012, dated March 17, 2015.

(ii) M7 Aerospace LLC SA227 Series Service Bulletin 227-76-007, dated March 17, 2015.

(iii) M7Aerospace LLC SA227 Series Commuter Category Service Bulletin CC7-76-004, dated March 17, 2015.

(iv) M7 Aerospace SA226 Series Maintenance Manual Temporary Revision 71-02, dated March 15, 2016.

(v) M7 Aerospace SA227 Series Maintenance Manual Temporary Revision 71-03, dated March 15, 2016.

(vi) M7 Aerospace SA227 Series Commuter Category Maintenance Manual Temporary Revision 71-02, dated March 15, 2016.

(vii) Honeywell International Inc. Service Bulletin TPE331-72-2190, dated December 21, 2011.

(3) For service information identified in this AD, contact M7 Aerospace LLC, 10823 NE Entrance Road, San Antonio, Texas 78216; phone: (210) 824-9421; fax: (210) 804-7766; Internet: <http://www.elbitsystems-us.com>; email: [MetroTech@M7Aerospace.com](mailto:MetroTech@M7Aerospace.com); or Honeywell International Inc. 111 S. 34th Street, Phoenix, Arizona 85034-2802; phone: (855) 808-6500; email: [AeroTechSupport@honeywell.com](mailto:AeroTechSupport@honeywell.com); Internet: <https://aerospace.honeywell.com/en/services/maintenance-and-monitoring>.

(4) You may view this service information at 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.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri on March 17, 2017.

William Schinstock,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.



---

**2017-06-03 Meggitt (Troy), Inc.:** Amendment 39-18827; Docket No. FAA-2014-0603; Directorate Identifier 2013-CE-026-AD.

**(a) Effective Date**

This AD is effective May 5, 2017.

**(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 May 5, 2017 (the effective date of this AD) or the next scheduled 100-hour inspection, annual inspection, or phase inspection that occurs 30 days after May 5, 2017 (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 Correction or Replacement of Other Assemblies**

If any discrepancies are found during any of the inspections/PDTs 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), Part No. 404-001056 Blower Assy. (SW G-716307), Part No. G-714127 Thermostat (SW G-714127), 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 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, PDT, 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."
- (iv) The ventilation blower can stay functional.

(v) If you re-enable the combustion heater, before further flight, you must perform the actions in paragraphs (f)(1) of this AD. If you cannot complete the actions of paragraph (f)(1) satisfactorily, you must perform the actions in either paragraph (f)(2) or (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.
- (vi) Do weight and balance for the aircraft.

(vii) If you install an applicable combustion heater on the airplane, before further flight, you must perform the actions in paragraphs (f)(1) of this AD. If you cannot complete the actions of paragraph (f)(1) satisfactorily, you must perform the actions in either paragraph (f)(2) or (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**

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

### **(o) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(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 Service Manual Beech Aircraft Corporation PM-20688, Part No. 404-001039 Heater Assy. (SW 8253-B), Part No. 404-001056 Blower Assy. (SW G-716307), Part No. G-714127 Thermostat (SW G-714127), revised: April 1965.

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

(iv) Meggitt Inspection Procedure, Pressure Decay Test, Aircraft Heaters, dated May 17, 2014.

(3) 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.

(4) You may view this service information at 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.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

**Appendix 1 to AD 2017-06-03**

The following service information applies to certain combustion heater models affected by this AD, but the service information cannot 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;
- 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 March 9, 2017.

Melvin Johnson,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.